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EXPLORING THE SUCCESS OF AN EFFECTIVE
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# AN EXAMINATION OF THE PROCESSES OF CHANGE: EXPLORING THE SUCCESS OF AN EFFECTIVE JUVENILE DIVERSION PROJECT

By

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ABSTRACT

AN EXAMINATION OF THE PROCESSES OF CHANGE:
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This study explored the relationships between the processes of change and delinquency outcomes in the context of a diversion program for juvenile offenders. One hundred and seven program participants were the subjects. Delinquency outcomes were based upon two distinct methods: Official data and self-report delinquency (SRD) rates. The process measures (predictor variables) included indices of intervention activities and general life domain conditions in the youths' lives. Separate discriminant analyses were performed on the two types of outcome groups. The results demonstrated SRD and offical delinquency to be distinct phenomena since the different discriminant functions included very different predictor variables, depending on which measure defined the outcome groups. Also, the predictor variables provided a much poorer model for discriminating the official outcome groups than for the SRD groups. In addition, the results provided support for an "Action" intervention model with these diverted youths which included behavioral contracting and youth advocacy components.

To Frances Kathryn Parisian and
the memory of George Thomas Parisian

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# CHAPTER I

# INTRODUCTION

## Statement of Problem

The problem of delinquency has been the focus of continuing concern and study in the country over the past few decades. Throughout the sixties and seventies the incidence of delinquency grew at an alarming rate. Between 1970 and 1979, the number of violent crimes committed by persons under the age of 18 increased by 41.3% (Crime in the United States, 1980). Although the national rate of delinquency has decreased slightly during the past couple of years, this has most likely reflected the age shifts in the general population more than any meaningful changes in the behavior patterns of young people. In addition, the F.B.I. reports that even though on the national level the number of arrests for people under eighteen decreased by 6% from 1970 to 1980, this figure increased by 6.6% in the "East North Central" region of the country which includes, Illinois, Michigan, Ohio and Wisconsin (Crime in the United States, 1981). During 1980, young people accounted for 20.9% of all the arrests made in the U.S.--and for 40.2% of all arrests for property crimes. It is estimated that between 17% to 33% of all males are arrested at least once before their eighteenth birthdays (Carter & Klein, 1976; Davidson, Snellman, & Koch, 1980). And yet even these figures greatly underestimate the rate of delinquent acts, since so few of them are ever detected or observed and therefore do not appear in official statistics. Gold and Williams obtained

self-report delinquency data from a random national sample of 847 young people in 1967 and report that 88% of the youth confessed one or more chargeable delinquent acts in the prior three years. Only 3% of these offenses resulted in detection and contact with the police (Gold & Williams, 1969; Williams & Gold, 1978). Clearly, delinquency continues to be a pressing problem in need of effective solutions. Unfortunately, the solutions have been elusive.

The present discussion will briefly review the effectiveness of some of the treatment and rehabilitation efforts made by the traditional juvenile justice system. Some of the major criticisms of this system will then be presented and the resulting movement toward alternatives, specifically toward diversion will be discussed. A brief review of the trends in diversion will follow. Then one particular diversion program (the Adolescent Diversion Project) will be discussed at length. The specific components of its intervention package will be reviewed. These include the use of nonprofessional change agents, and the utilization of behavioral contracting and of child advocacy as specific intervention tools. The outcome results of this program will then be presented. The need in program evaluation to examine and understand process variables as they impact upon outcome variables will be discussed generally as well as specifically in relationship to the Adolescent Diversion Project (ADP). The research model executed to evaluate the ADP allowed tremendous advancement of the understanding of this relationship between process and outcome variables in regard to the workings of this program. This research model will be presented and the process-related findings to date will be reviewed. The current study attempted to further examine the relationship between the variables which measure the ongoing processes of change throughout the

intervention period and the outcome variables of court recidivism rates, police recidivism rates, and measures of self-report delinquency. The second chapter presents the details of the study.

## Critique of Juvenile Justice System

As delinquency has proliferated during the past two decades, so have criticisms of the juvenile justice system which has assumed the major responsibility of rehabilitating juvenile offenders. A major and incisive criticism has been that the system simply has not worked. In regard to its stated goals of rehabilitation and treatment of juvenile offenders, it has failed miserably (Krisberg & Austin, 1978). Recidivism rates are high at every step into the system. Wolfgang, Figlio, and Sellin (1972) report that, at the level of police arrests, 54% of all youths arrested for the first time will be arrested again; and 65% of those arrested twice will be arrested for a third time. The juvenile court does no better. Among youth probationers, 50% will be re-petitioned to court and the estimates of recidivism rates for residential institutions for juvenile offenders are between 50% to 85% (Davidson, et al., 1980).

Recent reviews of the treatment efforts made by the juvenile justice system have reached discouraging conclusions. Riedel and Thornberry (1978) reviewed several evaluation studies which reported on hundreds of "treatment" approaches to rehabilitating juvenile offenders--including probation with variations in programming, imprisonment with variations in length, residential treatment programs and psychotherapy. Their conclusion was that "there is no systematic evidence that rehabilitation efforts have had significant impact on recidivism (p. 429). Romig (1978) arrived at a similar conclusion. He reviewed 170 controlled studies conducted in the area of delinquency rehabilitation between 1920 and 1976. He found

that, with very few exceptions, the treatment approaches utilized most frequently by the juvenile justice system are completely ineffective in rehabilitating (i.e., reducing the recidivism rates of) juvenile offenders. He finds that casework, the most frequently provided "treatment" for probationers (defined as including diagnosis, recommendations and direct services or counseling), is not effective for rehabilitation (p. 7). He finds similarly discouraging results with educational programs (which, while they may lead to improved academic performance, do not lead to a decrease in recidivism), most traditional vocational training and work programs, group counseling, the majority of individual psychotherapy approaches, community based residential programs and institutionalization. In short, he found that very little of what the juvenile justice system does with young people works to reduce future delinquency.

A second major criticism of the juvenile justice system has been that it operates inconsistently and unfairly in its handling of juvenile offenders (Krisberg & Austin, 1978; Lemert, 1976). The juvenile court, since its inception, has maintained relative procedural informality in the name of providing individualized "treatment" to children. Consequently, historically there have been few legal protections or safeguards for the rights of the children in the court proceedings (Krisberg & Austin, 1978, p. 3). During the mid-sixties the Supreme Court responded to this situation by handing down two major rulings (Kent vs. U.S. and the case of Gault) which stated that the constitutional rights of juveniles should be protected by establishing more formal proceedings within the juvenile court. (Some improvements have been realized since then, but concern about the biases and irregularities of the juvenile court remains.) Krisberg and Austin state such concerns concisely in The Children of Ishmael (1978):

> Laws governing juvenile justice agencies give license for widespread discretion. Police, probation, and court decisions are often made without significant parental or community input. Practices and procedures are so flexible that they allow gross distortions of cherished precepts of justice, including due process and equal protection of law (p. 570).

One of the most disturbing findings which signals the unfair workings of justice at the juvenile court level is that poor and nonwhite children consistently receive harsher disposition decisions at the hands of police and court personnel than do their wealthier, white counterparts (Krisberg & Austin, 1978; Gold, 1966).

These concerns have led many to entertain the notion that the processing of juvenile offenders through the juvenile justice system results in more malignant destructive consequences for the youths than in any benefits (Gold & Williams, 1969; Krisberg & Austin, 1978; Lemert, 1976; Schur, 1973). Gold and Williams' interview data from the National Youth Services suggests, in fact, that the apprehension of a youth by the police for delinquent behavior leads to more subsequent delinquency (as measured by self-report) than if, in the same case, the youth were not apprehended (1969). They concluded:

> It appears, unfortunately, that what legal authorities now commonly do upon apprehending a juvenile for his delinquent behavior is worse than not apprehending him at all (p. 3).

Lemert suggests that the labeling or "stigmatization" process that occurs when a youth becomes involved in the juvenile justice system accounts for the observed increases in delinquency. He describes this as "a process which assigns marks of moral inferiority to deviants; more simply it is a form of degradation which transforms identities and status for the worse (1976, p. 133). This, he maintains, simply creates more problems for the youth and his/her family.

## Diversion

These concerns and criticisms of the traditional juvenile justice system resulted in the current trend of "diversion" programs that direct youths away from normal processing through the system (Davidson & Kushler, 1979; Krisberg & Austin, 1978). The concept of diversion has been with us for over a century and, in fact, is what led to the creation of a separate juvenile court system in the first place (Palmer & Lewis, 1980). The current trend toward diversion was spurred by the 1967 President's Commission on Law Enforcement and the Administration of Justice. Their report criticized the juvenile justice system's handling of juvenile offenders and called for the widespread creation of alternatives in the form of diversion programs, Youth Service Bureaus, community-based treatment programs and the utilization of volunteers throughout the system (Carter & Klein, 1976; Davidson, et al., 1980; Palmer & Lewis, 1980). The call for diversion programs met with a widespread and rapid response over the next decade. In 1980, in Michigan alone, over 200 programs identified "diversion" as at least one of their main purposes (Davidson, et al., 1980). Diversion's many supporters suggested that formal processing through the juvenile justice system has such deleterious effects that redirecting youthful offenders to alternative programs (or to nothing at all) was bound to be more beneficial (Lemert, 1976; Rappaport, 1977; Schur, 1973). Unfortunately, systematic evaluation efforts did not keep pace with program implementation and only recently have attempts been made to sort out the issue of the "effectiveness" of diversion projects (Palmer & Lewis, 1980). The findings and conclusions have been mixed. One of the major problems is a definitional one (Klein, 1979). Diversion is usually defined negatively--that is, as anything which <u>removes</u> offenders from formal handling within the justice system.

This, of course, leaves tremendous latitude in terms of what diversion programs do. There is also a great deal of variability between programs in the specific characteristics of the target populations and in the point of referral or diversion from the system. As an example, one so-called "diversion" program might provide a few hours of counseling to a potential runaway. While another "diversion" program might provide community placements for repeat offenders who would otherwise be institutionalized in correctional facilities. Obviously, such diversity among programs renders the task of judging the effectiveness of "diversion" an extremely complex one. The problems which result from this situation are apparent in the recent reviews of diversion programs which are discussed below.

Klein (1979), in reporting on the effectiveness of diversion programs to reduce recidivism rates and delinquency rates (as measured by self-report), notes the prevasive absence of evaluation efforts and the poor quality of evaluation in those rare cases when it is attempted. He reviews 13 diversion programs and reports that only three of these cite unequivocal positive findings in regard to the reduction of recidivism and delinquency. He finds that two more report negative findings in regard to these criteria and the remaining eight cite "equivocal" findings (e.g., a reduction of recidivism rates but no corresponding self-reported delinquency changes). Unfortunately, Klein's presentation does not include information about who the "diverted" youths were or what these programs entailed in terms of intervention. He does state that "almost none" of them employed random assignment to a control group.

In another review, Davidson, Snellman, & Koch (1980), critiqued the reports of 50 evaluations of diversion programs. Of these 50, they

found only five that employed random assignment control groups. They limited their discussion to these five programs which included (1) a family focused intervention with diverted status offenders (Baron, Feeney, & Thornton, 1973), (2) a combination vocational, educational and counseling intervention package for youthful offenders (Quay & Love, 1977), (3) a program which referred diverted youths to local counseling services (Klein, 1979), (4) a broad-based intervention package which included relationship skills, behavioral contracting and advocacy for youth diverted from the police (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes, & Herring, 1977), and, (5) a program combining parent skills training, various environmental interventions and the assignment of an adult "role model/friend" to youths diverted from the police (Binder & Newkirk, 1977). Three of these evaluations which utilized treatment-as-usual control groups found significantly lower recidivism rates for diverted youths than for the control groups (Baron, et al., 1973; Quay & Love, 1977; Klein, 1979). Of those that utilized an outright release control group, two found lower recidivism rates for the group which received services than for the control group (Davidson, et al., 1977; Binder & Newkirk, 1977). On the other hand, Klein reports the lowest recidivism rates for the outright release control group, although, as reported above, the diverted-to-treatment group fared better than the treatment-as-usual group. Davidson, et al., concluded:

> First of all, it is obvious that the great majority of evaluations of diversion are of questionable credibility due to an inadequate design and/or other methodological deficiencies. In addition, the wide variability in the types of youths served, program types examined, and effectiveness criteria used makes definitive conclusions extremely difficult. The second major conclusion is that diversion has shown sufficient conceptual and empirical promise to warrant continued efforts in this area (p. V-9).

Romig (1978) also conducted a review of the literature of the effectiveness of "diversion" programs. He reports on eight studies of programs which involved a total of 1,095 youth. All of the projects included randomly assigned control groups--although it is not clear from his discussion if these were treatment-as-usual control groups or outright release groups. He reports that the results of these eight studies were uniformly negative. Seven of them resulted in no differences in the recidivism rates of the experimental and control groups and one (an intensive family counseling intervention administered to youths diverted from the court) resulted in greater recidivism rates for the experimental group than for the controls. It should be noted, however, that from Romig's description of these programs, only four of the eight were even attempting to divert youths who would otherwise be involved in the juvenile justice system away from that system. The other four were clearly "delinquency prevention" programs for "pre-delinquents." That Romig includes these as "diversion" projects again points out the definitional ambiguity that plagues the literature in this area and makes the task of evaluation a difficult one.

In discussing his findings, Romig reports that the overwhelming majority of diversion programs utilize individual counseling as the primary intervention tactic. The second most frequently used "treatment" is referral to other agencies. Since these methods of treatment are consistently found to be ineffective with delinquent populations, Romig's conclusion about diversion is that there does not appear to be anything inherently effective about diversion programs independent of their treatment approaches. Diversion programs which utilize ineffective intervention tactics will be ineffective. Romig suggests, "Diversion projects should be developed around teaching delivery strategies that will give

the youths the skills they need to succeed in school, work, and home. Such approaches have a greater likelihood of success than what has been continually tried in the past" (p. 121).

Perhaps the most extensive recent evaluation of diversion programs was a three year study of eleven community-based diversion projects which was conducted by Palmer and Lewis (1980). The projects they examined served youths who were referred from either police departments or juvenile courts. The authors compared the recidivism rates of the project client groups to those of "comparison" groups, two of which were random control groups; the rest were "matched" comparison groups. Palmer and Lewis found that, for the six month period following the referral arrest, "clients had significantly lower recidivism rates than comparisons" (p. 87). For all programs combined, 25.4% of the clients had experienced one or more subsequent arrests and 30.7% of the comparisons had done so. When the influence of a youth's prior record on program success was examined, Palmer and Lewis discovered that, for youths with no arrests prior to the referral arrest, diversion programs were not effective. (The authors suggest that this is due to the fact that this population is not at risk anyway--that is, they are not very likely to recidivate in any case. And yet, Palmer and Lewis found that they constitute the vast majority of diversion project clients.) (In contrast to these low-risk youngsters, for persons with one arrest prior to the referral arrest, there was a significant difference between the recidivism rates of the treatment group and the control group. This is the group for whom diversion projects appeared to be most promising.) (For individuals with more than one prior arrest, Palmer and Lewis found that "recidivism was reduced only in those few projects whose contacts with youth were relatively numerous (over 50) and that extended over several months" (p. xxvi). (In contrast to these figures, it is striking that the

average diversion client in these projects received a total of only 5.5 service hours over a period of six weeks.)

When Palmer and Lewis report on the results of the 11 projects separately, it becomes clear that the observed differences can be accounted for by the success rates of a few effective programs. The majority of the programs did not reduce recidivism rates. In fact, the results of three very effective programs accounted for nearly all of the variance between the client and comparison groups. Unfortunately, the brief program descriptions that Palmer and Lewis provide do not suggest hypotheses about what program variables might differentiate these three from the other, less effective programs. They conclude from their findings that, even though successful diversion projects were found to be somewhat rare, this should not be viewed as discouraging. Rather, they advocate that the implementation of future diversion programs should include careful documentation of program elements "so that the successful ones can be replicated and the unsuccessful ones can be discarded" (p. 215).

These reviews demonstrated that the results of the evaluation efforts of diversion to date are inconclusive. There seems to be agreement among these authors that the observed inconsistencies in the results of "diversion" studies stem from the variability between programs and/or the inconsistencies in the applications of the concept of diversion (e.g., to inappropriate populations at times). The current demand, then, is to execute evaluation studies of diversion programs is such a way that specific program variables can be compared systematically. The need is to begin to specify the exact conditions under which diversion is effective. In the next section, one particular diversion project which has attempted to meet the challenge of this task will be described and discussed.

## The Adolescent Diversion Project

The Adolescent Diversion Project (ADP) provides services to juvenile offenders who are referred to the project by the Juvenile Court of Ingham County, Michigan in lieu of further court processing. The ADP assigns each youth to work with an undergraduate student for eighteen weeks. The students and youths spend six to eight hours per week together working on mutually agreed upon goals. The students are enrolled in a three-term psychology course sequence at Michigan State University. During the weekly class meetings the students receive training and supervision in a specific and broad-based intervention model. The model stresses two main intervention tactics: behavioral contracting and youth advocacy. These are both implemented within the context of a deep, overriding commitment to deal with the youth's natural environment in any and all intervention strategies. The ultimate goal of both strategies is for the youth to develop skills to improve his/her relationship with that environment so as to facilitate the potential exchange of positive resources within relationships and within the larger community in general. The intervention potentially addresses all major areas of the youth's life: home and family relationships, school, friends and free-time activities, and employment skills. The following discussion will first address the major components of the ADP's intervention package. A brief corresponding literature review will be presented for each of these and then the specifics of the approach within the ADP intervention package will be delineated. This procedure will be followed for (1) the utilization of nonprofessional change agents, (2) behavioral contracting, and (3) youth advocacy. The discussion will then turn to the presentation of the research components of the Adolescent Diversion Project and a review of the youth outcome results achieved to date.

The Utilization of Nonprofessionals as Change Agents

Nonprofessional or "volunteer" involvement in the mental health and criminal justice fields became popular during the 1960's. Since that time, the utilization of nonprofessionals in various roles has become widespread. It is difficult to assess the extent of this trend, although it has been estimated that 50,000,000 Americans are involved in various volunteer activities (Kelly, Snowden, & Munoz, 1977). Many different groups within society have been recruited to fill these nonprofessional helping roles. The literature on nonprofessionals includes reference to indigenous community workers in low-income neighborhoods, parents, teachers, self-help groups like Alcoholics Anonymous and Parents Without Partners, college students, homemakers, police, and other non-mental health professionals (Mitchell, 1980; Rappaport, 1977). For the purposes of this discussion, the term "nonprofessional" will be used to include:

> Any individual who is recruited to provide mental health services without having completed the customary professional training in one of the traditional mental health disciplines. As such, the nonprofessional may be paid or unpaid, he may be a trained, practicing professional in some other field (Zax & Specter, 1974, p. 369).

The reasons cited in the literature for utilizing nonprofessional change agents in the mental health and criminal justice fields are many. Most often mentioned are the severe personpower shortages which result from overreliance on traditional approaches to solving human problems (Albee, 1970; Mitchell, 1980; Rappaport, 1977; Tharp & Wetzel, 1969). More specifically, traditional psychotherapy and counseling approaches require too many highly trained, inaccessible, expensive professionals to ever hope to meet the needs of this society. These services also tend to be best suited to (or at least most often rendered to) clients who are "young adult, intelligent, verbal, successful, white, (and) middle class"

(Rappaport, 1977, p. 8); in short, not those whose needs are greatest. The professionals have failed to reach large segments of the population (e.g., the poor and delinquents). In those instances when they have provided traditional services to these groups the results have not been promising (Rappaport, 1977, p. 374; Romig, 1978). These failures provided the greatest impetus to the utilization of nonprofessionals. It is believed that nonprofessionals provide a promising alternative to their professional counterparts because of their greater availability and accessibility, the relative dollar savings which result from their utilization, and most importantly, because empirical studies suggest that they can be very effective change agents in the human service fields (an issue which will be discussed at greater length below). These same factors which have resulted in the widespread utilization of nonprofessionals generally have also lead to a parallel development within the juvenile justice system.

Schwartz, Jensen, and Mahoney (1977) report that there are 2,000 criminal justice volunteer programs in the United States, utilizing some 250,000 volunteers. These authors go on to advocate an even greater utilization of nonprofessionals within the juvenile justice system. Again, their primary assumption is that nonprofessionals are effective change agents when used in meaningful helping roles. Recent research suggests that this is a valid assumption.

Durlak (1979) reviewed 42 studies which compared the effectiveness of professionals to nonprofessionals in the mental health fields. He reports that, in 28 studies no significant differences were found between the two groups in terms of positive client outcomes as measured by a variety of variables. In two studies, professionals were shown to be superior whereas in 12 studies superiority of the paraprofessionals' performance as helpers was demonstrated. All included studies involved multiple outcome ratings

and a follow-up measurement period. Durlak concludes that, "The central finding from these comparative studies is that the clinical outcomes that paraprofessionals achieve are equal to or significantly better than those obtained by professionals" (p. 84). In 1981 he reiterated his earlier findings and stated, "Research has failed to demonstrate significant differences in the outcomes obtained by paraprofessional and professional helpers" (Durlak, 1981, p. 569).

Throughout the literature there are examples of studies or reviews of nonprofessional programs that find no clear or significant differences between the performance of nonprofessionals and that of professionals and conclude that the utilization of nonprofessionals is unwarranted (Cook & Scioli, 1975; Dowell, 1978; Nietzel & Fisher, 1981). But the point has been made (Mitchell, 1980; Rappaport, 1977) that if the performance of professionals is not demonstrably superior to that of nonprofessionals, then the utilization of nonprofessionals should be strongly advocated on the basis of greater availability and cost effectiveness.

One source of nonprofessionals that is frequently utilized because of its ready availability is the college campus. College students have been found to be effective change agents in mental health roles and they are particularly well-suited to the demand for several reasons. They are especially willing and eager to become involved in practical "hands-on" experiences that will enhance their education and they are abundant in numbers (Heller & Monahan, 1977; Mitchell, 1980).

The conclusions from the above discussion are: (1) that the utilization of nonprofessionals is a promising and constructive concept that may alleviate some of the strains on the fields of mental health and criminal justice, (2) nonprofessionals have been found to be effective change agents

in those fields and (3) college students may be particularly well suited to fill these roles.

This, then provides the reasoning behind the Adolescent Diversion Project's utilization of nonprofessional change agents with delinquent youth. As previously stated, the ADP assigned each youth to work with a student who is enrolled in a three-term course which provides them with training and supervision in various intervention skills. One of the two major intervention techniques utilized is behavioral contracting.

Behavioral Contracting

Behavioral interventions, several authors point out, are particularly well suited to implementation by nonprofessionals due to the relative ease with which they are taught and utilized (Albee, 1970; Heller & Monahan, 1977; Nietzel, Winett, MacDonald & Davidson, 1977; Tharp & Wetzel, 1969). This is in contrast to the more traditional "therapies" implied by the "illness model" of behavioral disorders, which are much more likely to require years of study to implement.

Behavioral contracting is an intervention technique derived from social learning theory. This theory views individual behavior as a function of the environmental consequences for the behaviors (Bandura, 1969). From this perspective, since behavior results from environmental contingencies, the systematic re-organization of these contingencies will result in changes in behavior. The important environmental consequences are most often social ones--generating from habitual relationships with others (Tharp & Wetzel, 1969). Social learning theorists view anti-social or "abnormal" behaviors as learned behaviors--exactly like any other type of behavior. Heller and Monahan (1977) list four components of a typical behavioral intervention: (1) a specific definition of the desired change, (2) accurate observation and recording of the current behavior, (3) selection

of appropriate contingency alterations, and (4) the establishment and consistent maintenance of this new contingent relationship. Most behavioral change strategies, including "token economies" and behavioral contracting utilize a similar set of steps in achieving change.

A review of the literature on behavioral interventions with delinquent youth reveals very optimistic and encouraging conclusions. The following quote from Nietzel, Winett, MacDonald, and Davidson (1977) is a representative summary:

> The research to date has indicated a pattern of positive results in terms of improvements in specific targeted behaviors. Additionally, these positive results have shown some generalization to socially defined criteria such as recidivism, particularly when the interventions were accomplished in community settings (p. 81).

Ross (1978), Rappaport (1977), and Heller and Monahan (1977) come to similar conclusions. Davidson and Seidman (1974) reviewed the literature which appeared on behavioral intervention with delinquents between 1960 and June, 1973. Their discussion separates the studies into three categories: those targeting educationally related behaviors as targets to change, those which target pro-social institutional behaviors, and those which utilize delinquent behaviors (e.g., recidivism rates) as the outcome criteria. Of the studies which focus on educational performance, the authors conclude that behavioral interventions attain positive changes in a variety of settings including residential institutions, schools and home-based interventions. They point out, however, that the issues of generalizability of the behavioral changes to other settings and durability of the obtained changes are not adequately addressed. In regard to the studies which focused on positive behaviors in institutional settings (like cleaning one's room, saving money, being prompt to meals and meetings, etc.), the authors report that "Again, the effectiveness of behavioral principles has been demonstrated, yet the question of the lasting nature of effects

is largely unanswered" (p. 1002). Also, the generalizability of the changes to other settings is challenged. Finally, in regard to the third category of studies, the authors conclude, "The studies of interventions focusing on delinquent performances as criteria have also shown positive results" (p. 1005). The reviewed studies included programs that targeted stealing behaviors and aggressive behaviors in institutional settings. They also included studies which targeted a number of pro-social behaviors by utilizing "token economies," and behavioral contracting within families and then examined the reduction of delinquent behaviors as an outcome variable. In these instances, delinquent behavior was "targeted" only in an indirect sense. Some of these studies included follow-up criterion measurements. Of these, some demonstrate durability and others display a deterioration of obtained changes over time. So the issue of durability is again highlighted as one which needs greater empirical attention in the future. Davidson and Seidman (1974) conclude from their review that, "Overall, the behavioral intervention with delinquents have, to date, provided promising results" (pp. 1008-1009). But they also voice strong criticisms of the quality of the research conducted in this area. They cite as common problems, the absence of control groups, the absence of baseline or reversal data in A-B-A designs, the absence of multiple outcome measures and the lack of follow-up observations. The pervasiveness of these problems leads them to conclude, "This body of research cannot be classified as confirmatory in nature due to limitations of the research designs used and the concomitant failure to rule out alternative explanations" (p. 1008).

Redner, Snellman and Davidson (1982) conducted a similar review as an update and complement to that of Davidson and Seidman. Their findings and conclusions were very similar to those of the earlier review. They

find that most studies of behavioral interventions which focus on academic behaviors report positive results, although, "the outcomes are not universally positive and are often of unknown strength" (p. 22). They find that studies geared toward changing in-program behaviors are consistently positive. They note that all such studies utilize token economies as the behavioral intervention tactic. They also note that, "attempts to modify and increase the pro-social performance of delinquent youth have met with consistent success" (p. 33). Examples of targeted behaviors in this category are pro-social comments, negotiation skills, work activity and appropriate job behaviors. They further report that, "the few studies targeting delinquent behaviors directly have mostly reported positive results." They note that very few systematic studies examining the impact of behavioral interventions on the reduction of delinquency are conducted. Only 34% of the reviewed studies actually utilized measurements of delinquency (either archival data or self-report) as criterion variables. Of these, half demonstrated reductions either across time or as compared to a control group. The authors present this as a cautiously optimistic finding. These reviewers are also highly critical of the current state of the research in the area, noting many of the same serious weaknesses as the earlier review. They concur that these methodological problems lend a dubious light to the generally positive findings reported in the literature. In concluding their review, Redner, et al. (1982) call for an increased specification and systematic manipulation of the program variables, and the contexts within which they operate in future research efforts. They summarize:

> The results presented so far lead one to conclude that behavioral interventions are: somewhat successful in improving academic achievement; extremely successful in modifying behaviors related to program management; extremely successful in increasing pro-social or reducing anti-social behaviors; and somewhat successful

> in reducing delinquent activity. Within targeted behaviors, it is very difficult, however, to specify which intervention works best given a specific population, a specific setting, and a specific type of service provider (p. 38).

It is clear from the above discussion that, even though serious methodological weaknesses are prevalent in the research efforts in this area, behavioral interventions have repeatedly been found to be constructive and successful intervention strategies with delinquent youth. This has been demonstrated, to varying degrees, across a wide variety of settings and specific intervention techniques. Similar conclusions led to the decision to include behavioral approaches as a primary intervention component in the Adolescent Diversion Project.

> The technique of behavioral modification had produced consistently positive results in both institutional and community settings. . . .This is not to say that the credibility of the positive findings was firm in terms of methodological considerations. . . .However, the behavioral approaches appeared to show sufficient promise and constituted a set of techniques readily usable by undergraduate students (Davidson, 1979, p. 22-23).

Behavioral contracting, as proposed and described by Stuart (1973) is the specific behavioral technique utilized within the intervention package of the ADP. Stuart proposed four reasons for utilizing behavioral contracting in community-based interventions. First of all, it is demonstrated to be effective. Secondly, it requires little administration time. It also is a method that can effectively increase and extend family influences over youthful behavior, and, finally, it can be administered successfully by paraprofessionals (p. 335). In short, behavioral contracting is very well suited to the needs and goals of the ADP.

Stuart suggests the implementation of a behavioral contract in family relationships when patterns of positive reciprocal exchange are absent or weak. In such situations, a contract provides a structure and schedule for such positive exchanges between family members. The process of

negotiation through which a contract is derived requires that family members specify, in positive terms, their role expectations and the benefits (and costs) which accrue by meeting or missing these. Stuart suggests that the communication and specification processes increase the probability that these expectations will be met and "contribute to interactional stability" within the family (p. 337). These, then, are the goals of the ADP undergraduate change agents when they teach the youths and their families how to utilize the behavioral contracting model. The hope is to use the model as a way of initiating and maintaining more constructive communication skills and the increased exchange of positives within family relationships. The undergraduates also utilize intervention tactics to facilitate the exchange of positive resources in other important areas of the youth's life. Child advocacy skills are most often utilized to accomplish these goals and this component of the ADP intervention package will be presented in the next section.

Child Advocacy

The advocacy approach stems from the environmental resources conception of human behavior (Davidson & Rappaport, 1978). This perspective supports and encourages diversity between peoples (as contrasted to the more traditional "Blaming the Victim" approach to human "problems," as described by Ryan (1976), which often pinpoints differences between groups of people as being the cause of whatever "problem" is currently being studied). The environmental resources position maintains that all people have a right to equal access to society's resources--social, material, educational, and psychological. If these resources are not provided to all members of society, then the society is seen as failing--not the individuals who are experiencing the lack (Davidson & Rappaport, 1978; Rappaport, 1977). This position is stated succinctly by Rappaport:

> Diversity and cultural relativity are supported. . . .There is a respect for individual differences. At the same time, the economic policy is one of social responsibility and shared resources equitably distributed. There are no inferior persons or cultures and each has a right to be judged by its own standards and to receive a fair share of the resources of the larger society (p. 24).

Advocacy is suggested as the means of intervening on the individual's behalf (or group's behalf) in order to access or generate needed resources that are being withheld or denied. The target for change is the society, not the individual (Davidson & Rappaport, 1978; Rappaport, 1977). Child advocacy is this tactic applied on behalf of children (either individually or as a group), who are often the target of discriminatory practices because of their age (Westman, 1979). Westman maintains that all children require advocates and that, most frequently, parents fulfill these roles. But, when they do not, others must do so (p. 165). Davidson and Rapp (1976) point out that "delinquents can be viewed in the same way as all other youths. Their areas of unmet need--which culminate most dramatically in their entry to the juvenile justice system--happen to meet with severe social sanction" (p. 227). Entry into the juvenile justice system, in turn, simply exacerbates the problem of resource inaccessibility. The goal of child advocacy efforts with this population would be to reverse this process and to generate and access resources for the youths.

Advocacy became popular as a social intervention tactic in the 1960's during the civil rights movement (Westman, 1979). It proved to be a useful and effective approach to mobilizing resources for minority groups. The child advocacy movement received its primary impetus in 1969 when the report of The Joint Commission on the Mental Health of Children called for social advocacy efforts in addition to traditional health care approaches (Westman, 1979). This idea was reiterated in 1970 by the report of The White House Conference on Children (in Krisberg & Austin, 1978). This report stated the case for child advocacy more strongly:

> Children, who are powerless and need a strong voice to represent them as a minority group, are now without political clout in this country. Therefore, we recommend that top priority be given to quickly establish a child advocacy agency (p. 508).

Westman lists three major tasks of the child advocate: "(1) to know every child, (2) to know what each child needs, and (3) to make sure that needed services are available" (p. 44). He suggests that these can be accomplished at the individual or group level. These tasks obviously incorporate a broad range of roles and functions. For that reason Westman cautions that, ". . . advocacy is an interdisciplinary enterprise and cannot be complete without taking into account all facets of a child's life" (p. 193).

From this discussion it appears that the definition of child advocacy is dangerously close to "being all things to all children." Certainly, as an intervention tactic, it suffers from conceptual ambiguity and the lack of a specific framework. This was the state of the art when the Adolescent Diversion Project was developed and implemented. Davidson (1979) writes:

> At the time that the planning of the Adolescent Project was in full swing (1972-1973) very little had been forthcoming about the specifics of an advocacy approach. It was essentially necessary to evolve an operational model for use in the latter years of the project. The model of child advocacy which was eventually implemented involved a sequential problem solving process aimed at activating, accessing, coordinating, etc. the necessary community resources to provide for the needs of the youth in the Project (p. 24).

This model is fully articulated by Davidson and Rapp (1976) and by Davidson and Rappaport (1978). It involved four sequential stages: (1) assessment of the youth's unmet needs and of available potential resources to fulfill those needs, (2) the selection of the best specific strategy to maximize the possibility of obtaining the resource on behalf of the youth, (3) the implementation of the chosen strategy, and (4) careful monitoring

of the outcome of the advocacy effort. The fourth step might reveal the need for further, secondary advocacy efforts if the goal has not been obtained.

This is a "multiple strategy" model of child advocacy. Davidson and Rapp (1976) describe nine distinct advocacy strategies which result from the interaction of two continua. One describes the targeted level for change and is comprised of the individual, administrative or policy levels. The choice at this point might be determined by whether the advocate is interested in accessing a resource for one individual in one specific instance or effecting a more far-reaching change at the administrative or policy level. The second continuum describes the specific tactical approach the advocate uses to influence the persons who control the resource. Possibilities here include positive, neutral (merely providing information to the individual), or negative, aversive tactics. The choice here is based upon a careful assessment of the critical individual in charge of the resources to determine what is most likely to be effective. These two continua interact to yield nine possible strategies since the advocate will choose one type of strategy from both (e.g., positive approach at the individual level, neutral approach at the policy level).

This multiple strategy model of child advocacy, as presented by Davidson and Rapp (1976), is utilized by the undergraduate change agents in the ADP.

Discussion

Child advocacy, combined with behavioral contracting, as presented in the two previous sections, are the two major components of the ADP intervention package utilized with the diverted youths by the undergraduate change agents.

The model is applied in an individualized fashion with each youth. The information gained during an assessment phase is utilized to determine, with the youth and his/her family, which specific goals should be set for the intervention. The undergraduate then utilizes either or both of the intervention strategies to best meet these goals. The entire intervention philosophy is one of focusing on positive aspects of the youth's life and developing strengths. This is an approach to human service efforts which is seen by many theorists in the field of community psychology as being an essential and most productive one (Albee, 1970; Heller & Monahan, 1977; Rappaport, 1977).

Another major tenet of the ADP intervention philosophy is that in order for change tactics to be successful in any enduring sense, maximum involvement with the target's natural environment is essential. This is a necessary and central precept of both the environmental resources and the social learning perspectives of human behavior. This also is an intervention approach which has received substantial support in the literature--particularly among behaviorists (Davidson & Wolfred, 1976; Kazdin, 1978; Patterson, McNeal, Hawkins, & Phelps, 1970; Stuart, 1973). When combined with the emphasis upon the teaching of contracting and advocacy skills to the youths and their families, this should maximize the potential for the endurance of any benefits gained during the intervention period. This, then describes the basic components and philosophies of the Adolescent Diversion Project. One essential question that remains is whether or not and to what extent this is an effective intervention package. This will be discussed in the next section.

## ADP - The Outcome Research

### Background

The Adolescent Diversion Project began in Champaign-Urbana, Illinois

in 1973 as a component of a larger research project which examined the effectiveness of nonprofessionals with four distinct target populations: elementary school children, institutionalized adult mental patients, elderly adults and adolescents in legal jeopardy. The intervention model which has been described above (hereinafter referred to as the "Action" model) was developed at that time. Undergraduate students from the University of Illinois worked on a one-to-one basis for eighteen weeks with youths who were diverted from the police department to the ADP in lieu of court petitioning. The results of this phase of operation (which will be discussed below) were very promising and indicated that the model warranted further examination (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes & Herring, 1977). The project was formally implemented in East Lansing, Michigan in 1977 for the purposes of replication and further research. Again, the Action intervention model was utilized among others. Michigan State University undergraduates served as change agents and the youth, in this setting, were diverted from the Ingham County Probate Court. The project was funded under a five year grant by the National Institute of Mental Health. Although the scope of this research has been broad, with many different aspects, it has focused on two major areas of interest throughout this period: the impact of the intervention on the diverted youths and the impact of the intervention on the undergraduate change agents. This discussion will primarily be restricted to the former issue.

The major outcome measure of the project's effectiveness, of course, has been its impact on the youth's subsequent delinquency rates. A review of the literature highlights an important issue in regard to the measurement of delinquency. Historically, official archival records were utilized to measure "delinquency." Several authors in the field have criticized this practice (Blakely, Kushler, Parisian, & Davidson, 1980; Elliot & Voss,

1974; Fernandez, 1981; Gold, 1966; Gold & Williams, 1969). Fernandez lists three major concerns with official measures of delinquency. First of all, it has been argued that official delinquency rates are more a measure of the behavior patterns and decisions of police and court staff than of delinquent behavior per se. For instance, Gold (1966) reports that, "boys who live in poorer parts of town . . . are four to five times more likely to appear in some official record than boys from wealthier sections who commit the same act" (p. 27). Clearly, then, police records are not an unbiased report of observed delinquent behaviors. The second major concern with official records of delinquency presented by Fernandez is that they represent only a very small subset of delinquent acts. Gold and Williams (1969) compared self-reported delinquency data with official records for a national random sample of 847 young people and found that only 3% of all reported offenses resulted in official detection and contact with the police. Elliot and Voss (1974) reported that this rate was 5% for their sample of over 2,600 high school students in California. The proportion that appears in court records would be even smaller. Obviously, the inclusion of only official data in any study of "delinquency" will result in tremendous underestimation and misrepresentation of the phenomenon. This creates what Fernandez lists as the third major concern with official archival measures of delinquency. Many programs which are interested in curbing delinquency provide "preventative" services to low-risk populations. It is impossible to evaluate the effectiveness of such programs with such a low frequency occurrence as official detection and processing. Reliance on official measures to evaluate these programs could lead to unwarranted conclusions that a program is not effective. These dissatisfactions with official measures of delinquency resulted in the development of self-reported delinquency measures. This was seen as the solution to the problem

of distinguishing between official delinquency and law-violating behaviors (Gold & Williams, 1969, p. 4). It has been suggested that these two measures of delinquency (official archival data and self-reported data) actually measure different constructs, both of which are important and valid (Blakely, et al., 1980; Fernandez, 1981). Empirical data support this contention: the two measures of delinquency are consistently and significantly but weakly correlated with each other. The resulting consensus of opinion from the discussion of this issue in the literature is that both measures are useful and should be utilized in combination when evaluating programs which are attempting to affect "delinquency" rates (Blakely, et al., 1980; Elliot & Voss, 1974; Fernandez, 1981; Gold, 1966).

The ADP has included both official archival data and self-reported measures of delinquency. Official measures of delinquency outcome that will be discussed here include the frequency and seriousness of court petitions, the frequency and seriousness of police contacts, and incarceration rates. A self-reported delinquency measure (see Appendix A) was also utilized. In addition, school records were accessed to include several measures of school performance, grades, attendance rates, and enrollment status.

Outcome Results

During the first phase of program implementation in Illinois, 37 youths were referred to the ADP by the local police department. (For a more detailed discussion of the results of this research, see Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes, & Herring, 1977.) These youths were randomly assigned to the project or to an outright release control group. There were 25 project youths and 12 controls. The project youths received the Action intervention model described previously. The results were extremely favorable. The ADP had a dramatic impact on the reduction

of the number and seriousness of police contacts and the number of court petitions (Davidson, et al., 1977). The authors report that, during the intervention and a one year follow-up period, the project youths "had fewer contacts of less severity and fewer petitions filed than the control subjects" (p. 45). There were also promising trends in the school data. Although there were no between-group differences in school attendance or grades, it did appear that the project had impacted upon the youth's drop-out rate. "At termination, 71% of those in the project group remained in school, as compared to only 50% of the control group" (p. 47). The second year of operation in Illinois replicated these positive findings (Rappaport, 1977; Davidson, et al., 1977).

One of the major research tasks in Michigan since 1977 has been to replicate the ADP intervention model to see if comparable recidivism effects are obtained (1) within a different setting, (2) with a larger N, and (3) in comparison to a treatment-as-usual control group. Although these questions were examined within the context of a much more extensive research design (as will become clear later), the results which bear on these questions will be presented first. Between the fall of 1976 and the spring of 1979, youths were referred to the ADP by the Ingham County Probate Intake Department. The referred youths ranged from 9 to 17 years of age, with an average age of 14.21. They were 83% male and 74% white (Davidson & Redner, 1982). They had all been petitioned to court for the commission of an illegal act. The vast majority admitted to the alleged offense at the Intake Inquiry; those few who did not were not referred to the project until after formal pre-trial or trial proceedings had resulted in a determination that the youth had, in fact, committed the offense. The youths had an average of 1.6 prior court petitions (Davidson & Redner,

1982). Only 10.4% of them were petitioned to the court because of a status offense (Davidson & Redner, 1982). The court staff maintained that they did not refer youths who they would otherwise have warned and released. Subsequent archival record searches suggested that this was, for the most part, true. After a youth was referred to the project an interview was scheduled for an ADP staff member, the youth and one or both of his/her parents. At the meeting, the project was explained to the youth and parent(s) and it was explained that participation was voluntary. Youths were then randomly assigned to a condition. During this two and one-half year time period, 60 subjects were randomly returned to the court intake worker for treatment-as-usual. These youths were the Control group. During this same time, 76 youths were randomly assigned to the "Action" condition as described earlier. Tables 1-3 present the comparisons of these two groups on court recidivism rates, police recidivism rates and incarceration rates respectively. All of this data refers to a two and one-half year follow-up period subsequent to project referral.

Table 1 shows that after two and one-half years, while 62% of the treatment-as-usual Control group were repetitioned to the court, only 38% of the Action group were. In other words, project participation had the effect of reducing court recidivism by 39% from what it would have been if this group received normal court processing. This is a significant difference.

The police data depicted in Table 2 demonstrate a similar find although the between group differences are not as great, nor are they statistically significant. Table 3 reveals a significant between group difference in incarceration rates during the follow-up period. During this time, only 13% of the project youth are incarcerated for any length of time, whereas 28% of the Control group are.

Table 1

Court Recidivism

Number of Youths by Condition Who Were and Were Not Repetitioned to the Court During a Two and One-Half Year Follow-up Period

| Group | Repetitioned | Not Repetitioned | Total |
|---|---|---|---|
| Action | 29 (38%) | 47 (62%) | 76 |
| Control | 37 (62%) | 23 (38%) | 60 |

NOTE: $\chi^2 = 6.507$ $p < .02$

The data presented in this table are from Davidson and Redner, 1982.

Table 2

Police Recidivism

Number of Youths by Condition Who Did and Did Not Have Contact With the Police During a Two and One-Half Year Follow-Up Period

| Group | Had Contact With the Police | No Contact With the Police | Total |
|---|---|---|---|
| Action | 41 (54%) | 35 (46%) | 76 |
| Control | 40 (67%) | 20 (33%) | 60 |

NOTE: $\chi^2 = 1.755$ $p < .20$

The data presented in this table are from Davidson and Redner, 1982.

Table 3

Incarceration

Number of Youths by Condition Who Were and Were Not Incarcerated at Some Time During a Two and One-Half Year Follow-up Period

| Group | Incarcerated | Not Incarcerated | Total |
|---|---|---|---|
| Action | 10 (13%) | 66 (87%) | 76 |
| Control | 17 (28%) | 43 (72%) | 60 |

NOTE: $\chi^2 = 3.946$ $p < .05$

The data presented in this table are from Davidson and Redner, 1982.

The comparisons of the two groups' self-report delinquency data reveal no differences either during the project intervention period or one or two years after project termination. The two groups also did not differ on any of the school variables.

The results from this research, then, are mixed. The court recidivism results obtained in Illinois were strongly replicated. Furthemore, strong group differences are maintained for at least two years after project termination. Also, the differences between the two groups' incarceration rates are striking and lend further support to the conclusion that this is an effective intervention package that has an enduring impact upon the lives of the youths who are participants. But the absence of between group differences on the other outcome measures casts some doubt on this optimistic conclusion. It is particularly perplexing to note such differences in the number of court petitions and, yet, not to achieve group differences in self-report delinquency rates nor in the frequency of police contacts. These latter measures are purported to be more comprehensive indices of illegal behavior, since they are both less "distant" from the actual act than court records would be expected to be (Elliot & Voss, 1974, p. 81). At the least, these results highlight (1) the importance of including multiple outcome criteria in program evaluation research and (2) the extremely complex nature of "change" as it relates to social phenomena like "delinquency" in open social systems. A great deal more information than that presented here would be necessary to unravel and to understand the observed results.

## The Need to Examine Process Variables

Research results such as those just presented on the effectiveness of the ADP point up the importance of developing and utilizing adequate research designs and measures to tap the underlying processes of change and

the relationship of these processes to specific outcomes (Davidson, Redner & Saul, in press). This need is frequently discussed and delineated in the literature, particularly in relationship to the research conducted in the field of psychotherapy (Durlak, 1979; Gomes-Schwartz, Hadley & Srupp, 1978; Meltzoff & Kornreich, 1970; Strupp, 1978). Among these authors there is unanimous dissatisfaction with the traditional mode of conducting psychotherapy research. Meltzoff & Kornreich (1970) report that relatively few attempts are made to specify and verify the therapeutic variables which relate to specific outcomes (p. 203). Strupp (1978) and Gomes-Schwartz, et al. (1978) both call for a movement away from the general question of whether or not psychotherapy is effective, and toward a greater specification of the issues involved. Gomes-Schwartz, et al. state:

> Simple group comparisons do not answer questions about how therapy works--what elements of technique and what patient and therapist characteristics facilitate therapeutic movement or, conversely, contribute to negative change (p. 436).

Durlak (1979) notes this same complaint about the research comparing the effectiveness of professional change agents with that of nonprofessionals:

> Probably the most serious weakness in comparative research lies in the failure to examine the factors that account for paraprofessionals' effectiveness. Investigators have failed to relate specific intervention techniques to specific client changes (p. 78).

Even when investigators have examined the relative impacts of various types of interventions, Meltzoff and Kornreich (1970) note that the typical approach has been to label or describe the various theoretical orientations underlying the particular interventions and then to assume within group homogeneity of intervention. These authors point out that this is an erroneous assumption and that such research cannot further the task of understanding how particular interventions are helpful with particular target populations under specific conditions.

The research in psychotherapy has been categorized by Gottman and Markman (1978) into three types--each of which attempts to answer a different question: Is psychotherapy effective? What kind of therapy or therapeutic system is the most effective? Or, what therapeutic processes lead to the most change? The last of these is generally referred to as the "process study." The methodology employed in such research might provide guidelines for attempting to sort out the underlying processes operative within the ADP. Unfortunately, such process studies in psychotherapy seldom utilize objective outcome criteria--a fact which limits their usefulness in determining the relative impact of specific intervention components. In discussing the problem, Meltzoff and Kornreich (1970) noted that most researchers in the area of psychotherapy were apparently so committed, a priori, to some particular school of therapy that it never occurred to them to test the theory by utilizing objective outcome criteria--rather they would explore the conditions which seemed to maximize the occurrence of some therapist variable like, "unconditional positive regard" or "depth of interpretation," which was assumed to be helpful.

Still one might agree that the methodology employed by the psychotherapy process researchers could, nevertheless, be instructive to the current task. Schlien's (1968) presentation of several process studies suggests that the most common methodology involves a content analysis of the in-session behaviors of the therapist, the client or both. Gottman and Markman's more recent review (1978) also reflects this fact. Many such studies focus on the relationship of highly specific, operationalized interpersonal behaviors--like, the therapist's verbal reinforcement behaviors, physical gestures, or the duration of speech and silence--to the dependent variables. Unfortunately, the dependent variables most often are

also within-session behaviors and not, as mentioned earlier, more generalized objective outcome criteria.

But, at any rate, the focus of the research tends to be limited to the examination of minute aspects of the interaction between the therapist and client in the hopes of specifying some of these as more or less helpful in achieving certain outcomes. This perspective stems from a belief which is stated succinctly by Meltzoff and Kornreich (1970). "The proof of the therapeutic pudding lies in what actually happens between the participants" (p. 439). Although this is certainly an essential aspect of understanding the processes which lead to behavior changes, the social learning and the environmental resources theories of human behavior would disagree vehemently with such a limited focus of inquiry. The person's environment--outside of any therapeutic interactions--would be seen as having a tremendous impact upon any observed or hoped for changes. From this perspective, the exclusive examination of in-session variables or variables related directly to the intervention activities of the change agent is seen as too limited. Such a restricted focus suggests a simplistic understanding of human behavior and change. Another, more serious, obstacle to utilizing the techniques suggested from this source, stems from the fact that the intervention activities employed by the traditional psychotherapy model are of a fundamentally different (and <u>much</u> more restricted) scope than those employed within the ADP "Action" intervention package. In the latter, the "intervention" includes a wide variety of activities which occur in a wide variety of settings. For example, an undergraduate change agent who works within the ADP model might (among other things) spend recreational time with the youth, visit school personnel on the youth's behalf, role-play job interviewing situations, visit a neighborhood youth center to gather information about available activities, and engage in family

negotiation sessions to develop a contract. These activities obviously occur throughout the community. As such, they are not amenable to recording procedures or observation in the way that more traditional interventions are. And the psychotherapy research reported in the literature offers little in the way of suggestions for measuring such a diverse array of intervention components. In speaking to this problem, Tharp and Wetzel (1969) state:

> From an experimental point of view, behavior modification in the natural environment is difficult because of problems in the maintenance of control and collection of data. The functioning source of change, should change be accomplished, is difficult to pinpoint and isolate (p. 37).

For reasons described above, then, the techniques employed in therapy "process" studies have limited value for gaining a better understanding of the changes which underlie the observed results of the ADP intervention package.

In discussing these problems and the complexities involved in exploring the specific processes which underlie changes in human behavior as they relate to therapeutic interventions, several authors do make constructive proposals about possible research tactics. Paul (1967) suggests:

> In all its complexity, the question towards which all outcome research should ultimately be directed is the following: What treatment, by whom, is most effective for this individual with that specific problem, and under which specific set of circumstances? (p. 111).

He maintains that no single study will yield such a set of answers. Instead, he advocates sequential studies with systematic variations in the process and intervention variables and careful monitoring of the differential results. He also advocates that each study extensively measure and describe each of the important variables (emphasized in his quote). He thus foresees an accumulative process of arriving at the answers to the process question that he poses.

Several authors offer an additional suggestion: that of repeated measurement of multiple outcome and process variables throughout the intervention period (Gottman & Markman, 1978; Orlinsky & Howard, 1978; Tharp & Wetzel, 1969). Gottman and Markman (1978) argue for the use of such designs:

> Their most useful contribution is that they offer a unique perspective on the assessment of interventions . . . . Interventions with clients, institutions, communities, and societies do not merely have an "effect" but an "effect pattern" across time . . . . The time series designs provide a methodology appropriate to the complexity of the effects of interventions in human systems.

A Proposed "Hybrid" Model for the Task

Davidson, Redner and Saul (in press) note the inadequacy of current research paradigms for examining the impact of social programs and propose a hybrid model which they suggest is more able to meet the complex demands of the task. Their proposed model (of which the ADP research, presented below, is an example) includes both of the suggestions presented above. That is, it includes a sequential experimental component for hypothesis confirmation purposes and it utilizes multiple measurement points to add a longitudinal perspective. In addition, it also advocates multiple measurement tools rather than relying on a single outcome measure.

The hybrid model that is proposed is particularly well suited to examine the relationship of on-going process variables to specific outcomes. It includes "exploratory components" devised particularly for such a task. The authors propose that these exploratory components would be designed especially to match the needs of a given research setting. They might include a battery of measures including interviews with several sources, observations, questionnaires and archival data, the focus of which would be geared specifically toward the goals of the given program. These would be administered at several points in time, allowing the monitoring of the

patterns of change over time of a number of variables, as well as their interrelationships. Davidson, et al. advocate that these measures be designed to include maximum input from all of the project participants (target or client population, change agents, and staff). They suggest that this procedure could provide (1) manipulation checks of the experimental component of the model, (2) important longitudinal information about the relationships between the intervention activities and the observed outcomes and (3) information about other intervening variables which might be operating upon the participants and influencing outcomes. Since this model demands that measures be tailored to suit the particular needs of each research setting, "measurement development will necessarily become part of research efforts occurring simultaneously with intervention development, initiation and evaluation" (Davidson, et al., in press).

The next section will describe how this "hybrid model" of program evaluation research was utilized to help to explore the relationship between process and outcome variables in the Adolescent Diversion Project.

## ADP--The Process Research

The hybrid model proposed by Davidson, Redner and Saul (in press), as mentioned earlier, consists of two major components. The first of these is the experimental, or confirmatory component--which, through systematic manipulation of process variables and repetition over time, yields controlled tests of certain hypothesized relationships between process and outcome variables. The second component is the exploratory component described above. Its purpose is to provide a maximum amount of information about the entire context of the program participants' lives (including, but not limited to, the intervention activities). The result will be to obtain information about the change patterns demonstrated by multiple variables over time and thus to generate hypotheses about possible

relationships between process and outcome variables. The discussion in this section will present the results of this type of research conducted at the ADP. First, a description and the results of the experimental components of the model (as they relate to process variables) will be presented.

Review of Process Results Gained From Experimental Manipulation

During the second year of operation in Illinois, in order to gain a better understanding of the impact of the "Action" intervention model, the model was separated into its two main components: behavioral contracting and child advocacy (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes, & Herring, 1977). In this phase there were two experimental groups--a contracting group and an advocacy group--and the outright release control group. Thirty-six youths were diverted from the police and randomly assigned to one of the three conditions. As mentioned earlier, the comparison between the controls and the experimentals taken as one group replicated the findings of the first year (fewer court petitions and fewer police petitions for less serious offenses among the experimental groups). But there were no significant differences between the two experimental groups on any outcome measures. Davidson, et al. conclude that both intervention components are effective and advocate the utilization of the combination provided with the Action model for maximum flexibility and individualized interventions.

The next experimental manipulation designed to explore the specific important aspects of the intervention model involved the implementation of a "Relationship" focused intervention model which provided the same amount of training and supervision for the undergraduates as the Action model--but the intervention was based upon the relationship therapy principles and

procedures developed by Carl Rogers (Kantrowitz, 1979). Another condition included in this stage of the research was a "Low-Intensity" training and supervision condition. This condition was devised to test more commonly utilized volunteer-intervention models for adolescents--like those employed by the Big Brother/Big Sisters program. This group received much less training than the other groups and only monthly (as compared to weekly) supervision meetings with a focus on natural skills. The results of this phase of the ADP research are discussed fully by Kantrowitz (1979). Both the Action and Relationship conditions achieved significant reductions in the youths' court recidivism rates, and similar but smaller and nonsignificant trends in police recidivism. But the Low-Intensity groups did not demonstrate these effects. They were statistically indistinguishable from the treatment-as-usual control group on all outcome criteria. These effects have recently been demonstrated to have endured through a two and one-half year follow-up period (Davidson & Redner, 1982). Interview data with the youths further revealed that all three groups of undergraduate change agents spent similar amounts of time with their youths--so the observed differences are not due to simple differences in the "amounts" of intervention provided to the groups. Kantrowitz concludes:

> It appears that highly specific contents of training/supervision, combined with close, careful monitoring of cases, done in small classes and on a weekly basis, are crucial components of a successful nonprofessional program working with delinquent youth (p. 194).

These data suggest that the actual contents of the intervention model are less important than the fact that a specific and comprehensive model is provided within the context of intense and frequent training and supervision sessions. Kantrowitz also finds, from measures administered to the students, that those involved with the Action model reported greater satisfaction with their youths and with the project in general than did those in the Relationship condition.

The next phase of the ADP research was designed to explore the importance of providing a wide range of services to the youths with an intervention designed for implementation within a broad range of areas of the youth's life (like the Action model). This was contrasted with an intervention which was limited to dealing with the youth's family from the perspective of the social learning model (the "Family" model). Emshoff (1980) and Blakely, Kushler, Emshoff, Parisian, and Davidson (1980) present the results of this research. After a one and a half year follow-up period, the Family and Action groups combined had significantly fewer court petitions than did the Control group. The two groups did not differ significantly from one another on any of the delinquency outcome variables (Davidson & Redner, 1982). Emshoff noted differences in school variables, however. The Action group maintained steady rates of drop-out throughout the intervention period whereas the Family and Control groups' drop-out rates increased during this time. The same trend was noted in grade point average and attendance: the other groups demonstrated a deterioration not present within the Action group. Emshoff concluded that the data demonstrated a slight superiority of the Action condition--particularly vis-a-vis the school variables.

In the next year of operation, the ADP compared the Action and Control conditions to a condition which was devised to examine the importance of diversion away from the court system to the Action intervention package (Blakely, 1981). The students in this condition received training that was identical in content and structure to those in the Action condition, but the weekly supervision of cases was conducted by the court intake staff. Blakely reports that, by the end of the intervention period, only 18% of the "Action" youths had recidivated to either police or court, whereas this figure was 50% for the "Court" group. This difference was not significant,

however. But, Davidson and Redner (1982) report that, after one and a half years, 75% of the Court group had had further contact with the police, whereas only 39% of the Action group has. This is a significant difference. Blakely concludes that the diversion model is essential to the effectiveness of the project. Even though both groups of undergraduates were trained to carry out the same intervention model, the students supervised by the court staff were found (as measured by questionnaires administered to the students) to lose their commitment to the concept of diversion, and to become more punitive in their approaches to intervening with delinquents than were the Action students.

These results have shed some light on the issue of which intervention processes or components are most important in accounting for the reported success of the ADP. The following conclusions can be made: (1) both the behavioral contracting and the child advocacy components of the model are useful and effective (Davidson, et al., 1977); (2) intense supervision and training in a specific and detailed intervention model are essential (Kantrowitz, 1979); (3) a broad based intervention approach is slightly more effective than one limited to interventions within the family domain (Emshoff, 1980); and, (4) diversion from the court is an essential aspect of the ADP intervention package, and independence from the juvenile justice system should be maintained (Blakely, 1981). This presentation of this sequence of studies conducted on the ADP reveals how a series of experiments with repeated manipulations of process variables can help to unravel the question of the specific relationships between process variables and outcome criteria. This demonstrates the confirmatory component of the hybrid research paradigm proposed by Davidson, Redner and Saul (in press). The next section will describe and present the findings of the exploratory component of that model as it was executed within the ADP research setting.

Review of Process Results Gained From Exploratory Components

As stated previously, Davidson et al. (in press) advocate the inclusion of exploratory components in the assessment process when examining the effectiveness of social interventions. These are designed specifically to explore the context of the particular program in question to achieve a clearer picture of the processes of change which underlie any observed effects in the outcome criteria. One of the primary measures developed and utilized for this purpose vis-a-vis the youth-related outcome effects of the Adolescent Diversion Project is the "process interview." This was first utilized during the last phase of research conducted at Illinois. In discussing the rationale for this interview, Davidson (1979) states:

> It was felt essential to not only replicate the findings of the second year but to begin attempts at analyzing the processes which might be leading to the observed results. This led to the development of an intricate set of longitudinal, exploratory process interviewing procedures . . . (p. 56).

He later goes further in explaining the function and purpose of these interviews:

> One of the major foci of this research was to gain a detailed monitoring and understanding of the ongoing process of events in the lives of the youth, the components of the intervention approaches, and the salient features of the training and supervision sessions (p. 67).

It was believed to be extremely important to obtain this detailed information from the perspective of the program participants (youths, parents, undergraduate change agents, and supervisors). When first implemented, the interviews were conducted at three points throughout the intervention period with each of four sources: the youth, a parent, the student, and the student's supervisor. The interviews covered all important aspects of the youth's life (school, friends, free time activities, home life, and involvement with the legal system) and the intervention process in detail. The interview information was coded into items which were combined into

scales via the rational/empirical method (Jackson, 1970; Selltiz, Wrightman & Cook, 1976). The measurement development procedures utilized will be discussed at greater length in Chapter II.

The Illinois Setting--Process Results

The major findings of the analysis of the relationships between these scales, the three conditions, and a success/failure criteria (wherein success is defined as the absence of further police or court contacts during project involvement and attendance at school of at least a weekly average of two days) are presented in Table 4 (reprinted from Davidson, 1979). Davidson summarizes these results:

> For all conditions it was apparent that the success-failure criteria was closely related to what has been described as socially acceptable or sanctioned role involvement . . . . The youth who end up in further trouble with the police and completely uninvolved in school attendance are characterized by low levels of involvement at home, with the school system, and with the employment market (p. 87).

The Michigan Setting--Intervention Interview Results

The process interviews were also utilized in the research carried on at the Michigan site. Here the interviews were conducted at four points: at project referral and six, 12 and 18 weeks later. This last time coincided with project termination. The interviews were conducted with the youth, a parent and the volunteer in each case. There were two major components of the interview: (1) a "Life Domain Interview" which sought specific information about the youth's life in many areas, including school, home, and free time activities, and (2) an "Intervention Interview" which focused solely upon the activities directly involved in the intervention. This latter component, obviously, was only conducted with the five different experimental groups (Action, Relationship, Low Intensity, Family and Court). The results discussed in this section include the combined data from all of the youths who participated in the project between

Table 4*

Relationships of the Multiple Contingency Model
(Process scale scores x condition x success/failure)
Illinois Data--Year 2

| | Behavioral Contracting | Child Advocacy | Control |
|---|---|---|---|
| Success | 1. Involved in socially approved roles.<br>2. Stability on Change Dimensions.<br>3. Initiating contracting model.<br>4. Working on changes in the family area.<br>5. Working on changes in the youth's school performance. | 1. Involved in socially approved roles.<br>2. Stability on Change Dimensions.<br>3. Initiation of advocacy model.<br>4. Working with the youth's friends.<br>5. Working on changes in the school system. | 1. Involved in family and school.<br>2. Stability on Change Dimensions. |
| Failure | 1. Uninvolved in socially approved roles.<br>2. Deterioration on Change Dimentions.<br>3. Initial trouble initiating contracting model.<br>4. Responding to juvenile justice system.<br>5. Attempting to get youth employed.<br>6. Family intervention focused on youth per se and minimal school intervention. | 1. Uninvolved in socially approved roles.<br>2. Deterioration on Change Dimensions.<br>3. Initial trouble initiating contracting model.<br>4. Responding to juvenile justice system.<br>5. Attempting to get youth employed.<br>6. No family and minimal school intervention. | 1. Involved in job seeking.<br>2. Deterioration on Change Dimensions. |

*Note. Reprinted from Davidson (1979).

the spring of 1977 and the spring of 1979. The information yielded by the intervention interview provided an excellent "manipulation check" of the various intervention conditions. There were, accordingly, significant differences found in the intervention interview data between the various conditions. These demonstrated model adherence in most instances and have been discussed at length previously (Blakely, 1981; Emshoff, 1980; Kantrowitz, 1979). The data were analyzed using five (condition) by two (success vs. failure) by three (time period) analyses of variance. A youth is included in the "failure" group if any contact with the police or court occurred subsequent to project referral. Only the results which differentiate between the success and failure groups will be discussed here. These analyses included the data from the youth interviews only. (All the information in this and the following section was obtained from Davidson and Redner, 1982.)

Three intervention scales yielded significant results involving the success/failure variable:

1. Amount of Time. This scale measured the amount of time that the volunteer spent working with or on behalf of his/her youth. The results showed that the volunteers who worked with youths who recontacted the police or court at some time during the intervention or one year afterwards spent increasingly less time with their youths throughout the intervention period (time x success/failure $F = 4.34$, $p < .01$). These analyses, of course, do not allow a determination of the direction of causality, but this probably reflects the volunteer's reaction to the youth's reinvolvement in the juvenile justice system.

2. School Intervention--System Focus. This scale measured the extent that intervention activities focused on improving the school situation by attempting changes at the school (e.g., changing classes or teachers).

This type of intervention activity happened more within the "failure" group than the "success" group. This effect is strongest when the success/failure (S/F) classification is based upon the intervention period ($F = 4.81$, $p < .03$); only a marginal difference is obtained when S/F includes the one year follow-up period ($F = 3.31$, $p < .07$).

3. Legal System Involvement. This scale measured the extent to which the volunteer became involved with the juvenile justice system on behalf of the youth. Again, and obviously, the "failure" group received more of this type of intervention than the "success" group. This effect was apparent and strong when S/F was measured during the intervention period ($F = 10.96$, $p < .001$) and when it included the one year follow-up S/F information ($F = 9.83$, $p < .002$).

It is also informative to note some of the intervention scales which do not demonstrate S/F group differences. For instance, none of the scales which measure the extent that the intervention focuses on the home domain demonstrated between group differences in regard to the success/failure variable. Similarly, the two scales which measured the amount of behavioral contracting activity and the amount of advocacy activity did not show any such effects.

These results from the intervention interview suggest that the youths who become re-involved with the juvenile justice system receive a very different intervention package than those who do not. The youths who become re-involved receive a decreasing amount of intervention time from their volunteers and this time is relatively more often spent in dealing with the school system and the juvenile justice system. It is obvious that the latter involvement is elicited by the occurrence of a crisis (i.e., the volunteer only becomes involved in this system as a result of the youth having gotten into trouble). One might surmise that the between

group differences on the School Intervention scale can be similarly understood. That is, it is possible that the "failure" group volunteers more frequently become involved with the school system in response to crises (e.g., suspension or failing grades). The next section will discuss the results from the life domain component of the interview which demonstrated significant differences between the success and failure groups.

The Michigan Setting--Life Domain Interview Results

The data from the life domain interview were analyzed using a five (condition) by two (success vs. failure) by four (time period) analysis of variance. Five life domain scales demonstrated significant effects with regard to success/failure.

1. School Involvement. This scale measures the extent to which the youth is involved in school (how often he/she goes, whether or not he/she likes school or does well in it, etc.). The analyses here reveal that youths who recontact the juvenile justice system are less involved in school than are those youths who do not. This is true whether S/F is based upon the actual intervention period, a one year, or two year follow-up period ($F = 5.21$, $p = .02$; $F = 11.53$, $p = .001$; and $F = 7.43$, $p = .03$, respectively). This replicates earlier findings reported by Blakely, et al. (1980) and Davidson, et al. (1977).

2. Positive School Change. This scale measures the extent of change in the school domain in such variables as attendance, grades, classroom behavior, homework completion, etc. This scale demonstrates an interaction effect with time and S/F ($F = 3.78$, $p = .01$). The "failure" group demonstrates more positive change over time. Since this scale measures change, this is somewhat difficult to interpret. Since the previously discussed School Involvement scale demonstrated that this group was less involved with school than the "success" group, this result may reflect the fact

that these youths have more frequent problems within the school domain and therefore there is more room for improvement and change in this area. This effect is only apparent when S/F is measured during the intervention period--not when measured during one or two year follow-up periods.

3. Positive Home Change. This scale measures the extent of change in the home domain. It includes items such as, "What change has occurred in terms of the parent and youth arguing?" This scale demonstrates a condition by success/failure effect ($F = 2.70$, $p = .02$). Among the Action, Relationship and Family conditions the success group demonstrates more positive changes than the failure group, whereas for the Court and Control conditions, the failure group has higher means. The Low Intensity successes and failures do not differ. These condition differences may reflect the more proactive, strength-building approach of the Action, Family and Relationship change agents, whereas those in the Court group may have been more likely to work toward improvement in this area after a crisis (like re-involvement in the juvenile justice system). The same might be true in the Control group.

4. Parental Control. This scale measures the extent that the parents attempt to control, by negative means, the behaviors of the youth. It includes several items which focus on the frequency of arguments over various concerns (chores, friends, the use of the phone, etc.). This scale demonstrates a strong main effect for the S/F variable when it is based on one year and two year follow-up periods ($F = 6.23$, $p = .01$; $F = 8.16$, $p = .005$, respectively). It does not, however, yield significant differences between the S/F groups when they are determined on the basis of the "during-intervention" time period. This suggests that the more parents attempt to control the youth (which reflects dissatisfaction with the

youth's behavior), the more likely it is that the youth will get into legal trouble in the future.

5. Legal Involvement. This scale measures the extent of the youth's involvement in the legal system. The results replicate those found in the corresponding intervention interview scale--the "failure" group is (obviously) more involved with these activities than the "success" group $F = 22.73$, $p = .0005$).

These results from the life domain interview data demonstrate important differences between the youth who are successful in remaining uninvolved with the juvenile justice system and those who become re-involved. The "successful" youth are more involved in school and apparently have more positive relationships with their parents (since the "failures'" higher scores on the Parental Control scale can be viewed as reflecting parental dissatisfaction with the youths' behaviors). This is consistent with the earlier finding by Davidson (1979) that the youths who were successful in the Illinois project tended to be more involved in socially acceptable roles.

More generally, the results demonstrate the importance of including the "exploratory component" of the hybrid model as proposed by Davidson, Redner, and Saul (in press). The inclusion of the process interview allows a careful examination of the relationship between contextual/environmental variables, the ongoing processes of the intervention and the observed changes in the criterion or outcome variables. Unfortunately, the analyses reported above do not allow a comparative examination of the relative importance of the various process and contextual variables in accounting for the variance of the outcome measures. This is the focus of this proposed study.

## The Current Research

The preceding review suggests that the relationships between process variables and the outcome results achieved by social intervention programs must be examined if we are to achieve appropriate applications of specific interventions to specific human problems. We have seen that this approach to evaluation research is widely advocated in the human service fields (Davidson, Redner, & Saul, in press; Durlak, 1979; Gottman & Markman, 1978; Meltzoff & Kornreich, 1970; Orlinsky & Howard, 1978; Paul, 1967) but seldom applied. This has been due in part to a lack of appropriate methodology to meet the scope of the task. The "hybrid model" proposed by Davidson, Redner, and Saul (in press) was suggested as a research paradigm which could meet this need. We have seen how the combined applications of the confirmatory and exploratory components of this model, in the evaluation of the Adolescent Diversion Project, have been extremely productive in this regard.

This effort to "untangle" the impact on outcome of a wide array of intervention-process variables and other contextual variables operative in the lives of the project youths is especially important in regard to the ADP. This is because of the perplexing outcome results which have been reported to date (Davidson, et al., 1977; Davidson & Redner, 1982; Blakely, 1981; Emshoff, 1980; Kantrowitz, 1979). The project has been demonstrated to be very effective in reducing "delinquency," as measured by certain criteria (court recidivism and incarceration); but not equally effective in reducing "delinquency" as measured by other criteria (self-reported delinquency and police recidivism). These results demonstrate the importance of including multiple outcome measures in the evaluation of social intervention programs. Specifically, they highlight the importance of

including self-reported delinquency (SRD) measures and support the contention that SRD and archival records of formal contacts with the juvenile justice system in fact measure two different constructs or aspects of the phenomenon of "delinquency" (Fernandez, 1981).

These apparently contradictory results also point out the complexity of the problem of achieving (and measuring) changes in human behavior as a result of an intervention package applied within an open social system. The careful monitoring of process and contextual variables is essential if we ever hope to understand the complexities of the intricate patterns which lead to change.

The process interviews, which were devised especially for such an exploratory task within the ADP setting, have provided an excellent tool for achieving this understanding. Previous univariate examinations of the process interview data have resulted in substantial gains in information about the patterns of change which are associated with the observed outcome results. But these analyses do not allow an examination of the relative importance of these variables as compared with one another in accounting for the obtained variance. A multivariate examination was required for this next step.

The current study conducted such an examination. It explored the combined influences of a number of process variables (as predictors) on two different outcome or criterion variables. The process variables were derived from the process interviews described above. These variables included the youths' scores on the three life domain scales which measure various aspects of the youth's relationship to his/her family, two scales which measure his/her relationship to school, one which focuses on job seeking activities, two which focus on peer relationships, and ten of the

intervention scales which measure different components of the students' intervention activities throughout the youth's involvement with the program.

These eighteen scales were utilized as predictor variables in two discriminant function analyses, each examining a different outcome or criterion variable. The first of these utilized as the criterion variables the occurrence of court or police recidivism during a one year follow-up period to categorize the youths as "successes" or "failures." The second utilized self-reported delinquency rates during this same period. In this case the youths were assigned to one of three categories determined by the magnitude of the SRD score (Low, Medium, and High scores). These analyses addressed the following research questions:

1) Which process variables appear to be most strongly associated with the occurrence of official recidivism during a one year follow-up period? And, similarly, which ones appear to be strongly associated with the level of SRD rates?

2) To what extent can a combination of these variables account for the observed differentiation on these two outcome criteria? (i.e, To what extent can you predict delinquency outcomes one year after project termination based upon the knowledge of these process measures?)

3) Do different combinations of the process variables account for official delinquency outcome and for SRD outcome? How do the solutions for these two discriminant functions compare?

The following chapter will describe the study in greater detail.

# CHAPTER II

# METHOD

## Subjects

Youth participants. The sample for this research consisted of 107 youths who participated in the ADP between April, 1977 and June, 1979. These 107 youths were among the 133 who were randomly assigned to one of the five experimental conditions discussed in Chapter I which were under study within the context of this research project during that time (Action, Relationship, Low Intensity, Family and Court). Twenty-one youths were eliminated from the total sample due to the inability to conduct follow-up measures with them one year after the completion of their project involvement. These follow-up interviews were not possible either because the youth could not be located or they refused to be interviewed. The completion rates of these follow-up measures for the five conditions were nearly identical (Davidson & Redner, 1982). Another five youths were eliminated because of missing interview data from the period during their involvement with the project. These youths were also nearly equally distributed between conditions.

Throughout this time, the Adolescent Diversion Project operated under a federal grant from the National Institute of Mental Health. It diverted youths from the Ingham County Juvenile Court--The Intake Division. All youths referred to the project had been petitioned to the court for a violation of the juvenile code. The nature of the offense varied greatly. Table 5 presents the frequency distribution for all youths by referral

offense. This table includes all youths referred to the project between the Fall of 1976 and the Spring of 1980. The youths who were referred during this time had an average of 1.6 prior court petitions (including the referral petition) and 1.4 prior arrests (Davidson & Redner, 1982).

The project was operated in conjunction with the Department of Psychology at Michigan State University in East Lansing, Michigan, where the undergraduates who acted as service providers to the diverted youths were enrolled.

The average age of the 107 youths who were included in this study, during their interventions, was 14.25 with a range from 9 to 17 years. Seventy-eight and one-half percent of the youths were Caucasian. Only 18.7% were female. The youths represented a wide range of socio-economic levels, but the majority were from lower and lower-middle income homes.

Student participants. Each youth worked for 18 weeks with an undergraduate change agent who was enrolled in a three-term course sequence in the Psychology Department. The sequence began either in Fall or Spring Term and ran consecutively through the next two academic terms. Each student enrolled in a four credit course for each of the three terms that he/she was involved with the project. The students were primarily social science majors. Most were in their junior year. The students were randomly assigned to condition during Years III, IV, and V (see Table 6). Table 6 provides a breakdown of the 107 youth-student pairs who will be included in this study by condition and year.

Trainers and supervisors. The students were trained in the intervention model dictated by their particular condition in small groups of six to eight students each (with the exception of the Low Intensity group, which was supervised less intensively as will be described below). Each

Table 5

Distribution of ADP Participants by Referral Offense
Adolescent Diversion Project -- Fall, 1976 through September, 1980

| Type of Offense | Freq. | Pct. |
|---|---|---|
| B & E (breaking and entering) | 60 | 24.2 |
| malicious destruction of property | 14 | 5.6 |
| RAW (runaway) | 8 | 3.2 |
| incorrigibility/curfew (not school incorrigibility) | 7 | 2.8 |
| larceny | 83 | 33.5 |
| possession of a weapon | 1 | .4 |
| assault without weapon | 7 | 2.8 |
| assault with weapon (including armed robbery) | 4 | 1.6 |
| possession of controlled substance (other than alcohol) | 9 | 3.6 |
| arson | 1 | .4 |
| UDAA (car theft)/joy riding | 11 | 4.4 |
| false alarm | 4 | 1.6 |
| eluding/resisting arrest | 1 | .4 |
| possession of stolen property | 14 | 5.6 |
| forgery | 3 | 1.2 |
| truancy (including school incorrigibility) | 11 | 4.4 |
| bomb threat | 1 | .4 |
| leaving the scene | 3 | 1.2 |
| reckless or felonious driving, DUIL | 2 | .8 |
| reckless use of firearm | 2 | .8 |
| criminal sexual conduct (CSC)--4th degree | 1 | .4 |
| obstructing justice | 1 | .4 |
| Total | 248 | 100.0 |

Note: This information was compiled by Davidson and Redner, 1982.

Table 6

Breakdown of ADP Youth--Student Pairs by Condition and Year*

| Condition | Year II (Spring, 1977-Fall, 1977) | Year III (Fall, 1977-Spring, 1978) | Year IV (Spring, 1978-Fall, 1978) | Year V (Fall, 1978-Spring, 1979) | Totals |
|---|---|---|---|---|---|
| Action | 17 | 11 | 9 | 7 | 44 |
| Relationship | -- | 12 | -- | -- | 12 |
| Low Intensity | -- | 21 | -- | -- | 21 |
| Family | -- | -- | 8 | 11 | 19 |
| Court | -- | -- | -- | 11 | 11 |
| Totals | 17 | 44 | 17 | 29 | 107 |

*This table includes youth who were included in this study.

small group in the Action, Relationship and Family group was trained and supervised by a pair of psychology graduate students. The Court group was trained by one advanced psychology graduate student and a Court Intake Referee. They were subsequently supervised by the Court Referee alone.

The graduate students who were responsible for the training and supervision of the undergraduates were each simultaneously responsible for conducting some specific research related tasks on the project. They were rotated through the various conditions over time as much as possible so that no one supervisor would be exclusively associated with one of the conditions--however, they were not randomly assigned, nor was it possible to completely cross supervisors with conditions since none of the conditions except for Action was implemented often enough to achieve this.

The organizational structure of the ADP was modeled after the "Educational Pyramid" model suggested by Rappaport (1977). This model advocated a hierarchical structure wherein the target population (in this instance, the diverted youths) constituted the bottom tier. They were served exclusively by the undergraduate change agents who made up the next level in the pyramid. The students were supervised by graduate students, who also coordinated the research efforts. They were, in turn, supervised by the Project Director who oversaw the entire organization.

Procedures

Recruitment of students. Each Winter and Spring Term, course announcements were sent out to over 1,000 social science majors informing them of the availability of this course sequence beginning the following Spring or Fall Term. (Fall Term students were recruited during the prior Spring Term, since many of them left town over the summer.) The announcement (see Appendix B) provided a general description of the course experience and instructed interested students to call for more information. Those

who called were told to attend a recruitment meeting where they were provided with more detailed information about the content and requirements of the course (by the Project Director). Students who were still interested in pursuing enrollment in the course were told to come to a subsequent meeting where they would be required to fill out a number of demographic measures, attitude questionnaires, and Jackson's Peronality Research Form (Jackson, 1968). These measures were utilized in conjunction with the larger research project and are not directly related to the current study. From the pool of students who had attended both meetings and completed all of the measures, the necessary number of students for the following "year" of the project were chosen. An equal number of males and females were selected randomly. An additional group was chosen to make up a mailing list, should some of those selected to begin the class change their minds. The final set of students was randomly assigned to condition. Additional students, who had been rejected through the above described selection process, were given the option of enrolling in a simultaneous course sequence. This course would be involved with administering the process interviews which were conducted four times with each diverted youth, a parent, a peer (in some instances), and--for experimental youth--a student. Some other students were recruited by the academic counselors in the Psychology and Criminal Justice Departments for this interviewing course sequence. Approximately 10 to 15 students were enrolled in this course during each "year" of the project.

Referral of youth. The youths were referred to the project from the Intake Department of the Ingahm County Juvenile Court after a preliminary hearing had been held in conjunction with the charge for which they had been petitioned. If the youth admitted committing the offense at this point, the ADP was one of the referral options available to the Intake Referee.

The referees had agreed not to refer youths who they would otherwise warn and release.

If, after having heard a brief description of the project from the referee the youths and parents were interested in pursuing the possibility of becoming involved, the referee would schedule an appointment with one of the project staff.

This meeting with an ADP staff person took place at the court. The youth and parents were given a detailed description of what project involvement would entail. They were told that involvement was on a voluntary basis; and if they decided to participate, the project would last for 18 weeks and during that time they would spend six to eight hours per week working with a student. It was explained that the intervention was an individualized one, so that everyone's experiences were unique, but a general description of the kinds of activities that might be included in their work with the student was provided.

They were also told that not every youth would be assigned to work with a student--that only three-fourths of the youths would be and that a random lottery system would determine which youths would work with a student. They were told that, if they agreed to participate, they would be expected to be a part of the evaluation procedures whether or not they were assigned to a student.

It was explained that these evaluation procedures entailed (1) releasing access to school records, (2) releasing access to all police and court records, and (3) participating in a series of interviews. The youths would be paid $5.00 for each interview. It was explained that the project would want to interview the youth, parent and one of the youth's friends (to be nominated by him/her). The interviewer, they were told, would inquire about many different areas of the youth's life, including

home, school, freetime activities, and intervention activities with the student to whom they were assigned.

The voluntary nature of participation was again stressed. They were told that if either of them did not wish to participate they would go back to the referee for another disposition decision. This was also the procedure if they happened not to be assigned to a volunteer after deciding to participate with the ADP. If, at that point, they made a commitment, the participation agreement was filled out and signed (see Appendix C). Then the youth was randomly assigned to condition by drawing an envelope that contained the condition the youth would be assigned to. The envelopes were stratified by referee, the sex of the youth and race. The youths who had been assigned to the Control condition were told to expect to hear from the interviewer and were returned to their Intake Referee.

Youths who had been assigned to one of the experimental conditions were told that they would be contacted by an interviewer and their assigned student within a day or two. The case information was then forwarded to the supervisors in charge of that condition and they assigned a student to the youth. Assignment was random with two exceptions; students without cars were assigned to youths who lived close to bus routes and girls were always assigned to female students. The students were told to contact their youth as soon as possible to set up an initial meeting time.

Training and supervision. For Action, Relationship, Family and Court conditions, classes met in small groups of six students with two supervisors on a weekly basis. Each class session lasted for 2½ hours. The students were supplied with training manuals designed for their particular condition (Court and Action groups used the same manual). The training portion of the classes lasted for eight weeks. The manuals for each condition

were divided into eight sections. The material in each was to be mastered for the corresponding class meeting. In addition to the manual, outside readings were assigned each week. These were provided to the students on a "reserved" basis by the University Library. These courses were taught according to a "mastery" model. The beginning of each class meeting was spent answering any questions the students had about the material assigned for the week. After this discussion session, the students responded to three short essay questions on the material. These were then corrected immediately and returned to the students. If the students had not demonstrated an 85% mastery level on each question, they were required to rewrite the answers and turn them in again within the next few days. The correct answers to the questions were discussed during class. Next, the group responded to oral questions covering the same material which were similarly evaluated. Again, if the students did not demonstrate mastery, they wrote out their answers and resubmitted them. From the fourth week on, these didactic activities were supplemented with role-plays of important types of intervention interactions (e.g., contract negotiation sessions within the Action, Family and Court groups). The emphasis on mastery and practice were intended to maximize the probability that the students were, indeed, learning the intervention models. The content of each of the training components of these four conditions were:

1. Action. The Action group was trained to utilize behavioral contracting and child advocacy skills. Both of these intervention approaches were discussed in Chapter I. They were expected to utilize these techniques to aid the youth in dealing with a wide range of situations in their lives (school, home, freetime, employment and the legal domain, if necessary). They were trained in (a) assessment techniques, (b) the implementation of intervention strategies, (c) careful monitoring and "trouble

shooting" skills, (d) secondary intervention strategies to incorporate the information gained from the monitoring activities, and (e) termination strategies which shifted the major responsibilities for carrying on with these activities to the youth and his/her family.

2. Relationship. This group's training was based upon the interpersonal theories of human behavior put forth by Harry Stack Sullivan and Carl Rogers (Kantrowitz, 1979). The intervention strategies which were taught focused upon establishing meaningful, authentic relationships between the students and youths. This was expected to impact upon the youths' self-concepts in constructive ways which would diminish the likelihood of future delinquent behaviors. Students were taught to utilize accurate empathy skills, a problem-solving model, feedback skills and other communication and relationship skills to facilitate the development of a close, warm relationship between the student and youth.

3. Family. This condition was devised to test the importance of the broad focus of intervention of the Action model against a scope of intervention limited to the family domain (Emshoff, 1980). Training in this case was similar to the Action group's training in every respect except that it focused solely on interventions within the family system. The role of behavioral contracting, accordingly, assumed greater emphasis in the training of this group. As in the Action group, the students were taught assessment, intervention, monitoring, "trouble shooting," and termination strategies to utilize in their interventions.

4. Court. The Court group received exactly the same training as did the Action group (Blakely, 1981). The difference between the two groups was that the Court group's case supervision was carried out by a Court Intake Referee (as mentioned previously). He met with the students in a

group every week after training to review and to plan the individual case interventions.

Supervision of cases for the Action, Relationship and Family groups was also carried out in the small groups on a weekly basis--but by the ADP supervisor pairs who had also been responsible for the training of the groups. The format of these supervision groups allowed each student to present the goals, activities and accomplishments of the preceding week and to discuss any unresolved issues or questions with the group. They developed and presented their plans for the next week as a result of this process. The goal was to create an active problem-solving orientation within the groups and to foster group input into the individual cases. This supervision format allowed a close monitoring of the cases and provided the students with the resources of their fellow students' experiences. In addition to the weekly group meetings, students were encouraged to call their supervisors at any time if problems or questions arose.

In contrast to these intensive training and supervision models, the fifth condition--Low Intensity--was managed quite differently (Kantrowitz, 1979). These students received training sessions which presented very general information about the volunteering role with juvenile offenders. The focus of the training and intervention was on utilizing the students' natural helping skills for the benefit of their youths. This would primarily include such things as being the youth's friend, providing a good role model and sharing in mutually enjoyable activities. The students met with their supervisiors on a monthly basis for case supervision. This condition was devised to reproduce the circumstances which are more common within programs that serve young people with nonprofessional "helpers." This model could then be compared to the more intensive training and supervision models presented above.

Intervention. The intervention activities of each group were determined by the content and format of the different training and supervision conditions. Manipulation checks revealed that the students in each condition (with the exceptions noted earlier regarding the Court group) adhered to the models which they had been taught (Kantrowitz, 1979; Emshoff, 1980; Blakely, 1981). All students were expected to spend between six to eight hours per week working with their youths. The intervention period lasted for 18 weeks in all instances. This excluded any academic breaks observed by the University. All students were expected to carry out their intervention activities within the community--the youth's natural environment. Although the extent to which this occurred would obviously be influenced by the training models. For instance, only the Action and Court groups would be expected to become directly involved with the youths' schools. But the intensity of the intervention, as measured by the amount of time spent with the youth on a weekly basis, and the length of the intervention period, were the same across all conditions (Davidson & Redner, 1982).

Measures

The measures which were utilized for the purposes of this study include:

1. An indication of the occurrence of police and court contacts subsequent to referral to the ADP up until one year after the termination of project involvement. This measure was based upon archival record searches.

2. A measure of self-reported delinquent behaviors.

3. Detailed information about significant areas of the youth's life--school, home, friends, freetime activities and employment. This information was based upon the process interviews conducted with the youth. This will subsequently be referred to as the Life Domain Survey.

4. Detailed information about the extent and nature of the intervention activities that the students carried out with or on behalf of the youth.

This information was also based upon the youth interviews. This will subsequently be called the Intervention Survey.

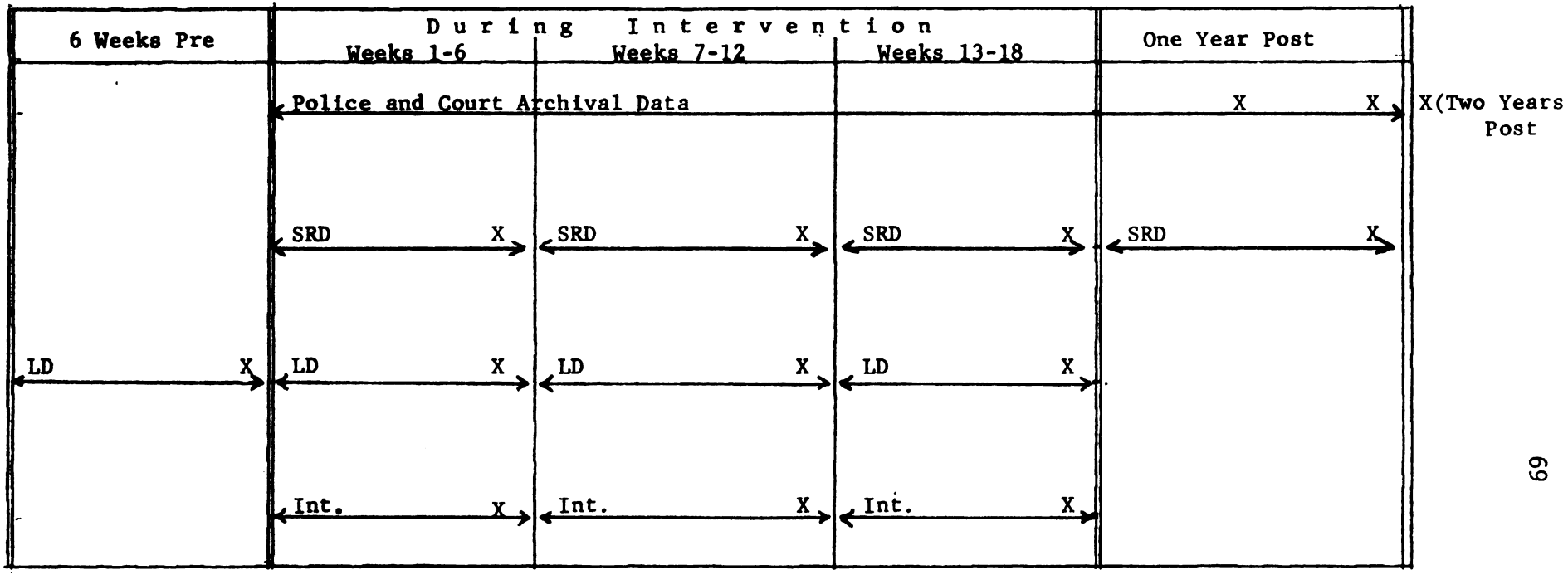
A depiction of the measurement schedule is presented in Figure 1. Each of the measures will be discussed separately.

Archival police and court data. The information about subsequent police and court contacts was collected semi-annually throughout this time (Spring of 1977 through the Spring of 1979) and for several years afterwards. This length of time increased the probability that the records concerning any contacts with the police or any petitions to the court would be in the files and accessible to the ADP research staff at some time during this period. The ADP staff's experience with these records suggested that it often took months for records to reach the files and that, even then, files would often disappear for unexplained reasons and variable lengths of time. For these reasons, repeated, frequent collections were deemed necessary to maximize the probability of a complete data set. The archival data were gathered by graduate research assistants, with the help of undergraduate coders.

The police data were gathered from the County Sheriff's Department, all major police stations in the area, the local branches of the State Police and several smaller township police departments. Several variables were collected from the police records, but the only one of concern to the present study is the number of police contacts.

The court data were all collected from the local County Juvenile Court. Again, several court variables were collected, but only the number of petitions subsequent to project referral is of interest for this study.

Process measures. The Self-Report Delinquency measure (SRD), and the Life Domain and Intervention Surveys were all administered to the youths by the interviewers who were enrolled in the research course sequence




| | |
|---|---|
| ⟷ | Arrows signify period for which data is available. |
| X | Signifies exact time of measurement administration (or data collection). |
| SRD | Self Report Delinquency |
| LD | Life Domain Survey |
| Int. | Intervention Survey |

Figure 1. Diagram of Measurement Administration

that ran concurrently with the intervention sequence. This course involved a three-term commitment from the students as did the other sequence. It was taught by ADP graduate student research assistants. The first term of this course involved training the students in interviewing techniques, familiarizing them with the ADP, teaching them coding and data management skills and training them to administer several paper and pencil measures, one of which was the SRD. (The others were not pertinent to this study.) This portion of the course relied heavily upon role-playing and practice interviews combined with frequent, specific feedback from the supervisors.

The interviewing technique which was taught was an open-ended one. The interviewers had a specific set of items to code from the information gained during the interviews but they obtained this information by asking open-ended questions, followed by increasingly specific probes--rather than administering a set of items. It was felt that this interview technique would yield higher quality data than more traditional methods (Davidson, 1979). The interviews were all audio-recorded to maximize the accuracy and retention of the information when the interview was coded later. The Life Domain and Intervention Surveys will be discussed at greater length in later sections.

At the end of the training segment of the course, before being assigned to interview a current ADP case, the interviewers conducted a complete practice interview and measure administration with previous interviewers or ADP staff members. They recorded the entire interview, coded all of the information and then reviewed the entire procedure with a supervisor. They were then assigned cases.

Each case consisted of four interviews with the youth and four with the parent (at the point of referral; and six, twelve, and 18 weeks later). It also involved three interviews with the youth's volunteer (at six,

twelve, and 18 weeks). One interviewer was responsible for all of these interviews for each case assigned to her/him. Once assigned, the interviewer contacted the youth and parent and scheduled appointments for the interview. The interviews were generally conducted at the youth's home in a place where privacy could be assured. All sources were interviewed separately. The interviews generally lasted for one to one and a half hours. The interviewers assured the sources of the confidentiality of the interview and the anonymous handling of the information. The youths were paid $5.00 to complete each interview. Every interviewer was responsible for four to six cases, one of which was an interrater case to which two interviewers were assigned. One of the interviewers in the pair conducted the interview, the other observed and tape-recorded the procedure and both coded the information independently. This allowed the assessment of interrater reliability of the Life Domain and Intervention Survey data.

Throughout the last two terms of the course sequence, interviewers met regularly with supervisors to discuss any problems which might have developed with specific cases, to talk about coding questions, listen to tapes of interviews, check over data sets as they were completed and handed in, and continue to work on improving interviewing techniques. Each of the components of this process interview which were pertinent to this study will be discussed below. These include the SRD, Life Domain Survey and Intervention Survey.

Self-Report Delinquency measure. The SRD measure which was utilized is included in Appendix A. The items inquire about a wide range of delinquent behaviors that are frequently occurring. Very serious crimes that are infrequently committed are not included. The measure also includes several positive items to discourage response-set biases. The youth responded to each item twice: first with the frequency of the behavior during

the past six weeks, and secondly with the frequency during the past year. The coded frequencies were, "never," "once," "twice," and "more than twice." The SRD was administered by the interviewer immediately following the open-ended interview. The interviewer read each item and recorded the youth's responses to eliminate error variance due to differences in reading skills. The measure was administered at the four time periods throughout the intervention period and also one year after project termination (by a different interviewer, but following a similar open-ended interview).

Blakely, et al. (1980) reported that this measure generates one major scale. The rational subscales were found to be less reliable. These authors demonstrated the reliability of the total scale via internal consistency analyses and test-retest methods. Concurrent validity of the total scale was assessed by examining the relationship between it and official outcome measures (police and court records). The authors report correlations in the mid to upper 20's and conclude that the total scale "demonstrated strong validity properties."

Life Domain Survey. The process interview was developed to provide a source of information about the impact of the intervention model on various areas of the youth's life (school, home, freetime, etc.). Specific information about these areas, combined with information about the nature and extent of the intervention activities could also provide information about contextual variables that might be affecting project outcomes. In short, these interviews were seen as tools which could be used to begin to examine the complex processes which underlie "change" in human behavior within social contexts. This interview was devised specifically to meet these needs as they related to the ADP (Davidson, et al., in press).

Davidson (1979) described the process of developing the interview, which took place during the second year of research at the Champaign-Urbana

setting. Initially, a handful of interviewers conducted the first process interviews with the youth participants and one of their parents three times throughout the course of their involvement. The general areas of interest were predetermined rationally. The item set was developed through a number of steps. First, an extensive list of potential items were generated rationally, based upon the first few interviews. Then, audiotapes of interviews were analyzed to generate new items, ascertain appropriate response categories for the items and to check the "ratability" of them. Following this process, all of the interviews were coded with this new item set. Then the task of scale development began. It was accomplished according to the methods outlined by Jackson (1970). First, items were rejected that did not demonstrate adequate differentiation properties. All items with over 90% endorsement in one response category were eliminated. The second step was to group items into scales rationally. Then these scales were examined for internal consistency and convergent/discriminant validity. The scales were modified wherever possible to maximize these properties. Finally, a multi-trait/multi-method analysis was conducted to further examine the scales' reliability and validity properties.

The codebooks which resulted are included in the appendices. The Life Domain Survey (Appendix D) included 132 items which made up eleven scales. The Intervention Survey (Appendix E) had 146 items which composed thirteen scales. The Intervention Survey will be discussed further in the next section.

Information concerning the eleven Life Domain scales in their final form are presented in Tables 7, 8, and 9 which are reprinted by permission of Davidson and Redner (1982). Table 7 presents the content description of each scale, an example of a scale item and the internal consistency alphas for each scale. The alphas ranged from .59 to .90. Table 8

presents the validity and reliability information obtained from the multi-trait/multi-method analysis. The results demonstrated the desired pattern of higher mono-trait/hetero-method correlations than mono-method/hetero-trait correlations on all eleven scales. Table 9 presents the inter-interviewer reliability data. In all instances the between-interviewer correlations were higher than the within-interviewer (between other scales) correlations. But the interrater correlations for some of the scales were lower than is desirable. They ranged from .19 to .81 with an average of .45. The correlations for three scales were particularly low: Parental Knowledge of Friends, Parental Knowledge of School and Legal System Involvement. The interrater correlations for the remaining eight scales ranged from .41 to .81 with an average of .53--a more acceptable range. These three scales were, therefore, excluded from the analyses conducted in this study.

The Life Domain Surveys were conducted with the youths and a parent at four times during project involvement, as described earlier (at 0, 6, 12 and 18 weeks). Each interview focused exclusively on the past six weeks. Thus, the first interview provided information about the six weeks prior to project involvement and the second, third, and fourth provided information concerning the eighteen week period that coincided with the ADP intervention. During the years of interest, the completion rates of these interviews was 95%, and was nearly identical across conditions. Only the data from the youth source were used for the analyses in this study.

Intervention Survey. The scales of the Intervention Survey were created in an identical manner to that used for the Life Domain Survey. Information concerning the thirteen Intervention scales are presented in Tables 10, 11, and 12 (reprinted by permission of Davidson and Redner, 1982).

Table 7

Life Domain Scales

I. POSITIVE INVOLVEMENT IN THE HOME. The degree to which the youth spends time at home and is involved in activities with his parents and siblings, e.g., "How often does youth play indoor activities with parents?" and "How often does the youth eat dinner at home?" $\alpha = .78$

II. PARENTAL CONTROL. The degree to which the parents make attempts, positive or negative, to control the actions or conduct of the youth, e.g., "How much do the parents argue with the youth about his/her friends?" and "How often do the parents talk to the youth about changing?" $\alpha = .72$

III. POSITIVE CHANGE IN THE HOME. This scale was drawn from common complaints from parents and youth in the interviews and the content of those issues were included as change items, e.g., "How much has the youth's spending time at home in the evenings changed?" $\alpha = .79$

IV. INVOLVEMENT IN THE SCHOOL. The degree to which the youth went to school, did well in school, liked school, etc., e.g., "How often does the youth attend school?" and "How often do the teachers hassle the youth? $\alpha = .90$

V. POSITIVE CHANGE IN SCHOOL. E.g., "What change has occurred in school attendance?" $\alpha = .85$

VI. ACTIVITIES WITH PEERS. The degree to which the youth engaged in activities with his peer group or friends, e.g., "How often does the youth spend time with friends on the weekends?" $\alpha = .75$

VII. POSITIVE CHANGE IN FREETIME ACTIVITIES. E.g., "What change has occurred in the youth spending freetime constructively?" $\alpha = .59$

VIII. PARENTAL KNOWLEDGE OF FRIENDS. The extent to which parents have knowledge of the youth's friends and his activities with them, e.g., "To what extent to parent(s) know who the youth's friends are?" $\alpha = .79$

IX. PARENTAL KNOWLEDGE OF SCHOOL. The extent to which parents have knowledge of the youth's school performance, e.g., "How many of the youth's teachers do the parents know of?" $\alpha = .63$

X. EMPLOYMENT MOTIVATION. The extent to which the youth desires and initiates action to obtain a job, e.g., "How often does the youth actively seek employment?" $\alpha = .69$

XI. LEGAL SYSTEM INVOLVEMENT (high score means low involvement) The extent to which the youth has contacts with the police or juvenile court, e.g., "How often has the youth had contacts with the police lately?" $\alpha = .71$

Table 8

Life Domain Scale Correlations

| | Mono-trait/Hetero-method (i.e., "validity diagonals") | Mono-method/Hetero-trait | | | |
|---|---|---|---|---|---|
| | | Youth | | Parent | |
| | Youth with Parent | Mean | Range | Mean | Range |
| 1. Positive Involvement in Home | .81 | .15 | .001 to .25 | .13 | .02 to .30 |
| 2. Parental Control | .76 | .21 | .00 to .56 | .27 | -.02 to .76 |
| 3. Positive Change in Home | .79 | .12 | -.01 to .27 | .14 | -.003 to -.34 |
| 4. Involvement in School | .69 | .21 | -.06 to -.46 | .28 | .06 to -.57 |
| 5. Positive Change in School | .65 | .16 | .07 to .28 | .20 | .04 to .28 |
| 6. Activities with Peers | .64 | .20 | -.01 to .44 | .14 | -.06 to .28 |
| 7. Positive Change/Freetime | .61 | .19 | .06 to .42 | .24 | .08 to .58 |
| 8. Parental Knowledge/Friends | .76 | .26 | .08 to .47 | .32 | .05 to -.56 |
| 9. Parental Knowledge/School | .50 | .14 | -.02 to .39 | .25 | .03 to .49 |
| 10. Employment Motivation | .91 | .17 | -.01 to .32 | .12 | .03 to .28 |
| 11. Legal System Involvement | .83 | .16 | -.01 to .32 | .16 | .02 to .30 |

NOTE: From Davidson and Redner, 1982.

Table 9

Inter-Interviewer Agreement

Years 2, 3, 4, 5 Life Domain

| | Between Interviewers Scale Correlation | Within Interviewer Correlations Range Lo | Hi | Mean |
|---|---|---|---|---|
| Positive Involvement in the Home | .81 | .05 | -.57 | .26 |
| Positive Change in School | .41 | -.02 | .25 | .10 |
| Activities with Peers | .47 | -.05 | .33 | .19 |
| Parental Control | .51 | -.00 | .42 | .21 |
| *Parental Knowledge of Friends | .19 | .01 | .38 | .15 |
| *Parental Knowledge of School | .29 | .01 | .34 | .19 |
| Positive Change in the Home | .54 | .03 | .34 | .17 |
| Involvement in School | .44 | .05 | .40 | .17 |
| Positive Change in Freetime Activities | .48 | .02 | .55 | .23 |
| Employment Motivation | .56 | .07 | .52 | .24 |
| *Legal System Involvement (high score means low involvement) | .27 | -.01 | .38 | .18 |
| | .45 | | | .19 |

NOTE: These scales were excluded from analyses in the current study.

Table 10 presents a description of each scale, an example item for each, and the internal consistency alphas for each. The alphas ranged from .58 to .93. Table 11 presents the results of the multi-trait/multi-method analyses. Again, the desired pattern of higher mono-trait/hetero-method correlation predominated. Table 12 presents the interrater data. The overall picture of these inter-interviewer correlations was superior to that of the Life Domain Survey scales. These correlations ranged from .22 to .87 with a mean of .61. Three scales performed questionably in these analyses--both in terms of demonstrating relatively low interrater correlations and in the fact that these correlations were closely approximated or exceeded by the within interviewer correlation ranges. These scales were: Positive Involvement, Peer Involvement, and Legal System Involvement. These were excluded from the analyses in this study. Interrater correlations for the remaining ten scales ranged from .47 to .87 with an average of .70.

The Intervention Surveys were conducted with each project youth, a parent and the volunteer three times--at six, 12 and 18 weeks. The focus of the interview was on the past six weeks. Combined, then, the three interviews provided inclusive information about the entire intervention period. Again, as with the Life Domain Survey, only the youth data was used for this study.

## Data Modification Procedures for Process Measures

As discussed in the preceding section, for the purposes of the current study, eight Life Domain Survey scales were utilized. These were:

**Positive Involvement in the Home**
**Positive Change in School**
**Activities with Peers**
**Parental Control**
**Positive Change in the Home**
**Involvement in School**
**Positive Change in Freetime Activities**
**Employment Motivation**

Table 10

Intervention Scales

I. AMOUNT OF TIME. Frequency and amount of contact, e.g., "How much time does the volunteer spend working on the case?" $\alpha$ = .76

II. POSITIVE INVOLVEMENT. The extent to which the youth and the assigned volunteer get along and the lack of problems involved in the intervention process, e.g., "To what extent does the youth like the volunteer?" $\alpha$ = .87

III. PARENTAL INVOLVEMENT. The extent to which parent(s) are included in the intervention and the extent of a relationship built up between the parent(s) and the volunteer, e.g., "How often does the volunteer talk with the parent(s)?" $\alpha$ = .81

IV. SCHOOL INTERVENTION: YOUTH FOCUS. Extent of the intervention focusing on school behavior of the youth, e.g., "To what extent is the volunteer trying to get the target to go to school more?" $\alpha$ = .87

V. SCHOOL INTERVENTION: SYSTEM FOCUS. Extent of the intervention focusing on bringing improvements to the school environment by focusing on school staff, e.g., "To what extent is the volunteer working on curriculum changes?" $\alpha$ = .78

VI. JOB SEEKING ACTIVITIES. Extent to which the intervention focused on getting the youth employment, e.g., "How much has the volunteer instructed the youth in job seeking?" $\alpha$ = .85

VII. FAMILY INTERVENTION: YOUTH FOCUS. Extent to which the intervention focused upon changing the youth within the family context, e.g., "How often does the volunteer talk to the youth about home?" $\alpha$ = .87

VIII. FAMILY INTERVENTION: PARENT FOCUS. Extent to which the intervention focused upon changing the parents' behavior in the family, e.g., "To what extent is the home intervention focused on improving the parents' household rules?" $\alpha$ = .78

IX. RECREATIONAL ACTIVITY. Amount of recreation involved in the time spent with youth by volunteer, e.g., "How often do the volunteer and youth do athletic activities together." $\alpha$ = .66

X. PEER INVOLVEMENT. Extent to which friends of the youth are involved in the intervention, e.g., "How often do the youth's friends spend time with the volunteer and youth?" $\alpha$ = .58

XI. LEGAL SYSTEM INTERVENTION. Extent to which the volunteer became involved in the juvenile justice system for the youth, e.g., "Has volunteer assisted in negotiating a court disposition?" $\alpha$ = .83

Table 10 (continued)

Intervention Scales

XII. ADVOCACY ACTIVITIES. Extent to which the volunteer intervened on behalf of the youth to gain needed resources, e.g., "To what extent does the volunteer take action to generate new resources (e.g., employment, new club) for the target?" $\alpha$ = .76

XIII. CONTRACTING ACTIVITIES. Extent to which the volunteer utilized behavioral contracting as an option in the intervention, e.g., "To what extent has the volunteer been instructing the youth and significant others in the methods of contracting?" $\alpha$ = .93

## Table 11

### Correlation of Intervention Scales

| | Mono-trait/Hetero-method (i.e. "validity diagonals") | | | Mono-method/Hetero-trait | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Youth | | Parent | | Volunteer | |
| | Youth with Parent | Youth with Volunteer | Parent with Volunteer | Mean | Range | Mean | Range | Mean | Range |
| 1. | .90 | .76 | .67 | .29 | -.06 to .50 | .28 | .04 to .52 | .31 | -.01 to .59 |
| 2. | .92 | .73 | .68 | .23 | .06 to .44 | .20 | .02 to .39 | .20 | .01 to .41 |
| 3. | .87 | .80 | .81 | .35 | -.003 to .59 | .33 | -.08 to .50 | .30 | .03 to .52 |
| 4. | .73 | .67 | .68 | .24 | .10 to .48 | .22 | -.01 to .53 | .26 | .06 to .57 |
| 5. | .86 | .81 | .82 | .24 | -.01 to .44 | .24 | .00 to .53 | .22 | -.003 to .59 |
| 6. | .86 | .77 | .79 | .34 | .11 to .79 | .26 | .001 to .50 | .31 | .03 to .81 |
| 7. | .80 | .79 | .76 | .31 | .06 to .79 | .26 | -.0004 to .82 | .27 | .02 to .81 |
| 8. | .90 | .82 | .87 | .25 | .11 to .60 | .26 | .001 to .63 | .23 | .04 to .64 |
| 9. | .88 | .82 | .80 | .31 | .06 to .60 | .30 | .03 to .62 | .33 | .12 to .64 |
| 10. | .95 | .90 | .91 | .13 | .02 to .45 | .10 | -.01 to .36 | .12 | -.003 to .37 |
| 11. | .85 | .91 | .92 | .10 | .02 to .23 | .10 | -.01 to .22 | .10 | .01 to .25 |
| 12. | .90 | .91 | .93 | .29 | -.08 to .57 | .28 | .09 to .54 | .29 | -.06 to .53 |
| 13. | .81 | .67 | .68 | .35 | .07 to .58 | .32 | .03 to .47 | .32 | .05 to .57 |

Table 12

Inter-Interviewer Agreement

Years 2, 3, 4, 5 Intervention

| | Between Interviewers Scale Correlation | Within Interviewer Correlations Range Lo | Hi | Mean |
|---|---|---|---|---|
| Amount of Time | .47 | -.02 | .46 | .25 |
| *Positive Involvement | .22 | .00 | .36 | .18 |
| Parental Involvement | .61 | .06 | .62 | .34 |
| *Peer Involvement | .34 | .01 | .52 | .26 |
| Recreational Activities | .57 | -.02 | .42 | .21 |
| Family Intervention: Parental Focus | .75 | .05 | .67 | .39 |
| Family Intervention: Youth Focus | .64 | .16 | .67 | .42 |
| School Intervention: System Focus | .87 | -.05 | .61 | .28 |
| School Intervention: Youth Focus | .79 | .04 | .63 | .33 |
| Job Seeking Activities | .83 | .03 | .26 | .13 |
| *Legal System Involvement | .40 | .03 | .38 | .15 |
| Contracting Activities | .77 | .12 | .62 | .36 |
| Advocacy Activities | .70 | .03 | .56 | .33 |
| | .61 | | | .28 |

*NOTE: These scales were excluded from analyses in the current study.

For each of these, each youth's scale scores from the first, second, third and fourth interviews were summed across time to yield one general measure for each scale. This combined score, it will be remembered, contained information about pre-intervention levels and also contained information about the during intervention scores which would indicate any improvements or detriments realized during this period. The combined scale scores yielded rough, overall indications of both sources of variation. Table 13 presents the means and standard deviations of the resulting eight Life Domain scale scores.

Ten Intervention Survey scales were also utilized in this study, as discussed previously. They were:

Amount of Time
Parental Involvement
Recreational Activities
Family Intervention: Parental Focus
Family Intervention: Youth Focus
School Intervention: System Focus
School Intervention: Youth Focus
Job Seeking Activities
Contracting Activities
Advocacy Activities

The scores for these ten scales were also summed across time. Each youth's scale scores from the six, 12, and 18 week interviews were combined to provide an overall measure of the intervention activities which were carried out throughout the youth's involvement with the ADP in each area. Table 14 describes the resulting ten Intervention scale scores.

The research questions presented at the end of Chapter I were to be addressed via discriminant analyses utilizing the contents of both the Life Domain and Intervention scales as predictor variables. The intercorrelations of these scales were therefore of interest. Table 15 presents the intercorrelations of these 18 scale scores. As can be seen from this table, many of these variables were highly correlated with one another.

Table 13

Means, Standard Deviations and Ranges
of Life Domain Predictor Variables

| Scale | $\bar{X}$ | $\sigma$ | Possible Range |
|---|---|---|---|
| Positive Home Involvement | 10.19 | 1.84 | 4.00-20.00 |
| Positive School Change | 12.39 | 2.76 | 4.00-20.00 |
| Activities of Peers | 13.00 | 2.31 | 4.00-20.00 |
| Parental Control | 8.09 | 2.22 | 4.00-20.00 |
| Positive Change at Home | 12.69 | .79 | 4.00-20.00 |
| Involvement in School | 13.63 | 3.29 | 4.00-20.00 |
| Positive Change - Freetime Activities | 13.26 | 1.26 | 4.00-20.00 |
| Employment Motivation | 11.37 | 3.05 | 4.00-20.00 |

Table 14

Means, Standard Deviations and Ranges
of Intervention Predictor Variables

| Scale | $\bar{X}$ | $\sigma$ | Possible Range |
|---|---|---|---|
| Amount of Time | 10.86 | 2.11 | 3.00-15.00 |
| Parental Involvement | 8.58 | 1.56 | 3.00-15.00 |
| Recreational Activities | 9.37 | 2.75 | 3.00-15.00 |
| Family Intervention - Parental Focus | 5.48 | 2.07 | 3.00-15.00 |
| Family Intervention - Youth Focus | 6.76 | 2.14 | 3.00-15.00 |
| School Intervention - System Focus | 4.28 | 1.74 | 3.00-15.00 |
| School Intervention - Youth Focus | 7.15 | 2.92 | 3.00-15.00 |
| Job Seeking Activities | 4.64 | 2.08 | 3.00-15.00 |
| Contracting Activities | 5.42 | 2.71 | 3.00-15.00 |
| Advocacy Activities | 6.19 | 2.37 | 3.00-15.00 |

Table 15

Intercorrelations of Life Domain and Intervention Predictor Variables

| | LD1 | LD2 | LD3 | LD4 | LD5 | LD6 | LD7 | LD8 | I1 | I2 | I3 | I4 | I5 | I6 | I7 | I8 | I9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Positive Home Involvement (LD1) | | | | | | | | | | | | | | | | | |
| Positive School Change (LD2) | .29*** | | | | | | | | | | | | | | | | |
| Activities of Peers (LD3) | -.23** | -.20* | | | | | | | | | | | | | | | |
| Parental Control (LD4) | -.08 | .05 | .42*** | | | | | | | | | | | | | | |
| Positive Change at Home (LD5) | -.02 | .16* | .06 | .09 | | | | | | | | | | | | | |
| Involvement in School (LD6) | .42*** | .89*** | -.33*** | -.11 | .00 | | | | | | | | | | | | |
| Positive Change - Freetime Activities (LD7) | .17* | .25** | -.28** | -.01 | .48*** | .27** | | | | | | | | | | | |
| Employment Motivation (LD8) | -.19* | -.06 | .33*** | .22* | .17* | -.13 | .11 | | | | | | | | | | |
| Amount of Time (I1) | .23** | .37*** | -.08 | .00 | .12 | .33*** | -.04 | -.03 | | | | | | | | | |
| Parental Involvement (I2) | .11 | .16 | .04 | .23** | .28** | .11 | .15 | .03 | .50*** | | | | | | | | |
| Recreational Activities (I3) | .36*** | .40*** | -.25** | -.22* | .01 | .43*** | .08 | -.20* | .48*** | .23** | | | | | | | |
| Family Intervention - Parental Focus (I4) | -.08 | -.03 | .05 | .46*** | .26** | -.07 | .11 | .06 | .05 | .52*** | -.06 | | | | | | |
| Family Intervention - Youth Focus (I5) | -.07 | .02 | .07 | .49*** | .28** | -.08 | .09 | .01 | .08 | .46*** | -.03 | .83*** | | | | | |
| School Intervention - System Focus (I6) | .19* | .38*** | .04 | .21* | .11 | .26** | .11 | -.02 | .39*** | .39*** | .15 | .20* | .15 | | | | |
| School Intervention - Youth Focus (I7) | .18* | .53*** | .07 | .23** | .25** | .32*** | .19* | .05 | .49*** | .51*** | .34*** | .21* | .24** | .74*** | | | |
| Job Seeking Activities (I8) | -.01 | .07 | .26** | .23** | .17* | -.13 | .07 | .60*** | .20* | .23** | -.13 | .32*** | .22* | .05 | .11 | | |
| Contracting Activities (I9) | .08 | .12 | .14 | .02 | .26** | .14 | .22* | -.19* | .17* | .45*** | .19* | .52*** | .51*** | .29*** | .27** | -.05 | |
| Advocacy Activities (I10) | -.01 | .09 | .09 | .36*** | .25** | -.03 | .19* | .24** | .24** | .45*** | .07 | .61*** | .53*** | .28*** | .36*** | .56*** | .40*** |

***p < .001
**p < .01
*p < .05

Fifty-seven percent of the correlations between the Life Domain scale scores were significant ($p < .05$). All 28 intercorrelations of these Life Domain scales ranged from -.23 to .89. The average of the absolute values of these correlations (which measure the average amount of association--either positive or negative--between Life Domain scales scores) was .22. The intercorrelations among the Intervention scale scores were even more prevalent. Thirty-four out of the 45 Intervention scale intercorrelations, or 75% of them, were significant ($p < .05$). They ranged from -.13 to .83 with an average of the absolute values of these intercorrelations of .32. The portion of Table 15 which presents the correlations between Life Domain and Intervention scale scores reveals that 45% of these correlations were significant. They ranged from -.25 to .60 and the average association between Life Domain and Intervention scale scores was .17 (again, using the absolute values).

In order to reduce the problem which the intercorrelation of these variables would present in the discriminant function analyses, the Life Domain scales and the Intervention scales were both subjected to factor analyses. While a combined factor analysis approach could have been utilized, it was thought that the separate analyses of Life Domain and Intervention variables would address the most serious problems of intercorrelations while yielding the most conceptually concise factors. The Life Domain and Intervention analyses will be discussed separately below.

Principal Components Analysis of Life Domain Scales

The eight Life Domain scales were analyzed by means of a principal components analysis using the varimax rotation method to achieve orthogonal factors (Nie, Hull, Jenkins, Steinbrenner & Bent, 1975). The results are presented in Tables 16 and 17. Table 16 reveals that adherence to the convention of utilizing the number of factors which result in eigenvalues

of 1.0 or greater would have led to a decision to create three factors. However, the six factor solution was preferable due to the greater conceptual simplicity of the resulting factors. The six factor solution accounted for 93.8% of the total variance of the eight Life Domain scale scores. Examination of the communalities in Table 17 reveals that a large proportion of the variance of each of the eight variables was included in the six factor solution. Thus, the solution accomplished the creation of six orthogonal factors which represented theoretically meaningful components while retaining the majority of the information contained in the original eight scale scores. The six resulting factors are presented below.

Life Domain - School. The variable loadings on this factor reveal that it primarily included information from the two Life Domain scales which measured the youth's school involvement: Positive School Change and Involvement in School. This factor, then, provided a general indication of the quality and quantity of the youth's school related activities.

Life Domain - Positive Change. This component included, primarily, the two Life Domain scales which measured change: Positive Change in the Home and Positive Change in Freetime Activities. It, therefore, provided a general indication of the degree of change over the period from six weeks prior to ADP involvement to the end of their intervention 24 weeks later.

Life Domain - Peer Involvement. This factor primarily represented the degree to which the youth was involved with peers as measured by the Life Domain scale Activities with Peers. It should be noted that the scale which measured Positive Change in Freetime Activities was negatively loaded on this factor.

Life Domain - Parental Control. An examination of the factor loadings on this component reveal that it primarily included the Parental Control

Table 16

Results of Factor Analysis of Life Domain Predictor Variables

| Variables | Life Domain-School | Life Domain-Positive Change | Life Domain-Peer Involvement | Life Domain-Parental Control | Life Domain-Employment Motivation | Life Domain-Positive Home Involvement |
|---|---|---|---|---|---|---|
| Positive Home Involvement | .19770 | -.00209 | -.08663 | -.03126 | -.09527 | .96712 |
| Positive School Change | .95601 | .16622 | -.03733 | .04859 | -.03025 | .04157 |
| Activities of Peers | -.18116 | .10452 | .81348 | .31044 | .25745 | -.06460 |
| Parental Control | -.02349 | .03594 | .15461 | .97385 | .09087 | -.02967 |
| Positive Change at Home | .07149 | .96179 | .05408 | .01479 | .04373 | -.04108 |
| Involvement in School | .90022 | -.03241 | -.21550 | -.10568 | -.03218 | .24267 |
| Positive Change in Freetime Activities | .13758 | .61452 | -.63520 | .10263 | .19078 | .13933 |
| Employment Motivation | -.04282 | .08634 | .10465 | .09328 | .96951 | -.09285 |
| **Statistics for Rotated Solution** | | | | | | |
| Eigenvalue | 1.823 | 1.694 | 1.158 | 1.084 | 1.064 | 1.031 |
| % of Total Variance Accounted for | 22.8 | 21.2 | 14.5 | 13.5 | 13.3 | 12.9 |
| Cumulative % of Variance Accounted for | 22.8 | 44.0 | 58.5 | 72.0 | 85.3 | 98.2 |
| **Statistics for Unrotated Solution** | | | | | | |
| Eigenvalue | 2.521 | 1.694 | 1.150 | .818 | .730 | .592 |
| % of Total Variance Accounted for | 31.5 | 21.2 | 14.4 | 10.2 | 9.1 | 7.4 |
| Cumulative % of Variance Accounted for | 31.5 | 52.7 | 67.1 | 77.3 | 86.4 | 93.8 |

Table 17

Communalities of Life Domain Predictors
Rotated Principal Components Solution
6 Factors

| Scale | |
|---|---|
| Positive Home Involvement | .99197 |
| Positive School Change | .94799 |
| Activities with Peers | .87232 |
| Parental Control | .98327 |
| Positive Change at Home | .93689 |
| Involvement in School | .92898 |
| Positive Change - Freetime Activities | .86639 |
| Employment Motivation | .97748 |

scale. This scale, it will be remembered, measured the frequency of the parents' negative attempts to change or control the youth (i.e., by arguing or utilizing punishments).

Life Domain - Employment Motivation. This component represented, predominantly, the Employment Motivation scale from the Life Domain Survey. It indicated the degree to which the youth wanted and was seeking employment.

Life Domain - Positive Home Involvement. As before, this factor represented primarily one Life Domain scale--Positive Home Involvement. This scale included items which measured the extent and type of activities that the youth engaged in with his/her parents and siblings and information about the amount of time the youth spent at home.

Principal Components Analysis of Intervention Scales

The ten Intervention scales were also subjected to a principal components analysis with varimax rotation. The results of this analysis are presented in Tables 18 and 19. Again, observance of the 1.0 or greater eigenvalue convention for the determination of the number of factors would have yielded three factors. But the six factor solution was again preferable due to greater conceptual simplicity. This solution accounted for 90.3% of the total variance of these ten scales. The communalities presented in Table 19, again, reveal that the majority of the variance of each of the variables was included in this six factor solution. The six resulting Intervention factors are presented below.

Intervention - Family. An examination of the variable loadings on this component reveals that it primarily reflected the two family intervention scales: Family Intervention - Parent Focus and Family Intervention - Youth Focus. It provided, then, an overall indication of the degree to

Table 18

Results of Factor Analysis of Intervention Predictor Variables

| Variables | Intervention-Family | Intervention-School | Intervention-Job Seeking and Advocacy | Intervention-Amount of Time and Parental Involvement | Intervention-Recreation | Intervention-Contracting |
|---|---|---|---|---|---|---|
| Amount of Time | -.09102 | .21789 | .18194 | .79264 | .37672 | .03952 |
| Parental Involvement | .45160 | .26581 | .07556 | .73834 | .01531 | .18445 |
| Recreational Activities | -.03794 | .08778 | .07285 | .20999 | .94594 | .08244 |
| Family Intervention - Parental Focus | .87806 | .09854 | .23462 | .08243 | -.07498 | .22088 |
| Family Intervention - Youth Focus | .92759 | .06965 | .10883 | .07518 | .00045 | .14597 |
| School Intervention - System Focus | .03399 | .90941 | .13976 | .12220 | -.05695 | .19374 |
| School Intervention - Youth Focus | .18446 | .84986 | .04977 | .27438 | .24076 | -.02894 |
| Job Seeking Activities | .11676 | .03854 | .92079 | .16334 | -.12319 | -.12712 |
| Contracting | .36991 | .14777 | -.03313 | .13849 | .10121 | .88502 |
| Advocacy | .45642 | .29287 | .69368 | .02846 | .12802 | .26044 |
| Statistics for Rotated Solution | | | | | | |
| Eigenvalue | 2.239 | 1.799 | 1.463 | 1.367 | 1.148 | 1.026 |
| % of Total Variance Accounted for | 22.4 | 18.0 | 14.6 | 13.7 | 11.5 | 10.3 |
| Cumulative % of Variance Accounted for | 22.4 | 40.4 | 55.0 | 68.7 | 80.2 | 90.5 |
| Statistics for Unrotated Solution | | | | | | |
| Eigenvalue | 3.982 | 1.837 | 1.232 | .941 | .571 | .469 |
| % of Total Variance Accounted for | 39.8 | 18.4 | 12.3 | 9.4 | 5.7 | 4.7 |
| Cumulative % of Variance Accounted for | 39.8 | 58.2 | 70.5 | 79.9 | 85.6 | 90.3 |

Table 19

Communalities of Intervention Predictors
Rotated Principal Components Solution
6 Factors

| | |
|---|---|
| Amount of Time | .86062 |
| Parental Involvement | .85971 |
| Recreational Activities | .96015 |
| Family Intervention - Parental Focus | .89695 |
| Family Intervention - Youth Focus | .90407 |
| School Intervention - System Focus | .90343 |
| School Intervention - Youth Focus | .89285 |
| Job Seeking Activities | .92099 |
| Contracting | .97245 |
| Advocacy | .86031 |

which the intervention activities were focused upon improving the family situation.

Intervention - School. This factor predominantly included the information combined in the two school-related Intervention scales--School Intervention - System Focus and School Intervention - Youth Focus. It provided a general measure of the degree to which the intervention activities focused upon improving the youth's school situation.

Intervention - Job Seeking and Advocacy. This component reflected, for the most part, the Job Seeking Activities and the Advocacy Intervention scales. Since much activity which was coded in the Advocacy scale related to seeking employment for the youth, this factor may be thought of primarily as an indication of the degree to which the intervention activities were focused upon seeking the youth employment.

Intervention - Amount of Time and Parental Involvement. As the name indicates, this factor represented primarily the Amount of Time and the Parental Involvement Intervention scales. Since both of these scales were significantly correlated with the majority of the other Intervention scales, and they were intercorrelated at a level of .50 (see Table 15), this factor can be interpreted as an overall indication of the intensity of the intervention that the youth received during project involvement.

Intervention - Recreation. This factor indicated the degree to which the intervention included recreational activities. It primarily reflected the corresponding Recreation scale from the Intervention Survey.

Intervention - Contracting. This component, as the name implies, reflected the Contracting scale from the Intervention Survey.

Computer Factor Scores

Standardized factor scores were computed for each youth for these six Life Domain and six Intervention factors. These twelve factor scores

provided the predictor variables for the discriminant analyses which will be discussed in Chapter III.

## Data Modification Procedures for Outcome Measures

The discriminant function analyses, utilizing the twelve process factors described in the previous section were performed to examine the differences between youth outcome groups as defined in two different ways: The first method based group membership upon the archival police and court data. The second method defined groups according to self-report delinquency scores. Each of these is discussed separately below.

### Archival Outcome Measures

The archival police and court data indicated the frequency of police and court contacts for the time period from the point of project referral until one year after project termination. For the purposes of this study, this information was reduced to a simple dichotomous variable indicating either the absence or presence of contact with the juvenile justice system during this period of time.

By one year after the project termination, 50 of the youths included in this study had not recontacted the legal authorities, while the remaining 57 had had at least one such contact during this time.

### Self-Report Delinquency Outcome Measure

The Self-Report Delinquency (SRD) variable which was utilized in the present study was computed as a two-part sum. The first component included the youth's reported delinquency rates for the "past six weeks" from the interviews conducted at 6, 12, and 18 weeks into the intervention. These three, combined, would yield a measurement of delinquent behaviors during the entire intervention period. The second component consisted of the frequency of the youth's delinquent behavior during the year following project termination as measured by the youth's responses to the SRD

instrument at the one-year follow-up interview. This overall SRD score, then, provided a measurement of delinquent behaviors from the point of project referral to one year after project termination. This was the same period for which the archival police and court contact data were collected. The resulting SRD variable for the 107 youths included in this study, ranged from 0 to 143 with a mean of 48.98 and a standard deviation of 30.11. For the purposes of this study, this SRD variable was used to categorize the 107 youths into three equal groups. The Low SRD group included those youth with scores from 0 to 35. The second group, with moderate SRD rates, included scores from 36 to 54 and the High SRD group included scores over 54.

Two separate discriminant function analyses were performed. The first utilized the two criterion groups created from the archival outcome data. The second utilized the three SRD-defined groups discussed above. The results of these analyses will be presented in the next chapter.

# CHAPTER III

# RESULTS

## Analyses

The research questions set forth at the end of Chapter I were addressed by means of a series of discriminant analyses (Nie, et al., 1975). The Wilks' method of stepwise inclusion of predictor variables was utilized. This method bases the inclusion decisions on the greatest decrease in Wilks' Lambda. A variable was considered for inclusion into the discriminant function only if its partial multivariate F ratio was larger than 1.0 (Nie, et al., 1975, p .448).

The first set of analyses explored the differences between the youth outcome groups whose membership was determined on the basis of archival data, as discussed in the previous chapter. Group I included youths who did not have any contacts with either the police or court from the point of referral to the ADP through a one-year follow-up period (a period of approximately 1½ years in all). This group is subsequently referred to as the success group. Group II included all youths who had one or more contacts with the police or court during this time period. They are subsequently referred to as the failure group.

The next analysis explored the differences between three outcome groups that were determined on the basis of the youths' Self-Report Delinquency (SRD) scores, as discussed previously. Group I included the third of the youths who reported the lowest delinquency rates during the 1½ year

period of interest (the low SRD group). Group II consists of the middle third (the medium SRD group) and Group III consists of the highest scorers (the high SRD group).

For both phases of the analysis, the six Life Domain factors and six Intervention factors described in Chapter II were used as predictor variables. These were the "process-related" variables. In addition, the youth's age at the time of project referral was included as a predictor since delinquency rates have been reported to vary systematically with age (Williams & Gold, 1978). Condition was also included since it has been found to be an important variable in determining archival outcomes in the ADP (Blakely, 1981; Davidson, et al., 1977; Kantrowitz, 1979). Conditions were transformed into a dummy variable--using the Low Intensity condition as the reference category (Nie, et al., 1975, p. 374).

As discussed in Chapter II, the Life Domain factors were orthogonally related to one another--as were the Intervention factors. However, the correlations of these two groups of factors across group were of interest--as were the correlations of age and condition with the process-related predictor variables. Table 20 presents the correlation matrix of all the predictor variables. Although a few of these correlations were higher than was desirable, the decision was made to maintain the conceptual clarity of the existing set of predictor variables without further modification or reduction. The results should be interpreted accordingly. In particular, one should not necessarily assume by a variable's absence in a function, that it is not an important discriminator if there are variables in the function that are highly correlated with it. With this caution in mind, the discussion will now turn to the results of the discriminant function analyses. The analyses relating to the two different types of criterion groups will be discussed separately in the next section.

Table 20

Pooled Within-Groups Correlation Matrix of Predictor Variables

| | LD1 | LD2 | LD3 | LD4 | LD5 | LD6 | I1 | I2 | I3 | I4 | I5 | I6 | Age |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Life Domain-School (LD1) | | | | | | | | | | | | | |
| Life Domain - Positive Change (LD2) | -.01 | | | | | | | | | | | | |
| Life Domain-Peer Involvement (LD3) | .01 | .00 | | | | | | | | | | | |
| Life Domain-Parental Control (LD4) | .02 | .01 | -.01 | | | | | | | | | | |
| Life Domain-Employment Motivation (LD5) | -.01 | -.01 | .00 | .01 | | | | | | | | | |
| Life Domain-Positive Home Involvement (LD6) | .01 | .01 | -.00 | -.01 | .00 | | | | | | | | |
| Intervention-Family (I1) | -.05 | .22* | -.06 | .48** | -.11 | -.12 | | | | | | | |
| Intervention-School (I2) | .23* | .14 | .08 | .23* | -.01 | .05 | -.01 | | | | | | |
| Intervention-Job Seeking and Advocacy (I3) | -.09 | .06 | .05 | .10 | .52** | .06 | .01 | .01 | | | | | |
| Intervention-Amount of Time and Parental Involvement (I4) | .17 | .10 | .10 | -.05 | -.01 | .11 | -.02 | -.01 | .01 | | | | |
| Intervention-Recreation (I5) | .38** | -.02 | -.08 | -.16 | -.12 | .20 | .00 | .00 | .00 | .00 | | | |
| Intervention-Contracting (I6) | .00 | .15 | -.16 | -.15 | -.18 | .04 | .00 | .00 | .00 | .00 | .00 | | |
| Age | -.09 | .15 | .19* | .10 | .40** | -.35** | .10 | -.11 | .19* | -.21* | -.20* | -.10 | |
| Action (A) | -.09 | .14 | .05 | .18 | .08 | -.02 | .11 | .18 | .32** | -.10 | -.39** | .20* | .10 |
| Relationship (R) | .05 | .00 | -.07 | .02 | -.06 | .03 | -.19* | -.23* | -.05 | -.05 | .16 | -.12 | -.04 |
| Family (F) | -.23* | .05 | -.06 | -.17 | -.07 | -.19* | .20* | -.23* | -.19* | .01 | -.03 | .21* | .13 |
| Court (C) | .20* | -.09 | -.05 | -.20* | .00 | .25** | -.17 | .26** | -.15 | .00 | .14 | .02 | -.10 |

*p < .05
**p < .01

## Discriminant Function Results

### Archival Outcome Groups

Analysis with all predictor variables. Tables 21 and 22 present the results of the discriminant function analysis of the differences between the successes and failures as defined by the archival data. Table 21 presents the two groups' means on all predictor variables. Table 22 presents a summary of the discriminant function which resulted from the analysis. Six of the predictor variables entered the equation, resulting in a Wilks Lambda statistic of .857. This demonstrated that only a little over 14% of the variance between the criterion groups was accounted for by the function. This suggested that these predictors provided a relatively poor model for the data.

The discriminant function coefficients reflect the relative importance of the predictors to the differentiation of the two groups. The Action condition was the most important predictor. Examination of the group means in Table 21 reveals that the success group was more likely to be in the Action condition than was the failure group. The next most important predictor variable was the Intervention-Family factor. Successes were less likely than failures to report interventions in the family domain. Another important predictor was the Life Domain-School factor. The group means reveal that the success group reported more positive involvement in school than the failure group. Intervention in the school area was also demonstrated to be an important variable in the function. Here again, the successes were less likely than the failures to report this type of intervention activity.

Another measure of the performance of a discriminant function is its ability to accurately predict the group membership of the original cases from which the function was derived. Table 23 reveals that this function

Table 21

Archival Success and Failure Groups
Means of Predictor Variables

| | GROUPS | |
|---|---|---|
| Variables | Success (1) | Failure (2) |
| Life Domain-School | .152 | -.134 |
| Life Domain-Positive Change | .095 | -.083 |
| Life Domain-Peer Involvement | -.054 | .047 |
| Life Domain-Parental Control | -.143 | .125 |
| Life Domain-Employment Motivation | .070 | -.062 |
| Life Domain-Positive Home Involvement | -.069 | .061 |
| Intervention-Family | -.182 | .160 |
| Intervention-School | -.073 | .064 |
| Intervention-Job Seeking and Advocacy | .079 | -.069 |
| Intervention-Amount of Time and Parental Involvement | -.107 | .094 |
| Intervention-Recreation | -.026 | .023 |
| Intervention-Contracting | -.002 | .002 |
| Age | 14.400 | 14.088 |
| Action Condition | .520 | .316 |
| Relationship Condition | .140 | .088 |
| Family Condition | .120 | .228 |
| Court Condition | .060 | .140 |

Table 22

Discriminant Analysis Summary Table
Archival Success and Failure Groups

| Variable Entered | Wilks Lambda | Significance | Standardized Canonical Discriminant Function Coefficients |
|---|---|---|---|
| Action Condition | .957 | .032 | .631 |
| Intervention-Family | .922 | .015 | -.559 |
| Life Domain-School | .902 | .014 | .553 |
| Intervention-School | .881 | .011 | -.470 |
| Life Domain-Change | .869 | .013 | .363 |
| Intervention-Amount of Time and Parental Involvement | .857 | .015 | -.328 |

| Eigenvalue | Canonical Correlation | Wilks Lambda | Chi-Square | DF | Significance |
|---|---|---|---|---|---|
| .16736 | .3786350 | .8566356 | 15.784 | 6 | .0150 |

| | Group Centroids |
|---|---|
| Group 1 - No Juvenile Justice System Contacts | .433 |
| Group 2 - One or More Juvenile Justice System Contacts | -.380 |

achieved the correct classification in 69% of the cases. It performed about equally with respect to the success and failure groups.

Analysis with only process variables. The fact that the Action condition turned out to be the major discriminator in the preceding function led to a second discriminant function analysis which included only the process variables. This was done to ascertain the impact of some process variables on the archival criterion groups that the presence of the Action condition predictor could be masking due to problems of intercorrelation (see Table 20).

Table 24 presents the results of the second discriminant function analysis performed on the two archival outcome groups. As before, six predictor variables entered the equation, resulting in a Wilks Lambda of .895. This function accounted for about 10% of the variance, which reflected a loss of about 4% due to the exclusion of the Action condition variable. This function did not achieve a .05 level of significance. A comparison of the discriminant function coefficients in Tables 22 and 24 reveals that, except for slight ordering effects, the second analysis did not lead to any substantially different conclusions about the differentiation of the two archival outcome groups on the basis of the process variables. Furthermore, the exclusion of the condition variable resulted in an even poorer "fit" for the data.

Self-Report Delinquency Outcome Group

Tables 25 and 26 present the results of the discriminant function analysis of the three outcome groups as defined by SRD scores. Table 25 presents the group means of the predictor variables and Table 26 displays the discriminant function summary table. The resulting solution consisted of two equations with ten predictor variables. Wilks' Lambda statistic for the functions was .502 (i.e., the functions account for 50% of the variance

Table 23

Capability of the Discriminant Function
to Predict Archival Outcome Groups

| Actual Group Membership | | Predicted Group Membership: 1 | Predicted Group Membership: 2 | |
|---|---|---|---|---|
| No further contact with juvenile justice system | 1 | 34 (68.0%) | 16 (32%) | 50 |
| One or more contacts with juvenile justice system | 2 | 17 (29.8%) | 40 (70.2%) | 57 |
| | | 51 | 56 | |

Percent of Cases Correctly Classified - 69.16%

Table 24

Discriminant Analysis Summary Table
Archival Success and Failure Groups
(Including Only Life Domain and Intervention Predictor Variables)

| Variable Entered | Wilks Lambda | Significance | Standardized Canonical Discriminant Function Coefficients |
|---|---|---|---|
| Intervention-Family | .971 | .077 | -.602 |
| Life Domain-School | .954 | .084 | .715 |
| Life Domain-Change | .938 | .084 | .515 |
| Intervention-Amount of Time and Parental Involvement | .920 | .071 | -.486 |
| Intervention-School | .904 | .067 | -.449 |
| Intervention-Recreation | .895 | .079 | -.343 |

| Eigenvalue | Canonical Correlation | Wilks Lambda | Chi-Square | DF | Significance |
|---|---|---|---|---|---|
| .11756 | .3243376 | .8948052 | 11.337 | 6 | .0785 |

| | Group Centroids |
|---|---|
| Group 1 - No Juvenile Justice System Contacts | .363 |
| Group 2 - One or More Juvenile Justice System Contacts | -.318 |

Table 25

Self-Report Delinquency Groups
Means of Predictor Variables

| Variables | GROUPS Low(1) | Medium(2) | High(3) |
|---|---|---|---|
| Life Domain-School | .117 | -.052 | -.067 |
| Life Domain-Positive Change | -.151 | .204 | -.047 |
| Life Domain-Peer Involvement | -.511 | .077 | .437 |
| Life Domain-Parental Control | -.387 | -.092 | .476 |
| Life Domain-Employment Motivation | -.319 | .031 | .289 |
| Life Domain-Positive Home Involvement | .042 | .138 | -.176 |
| Intervention-Family | -.117 | .134 | -.013 |
| Intervention-School | -.257 | .100 | .159 |
| Intervention-Job Seeking and Advocacy | -.178 | .198 | -.014 |
| Intervention-Amount of Time and Parental Involvement | .212 | -.313 | .091 |
| Intervention-Recreation | .129 | .146 | -.270 |
| Intervention-Contracting | .236 | .183 | -.414 |
| Age | 13.806 | 14.429 | 14.472 |
| Action | .361 | .457 | .417 |
| Relationship | .111 | .086 | .139 |
| Family | .222 | .200 | .111 |
| Court | .111 | .143 | .056 |

Table 26

Discriminant Analysis Summary Table
Self-Report Delinquency Groups

| Variable Entered | Wilks Lambda | Significance | Standardized Canonical Discriminant Function Coefficients | |
|---|---|---|---|---|
| | | | Function 1 | Function 2 |
| Life Domain-Peer Involvement | .844 | .000 | -.744 | -.341 |
| Life Domain-Parental Control | .716 | .000 | -.836 | .285 |
| Life Domain-Employment Motivation | .653 | .000 | -.687 | .012 |
| Intervention-Time And Parental Involvement | .613 | .000 | .143 | .716 |
| Intervention-Job Seeking and Advocacy | .581 | .000 | .324 | -.358 |
| Intervention-Family | .559 | .000 | .301 | -.409 |
| Life Domain-Positive Home Involvement | .541 | .000 | .289 | -.379 |
| Life Domain-Positive Change | .526 | .000 | -.232 | -.319 |
| Intervention-Contracting | .513 | .000 | .214 | -.232 |
| Age | .502 | .000 | .282 | -.099 |

| Function | Eigenvalue | % of Variance | Canonical Correlation | After Function | Wilks Lambda | Chi-Square | DF | Sig. |
|---|---|---|---|---|---|---|---|---|
| 1 | .70052 | 80.36 | .64183 | 0 | .5021125 | 68.549 | 20 | .000 |
| 2 | .17116 | 19.64 | .38229 | 1 | .8538540 | 15.721 | 9 | .073 |

in SRD scores). This suggested that these data were reasonably well described by this set of predictor variables--unlike the archival data. The significance level of the solution was less than .001.

The first function accounted for 80% of the explained variance, while the second one accounted for about 20%. The second was only marginally significant ($p = .073$). Table 27 describes the function's ability to discriminate between the three groups. The between group F's which described the differences between the high SRD group and the other two were both significant at less than .001. The between group F which reflected the difference between the low and medium SRD groups was significant at less than .05. Table 27 also displays the two functions as they are represented by the group centroids. The first function--which accounted for the majority of the variance--appeared to discriminate between all three groups very well. While the second function performed less well.

There were three predictor variables that were heavily loaded in the first function. The first of these was the Life Domain-Parental Control factor. Table 25 reveals that the low SRD group scored low on this factor; the medium SRD group, moderately; and the high SRD group reported the highest level of Parental Control. (This factor, as discussed previously, primarily measured the frequency with which parents engage in arguments or punishments to control their children.) The second most important predictor variable in this function was the Life Domain-Peer Involvement factor. Again, the scores on this factor co-varied with the SRD scores, with the low SRD group reporting low Peer Involvement and so on. The third important discriminator was the Life Domain-Employment Motivation factor. As with the previous two predictors, the youths reporting the lowest SRD scores reported the lowest desire for employment, the high scorers

Table 27

Group Centroids and Between-Group Discriminant Ability of the Functions - Self-Report Delinquency Groups

| Group | Group Centroids | |
|---|---|---|
| | Function 1 | Function 2 |
| Low SRD (1) | .940 | .335 |
| Medium SRD (2) | .124 | -.582 |
| High SRD (3) | -1.061 | .231 |

Between Group F-Statistics and Significance Levels

| | Group 1 | Group 2 |
|---|---|---|
| Group 2 | 2.4404 | |
| | .0123 | |
| Group 3 | 6.5994 | 3.3471 |
| | .0000 | .0009 |

reported the highest, and the middle group fell in between. These relationships will be discussed at greater length in the next chapter.

Table 28 presents the capability of these disciminant functions to accurately predict the group membership of this sample. Sixty-four percent of the cases were predicted accurately. The functions predicted the high and low groups very well (75% and 72% accurately) but performed poorly with the middle group (54% were classified incorrectly). These figures reflect the fact that there was a great deal of overlap between these three groups, even though the group centroids were well differentiated from one another.

These results will be discussed at greater length in the next chapter.

Table 28

Capability of the Discriminant Function to Predict Self-Report Delinquency Outcome Groups

| Actual Group Membership | | Predicted Group Membership | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | |
| Low SRD | 1 | 26 (72.2%) | 7 (19.4%) | 3 (8.3%) | 36 |
| Medium SRD | 2 | 10 (28.6%) | 16 (45.7%) | 9 (25.7%) | 35 |
| High SRD | 3 | 4 (11.1%) | 5 (13.9%) | 27 (75.0%) | 36 |
| | | 40 | 28 | 39 | |

Percent of cases correctly classified - 64.49%

# CHAPTER IV

# DISCUSSION

Three research questions were posed in Chapter I concerning the relationships between delinquency and several process variables which were operative within the lives of the ADP participants while they were involved in the intervention. These specific questions were:

1) Which process variables were more strongly associated with official recidivism and which with self-report delinquency?

2) To what extent did a combination of these process variables, derived from a discriminant function, explain the variance of these two measures of delinquency outcome? How successfully did they predict delinquency outcomes for the same population?

3) How did the function derived for the archival groups compare with those derived for the SRD groups? How dissimilar were they?

The two separate discriminant functions which were reported in Chapter III have been compiled in Table 29 for comparison. Each of the three research questions will be discussed below. The first two will be discussed--first in regard to the official outcome groups and then in regard to the Self-Report Delinquency groups. Lastly, the third question will be addressed.

## Results--Official Recidivism Groups

### Important Predictors

The discriminant function analysis of the two officially determined groups led to a characterization of the "success" group as:

Table 29

Comparison of Discriminant Function for Archival Outcome Groups with Functions for Self-Report Delinquency Outcome Groups

| Variable | Standardized Canonical Discriminant Function Coefficients: Archival Function #1 | Ranking | SRD Function #1 | Ranking | SRD Function #2 | Ranking | GROUP MEANS: Archival Successes (1) | Archival Failures (2) | SRD Low (1) | SRD Med (2) | SRD High (3) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| L.D.-School | .55294 | 3 | | | | | .152 | -.134 | .117 | -.052 | -.067 |
| L.D.-Positive Change | .36272 | 5 | -.23202 | 8 | -.31885 | 6 | .092 | -.083 | -.151 | .204 | -.047 |
| L.D.-Peer Involvement | | | -.74364 | 2 | -.34052 | 5 | -.054 | .047 | -.511 | .077 | .437 |
| L.D.-Parental Control | | | -.83552 | 1 | .28462 | 7 | -.143 | .125 | -.387 | -.092 | .476 |
| L.D.-Employment Motivation | | | -.68661 | 3 | .01197 | 10 | .070 | -.062 | -.319 | .031 | .289 |
| L.D.-Positive Home Involvement | | | .28881 | 6 | -.37882 | 3 | -.069 | .061 | .042 | .138 | -.176 |
| I.-Family | -.55881 | 2 | .30140 | 5 | -.40850 | 2 | -.182 | .160 | -.117 | .134 | -.013 |
| I.-School | -.47046 | 4 | | | | | -.073 | .064 | -.257 | .100 | .159 |
| I.-Job Seeking and Advocacy | | | .32447 | 4 | -.35808 | 4 | .079 | -.069 | -.178 | .198 | -.014 |
| I.-Amount of Time and Parental Involvement | -.32779 | 6 | .14319 | 10 | .71634 | 1 | -.107 | .094 | .212 | -.313 | .091 |
| I.-Recreation | | | | | | | -.026 | .023 | .129 | .146 | -.270 |
| I.-Contracting | | | .21375 | 9 | -.23201 | 8 | -.002 | .002 | .236 | .183 | -.414 |
| Age | | | .28214 | 7 | -.09864 | 9 | 14.400 | 14.088 | 13.806 | 14.429 | 14.472 |
| Action Condition | .63148 | 1 | | | | | .520 | .316 | .361 | .457 | .417 |
| Relationship Condition | | | | | | | .140 | .088 | .111 | .086 | .139 |
| Family Condition | | | | | | | .120 | .228 | .222 | .200 | .111 |
| Court Condition | | | | | | | .060 | .140 | .111 | .143 | .056 |
| % of "Explained" Variance Associated With Function | ----- | | 80.36% | | 19.64% | | | | | | |
| Wilks Lambda | .8566356 | | .5021125 | | | | | | | | |
| Significance | .0150 | | .0000 | | | | | | | | |

1) relatively more frequently involved with the Action condition than with any of the other experimental conditions.

2) less likely than failures to be involved with interventions focused on the family domain (Intervention-Family).

3) more positively involved in school (Life Domain-School).

4) less likely to be involved with interventions in the school domain (Intervention-School).

Although two other predictor variables entered into the function (Life Domain-Positive Change and Intervention-Amount of Time and Parental Involvement) they each accounted for only about 1% of additional variance and were, therefore, not considered to exercise important discriminating abilities.

An examination of the discriminant coefficients in Table 29 reveals that the Action condition was found to be the single most important predictor of success-group membership of all the predictor variables. As will be remembered, when this variable was removed from the equation, a significant solution was not achieved. This finding, of course, was not unexpected. The relative effectiveness of the Action Condition in achieving success (as defined by the absence of contacts with the police or court) for youthful offenders was well documented previously (Blakely, 1981; Davidson, et al., 1977; Davidson & Redner, 1982; Kantrowitz, 1979) as discussed in Chapter I. The current results re-emphasize this finding in a multivariate sense.

The three other important predictor variables (Intervention-Family, Life Domain-School, and Intervention-School) which discriminated between the two groups had also been examined previously in univariate analyses. These findings, some of which were presented in Chapter I, are of interest to the current discussion. The second most important discriminating variable in this equation, the Intervention-Family factor, measured the extent

to which the intervention focused on changing the home domain. The group means revealed that the success group reported less of this type of intervention activity. However, earlier analyses reported by Davidson and Redner (1982) place this finding in a clearer perspective. These researchers reported strong condition effects with the Family Intervention-Parental Focus scale. Specifically, the Court condition was found to be the only condition which reflected a difference between the success and failure groups similar to that found in the study (i.e., the failure groups reporting relatively more family-focused intervention activities than the success group). With the Family Intervention-Youth Focus scale, Davidson and Redner report that the Court, Low Intensity and Relationship conditions all reflected similar differences between the success and failure groups (although nonsignificant). In light of these earlier findings, it is likely that the group differences found in the present analysis do not reflect a pattern that is common to all conditions equally. It is also likely that the observed differences between the success and failure groups on this factor reflect an increase in family intervention activities subsequent to a youth's reinvolvement with the juvenile justice system. The current analyses, of course, do not permit a closer examination of the causal underpinnings of the observed association.

The third most heavily weighted predictor in the discriminant function was the Life Domain-School Involvement factor. This demonstrated a greater involvement in school on the part of the success group--another replication of earlier findings concerning the ADP (Blakely, 1981; Davidson, 1979; Davidson, et al., 1977; Davidson & Redner, 1982), and also more generally (Elliot & Voss, 1974). Elliot and Voss found a weak relationship between academic achievement and subsequent delinquency (as measured, however, by SRD). They also reported that normlessness in the school domain (as

measured by dislike of school, reported frequency of "skipping," getting into trouble with school officials, etc.) was a predictor of subsequent delinquency (Elliot & Voss, 1974, p. 151). Their data demonstrated, however, that the causal connection between school involvement and delinquency was a reciprocal one--i.e., delinquency contributed to alienation within the school domain and predicted future academic failure as much or more than it was a consequence of these phenomena (p. 135). This again points out that the causal relationship underlying the observed association between school involvement and official delinquency in the current study cannot be assumed. It is possible that involvement in the juvenile justice system leads to disengagement in the school domain. Subsequent studies will have to explore this possibility.

The last meaningful discriminating variable in this function was the factor which measures school intervention activities. Again, as with intervention in the family domain, the success group reported fewer such activities. This also replicated earlier findings reported by Davidson and Redner (1982). This relationship may reflect the fact that more of the success cases were positively involved in the school domain and were, therefore, not in need of intervention efforts in this area. Alternatively, this relationship could, again, reflect an increase in intervention activities in this domain subsequent to and reacting to further involvement in the juvenile justice system.

These results, considered together, lead to several conclusions. First of all, the Action condition was again demonstrated to be an effective approach to helping youthful offenders avoid future involvement with the juvenile justice system. The current study did not lead to a clear understanding of this efficacy. None of the intervention components which might have been expected to account for this difference performed as

important group discriminators in this analysis (e.g., contracting or advocacy). Secondly, the school area appeared to have an important bearing on official delinquency. Although these results did not lead to a clear understanding of this relationship, they suggest, at the least, that change agents in other settings who work on behalf of youthful offenders might be well advised to attend to the youth's relationship to school. Finally, these results suggest that the decision to combine all the ADP experimental conditions into one discriminant analysis may have resulted in misleading conclusions and that a condition specific approach might have been preferable in achieving a clear understanding of the relationships between intervention processes and outcome.

Evaluation of Predictive and Explanatory Capabilities

The discriminant function derived from these predictor variables did not perform well in regard to the archival outcome groups. Only 14% of the observed variance in official outcomes was explained by this combination of variables. In addition, the function did not predict group membership very accurately. These two facts indicate that whether or not a youth was contacted by the police or court was primarily determined by factors that were not adequately reflected in these predictor variables. Perhaps since official outcome can be viewed as largely a function of official behaviors (by police and other agents of social control), this is not surprising, since these predictor variables measured youth behaviors, primarily. The Self-Reported measure of delinquency, which may be thought of as being more directly related to the youth's behaviors, was, in fact, more profitably explored via the discriminant function analysis--as will be discussed in the next section.

## Results - SRD Groups

### Important Predictors

The discriminant function analysis of the three Self-Report Delinquency groups highlighted the following important group differences:

Life Domain-Parental Control factor. The low SRD group members were much less likely to report negative coercive interactions with their parents than the middle group--who in turn was less likely than the high scoring group to report such interactions. The low SRD group reported fewer arguments, and fewer incidents of their parents utilizing aversive controls. In short, these youths reported that their parents were less dissatisfied with them and that there was less friction in these relationships.

Davidson and Redner (1982) reported the same relationships in regard to the archival success and failure groups--as reported in Chapter I. In their report it appeared that this relationship became stronger in a predictive sense--that is, the group differences on the Parental Control scale (which measures the parent-youth relationship during project involvement) were larger when the groups were determined by two-year follow-up archival outcome than when they were based on one-year follow-up data. And the relationship did not appear when based upon official recidivism during the intervention period. This finding and that of the current study strongly suggest that this variable was an extremely important factor in the development of delinquency among these youth. These results strongly support Richard Stuart's (1973) position that, "the family plays a critical role in the etiology of delinquency when certain dysfunctional family interaction patterns coexists with a paucity of opportunities for acceptable performance in the community" (p. 335). Stuart reports both that families of delinquents are more likely to exhibit coercive interaction patterns and that they are less likely to utilize positive controls to influence their children.

He suggests that behavioral contracting can be a useful method of reversing this pattern and extending the constructive, positive influences of the family. In regard to this, it is interesting to note, in Table 29, that the SRD group means for the Intervention-Contracting factor provided further support for this contention. (Although this factor entered the function as a significant predictor, it accounted for only a little over 1% of the variance between SRD groups and therefore cannot be said to have been an important predictor.)

The relationship between parental dissatisfaction and SRD which was demonstrated by these data is consistent with findings of other researchers. Conger (1976) found that the incidence of parents' reinforcing behaviors and the frequency of positive communication were negatively related to delinquency. He further reports that as the incidence of parental punishment increases, this inverse relationship between parental reinforcement and delinquency disappears. Conger concludes that parental response behaviors--whether rewarding or punishing--are important determinants of the bond between the youth and parent. He views this bond as an important potential protection against delinquent involvement. Of Conger's findings vis-a-vis this important parent/child relationship, Austin (1977) states, "mutual acceptance is associated with least delinquency and mutual rejection with most delinquency" (p. 112). The findings of the current study were consistent with this assertion.

Life Domain-Peer Involvement factor. The low SRD group also reported much less involvement with their peers and more positive change in the freetime domain than did the middle or high scoring groups. This finding also replicated those reported by other investigators in the area of delinquency. Elliot and Voss (1974), for instance, reported that among

their sample of youths, as measured by self-report, "commitment to peers has a strong, direct effect on delinquent behavior" (p. 165). Conger (1976) examined the question of peer involvement as it related to delinquency in a large sample of white male urban junior and high school students. He found no overall relationship between attachment to peers and self-reported delinquency rates in his sample. He suggested that this could be understood in light of social learning theory. Social learning theory would predict that peer involvement would lead to increased delinquency only if a youth's peer group was reinforcing delinquent behaviors. Involvement with a conventional or pro-social peer group would be expected to lead to decreased delinquency. In a large, mixed sample of youths, one would expect to find no generalized relationship between peer involvement and delinquency. Conger would maintain that the results of the current study suggest that the "peer groups" of these youths are attending to and reinforcing delinquent behaviors and that the higher level of peer involvement of the high SRD group would therefore be expected.

Conger further suggests that the influence of delinquent peers (of the rewards they offer for delinquent behaviors) will be greatest in a youth's life in the absence of sources of reinforcement for pro-social behavior. He predicts that, "delinquency will be greatest where attachments to conventional environments are weak and attachments to deviant environments are strong." The high SRD groups reported negative relationships with their parents (Life Domain-Parental Control), low involvement at home (Life Domain-Positive Home Involvement) and high peer involvement, as measured by this Peer Involvement factor. In combination all provide strong support for Conger's position.

Life Domain-Employment Motivation factor. The low SRD group was also less likely to report high motivation for employment than the middle group

(who scored moderately on this factor) or the high group (who reported high motivation for employment). This effect might, in part, be a reflection of the fact that the low SRD group tended to be somewhat younger than the other two groups, since Table 20 indicates that age and employment motivation were correlated. This effect may also stem from the fact that the low SRD group was relatively more positively involved at home and school than were the other two groups. Perhaps if these other important, traditional youth roles became more dissatisfying or aversive (as they appeared to be for the other two groups) then employment was seen as a more important goal--a kind of substitute arena in which to prove oneself successful.

Intervention--Job Advocacy factor. Closely related to the above predictor, the low SRD group reported the lowest frequency of intervention focused on obtaining employment and other "advocacy" interventions. The middle SRD group reported the highest incidence of these types of interventions and the high SRD group mean fell in between the other two groups. As stated above, the low SRD group did not appear to want employment, so their report of little intervention in this regard was not surprising. But both the middle and high SRD groups did report high desire for employment--particularly the high SRD group. The relatively low score on this factor for that group was therefore perplexing. These data did not provide any direct explanation of this observed group difference. It is possible that these high SRD youths were involved with crises in other areas of their lives which became the focus of the intervention activities, but that is not clear from this study. It is, perhaps, equally as likely that the relationships between these youths and the students with whom they worked were less positive than those in the other groups and that the students were less likely to take proactive steps toward goals which were

desired by their youths. Further investigation into this area is necessary to gain a clearer understanding of these results.

Intervention-Amount of Time and Parental Involvement factor. Table 29 reveals that this predictor, while not heavily weighted in the first function--was the most important predictor in the second function which discriminated the SRD groups. Although this second function was not very successful in discriminating the three SRD groups, this predictor entered the overall discriminant function procedure at the fourth step and accounted for an additional 4% of the observed differences between the three groups. The group means revealed that the low SRD group reported the highest level of involvement with their student change agents, as measured by this factor. The middle SRD group reported the lowest group mean here and the high SRD group fell in the middle. The high score of the low SRD group might have been due to the assigned students finding it relatively easier and more satisfying to work with this group. They may have been a more rewarding and responsive group to work with since they tended to be more positively involved at home (which would have made it easier to involve their parents in the intervention) and at school. They also were not engaging in delinquent behaviors as much as the other groups and this fact perhaps resulted in relatively greater rewards for the students who worked with this group. The situation which sometimes faced those students in the other groups was that they became aware that their youth was continuing to engage in delinquent behaviors and they felt less "successful" or effective themselves as a result.

The difference between the medium SRD and the high SRD group was more puzzling--particularly the very low score of the medium SRD group. It may be that the high SRD group provided more apparent, clear-cut issues

for the students to work on than did the middle group. Further information would be necessary to obtain a clearer understanding of these group differences.

Intervention-Family factor. The group means on this factor revealed that the low SRD group reported the least amount of intervention in the family domain, the medium SRD group reported the highest amount, and the high SRD group fell in the middle. This may reflect that the low SRD group was not in need of interventions in this area and therefore received less. The medium SRD group, however, reported high involvement in the home (see the Life Domain-Home Involvement factor means) and a moderate amount of stress in their relationships with their parents (see Life Domain-Parental Control). Under these circumstances, there would have been an increased need for interventions with the family. The high SRD group was relatively uninvolved in the home domain and their relationships with their parents were very stressed. Under these circumstances it would have been relatively difficult to get the youth and parent engaged in family intervention activities.

Conclusions--Findings Discriminating the SRD Groups

The remaining four predictor variables which entered the discriminant function accounted for approximately 1% of the variance each. They, therefore, cannot be viewed as important discriminating variables in regard to the SRD groups.

The overall picture of the high SRD group presented by the group means of the predictor variables was not a new one. This group reported negative relationships with their parents governed primarily by coercive controls. They were highly involved with their peer group and relatively less involved at home. They were not positively involved in school. They wanted employment but were most frequently not employed. Davidson (1979)

reported similar findings in regard to the "failure" youths who participated in the ADP in Illinois. In that instance, the group was determined by police and court recidivism and poor school attendance levels. Elliot and Voss (1979) also reported similar relationships between many of these "life domain" variables and delinquent behavior in their sample of 2,617 metropolitan high school students. It is a picture which is consistent with the predictions of Conger's (1976) synthesis of social control and social learning theories of delinquent behavior. The youths who reported high levels of delinquency in this study also reported relatively weak attachments to conventional roles and environments (school, home) and they also reported strong attachments to their peers. Conger would suggest that these peers were very likely to be highly delinquent themselves and that the youths' commitment to their peers were most probably very strong as well. These results are similarly consistent with the related theory of "differential opportunity" put forth by Cloward and Ohlin (1978) which united the concept of anomie (differential access to legitimate means of obtaining desired ends) with "delinquent subculture" theories which suggested the idea of differential access to <u>illegitimate</u> means of obtaining desired ends as well. This theory would also predict the pattern of "life domain" components reported by the high SRD group in this study.

The fact that the Intervention predictors played a relatively minor role in these discriminant function solutions is somewhat discouraging. However, it is not surprising, since the previous research on the ADP did not demonstrate condition effects in regard to Self-Reported Delinquency rates. The Life Domain predictors did provide strong support for the rationale behind the inclusion of the behavioral contracting approaches utilized in the Action model. They also provided support for advocacy

interventions aimed at achieving desired goals in the employment and school areas. Although the importance of the peer involvement factor in discriminating the SRD groups might be viewed as an indication that peer relationships should become a focus of intervention efforts, the most productive approach in this area is more likely to be an indirect one. Even in an intervention model which is as deeply embedded in the youth's natural environment as is the ADP, peer group relationships are difficult and relatively inaccessible targets for change. Conger's (1976) findings, however, suggest an alternative, indirect strategy for addressing the concern about the influence of delinquent peers. He maintains that delinquent peers are primarily influential with youths who are not receiving adequate reinforcements from more conventional interpersonal situations (specifically the parents). He suggests that a more positive parent/child relationship can serve as an important protection against deleterious involvement with delinquent peers. The suggestion, then, is that since youths who are more involved with and committed to peers generally are so because they receive a greater amount of positive attention from these peers than they do from their parents, the most productive solution is to increase the amount of reinforcement available to the youth from the parent(s). This approach focuses on strengthening the positive bond between the youth and the parent, thereby increasing the importance of that relationship to the youth. The resulting more positive parent/child involvement (or home involvement) has repeatedly been shown to be negatively related to delinquency (Conger, 1976; Davidson, 1979; Elliot & Voss, 1979).

The relatively minor role that intervention activities played in discriminating the SRD groups could be due to a number of factors. First

of all, it is possible that the merging of these conditions masked some of the intervention relationships that might exist in some of the conditions. The Action group, in particular, might yield stronger intervention/outcome relationships in a discriminant function analysis when viewed alone. Another possibility is that the Life Domain and Intervention interviews conducted with the youths did not measure the intervention activities with enough precision to explore the relationships between these activities and SRD outcomes (even if such relationships did exist). This was of particular concern in regard to the advocacy portion of the intervention. Perhaps the volunteer interviews would have provided a more accurate or complete measure of the intervention predictor variables. Another likely possibility is that the interventions supplied by the ADP to the court referred youth--although very "intensive" in comparison to most traditional intervention approaches--was simply not an important enough influence in the youth's life to affect the desired changes in delinquent behaviors. Finally, it is possible that the intervention packages offered by the ADP were "off target" in some important ways and simply did not achieve changes in areas of the youths' lives that would need to be changed in order to decrease delinquent behaviors. Future studies--specifically of the Action condition--would be necessary to begin to unravel this puzzle. One profitable approach would be to carefully examine the interventions that youths who did demonstrate decreases in SRD rates received and attempt to differentiate these interventions from those of the other youth.

Evaluation of Predictive and Explanatory Capabilities

The discriminant functions for the SRD groups provided a relatively good model to account for SRD variance, accounting for 50% of the observed

variance. An important caution must be born in mind in regard to these results, however. Both the SRD data and the predictor variables were obtained through interviews. Under these circumstances, method variance would be expected to inflate the "variance accounted for" by these functions. Even in light of this caution though, these results can be said to indicate that the ten predictors included in the equations were important factors in accounting for the delinquency rates of these youths as measured by SRD. It is also true, however, that 50% of the variance in SRD group membership was not accounted for by this combination of predictor variables. So clearly, several other variables which are important in understanding the etiology of delinquency were not included in this set (for instance, the level of delinquent activity among a youth's peer or family group might be such variables).

The predictive ability of these discriminant functions--although superior to chance--was not very accurate and yielded a particularly high percentage of "misses" in regard to the middle group. So these groups were not clearly differentiated from one another by the functions. In short, these derived functions were more productive in an analytical, exploratory sense than in a predictive one.

Comparison of the Two Discriminant Functions

An examination of Table 29 yields a very clear-cut answer to the third research question of whether or not the derived discriminant functions for the SRD groups and the archival groups were similar. The answer is that they were not at all similar. In fact--and almost unbelievably, given such a relatively small number of predictors--of the top four predictors of each function there was absolutely no overlap (i.e., no common, important predictors). This provides clear evidence that "delinquency" as measured by archival data and "delinquency" as measured by SRD are two

very distinct phenomena. These are clearly not two ways of measuring the same construct, but, in fact, measure separate constructs--both of which are valid and important to the overall phenomenon of "delinquency." This is the position put forth by Blakely, et al. (1980) and Fernandez (1981). It receives strong confirmation from these results.

The current study does not lead to any clear understanding of the observed differences between these two indices of delinquency. It does appear that the discriminant function which described the officially defined groups included several factors which measured strong environmental reactions to a youth's involvement in the juvenile justice system. Specifically, the observed group differences on the Life Domain-School factor, and the two Intervention factors which discriminated between the two groups (Family and School) could all be interpreted as differential responses to a youth's re-entry into the juvenile justice system. It is not clear whether or not this was the case since all of these measures were collapsed across time. A time series analysis of these data would lead to a clearer understanding of this matter.

## Conclusions

This study attempted to explore the relationship between the processes of change and delinquency outcomes in the context of the Adolescent Diversion Project, a diversion program for juvenile offenders. Delinquency outcomes were measured by two distinct methods: Archival data concerning police and court contacts and a Self-Report Delinquency measure. The process measures included indices of intervention activities and general life domain conditions operative in the youths' lives. The discriminant analyses performed led to several major conclusions.

First of all, self-report delinquency and official delinquency were demonstrated to be two distinct constructs by the fact that the derived

functions which described the various groups in the two instances had virtually nothing in common. The process variables that discriminated groups of SRD respondents did not discriminate between the officially defined "success" and "failure" groups and vice versa.

Secondly, these process variables which were utilized as predictors provided a very poor model for the explanation of official delinquency. They accounted for very little of the difference between outcome groups. Self-Reported Delinquency was more adequately explained by this particular set of predictor variables--although there was certainly a great deal of unexplained variance (50%) even here.

A comparison of the predictors which were determined to be important with respect to the official outcome groups and those with respect to the SRD groups leads to a perplexing situation. The successful official outcome group was, in part, predicted by participation in the "Action" intervention condition--the SRD groups were not related to condition. Yet the Life Domain predictors in the SRD functions provided support for the specific intervention components of the Action model (e.g., the importance of the Life Domain-Parental Control factor provides strong support for the inclusion of behavioral contracting). But the Action model did not account for any of the variance in group membership among the SRD groups. This leads to the inevitable question of how to account for the Action model's impact on official recidivism when official delinquency was not demonstrated to be related to the specific intervention components as measured by the Intervention Survey. This study does not provide the information necessary to answer this question, although some of the results suggest that important steps toward achieving a clearer picture would be to examine the Action condition youths separately and to examine the data utilizing a time series approach rather than collapsing across time as was done in this study.

Two final, and more general conclusions can be made on the basis of the results of this study. First, the observed distinctions between official and self-reported delinquency emphasize the need to include both measures to evaluate social programs related to delinquent--or pre-delinquent--populations. Both measures of delinquency are valid and important ones. Delinquency programs, such as the ADP, should attempt to tailor their intervention efforts to maximize a decrease in both types of delinquency. Secondly, this study clearly demonstrates the importance of conducting research in the manner prescribed by the Hybrid Model proposed by Davidson, Redner, and Saul (in press) of which the ADP research has been an example as described in Chapter I. The relationships between process variables and outcomes in social interventions are extremely complicated. The task of sorting out and explaining these relationships is an essential and extremely difficult one--particularly when the interventions are carried out in the context of the natural environment. An appropriately complex approach to measurement such as that proposed by Davidson, et al. is essential if such explanantions and understandings are ever to be achieved.

# APPENDIX A

## Self Report Delinquency Measure

# SELF REPORT DELINQUENCY (SRD)

HOW OFTEN HAVE YOU:
HOW OFTEN HAS YOUR SON/DAUGHTER:
HOW OFTEN HAS YOUR YOUTH:

| | | IN THE LAST | |
|---|---|---|---|
| | | 6 WEEKS | YEAR |
| 2085 | SKIPPED CLASS WHEN YOU/HE/SHE WAS IN SCHOOL? | | |
| 2086 | GONE ONTO SOMEONE'S LAND WHEN THEY DIDN'T WANT YOU/HIM/HER TO BE THERE, OR WITHOUT THEIR PERMISSION? | | |
| 2087 | GONE INTO A HOUSE OR BUILDING WHEN YOU/HE/SHE WASN'T SUPPOSED TO BE THERE? | | |
| 2088 | PLAYED ON A SCHOOL ATHLETIC TEAM? | | |
| 2089 | THREATENED TO HURT SOMEONE? | | |
| 2090 | BEEN TOLD TO BRING YOUR/HIS/HER PARENTS TO SCHOOL FOR SOMETHING YOU/HE/SHE DID WRONG? | | |
| 2091 | DAMAGED OR MESSED UP SOMETHING NOT BELONGING TO YOU/HIM/HER? | | |
| 2092 | HURT SOMEONE BADLY ENOUGH FOR HIM/HER TO NEED BANDAGES OR A DOCTOR? | | |
| 2093 | GOTTEN ON THE HONOR ROLL FOR GOOD GRADES IN SCHOOL? | | |
| 2094 | TAKEN SOME PART OF A CAR OR SOME GASOLINE? | | |
| 2095 | HIT A MEMBER OF YOUR/HIS/HER FAMILY? (IN ANGER) | | |
| 2096 | HAS NOT BEEN ALLOWED TO GO TO SCHOOL UNTIL THE SUPERINTENDANT OR PRINCIPAL TOLD YOU/HIM/HER THAT YOU/HE/SHE COULD GO AGAIN? (BEEN SUSPENDED) | | |

| | | IN THE LAST 6 WEEKS | IN THE LAST YEAR |
|---|---|---|---|
| 2097 | TAKEN SOMETHING NOT BELINGING TO YOU/HIM/HER WORTH LESS THAN $2.00? | | |
| 2098 | EARNED SOME MONEY AT A JOB? | | |
| 2099 | DRUNK BEER OR LIQUOR? (INCLUDES SIPS) | | |
| 2100 | RUN AWAY FROM HOME? | | |
| 2101 | SKIPPED A FULL DAY OF SCHOOL? | | |
| 2102 | BEEN SENT TO THE SCHOOL PRINCIPAL'S OFFICE FOR BAD BEHAVIOR IN CLASS? | | |
| 2103 | CARRIED A GUN OR A KNIFE? | | |
| 2104 | WORKED ON A SCHOOL NEWSPAPER OR YEARBOOK? | | |
| 2105 | TAKEN SOMETHING NOT BELONGING TO YOU/HIM/HER WORTH OVER $50.00? | | |
| 2106 | DONE SOMETHING AROUND THE HOUSE OR FOR THE FAMILY THAT REALLY PLEASED YOUR/HIS/HER FAMILY? | | |
| 2107 | SET FIRE TO SOMEONE ELSE'S PROPERTY? | | |
| 2108 | USED OR THREATENED TO USE A WEAPON TO GET SOMETHING FROM A PERSON? | | |
| 2109 | TAKEN SOMETHING FROM A STORE WITHOUT PAYING FOR IT? (REGARDLESS OF PRICE) | | |
| 2110 | SMOKED WITHOUT YOUR PARENTS/YOUR/HIS PARENTS KNOWING ABOUT IT OR WITHOUT PERMISSION? (REGULAR CIGS.) | | |
| 2111 | WORKED FREE FOR A CHARITY ORGANIZATION? | | |
| 2112 | TAKEN A CAR WITHOUT THE OWNER'S PERMISSION? (INCLUDES JOYRIDING) | | |

| | | IN THE LAST 6 WEEKS | YEAR |
|---|---|---|---|
| 2113 | SMOKED MARIJUANA? | | |
| 2114 | TAKEN SOMETHING FROM A PERSON BY FORCE? (MAY OR MAY NOT USE A WEAPON) | | |
| 2115 | BEATEN UP ON SOMEBODY OR FOUGHT SOMEONE (PHYSICALLY)? | | |
| 2116 | TAKEN DRUGS OR PILLS, OTHER THAN MARIJUANA? | | |
| 2117 | BOUGHT OR GOTTEN SOMETHING THAT WAS STOLEN BY SOMEONE ELSE? | | |
| 2118 | BROKEN INTO A PLACE AND STOLEN SOMETHING? | | |
| 2119 | TAKEN THEINGS WORTH LESS THAN $50.00? (OVER $2.00) | | |

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# APPENDIX B

## Recruitment Letter

MICHIGAN STATE UNIVERSITY - EAST LANSING

Department of Psychology - Snyder Hall

May 14, 1979

COURSE ANNOUNCEMENT

Dear Student:

We would like to inform you about a sequence of courses available to undergraduates beginning in Fall, 1979. The course involves a three-term commitment. The course will be offered under Psychology 371 (Fall, 1979), Psychology 372 (Winter, 1980), and Psychology 373 (Spring, 1980) for 4 credits each term. The course will provide you the opportunity to work on a one-to-one basis with an adolescent from the local community. These youths have been referred by the juvenile court. The course will provide you with initial training in working with adolescents and ongoing supervision of your actual involvement and progress. The course will be a unique combination of information, intervention techniques, and actual community experience. This course will be a valuable experience for anyone considering graduate work and/or a career in the human service fields. PLEASE NOTE: This course requires that you be enrolled the entire three terms.

Due to the typical overwhelming response to this course, we are limited to the number of people we can process. Therefore, the first 300 people who call the office number (355-1814) starting Wednesday, May 23 through Tuesday, May 29 will be the only people invited to the initial meeting. If you or any of your friends would be interested in this project, please call 355-1814 between 8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m. no earlier than May 23 for information concerning the first meeting.

Sincerely,

William S. Davidson II, Ph.D.
Associate Professor of Psychology
Director, Adolescent Diversion Project

WSD:rjm

# APPENDIX C

## Participation Agreement

# MSU ADOLESCENT DIVERSION PROJECT

## Participation Agreement

In the Fall of 1976, Michigan State University and the Ingham County Probate Court started a program for youth in this community. The idea for the program is to provide an alternative to the juvenile court for local youth. This project involves several things. First, some of the youth in the program will be working with volunteers. The volunteers will be working with kids on a lot of different things depending on the kinds of changes which need to be made for particular kids. This might involve working things out between you and your parents, working things out at school, helping you find a job, things to do in your free time and so on. Second, not all of the kids who decide to be in this program will be working with a volunteer. About 3/4 of the kids will be working with a volunteer between six and eight hours per week on the kinds of things described above. The rest of the kids will be returned to the intake worker. Whether or not you will be working with a volunteer will be decided by lottery and in no way reflects what we think of you. When you complete the program on ____/____/____ and if you've had no further trouble with the court, you will have no further court responsibility. If you would like to talk to a lawyer about this decision, Attorney Daniel Mankins will be willing to meet with you without charge.

This form is for you to indicate your intention to participate in the program. It's important for you to know exactly what you're agreeing to.

1. We hereby indicate that we are participating in this project voluntarily and understand that we have the right to withdraw if we see fit.

2. We understand that this project is being evaluated and that our input will be an important part of that evaluation. We, therefore, agree to provide honest and accurate information to the project staff.

3. We agree to be interviewed by the project staff on six occasions. Once within two days, once in six weeks, once in twelve weeks, once in eighteen weeks, one and two years from now. We understand that this information as all information, will be kept confidential. We also understand that both _____ and his/her parents will participate in each interview. _____ will be paid $5.00 for each interview. Finally, we understand that one of _____'s friends will also participate in the interview.

4. We agree to work with a volunteer should one be assigned. We understand that this may involve six to eights hours per week. We understand that the volunteer will be able to work around our schedule.

5. We hereby give permission for the project staff to examine and record the police and court records for _____. It is also understood that this information will be handled confidentially and anonymously. This permission includes access to juvenile as well as adult records should they occur. This permission applies to all records from 197_ through 198_.

Youth _____ Date _____

Parent _____ Project Staff _____

Court Staff _____

# APPENDIX D

## Life Domain Survey

Life Domain Survey

(All questions refer to the last six weeks.)

1015. How often does youth spend time with parents in athletics? (last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3 or 4 times | More than 4 times |

1016. How often do the youth and parent(s) go to movies together?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3 or 4 times | More than 4 times |

1017. How often do the youth and parent(s) go camping/fishing/hunting, etc.?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3 or 4 times | More than 4 times |

1018. How often does youth visit relatives with parents?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3 or 4 times | More than 4 times |

1019. How often does the parent(s) instruct the youth in some skill/activity?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3 or 4 times | More than 4 times |

1020. How often does the youth participate in purchased activities with parents?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3 or 4 times | More than 4 times |

1021. How often do the parent(s) talk with the youth about day-to-day things?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a month | Once a week | More than once/week | Daily |

1022. * How often does the youth spend time with siblings in athletics? (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

1023. * How often does the youth spend time with siblings going to movies? (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

(All questions refer to the last six weeks.)

1024. How often does the youth spend time with siblings camping/fishing/hunting, etc.?
* (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

1025. How often does the youth spend time with siblings going out of town?
* (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

1026. How often does the youth spend time with siblings at indoor activities (TV)?
* (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once/week | Daily |

1027. How often does the source say the youth and siblings "hang around" together?
* (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once/week | Daily |

1028. How much is expected of youth in terms of household responsibilities?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Nothing | Very little | Some | A fair amount | A lot |

1029. How often does the youth complete his/her household responsibilities?
* (no responsibilities)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Seldom | Half the time | Most of the time | All the time |

1030. How often does the youth spend evenings at home?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a week | More than once a week | Almost everyday | Daily |

1031. How often does the youth engage in other spontaneous activities with his/her parent(s)?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once a week | Daily |

(All questions refer to the last six weeks.)

1032. How often does the youth engage in spontaneous activities with his/her siblings? (activities not covered by other items)

* (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once a week | Daily |

1033. How often does the youth engage in purchased activities with siblings

* (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

1034. How often does the youth sleep at home at night?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a week | More than once a week | Almost daily | Daily |

1035. How often does the youth sleep at a relative's home?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once/week | Daily |

1036. How much has the youth's neatness around the house improved?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1037. How much has the frequency of the youth's talking with parents changed?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much less | Somewhat less | No change | More | Much more |

1038. How has the youth's and parent's "getting along" changed?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1039. How has the youth's performance of household responsibilities changed?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much less often | Somewhat less often | No change | Somewhat more often | Much more often |

(All questions refer to the last six weeks.)

1040. How much has the youth's spending time at home (evenings) changed?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much less | Somewhat less | No change | Somewhat more | Much more |

1041. What change has occurred in terms of the parent's lessening restrictions on the youth and/or allowing the youth to do things outside the home?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1042. What change has occurred in terms of the youth's moodiness?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1043. What change has occurred in terms of the parent and youth arguing?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much more frequent | Somewhat more | No change | Somewhat less | Much less frequent |

1044. What is the view of the change which has occurred in the home area?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Completely dissatisfied | Somewhat dissatisfied | No change | Somewhat satisfied | Completely satisfied |

1045. What change has occurred in the parent(s) hassling the youth about school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much more frequent | Somewhat more | No change | Somewhat less | Much less frequent |

1046. How often do parents use punishment to control the youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1047. How often do the parent(s) talk to the youth about changing?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1048. Does source say that the youth lies to the parents?

| 1 | 5 |
|---|---|
| No | Yes |

(All questions refer to the last six weeks.)

1049. Do the parent(s) suspect the youth of illegal activity?

| 1 | 5 |
|---|---|
| No | Yes |

1050. How much do the parent(s) and the youth argue about where the youth is going?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily | Daily |

1051. How much do the parent(s) hassle youth about the way the youth looks?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily | Daily |

1052. How much do parent(s) and youth argue about chores?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily | Daily |

1053. How much do the parent(s) and the youth argue about the use of the phone?
* (no phone)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily | Daily |

1054. How much do the parent(s) and youth argue about the youth's friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily | Daily |

1055. How much do the parent(s) and youth argue about curfew?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily | Daily |

1056. How much do the parent(s) and youth argue in general?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily or daily | More than once a day |

1057. How necessary is change in the home domain? (according to source)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Unimportant | Partially important | Relevant | Central | Crucial |

(All questions refer to the last six weeks.)

1058. To what extent do the parent(s) hassle the youth about school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost daily | Daily |

1059. How often do the parent(s) intervene with youth's peers?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| More than once a week | Once a week | 2-6 times | Once | Never |

1060. To what extent do the parent(s) know the specific things the youth does with friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Vaguely mention one thing | Specifically mention one thing | Vaguely mention several things | Specifically mention several things |

1061. To what extent do parent(s) know who youth's friends are?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | knows small proportion of them | knows half of them | knows most of them | knows all of them |

1062. To what extent do the parent(s) know specific things youth does in free time?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Vaguely mention one thing | Specifically mention one thing | Vaguely mention several things | Specifically mention several things |

1063. To what extent do the parent(s) know what classes the youth takes?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Mention one | Mention several | Mention most | Mention almost all |

1064. How many of the youth's teachers do the parents know of?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| None at all | Mention one | Mention several | Mention most | Mention almost all |

1065. To what extent do the parent(s) know specific things that the youth does in school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Vaguely mention one thing | Specifically mention one thing | Vaguely mention several | Specifically mention several |

(All questions refer to the last six weeks.)

1066. How often does the school inform the parents when the youth is absent?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1067. To what extent have the parents taken action to change the youth's school situation?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Has talked about it | Planning specific action | Taking action | Making very intense effort |

1068. To what extent have the parent(s) been successful (in making changes)?
* (no attempt above)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little impact | Some impact | Somewhat satisfied | Completely satisfied |

1069. To what extent has the change resulted in improved attendance?
* (no attempted change or not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1070. To what extent has the change resulted in improved academic performance?
* (no attempted change or not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1071. Is the youth currently enrolled in school?

| 1 | 5 |
|---|---|
| No | Yes |

1072. Has the youth been suspended/expelled from school in last 6 weeks?

| 1 | 5 |
|---|---|
| No | Yes |

1073. Is the youth good at particular classes?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| No classes | One class | Some classes | Most classes | All classes |

(All questions refer to the last six weeks.)

1074. How many classes does the youth know particular things which are going on?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| No classes | One class | Some classes | Most classes | All classes |

1075. How often does the youth attend school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once/week or less | More than once a week | Almost everyday | Daily (or the required amount) |

1076. How often does the youth talk to teachers outside of class?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once/month | Once/month | Once/week | More than once/week |

1077. How often does the youth talk to the principal at school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once/month | Once/month | Once/week | More than once/week |

1078. How many academic classes is the youth good at?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| No classes | One class | Some classes | Most classes | All classes |

1079. How many activity classes is the youth good at?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| No classes | One class | Some classes | Most classes | All classes |

1080. To what extent is the youth good at P.E.?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | O.K. | Pretty good | Very good |

1081. Source

1082. Source

1083. Card

1084. Card

(All questions refer to the last six weeks.)

1085. How often does the youth participate in extracurricular activities?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a week | Once a week | More than once a week | Almost every day |

1086. How often does the youth skip any classes (on days when youth is in school)?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Everyday | Almost everyday | Once a week | Less than once a week | Never |

1087. To what extent does the youth want to switch schools?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| A great deal | Definitely an issue | Would like to | Has mentioned | Not an issue |

1088. How often does the youth get in trouble with the teachers?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| More than once a week | Once a week | Once a month | Less than once a month | Never |

1089. To what extent does the youth get a fair deal at school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1090. To what extent does the youth get passing grades in school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| No classes | One class | Some classes | Most classes | All classes |

1091. How often does the youth do homework in school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never (or no homework) | Less than once a week | Once a week | More than once a week | Almost every day |

1092. How often does the parent(s) help youth with homework?
* (no school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a month | Once a week | More than once/week | Daily |

(All questions refer to the last six weeks.)

1093. How often does the youth do homework outside the school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a week | Once a week | More than once a week | Almost every day |

1094. How many classes does the youth like?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| No classes | One class | Some classes | Most classes | All classes |

1095. How many classes does the youth dislike?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| All classes | Most classes | Some classes | One class | No classes |

1096. How many teachers does the youth like?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| None | Mentions one as liked | Mentions more than one as liked | Mentions one as really liked | Mentions more than one as really liked |

1097. How many teachers does the youth dislike?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| All | Most all | Some | One | None |

1098. To what extent does the youth like activity classes? (art, shop, etc.)
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Dislikes | Says is O.K. | Likes | Mentioned as a favorite |

1099. To what extent does the youth like P.E.?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Dislikes | Says is O.K. | Likes | Mentions as a favorite class |

1100. To what extent does the youth dislike the rules at school?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| A major reason for not liking school | Definitely dissatisfied | Some dissatisfaction | A little dissatisfaction | Not an issue |

(All questions refer to the last six weeks.)

1101. To what extent does the youth like the school administrators?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intense dislike | Dislike | Not an issue | Likes them | Really likes them |

1102. To what extent does the youth care about school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Concerned | Very concerned |

1103. To what extent is the youth concerned about finishing school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Concerned | Very concerned |

1104. In general, what is the youth's attitude toward school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Very negative | Negative | Neutral | Positive | Very positive |

1105. How often do the administrators hassle the youth?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| More than once a week | Once a week | Once a month | Less than once a month | Never |

1106. How often do the teachers hassle the youth?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| More than once a week | Once a week | Once a month | Less than once a month | Never |

1107. What change has occurred in school attendance?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1108. What change has occurred in academic performance?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1109. What change has occurred in classroom behavior?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

(All questions refer to the last six weeks.)

1110. What change has occurred in the youth completing homework?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1111. What change has occurred in the youth's attitude towards school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1112. What change has occurred in the youth's relationship to teachers?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1113. What is the view of any changes which have occurred in the school area?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Completely dissatisfied | Somewhat dissatisfied | No change | Somewhat satisfied | Completely satisfied |

1114. How often does youth spend time with friends during school time?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | 2 times a week | Almost everyday | Few times a day | Major part of the day |

1115. How often does youth skip school with friends?'
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Daily | More than once a week | 2-6 times | Once | Never |

1116. How often does youth spend time with friends on weekends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | One weekend per month or less | A part of almost every weekend | A part of every weekend | Most of every weekend |

1117. How often does youth participate in purchased activities with friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once a week | Daily |

(All questions refer to the last six weeks.)

1118. How often does youth participate in other spontaneous activities with friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost every day | Daily |

1119. How often does youth spend time with friends in the afternoons?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once a week or less | More than once a week | Almost every afternoon | Every afternoon |

1120. How often does youth spend time with friends evenings?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than one evening/week | Every evening |

1121. How often does youth drink with friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once a week | Daily |

1122. How often does youth go to parties with friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

1123. How often does youth smoke dope with friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1124. How often does youth spend time at a friend's home?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 2-6 times | More than once a week | Daily |

1125. How many close friends does youth associate with?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| None (no particular set of friends) | One | Two | Three | More than three |

1126. How much has the frequency of the youth's spending time at home (during the day) changed?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much less frequent | Somewhat less | No change | Somewhat more | Much more frequent |

(All questions refer to the last six weeks.)

1127. What change has occurred with respect to youth spending free time constructively?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much worse | Somewhat worse | No change | Somewhat better | Much better |

1128. What change has occurred in youth's spending time with the peers that the youth usually gets in trouble with?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| A lot more | A little more time | No change | A little less time | A lot less time |

1129. What is the view of the change which has occurred in the friends--free time area?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Completely dissatisfied | Somewhat dissatisfied | No change | Somewhat satisfied | Completely satisfied |

1130. How often does youth spend time hanging around alone?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| All the time | Most of the time | Sometimes | Not very often | Never |

1131. How often does the youth actively seek employment?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | Three or four times | More than four times |

1132. Has the youth had a job in the last 6 weeks?

| 1 | 3 | 5 |
|---|---|---|
| No | Self employed | Yes Formally has job |

1133. How much time does youth spend at the job?
* (no job last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| None | 1-4 hrs. Less than once a week (every other week) | (1-4) Once a week | 4-10 hrs./wk. or less | More than 10 hrs./wk. |

1134. To what extent is the youth taking action to get a job?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Has talked about it | Planning specific action | Taking action | Making very intense effort. Now employed |

(All questions refer to the last six weeks.)

1135. To what extent does the youth want a job? (including current job if already employed) (i.e., getting a job or a new job is an issue)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Against the idea | Indifferent | Somewhat for the idea | Definitely desired | A great deal (wants a job or a new job) |

1136. To what extent do the youth's parent(s) want him or her to have a job? (including current job if already employed)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Against. the idea | Indifferent | Somewhat for the idea | Definitely desired | A great deal |

1137. Has the youth acquired a job recently? (last 6 weeks)

| 1 | 5 |
|---|---|
| No | Yes |

1138. What kind of relationship does the youth and his/her supervisor have?
* (no job last 6 weeks or no supervisor)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strong negative | Negative | Neutral | Positive | Strong positive |

1139. What kind of relationship does the youth have with her/his peers at work?
* (no job last 6 weeks or no peers at work, i.e., works alone)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strong negative | Negative | Neutral | Positive | Strong positive |

1140. How often does youth talk to his/her supervisor?
* (no job last 6 weeks or no supervisor)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1141. Does the supervisor say good things about the youth?
* (no job last 6 weeks or no supervisor)

| 1 | 5 |
|---|---|
| No | Yes |

1142. What change has occurred in the frequency of the youth's illegal activities?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much more | Somewhat more | No change | Somehwat less | Much less |

(All questions refer to the last six weeks.)

1143. What change has occurred in the frequency of the youth's contact with the police?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Much more | Somewhat more | No change | Somewhat less | Much less |

1144. Is there a pending legal case?

| 1 | 3 | 5 |
|---|---|---|
| Two or more cases | One case | None |

1145. Is the youth on probation?

| 1 | 5 |
|---|---|
| Yes | No |

1146. How often has youth had contacts with police recently? (6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| More than 4 times | 3-4 times | Twice | Once | Never |

1147. What is the nature of the police disposition in comparison to what would be expected?

* (none last 6 weeks)

| 1 | 3 | 5 |
|---|---|---|
| Unfavorable | No different than expected | Favorable |

1148. What was the court disposition of any petition which had been filed?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Institution-alized or removed from home | Probation | Diversion to us or to other social agencies | Case dismissed | No petitions |

1149. Has the youth been detained?

| 1 | 5 |
|---|---|
| Yes | No |

1150. What is the extent of the interviewer's confidence in the information contained in this section?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Completely uncertain | Somewhat uncertain | Somewhat confident (70%) | Confident (90%) | Completely confident (99%) |

# APPENDIX E

## Intervention Survey

1155. How often does the volunteer have contact with the youth (not including phone).

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Once/Month or less | 2-4 times a Month | 5-7 times a Month | Twice a week | More than twice/week |

1156. How much time does the volunteer spend working on the case?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| One hour or less/week | Two or three hours/week | Four or five hours/week | Six or seven hours/week | Eight or more hours/week |

1157. To what extent does the volunteer engage in spontaneous activities with the youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | 3-5 times | Once a week | More than once a week |

1158. What is the frequency of phone contact between the volunteer and youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Once a month or less | 2-4 times a month | 5-7 times a month | Twice a week | More than twice a week |

1159. How often does the volunteer call the target?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Once a month or less | 2-4 times a month | 5-7 times a month | Twice a week | More than twice a week |

1160. How often does the target call the volunteer?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Once a month or less | 2-4 times a month | 5-7 times a month | Twice a week | More than twice a week |

1161. To what extent does the youth like what the volunteer is doing in general?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Barely mentions positive things | Seems to like it | Is very pleased | Say it's the best thing that's happened |

1162. To what extent does the youth like the volunteer?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intensely dislikes | Dislikes | Okay | Likes | Intensely likes |

1163. To what extent does the volunteer like the youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intensely dislikes | Dislikes | Okay | Likes | Intensely likes |

1164. To what extent has the volunteer had an early success with the case?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Started off very poorly | Had trouble getting started | It started okay | Got things going quickly | Had an early major success |

1165. To what extent does the youth share personal things with the volunteer?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

Complaints

1166. Volunteer feels role is undefined
1 5
Yes No

1167. Volunteer has no car
1 5
Yes No

1168. Volunteer can't find things youth likes to do
1 5
Yes No

1169. Volunteer has problems finding focus for approach
1 5
Yes No

1170. Target doesn't show up for contacts
1 5
Yes No

1171. Volunteer doesn't have enough time
1 5
Yes No

1172. Volunteer is angry at target
1 5
Yes No

1173. Parents wanted volunteer of same sex
1 5
Yes No

1174. Parents wonder about the purpose of the program
1 5
Yes No

1175. Target is too busy to see volunteer
1 5
Yes No

1176. Target finds the volunteer aversive (gross)
1 5
Yes No

1177. Target says program takes too much time
1 5
Yes No

1178. Volunteer is frustrated with lack of progress
1 5
Yes No

1179. Target has no enthusiasm
1 5
Yes No

1180. Volunteer feels that program has nothing to offer target

1181. Parent is uncooperative?

| 1 | 2 |
|---|---|
| Yes | No |

1182. How often does the parent call the volunteer?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than once a week |

1183. How often does the volunteer call the parents?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Less than once a month | Once a month | 2-4 times a month | More than once a week | Almost daily |

1184. How often do the parents do things to assist the volunteer and youth getting together?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1185. To what extent do the parent(s) like what the volunteer is doing?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Barely mentions positive things | Seems to like it | Are very pleased | Say it's the best thing that's happened |

1186. To what extent does the parent like the volunteer?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intensely dislikes | Dislikes | Okay | Likes | Intensely likes |

1187. To what extent does the volunteer like the parent(s)?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intensely dislikes | Dislikes | Okay | Likes | Intensely likes |

1188. To what extent has a friendship developed between the volunteer and the parent(s)?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never talk to each other | Talk very seldom | Talk most of the time | Talk all of the time | Developed a strong friendship |

1189. To what extent do the parents want this volunteer working with the youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly opposed | Mildly opposed | Doesn't care | Mildly in favor | Strongly in favor |

1190. To what extent does the source mention the volunteer spontaneously? (leave blank for volunteer)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Once | In two areas | Several times | In most areas |

1191. How often does the volunteer talk with the parents?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1192. How often does the volunteer talk with the parent(s) about day-to-day things?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1193. * To what extent do the parent(s) play a role in the school intervention? (no neg. of school change)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1194. How often do the youth's friends spend time with the volunteer and youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1195. * How often does the volunteer monitor the youth's performance in school? (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

1196. How often does the volunteer involve the youth's friends in recreation?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1197. How often does the volunteer talk to the youth's friends independently?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1198. To what extent has the volunteer specified changes relevant to the friends?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

1199. How often does the volunteer involve the youth's peers in things?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1200. To what extent do the volunteer and youth have a mutual recreational interest?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Have something to talk about | Have one (to do together) | Have two (to do together) | Have several (to do together) |

1201. How often do the volunteer and youth do purchased activities together?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

1202. How often do the volunteer and youth do athletic activities together?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

1203. What is the extent of the interviewer's confidence in the information contained in this section?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Completely uncertain | Somewhat uncertain | Somewhat confident (70%) | Confident (90%) | Completely confident (99%) |

1204. How often does the volunteer talk with the parent(s) alone about home problems?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

1205. How often does the volunteer talk to the youth about home?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1206. To what extent is the intervention focused on the home?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1207. To what extent is the home intervention focused on the youth doing household chores?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1208. To what extent is the home intervention focused on improving the youth's attitude?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1209. To what extent is the intervention focused on providing the parents information about the youth's comings and goings?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1210. How often does the volunteer talk with the parent and youth about home problems?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

1211. How often has the volunteer mediated a family disagreement?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | Three times | More than 3 times |

1212. To what extent does the volunteer involve the parent(s) in the planning of the intervention?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

1213. * How much of the time do the youth's siblings spend with the youth and volunteer? (no siblings)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

1214. To what extent is the home intervention focused on improving the parent's household rules?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1215. To what extent is the home intervention focused on having the parent(s) treat the youth more positively?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1216. To what extent is the intervention focused on getting the parent(s) and youth to talk more?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1217. To what extent is the intervention focused on improving the youth's school performance?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A very minor part | Part of, but not a major focus | One of the major foci | The major focus |

1218. How much do the volunteer and youth talk about school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

1219. How often does the volunteer talk to parent(s) about school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

1220. * How often does the volunteer help the youth with homework? (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

2015. To what extent has the volunteer specified school as a major change area?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Some | Considerably | A major focus |

2016. To what extent is the volunteer working on the youth changing schools?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

2017. * To what extent is the volunteer working on school-related activity changes? (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

2018. To what extent is the volunteer working on changing the youth's classroom behavior?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

2019. Has the volunteer set up a contract with the youth's school staff?
* (not in school last 6 weeks)

| 1 | 5 |
|---|---|
| No | Yes |

2020. To what extent is the volunteer trying to get the target to go to school more?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

2021. How often does the volunteer monitor the changes the school is supposed to make?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Less than once a month | Once a month | 2-4 times a month | More than 4 times a month |

2022. To what extent is the volunteer trying to get the youth to do more homework?
* (not in school last 6 weeks)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

2023. How often does the volunteer visit the school?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2024. How often has the volunteer talked to the school administrators?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2025. How often has the volunteer talked to the school counselors?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2026. To what extent is the volunteer working on curriculum changes?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

2027. To what extent does the volunteer involve the youth in the negotiation of school changes?
* (no neg. of school change)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

2028. How often has the volunteer talked to the teachers?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2029. How much has the volunteer talked with the youth about a job?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Some | Considerably | A major focus |

2030. To what extent has the volunteer identified the job area as a focus of change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Some | Considerably | A major focus |

2031. How much has the volunteer instructed the youth in job seeking?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Some | Considerably | A major focus |

2032. How often does the volunteer take the youth for job interviews?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2033. To what extent has the volunteer contacted local youth employment resources?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Talks about it | Made contact with one resource | Made contact with several/ using one | Actively using several |

2034. Has the volunteer gotten the youth a job?
* (Youth already has job - or clearly does not want a job)

| 1 | 5 |
|---|---|
| No | Yes |

2035. Has the volunteer gotten the youth into a work-study program?
* (Youth already in W.S. Program or has no interest to be in one)

| 1 | 5 |
|---|---|
| No | Yes |

2036. To what extent does the parent(s) play a role in the legal intervention?
* (no legal issue)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Some | Considerably | A major focus |

2037. How often does the volunteer talk to the police?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2038. How often does the volunteer talk to probation/DSS staff?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2039. How often does the volunteer talk to a lawyer?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2040. Has the volunteer assisted in getting the youth a lawyer?

| 1 | 5 |
|---|---|
| No | Yes |

2041. Has the volunteer attended a hearing?

| 1 | 5 |
|---|---|
| No | Yes |

2042. Has the volunteer assisted in negotiating a court disposition?

| 1 | 5 |
|---|---|
| No | Yes |

2043. How often has the volunteer visited the youth in detention?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

2044. Has the volunteer aided in getting the youth released from detention?

| 1 | 5 |
|---|---|
| No | Yes |

2045. How often do the volunteer and youth talk about legal problems?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2046. How often does the volunteer talk to the parent(s) about legal problems?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Once | Twice | 3-4 times | More than 4 times |

2047. To what extent has the volunteer specified interpersonal contingencies which need alteration?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Mentions nothing | Mentions only general things | Mentions one specific change | Mentions two specific changes | Mentions several changes |

2048. To what extent has the volunteer specified a contract between the youth and the significant others in his/her life?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Mentions nothing | Mentions the idea in passing | Talks of wanting to do a contract | Specified the people | Specified the people and behaviors |

2049. To what extent has a contract been used?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Mentions nothing | Has specific plan | Has talked with both parties | Has a contract written | Has had a contract in operation |

2050. To what extent has the volunteer set up a monitoring system for the contract?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| None mentioned | Mentions plans to do so | Has a specific system ready to implement | Has started using one | Has started using one and knows of each party's compliance |

2051. To what extent has the volunteer involved the youth and the relevant significant(s) in the contract negotiations?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Completely uninvolved (or no contract) | Minimally involved | Somewhat involved | Involved in most | Involved in everything |

2052. To what extent has the volunteer been instructing the youth and significant others in the methods of contracting?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | They have talked about it a fair amount | Very actively involves youth in instruction and practice |

2053. * To what extent does the youth like the contracting approach? (Kid knows nothing of approach)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intense dislike | Dislike | Neutral | Likes | Likes intensely |

2054. * To what extent is the parent following through with the contract? (no contract)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Most of the time | Complete followthrough |

2055. To what extent is the youth following through the contract?
* (no contract)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Most of the time | Complete followthrough |

2056. To what extent do the parent(s) like the contracting approach?
* (source knows nothing of approach)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intense dislike | Dislike | Neutral | Likes | Likes intensely |

2057. To what extent has the volunteer specified changes the youth would like made in his/her environment?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Mentions nothing | Mentions only general things | Mentions one specific change | Mentions two specific changes | Mentions several changes |

2058. To what extent has the volunteer specified courses of action to facilitate change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Mentions nothing | Mentions only vague actions | Mentions one specific action | Mentions two specific actions | Mentions several actions |

2059. To what extent has the volunteer specified individual targets for change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Source mentions nothing | Source mentions only categories of individuals | Source mentions one specific person | Source mentions two specific individuals | Source mentions several |

2060. To what extent has the volunteer (with or without the kid) taken specific action to initiate change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Source mentions nothing | Source mentions only vague action | Source mentions one specific action | Source mentions two specific actions | Source mentions several |

2061. (Refer to Item 2060) To what extent has youth alone taken specific action to initiate change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Source mentions nothing | Source mentions only vague action | Source mentions one specific action | Source mentions two specific actions | Source mentions several actions |

2062. To what extent has the volunteer followed up on change areas? (Monitoring the change attempts)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Mentions nothing | Mentions only general things | Followed up on one specific change | Followed up on two specific changes | Followed up on several changes |

2063. To what extent did the volunteer involve the youth in the planning and action which has been accomplished?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Completely uninvolved | Minimally involved | Somewhat involved | Involved in most | Involved in everything |

2064. To what extent has the volunteer been instructing the youth and/or parent(s) in advocacy?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | They have talked about it a fair amount | Very actively involved in instruction and practice |

2065. * To what extent does the youth like the advocacy approach? (never used approach)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intense dislike | Dislike | Neutral | Like | Like intensely |

2066. To what extent does the volunteer take action to generate new resources (e.g., employment, new club) for the target?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Talks about it | Has a specific plan | Has taken initial action | Substantial progress |

2067. To what extent is the volunteer using outside resources (e.g., Ed. programs employment programs)?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Talks about it | Made contact with one resource | Made contact with several/ using one | Actively using several |

2068. * To what extent do the parent(s) like the approach? (never used approach)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Intense dislike | Dislike | Neutral | Likes | Likes intensely |

2069. To what extent does the volunteer talk about himself/herself and his/her feelings to the youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never | Not very often | Sometimes | Most of the time | All the time |

2070. How much effort does the volunteer put into trying to understand the youth's feelings, beliefs, values, etc?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| None | Very little | Some | Considerable | Major amount |

2071. To what extent is the volunteer trying to get the parent(s) to advocate for the youth?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | Very little | Somewhat | Considerably | A major focus |

2072. To what extent does the source view the "home domain" as an important focus for change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not important | Somewhat important | Important | Very important | A major focus |

2073. To what extent does the source view the "friend domain" as an important focus for change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not important | Somewhat important | Important | Very important | Major focus |

2074. To what extent does the source view the youth's freetime activities as an important focus for change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not important | Somewhat important | Important | Very important | A major focus |

2075. To what extent does the source view the "school domain" as an important focus for change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not important | Somewhat important | Important | Very important | A major focus |

2076. To what extent does the source view the "job domain" as an important focus for change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not important | Somewhat important | Important | Very important | A major focus |

2077. To what extent does the source view the "legal domain" as an important focus for change?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not important | Somewhat important | Important | Very important | A major focus |

2078. Has the youth mentioned his involvement in the ADDP to any court personnel he/she has come in contact with?

* (no contact with court personnel)

| 1 | 5 |
|---|---|
| Yes | No |

2079. Has the youth mentioned his involvement in the ADDP to any police personnel he/she has come in contact with?

* (no contact with police personnel)

| 1 | 5 |
|---|---|
| Yes | No |

2080. Has mentioning his/her involvement in the ADDP kept the youth out of further trouble?

* (no mention of the project to other source)

| 1 | 5 |
|---|---|
| Yes | No |

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