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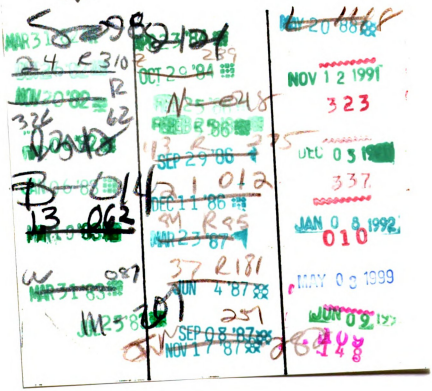

THE DIVERSION OF JUVENILE DELINQUENTS: A COMPARISON OF INTERVENTION WITH THE FAMILY AND INTERVENTION WITH ALL LIFE SYSTEMS

By

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ABSTRACT

THE DIVERSION OF JUVENILE DELINQUENTS:
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The variety of theories which have been developed to explain the causes of delinquency have led to equally diverse attempts to prevent and/or treat delinquents. These theories and the accompanying research have led to the development of the Adolescent Diversion Project. Adolescents who had petitions filed against them were referred to the project from the county probate court as an alternative to further court processing. These youth were then randomly assigned to the project or to a control group which received treatment as usual by the court. Youth who were assigned to the project were matched on a one-to-one basis with undergraduates who received intensive training and supervision from the project staff. The students spent six to eight hours weekly with their youth. Two basic intervention techniques were employed. Behavioral contracting was used to specify and modify the interpersonal contingencies operating between the youth and significant others, usually the family. In addition, advocacy strategies were designed to insure the welfare of the youth by protecting his/her rights and helping to locate or generate resources to fulfill the youth's needs and interests. Project

youth were also randomly assigned to one of two intervention conditions within the project. The Multi-focus group applied the above strategies to a variety of social domains of the youth (family, school, employment, peers, etc.) while the Family condition focused entirely on the family.

Standard outcome criteria were used to compare the three conditions (Multi-focus, Family, and Control). These included police data (frequency and seriousness of contacts), court data (frequency and seriousness of petitions filed) and school data (enrollment, attendance, grades, and credits earned). An additional outcome measure was the youth's self-reported estimate of the amount of their delinquent behavior.

Interviews with the youth were also conducted to obtain process information concerning the intervention and to monitor several of the life domains of the youth. These interviews were conducted at the beginning of the intervention, twice during the intervention, and again at the conclusion of the intervention.

With respect to delinquency related measures, the largest observed effect was the high number of police contacts, court petitions, and self-reported delinquent behaviors in the period immediately preceding placement in the project. Differences between groups were minimal.

School behavior was more consistent and showed positive effects for project participation. Generalizing over the four variables analyzed, the Multi-focus group showed the best performance, followed by the Family group, and finally the Control group.

The intervention scales generated from interviews indicated that the volunteers in the two intervention conditions, Multi-focus and Family, followed through on the models in which they had been trained.

The Family group was particularly high on scales involving the Family and contracting. The Multi-focus group intervened more in the areas of school and employment and used more advocacy strategies. Most of the main effects were for time. These indicated a general decrease in the amount of intervention provided over time though several scales were highest in the middle of the intervention period. In general, there was little correlation between the type and level of intervention provided and the outcome of the case.

The scales assessing the life domains of the youth showed a tendency to become less involved in several areas over time, though these findings were not consistent. The most noteworthy condition effects showed a greater involvement and more positive change in the school for the Multi-focus group.

Interpretations of these results and implications for the use of diversion and family intervention with delinquents were discussed. Future research needs were also presented.

To Mary, who helped me work when I

needed to work, and helped me play when I needed to play.

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The teamwork and camaraderie which exists at the Adolescent Diversion Project made this work a lot more enjoyable. I consider myself lucky to have worked with people who were friends inside and outside of the office. A number of staff members provided assistance with this specific research. Special thanks goes to Craig Blakely for his help with analyses. The large number of interviews conducted could not have been accomplished without the work of a large number of students and their supervisors, Julie Parisian, Jeana Chodakowski, Cheryl Saylor, and Sharon Dynak. The organizational and secretarial efforts of Keitha Kasel and Becky Mulholland were also greatly appreciated throughout the course of the project.

The patience and support provided by my wife, Mary, helped to keep me going. The encouragement of my friends and parents was also stimulating.

Finally, my sincere appreciation goes to the youths and families involved in this project. Their cooperation was critical to the project's success. I hope that the project provided them benefits in return that exceeded what can be quantified and reported here.

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CHAPTER I

INTRODUCTION

The Problem

Over the past decade or two, crime, particularly juvenile crime, has shown a dramatic rate increase. This increase has been accompanied by an equally high increase in the attention given to delinquency as a social problem. This concern is well represented by the statement of Saleem Shah, Director of the Center for Studies of Crime and Delinquency of the National Institute of Mental Health: "It can be said with little fear of exaggeration that the phenomena of delinquency and crime constitute one of the most critical domestic problems presently facing the country" (Shah, 1973).

As early as 1967, the President's Commission on Law Enforcement and Administration of Justice (1967) estimated that 11% of our population will have contact with the juvenile court before the age of 18. If only males are considered, the rate jumps to 17%. Since that time, the number of people arrested under the age of 18 has increased by 43% (Federal Bureau of Investigation, 1977). The number of individuals under the age of 18 arrested for violent crimes has increased 98%. Rates of increase for juveniles for some crimes have increased even more dramatically, such as narcotic drugs (615%), driving under the influence of liquor (411%), crimes against the family and children (227%), prostitution (230%), and stolen property (176%). While most of these increases occurred between

1967 and 1972, there are quite a few exceptions to this generalization. For instance, the number of crimes against family and children in 1976 was more than five times greater than the number in 1972.

Today, 24% of all males and 34% of all females arrested are under the age of 18. The percentages are even higher for some crimes such as car theft (55%) (FBI, 1977).

This research is a comparison of three modes of intervention with adolescent offenders and their effects on the youths involved. Two of the interventions share four basic components. First, the adolescents in these groups were diverted from the juvenile court and placed in a program administered by the Department of Psychology at Michigan State University. Second, trained undergraduates provided the intervention with youths in these two groups. Finally, the actual techniques used in the intervention were advocacy and behavioral contracting. One of the two groups of students applied these strategies only in the context of the youth's family, while the other group employed them in all relevant areas of the youth's life (e.g., school, home, job, friends). The third group of adolescents received treatment as usual from the court.

The remainder of this introduction will proceed as follows in order to provide the rationale for these modes of intervention and the specific research. First, leading theories of the causes of delinquency will be presented. Second, the implications of these theories for intervention will be discussed. Emphasis will be placed on the derivation of the two techniques of intervention (behavioral contracting and advocacy) to be used in this research as well as the concept of diversion and its relation to theory, research, and the operation of the juvenile justice system. Third, the rationale and research on the use of trained non-professionals

will be presented to provide an argument for the use of undergraduates as the intervention agents. Finally, the rationale for the specified proposed research will be provided within the context of a perspective of social model building.

Theories of Delinquency

This widespread incidence of delinquency has attracted the attention of social scientists, the legal profession, law enforcement officials, politicians, social service administrators, as well as the mass media and the general public. The traditional response of social scientists has been to try to explain the causes of delinquency. The resulting theories can conceptually be separated into a basic dichotomy, although a continuum may be more appropriate. One group of theories is characterized by their contention that characteristics of the individual are responsible for delinquent behavior. The other group focuses on the influence of variables external to the individual committing the delinquent act. This dichotomy is common to the discussion of almost any human behavior.

Internal Theories - Individual Differences

Those theorists who maintain that internal factors are the cause of criminal behavior focus on the individual differences between people. People who possess certain physiological or psychological characteristics become (or tend to become) criminal or deviant.

The basic paradigm for research in this area is the criterion group study in which delinquents and non-delinquents are compared and differences noted. The classic study of this type was done by Glueck and Glueck (1951). In an ambitious effort they examined 500 institutionalized delinquent youth with 500 non-delinquents (matched on age, IQ, and race). Comparisons were made on over 400 physical (size and condition of body

parts), psychological (a variety of personality, intelligence, and projective variables) and social (mostly parenting style and family composition) variables. From the large number of statistically reliable differences they were able to identify, the Gluecks designed a statistical means of early identification of children who were likely to become delinquent. This touched off a series of studies in response. Craig and Glick (1963) and Travett (1965) attempted to empirically validate the predictive power of the Glueck method, but Kahn (1965) pointed out several methodological problems with these two studies. Noteworthy criticism of the Glueck method concerns the fact that it identifies a large number of non-delinquents as delinquents (false positives).

Psychological comparison studies have found differences between delinquents and non-delinquents using a variety of objective personality tests, performance measures, and projective techniques (Waldo & Dinitz, 1967). Similar studies have concluded that delinquents are undersocialized (Smith & Ausnew, 1974), psychologically abnormal (Adams, 1974) and morally immature (Prentice, 1972). A dissenting opinion came from Gibbons (1970), who concluded that delinquents do not differ from non-delinquents in psychological adjustment.

Biological explanations of criminal behavior have existed for centuries, most notably from the nineteenth century Italian army physician, Cesare Lombroso. Krisberg and Austin (1978) have grouped contemporary biological attributions of delinquency into eight categories:

1. Tumors or lesions on the limbic system of the brain
2. Side effects of epileptic seizures
3. Endocrine or glandular disorders
4. Prenatal or birth complications and mild forms of retardation or brain damage
5. Minimal brain dysfunction
6. Genetic factors
7. Chromosome disorders
8. Physique

Two explanations, not mutually exclusive, are offered for the great number of studies focusing on individual differences as the cause of delinquent behavior. First, the comparison studies are relatively simple to conduct and the number of potential variables for observation is nearly infinite, especially when considered in combination with each other. Second, as Krisberg and Austin (1978) point out, focusing on the individual depoliticizes delinquency and encourages the avoidance of the social issues involved.

The theory of delinquency based on individual differences has specific implications for how to intervene with delinquents. These implications, as well as those stemming from the theories below, will be presented later in the context of building a rationale for the interventions proposed in this research.

External Theories

The environmental conception of deviance, that events external to the individual are responsible for deviant behavior, can be broken down into four categories. First, there is the effect of larger environmental conditions (social structure, socioeconomic status, institutions, and social opportunities) which together can be called the social macrocosm. Second, there is the relationship between the individual and his immediate social environment (his family, friends and school) which will be called the social microcosm. Third, learning theory has led to behavioral explanations of the relation between the environment and delinquency. Finally, there is the position that the society has an effect, not through its influence on the behavior of the individual, but rather as the basis for the definition of what is deviant. These four environmental categories are not discrete, but are presented separately as a convenient way of viewing the environmental perspective.

Social macrocosm. Merton (1957) laid out the basic theory that deviance is the result of social structures and the total social mileau. This was long after the classic studies of Shaw (1929) and Shaw and McKay (1942) which reported the high correlation between crime rates and the socioeconomic status of various geographical areas of communities. Much later, Beasley and Antunes (1974) have reported a high correlation between juvenile delinquency and population density. The relationship between socioeconomic status and delinquency has been analyzed by many researchers who have come to the basic conclusion that socioeconomic status and delinquency are highly correlated when arrest rates are used as a measure of delinquency, but that actual delinquent behavior is spread equally through all socioeconomic levels (Hirschi, 1969; Erickson & Empey, 1965; Nye, Short, & Olson, 1958; Akers, 1964; Dentler & Monroe, 1961; Williams & Gold, 1972; Erickson, 1973). (The social and political implications of the inconsistency of this correlation when using these two measures will be discussed later.) Other related studies have shown that looking only within a given community (Clark & Wenninger, 1962) or school (Harry, 1974), reduces the relationship between socioeconomic status and delinquency to insignificance.

Another conception of the role of society in determining delinquency is the "blocked opportunity" explanation (Cloward & Ohlin, 1960; Cloward, 1968). By this theory, society emulates only middle class ideals and values, but is structured so that the legitimate modes of access to these cultural and societal goals are not available to low income youth. Between these youths and these goals stand inadequate schools, racial discrimination, the squalor of the slums and numerous other manifestations of unequal economic, social, and political opportunities. The socially defined importance of acquiring material goods and middle class status acts to

pressure these youths into using deviant behavior, since illegitimate modes of access are often available. While this theory is not specifically data based, it is founded on the type of observations mentioned above, correlations between social variables (socioeconomic status, crowded living conditions, ghettos, inadequate schools) and delinquency.

Social microcosm theories. The microcosm facet of environmental theories focuses on the effects of the immediate social surroundings and the youth's relationships with significant others in his life. In this regard, the family has been considered a major influence. Theories dealing with the family can be further broken down into those dealing with the structural integrity of the family, the characteristics of the parents, the child rearing practices of the parents, and the functioning (specifically communication patterns) of the family as a whole.

The theory that broken homes (in which one or more parents are absent due to death, divorce, or desertion) leads to delinquency has gained much popular, if not scientific, acceptance (Department of Health, Education, and Welfare, 1960). Schafer and Knudsen (1970) review 11 studies that compare the incidence of broken homes between delinquents and non-delinquents and conclude that broken homes are one and one-half to two times more common among delinquents. Other reviews (Sterne, 1964) have found the results to be mixed and claim the whole issue is clouded by methodological problems in data collection and analysis.

Other authors have maintained that the presence of a parent does not guarantee strong relationships in any case. Jaffe (1963) comments on the role that anomie and system disintegration in the family play in causing delinquency. Similarly, Kvarceus (1954) and Hirschi (1969) claim that a lack of parent-child attachment is an important factor in determining delinquency.

Most studies dealing with the effects of parent characteristics use the same method of comparison as described in the studies of individual differences, criterion group comparisons. In fact, Glueck and Glueck (1962) are again the leaders in this regard. Among their findings are the facts that delinquents are more likely to have alcoholic and emotionally distrubed parents. McCord and McCord (1958) and Sutherland and Cressey (1960) find that delinquents come from homes where parents themselves are more likely to engage in illegal behavior. Other writers use a theoretical or case study base. Reiner and Kaufman (1959), for instance, discuss the character disorders of delinquent's parents from a psychoanalytic framework.

In addition to the more or less static characteristics of the parents of delinquents, there have been many studies of the style of parenting or child-rearing practices of the parents of delinquents. Discipline has been a frequent target of concern, though there is no consensus of its relationship to delinquency. Parents of delinquents have been said to use too little discipline (Glueck and Glueck, 1962), too much discipline (Wright & James, 1974) or inconsistent discipline (McCord & McCord, 1958). The <u>style</u> of discipline has been commented on by Wright and James (1974) who noted that parents of delinquents tend to use verbal and physical punishment as a means of control. Similarly, others have said that parents of delinquents show their children little affection (Goldfarb, 1943), are hostile towards their children (Glueck & Glueck, 1962), and tend to reject them (McCord & McCord, 1958). Wright and James (1974) also noted that parents of delinquents do not follow through on either their promises or threats but use rewards and punishment noncontingently on the youth's behavior.

A final conception of the relation between the family and delinquency is concerned with more than just a one-way relationship in which the parent acts on the youth. On the contrary, it focuses on the family as a whole, its interactions, communications, and the relationships between all of its members. This is based on the perspective of a family as a system (Watzlawick, Beavin, & Jackson, 1967; Von Bertalanffy, 1968). Several authors have argued that deviance occurs in order to help maintain this system. The deviance encourages communication which helps to balance and maintain roles and relationships within the family (Haley, 1971; Alexander, 1974; Malouf & Alexander, 1974). In a study of the family functioning in delinquent families, Alexander (1973) found these families to be characterized by a lack of reciprocity of supportiveness, and the presence of reciprocity of defensiveness. Other studies of the relationships between members of families of delinquents will be considered with social learning explanations of delinquency later.

An important component of the social microcosm of the youth is the school, which has been shown to have some relationship with the development and manifestation of delinquency. Kelly (1974) reported a correlational study in which the track position of a student had a greater relation to delinquency than did either the sex or social class of the student. Polk and Schafer (1972) have conjectured that underachievement, misconduct, and dropping out are the result not of student characteristics in isolation, but in the student-school relationship. The school's contribution to delinquency lies in the low involvement (and therefore low commitment) it allows students, a belief in the limited potential of disadvantaged students, irrelevant teaching and content (that do not correspond to adult success), and a frustration felt by the student due to all

of the above plus a high resulting chance for failure in an atmosphere that emphasizes success.

This school-delinquency relationship prompted Glaser (1975) to hypothesize that if the school is controlled for, ethnicity has no relationship with delinquency. Elliot and Voss (1974) present data which lend some credence to the theories of the role the school plays in delinquency. Specifically, they found that students who had been involved in delinquency while in school quite often decrease their delinquent behavior after dropping out of school. It should be recognized that the data in this study (as well as Kelly (1974) above) was correlational and therefore subject to several interpretations, though the authors opt to interpret the data as at least a strong implication that a causal relationship exists.

A final component of the social microcosm concerns the people outside of the family with whom the youth spends time. The values and subculture of these people are said to be the operating force. The classic explanation of this perspective is Sutherland's (1947) theory of differential association. This theory, radical in its day for its focus on influence outside of the individual, maintains that criminal behavior is learned from others who hold values that encourage delinquency. Miller (1958) has written on the role of lower class culture in generating delinquency and several authors have expounded on the role of peers in encouraging delinquency (Hirschi, 1969; Sutherland & Cressey, 1970; Hackler, 1970).

Rivera and Short (1968) have proposed a theory of gang delinquency based on the assumption that adults in a youth's life are responsible for guiding the youngsters to and through the conventional structures of opportunity (education, employment, constructive social activity, etc.).

The relevant adults nominated by gang delinquents in their study did not provide this guiding function, but rather (according to the youths) did not improve the youth's performance, negatively evaluated the youth, did not care about the youth, and were powerless. It is implied that these relevant adults were bad models. It is also possible that it is not the adult and peer associations per se that lead to delinquency, but rather the lack of important involvement with non-criminals (Glaser, 1975).

Behavior theory. Another explanation of delinquency, behavior theory, is not limited to any one level or facet of the environment, but is based on the external consequences of delinquent behavior. The theory is founded on the principles of operant conditioning (Skinner, 1953). Simply stated, delinquent behavior occurs because the consequence of this behavior is rewarding to the youth. Delinquent behavior is learned in the same manner that any other behavior is learned. "When an individual has acquired a functional connection between an environmental stimulus and a response on his part, learning has taken place. Learning continues from birth to death" (Ullmann & Krasner, 1969).

Delinquent behavior can be learned in both social and nonsocial situations. An example of nonsocial reinforcement is the acquisition of material goods through stealing. More has been written about the effect of social learning (Bandura & Walters, 1963; Bandura, 1969) on delinquent behavior. Deviance is learned when the response of others to a deviant act is reinforcing to the person committing the act. More specifically, it is suggested that delinquency results when parents and teachers fail to reinforce positive behaviors while differentially attending to, and in the case of some parents, modeling antisocial behaviors. Peers may

also act to model and reinforce delinquent behaviors (Patterson & Reid, 1970). An explanation of delinquency based on both these learning principles and the theory of differential association was presented by Burgess and Akers (1966). Research supporting the behavioral explanation of delinquency will be presented in the context of treatment approaches using this theory, which will be described later.

Social labeling theory. A final environmental influence on delinquency is more direct. Instead of centering on the environment's role in causing an individual to commit a deviant behavior, some theorists have pointed out that it is the environment itself, society, that defines deviance, and therefore makes "deviants" deviant. What is important is that deviance is created by certain people's reaction to an act (Matza, 1969). Erickson (1962) calls these certain people an "influential audience". Certain behaviors were "designated as crimes when they were repugnant to persons with sufficient political power to have the law impose their standrads of conduct on others" (Glaser, 1975). Both the behavior and the persons committing the behavior are thus labeled as deviant.

In 1956, Garfinkel pointed out the use of this labeling process to lower the social standing of certain groups. Richette (1972) has made the position specific to delinquency by pointing to the use of the juvenile court's conception of deviancy to rid society of its "undesirable citizens". In developing their argument that student deviance is a function of the student-school interaction, Polk and Schafer (1972) stressed the important role of the school in being able to define what is deviant. The law enforcement system also takes part in the labeling process. In Hagan's 1972 review of the labeling literature, he stated

that the law enforcement reacts to the need of an act being negatively categorized. Similarly, in a survey of the presiding judges in 229 cases resulting in the placement of a youth in a state training school, the judge's perception of community demand was an important factor in his decision (Langley, Graves, & Norris, 1967).

The labeling of deviance is an interesting and far from rational process. The deviance level of an act varies with how different that act is from the influential audience's experience. This allows political and social ideology to weigh more heavily than the actual resulting danger to society in determining the relative deviance of an act. Another irrational characteristic of labeling is the fact that deviants (of any given category) are considered a homogeneous group, defined and made alike by their deviance (Becker, 1962).

Implications for Interventions - The Search for Alternatives

The reasoning on which the above theories were based led to parallel reactions for attempting to deal with delinquency. The great variety in theories corresponds to an equal diversity in the interventions with the individual delinquent, his family, his school, or the larger social structure. Some suggested programs have dealt with the delinquency after the fact, others have tried to "nip it in the bud", and some have attempted to prevent it.

No attempt will be made to describe all of the interventions that have been used with delinquents. An overview of the basic traditional method of individual treatment will be presented. The inadequacies of this mode of intervention will be presented as a stimulus for the development of alternatives. Theories dealing with causes of delinquency

external to the individual provided the rationale for alternatives. The development of two of these alternatives, advocacy and behavioral contracting, will be examined in depth.

Individual Treatment

Those theories that focused on the individual as the source of delinquency naturally dealt with the individual in isolation in order to "fix", "rehabilitate", or otherwise "treat" him/her. As with other human problems thought to be psychological in origin, the medical model was used. This system, which was clearly effective with physical disorders, was based on the premise that behaviors themselves were not problems, but were instead symptoms of an internal disorder. It was this internal disorder (a variety of possibilities mentioned earlier) that was the object of treatment. The rationale and consequences of the medical (or "illness") model are thoroughly described by Tharp and Wetzel (1969).

The consequence in terms of traditional treatment of delinquents has been disappointing. The types of psychotherapy and counseling techniques used with delinquents are as varied as those used to deal with other psychological problems, but the overriding conclusion is that they have been ineffective with this population (Levitt, 1971; Grey & Dermody, 1972; Gordon, 1962; Meltzoff & Kornreich, 1970; Yong, 1971; Gibbons, 1970). Results of the Cambridge-Sommerville Youth Study provided early evidence of this ineffectiveness. Three hundred and twenty-eight male pre-delinquents were given individual counseling from model adults and then compared to a matched control group. Follow-up measures indicated that the counseling had no effect on future crime rates, type of offense committed, incarceration rates, or post-institutional adjustment (McCord & McCord, 1959).

Another result of the emphasis on individual factors is the strategy of early detection and prevention of delinquency by identifying those children with characteristics correlated with delinquency. Again, Glueck and Glueck (1951) provided the best example of such a prediction scheme. However, the intensive family casework offered to those identified as likely delinquents had no effect on future rates of delinquency. Reviews of other studies attempting to do early identification and prevention have led to the general conclusion that neither the methods of detection nor the resulting interventions have been shown effective enough to warrant future use (Berlemen & Steinburn, 1969; Venezia, 1971).

Even if such traditional methods as individual counseling were shown to be effective, they would be impractical for widespread use. Given the incidence of delinquency, the use of professional, one-to-one treatment would require an unfeasible amount of both manpower and money. Furthermore, professionals have shown a reluctance to work with "difficult" populations that have not responded well to treatment, such as delinquents (Gruver, 1971).

External Theories

The implications of environmental or external theories appear to have more potential for effective treatment. Various facets of theories dealing with the social macrocosm, the social microcosm, delinquency as a learned behavior, and social labeling will be brought together to provide the rationale for the two intervention techniques to be used in the proposed research (advocacy and behavior contracting) and the context for the research, the diversion of youth from the juvenile justice system.

Advocacy. The strategy of advocacy seeks to fulfill the unmet environmental and social needs and protect the interests of the youth. The

basis for this can be at least partially found in the theories related to the social macrocosm, specifically the theory of blocked opportunity (Cloward & Ohlin, 1960). As presented earlier, Cloward and Ohlin maintain that delinquency results from the inaccessibility of legitimate means toward socially accepted goals. Essentially, key social, education, economic, and political resources are unavailable. Ryan (1971) also makes an excellent case for turning from an emphasis on the individual as the focus for change to a strategy that deals with social structures, institutional changes, and public policy.

The work of Cloward and Ohlin (1960) was highly responsible for the Mobilization for Youth, initiated by the Ford Foundation in 1962. This program was designed to service a population of 107,000 in an area of New York City with a high rate of unemployment and delinquency. The components of the project included work training, education, group work, community organization, services to individuals and families, and training and personnel. The Harlem Youth Opportunities Unlimited (Haryou-Act) is another example of a program designed to develop and coordinate community resources on behalf of local youth.

A separate argument for the strategy of advocacy concerns the protection of the youth's interests and rights. Several studies have indicated that the juvenile justice system is not without its share of injustices. At the level of the police, there is a great deal of evidence that youths of lower socioeconomic status are arrested more, but do not actually commit more delinquent behavior (Hirschi, 1969; Erickson & Empey, 1965; Nye, Short, & Olsen, 1958; Akers, 1964; Williams & Gold, 1972; Erickson, 1973). Secondly, at the level of the courts, youths of lower socioeconomic status receive more severe dispositions

than others for the same offense (Scarpitti & Stephenson, 1971; Erickson, 1973; Williams & Gold, 1972). Thus the appearance of an overly delinquent lower socioeconomic status population may be the result of differential use of the enforcement and judicial systems. Jordan (1974) has claimed that the court punishes youths who are victims of social inequalities and that the court is a political tool with separate justice systems operating for the rich and poor.

As mentioned before, a judge's perception of community demand is an important factor in his disposition (Langley, Graves, & Norris, 1967). Furthermore, dispositional decisions have been found to be more dependent on a juvenile judge's experience than on the individual circumstances of a youth's situation. The juvenile court has also frequently been criticized for its procedural informality which was the basis for the decision of the Supreme Court in the case of Gault in 1967.

Viewed from the perspectives above, it appears that delinquents are originally no different from non-delinquents in many respects, but are victims of circumstances. Lack of social opportunities and community resources appear to precipitate delinquent behavior. An arbitrary and inconsistent judicial system then acts to identify and process the youth in a manner that seems to react more to social and political factors than to the interests of the youth.

An advocate could play a very important role with respect to these conditions. First, he/she could act to locate or generate community resources to fill the unmet needs of the youth and provide the opportunities that are lacking. Such needs might concern the youth's education, employment, personal interests, or any other area of concern.

The focus would be the individuals, organizations, institutions, and policies that are relevant to the youth's life. Second, an advocate could be very helpful in insuring the rights and interests of the youth not only within the justice system, but in all systems (such as the school) to whom the youth is vulnerable.

The concept of advocacy is a common model for meeting the needs and protecting the interests of our society (Davidson & Rapp, 1976). Lawyers work for the needs of their clients, unions protect the interests of workers, professional organizations do the same for their members, and lobbyists are employed to advocate for their constitutents. However, it is only recently that this concept has been applied to children. In 1973, the Joint Commission on Mental Health of Children recommended the formation of a national network of federal, state, and local advocacy councils to help guarantee every youth's "right to a mentally healthy life of well-being and effectiveness".

The advocacy literature has been primarily concerned with the role of the advocate and the nomination of various groups to perform the advocacy effort. With respect to the former question, the National Association of Social Workers' ad hoc Committee on Advocacy has defined the advocate as:

> ...his client's supporter, his adviser, his champion, and if need be, his representative in his dealings with the court, the police, the social agency, and other organizations that affect his well-being (NASW, 1969, p. 17).

Various groups have been suggested to act as child advocates including lawyers (Platt and Friedman, 1968), school personnel (Lewis, 1970), a federal agency (Shore, 1971), and students (Wineman & James, 1969).

What this literature has generally failed to do is to go beyond descriptions in more than general terms. Specific operating principles

and any empirical evidence of its effectiveness are lacking. Davidson and Rapp (1976) provide an exception to the lack of specific strategies. They briefly review the history and literature of the movement before going on to suggest a multiple strategy model of advocacy which will be used in the proposed research. Advocacy efforts can vary along two continua. First, advocacy efforts can range from a positive "salesmanship" approach to an aversive, negative approach. Second, the target of the effort can be either an individual, an agency or organization, or a policy. A more detailed description of this mode of intervention will be presented in the Methods section.

Behavioral contracting. A promising technique, particularly in the past decade, has been the result of the combination of the focus on the social microcosm (significant others) as the origin of the problem and behavioral principles (including social learning) as the mechanism by which problem behaviors are learned. This perspective looked beyond the individual and recognized the importance of the social environment in reinforcing deviant behaviors.

The response, in terms of treatment, has been to involve the environment in re-arranging the patterns of reinforcement in order to decrease the incidence of undesirable behavior and increase the incidence of pro-social behavior. The number of programs using behavior modification with delinquents has grown rapidly in the past 15 years. Research has indicated the effectiveness of such programs in institutions, clinics, the home, and the school. A variety of behaviors have been modified, including classroom attendance and behavior, academic achievement, aggressive behavior, and antisocial verbal behavior. However, a review of such programs (Davidson & Seidman, 1974; Neitzel, Winett, MacDonald,

& Davidson, 1976) reveals a number of methodological problems that threaten the validity of these studies. These problems include a lack of control groups, a failure to establish stable rates of behavior during baseline, a failure to separate the various components of a program in order to allow proper attribution of effectiveness, a lack of multiple measures to assess both outcome and process criteria, the possibility of biased data collection, and a lack of follow-up measures. Another common question has concerned the durability of observed changes and the generalizability of these changes across settings (Baer, Wolf, & Risley, 1968; Baer, 1973). With these concerns in mind, some program examples will be presented in order to represent some general trends of the use of behavioral methods with delinquents. These developments will provide the rationale for the second intervention technique to be used in this research, behavioral contracting.

Institutions for juvenile offenders made early use of behavioral technology. The general strategy has been to establish an environment by which certain behaviors are reinforced, while others are not. The reinforcement and punishment involves the presentation or removal of either something material or a privilege. This system is usually mediated through the use of "tokens" or points which can be exchanged for such goods or privileges. Token economies have been used with a number of populations and are reviewed by Kazdin and Bootzin (1972). An early example is the CASE program at the National Training School for Boys in Washington, D.C. (Cohen & Filipczak, 1971). A contingency management program there focused primarily (and successfully) on academic performance, but also produced positive social behavior and attitude changes. A comparison of 41 participating students with students at a

standard training school showed lower recidivism rates for the CASE students up to two years later. However, at three years, such differences disappear.

A study by Jesness, DeRisi, McCormick and Wedge (1972), compared the effectiveness of two institutions of the California Youth Authority. One school used a variety of behavior techniques, while the other employed a program of transactional analysis. The results were mixed. Students in the latter program seem to be superior when using psychological measures as criteria, while those in the behavioral program were superior on behavior measures. While the residents reported more satisfaction with the transactional analysis program, there were no differences between groups in recidivism.

The past ten years have seen the development of a large number of community based group homes and halfway houses as alternatives to institutions. These residential facilities have also made use of behavioral methods. In terms of public exposure and experimental evaluation, the program at Achievement Place in Lawrence, Kansas is the most outstanding example (Phillips, 1968; Phillips, Phillips, Fixsen & Wolf, 1971). The treatment program is carried out by "teaching parents" in a home for 6-8 youths aged 12-16. Burchard and Harig (1976) reviewed 30 experiments at Achievement Place reported in nine studies and classified the target behaviors of these experiments. In order of their frequency, these experiments have tried to modify maintenance behaviors, social behaviors, academic behaviors, and program administration (self- and peer-report of maintenance behaviors and participation in family conferences). Using a token economy point system, they have been largely successful in these efforts. However, Burchard and Harig offered several

criticisms of the program. First, they questioned the relevancy of the behaviors modified with respect to the youth's eventual ability to adapt to his natural environment. Second, they pointed out the extensive use made of aversive control. This relates to the third issue of the generalization of learned behaviors upon return to the natural environment. If aversive methods are responsible for control, it is unlikely that such behaviors can be maintained after the removal of these contingencies, and the presence of the controlling stimuli.

These criticisms are not unique to Achievement Place. On the contrary, they are among the major issues discussed with regard to the use of behavioral methods in any institutional or other residential setting. Braukman and Fixsen (1974) brought up the question of generalization in their review of behavior modification with delinquents. Hartmann and Atkinson (1973) have pointed out that those behaviors that can be brought under reinforcement control are least likely to generalize across settings. On the question of relevancy of behaviors, Costello (1972) concluded that behavioral methods with delinquents in institutions and other residential settings have been used primarily to control and manage rather than build adaptive skills for use upon return to the natural environment.

These considerations have led to an increase in the use of interventions in the natural environment itself. Agras (1972) pointed out that because deviant behavior is learned in the youth's natural environment, this same environment should be the focus for change in working with the youth. Work in the natural setting thus acts as a preventative measure against future problem behavior. Though there have been a variety of programs using behavioral methods in the home and school

(Davidson & Seidman, 1974; Braukman & Fixsen, 1974) four specific projects and bodies of research will be reviewed for their importance in developing the use of behavioral contracting in these settings. Each project was based on the observation that delinquency was often the result of negative behaviors being reinforced and positive behaviors being ignored. Each responded with some use of a behavioral contract, a written specification of the relationship between a behavior and its consequences, designed to weaken undesirable behaviors and strengthen more positive ones.

The Social Learning Project at the Oregon Research Institute, run by Patterson and his associates, was designed to work with the parents (mostly self-referred) of 5-13 year old boys displaying aggressive and disruptive behavior. The basis for the program began with case study research (Patterson & Brodsky, 1966; Patterson, McNeal, Hawkins & Phelps, 1967) which involved training parents in reinforcement principles to alter the behavior of their children. This was followed by a study of five boys (Patterson, Ray, & Shaw, 1968) using similar methods, which resulted in a 62-75% reduction of deviant behavior up to 12 months after training. The training procedures that developed from these early studies began with the teaching of social learning principles through a programmed text (Patterson & Gullion, 1968; Patterson, 1971). This was followed by group sessions for the teaching of token point systems, behavioral contracting, the use of "time-out" strategy, and the importance of defining and recording specific behaviors. The final step involved home visits by staff members to aid with the execution of specific intervention programs (Patterson, Cobb, & Ray, 1973). While this training program has resulted in a number of reports

(Wiltz & Patterson, 1974; Patterson & Reid, 1973; Eyberg & Johnson, 1974), the most conclusive is a study of 27 boys (Patterson, 1974). All 27 received home treatment, while 14 of them also received school treatment of a similar nature involving the training of teachers. A well-developed observation system was used in the home and classroom before, during, and after training. Daily parent reports on the frequency of deviant behavior were also used for evaluation. Both observational and parent report data indicated reduction in deviant behavior. These effects persisted in both the home and classroom at a 12 month follow-up. A recent report (Taplan & Reid, 1977) indicated that not only the children, but the parents changed their behavior. Trained parents reduced the use of aversive behavior and inappropriate consequences. However, there was no indication that they increased positive consequences for positive behavior.

Burchard and Harig (1976) pointed out that Patterson's social engineering approach may not be feasible when parents have inadequate social repertoires or parent-child relationships have already severely deteriorated. Tharp and Wetzel's (1969) Behavior Research Project avoided these problems by minimizing the need for parent-child verbalization. They described a triadic model of intervention whereby a consultant (a trained staff member) aided a mediator (usually a parent or teacher) in the modification of a youth's behavior, usually through the use of a behavioral contract. Eighty-nine delinquents were involved and three post-treatment data collections (up to 18 months later) indicated improvements in terms of frequency of delinquent behavior, grade point average, and ratings made by the mediators involved on the youth's behavior.

A third series of studies resulted from the Alexander (1973) study in which it was found that communication in delinquent families was characterized by reciprocation of defensiveness and a lack of reciprocation of supportiveness. Rather than focus on the delinquent behavior directly, Alexander and Parsons (1973) sought to modify these patterns which they felt were at least partially responsible for the delinquency. The program they developed included five to six weeks of family sessions which included training in behavioral contracting (which is designed to improve positive reciprocity), communications skills, and the reading of a family training manual. To test the program's efficacy, 170 families were randomly assigned to this contracting condition, client-centered family groups, eclectic psychodynamic groups, or a no-treatment control group. A test situation for the observation of communications patterns consisted of a family discussion of changes desired within the family. The contracting group showed superior communications as measured by more equality of discussion among all members, more total discussion, and more interruptions for clarifications. Six to eighteen month follow-up also showed lower recidivism rates for this group. Recidivism was also shown to be related to equality of discussion. A two and a half to three year follow-up of the families participating in all conditions indicated that siblings in the contracting families had had fewer court contacts (Klein, Alexander, & Parsons, 1977). The authors used this data to make an argument for this type of family intervention as a method of primary prevention of delinquency.

The final body of work, Stuart's Family and School Consultation Project, went the farthest in describing the rationale and procedures

for developing behavioral contracts. Consistent with the findings of Alexander and Patterson described earlier, observations of the discussions of delinquent families were found to be more negative than those of a matched group recruited from church youth groups (Stuart, 1971). Stuart conjectured that the lack of positive reinforcement in the home was responsible for delinquent behavior and that contingencies needed to be modified in order to alter this condition. Later, teachers became involved in the change process.

The need for contracts was also the result of four assumptions that Stuart made about the nature of interpersonal relationships. First, the receipt of positive reinforcements in an interpersonal situation is a privilege, not a right. Second, effective interpersonal agreements are based on an equity in the value of reinforcers for each side (reciprocity). Third, the value of an interpersonal exchange is a function of the range, rate, and magnitude of positive reinforcements mediated by the exchange. Finally, rules concerning an interpersonal relationship create freedom in that relationship by allowing each individual to choose his behavior with full knowledge of its consequences.

Stuart also specified the essential components of a behavioral contract. First, there should be a written statement of the privileges and consequences that each party can expect upon fulfilling his responsibilities. Second, there should be a bonus condition for extraordinary performance and a penalty clause for not following the agreement. Finally, there should be an established system for monitoring each other's performance.

This system of contracting was evaluated during a series of studies with the Family and School Consultation Project. An early study of 165 junior high school students assigned to varying lengths of contract-based intervention indicated that the interventions were determined more by the particular therapist than by experimental condition (Stuart & Tripodi, 1973). Stuart and Lott (1972) also found that the therapist's skill in structuring a climate of compromise was a crucial factor. Less important but significant findings were that families with a history of negotiation and families with more immediate pressing conflicts were more likely to be successful in negotiating a contract. Later research showed that contracting was superior to a weekly recreation program (Stuart, Tripodi, & Jayaratne, 1973). The final study consisted of a study of 60 youths referred by the school (Stuart, Jayaratne, Tripodi, 1976). Thirty youths were randomly assigned to a contracting condition that involved school and home contracts. Compared to the 30 no-treatment controls, this group was superior on four of thirteen school and home measurements, all of which involved ratings by school personnel and parents. In addition, the contracting group had less court contacts.

The work of Patterson, Tharp and Wetzel, Alexander, Stuart, and their associates combine to form a rational and empirical basis for the use of behavioral contracts in the proposed study. In summary,

> Observations of intrafamilial interaction involving delinquents and their parents suggest that often neither implicit norms nor explicated rules are sufficient to establish reciprocal interaction . . . . When successfully negotiated, contracts not only change serious conflict to positive social interaction, but they may also provide the family with training in a style of conflict resolution which can have long range benefits (Stuart & Lott, 1972, p. 161).

However, this optimism must be tempered by two relevant concerns. First the problems of methodology presented by Davidson and Seidman (1974) apply to these programs in the natural environment as well as to those in more restricted conditions. In addition, questions of the durability of effort and the generalizability of effect across settings (e.g., from home to school) have not been conclusively answered. As with advocacy, the use of behavioral contracting appears promising, but the exact nature of its efficacy remains in some doubt.

Diversion

To review, individual differences theories implied basically ineffective treatments. Social macrocosm theories and related research on the juvenile justice system implied an advocacy strategy. Social microcosm and behavioral theories combined to suggest the use of behavioral contracting. Given advocacy and behavioral contracting as what to use for treatment, the following suggests when and where in the youth's social and legal position it could be applied.

Social labeling explains how delinquent acts come to be known as such. It does not offer or imply any specific treatment. On the contrary, research on the negative effects of labeling a youth as delinquent implies a lack of treatment or, more precisely, a lack of involvement with the juvenile justice system. Matza (1969), Schur (1967; 1973), Faust (1973), and Lemert (1974) have all expounded on the cycle that a youthful offender often goes through of being apprehended, labeled, released (but stigmatized as a delinquent) and then re-involved in delinquency. Gold and Williams (1969) have done the most significant statistical research in this area, showing that apprehension may serve to increase the probability of delinquency in the future. They point

out that involvement in the justice system is the best predictor of future delinquency. Venezia in his 1971 review of the attempts to do an early prediction of delinquency commented on the potentially harmful practice of labeling a child as a pre-delinquent, perhaps initiating a self-fulfilling prophecy.

Nor are these the only criticisms of the juvenile justice system. Institutions for offenders are a prime target of critics who point out that institutions are inappropriate, expensive, and ineffective with recidivism rates of 50% or higher (Empey, 1967; Stephenson & Scarpitti, 1969). Other authors have cited the conditions in such institutions as unlivable (James, 1969). As reviewed earlier to build the rationale for advocacy, several authors and studies have indicated that the system acts in response to a number of political and social variables rather than in the interests of the youth it supposedly serves. Polier (1973) argued that the court regiments and depersonalizes the poor, while ignoring social problems. In addition, youths in the juvenile court are in a state of double jeopardy in which they receive neither procedural safeguards nor treatment (Renn, 1973). Krisberg and Austin (1978) summarized several of these arguments:

> Our analysis paints a dismal picture. Juvenile laws are vaguely worded and inconsistently applied, permitting extensive abuses in the handling of children by social control agencies whose discretion is largely unchecked. Instead of protecting children from injustices and unwarranted state intervention, the opposite effect has occurred. The practices and procedures of juvenile justice agents reflect class and racial prejudices that extend to the larger social order, and fall disproportionately on Third World and poor people (Krisberg & Austin, 1978, p. 105).

Given the negative effects of putting a youth through the justice system, the subsequent labeling of him/her, the malfunctioning of the

system, and the arbitrary nature of some deviance, the suggestion has been made that the best thing that can be done for a juvenile delinquent is to divert him from the system entirely.

> In many cases, the harm done to children and youth by contacts with these courts outweighs any benefits thereby gained. Moreover, the interaction between child and court and unanticipated consequences of the processing of a child in many instances contributes to or exacerbates the problem of delinquency (Lemert, 1971, p. 1).

Irwin (1974) argued that no innovation is possible within a system so milignant. As early as 1967, the President's Commission on Law Enforcement and the Administration of Justice (1967) recommended prejudicial disposition for youthful offenders. In 1973, the Department of Health, Education and Welfare called the juvenile court "a marketplace wherein a negative community image is unwillingly purchased, consumer protection is minimal, and all sales are final". Lemert (1971) based his strong appeal for diversion on the large numbers of cases handled, local inconsistencies in disposition and treatment, the stigma of deviance labeling, and the problems of enforcing "moral" laws, which are responsible for one-half of all juvenile cases.

Offenders of these moral laws (juvenile status offenses such as truancy, curfew, runaway, and incorrigibility) seem particularly well suited to diversion. Jordan (1974) and Schur (1973) have called for the removal of these laws from the books, while the National Council on Crime and Delinquency (1975) issued its policy stating such cases should be removed from court jurisdiction.

One existing alternative to the juvenile justice system has emerged with the creation of Youth Service Bureaus. These bureaus were intended to develop and coordinate community services and resources for

delinquent youth, with each bureau deciding how this might best be done. Unfortunately, the results have been disappointing. Studies have indicated that there has been considerable conflict between community residents (who were supposed to have input) and agency personnel with resulting charges that Youth Service Bureaus were not responsive to community needs (Department of Health, Education and Welfare, 1973; Duxbury, 1972). Some Youth Service Bureaus were controlled by police or probation departments, most programs used only traditional individual casework methods, and there was very little evaluation done on the impact of these programs (U.S. Department of Health, Education and Welfare, 1973).

The use of diversion programs has increased greatly in the past five years, but not without criticism. Frequent concerns are that diversion programs are used with adolescents who would otherwise be released, that such programs remove legal rights from individuals involved by implying a guilty plea, and that diversion programs don't actually act to divert when they are at least partially directed or staffed by personnel from the police or court systems, as is often the case (Nejelski, 1976). Research on the impact of diversion projects is minimal. In a study of juvenile status offenders in California, it was found that these offenders were significantly less likely to be involved in further delinquency if they were handled by a crisis intervention team and diverted to a community program than if they were detained and put on probation (Baron, Feeny, & Thornton, 1973). Gibbons and Blake (1976) review nine diversion programs and find generally positive results. However, their stronger conclusion was that the evaluations done of these programs were hampered by small samples,

suffered from ambiguity about the actual process of diversion and treatment, and had other methodological flaws, though they were among the best evaluated that they had seen. Nevertheless, the concept of diversion remains promising, if not conclusively proven effective.

The Use of Trained Nonprofessionals

Given the use of advocacy and behavioral contracting with diverted adolescents, who is best equipped to carry out this intervention? A dominant trend in the field of the provision of human services is the use of trained nonprofessionals. A review of journals published from 1960-1969 indicated that the number of programs employing nonprofessionals increased every year during this time (Durlak, 1971) and there are indications this trend has continued. Surveys of nonprofessional use concluded that a variety of sources of volunteers have been used with an equally diverse number of target populations (Cowen, 1973; Brown, 1974; Rappaport, 1977). Examples of volunteers include housewives, college students, clergy, senior citizens, and psychiatric aides. Target groups have included chronic hospitalized patients (Poser, 1966), disturbed elementary school children (Goodman, 1972), juvenile delinquents (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes, & Herring, 1977), and college students (Brown, 1974).

One of the original motivations for the training of volunteers to provide service functions was the serious shortage of trained professionals. Albee (1968) was a leader in recognizing that service needs far outstripped available resources and that this trend would continue. This was especially true given the traditional model of individualized services. It was also felt that trained volunteers might become interested in further professional training and therefore increase the

amount of professional manpower. The training of volunteers by professionals makes more efficient use of the latter's time, allowing him/her to at least indirectly serve a greater number of people (Seidman & Rappaport, 1974). Finally, the use of nonprofessionals promised greater treatment of difficult populations such as drug abusers, alcoholics and juvenile delinquents who were often neglected by professionals because of their lack of success with such groups.

Second, nonprofessionals offered a lot of advantages over traditional service delivery systems. They were felt to contribute enthusiasm, new perspectives, a desire for involvement, and role flexibility (Korchin, 1976; Poser, 1966; Rappaport, Chinsky & Cowen, 1971). Clients found volunteers more acceptable, partially because of their more similar social status. Riessman (1970) claimed that nonprofessionals brought a new style of service delivery with greater impact. In fact, the dissatisfactions with existing systems of treatment described earlier were a prime reason for the use of volunteers in the context of the treatment of delinquents. Volunteers offered more intensive, less expensive, and more community-based services.

A third rationale for the use of nonprofessionals was the helper therapy principle which implies that acting in a helping role has beneficial effects for the helper (Riessman, 1969). Research on this effect will be presented later.

The use of volunteers was also congruent with several of the theories of delinquency described earlier. Volunteers could act as the good models delinquents were felt to be lacking. Behavioral methods are also amenable to use by nonprofessionals because the principles and techniques are easily learned. Finally, the use of nonprofessionals allows less labeling to occur than if a professional were involved.

These arguments led to a proliferation of programs using non-professionals. By 1973, over 1,000 juvenile courts in the United States alone were making use of volunteers. Examples of their roles include case aides (Lee, 1968), participants on correctional professional teams (Schwartz, 1971), and big brothers in conjunction with probation programs (Logan, 1972).

There is a lack of effective evaluation of programs using non-professionals in general, and especially few studies examining the separate components of selection, training, supervision, and intervention. Zimfer (1974) notes that few studies have employed rigorous designs or adequate analysis, with the usual result of confounded variables.

Reviews of existing research do indicate a number of instances in diverse settings in which nonprofessionals have acted very effectively, sometimes more effectively than their professional counterparts (Durlack, 1971; Gruver, 1971; Karlsruher, 1974). Outcomes have included a variety of personality and behavioral change measures. An example is the research of Poser (1966) who found that untrained female undergraduates were more effective than mental health professionals in working with chronic mental patients. These findings were substantiated by the work of Rappaport, Cowen, and Chinsky (1971) who also found a positive effect on the volunteers.

In the field of delinquency, a study comparing 119 delinquents assigned to volunteers and 112 delinquents from a nearby court who were not assigned delinquents showed that the volunteer group was superior in terms of recidivism and several personality measures (Rosenbaum, Grissell, Kaschtial, Knox, & Leenhouts, 1969). However, other studies

showing a lack of significant results (Poorkaj & Bockelman, 1973) and poor methodology make conclusions on the effectiveness of such programs (in terms of client outcomes) tentative. Reviews by Shelley (1971) and Peters (1973) of 50 and 70 programs in the field of corrections using volunteers bemoan the lack of useful evaluation.

Research on the effects of nonprofessional programs on the volunteers themselves have been more positive. Gruver (1971) concluded that these programs have had positive impacts on self-acceptance, moral judgments, self-understanding, self-confidence, and identity formations. More specific examples include improvements in self-image (Holzberg, Gerwitz, & Ebner, 1964) and relationships with friends (Goodman, 1972). Cowen, Zax and Laird (1966) reported that volunteers' attitudes toward the target population became more positive, while attitudes toward relevant institutions became more negative.

Some reviewers have concluded that volunteers have performed well, have had a positive therapeutic effect on their targets, and have benefitted themselves from the process (Kelly, Snowden, and Munoz, 1977; Siegel, 1973). Gruver (1971) was more cautious in making claims about the effects on clients due to mixed results and the lack of sound research. Rappaport (1977) pointed out the barriers in coming to any absolute conclusions in this regard, noting the difficulty in separating helper characteristics, client characteristics, and the specific techniques of intervention. The combinations of all levels of all variables is a formidable research task, to say the least.

As was the case with the use of behavioral contracting, advocacy, and diversion, the use of nonprofessionals appears to be a useful technique offering several advantages over the alternatives. In each case

the rational and empirical arguments are strong enough to proceed with their use, but the existing research is not conclusive enough to warrant the termination of their study.

Rationale for the Research

Social Model Building

The rationale for this research is based on a conception of sequential steps towards building a model for social interventions. The first of these steps is the conceptual and rational formation of the model to be used for intervention. The second stage is the empirical testing of this intervention. Finally, specific pieces of the intervention or alternative forms of the mode are tested in order to determine the operative forces of the intervention.

The specific placement of the proposed research within this model is as follows. The first stage of conceptual and rational formation was simulated in the literature review. Given respective rationales for advocacy, behavioral contracting, diversion, and the use of nonprofessionals, it was logical to combine them into a single intervention package.

The second stage of the process is the empirical testing of the intervention. The use of behavioral contracting and advocacy by nonprofessionals with diverted juvenile delinquents has been studied before in a project at the University of Illinois which was a forerunner to the present program (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes, & Herring, 1976). The first year's study compared 25 police-referred adolescents randomly assigned to college students with 12 treatment-as-usual controls. The intervention used a combination of behavioral contracting, advocacy, and relationship skills. Though

the two groups were equal before referral, the volunteer group was superior to the control group in terms of frequency and seriousness of contacts with police and frequency of petitions filed against them during the program, as well as at one and two year follow-ups. In addition, 71% of the volunteer group were enrolled in school at the termination of involvement while only 50% of the controls remained. The second year of study compared youths that were randomly assigned to students trained in behavioral contracting or advocacy, or a treatment-as-usual control group. The results indicated that the two methods of intervention did not differ in efficacy and that both were superior to the control group, again in terms of frequency and seriousness of police contacts and frequency of court petitions during intervention and at one-year follow-up. School attendance of the volunteer group was also superior to the control group during intervention and at a two-month follow-up. "Process" interviews done with the youths, parents and volunteers throughout the intervention indicated a number of life dimensions and intervention characteristics that were correlated with the outcome criteria.

A very similar program was instituted at Michigan State University in the fall of 1976. Preliminary analyses from a first group of 32 randomly assigned youths indicated that experimentals (receiving behavioral contracting and advocacy through trained undergraduates) had an average of .64 court petitions filed against them (6 of 22 had any filed) during the intervention, while the control group averaged 1.90 petitions apiece (6 of 10 had any filed against them).

If this mode of intervention has been used successfully before, what is the need for continuing this line of research? The answer to

this question lies in the third step of the process and provides the specific rationale for this research. Given an empirically tested mode of intervention, it is then important to pull apart some of the pieces of the packaged intervention in order to better learn what is responsible for its success and consequently how the model can be improved. This dissection process is designed to get inside the "black box" in order to understand the operative components. This may involve the comparison of a portion of the intervention with the total package, a comparison of separate components, or a comparison of two or more alternative models of intervention. Factorial designs allow the separation of effects of specific variables. An evaluation designed to systematically study the process of the intervention is an alternate method of exploring the contributing pieces of the program. By monitoring and assessing the level and content of the intervention throughout the intervention phase, it is possible to gain a better understanding of the relationship between the intervention and the outcome. This stage of the model building process attempts to answer some of the ultimate outcome questions posed by Paul (1969) and Kiesler (1971) of what interventions work with what populations, administered by who, in what settings, under what conditions.

Overview of the Research

The intervention being discussed presently finds itself at this third step of model building. The research reported here was a comparison of the effects of applying the intervention to all the relevant domains of the youth's life (as has been done in the past) as opposed to intervening in only one of these domains, the family.

Studying the effects of intervening in only one domain provided a better understanding of why this program works and where it can be

effective. In the process, more was learned of the nature of delinquency, its source and potential treatment. If one crucial system can be identified as critical, it suggests the concentration of resources and effort to be applied to this domain. This implies more efficient and more indepth training of the volunteers. An analysis of data from the Illinois program (Ku & Blew, 1976) indicated that interventions in a number of systems (domains) was correlated with successful outcome measures. However, this correlation was based on a small sample and was open to several interpretations. It was possible that more domains were dealt with by the more active and creative students and if these talents had been applied to a single crucial system, the results would have been even more positive.

Given the rationale for studying the effects of intervening in only one system, why was the family chosen as the system for examination? First, many theorists, regardless of school of thought, have identified the family as the source of delinquency. Whether the particular attribution was the individual character disorders of the parents (Reiner & Kaufman, 1959), a sociological explanation of the effect of broken homes (Sterne, 1964), a theory relating to the effects of discipline or other parenting practices (Glueck & Glueck, 1962), the effect of lack of role models (Rivera & Short, 1968), a social learning theory dealing with the patterns of reinforcement (Bandura, 1969), or an attribution based on communication styles (Alexander, 1973), the family has been continuously nominated as a key influence in the development of delinquency.

Second, the family is the most accessible of the social systems that are relevant to the youth. Families are easily identified and

parents are usually willing to cooperate either out of a genuine sense of concern for their child, or at least a feeling of obligation. Other social systems, such as the youth's peers, are considerably more difficult to identify and modify.

Third, involving only the family in the intervention allowed a bare minimum of labeling to occur. It was not necessary to alert the school, employer or other relevant party that the youth had had legal difficulty or was receiving "treatment." Such identification can have long lasting negative effects on the youth's standing in the community, as was reviewed with the labeling literature.

Two sets of questions were addressed in the research.

I. What are the relative effects of using trained non-professionals (undergraduates) to provide behavioral contracting and advocacy in all domains as opposed to the same intervention with only the family of the youths involved or treatment as usual by the court? This question was answered in terms of the following criteria:

A. Police data (frequency and seriousness of contacts)

B. Court data (number and seriousness of petitions filed)

C. School data (attendance, grades, proportion of credits earned and status)

D. Delinquent behavior as reported by the youth, his/her parent and his/her peer

The fourth criterion mentioned above was assessed through regular interviews before, during, and after the intervention. All outcome criteria were correlated with each other. In addition to asking about change in delinquency, these interviews were designed to assess conditions of relevant life domains (home, school, peers, free time,

employment, and legal status) in order to understand program impact on areas not assessed through conventional outcome measures. The interviews also monitored the progress of intervention. Data from these interviews were used to answer a second set of questions.

II. Process interview data:

A. Did the different training (family only or multi-focus intervention students) in fact lead to different interventions?

B. Did the different training lead to differential impact on the life domains assessed?

C. What were the relationships between these process measures and the outcome criteria described above?

CHAPTER II

METHOD

Setting

The proposed research took place within the context of a larger two-year research project funded by the National Institute of Mental Health. Although this project began in April of 1977, the Adolescent Diversion Project has actually been in operation since September of 1976. The research was designed to replicate and expand the research of the Illinois project reported earlier (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes, & Herring, 1976; Davidson, 1976; Seidman, Rappaport, Davidson, & Linney, in press). Other project research concerns comparisons of different contents and intensities of training and supervision of undergraduate volunteers, the effect of the diversion program on the decision-making process of the juvenile justice system, the effect of participating on the college students working with diverted adolescents, and attempts to predict "good" volunteers (ones whose youths have successful outcomes) through the use of pre-participation measures.

Undergraduates receive their training and supervision within the context of a three-term sequence of psychology courses at Michigan State University (Psychology 371, 372, 373). Students meet in small groups with two graduate student (or advanced undergraduate) supervisors, who provide the training and supervision. The project employs nine graduate

and three undergraduates who, in addition to the above duties, coordinate various components of the research. These students are supervised in turn by the principal investigator (the dissertation committee chairman) and the project manager (the author). This structural hierarchy (see Figure 1) is quite similar to the educational pyramid model described by Seidman and Rappaport (1974).

Community-based research requires the establishment of crucial relationships with community groups and agencies. In this case, the most critical ties are the Ingham County Juvenile Court who provide the referrals for the project. Key individuals within this organization were very receptive to establishing this alternative. An administrative agreement (see Appendix A) formalized the relationship between the project and the court. This agreement stated some of the important procedures for the operation of the program. The court agreed to refer 175 youths in the first two years. Youths were selected for referral by intake referees after a preliminary hearing, and were randomly assigned to intervention conditions by the project.

Subjects

Delinquent Youths

Thirty-six referred adolescents were involved in the research. Youths ranged in age from 10-17, with a mean age of 14.7. Eighty-six percent of them were male, and 67% were white. All social strata were represented, though lower and lower-middle class families were most typical. Most of the youths involved committed either serious misdemeanors or non-serious felonies. It was the project's decision not to accept cases of minimal seriousness, as these youth would otherwise be likely to be diverted with no treatment. It is the court's decision

Figure 1

Project Organizational Structure

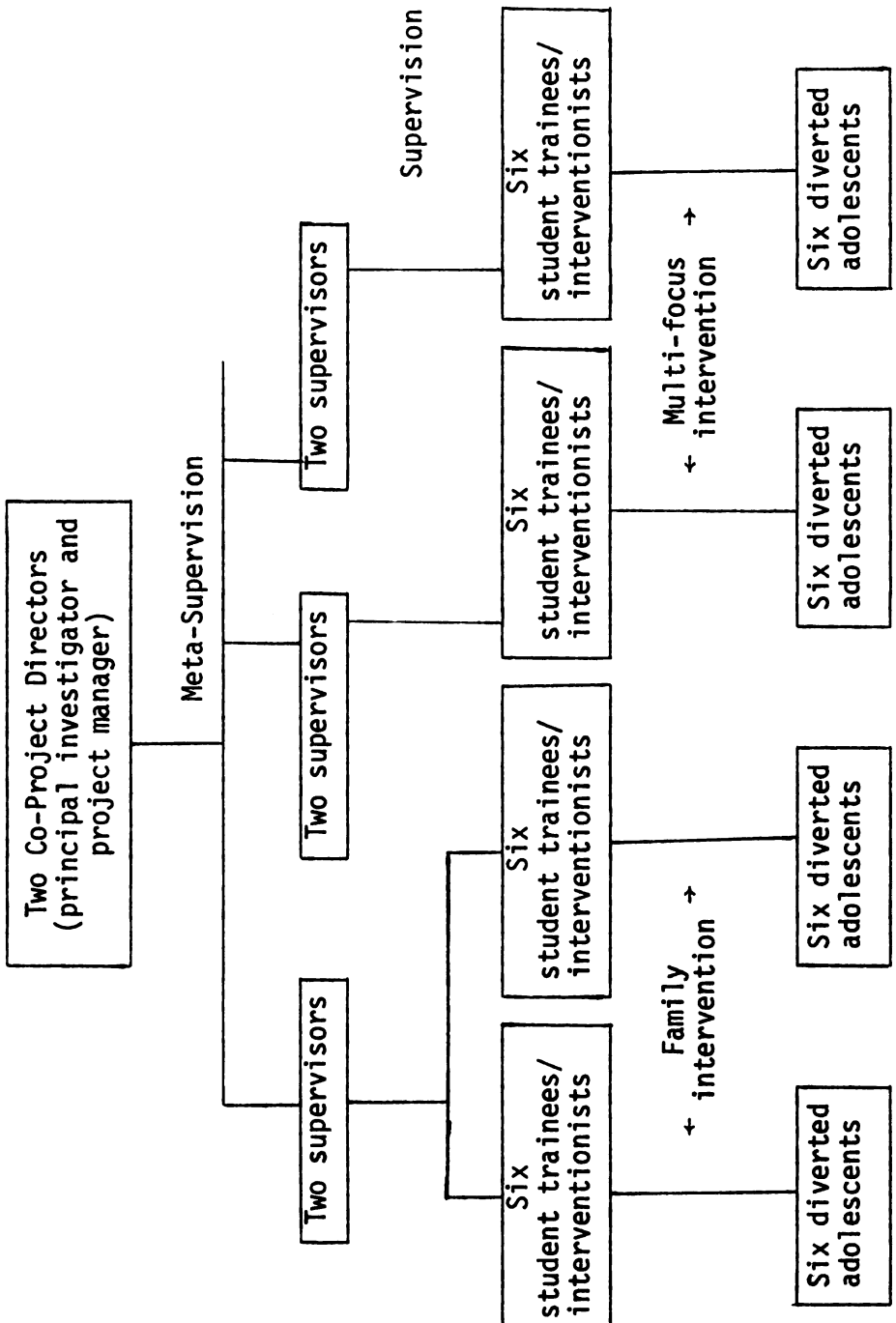
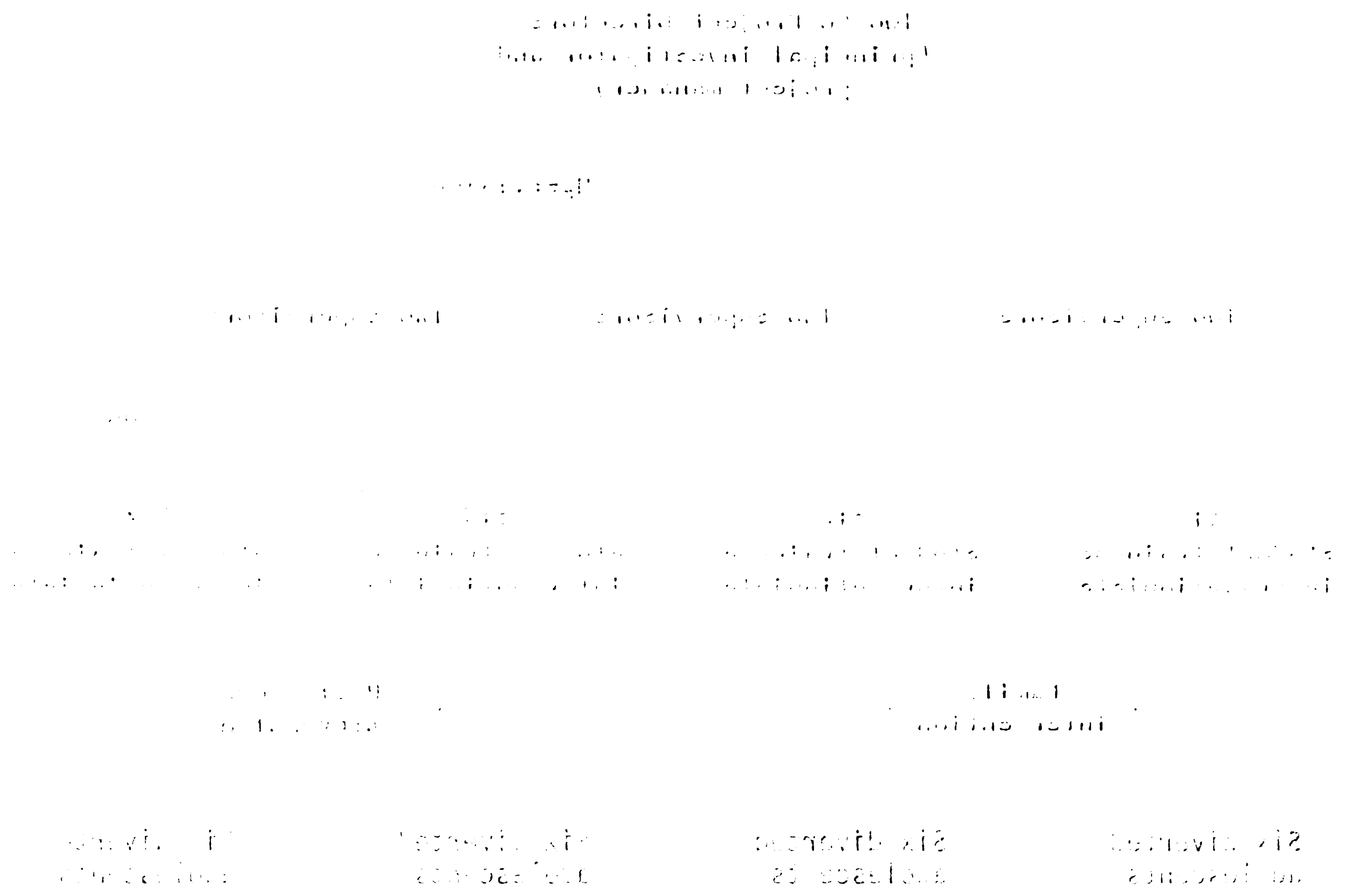


Figure 1

Project Organizational Structure



not to divert extremely serious youth who are considered dangerous. The court no longer handles status offenders.

The Adolescent Diversion Project was reviewed by the Human Subjects in Research Committee and was found to have met all criteria for approval.

Nonprofessional Volunteers

The nonprofessional volunteers consisted of 24 (12 male and 12 female) undergraduate students. Few seniors were involved since students had to agree to participate through the fall term of 1978. Most of the students were majoring in psychology, criminal justice, or social work. Participating students were randomly selected from a larger group who wanted to be in the class. Students received three or four credits their choice) per term for the spring, summer, and fall terms of 1978.

Trainers/Supervisors

There were five people involved in the training and supervising of small groups of undergraduates working with referred adolescents. Each small group of six were supervised by two of these five people. The family intervention groups were supervised by the author and a graduate student in clinical psychology. The author had had experience in this role, and had also been a volunteer and paid staff in the Illinois project. The second supervisor had had several experiences working with adolescents and had worked with the project for several months helping to supervise the collection and coding of data.

One of the Multi-focus intervention groups was supervised by a male advanced graduate student in ecological psychology with past experience as a supervisor and a female senior majoring in psychology who had been a student volunteer and an interviewer for the project. This second

supervisor also supervised the second Multi-focus intervention group, along with another male advanced graduate student in ecological psychology with recent experience as a supervisor and earlier experience as a volunteer in the Illinois project.

Design

A factorial design with experimental condition of the youth and time being the two independent variables was used. The different measures employed imply different levels of these two variables, but both variables were always involved. Most of the outcome measures (police, court, and school records) had three levels of condition (Family intervention, Multi-focus intervention, control) by six levels of time (two pre-periods and four post-periods). Self-report delinquency and the life domain data from the process interviews had three levels of condition (Family intervention, Multi-focus intervention, control) by four levels of time (Pre, Post I, Post II, and Post III). Data on the process of intervention from the process interviews had two levels of condition (Family and Multi-focus intervention) by three levels of time (Post I, Post II, and Post III). This design is illustrated in Table 1.

Procedure

Recruitment of Students

On February 7, 1978, a letter was sent to 1,300 social science majors by the project. The letter described the project and the opportunity for the students to participate. Interested students were told to call the office no sooner than February 15 and were also told that only the first 100 callers would be invited to an initial meeting. Sixty-seven of these first 100 callers actually came to this meeting, which consisted of the provision of general information about the course

Table 1

Experimental Design and Measures

EXPERIMENTAL CONDITION	Pre	6 Weeks (Post I)	12 Weeks (Post II)	Post III
Family Intervention	1-5	4,5,6	4,5,6	1-6
Multi-focus Intervention	1-5	4,5,6	4,5,6	1-6
Control	1-5	4,5	4,5	1-5

1 - Police data (frequency and seriousness of contacts)

2 - Court data (number of petitions filed)

3 - School data (attendance, grades, credits earned)

4 - Self-report delinquency

5 - Life domains (interviews with youth, parent, and peer)

6 - Intervention (interviews with parent, youth, peer, and volunteer)

and its requirements. After this introduction, students asked questions and then completed forms asking for demographic and experiential information. They also signed contracts (see Appendix B) indicating their willingness to complete the three-term commitment and to participate in further assessments at a second meeting the following week. Forty-six students came to this second meeting and completed a series of measures including Jackson's (1971) Personality Research Form, an assessment of locus of control, a delinquency orientation measure, and a semantic differential used to rate 20 concepts relevant to the project. These measures were for use in research to examine the effect of participation on the students and to develop methods of predicting successful volunteers. They are not directly related to the proposed research.

Six people were randomly eliminated from these 46 before participating in a more resource demanding (for the project) behavioral measure developed as part of the selection of volunteers research. Because of the need for an equal number of males and females, all six of these eliminated students were women. Two students were eliminated for high infrequency scores on Jackson's Personality Research Form. Another person was not able to devote the necessary amount of time to the project. Of the 36 students who completed all assessments, 24 (12 men and 12 women) were randomly selected for the class. Letters were sent to all 36 informing them of their status. The 24 members of the class were stratified by sex and then randomly assigned to condition (Family training or Multi-focus training).

Referral of Delinquent Youths

If the court received a petition on a youth from the police, parents, school, or other party, it scheduled a preliminary hearing to determine the basic circumstances of the case. If the youth admitted to the offense, the intake worker considered the option of diversion to the Adolescent Diversion Project. If the worker chose this option, and the youth and parents agreed to consider it, an appointment between at least one parent, the youth, and a representative from the project was scheduled. During this intake meeting, the staff member explained the operation of the program, the process of random selection, the assessment (interviews and record data) involved, the confidentiality of this information, and the voluntary nature of the participation. About 10% of all referrals declined the opportunity and were returned to the intake worker. Those who agreed to participate signed an agreement (see Appendix C) stating their understanding of the program, their willingness to participate in interviews, and their permission to allow project staff to examine police, court, and school records. Both the youth and his/her parents signed this agreement. Basic demographic information was also collected at this time. Following the signing of the agreement, the random assignment of the youth to experimental condition was made. This was accomplished by opening a sealed envelope with a card inside stating experimental status. Envelopes were stratified by intake worker, seriousness of case (formal or informal processing as intake worker's statement of alternative if the youth was a control), race and sex. Of the 36 youths accepted, 12 were assigned to each of three conditions (Family intervention, Multi-focus intervention, or control).

Control families were told that an interviewer would contact them shortly and were returned to the intake worker for alternative processing. Experimental youths and parents were told that a volunteer and an interviewer would contact them shortly.

Referrals were taken from the third week in April and continued until 36 youths had been accepted by the second week of July.

Assignment to Students

Within experimental condition, youths were assigned to students by the supervisors using the following criteria. Students were matched to youths on the basis of sex and race when possible, though this was not always possible. Mutual interests of the students (assessed during the first class) and the youths (assessed during intake) were also considered. Finally, students without access to cars were given youths who lived either close to them or near bus lines.

Students made their first contact with the youth by phone and set up a meeting. During the following 18 school weeks (including registration and finals week), the student was expected to work with the youth for 6-8 hours per week. Though any specific length of time is arbitrary, 18 weeks was chosen because of its use in prior research.

Training

Classes met once per week. During the first eight weeks, the classes were primarily devoted to training, plus the supervision of any cases that got assigned before the end of training. Classes lasted two and a half hours during training and two hours the remainder of the first term and all of the following two terms.

Outside assignments for the students during training consisted of reading the week's material in the training manual developed by the authors and others for use in this program, reading the outside readings

listed in that week's section of the manual, and completing any outside assignments listed in the manual. During each week's class during training, students were given written and oral examinations on the readings. Because the material to be learned was crucial for the intervention, the training used a mastery-to-criteria system whereby each student was required to rewrite missed questions until understanding of the material was demonstrated. Grades during this time were based on these examinations and attendance.

Once a student was assigned to a youth, a number of requirements were added to his/her responsibility. These included the weekly completions of progress reports on his/her case, the recording of contacts with the youth and with others on behalf of the youth in a log book, participations in assessment procedures and process interviews, in addition to six to eight hours per week of contact with the youth during the 18 week intervention. Grades were primarily based on case responsibility, with attendance, weekly progress reports, and class participations also considered.

Multi-focus training. Multi-focus intervention was based on a training manual. The forerunner to this manual was developed by the Illinois project described earlier. The author and three other members of the research team made substantial revisions in the manual upon the initiation of the local program. For the proposed research, the author did further revisions, specifically adding several role plays and practical exercises to the training. The manual provides information and practice in a sequence of phases that parallel the actual intervention to be described later. A brief description of each week's training follows. The first week of the training provided an overview

of the course, its requirements and training procedures. A brief history of the juvenile justice system, the rationale for diversion, and a description of the local court system served as an orientation to the training. The second half of the week's manual and the outside readings presented the behavioral conception of human nature and delinquency which formed the foundation for the techniques of behavioral contracting presented later.

The second week of training focused on the environmental conception of human nature and delinquency, specifically the advocacy-related principles of unmet needs and social and community resources. These concepts and the environmental perspective formed the basis for advocacy strategies that were introduced in later weeks. The rationale for using two separate systems of intervention was also discussed.

Assessment was the main topic of readings and discussion during the third week of training. This began with an explanation of the procedure of meeting with the youth for the first time. This situation was role played in class. Assessment involves the gathering of information about the youth that allows the formation of strategy for intervening. Information necessary for a contracting effort includes the identification of significant others in the youth's life, the interpersonal relationships that exist between the youth and these significant others, and the determination of those areas of change that the youth and others desire. Advocacy assessment involves the identification of the youth's strengths, weaknesses, unmet needs, resources available for meeting these needs, and the vulnerability of those individuals controlling these resources.

The fourth week of training was focused on an outside assignment that the students completed before coming to class. During the week, the students practiced a behavioral assessment. After deciding on a behavior of a roommate or friend, the student set up a system for recording the frequency of this behavior on a regular basis. Class time was used to discuss the results of this excercise.

The assessment phase of intervention allowed the student to develop a picture of the youth's situation. This information was then used to form a strategy for intervention. The fifth week of training was designed to develop and initiate an individualized intervention strategy. Students were trained in transferring the assessment information into a plan of action using either or both methods of behavioral contracting and advocacy.

Contracting involves the negotiation and recording of the contingencies that operate between the youth and significant others. The written document consists of a list of privileges, responsibilities, bonuses, and sanctions for each party, as well as a system of monitoring the performance of each party. Advocacy interventions are designed to meet unmet needs and vary along the two continua proposed by Davidson and Rapp (1976). The target of change can exist at an individual, administrative, or policy level. The style of intervention can be positive, neutral, or negative with respect to the approach of the target. A contracting and an advocacy role play were conducted in class. The contracting role play consisted of the student helping a "youth" and "parent" to identify areas of change desired and introducing the notion of contracting. The advocacy exercise began with a description of a youth's situation. Various advocacy strategies were generated and the interactions implied by these strategies were then role played.

The sixth week continued training on the initiation of intervention. Two exercises were conducted in class in order to provide practice in the process of intervention. The contracting exercise begun in week five was concluded with the role playing of the actual negotiation of a contract. An advocacy exercise similar to that performed in week five was also done in class, with a new hypothetical situation considered for discussion and role playing.

Monitoring the intervention and the generation of alternative strategies were discussed and practiced in week seven of the training. Evaluation of the success of intervention was the key principle involved in the monitoring stage. Renegotiation of an unsuccessful contract was role played. Another advocacy exercise similar to that used in the previous two weeks was practiced in class.

The eighth and final week of training discussed the termination of involvement with the youth. It is important that the youth and his/her significant others learn the skills used in intervention in order to perpetuate and build on the changes that have occurred. This was accomplished through a combination of instruction, modeling, and practice.

Family intervention training. Students in this experimental condition used the same skills taught in the Multi-focus intervention training, but concentrated their use within the context of the family. However, because the strategy of advocacy is rarely used with the family (other than in the context of contracting), it would have been an inefficient use of training time and resources to teach the students the advocacy approach. Therefore, the strategy of advocacy was introduced to students by supervisors when particular youth's situation indicated

that advocacy was called for with the family (in a case of neglect, for instance). This allowed greater emphasis in training on the use of behavioral contracting.

The following description of training for the Family intervention students is based on the family training manual. This manual was developed by the author specifically for this research. The main differences from the Multi-focus intervention training manual are the omission of advocacy training, the addition of the rationale for focusing on the family, the addition of training in communication skills, and increased intensity of training (mostly in terms of exercises and outside readings) for those topics common to both training groups.

Week one again provided a course overview, history of the juvenile justice system, and description of the local court system. This was followed by a review and critique of major theories linking the family to delinquency. The point was made that while the family appears to have a relation with delinquency, most theories have been inadequate in providing useful interventions based on them.

The second week of training gave a detailed description of the behavioral conception of human behavior and delinquency. This was introduced by a presentation of the medical model perspective of behavior and its treatment followed by a presentation of basic learning and behavior principles. These principles were then applied to the area of delinquency.

As with the Multi-focus intervention training, the third week of training provided instruction in methods of assessment. This begins with determining the nature of family relationships and the interpersonal contingencies that operate. Discussions between the youth, the

student, and the family must follow in order to identify areas of conflict that may be modified with the use of a contract.

During the week proceeding the fourth class, students completed an assessment of the behavior of a friend, recording the frequency of this behavior over several days. This allowed practice in specifying objective behaviors and developing systems of recording behavioral information. The results of this exercise were discussed in class.

The fifth week of training provided the specifics for negotiating and writing a behavioral contract. Communications skills that aid in the negotiation process were emphasized to a greater degree than in the Multi-focus intervention training. Rules for choosing appropriate behaviors for inclusion in the contract and procedures for actually writing the contract were presented. A role play of discussion with a youth and his family aided in using the communications skills, determining each party's needs, and introducing the notions of contracting.

Weeks seven and eight covered the same topics as those presented in the Multi-focus intervention package, with the exception that the readings, discussion and exercise were based solely on family contracting. Week seven provided the necessary components of a good contract monitoring system and the procedures followed in contract renegotiation. Week eight focused on termination. Teaching the youth and his family contracting methods occurred to some extent throughout the intervention. However, specific instruction, modeling, and practice were emphasized as termination approached. The teaching of important communication skills associated with the contracting process were also taught to the family and shown to be useful in everyday interactions.

Supervision

During the remainder of the three terms, the class period was devoted to the supervision of cases. Each student with a youth presented a summary of the week's activities with the youth, progress towards goals, relation to the intervention model and the particular phase they had reached or were approaching, things they had learned about the youth and his/her situation, and problems or questions they were facing. Supervisors and classmates acted to clarify and understand the situation presented, helped to generate alternative solutions to any problems that had arisen, planned strategies for implementing the next phase of the intervention model, and developed overall goals for the youth during the 18-week intervention.

The intervention followed the model read about, discussed, and practiced during training. This began with an assessment of the youth and his situation. Based on this assessment, a specific strategy was formulated, again based on the model. The success or failure of the implementation effort was then discussed in the supervision session and plans for the future formulated. For instance, if a contract had been negotiated but did not seem to have been effective, a number of possibilities could be considered. Perhaps the terms were not clear, the system of monitoring was not convenient to both parties, or the terms of the contract were not motivating to the parties involved. These alternatives, which imply different next steps, were then discussed in class. Rarely did an eighteen week intervention proceed without setbacks and consequent retreats to appropriate stages. The final stage of the intervention consisted of the training of the youth and his family in the intervention techniques used. This involved discussion,

role plays, modeling, and actual trials, if appropriate. Discussion of this stage as well as all stages of the intervention took place in supervision.

The process of supervision was similar for both of the intervention models. The content differed along the same lines as the manuals, training, and general models of intervention vary. Specifically, it was important to keep the students in the Family condition focused on the family alone and not let them digress from this perspective and style of intervention. However, the process of reporting, problem-solving, and planning was constant across experimental conditions.

Intervention

The intervention process can be conceived of as a series of phases. These can be labeled as introduction, assessment, intervention, monitoring, and termination. It was not a linear progression, however. Assessment continued throughout involvement with the youth. Monitoring was a process of evaluation of intervention effectiveness. This evaluation often implied a reformulation of strategy or the need for more information. Even if a particular strategy aided in improving one situation, continued assessment often indicated other problems. Thus the entire process was more a series of overlapping cycles than a sequence of discrete steps.

The above is an accurate description of the general process of intervention for both experimental conditions. A more complete description of each phase and a hypothetical case for each experimental condition are given below. Further details can be found in the training manuals.

Multi-focus intervention. Initial contact was initiated by the student over the phone. After introducing himself/herself as the volunteer from MSU (which the youth was expecting), they set up a specific meeting. Early contacts often involved recreational activities as a context for establishing a relationship. Though their frequency diminished somewhat over the 18 weeks (see Results) as more task-oriented activities were needed, recreation often formed the context for discussion of both intervention-related and more informal matters.

Early discussion formed the basis for assessment. Needed information was obtained through casual conversation with the youth as the relationship was established. This information often indicated the need to speak with other key individuals, such as teachers, parents, or employers. Observation was also a useful method of obtaining an understanding of the youth's situation.

Use of these assessment methods yielded the needed information from a behavioral-advocacy perspective. This included knowledge of a variety of social systems (e.g., home, school, peers, employment). Within these areas, it was important to understand the youth's likes, dislikes, resources possessed and lacking, relationships, operating contingencies, strengths, and needs. The focus was on the youth's social environment, not on internal concepts. For instance, school assessment included knowledge of the youth's classes, teachers, grades, behavior, likes, dislikes, interests, conflicts, and rate of attendance, but did not include an assessment of the youth's self-concept as a student.

The results of this assessment (which was the object of the first four weeks of intervention) was a picture of a unique individual. The

specific areas of concern identified during assessment were immediately focused on. The student discussed potential strategies for dealing with these concerns with the youth, significant others, and members of the supervision group. For instance, a student whose youth was having a conflict with a teacher might have considered contracting to aid in reducing the conflict or might have taken an advocacy position and attempted to gain permission for the youth to change classes.

Interpersonal contingencies were modified and specified through the use of behavioral contracts. The rules of negotiation and the important components of contracting are presented in the introduction and in the training manual and are detailed by Stuart (1971).

In acting as the youth's advocate, the student helped to meet the youth's unmet educational, familial, social, employment, and legal needs while serving to protect his/her interests and rights. Targets for change included individuals, organizations, or policies. Styles of change ranged from a positive "salesman" approach to a negative approach. Choosing the specific target and strategy was dependent on the assessment phase which identified key targets for change and their vulnerabilities. Alternative strategies were considered on the basis of their probable relative efficacies.

The effects of any intervention strategy must be carefully evaluated. This monitoring phase implied talking specifically with the youth and relevant others, as well as observing first-hand results of the intervention. Two critical questions were addressed through the monitoring of efforts. First, had the plan been successfully implemented? Second, what changes had occurred as a result? This information was then used to reformulate plans, if necessary. It was important to

continue to remain informed about the maintenance (or lack of it) of these changes. For instance, an advocacy effort might have resulted in a school counselor agreeing to administer learning disability tests for placement in special classes. Monitoring would have included checking to see if the tests had been given, if that had led to placement, and if that had improved the youth's academic performance, attendance, and behavior over a period of time.

Throughout the intervention, the student described the intervention and its rationale to the youth and significant others in his/her life. As termination approached, instruction became more important and detailed. Both contracting and advocacy were discussed and demonstrated. This was designed to culminate in the execution of an actual advocacy effort by the youth on his/her behalf and the negotiation of a contract between the youth and his/her parents or other relevant parties. Such a contract could have dealt with old, newly identified, or hypothetical areas of change.

A hypothetical case will be used to illustrate the Multi-focus intervention procedure. Bill is a 15-year-old referred to the project for shoplifting. Don, the student assigned to him, calls him, introduces himself and arranges a meeting at the youth's home. This first contact, like many to follow in the next three weeks, involves informal conversation, often while playing cards at home or pinball in a nearby youth center. Don finds out that Bill's major concerns are that his parents hassle him about curfew and letting them know where he is, that he wants a job, and that he dislikes school and plans to quit to become a mechanic. During the third week, Don joins Bill at school after class and they talk to a counselor. They find out that Bill could substitute

training in a community vocational training center for his afternoon classes, but that his grades are too low for admission to this program. Don spends much of his time exploring this policy, those who formulated it, and those who must enforce it. After winding his way through the bureaucracy, he eventually convinces an administrator that allowing Bill in the program was more desirable than the alternative, Bill's dropping out.

The home conflicts (curfew and knowledge of whereabouts) seemed suitable for modification through a contract. A negotiation session resulted in a contract. Bill agreed to inform his parents as to where he was in the afternoon if he didn't come home from school. Each instance of this behavior was worth the addition of twenty minutes to Friday or Saturday's curfew. Because his mother also wished to see Bill more often, Bill also earned twenty minutes of extended curfew if he came home after school.

To aid with Bill's getting a job, Don and Bill went through want ads together. Following this, Don spent several days driving Bill to potential employers to apply for jobs.

Monitoring of each of these efforts took place immediately after the intervention and continued throughout Don's involvement. After enrolling in the vocational program, Bill began to go to school more frequently (as it was a prerequisite for afternoon participation) and both Bill's and his teacher's reports indicated improved performance. The original contract was renegotiated to reflect a more equitable arrangement. In the area of employment, Bill claimed he had been promised a job, but two weeks later it had not materialized. Eventually, a youth employment program was located by Don and Bill. This led to a job in the city's parks.

Before termination, Don showed Bill and his parents the procedures of behavior contracting and they practiced them together. Don also explained to Bill the advocacy procedures he had used in getting Bill into the vocational training program and finding him a job. To practice these skills, they developed a strategy for making a change in the vocational program that Bill was enrolled in. Bill then initiated contact with the necessary administrators. At the conclusion of the 18 weeks, several positive changes were still in operation and both Bill and his parents had developed the skills necessary to maintain and expand these changes.

Family intervention. This experimental condition shared the basic intervention phases described above. Many of the same procedures were used, but the entire effort was exclusively focused on the family.

Introductions and the first contact proceeded as described above. However, assessment concentrated on the youth's family situation. Instead of speaking with a wide variety of people in the youth's life, Family intervention assessment implied speaking only with the youth and his family. Similarly, observation of the youth took place in the home. It was necessary to identify who the members of his/her immediate family were, how they related to each other, what contingencies operated with what consistency, and what were the areas of concern for the youth and his/her parents. These questions were answered through both conversation and observation. As this assessment progressed, it was necessary to speak with the youth and his/her relative(s) (usually parents) about changes each party desired.

This information provided the basis for intervention with the family, usually in the form of a contract. The concept of contracting

was introduced to the relevant parties, and the areas of desired change were focused on in a negotiation session. It was important for the student to create a climate of compromise during this negotiation session. This process was aided through the use of communications skills such as paraphrasing, asking clarifying questions, and being specific. Rules regarding the writing of the contract were that the contract itself should have been reciprocal (so that each side would benefit), it should have focused on behaviors that were monitorable, and the terms should have been stated in positive and specific terms.

The contract also required a system for monitoring the behaviors of each party and the schedule for providing consequences for the relevant behaviors. This monitoring system was checked by the student on a regular basis (at least once per week). Students examined the consistency with which the desired behaviors were occurring, the consistency with which the monitoring system was being used, and the use of the schedule for applying consequences for the behaviors. Problems with any of these concerns implied restructuring the contract and/or the monitoring system. Regular contact with the youth and the parents was as crucial as it was in assessment and negotiating the contract itself.

Continued assessment often indicated the necessity for either adding terms to an existing contract or negotiating new ones as additional concerns were brought up. Again, the concept of intervention as a continuing process of cycles is important in understanding the relationship between assessment, contracting, and monitoring (evaluating the impact and use of the contract).

The final phase of the Family intervention was the training of the family in the intervention technique. Contract negotiation, the

components of the contract, and the communications skills practiced in the formulation of a contract were all the subject of instruction, demonstration and actual practice by the family.

The same hypothetical case will be used to illustrate the differences between Multi-focus and Family intervention. Lou, a student trained in Family intervention, was assigned to Bill. Their initial meeting occurred in much the same way as it did with Don and Bill, a phone contact followed by a visit at home. However, the focus of assessment for Family intervention was immediately different. Though Lou relied on informal conversation with Bill in order to obtain much information, the information concerned Bill's family and the contingencies and relationships that existed within the family. Lou and Bill spent much time at Bill's home, watching TV, playing pool, and simply talking. Sometimes Bill's parents were involved in these conversations as it was important to determine what each party desired to see changed in the behavior of the others. These conversations formed the basis for the initiation of a contract four weeks later. Negotiation sessions were mediated by Lou. The terms of the resulting contract were very similar to those described in Bill and Don's case study.

Monitoring Bill's behavior and the use of the contract became the main emphasis of the intervention. Lou found that the monitoring system wasn't being used consistently. Consultation revealed that Bill wasn't sure about how it was to be used and his parents found it inconveniently located. Since both parties need to monitor the contract, appropriate corrections were made.

Lou and Bill continued to spend about three or four hours per week at Bill's home. The other half of their time together was spent at Lou's

apartment, having a coke at a nearby shopping center cafeteria, or in some other recreation (e.g., playing pinball, swimming at the IM building, bowling). At least an hour or two of every week was spent talking with Bill and his parents together. This weekly discussion, beginning with a discussion of the week's contract behaviors, led to an increased trust. Increased communication and the use of communications skills Lou had learned in training brought two more concerns to light. Bill wanted his parents to pay for guitar lessons while Bill's parents wanted him to keep his room clean. These conditions were added to the contract. Every evening at 9:00 his parents would use specified criteria for checking Bill's room. If it was clean, Bill earned a coupon good for one-fifth of a guitar lesson.

Lou has also learned of Bill's dislike for school and desire for a job. Because of the importance of the family, it was felt by Lou and his class that it was useless to be concerned with any outside problem until the family situation had improved. This improvement might actually generalize to improved school behavior. Even after home conditions were modified, other concerns would be approached from a family perspective.

After 11 weeks, it appeared that the home situation had greatly improved. The contract was being followed and the behaviors monitored and improved to everyone's satisfaction. To approach Bill's deteriorating school performance, Lou spoke with the parents at length. Two suggestions were made. First, Lou felt that Bill's parents should encourage his school performance more through providing verbal reinforcement for his attendance and any positive accomplishments at school. Second, Lou suggested that Bill and his parents explore the opportunities for vocational training or half-day job placement through the school.

His school attendance and grades increased somewhat during Lou's involvement, but he did not find any classroom alternative.

Bill's desire for a job was also approached without Lou directly or physically involving himself. Lou spent several hours instructing Bill on how to read want ads and how to interview for a job. Bill looked for a job with no luck and became too discouraged to continue.

During the last three weeks of involvement, Lou spent several contacts with Bill and his parents explaining the rules and principles of contracting and assembling a written list of important points. After instruction, Lou led several role plays which culminated in a "solo" effort in which Bill and his family negotiated a new contract. It appeared that they would be able to use this method to maintain the family harmony they had developed.

Table 2 presents a summary of the differences between the Family intervention and Multi-focus intervention which were described above and illustrated in the case studies.

Monitoring Training/Supervision - Meta-Supervision

The trainer/supervisors from each experimental condition met with the principal investigator weekly for 1½ hours. There were two separate meetings, one for each condition. During these meetings, the supervisors and principal investigator reviewed the class meetings that were held during the week and discussed progress, problems, and future plans of students in much the same manner that the class supervision was conducted. Audio tapes were made of every class to be used as an aid in this review process. Each of these meetings concerned the progress of the two classes participating in the specific condition of interest.

Table 2

Comparison of Family
Intervention and Multi-focus Intervention

	Multi-focus Intervention	Family Intervention
Conception of Human Behavior	Result of social environment	Result of social environment, especially the family
Means of Introduction and Building Relationship	Informal conversation, recreation	Informal conversation, recreation
Means of Assessment	Speaking with the youth, significant others, and observation in many social situations	Speaking with the youth and parents, observation in the home
Focus of Assessment	All life systems	Family situation
Means of Intervention	Behavioral contracting and advocacy	Primarily behavioral contracting
Focus of Intervention	All life systems	Primarily the family (any other life system secondary and approached through the family)
Purpose of Monitoring	Evaluate intervention efforts	Evaluate intervention efforts
Means of Monitoring	Speak with all relevant parties in all life systems	Speak with youth and parents
Preparation	Teach youth and all involved parties behavioral contracting and advocacy	Teach youth and parents behavioral contracting

The principal investigator and the supervisors kept notes on every case to help monitor the adherence to the intervention model.

Measures

Outcome

There will be three sources of record data and one source of interview data to serve as outcome measures on the youths. Court, police, and school records were collected for the year (12 months) prior to the referral of the youth to the project. This data was compared to the same data collected during the intervention. Data was collected by research assistants working with the project with the assistance of undergraduates enrolled in a three term course in interviewing and data collection skills taught by graduate assistants with the project. All data collectors were naive as to the experimental conditions of the youths, as none supervised groups of students.

Another source of outcome data was the delinquent behavior of the youths as reported by the youth, the youth's parent, and the youth's peer nominated by the youth as someone the youth saw regularly.

Police and court records. A standard criterion used in research involving intervention with delinquents is the amount of contact with the juvenile justice system. Frequency of police contacts, seriousness of offense leading to police contacts (using a weighted system derived from Sellin and Wolfgang [1964]), the number of court petitions filed against the youth, and the seriousness of the offense named in the petition were used in this regard. Again pre-data was collected shortly after referral. Post-data was collected at termination (the end of the 18 weeks of intervention).

School records. As part of the intake procedure, parents and youths signed permission slips allowing project examination of school records. These permission slips were taken to the schools attended by the youths and presented in order to gain access to the records. School attendance, grade point average, and the proportion of credits earned to credits possible were recorded. Pre data covering the school year preceding referral was collected shortly after referral. Post data was collected by quarter during the intervention so as to minimize the chances for loss of records.

Self-report delinquency. Self-report delinquency is a method of measuring delinquency based on a procedure described by Gold (1970) in which the youth is asked about a series of delinquent behaviors (see Appendix D). The youth, his parent(s), and a peer were asked about the frequency of each of 29 behaviors during the past six weeks, the past year, and in his entire life. The frequency was recorded as a "0", "1", "2", or "3", corresponding to the response categories "Never", "Once", "Twice", or "More than twice" respectively. Because of the high correlations among items, resulting in a total score consistency of the average item response. The internal consistency estimate, alpha, for the total scale score based on this summation is .80.

The youth-parent and youth-peer inter-correlations were .43 and .44 respectively. Because of these relatively high correlations among sources, only the youth's responses were analyzed. Also for purposes of analyses, the data referring to the preceding six weeks was considered the most meaningful. Six week data was correlated .71 with the one year data and .63 with the "entire life" data. While several weighting schemes based

on seriousness of offense data were considered, they appeared to provide little further information (Blakely, Kushler, Parisian, & Davidson, 1979).

The interviewers who conducted the process interviews also collected this self-report delinquency data. More information on their training will be presented in the description of process interviews to follow. This data was collected at the same time as the process interviews, before intervention, six weeks after referral, 12 weeks after referral, and at termination.

Process Interviews

Process interviews were conducted with the youth, his/her parent(s) (one or both may participate), a peer that the youth nominated as someone he/she saw often, and the volunteer who worked with the youth. These interviews took place in the interviewee's home and were conducted within a week of referral, six weeks into the intervention, 12 weeks into the intervention, and at termination. The exception to this schedule is that the volunteer was not interviewed the first week due to the minimal contact that had occurred at that point.

The process interviews were initiated in the Illinois project as an attempt to better understand some of the success that the project was enjoying (Davidson, 1976). The use of interviews to understand the process of the intervention and its effects on the lives of the youths involved fits with the attempts to dissect an empirically successful method in building a social model. The interviews were designed to assess both the life domains of the youth (activities and circumstances surrounding the home, school, friends, free time, employment, and involvement with the justice system) and the process of intervention (what was being

attempted and accomplished, and what effects it was having). Participant input as to these processes was considered important in reaching an understanding of the project's effects. Multiple sources of information at multiple time periods were used to improve the quality and validity of the data gathered.

The original interviews were extremely broad and exploratory in nature. In order to establish specific and standard information from open-ended interviews, the following steps were followed. From audio tapes of these interviews, questions were written to represent the information that was being obtained. After removing many of these questions on the basis of low endorsement frequency (they could not be answered often), the remaining questions were answered on the basis of the interviews. While the interviews remained open-ended and conversational in nature, the interviewer was required to answer all of the approximately 400 items on the basis of the interview (with the aid of an audio tape of the interview) after the interview had been completed.

The items were then combined into scales using a combination of rational and empirical (internal consistency) methods (Jackson, 1971). This resulted in 11 scales concerning the life domains of the youth and 13 scales concerning the intervention. Tables 3 and 4 describe each scale and provide an example, and give its internal consistency estimate, alpha, for the life domain and intervention scales. Alphas for the life domain scales range from .59 to .90 with a mean of .75. Intervention scale alphas range from .61 to .95 with a mean of .83. Appendices E and F list all the items comprising each scale for life domain and intervention scales.

Table 3

Process Scales

Life Domain Survey

I. Home Involvement and Activity. 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?" α=.77

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?" α=.71

III. Positive Change in the Home Domain. 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?" α=.79

IV. Involvement in the School System. 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?" α=.90

V. Positive Change in the School Domain. e.g., "What change has occurred in school attendance?" α=.85

VI. Peer Involvement. 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?" α=.75

VII. Positive Change in the Use of Free Time and Peer Activity. e.g., "What change has occurred in the youth spending free time constructively?" α=.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 do parent(s) know who the youth's friends are?" α=.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?" α=.63

X. Job Desirability. The extent to which the youth desires and initiates action to obtain a job, e.g., "How often does the youth actively seek employment?" α=.69

XI. Juvenile Justice System Non-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?" α=.71

Table 4

Process Scales

Intervention Survey

I. Amount of Time. Frequency and amount of contact, e.g., "How much time does the volunteer spend working on the case?" α=.80

II. Lack of Complaints/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?" α=.84

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)?" α=.84

IV. School: Focus on Changing Youth. 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?" α=.95

V. School: Focus on Changing School. Extent of the intervention focusing on bringing improvement to the school environment by focusing on school staff, e.g., "To what extent is the volunteer working on curriculum changes?" α=.61

VI. Employment. Extent to which the intervention focused on getting the youth employment, e.g., "How much has the volunteer instructed the youth in job seeking?" α=.89

VII. Home: Focus on Changing Youth. 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?" α=.80

VIII. Home: Focus on Changing Parents. 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 parent's household rules?" α=.84

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?" α=.74

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?" α=.75

XI. Legal System Involvement. Extent to which the volunteer became involved in the juvenile justice system for the youth, e.g., "Has the volunteer assisted in negotiating a court disposition?" α=.88

Table 4 (cont'd.)

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?" α=.87

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?" α=.94

It should be noted that despite the great effort that went into the creation of these scales, there is no scientific method of assuring that the scale name is an exact summation of all of the items on the scale. Yet, this name becomes the only reference point for the concepts represented in the scale. Careful thought went into making sure that the representation was as accurate as possible, but the reader is invited to note what items comprise the scale in order to best understand the meaning of the results related to the scale. The scale name is operationally defined by the items, but the definition may not always exactly match the connotation associated with the name.

Scale scores were used as the variables of interest in the process measure. The scales showed good convergent and discriminant validity. Convergent validity exists when different sources of information provide consistent values for the same variable. In this case, parents and youth were both interviewed on the same topics. Life domain scale scores computed with youth and parent data had an average correlation of .78. The consistency between youth and parents with respect to intervention scales was even higher, with an average scale correlation of .86. Because of the high inter-source correlations, only the youth's responses were analyzed.

Discriminant validity exists when different variables collected by the same method are not highly correlated. Life domain scales (computed from youth data) correlated with each other an average of .18. Intervention scales correlated with each other an average of .31. These findings show that the same variables collected from different sources showed correlated values, while different variables collected from the same source did not show correlated values. This provides evidence for the validity of these scales.

Interviews were conducted by undergraduates participating in a three term course on data collection and interviewing. Students were given considerable instruction by three graduate assistants and two former interviewers from the project who taught the course.

Initial training sessions were basically didactic with the instructors providing information on the context of the interviews (the larger research project) and their purpose. This was followed by pragmatic issues such as what material needed to be covered in the interviews, how to code the information, and the entire process from assignment of a case to turning in data. Later sessions provided instruction on the style of the interview and the skills of interviewing (asking open-ended questions, getting specific information, following up information, paraphrasing). In the practice stage, role plays were done in class, students interviewed their friends out of class, and finally each student had a practice interview with a youth and/or parent. At each stage of this practice, instructors used tapes of the interviews to provide feedback to the students in individual sessions and small groups. No student was allowed to conduct an actual interview until reaching an advanced stage of competency. Each youth's entire set of interviews, across source and across time, was conducted by a single interviewer. Each interviewer was responsible for approximately five sets of such interviews (including self-report delinquency) and received four credits per term for participating in the course.

Schedule of Assessment

The various measures employed will be collected for various lengths of time and at various points in time with respect to the intervention. Outcome data (court, police, and school) will be collected for four pre and two post periods of 13 weeks apiece. Life domain and self-report

delinquency data will be collected for one pre and three post periods of 6-8 weeks apiece. Intervention interviews will be conducted during three post periods of 6-8 weeks. Because "Time 1" will refer to different points in time with respect to the intervention for various measures, the reader may find Table 5 a useful reference when interpreting the results.

Table 5

Assessment Time Periods

	PRE				POST		
Police, Court, and School	Time 1 (13 weeks)	Time 2 (13 weeks)	Time 3 (13 weeks)	Time 4 (13 weeks)	Time 5 (12 weeks)		Time 6 (12 weeks)
Self-Report Delinquency and Life Domain				Time 1 (6 weeks)	Time 2 (6 weeks)*	Time 3 (6 weeks)*	Time 4 (6 weeks)*
Intervention					Time 1 (6 weeks)*	Time 2 (6 weeks)*	Time 3 (6 weeks)*

*While post interviews were done for every 6 weeks of actual intervention, breaks between terms (during which no intervention occurred) resulted in an average real interval of approximately 8 weeks.

CHAPTER III

RESULTS

The results of this experiment will be presented in two sections. First, the outcome data relating to delinquent behavior (police, court, and self-report data) and school performance will be described. Second, the process interview data describing the intervention and the effects of the intervention on various areas of the youth's life will be presented.

The primary test used to analyze these data was repeated measures analysis of variance. There is some controversy concerning the use of this technique to explore pre-post differences. Huck and McLean (1975) maintained that the analysis is too conservative with respect to interaction terms and too liberal with respect to time effects and providing a small error term for the use of planned comparisons. However, the alternatives proposed, covariance and change scores, display the opposite biases. Furthermore, each of these latter techniques rely strongly on the pre scores. In the data collected for the present research, employing up to four pre scores, it would be difficult to make the appropriate decisions about the composition and comparisons of pre data.

For the police, court, and school data, the independent variables included experimental condition (Multi-focus, Family, or Control) and time (four pre quarters and two post quarters). For the remaining dependent variables (self-report delinquency, life domain, and intervention scale

scores) an additional independent variable was used. The outcome of each case was designated either a Success or a Failure. This was done in order to examine the relationship between process measures (the life domain and intervention scale scores) and the outcome of the case. It was also used in conjunction with self-report delinquency in order to note the degree of correspondence between the record data and self-reported data. The criteria for success/failure designation came from the official delinquency data--police and court records. If the youth was apprehended by the police or received a court petition during the post period (from the time he/she was assigned to the project until termination) the youth was considered a "Failure" for the purpose of analyses. Youth who had no police or court contacts during this time were designated "Successes."

According to these criteria, the Successes and Failures were distributed among the intervention conditions as follows. The Multi-focus group had seven Successes and five Failures. The Family condition had eight Successes and four Failures. The Control condition had six Successes and six Failures.

This research effort has employed a basically broad and exploratory strategy. The analyses, reflecting this strategy, look for a variety of effects and relationships between variables. The analyses of variance have been augmented by Scheffe multi-group planned comparisons whenever there is indication of such a relationship between variables. The inconclusiveness of this strategy gives cause for caution when considering any single finding. The most significant findings have convergence between several sources of information.

In listing the results, this inclusive style will also be employed. Trends, as well as significant findings will be described, with the differences noted. Any result, including Scheffe results, reported as significant can be assumed to be at least at the .05 level of significance. It should also be noted that there are a great number of comparisons made in the present research. If .05 is used as the criterion for significance, one of every 20 comparisons will appear to be significant by chance alone. Again, most of the results had some support for their validity through convergence with other results and sources of information.

Manipulation Check

Before discussing analyses that employ condition as an independent variable, it is necessary to assess whether or not the two experimental conditions were actually different in practice. The differences in training were detailed in the previous chapter. However, differences in training content do not in themselves insure that the two groups actually learned different content and skills. A training test was devised to measure the basic concepts associated with the Multi-focus and Family interventions. The scales representing these two areas were derived using a combination of rational and empirical methods (Jackson, 1971). The results of an analysis of variance on this training test showed that the Multi-focus group scored significantly higher than the Family group on the Multi-focus intervention scale, while the Family group scored significantly higher than the Multi-focus group on the Family scale. Therefore, it can be concluded that the two conditions did learn different concepts and skills for intervention.

Even though they learned different information, this does not necessarily indicate that the intervention provided by the two groups differed

in actual practice. The process interviews that assessed intervention allow an examination of the content of the intervention as it was practiced. The scale scores measuring different components of the intervention indicate that there were experimental differences between the Multi-focus and Family conditions. These differences can be categorized as differences in the focus of intervention and differences in the techniques used.

In terms of differences in focus, the Family group practiced more intervention concerning the home and family than did the Multi-focus group. This Family focus is represented in higher scores on the Home-Youth (home intervention focused on the youth), Home-Parent (home intervention focused on the parents) and Parental Involvement scales. Means and an analysis of variance for these three scales can be found in Tables 6-8. According to the analysis of variance, the probabilities that these differences could have occurred by chance are .05, .10, and .09 for the three scales respectively.

While the Family group focused more on the family, the Multi-focus group intervened in a variety of areas. Differences on the school scales were especially noteworthy. There was a significant condition effect on the School-School (school intervention focused on the school itself) scale (see Table 9). The Multi-focus group was also higher on the School-Youth (school intervention focused on the youth) scale and on the Employment intervention scale, though these differences were not significant overall.

In terms of techniques used, the Family group employed more contracting, though only at Time 2 was this difference significant. The Multi-focus group used significantly more advocacy than the Family Success Group.

Table 6

Home Intervention Focused on Youth

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	2.09	2.24	2.11
	Failure	2.45	2.83	2.20
Family	Success	2.06	1.83	1.87
	Failure	3.00	3.55	2.44

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	8.23	4.35	.05	.09
Failure/Success (F)	1	.31	.16	.69	
C x F	1	2.18	1.15	.30	
Subjects (S)	19	1.89			
Time (T)	2	1.14	2.13	.13	
C x T	2	.94	1.76	.18	
F x T	2	.10	.18	.84	
C x F x T	2	.16	.30	.74	
S x T	38	.53			

Table 7

Home Intervention - Focus on Parents

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	2.06	1.97	1.69
	Failure	1.61	1.69	1.35
Family	Success	1.68	2.32	1.97
	Failure	2.56	2.72	2.07

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	4.00	2.90	.10	.05
Failure/Success (F)	1	.05	.04	.86	
C x F	1	2.72	1.97	.18	
Subjects (S)	19	1.38			
Time (T)	2	.89	2.69	.08	.02
C x T	2	.22	.66	.52	
F x T	2	.15	.44	.65	
C x F x T	2	.29	.86	.43	
S x T	38	.33			

Table 8

Parental Involvement in Intervention

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	2.32	2.64	2.37
	Failure	2.93	2.87	2.35
Family	Success	2.35	2.77	2.53
	Failure	2.85	3.12	2.98

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	1.98	3.29	.09	.07
Failure/Success (F)	1	.54	.90	.36	
C x F	1	.11	.18	.68	
Subjects (S)	18	.60			
Time (T)	2	.51	4.64	.02	.04
C x T	2	.16	1.52	.23	
F x T	2	.23	2.14	.13	
C x F x T	2	.11	1.05	.36	
S x T	36	.11			

Table 9

School Intervention Focused on School

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	1.00	2.04	1.67
	Failure	1.56	1.52	2.02
Family	Success	1.00	1.19	1.00
	Failure	1.00	1.00	1.00

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	4.13	10.34	.007	.20
Failure/Success (F)	1	.01	.03	.86	
C x F	1	.11	.27	.61	
Subjects (S)	13	.40			
Time (T)	2	.43	1.95	.16	
C x T	2	.32	1.47	.25	
F x T	2	.44	1.99	.16	
C x F x T	2	.20	.93	.41	
S x T	26	222			

In sum, the intervention scales indicate that the two experimental groups followed through on the models in which they were trained. The Family group focused exclusively on the Family, while the Multi-focus group intervened in a variety of social areas. Coinciding with this difference in focus was a difference in strategies and techniques employed. The Family group used more contracting (as is appropriate with the family) while the Multi-focus group used more advocacy. The differences between these conditions will be described in more detail throughout this chapter.

Outcome Measures

The first question posed in the research concerns the relative effects of Multi-focus, Family, and normal court intervention in terms of standard outcome measures (delinquent behavior and school performance).

Correlations

Although assessment of changes in court, police, and school involvement have been broken down into further detail (two variables each for court and police and four variables for school), it is important to determine the degree of correlation between these variables. The variables within each of these larger areas (court, police, and school) are highly correlated. The two police variables are correlated .67, the two court variables are correlated .72, and the four school variables have an average inter-correlation of .65.

In the area of school, it would be difficult to state that four separate changes were observed. In fact, school performance is one larger dimension. Within police and court results, it is misleading to place a lot of significance on a finding that occurs for one of the two variables that does not occur for the other. Because of these high correlations

and these resulting concerns, only one variable will be reported for each area (court, police, and school). This will increase the clarity of the presentation and interpretation of results, with little loss of information. Data on other variables can be found in appendices as noted.

Police

Two variables from police data were analyzed using an analysis of variance. There were no significant differences between groups on police data. The frequency of police contacts showed a main effect for time. As can be seen in Table 10, this was largely accounted for by the high number of contacts at Time 4, the fourth quarter of the pre period which directly preceded the youth's participation into the project. Using Scheffe planned comparisons, it can be seen that any comparison of the pre period to the post period shows a decrease over time. This is true whether the pre period is considered as the one, two, or four quarters preceding entrance into the project.

The means and analysis of variance for the seriousness of these police contacts can be found in Appendix G.

Court

Variables analyzed from court data include the number of court petitions filed and the seriousness of the offenses named in these petitions. Analyses of variance were conducted on these variables.

As in the police data, the number of petitions showed a main effect for time. Time 4 was significantly higher than the other three time periods, as it immediately preceded entrance into the project. All conditions showed a decline from Time 4 to Times 5 and 6. Only the Multifocus condition showed a decline from Times 3 and 4 to 5 and 6. No

Table 10

Police Contacts

	Time Intervals					
	Four Quarters Pre				Two Quarters Post	
Condition	1	2	3	4	5	6
Multi-focus	.00	.17	.33	1.33	.67	.50
Family	.08	.08	.17	1.67	.16	.16
Control	.08	.25	.25	1.83	.25	.08

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.23	.20	.817	
Subjects (S)	33	1.11			
Time (T)	5	12.03	16.34	.0005	.26
C x T	10	.44	.59	.82	
S x T	165	.74			

groups showed a decline from 1 through 4 to 5 and 6. The means and analysis of variance for the number of petitions are presented in Table 11.

An alternative method of examining the differences between groups over time with respect to court petitions is to use change scores. From pre to post, each youth either increased, decreased, or stayed the same in terms of the rate of petitions filed against them. Ten of the twelve Multi-focus youth stayed the same or decreased. Nine of the Family youth and six of the Control youth fell in this category. Conversely, two Multi-focus youth, three Family youth, and six Controls had increased rates of petitions filed against them. A Chi-square analysis indicates that this experimental-control difference is significant at the .10 level (x^2=3.14).

The average seriousness of petitions also shows a strong time effect and the same Chi-square condition difference. Data for this variable are presented in Appendix H.

Self-Report Delinquency

The reports of the youths themselves provide another measure of delinquent behavior and its change over time. Youth were asked about the frequency of 29 delinquent behaviors during the preceding six weeks. Rather than consider each item separately, the average response to all items was calculated. Responses at Time 1 refer to the six weeks preceding entrance into the project. Responses at Times 2 through 4 refer to three periods of six weeks during the project. These data were submitted to a repeated measures analysis of variance.

The results indicated a strong effect for time, with Time 1 significantly higher than any other single time or combination of times. As

Table 11

Court Petitions

Condition	Time Intervals: Four Quarters Pre				Two Quarters Post	
	1	2	3	4	5	6
Multi-Focus	.00	.00	.08	1.33	.16	.33
Family	.00	.08	.00	1.25	.17	.67
Control	.00	.00	.08	1.33	.92	.25

Court Petitions - Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.10	.17	.85	
Subjects (S)	33	.58			
Time (T)	5	10.44	21.81	<0.0005	.32
C x T	10	.68	1.41	.18	
S x T	165	.48			

shown in Table 12, this finding is true across all groups. While Failures had a higher response rate than Successes, this difference was not significant.

School

Repeated measures analyses of variance were used to examine the status of the student (in or out of school), the grade point average of the student, the attendance, and the proportion of credits earned. Because of the high correlations between school variables, only status will be reported.

The status variable showed a main effect for time significant at the .06 level. Upon more careful examination with Scheffe tests, it appears that there was a tendency for students to drop out over time, and that this tendency was not equally displayed by all groups. Again, Times 1-4 refer to four quarters preceding the project, while Times 5 and 6 refer to two quarters after assignment to the project. As can be seen in Table 13, the Control group showed an increase in dropouts from the pre to post period, regardless of whether one, two or four quarters were used as a pre measurement. The Family condition showed this trend when considering all four pre quarters, but not for the pre period of one or two quarters before assignment. Finally, the Multi-focus group did not display this tendency at all. All Multi-focus condition youth were in school at all times until Time 6 when one student dropped out. An analysis of variance conducted on Times 3-6 only resulted in a condition by time interaction significant at the .10 level. Means and analysis of variance for grade point average, attendance, and proportion of credits earned can be found in Appendices I - K. In each case, it appears that

Table 12

Self Report Delinquency
(Average Item Response)

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	.52	.33	.29	.29
	Failure	.84	.47	.37	.71
Family	Success	.74	.54	.38	.29
	Failure	.53	.56	.33	.33
Control	Success	.57	.37	.33	.42
	Failure	.85	.44	.39	.37

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.003	.01	.99	
Failure/Success (F)	1	.26	.70	.41	
C x F	2	.20	.54	.59	
Subjects (S)	29	.37			
Time (T)	3	.61	7.55	.0005	.08
C x T	6	.06	.77	.59	
F x T	3	.02	.26	.85	
C x F x T	6	.06	.78	.59	
S x T	87	.08			

Table 13

School Status

	Time Intervals					
	Four Quarters Pre				Two Quarters Post	
Condition	1	2	3	4	5	6
Multi-focus	1.00	1.00	1.00	1.00	1.00	1.08
Family	1.00	1.09	1.00	1.18	1.18	1.18
Control	1.17	1.08	1.00	1.00	1.17	1.25

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.25	1.14	.33	
Subject (S)	32	.22			
Time (T)	5	.10	2.14	.06	.02
C x T	10	.05	1.12	.35	
S x T	160	.04			

the experimental intervention (particularly the Multi-focus condition) acted to halt or at least slow down a deterioration of school performance.

Summary of Outcome Results

With respect to delinquency related measures, the largest effect found was the high number of police contacts, court petitions, and self-reported delinquent behaviors in the period immediately preceding placement in the project. Differences between groups were minimal.

School behavior was more consistent and showed positive effects for project participation. Generalizing over the four variables analyzed, the Multi-focus group showed the best performance, followed by the Family group, and then the Control group.

Pre-Post Correlations - Predicting Delinquency

Pre and post values were computed for each subject for two police variables (number of contacts and seriousness of contacts), two court variables (number of petitions and seriousness of petitions), and four school variables (status in or out of school, grade point average, attendance, and proportion of credits earned). Time 1 life domain scale scores were also used as a measure of pre conditions. All of these 19 pre and 8 post variables were submitted to a correlational analysis for the purpose of determining the empirical relationships between these variables and the possibilities of predicting future delinquency. The ability to predict future delinquency could be important in screening youth and choosing appropriate targets for diversion.

Unfortunately, predicting further contact with the juvenile justice system appears to be difficult. None of the post levels of police contacts, police seriousness, court petitions, or court seriousness correlated

significantly with any of the pre levels of these variables. For instance, the number of post contacts with the police correlated .07 with the number of pre contacts, -.04 with the seriousness of the pre police contacts, -.13 with the number of pre petitions, and -.03 with the seriousness of the pre petitions.

The number of post police contacts did correlate significantly negatively with pre levels of home involvement and school involvement, as measured by the life domain scales. Post police seriousness correlated negatively with parents' knowledge of school during the pre period. Since these two police variables were highly correlated (.74 for the post period) and yet they did not show any consistent correlations with the same variables, these police-life domain correlations cannot be considered as overly significant, especially given the large number of pre variables in the matrix.

The two post court variables were also highly correlated (.81). These two variables (number of petitions and seriousness of petitions) both correlated with the pre level of the life domain scale measuring the degree to which the parents exercised control over the youth. This Parental Control scale also correlated significantly (.33) with the amount of legal system involvement of the youth, and negatively (-.37) with the amount of positive home change.

School performance was considerably easier to predict. There were a number of legal system and life domain variables whose pre levels correlated with the post levels of school performance. However, none of these correlations were as high as the correlations between the pre and post levels of the school performance variables themselves. The average pre-post correlations of the same school variable was .68. There was only

one instance in which a post school variable had a higher correlation with another pre variable other than itself. The post level of attendance was most highly correlated with the pre level of the proportion of credits earned. In other words, if a student did not pass many of his/her classes in the pre period, he/she did not attend school as often in the post period.

Process Measures

Interviews were conducted with the youth and his/her parents at six week intervals starting at the beginning of project participation and ending at termination. These interviews were designed to assess the content, style, and amount of the intervention as well as the status of life domains of the youth. Responses from the youth and parent were highly correlated, allowing the use of only youth data. Answers to individual questions were grouped using rational and empirical methods (Jackson, 1971) into scales. Scale scores were computed as the average item response to all items on the scale. The items (and consequently the scale scores) had a response range of 1-5. Analyses of variance were then used on the scale scores. For intervention data, this resulted in a 2x2x3 analysis of variance, with the independent variables being experimental condition (Multi-focus and Family), outcome (Success and Failure), and time (six weeks, twelve weeks, and eighteen weeks after the start of the project). For the life domain data, a 3x2x4 design was employed, the differences from the intervention design being the addition of the Control group and an assessment at the beginning of the project measuring the life domains as they existed for the six weeks before the project's initiation.

Intervention

The presentation of the results of the intervention data will be organized around the three independent variables employed in the analyses of variance, condition, success-failure, and time. The scales will then be grouped by content area to note findings within specific areas of intervention.

Condition effects. One purpose of conducting the intervention interviews was to examine the differences between the experimental groups in terms of style and quantity of intervention provided. There was only one significant (.05) main effect for condition in the analyses of variance conducted on the intervention scales. However, it is clear that there were differences in the intervention provided by the Family and Multi-focus groups. By using Scheffe tests, it can be determined that there were condition effects at certain times for certain scales and that the two conditions did not always act similarly over time. In other words, some time effects acted differentially between the two groups, though usually not in a strong enough manner to lead to a significant interaction effect.

In general, the condition differences that were found indicated that the models of intervention in which the groups were trained were followed relatively faithfully. The Family group was higher on the scales relating to the family and contracting, while the Multi-focus group showed greater intervention in other domains (school, employment, and peers) and used more advocacy. These differences will be described in more detail below.

The Family group did more contracting than the Multi-focus group, though only at Time 2 did a Scheffe test show this difference to be

significant (see Table 14). As shown in Tables 6 and 7, the Family group also did more home intervention focused on the youth ($p < .05$) and focused on the parents ($p < .10$). The Family group also scored higher on the Parental Involvement scale than did the Multi-focus group. This difference was significant at the .09 level (see Table 8).

The Multi-focus group was not significantly higher than the total Family group on the Advocacy scale. However, as shown in Table 15, the Multi-focus group was superior to the Family Successes in terms of the amount of advocacy provided.

The Multi-focus group reported considerably higher intervention on the School-School scale (focus on changing the school), yielding the one significant main effect for condition on the intervention scales (see Table 9). The Family group reported virtually no activity in this area. As shown in Table 16, the Multi-focus group also consistently scored higher on the School-Youth scale (school intervention focused on changing the youth), though the overall difference was not significant. However, by Time 3 the Multi-focus Successes were significantly higher than the Family group. One item that did not correlate with scales showed some interesting results when analyzed separately. In response to the question, "How often does the volunteer talk with teachers?" the Multi-focus group consistently reported a higher frequency, and by Time 3 this difference was significant.

Employment intervention is another area in which the Multi-focus showed greater activity, though the difference was not statistically significant. However, there was a statistically significant decrease in employment intervention over time for the Multi-focus Failures and the Family group, while the Multi-focus Successes remained more consistent.

Table 14

Contracting Intervention

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	1.81	2.02	1.83
	Failure	1.35	1.98	1.93
Family	Success	1.87	3.22	2.51
	Failure	2.12	3.70	2.44

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	11.03	4.22	.05	.08
Failure/Success (F)	1	.03	.01	.91	
C x F	1	.49	.19	.67	
Subjects (S)	19	2.61			
Time (T)	2	4.85	5.62	.007	.07
C x T	2	1.70	1.98	.15	
F x T	2	1.41	.16	.85	
C x F x T	2	.29	.34	.72	
S x T	38	.86			

Table 15

Advocacy Intervention

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	2.35	2.65	2.58
	Failure	2.52	2.49	2.03
Family	Success	1.59	2.10	1.82
	Failure	2.30	3.19	2.50

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	.59	.28	.60	
Failure/Success (F)	1	1.72	.83	.37	
C x F	1	4.19	2.01	.17	
Subjects (S)	19	2.08			
Time (T)	2	1.15	2.56	.09	.02
C x T	2	.45	1.00	.38	
F x T	2	.27	.60	.55	
S x T	38	.45			

Table 16

School Intervention Focused on Youth

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	1.45	2.36	2.81
	Failure	1.62	2.26	2.37
Family	Success	1.54	2.03	1.70
	Failure	1.23	1.48	1.75

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	3.54	2.47	.14	
Failure/Success (F)	1	.50	.35	.57	
C x F	1	.07	.05	.83	
Subjects (S)	15	1.43			
Time (T)	2	2.38	5.70	.008	.09
C x T	2	.56	1.35	.28	
F x T	2	.07	.16	.86	
C x F x T	2	.32	.77	.47	
S x T	30	.42			

Success-Failure effects. A second purpose for the intervention survey was to assess the relationship between the intervention provided the youth and the case outcome. In general, the levels of intervention were not strongly related to the outcome of the case. Though there were no main effects for Success-Failure, the Legal System Intervention scale came the closest to producing one, yielding a .07 level of significance (see Table 17). This showed that volunteers whose target youth were Failures intervened more in the legal system, as would be expected. At Time 3 this difference was significant at the .05 level. Failures also increased on this scale over time, while the Successes remained relatively constant, leading to a significant interaction effect.

Time effects. While the condition and Success-Failure variables directly relate to the questions posed in this research, the time variable acts to give further description to the account of the intervention provided. In general, the amount of intervention provided the youth decreased over time. Amount of Time, Peer Involvement (especially the Multi-focus group and the Successes), Recreation, Home-Youth (especially the Family group and the Failures) all showed significant decreases from Times 1 and 2 to Time 3. An example of this trend can be seen in Table 8 which provides data on the Parental Involvement scale. Data on Amount of Time, Peer Involvement, Recreation, and Employment can be found in Appendices L - O.

While there was an overall decrease over time, there is also considerable evidence that the greatest amount of intervention took place in the middle of the intervention period, measured at Time 2. Time 2 was significantly greater than Times 1 and 3 for the scales Home-Youth, Home-Parent (especially in the Family group), Parental Involvement (not for

Table 17

Legal System Intervention

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	1.04	1.21	1.12
	Failure	1.21	1.59	1.53
Family	Success	1.09	1.08	1.05
	Failure	1.16	1.04	1.73

Source	Df	MS	F	Prob.	ω^2
Condition	1	.13	.37	.55	
Failure/Success (F)	1	1.27	3.62	.07	.07
C x F	1	.03	.08	.79	
Subjects (S)	19	.35			
Time (T)	2	.29	3.61	.04	.03
C x T	2	.25	3.13	.06	.03
F x T	2	.29	3.54	.04	.03
C x F x T	2	.16	1.95	.16	
S x T	38	.08			

Successes), Employment, Contracting (especially in the Family group), and Advocacy (especially in the Family group). Most of the superiority of Time 2 was accounted for by a decrease from Time 2 to Time 3, as opposed to large increases from Time 1 to Time 2. However, Home-Parent, Peer Involvement, Contracting (see Table 14), and Advocacy (see Table 15) all showed significant increases from Time 1 to Time 2, for at least some of the experimental conditions or Success-Failure groups.

Other intervention scales actually showed an increase over time. Scheffe tests indicated that Time 1 was significantly lower than Times 2 and 3 for School-Youth (accounted for by an increase by the Successes in the Multi-focus group), School-School (also accounted for by the Multi-focus Successes), Legal Involvement (accounted for by Failures) and Contracting (accounted for by the Family condition). Table 16, which presents School-Youth data, illustrates this trend.

Intervention effects by content area. While the preceding report of results provides an examination of what time, condition, and Success-Failure differences were found, it is also useful to look at specific areas of intervention and summarize these results.

Scales concerning the school showed higher levels for the Multi-focus condition than for the Family condition. Intervention as assessed by both the School-Youth and School-School scales increased over time, especially from Times 1 to 2.

Scales assessing home intervention (Home-Youth, Home-Parent, and Parental Involvement) showed that students in the Family condition were more involved with the family than were the students in the Multi-focus condition. The majority of this involvement came during the middle of the intervention period.

General intervention level scales (Amount of Time, Recreation, and Peer Involvement) showed decreases over time, especially from Times 1 and 2 to Time 3. Employment also showed a decrease, though the Multi-focus Successes remained stable. Legal System Intervention increased, but only for the Failures.

With respect to the intervention techniques used, the Family students used more contracting, while the Multi-focus group did more advocacy (though the Family Failures also practiced advocacy). The majority of both contracting and advocacy was used in the middle of the intervention period.

Life Domain Scales

Life Domain scales generally did not reflect changes in the various areas assessed. The changes that did occur were somewhat inconsistent with respect to the three independent variables, condition, success-failure, and time. The effects will be discussed for each of these variables individually, with the interactions also noted. Following this, scales will be grouped by content areas and the results noted.

Condition effects. The differences between intervention groups in terms of impact on the various life domains assessed will be examined first. The Life Domain scales showed no main effects for condition when submitted to the analyses of variance. However, some effects for condition can be identified by looking at what conditions were responsible for some of the time effects found and by looking for interactions with the two other variables, time and success-failure.

As shown in Table 18, the experimental conditions (Multi-focus and Family) were responsible for a decrease on the Home Involvement scale while the Controls remained constant over time. While all groups

Table 18

Home Involvement

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	2.29	2.17	2.10	2.20
	Failure	2.58	2.32	2.24	2.32
Family	Success	2.61	2.50	2.43	2.37
	Failure	2.66	2.59	2.52	2.22
Control	Success	2.60	2.43	2.18	2.21
	Failure	2.24	2.67	2.63	2.57

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.55	.58	.57	
Failure/Success (F)	1	.50	.52	.48	
C x F	2	.08	.08	.92	
Subjects (S)	30	.96			
Time (T)	3	.23	2.83	.04	.11
C x T	6	.10	1.19	.32	
F x T	3	.08	1.00	.39	
C x F x T	6	.18	2.15		
S x T	90	.08			

reported some positive change in the home situation, only the Controls showed a significant increase (due to the large changes in the Control Failures).

Three scales dealing with school showed some positive effects for the Multi-focus condition. In School Involvement, there were no significant time, condition, or interaction effects. However, Scheffe tests showed that the Multi-focus group did increase from Times 1 and 2 to Times 3 and 4. This change is seen in Table 19. The Positive School Change scale yielded a condition by Success-Failure interaction effect significant at the .07 level (see Table 20). This was caused by high levels of positive change reported by the Failures in the Control condition. While the Multi-focus and Family Successes reported more positive change than did the Control Successes, the Control Failures reported significantly more positive change than did the experimental Failures. In the area of Parent's Knowledge of School, the Multi-focus group reported significantly more parental knowledge than the Family group at Times 1, 3, and 4. The Multi-focus Successes also reported significantly more than the Control and Family Successes over all time periods.

The Family group showed a significant decrease in Parental Knowledge of Friends over time, while the other two conditions showed insignificant increases, though neither main effects nor an interaction were found for this scale. Consistent with this finding were the Scheffe test results on the Positive Use of Free Time scale which showed a significant decrease for the Family group from Times 1 and 2 to Times 3 and 4, with no such decreases found for the other two groups.

Success-Failure effects. To a large extent, the outcome of the case was not correlated with other domains of the youth's life assessed

Table 19

School Involvement

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	3.52	3.58	3.77	3.73
	Failure	2.99	3.11	3.32	3.16
Family	Success	3.14	3.28	3.19	3.55
	Failure	3.52	3.61	3.32	3.55
Control	Success	3.53	3.56	3.60	3.37
	Failure	3.43	3.67	3.71	3.81

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.47	.56	.58	
Failure/Success (F)	1	.08	.09	.76	
C x F	2	.15	1.81	.18	
Subjects (S)	26	.84			
Time (T)	3	.16	1.48	.23	
C x T	6	.10	.94	.47	
F x T	3	.01	.07	.98	
C x F x T	6	.10	.92	.48	
S x T	78	.11			

Table 20

Positive School Change

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	3.37	3.26	3.40	3.52
	Failure	3.20	2.96	3.07	2.86
Family	Success	3.27	3.28	3.18	3.25
	Failure	3.10	3.45	3.22	3.10
Control	Success	3.27	2.99	3.05	3.05
	Failure	3.34	3.50	3.61	3.72

Source	Df	MS	F	Prob.	ω^2
Condition	2	.13	.22	.80	
Failure/Success (F)	1	.01	.02	.89	
C x F	2	1.61	2.85	.08	.06
Subjects (S)	26	.57			
Time (T)	3	.00	.01	.998	
C x T	6	.06	.30	.94	
F x T	3	.05	.25	.86	
C x F x T	6	.17	.84	.55	
S x T	78				

through the life domain interviews. The only significant effect for Success-Failure was predictably on the Legal System Non-Involvement Scale where Successes were considerably higher (less involved with the legal system) than the Failures (see Table 21).

While there were no significant main effects or interactions, the Failures dropped significantly at Time 4 on the Positive Use of Free Time, according to Scheffe tests.

The Control Failures in particular showed an interesting pattern of reporting generally positive situations in the home and school. For instance, while all other groups reported decreases in Home Involvement over time (most of these decreases being significant), the Control Failures reported a significant increase. The increase in Positive Home Change was almost entirely a result of the significant increase in the Control Failure group (see Table 22). As shown in Table 20, this same Control Failure group also reported significantly more Positive Change in the School than did the other Failures and the Control Successes (even though the other Successes reported more positive change than did the other Failures).

Time effects. The time variable allows a description of change in the life domains. In the area of the home, the findings were somewhat inconsistent. Home Involvement showed a decrease over time, though the Control and Failure groups did not display this tendency. As seen in Table 18, the Failures in the Control group actually increased significantly from Time 1 to Times 2 through 4. The Control Failure group was also responsible for an overall increase over time on the scale measuring Positive Home Change (see Table 22). This group scored the lowest of the six Condition-Success-Failure combinations at Time 1. However, it

Table 21

Legal System Noninvolvement

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	3.86	4.29	4.37	4.42
	Failure	3.72	3.86	3.78	4.07
Family	Success	4.31	4.77	4.49	4.46
	Failure	4.10	3.98	4.43	3.46
Control	Success	3.68	4.34	4.60	4.39
	Failure	3.65	4.26	4.07	4.02

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.48	1.01	.38	
Failure/Success (F)	1	4.97	10.41	.003	.08
C x F	2	2.04	.43	.66	
Subjects (S)	30	.47			
Time (T)	3	1.12	4.05	.009	.05
C x T	6	.47	1.70	.13	
F x T	3	.30	1.09	.36	
C x F x T	6	.27	.97	.45	
S x T	90	.28			

Table 22

Positive Home Change

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	3.06	3.19	3.26	3.19
	Failure	3.22	3.02	3.28	3.22
Family	Success	3.11	3.16	3.15	3.32
	Failure	3.03	3.17	3.33	2.88
Control	Success	3.07	3.05	3.20	3.16
	Failure	2.82	3.52	3.44	3.56

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.08	.36	.70	
Failure/Success (F)	1	.07	.31	.58	
C x F	2	.27	1.18	.32	
Subjects (S)	30	.23			
Time (T)	3	.32	3.26	.025	.03
C x T	6	.12	1.18	.32	
F x T	3	.08	.80	.50	
C x F x T	6	.24	2.41	.033	.04
S x T	90	.10			

was the highest at the other three time periods, causing a three-way interaction effect.

Other scales which registered significant decreases over time include Parental Control (especially the Failures in the Family and Control groups), and Job Desirability (see Appendices P - Q). While there was no time main effect on Positive Change in the Use of Free Time, Scheffe tests showed a decrease for the Failure group. Although there was a main effect for time on the scale, Legal Non-Involvement, this actually indicates a reduction of activity with the legal system (see Table 21). This scale and Positive Home Change were the only scales indicating increases over time.

Effects by life domain content area. The preceding presentation of life domain results has been organized by the independent variables used, condition, success-failure, and time. Alternatively, the scales can be grouped by their conceptual relationship to each other.

Home Involvement and Parental Control showed decreases over time, while Positive Change in the Home showed an increase. However, this increase was caused by the reports of the Control Failures.

School scales (School Involvement, Positive Change in School, and Parental Knowledge of School) showed a slight superiority for the Multi-focus condition, especially for the Successes within the Multi-focus condition. This coincided with the more positive school records for the Multi-focus group.

Two scales dealing with friends and free time (Parental Knowledge of Friends and Positive Use of Free Time) showed decreases over time. The decrease in Positive Use of Free Time was the result of changes in the Failure group.

Grouping the three scales measuring positive changes together (home, school, and free time) an interesting pattern emerges. The Control Failures reported the highest levels of positive change on the school and home positive change scales, while Failures in general decrease over time on the Positive Change in the Use of Free Time.

Summary of Process Results

The Intervention scales indicated that the volunteers in the two intervention conditions, Multi-focus and Family, followed through on the models in which they had been trained. The Family group was particularly high on scales involving the family and contracting.

The Multi-focus group was higher on scales involving school, employment, and advocacy. Most of the main effects were for time. These indicated a general decrease in the amount of intervention provided over time. Time 2 showed the highest levels of intervention. In general there was little correlation between the type and level of intervention provided and the outcome (success-failure) of the case.

The scales assessing the life domains of the youth showed a tendency to become less involved in several areas over time, though these findings were not consistent. The most noteworthy condition effects showed a greater involvement and more positive change in the school for the Multi-focus group. The Successes scored higher on the Legal System Non-Involvement Scale. The Control Failures reported a positive situation with respect to several of the areas assessed.

CHAPTER IV

DISCUSSION

This study was designed to expand the existing knowledge of the effectiveness of using student volunteers to provide intervention to youth diverted from the juvenile justice system. The particular issue examined was the relative efficacy of focusing the intervention on one important area of the youth's life, the family, as opposed to providing intervention which impacts on several areas of the youth's life. Youth were randomly assigned to these two conditions or to a control group which received treatment as usual by the court. Two sets of questions were used as a basis of comparison of these different experimental conditions. First, what were the effects of these interventions on several socially accepted measures of the youth's behavior (amount of delinquent behavior, further juvenile justice system involvement, and school performance)? Second, process measures were used in order to assess the components of the intervention provided and to measure the effectiveness of these interventions on several life domains of the youth as well as the outcome of the case. The results of these two areas of questions will be examined, followed by a discussion of the implications and conclusions to be drawn from these results.

One point can be made which is relevant to the discussion of all of the results. The small sample sizes made it difficult to obtain significant results. While there were 12 youth in each condition, the split into success-failure within each of these conditions brought the cell

sizes down to the range of 4-8. Though missing data were not a large problem, it occasionally made these cells even smaller.

Outcome

There were no statistically significant differences among groups with respect to police data. The strongest result from the analysis of the police data was a time effect. Time 4, the period directly preceding the youth's referral to the project, was markedly higher than any other period or combination of periods for both the frequency and seriousness of police contacts. This is not at all surprising, since the referral to the project was the result of delinquent behavior. The strength of this Time 4 effect overshadowed any other time or condition effects. However, its significance is minimal, as it was simply an artifact of the project and research design. In almost all cases, the youth must have had a police and court contact in Time 4 in order to have been referred to the project. Thus, while all groups showed a decline from the pre to post periods, the large number of contacts at Time 4 resulted in an inflation of the pre period, rendering the pre-post difference open to interpretation. On one hand, it can be speculated that the youth would have continued delinquent behavior at the same rate as during Time 4 if it were not for the intervention and that therefore the decline is meaningful. On the other hand, Times 5 and 6 (during the project) were actually higher (though not significantly) than the other three pre periods (1, 2, and 3) and that therefore the project had a negative effect if any. The use of the Control group showed that the project had essentially no effect different from normal court treatment, though the effect of the court treatment as compared to no treatment at all cannot be determined from this research.

However, previous results showed that the project youth do significantly better than a control group which received no treatment at all (Davidson, et al., 1977).

As in any research, the conclusions drawn can only be as strong as the reliability of the data on which they are based. The police data was difficult to reliably collect. Eleven different police departments were visited in order to inspect records. In addition, the records of several large stores were examined for their records regarding shoplifting cases. Each police department and store had their own system of record-keeping. Variations also appeared to occur in the accuracy and completeness of the records.

It is also entirely possible that youth had contacts with other police departments which were not surveyed. Resources limited the number of departments that could be contacted. Consequently, the data is probably at least somewhat incomplete. This was confirmed by the fact that more court petitions were obtained than police contacts. Since virtually every petition is preceded by a police contact and many police contacts do not result in court petitions, the opposite result would be expected if police data were completely accurate. Another indication of this reliability problem is the fact that every return visit to a police department for updates on police contacts resulted in finding more contacts for the periods previously recorded.

Despite these concerns with reliability, there are reasons for examining police data. Any problems with the collection of police data should affect each group approximately equally. Furthermore, the high correlation between police and court data supports the validity of the police data.

Condition differences on the court analysis of variance could only be obtained by using Scheffe tests to discover differential time effects for the conditions. When looking at the number of petitions, the Multi-focus group is the only group that showed a significant pre-post decline when considering two pre quarters (3 and 4) instead of only Time 4 as the pre measurement. This was a small difference, but it was convergent with an analysis of change scores. When the rate of pre petitions was compared to the rate of post petitions, the Multi-focus group had the highest number of youth whose rate declined or stayed the same. The experimental-control difference was significant. This difference between conditions on change scores was replicated when using seriousness of court petitions as the dependent variable. The fact that both variables resulted in exactly the same number of youth declining or increasing in each condition is further evidence of the large correlation between these two court variables. Court data replicated the findings from police data with respect to time effects. Again Time 4 was very high for both the number and seriousness of court petitions. This was to be expected since the court referred youth to the project as a result of court petitions and Time 4 directly preceded this referral.

While the police and court data acted to show official delinquency and juvenile justice system penetration, the method of self-reported delinquency was designed to assess the actual frequency of delinquent behavior. While the record data had the advantage of representing society's actual measure of delinquency (and its reaction to it), the self-report method allowed a measure of delinquent behavior that was not subject to the variables that affect the entrance of the youth into the actual juvenile justice system. The evaluation of any intervention's

effectiveness should include both measures of delinquency in order to strengthen any conclusions drawn.

In the case of this experiment, the different intervention groups did not report different rates of committing delinquent behavior. There was a time effect, with Time 1 showing the highest rates of delinquent behavior. There are at least three different possible explanations for this effect. Time 1 assessed the amount of delinquent behavior which had occurred during the six weeks preceding referral to the project. It is possible that the youth were actually committing more delinquent acts during this time. Certainly the high number of police contacts and court petitions during the same time period would indicate this. On the other hand, it is possible that the youth were not committing an extraordinarily high amount of delinquent behavior during this time, but that they knew that the project was aware that they had committed some delinquent behavior during this time. The youth's awareness of the project's knowledge would tend to minimize the amount of under-reporting which might otherwise occur during this period. This possibility of under-reporting is the third explanation of the time effect. During the project, the youth were probably especially cautious about admitting to delinquent behavior. While the interviewers stressed that the information was confidential and that nothing they admitted to could be held against them, there was at least some social demand to appear to be staying out of trouble. In fact, it is likely that all three of these effects were operating at once to cause a Time 1 effect. Youth probably committed more delinquent behavior directly preceding referral to the project, they knew that the project personnel were aware of it, and they tended to under-report during a period when they were supposed to be staying out of trouble.

It is somewhat surprising that there was no effect for success-failure on the self-reported delinquency. In other words, there was not a great deal of correlation between contact with the police and/or court while in the project and the amount of delinquent behavior reported during this time. It would not be expected that the relationship would be perfect. A person was designated as a failure for having any justice system contact, while the self-reported delinquency was a more quantitative estimate of delinquent behavior. Perhaps the relatively low sample size kept the tendency (which was in the expected direction) from becoming a statistically significant effect.

The literature has provided a great deal of inconsistency with respect to the empirical relationship between official and self-report delinquency (Blakely, Kushler, Parisian, & Davidson, 1979). Even within the Adolescent Diversion Project, the findings have been mixed. The present research and the Illinois Project indicated no relationship between self-reported delinquency and police and court outcomes. On the other hand, in every other phase of the Michigan State University Adolescent Diversion Project, there has been a significant effect for Success-Failure on the self-reported delinquency measure.

The basic conclusion from these various measures of delinquency is that the intervention conditions did not differ greatly with respect to the amount of delinquency. The court data showed some superiority for the experimental groups, especially the Multi-focus group. The Family group had the greatest percentage of Successes (youth with no police or court contacts during the project). Sixty-seven percent of the Family group were Successes, as compared to 58% of the Multi-focus group and 42% of the Control group. None of these differences are large enough

to make any absolute statements about differences in delinquency between groups.

The school results showed the clearest, most consistent, and most positive effects for the experimental intervention. The Multi-focus group consistently showed superior performance, followed by the Family and then the Control condition. This superior performance did not take the form of improved school performance as a result of project participation. Instead, the project (especially the Multi-focus condition) acted to halt a steady deterioration trend. As with other data, condition differences were not observed as main effects, but can be detected by observing differences in time effects.

For instance, the Control group showed a significant increase in the number of dropouts from the pre to post periods. The Multi-focus group on the other hand, had no dropouts at any time period with the exception of one during Time 6. While there was an overall decline in grade point average over time, the two experimental groups (Multi-focus and Family) had a slight increase in grade points when considering the two periods directly preceding the project (Times 3 and 4) to the grades received while in the project. Attendance and proportion of credits earned showed a similar pattern.

The strength of these results lies in their consistency across school variables. Given the high correlation among school variables, a finding in only one variable would be difficult to interpret. In almost every case, the Multi-focus group showed the best performance, followed by the Family condition and finally the Control group. This consistency was to be expected in such highly correlated variables. The strength of these findings is further increased by the fact that

they strongly replicate the results found in earlier phases of the project (Kantrowitz, 1979; Davidson, et al., 1977).

The positive effects shown by the Multi-focus condition provide an encouraging example of convergent data across a process. The students in this group were trained to provide intervention in the school, focusing both on changing elements of the school system itself and the youths fit and behavior within it. The intervention interviews show that the students followed through on this training and provided more school-oriented intervention than did students in the Family condition. Furthermore, youth in the Multi-focus group reported more school involvement and positive change in the school than did youth in the Family group. Thus, a progression can be observed from training to intervention to results (both in terms of school records and the reports of the youth themselves).

It also appears that simply participating in the project had some beneficial effect with respect to school. The Family group, though they were trained only to intervene with the family, was superior to the Control group in terms of all four school variables. It appears that the issues addressed in the home situation included some focus on the school. It is also possible that there was a generalizing of effect from home to school.

Given that the school effects were the most dramatic of the outcome results, it is interesting to note what other variables were related to school performance. As noted earlier, the four school variables were highly related and consistent over time. Any pre or post school variable was significantly correlated with any other pre or post school variable. Several life domain scales were also related to school performance. Not surprisingly, School Involvement was significantly

correlated with three of the four school variables. Peer Involvement was negatively correlated with three of the four school variables. Finally, Home Involvement was correlated with two of the four variables. Youth who were involved with their homes and school did well in school, while youth who spent a lot of time with friends did poorly.

The timing of the overall general decline in school performance provides some data for speculation about the relationship between the school and delinquency. Most of the decline in school attendance and grades occurred between Times 2 and 3. The poorer attendance and grades were followed, not surprisingly, by a decline in the proportion of credits earned, which occurred between Times 3 and 4. All of this decline preceded the youth's trouble with the legal system which occurred in Time 4. It would be convenient to conclude that trouble with school caused delinquent behavior, supporting the literature which has stated that the school contributes to delinquency (Elliot & Voss, 1974; Polk & Schafer, 1972).

However, the relationship established here between school and delinquency was only correlational, not causal. It is possible that school behavior and delinquent behavior were both related to a third factor. Furthermore, even though the specific incident for which the youth was referred to the project occurred during Time 4 (in most instances), there is no way of directly relating it to delinquent behavior itself, since there were no measures of self-reported delinquency earlier than this. It is possible that the delinquent behavior started (or increased) at the same time as the decline in school performance, or even preceded this decline. Given the fact that only a small proportion of delinquency behavior results in actual police contact and court

petitions, the behavior itself could have preceded the specific system contact by any length of time. In other words, the laws of probability would indicate that much delinquent behavior occurred before the youth was actually caught and sent to court. Without knowing the extent to which this lag effect operated, it could also be concluded that delinquent behavior caused a decline in school performance. In any case, it appears that the two are related, supporting the correlational evidence presented by Kelly (1974).

It should be noted that outcome data was restricted to the period of time during which the youth was in the project (or not in the project in the case of the Control group). While this is useful information, the question of the ultimate significance of the project in terms of its impact on the youth can only be answered by looking at what happens to these youth over a longer period of time. Follow-up data will be collected by project staff in order to make such an assessment. These more definitive data will be available in one to two years.

Process Interviews

Intervention

The intervention interviews were designed to answer three questions. First, how did the two intervention conditions differ in terms of what intervention was actually provided? Second, how much intervention was done in various areas and how did this change over time? Third, how did the levels and focus of the intervention relate to the outcome of the case? The majority of the effects found were related to time. Some condition effects and very few success-failure differences were found.

The differences between conditions in terms of intervention were positive from the standpoint that the students in the two conditions

provided the styles and contents of intervention in which they had been trained. The Family group emphasized changing the home situation, focusing on both the youth's and parent's role in this change. The Family intervention required considerable involvement on the part of the parents, and the students in this condition worked to keep them involved throughout the intervention. The fact that the Family group did more contracting is also consistent with the differences in emphasis between the two intervention conditions.

The Multi-focus condition also followed through on their training, demonstrating a focus on a variety of areas. Intervention in the school was especially high. Intervention in the school with a focus on changing the school yielded the one main effect for condition. The Family group did virtually nothing in this area, as they were instructed not to. The fact that students in the Multi-focus condition talked more to teachers furthers this finding. The Multi-focus group also did more school intervention focused on changing the youth, but this difference was not as great. It was possible for the Family condition to include school behavior and performance as a home issue. For instance, a contract between the youth and parents could specify that the youth had to do more homework in order to earn privileges.

Particularly encouraging was the correlation between school intervention and school performance. While this was not calculated directly, it is clear that the Multi-focus group did significantly more school intervention and that the youth in the Multi-focus condition had significantly higher school performance than the youth in the Family or Control conditions.

The Multi-focus group did not do more advocacy than the Family group as a whole. However, they did use more advocacy in their intervention than did the Family Successes. The Family Failures did some advocacy, probably in response to the youth's trouble with the legal system. Any effort regarding the youth's legal troubles would probably be registered on the advocacy scale. Thus it appears that the Multi-focus group used advocacy in response to their training, while the Family group only used advocacy as a response to a crisis.

The Successes in the Multi-focus group were even more different from the Family group than were the Multi-focus Failures. This was particularly true on the school and employment scale where the Multi-focus Successes were high. It would be tempting to conclude that if the student followed through on the model provided in training and supervision, the youth was likely to remain out of contact with the legal system. However, another interpretation is that the Failures turned their attention from these areas and were forced to use more crisis intervention, usually focusing on the legal system. In a sense, intervention in such areas as employment and school were considered (by some students) more as luxuries that can be addressed after the problems with delinquent behavior were dealt with. Unfortunately, in some cases very little was actually accomplished that would change those conditions that are related to delinquency, simply because the student focused on only the delinquency itself. Students were encouraged to remain aware and attend to other needs as well, but it appears that this advice was not always heeded.

The second intervention question focused on the relationship between the intervention scales and the outcome of the case (as

designated by Success-Failure status). With some exceptions, very little can be said about what kind or amount of intervention was related to a positive outcome. The strongest relationship between an intervention scale and the case outcome occurred with intervention in the legal system. Not surprisingly, students working with Failure youth intervened significantly more in the legal system. This difference increased over time, as more of the eventual Failures became involved in the legal system. It can be hypothesized that in this case, the Success-Failure status was the causal factor in raising the level of legal intervention. In other words, the intervention was a reaction to the outcome, instead of a cause of the outcome.

There were a few other interesting differences between the Successes and Failures. Failures declined in the areas of peer involvement and employment intervention over time. Again this may be a case of the reduction of intervention in marginal areas as a result of increased attention on the legal system. While Successes declined on Parental Involvement, the Failures maintained their contact and involvement with the parents. The Failures had a greater need to deal with the parents, enlisting their assistance in dealing with the problem and the legal system, asking for their advice, and generally discussing the situation with the parents.

It would be useful to be able to determine what interventions led to a positive outcome. However, the differences observed all appear to be reactive, in that the intervention that occurred was a result of the involvement with the legal system. Perhaps looking for a positive correlation between the amount of intervention and the outcome of the case is a misleading exercise. In some cases, the provision of appropriate

intervention may actually be associated with further delinquent behavior. What makes the overall relationship between intervention and outcome difficult to detect is another dynamic. The youths that ended up being Successes often had few identifiable needs in the first place. Therefore, less intervention was provided as less was needed. Those youth that were Failures had correspondingly greater needs for intervention. Conceivably these two relationships, greater intervention leading to positive outcome and positive outcome youth needing less intervention acted to balance each other out, leaving no net effects for outcome on the intervention scales.

Finally, time effects described levels of intervention provided over time. The overall conclusion from the time effects is that less intervention was provided as time went on. While this was not always the case, it can be seen most clearly on the scale, Amount of Time, which showed a dramatic fall, particularly between Times 2 and 3 (during the last six weeks of the 18 week intervention). The volunteers simply gave less attention to the youth as time went on, despite the weekly supervision (during which the students had to account for six to eight hours of weekly contact with the youth) and weekly progress reports (which required the same accounting). Different areas of the intervention (as assessed by different intervention scales) showed drops for different groups, so it is not possible to make any general statements that the Multi-focus group continued or that Successes persevered. Such differences occurred, but only with respect to specific scales. Some of these differences will be discussed specifically.

There were three predominate time effects. On some scales, there was a decline from Times 1 and 2 to Time 3 (as on Amount of Time). In other cases, there was an increase from Time 1 to Times 2 and 3. Finally

there were the scales on which Time 2 was significantly higher than Times 1 and 3. In each of these three time effects, Time 2 was always on the high side of the time difference. Parental involvement was one of the scales showing the decline over time. This decline was manifested in the Multi-focus and Success groups. It is likely that students in the Multi-focus group were not trained and encouraged in supervision sessions to keep the parents involved. The Successes probably did not have as much need to deal with the parents as did the Failures. It has been observed by supervisors that students working with youths that got in trouble often began to sympathize with the parents and take their point of view.

The scales for which there was an increase from Time 1 to Times 2 and 3 represent areas of intervention that take time to develop. For instance, the two scales assessing school intervention started at low levels, then increased and maintained over the middle and end of the intervention. This increase was accounted for by the intervention done by the Multi-focus condition (especially the Successes in this group). It would be exptected that the Multi-focus group, who were trained in school interventions, would show this increase while the Family group remained relatively stable. A similar increase over the course of the intervention was displayed by the Family group in the area of contracting. Again, contracting was emphasized in the Family condition, but the preparation that preceded the actual negotiation of the contract resulted in a low level at the beginning of the intervention. Finally, the increase in the area of legal system intervention was expected as more youth got in trouble over the course of their project participation.

Most of the scales showed that the greatest amount of intervention occurred at Time 2. Several of them showed that 2 was significantly

higher than 1 and 3. This is convergent with the observation of several supervisors that the intervention provided seemed to come in a cycle. During the early phase of the intervention, the student spent much of the time getting to know the youth. At this point, the Amount of Time and Recreation scales already showed high levels. Early in their involvement students spent considerable time in recreational activities, as a means to informally get to know the youth. However, most of the work of the intervention had not yet begun. The scales measuring the content areas of intervention (such as the home and school scales) showed that a great deal of intervention took place in the middle stage of the intervention period. At this point, the student had assessed the needs and desires of the youth and the significant others. The student had had time to devise strategies for dealing with the issues raised and had discussed them with the supervision group. Usually, the student was anxious to actually try to accomplish the changes that had been planned. This is typically the phase of greatest accomplishment.

Time 3 often showed a decline in intervention. If the effects expended in Time 2 had been successful, the need for continued intervention was often minimal. This third phase then became a period characterized by monitoring of existing changes. If the intervention attempted in the second phase had not been successful, the student often became frustrated and felt helpless. The student often felt as if the intervention techniques would not work or that he/she was not capable of using them properly. Furthermore, students did not want to begin major intervention efforts shortly before termination of their involvement with the youth. Therefore, Time 3 scale scores often showed reduced

levels of intervention. These findings coincide with earlier research on the effects of this program on the students themselves. Kantrowitz (1979) found that the enthusiasm and positive attitudes towards the program and the youth were dampened by the realities faced in actually trying to affect change and the discouragement felt in the case of an unsuccessful effort.

Life Domain Interviews

The life domain interviews were designed to assess the effects of the intervention on several areas of the youth's life. This was information obtained from the youths themselves and not obtainable through any other means. The scales indicated self-reported change in a variety of areas. The analyses also allow an examination of what conditions in these domains (home, school, employment, etc.) were associated with further involvement with the juvenile justice system.

The home and family life was a prime area of concern, especially with respect to the Family condition. It has been shown that the Family group did more intervention in the family, but that there was little if any beneficial effect in terms of delinquent behavior. The family scales allow an examination of whether or not the family intervention at least had an impact on the family itself. There was increasing positive home change over time for the Family group, but not as much as that reported by the Control Failures who were responsible for the overall increasing time effect. In terms of family involvement, there was actually a decrease over time for both the Family and Multi-focus groups, while Control Failures again increased.

Other home-related scales were more directly concerned with parental practices and knowledge. Parental Control decreased over

time, especially in the Family and Control Failures. Parental Knowledge of Friends decreased over time in the Family group. This could be accounted for by the coinciding decrease in family involvement. It could also be in response to contracting procedures in the Family condition. Parents often wanted to know about or restrict the peer relationships of the youth as a condition of a contract. However, the students responded by telling the parents that such activities were not monitorable and thus unacceptable as a condition of contracting. These parents may have become more accepting of the fact that they could not always know what their children were doing or who they were with.

In general, the family life domain scales do not show that the family condition had any significant effect on the condition or involvement of the family. This makes it difficult to come to any conclusions about the appropriateness of family intervention as a means of preventing or reducing delinquent behavior. The intervention in this condition was focused correctly, but the changes in the family did not occur. It is possible that if the changes had occurred in the home, there would have been a corresponding effect on the outcome measures. In other words, it is unclear if the lack of outcome effects in the Family condition were the result of the unimportance of the family situation with respect to delinquency or because the change in the home was never really accomplished. One clue to this is the fact that Success-Failure status did not appear to be related to scores on either the Positive Home Change or Family Involvement scales. This would indicate that the home situation (as measured by these scales) was unrelated to the probability of having further contact with the legal system.

The school domain showed more change as a result of project participation. The experimental (Multi-focus and Family) Successes reported more positive change in the school than did the Control Successes. However, the Control Failures reported extremely high levels of positive change, considerably higher than the Experimental Failures. The Multi-focus group in particular reported positive school results. They became more involved with school over time while the Control and Family groups did not. This increase in involvement is particularly interesting in light of the fact that school performance (in terms of outcome measures) actually showed a steady decline over time, except for the Multi-focus condition which was more stable.

Parents of youth in the Multi-focus condition knew more about school than did parents of youth in the Family condition. This can be attributed to two factors. First, as noted above, these youth were actually more involved in school, so there was more for the parents to be aware of. Second, students in the Multi-focus condition attended more to school and probably acted to make the parents more aware.

This general superiority of the Multi-focus condition on the life domain school scales was convergent with both the levels of intervention provided in the area of school and with the outcome results which showed a positive effect for participation in the Multi-focus condition. The fact that a positive school situation was reported using two different methods (records and self-report) provides convergent validity for the life domain interview school scales.

The area of free time registered some changes for the Family group. They declined in terms of the positive use of free time and parental knowledge of friends. Again, this latter time effect could be the

result of discussion between parents and students who attempted to make the parents aware of the difficulty in monitoring free time behavior.

The final life domain registering any effects was involvement in the legal system, which declined over time. This decline was the result of high levels of involvement at Time 1. This was to be expected because Time 1 measured the degree of legal system involvement during the six weeks preceding referral to the project, a time when the youth had to have had legal system involvement in order to have been referred. Successes were less involved with the legal system than were Failures, which was to be expected. The high levels of Time 1 involvement and the Success-Failure difference both act to provide convergent validity for this scale. Again, two different methods of gathering information on the same variable provided similar results.

The Legal Non-Involvement Scale registered the strongest Success-Failure difference of any of the life domain scales. The only other interesting Success-Failure finding is that the Failures make less positive use of free time by Time 4.

The lack of Success-Failure differences on life domain scales would seem to indicate that delinquent behavior and involvement with the juvenile justice system were unrelated to other areas of the youth's life. The situations in the home, school, with friends, and employment did not differ for those who had further legal system contact and those who did not. One partial explanation for this concerns the interview responses given by the Failures in the Control group. They consistently reported a positive situation, especially on scales measuring Positive Change in the Home, Positive Change at School, and Home Involvement.

It is likely that the youth in this group felt defensive about their position. While care was taken to assure the confidentiality of the interviews, the Control group was probably particularly suspicious about the project. Their only other contact (other than the interviews) with the program came at the probate court, leading to an identification between the program and legal system itself. Not getting into the program probably increased their suspicions concerning the project. It is likely that they felt that there was more of a chance that their being in trouble would result in further system contact since they did not have the protection of the program. Since they received the normal court treatment they were likely to have been on probation or a form of informal probation in which the intake worker waited to see how the youth behaved over a period of time before making a decision on further processing. All of this would have acted to make the Control group cautious about admitting to negative situations. This effect would be exaggerated for the Failures in the Control group who had actually been in trouble again. Their need to present a good image led to the reporting of very positive situations at home and school.

The reporting pattern exhibited by the Control Failures had two effects. First, it helped keep Successes from looking more positive than the Failures with respect to the various life domains. Similarly, it made the Control group look more positive than it otherwise would have, eliminating some potential experimental-Control differences. In all fairness, however, when the Control Failures were eliminated from analyses, the Success-Failure results were not markedly different. In other words, the Successes in the experimental groups did not look significantly better than the Failures. The differences were generally

in the right direction and it is possible that Failures had a tendency to paint a brighter picture than what really existed. There are some experimental-Control differences that exist only when the Control Failures are eliminated from the analysis.

Conclusions

The conclusions from this research will be stated in terms of the questions posed at the end of the first chapter. The first set of questions dealt with the "relative effects of using trained non-professionals (undergraduates) to provide behavioral contracting and advocacy in all domains as opposed to the same intervention with only the family of the youths involved or treatment as usual by the court." The variables on which these groups were compared included police variables (frequency and seriousness of contacts), court variables (frequency and seriousness of petitions), school variables (status, grades, attendance, and proportion of credits earned), and self-reported delinquent behavior.

Frequency and seriousness of police contacts, as well as self-reported delinquency, appear to be relatively equal for all conditions. All groups decreased from the pre project period to the post project period.

The Multi-focus and Family groups had a higher percentage of their members decrease their court involvement (with respect to both frequency and seriousness of petitions) from the pre to post period than did the control group. A related finding is that the experimental conditions (Multi-focus and Family) produced more Successes than the Control group. The analyses of variance for these variables give marginal support for this finding.

The school performance of the Multi-focus youth was conclusively superior to that of the other two groups. This was true on all four school variables, but these variables were highly correlated. The Multi-focus intervention did not act to improve school performance over time. Instead it appeared to prevent a deterioration that took place in the Control group, and to a lesser extent in the Family condition.

Process interviews were used to investigate areas that could not be assessed through conventional outcome data. Interviews were designed to measure the content and intensity of the intervention provided by the two experimental conditions, while life domain data focused on a variety of areas of the youth's life including home, school, peers, free time, and employment. Several questions were raised with respect to the information gained through these interviews.

First, did the different training (Family and Multi-focus) lead to different interventions? This is clearly the case in terms of both the techniques used and the areas in which they were applied. The Family condition provided more family intervention and used more contracting than did the Multi-focus group. The Multi-focus group was even more clearly differentiated from the Family group in their provision of intervention focused on the school. The Multi-focus group also used more advocacy than did the Successes in the Family condition.

Second, did the different training and intervention lead to differential impact on the life domains assessed? For the most part, the two experimental groups did not differ from each other or from the Control group in terms of the life domain scales. There were two exceptions to this finding. The Multi-focus group tended to be more involved and reported greater positive change in the area of school.

Second, the Failures in the Control condition tended to report a generally more positive situation than did the other Condition-Success-Failure combinations. This group appeared to be attempting to defensively provide a positive image of themselves and their situation.

Finally, what were the relationships between these process measures and the outcome criteria? The results in this area lead to the disappointing conclusion that neither the amount, nor content of the intervention was related to the delinquency-related outcome. On the other hand, the high amounts of school intervention provided by the Multi-focus condition appear to have paid off in greater school involvement and performance, as measured by both the standard school record data and the information collected in the life domain interviews concerning school. The other intervention-outcome relationship is that more intervention dealing with the legal system is provided to those youth having more contact with the legal system. In this case, the intervention is probably a reaction to the outcome, not a contributor.

Not only was there a general lack of correspondence between intervention and outcome, but there is little evidence of a relationship between delinquent behavior and the situation in other life domains. Contrary to a number of theories and research reports, the data in the present research indicates that the situations in the home, school, peers, and employment were largely unrelated to delinquent behavior. This conclusion is tempered by the coinciding decrease in school performance and increase in delinquent behavior which occurred prior to entry into the project. The only life domain scale with a strong relationship to the police and court data was the assessment of legal system involvement. This relationship was nothing more than convergent information from different sources concerning the same variable.

Implications

Family Intervention

The main purpose for conducting this research was to determine whether or not focusing on a single important area (the family) was more or less effective than the traditional and proven effective intervention used by this program, which focused on a variety of social systems. The results and conclusions presented above indicate that the Family condition was no better, and perhaps slightly worse than the Multi-focus condition in terms of police and court data. Multi-focus youth were superior to the Family youth on school measures, but the Family group failed to achieve a corresponding advantage with respect to scales measuring home involvement and positive change in the family.

Should family intervention be recommended for further use? On one hand, these results would not encourage its use as a substitute for the Multi-focus intervention. While the results were largely similar (especially on delinquency measures), if only one method were to be chosen for future use, the Multi-focus group would have to be nominated. If the superiority of the Multi-focus group is to be acknowledged, it acts to support the findings of Ku and Blew (1977) whose report on the Illinois version of this project stated that successful outcomes were characterized by intervention in a variety of life domains. On the other hand, if the groups are considered to be essentially equal, the results converge with the conclusions of Durlak (1971) and Kantrowitz (1979). These studies concluded that the particular content of the intervention was not as important as the provision of specific training of the volunteers. However, the research of Kantrowitz (1979) also showed that merely providing attention to the youth without any specific content of intervention did not result in positive outcomes.

To be fair, a single test of one specific form of family intervention is not enough to dismiss the concept and its potential. The use of the family as the focus of intervention still has several advantages which make its potential appealing. The family is generally easily identifiable and accessible. In addition, intervention in the family minimizes any labeling effect which occurs when other domains (such as the school) are involved.

In a sense, the lack of condition effects on life domain home scales is encouraging. The Family condition did almost as well as the Multi-focus group on delinquency measures without having made a differential impact on the family. If it were possible to effect significant change in the family, recidivism rates could possibly be even further reduced. This assumes the validity of the link between family and delinquency which is supported by the literature and was the theoretical basis for the intervention, but which is not supported by the current findings.

Why didn't the Family group register higher levels of home involvement and positive home change than the other groups? Why didn't these reported levels increase over time in response to the family intervention? Perhaps the home scales were invalid and did not really tap what was happening in the family. There is no way of directly disconfirming this possibility. However, scales that can be compared with convergent information yielded consistent results. For instance, life domain school scales and school record data give similar condition and time effects. In addition, life domain and intervention scales measuring legal system involvement and intervention reacted in response to the youth's real juvenile justice system involvement as measured by court and police records. These findings indicate that life domain scales are an accurate reflection of the youth's life.

Another possible explanation for lack of life domain effects is a ceiling effect. The Family group would not show increasing or superior levels on home scales if measurements of all groups at all time periods were so high as to prevent the registering of change or differential scores. An examination of the scale means discounts this explanation.

The absence of family change was not the result of a lack of family intervention. While the training model was not completely carried out by every student, the levels of family intervention and contracting in the Family condition were relatively high. Family intervention by the Family group was greater than other intervention provided by students in the Family group. Scale scores on family intervention were also higher for the Family condition than for the Multi-focus group.

Perhaps the students were providing a sufficient quantity, but insufficient quality of family intervention. To an extent, the intervention scales also measured quality since they included specific questions about the correct procedures to be followed in Family intervention. Supervisors' rating of the students' performance also indicated that while there was room for improvement (as there always is), the students were capable and provided intervention of at least typical quality in comparison to previous groups of students.

Finally, there remains the possibility that this specific form of family intervention has no potential to have a positive effect on the family situation. This explanation is inconsistent with the findings of a variety of research reports (Tharp & Wetzel, 1969; Patterson, 1974; Stuart, Jayaratne, & Tripodi, 1976; Klein, Alexander, & Parsons, 1977). None of this research used an intervention technique identical to that employed in the present research, but all used similar principles to

obtain positive results. Certainly, the rationale for using this form of family intervention has a logical basis and strong support from the literature.

However, there is certainly much more to learn about the dynamics of the family and its relationship to delinquency. Research in this area is growing, but is still young. Increased knowledge of the workings of the family must be accompanied by corresponding implications for family intervention. Only through continued research on the effects of such interventions can we come to any stronger conclusions about the efficacy of family interventions as a response to delinquency.

Recently concluded research at the Adolescent Diversion Project included a replication of this family condition which will provide further information on the effects of this version of family intervention. The results of this replication research might have even greater significance with respect to family intervention than the present research. This is because of the fact that the use of the Family condition in the present research was the first time that this intervention technique had been used. While there was overlap with the training procedures, materials, and supervision methods used by the Multi-focus group, there was also considerable generation of new material, readings, exercises, and training methods. Any time a program is initiated, it is difficult to draw absolute conclusions about its effectiveness until it has some time to become more established. There is still much to be learned about how to best intervene in the family situation and how to train people to accomplish this. The Multi-focus condition, on the other hand, had been used several times previous to the present study.

Given the above considerations, the lack of change in family scales does not condemn the future of family intervention. Possible problems

with the dependent variables (home scales), the quality of the intervention provided, or the specific content of the family intervention might have acted alone or in combination to cause this lack of change and condition differences. More troubling is the lack of correspondence between the family scales and the outcome of the case (Success or Failure). Delinquency outcome was generally unrelated to life domain or intervention scales. If this finding is valid, then no amount of family intervention (or any other intervention) or even positive home change would affect delinquency. The absence of a relationship between intervention and outcome provides further support for the theory that specific content of intervention is not crucial to outcome. Again, if the scales do not really reflect the home situation or the amount of home intervention, this lack of correspondence is equally meaningless. Nevertheless, the lack of any correlation between delinquency and the life domain and intervention scales makes theorizing about the etiology of delinquency and planning intervention for its prevention and/or treatment a difficult task.

Diversion

While this specific research was focused on the efficacy of family intervention, it also furthers the state of knowledge concerning the general diversion model practiced by the Adolescent Diversion Project. What does this research say about the use of trained non-professionals providing advocacy and contracting to diverted youth as opposed to normal court treatment? The results from this study alone are not conclusive. School data showed that the program can prevent or attenuate a decline in school performance. Differences on police data and self-report delinquency were minimal. Differences on court data provided some

support for the superiority of the experimental group as compared to the controls. While no single statistic is conclusive, the presence of several tendencies favoring the recidivism of the experimentals is encouraging. While the following measures were based on the same data, experimentals were at least marginally superior when comparing the groups with respect to the numbers of Successes and Failures in each group, change scores on court data, and an analysis of variance on court data. Furthermore, while these findings were highly correlated and showed only marginal experimental superiority, they derive further strength from their convergence with more conclusive data from previous research on the same intervention techniques. It is important to not view this experiment in isolation, but instead in the context of an ongoing program of research which has had largely positive results. While the present results do not make a conclusive argument for this intervention in themselves, they certainly do not act to negate the previous findings. There is little indication that the Control group performed better than the experimentals. The basic model of intervention retains its validity as an effective alternative to normal court processing when using further juvenile justice system contact as a criterion. Furthermore, the diversion program as practiced, avoids much of the labeling accompanying court processing. Finally, the use of non-professional volunteers offers a significant economic advantage over normal court procedures. In short, the rationale for diversion remains strong and while the data are not compelling, they are in the right direction, they support earlier findings, and they do not provide any basis for discontinuing the principal procedures used in present practice.

This is not to say that this form of intervention should be considered as ideal in its present form. There is certainly more to learn

and improvements to be made on the basis of this increased knowledge. One direction for diversion research involves the prediction of the most suitable candidates for diversion. If it were possible to predict that a youth would have no further contact with the justice system, the youth could be diverted from the system with no intervention. These youth would fit with the argument for the diversion of youth for whom juvenile justice system involvement is at best a formality and at worst a detriment to their future. Youth who were predicted as likely to commit further offenses could be provided whatever intervention was appropriate. Given the project's recidivism data, it could be argued that this group would also be diverted, though it would receive intervention.

Unfortunately, the data from this research indicate that predicting future police and court contacts is impossible, at least for these youth and these predictors. Pre levels of police, court, school, and life domain variables were not significantly correlated with post levels of police and court variables. The one consistent exception to this finding was the correlations between pre levels of parental control and post levels of police data. However, given the large numbers of variables used, this correlation could easily have occurred by chance. Furthermore, doing a pre-assessment of parental control would be somewhat impractical in the context of juvenile justice system decision-making. The life domain interviews were conducted informally, in the youth's home, with minimal threat due to the assurance of confidentiality and the interviewer's affiliation and characteristics. An interview in a court or police office would have the opposite context in terms of formality and threat. This difference could easily result in the reduction of the correlation between the parental control scale score and post outcome.

These generally low correlations are convergent with the lack of Success-Failure differences on life domain scales. There appears to be little relationship between delinquent behavior and the rest of the youth's life or even with previous delinquent behavior. Prediction schemes for delinquency have historically displayed little accuracy. Nevertheless, the potential utility of their results make continued efforts in this area worthwhile.

A related direction for further diversion efforts involves attempted matching between the youth and specific interventions available. To some extent, the two interventions used in this research led to different effects. Most dramatically, the Multi-focus condition had superior school performance. Ideally, youth with school needs could be placed in this condition. Other youth might benefit more from family intervention. It is possible that the family intervention as practiced could have shown greater effects in terms of both outcome and the assessment of the home through life domain scales if the youth with the most serious home problems had been assigned to the Family condition. As it was, many students in the Family condition complained that there was nothing to do with the family and that both the parents and the youth were satisfied with the present situation. This was often the result of inadequate assessment procedures on the part of the student. However, a more careful matching on the basis of need would likely improve the results of both intervention strategies. Pinpointing the variables and assessment procedures necessary for matching is a difficult process. However, the usefulness of such efforts could be tested through an experiment in which youth were randomly assigned to random assignment or to a matching system of assignment.

Similarly, matching between students and conditions is another promising possibility. If students had been allowed to choose which training model they would be using, there might have been a better match between the students and the intervention techniques they were using. For instance, those with particular interests in the family could have chosen to be assigned to the Family condition. While this might have improved outcome results (especially when comparing the experimentals to the Controls), the random assignment was necessary for the experimental design in the present research.

This continued research and new directions for the use of diversion fit with the social model building process described in the first chapter. To review, this process consists of a series of sequential steps, beginning with the conceptual and rational formation of a social intervention. This is followed by an empirical testing of the model. If this test is successful, specific pieces or alternative forms of the intervention are compared in order to better understand its effectiveness and determine its optimal form. The present research, as well as the proposals for future research, are pieces of this third step in the process. Kantrowitz (1979) also contributed to this process by comparing high and low levels of training and supervision, as well as an experimental intervention based on relationship building communication and problem solving skills. Recently completed research empirically tests the relative effects of training and supervision by project staff (typically graduate students) and court staff. Finally, research has been recently initiated to investigate the efficacy of using students from a local community college and volunteers from the community recruited by the court, as opposed to the usual practice of using undergraduates from large universities.

Ongoing research will continue to investigate various components of the diversion and intervention process in order to determine their relative contribution to the overall effects observed. Gradually, it becomes possible to describe what happens inside of the "black box" of diversion, at least as it is practiced by the present research program. The dismantling of the box is a time consuming and expensive process. Only a few factors can be tested at one time given a limited subject population. However, the quality of the product is equal to the cost of the process. Such continuing exploratory efforts can only contribute to our understanding of diversion. As long as delinquency and its prevention/treatment remain important social concerns, continued research must be employed in order to provide an empirical basis for decision-making and the formulation of policy concerning these issues.

APPENDICES

APPENDIX A

DRAFT OF ADMINISTRATIVE AGREEMENT

APPENDIX A

MICHIGAN STATE UNIVERSITY ADOLESCENT DIVERSION PROJECT
DRAFT OF ADMINISTRATIVE AGREEMENT

This agreement is to specify the intention and future relationship of Dr. William S. Davidson II, Director of the Michigan State University Adolescent Diversion Project and the Ingham County Probate Court, Juvenile Division. These two parties are jointly initiating the Adolescent Diversion Project for the purposes of: 1) developing an intensive program of service to youthful offenders from the local community to be used as an alternative to formal juvenile court adjudication and disposition, and 2) conducting a careful and systematic evaluation of the effectiveness and impact of the Adolescent Diversion Project. In line with this intention the following agreement is specified:

The MSU Adolescent Project will:

1. Take responsibility for Project operation including accepting and processing referred youth; recruiting, selecting, training, and supervising student volunteers who will act as the primary change agents; administer relevant course credit for the students.
2. Take responsibility for Project evaluation including the necessary data collection, data management, analyses, and interpretation components.
3. Provide the Court with monthly reports of Program progress as well as maintaining informal communication with the Court staff about Program operation and outcome.
4. Take responsibility for all written communication to the granting agency should federal research support be forthcoming.
5. Take the initiative for establishing an Advisory Board for the Project which will include local youth, parents, Court personnel, and community leaders.
6. Insure the confidential and anonymous handling of all information collected relevant to individual youth and Program operation.
7. Take the initiative for Program continuation after federal support expires contingent upon a positive outcome evaluation.

The Ingham County Juvenile Court will:

1. Refer approximately 100 and 75 youth to the project in the first and second years of operation respectively. The referral of youth to the project will take place following a preliminary inquiry or hearing and only in the case of a youth who admits to the allegations in question.
2. Cooperate in the evaluation of the Project. This will involve several specifics including the random assignment of youth to comparison approaches, and allowing confidential and anonymous access to court records by the Project research staff.

3. Participate in the ongoing operation of the Project by accepting formal reports and informal communication with the staff.
4. Participate in the Advisory Board of the Project.
5. Assist the Project staff in working towards the Project's continuance contingent upon a positive outcome evaluation.

Dr. William S. Davidson II	Judge Robert L. Drake, Senior Judge of Probate
Date	
Darrell Zwick, Intake Supervisor	Warren Ritter, Director of Children's Services

APPENDIX B

STUDENT AGREEMENT

APPENDIX B

STUDENT AGREEMENT
MSU ADOLESCENT DIVERSION PROJECT
1977-1978

I am interested in being involved in the MSU Adolescent Diversion Project and I hereby agree to participate in the initial assessment session which will take place on May 31, 1977.

If I am selected for the Adolescent Diversion Project, this agreement signifies my intention to be involved in the MSU Adolescent Diversion Project during the 1977-1978 academic year through the Department of Psychology. It is my understanding that this project involves a three-term commitment involving Psychology 370H, 400H, and 400H for Fall 1977, Winter 1978 and Spring 1978 terms respectively for four hours credit each. My work in this course will include participation in the initial training segment (6-8 weeks) as well as intensive work with an individual adolescent to whom I am assigned. The course will involve an average of 8-10 hours of involvement per week.

If I am selected for the Diversion Project, there are several special conditions of this course which I agree to abide with. First, I fully understand that all the information concerning the youth with whom I will be working is to be held in the strictest confidence. Second, I agree to participate in the course and field work during all three terms. Third, I agree to be involved in the course and field work Fall term through the end of finals week, Winter term beginning with the start of registration and through the end of finals, and Spring term beginning with the start of registration and through the end of finals week. Fourth, grading for this course will be based on my demonstration of responsibility in class and in field work, class attendance, and following ethical standards. Fifth, I understand that I will be asked to complete some further assessment procedures during the course of the project.

If I am not selected for this Project, I agree to participate in the follow-up assessment (approximately one hour) in one year for which I will be paid $12. Finally, I am aware that I will be notified of my acceptance or non-acceptance into the course by August 31, 1977.

_____
Professor William S. Davidson II

_____
Student

_____
Date

APPENDIX C

PARTICIPATION AGREEMENT

APPENDIX C

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 dependent 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 two-thirds 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,_____ (legal advocate) a lawyer 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 five occasions. Once within two days, once in six weeks, once in twelve weeks, once in eighteen weeks, and once a year 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 $2.50 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 eight 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.

6. We hereby give permission for the project staff to examine and record the school grade and attendance records for _____ for school years 19__, 19__, 19__, and 19__. It is also understood that the information will be handled confidentially and anonymously.

Youth_____ Date_____

Parent_____ Project Staff_____

Court Staff_____

APPENDIX D

SELF-REPORT DELINQUENCY FORM

APPENDIX D

SELF-REPORT DELINQUENCY FORM
YOUTH'S RATING OF PARENT'S ANSWERS
ABOUT HIMSELF/HERSELF

How often do you think your parents said you have:	In the Last 6 Weeks	In the Last Year	Ever
1. skipped class when you were in school?			
2. gone onto someone's land when he didn't want you there, or without permission?			
3. gone into a house or building when you were not supposed to be there?			
4. played on a school athletic team?			
5. threatened to hurt someone?			
6. been told to bring your parents to school for something you did wrong?			
7. damaged or messed up something not belonging to you?			
8. hurt someone badly enough for him to need bandages or a doctor?			
9. gotten on the honor roll for good grades in school?			
10. taken some part of a car or some gasoline?			
11. hit a member of your family (in anger--not horseplay)?			
12. not been allowed to go to school until the superintendent or principal or someone like that told you that you could go again (i.e., being suspended)?			
13. taken something not belonging to you worth less than $2?			
14. earned some money at a job?			
15. drunk beer or liquor?			
16. run away from home?			

	In the Last 6 Weeks	In the Last Year	Ever
17. skipped a day of school?			
18. been sent to the school principal's office for bad behavior in class?			
19. carried a gun or knife?			
How often have you:			
20. worked on the school newspaper or yearbook?			
21. taken something not belonging to you worth over $50?			
22. done something around the house or for your family that really pleased your parents?			
23. set fire to someone else's property?			
24. used or threatened to use a weapon to get something from a person?			
25. taken something from a store without paying for it?			
26. smoked without your parents' knowing it or without their permission (tobacco)?			
27. worked free for a charity organization (e.g., March of Dimes, Red Cross, etc.)?			
28. taken a car without permission of the owner (even if auto returned)?			
29. smoked marijuana?			
30. taken something from a person by force?			
31. beaten up on somebody or fought people physically?			
32. sniffed glue or cocaine or taken pills?			
33. bought or gotten something that was stolen by someone else?			
34. broken into a place and stolen something?			
35. taken things worth less than $50?			

(Now, interviewer: get the next set of answer sheets and go through the same list of activities with this question:

"How often will your parents say you have . . ."

Again--ask that question for each of the three time periods. Also, remind the person from time to time that he/she should be responding as they think their parent(s) would.)

APPENDIX E

LIFE DOMAIN SURVEY

APPENDIX E

LIFE DOMAIN SURVEY

1. HOME INVOLVEMENT AND ACTIVITY

How often does youth spend time with parents in athletics?
How often do the youth and parent(s) go to movies together?
How often do the youth and parent(s) go camping/fishing/hunting, etc.?
How often does youth visit relatives with parents?
How often does the parent(s) instruct the youth in some skill/activity?
How often does the youth participate in purchased activities with parents?
How often do the parent(s) talk with the youth about day-to-day things?
How often does the youth spend time with siblings in athletics?
How often does the youth spend time with siblings going to movies?
How often does the youth spend time with siblings camping/fishing/hunting, etc.
How often does the youth spend time with siblings going out of town?
How often does the youth spend time with siblings at indoor activities (TV)?
How often does the source say the youth and siblings "hang around" together?
How often does the youth eat dinner at home?
How much is expected of youth in terms of household responsibilities?
How often does the youth complete his/her household responsibilities?
How often does the youth sleep at home at night?
How often does the youth spend evenings at home?
How often does the youth engage in other spontaneous activities with his/her parent(s)?
How often does the youth engage in other spontaneous activities with his/her siblings?
How often does the youth engage in other purchased activities with siblings?

2. POSITIVE CHANGE IN THE HOME DOMAIN

How much has the youth's neatness around the house improved?
How much has the frequency of the youth's talking with parents improved?
How much has the youth's and parent's "getting along" changed?
How much has the youth's performance of household responsibilities changed?
How much has the youth's spending time at home (evenings) changed?
What change has occurred in terms of the parent's lessening restrictions on the youth and/or allowing the youth do do things outside of home?

What change has occurred in terms of the youth's moodiness?
What change has occurred in terms of parent and youth arguing?
What is the view of the change which has occurred in the home area?
What change has occurred in the parent(s) hassling the youth about school?

3. ACTIVE PARENTAL CONTROL

How often do parents use punishment to control the youth?
How often do the parent(s) talk to the youth about changing?
Does source say that the youth lies to the parents?
Do the parent(s) suspect the youth of illegal activity?
How much do the parent(s) and the youth argue about where the youth is going?
How much do the parent(s) hassle youth about the way the youth looks?
How much do parent(s) and youth argue about chores?
How much do the parent(s) and the youth argue about the use of the phone?
How much do the parent(s) and youth argue about the youth's friends?
How much do the parent(s) and youth argue about curfew?
How much do the parent(s) and youth argue in general?
How necessary is change in the home domain?
To what extent do the parent(s) hassle the youth about school?
How often do the parent(s) intervene with youth's peers?

4. PARENTAL KNOWLEDGE ABOUT FRIENDS

To what extent do the parent(s) know the specific things the youth does with friends?
To what extent do parent(s) know who youth's friends are?
To what extent do the parent(s) know specific things youth does in free time?

5. PARENTAL KNOWLEDGE OF SCHOOL ACTIVITIES

To what extent do the parent(s) know what classes the youth takes?
How many of the youth's teachers do the parents know of?
To what extent do the parent(s) know specific things that the youth does in school?

6. INVOLVEMENT IN THE SCHOOL SYSTEM

Is the youth good at particular classes?
How many classes does the youth know particular things which are going on?
How often does the youth attend school?
How often does the youth talk to teachers outside of class?
How often does the youth talk to counselors at school?
How often does the youth talk to the principal at school?
How many academic classes is the youth good at?
How many activity classes is the youth good at?
To what extent is the youth good at P.E.?

How often does the youth participate in extra-curricular activities?
How often does the youth skip any classes (on days when youth is in school)?
To what extent does the youth want to change schools?
How often does the youth get in trouble with the teachers?
To what extent does the youth get a fair deal at school?
To what extent does the youth get passing grades in school?
How often does the youth do homework in school?
How often does the youth do homework at home?
How many classes does the youth like?
How many classes does the youth dislike?
How many teachers does the youth dislike?
How many teachers does the youth like?
To what extent does the youth like activity classes?
To what extent does the youth like P.E.?
To what extent does the youth dislike the rules at school?
To what extent does the youth like the school administrators?
To what extent does the youth care about school?
To what extent is the youth concerned about finishing school?
In general, what is the youth's attitude towards school?
How often do the administrators hassle the youth?
How often do the teachers hassle the youth?

7. POSITIVE CHANGE IN THE SCHOOL DOMAIN

What change has occurred in school attendance?
What change has occurred in academic performance?
What change has occurred in classroom behavior?
What change has occurred in the youth completing homework?
What change has occurred in the youth's attitude toward school?
What change has occurred in the youth's relationship to teachers?
What is the view of any changes which have occurred in the school area?

8. PEER INVOLVEMENT

How often does the youth spend time with friends during school time?
How often does youth skip school with friends?
How often does youth spend time with friends on weekends?
How often does youth eat lunch with friends?
How often does youth participate in purchased activities with friends?
How often does youth participate in other spontaneous activities with friends?
How often does youth spend time with friends in the afternoons?
How often does youth spend time with friends in the evenings?
How often does youth smoke dope with friends?
How often does youth drink with friends?
How often does youth go to parties with friends?
How often does youth spend time at a friend's home?
How many close friends does youth associate with?

9. POSITIVE CHANGE IN THE USE OF FREE TIME AND PEER ACTIVITY

How much has the frequency of the youth's spending time at home (during the day) changed?
What change has occurred with respect to youth spending free time constructively?
What change has occurred in youth's spending time with the peers that the youth usually gets in trouble with?
What is the view of the change which has occurred in the friends--free time area?

10. JOB DESIRABILITY

How often does the youth actively seek employment?
To what extent is the youth taking action to get a job?
To what extent does the youth want a job?
To what extent do the youth's parent(s) want him or her to have a job?
How necessary is change in the job domain?

11. JUVENILE JUSTICE SYSTEM NONINVOLVEMENT

How often do youth and peers get in trouble together?
Is there a pending legal case?
Is the youth on probation?
How often has youth had contacts with police recently?
What is the nature of the police disposition in comparison to what would be expected?
What change has occurred in the frequency of the youth's contact with the police?
What change has occurred in the frequency of the youth's illegal activities?
What was the court disposition of any petition which had been filed?

APPENDIX F

INTERVENTION SURVEY

APPENDIX F

INTERVENTION SURVEY

1. AMOUNT OF TIME

How often does the volunteer have contact with the youth (not including phone)?
How much time does the volunteer spend working on the case?
To what extent does the volunteer engage in other spontaneous activities with the youth?

2. LACK OF COMPLAINTS/POSITIVE INVOLVEMENT

What is the frequency of phone contact between the volunteer and youth?
How often does the volunteer call the target?
How often does the target call the volunteer?
To what extent does the youth like what the volunteer is doing in general?
To what extent does the youth like the volunteer?
To what extent does the volunteer like the youth?
To what extent has the volunteer had an early success with the case?
To what extent does the youth share personal things with the volunteer?
Volunteer feels role is underdefined.
Volunteer has no car.
Volunteer can't find things youth likes to do.
Volunteer has problems finding focus for approach.
Target doesn't show up for contacts.
Volunteer is angry at target.
Parents wanted volunteer of same sex.
Parents wonder about the purpose of the program.
Target is too busy to see volunteer.
Target finds the volunteer aversive.
Target says program takes too much time.
Volunteer is frustrated with lack of progress.
Target has no enthusiasm.
Volunteer feels that program has nothing to offer target.
Volunteer not doing well because they're not in psychology.

3. PARENTAL INVOLVEMENT

How often does the parent call the volunteer?
How often does the volunteer call the parents?
How often do the parents do things to assist the volunteer and youth getting together?
To what extent do the parent(s) like what the volunteer is doing?
To what extent does the parent(s) like the volunteer?
To what extent does the volunteer like the parent(s)?

To what extent has a friendship developed between the volunteer and the parent(s)?
To what extent do the parents want the volunteer working with youth?
To what extent does the source mention the volunteer spontaneously?
How often does the volunteer talk with the parent(s)?
How often does the volunteer talk with the parent(s) about day-to-day things?
To what extent do the parent(s) play a role in the school intervention?

4. SCHOOL INTERVENTION: FOCUS ON CHANGING YOUTH

To what extent is the intervention focused on improving the youth's school performance?
How much do the volunteer and youth talk about school?
How often does the volunteer talk to parent(s) about school?
To what extent has the volunteer specified school as a major change area?
To what extent is the volunteer trying to get the target to go to school more?
How often does the volunteer monitor the youth's performance in school?
How often does the volunteer monitor the changes the school is supposed to make?
To what extent is the volunteer trying to get the youth to do more homework?

5. SCHOOL INTERVENTION: FOCUS ON CHANGING SCHOOL

How often does the volunteer visit the school?
How often has the volunteer talked to the school administrators?
How often has the volunteer talked to the school counselors?
To what extent is the volunteer working on curriculum changes?
To what extent does the volunteer involve the youth in the negotiation of school changes?

6. JOB DESIRABILITY

How much has the volunteer talked with the youth about a job?
To what extent has the volunteer identified the job area as a focus of change?
How much has the volunteer instructed the youth in job seeking?
How often does the volunteer take the youth for job interviews?
To what extent has the volunteer contacted local youth employment resources?
Has the volunteer gotten the youth a job?
Has the volunteer gotten the youth into a work-study program?

7. FAMILY INTERVENTION: FOCUS ON CHANGING YOUTH

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

To what extent is the intervention focused on the home?
To what extent is the home intervention focused on the youth doing household chores?
To what extent is the home intervention focused on improving the youth's attitude?

8. FAMILY INTERVENTION: FOCUS ON CHANGING PARENTS

How often does the volunteer talk with the parent and youth about home problems?
How often has the volunteer mediated a family disagreement?
To what extent does the volunteer involve the parent(s) in the planning of the intervention?
To what extent is the intervention focused on the home?
To what extent is the intervention focused on providing the parents information about the youth's comings and goings?
To what extent is the home intervention focused on improving the parent's household rules?
To what extent is the home intervention focused on having the parent(s) treat the youth more positively?
To what extent is the intervention focused on getting the parent(s) and youth to talk more?

9. RECREATIONAL ACTIVITIES

To what extent do the volunteer and youth have a mutual recreational interest?
How often do the volunteer and youth do purchased activities together?
How often do the volunteer and youth do athletic activities together?

10. PEER INVOLVEMENT

How often do the youth's friends spend time with the volunteer and youth?
How often do the volunteer and youth talk about friends?
How often does the volunteer involve the youth's friends in recreation?
How often does the volunteer talk to the youth's friends independently?
To what extent has the volunteer specified changes relevant to the friends?
How often does the volunteer involve the youth's peers in things?

11. LEGAL SYSTEM INVOLVEMENT

To what extent does the parent(s) play a role in the legal intervention:
How often does the volunteer talk to the police?
How often does the volunteer talk to probation/DSS staff?
How often does the volunteer talk to a lawyer?
Has the volunteer assisted in getting the youth a lawyer?
Has the volunteer attended a hearing?

Has the volunteer assisted in negotiating a court disposition?
How often has the volunteer visited the youth in detention?
Has the volunteer aided in getting the youth released from detention?
How often do the volunteer and youth talk about legal problems?
How often does the volunteer talk to the parent(s) about legal problems?

12. CHILD ADVOCACY

To what extent has the volunteer specified changes the youth would like made in his/her environment?
To what extent has the volunteer specified courses of action to facilitate change?
To what extent has the volunteer (with or without the kid) taken specific action to initiate change?
To what extent has the volunteer followed up on change areas?
To what extent did the volunteer involve the youth in the planning and action which has been accomplished?
To what extent has the volunteer been instructing the youth and/or parent(s) in advocacy?
To what extent does the youth like the advocacy approach?
To what extent do the parent(s) like the approach?
To what extent does the volunteer take action to generate new resources (e.g., employment, new club) for the target?

13. BEHAVIORAL CONTRACTING ACTIVITIES

To what extent has the volunteer specified interpersonal contingencies which need alteration?
To what extent has the volunteer specified a contract between the youth and the significant others in his/her life?
To what extent has a contract been used?
To what extent has the volunteer set up a monitoring system for the contract?
To what extent has the volunteer involved the youth and the relevant significant(s) in the contract negotiations?
To what extent has the volunteer been instructing the youth and significant others in the methods of contracting?
To what extent does the youth like the contracting approach?
To what extent is the parent following through with the contract?
To what extent is the youth following through the contract?

APPENDIX G

POLICE SERIOUSNESS

APPENDIX G

Police Seriousness

	Time Intervals					
	Four Quarters Pre				Two Quarters Post	
Condition	1	2	3	4	5	6
Multi-focus	0	.25	.58	2.19	.33	.54
Family	.25	.08	.33	2.18	.50	.50
Control	.08	.38	.25	2.17	.38	.25

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.09	.15	.86	
Subjects (S)	33	.61			
Time (T)	5	.21	25.95	.0005	.39
C x T	10	.22	.27	.99	
S x T	165	.83			

APPENDIX H

SERIOUSNESS OF COURT PETITIONS

APPENDIX H

Seriousness of Court Petitions

	Time Intervals					
	Four Quarters Pre				Two Quarters Post	
Condition	1	2	3	4	5	6
Multi-Focus	0	0	.17	2.60	.25	.58
Family	0	.17	0	2.83	.42	.79
Control	0	0	.17	2.28	.89	.50

Seriousness of Court Petitions - Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.19	.29	.75	
Subjects (S)	33	.66			
Time (T)	5	34.32	61.58	<0.0005	.58
C x T	10	.51	.92	.52	
S x T	165	.56			

APPENDIX I

GRADE POINT AVERAGE

APPENDIX I

Grade Point Average

	Time Intervals					
	Four Quarters Pre				Two Quarters Post	
Condition	1	2	3	4	5	6
Multi-focus	1.39	1.27	1.02	.94	1.11	1.07
Family	1.26	1.25	.92	.91	.93	1.02
Control	1.00	1.05	1.04	.83	.88	.79

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.72	.17	.85	
Subject (S)	31	.43			
Time (T)	5	.59	2.48	.03	.01
C x T	10	.08	.36	.96	
S x T	155	.24			

APPENDIX J

PERCENTAGE OF DAYS ABSENT

APPENDIX J

Percentage of Days Absent

	Time Intervals					
	Four Quarters Pre				Two Quarters Post	
Condition	1	2	3	4	5	6
Multi-focus	19.1	22.2	28.2	29.6	28.7	31.5
Family	27.2	24.4	35.2	37.6	37.8	44.1
Control	31.5	28.0	30.5	34.8	42.8	50.4

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	1927	.49	.62	
Subject (S)	32	3913			
Time (T)	5	1465	4.60	.001	.03
C x T	10	142	.45	.92	
S x T	160	318			

APPENDIX K

PERCENTAGE OF CREDITS EARNED

APPENDIX K

Percentage of Credits Earned

	Time Intervals					
	Four Quarters Pre				Two Quarters Post	
Condition	1	2	3	4	5	6
Multi-focus	71.8	66.1	58.6	57.3	58.8	55.2
Family	75.1	76.3	66.4	54.8	46.5	45.7
Control	55.5	54.1	59.7	51.1	48.6	35.8

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.24	.42	.66	
Subjects (S)	30	.57			
Time (T)	5	.24	4.94	.0005	.03
C x T	10	.04	.86	.57	
S x T	160	.05			

APPENDIX L

INTERVENTION - AMOUNT OF TIME

APPENDIX L

Intervention - Amount of Time

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	3.43	3.24	2.71
	Failure	3.50	3.47	2.87
Family	Success	3.56	3.34	2.78
	Failure	3.42	3.60	2.33

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	.01	.00	.95	
Failure/Success (F)	1	.02	.01	.92	
C x F	1	.22	.13	.72	
Subjects (S)	18	1.68			
Time (T)	2	4.26	5.76	.007	.10
C x T	2	.20	.27	.76	
F x T	2	.26	.35	.71	
C x F x T	2	.16	.22	.81	
S x T	36	.74			

APPENDIX M

INTERVENTION - PEER INVOLVEMENT IN THE INTERVENTION

APPENDIX M

Intervention - Peer Involvement in the Intervention

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	1.57	2.07	1.69
	Failure	1.41	1.93	1.37
Family	Success	1.97	1.58	1.58
	Failure	1.96	1.88	1.13

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	.00	.00	.97	
Failure/Success (F)	1	.28	.47	.50	
C x F	1	.08	.14	.71	
Subjects (S)	18	.60			
Time (T)	2	.99	4.60	.02	.07
C x T	2	.86	4.02	.03	.05
F x T	2	.30	1.38	.26	
C x F x T	2	.11	.49	.62	
S x T	36	.21			

APPENDIX N

INTERVENTION - RECREATION

APPENDIX N

Intervention - Recreation

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	3.00	3.00	2.33
	Failure	3.33	3.14	2.14
Family	Success	3.07	2.80	2.20
	Failure	3.42	3.58	2.33

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	1.09	.46	.50	
Failure/Success (F)	1	.09	.04	.85	
C x F	1	.43	.18	.67	
Subjects (S)	19	.23			
Time (T)	2	6.10	8.94	.001	.13
C x T	2	.36	.52	.50	
F x T	2	.01	.02	.98	
C x F x T	2	.13	.20	.82	
S x T	38	.68			

APPENDIX O

INTERVENTION - EMPLOYMENT

APPENDIX O

Intervention - Employment

Condition	Outcome	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	1.52	1.94	1.84
	Failure	2.17	2.10	1.46
Family	Success	1.47	1.61	1.13
	Failure	1.47	1.50	1.21

Source	Df	MS	F	Prob.	ω^2
Condition (C)	1	3.12	1.93	.18	
Failure/Success (F)	1	.07	.04	.84	
C x F	1	.11	.07	.80	
Subjects (S)	19	1.67			
Time (T)	2	.80	2.99	.06	.02
C x T	2	.01	.05	.95	
F x T	2	.32	1.21	.31	
C x F x T	2	.43	1.63	.21	
S x T	38	.27			

APPENDIX P

PARENTAL CONTROL

APPENDIX P

Parental Control

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	2.29	1.98	1.79	2.14
	Failure	1.83	2.03	1.95	1.78
Family	Success	1.97	2.04	1.79	1.58
	Failure	2.22	1.97	1.78	1.96
Control	Success	1.62	1.88	1.65	1.54
	Failure	2.57	1.64	1.72	1.61

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.46	.86	.43	
Failure/Success (F)	1	.15	.28	.60	
C x F	2	.43	.82	.45	
Subjects (S)	30	.53			
Time (T)	3	.75	5.05	.003	.05
C x T	6	.10	.66	.68	
F x T	3	.16	1.05	.38	
C x F x T	6	.49	3.27	.006	.05
S x T	90	.15			

APPENDIX Q

JOB DESIRABILITY

APPENDIX Q

Job Desirability

Condition	Outcome	0 Weeks	6 Weeks	12 Weeks	18 Weeks
Multi-focus	Success	3.20	2.57	2.69	2.39
	Failure	3.08	3.14	3.05	2.66
Family	Success	2.84	3.20	2.68	2.88
	Failure	3.41	2.85	2.25	2.35
Control	Success	3.44	2.90	2.80	2.90
	Failure	2.85	2.50	2.65	2.27

Source	Df	MS	F	Prob.	ω^2
Condition (C)	2	.04	.02	.98	
Failure/Success (F)	1	1.03	.40	.53	
C x F	2	1.22	.48	.62	
Subjects (S)	30	2.55			
Time (T)	3	2.07	5.32	.002	.04
C x T	6	.14	.36	.90	
F x T	3	.61	.34	.80	
C x F x T	6	.39	1.58	.16	
S x T	90				

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