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NONPROFESSIONALS WORKING WITH DELINQUENT YOUTH: AN EXPERIMENTAL COMPARISON OF UNIVERSITY, COMMUNITY COLLEGE AND COMMUNITY NONPROFESSIONALS

By

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ABSTRACT

NONPROFESSIONALS WORKING WITH DELINQUENT YOUTH: AN EXPERIMENTAL COMPARISON OF UNIVERSITY, COMMUNITY COLLEGE AND COMMUNITY NONPROFESSIONALS

By

Christina M. Mitchell

Since the proliferation of the use of nonprofessionals in the human service field in the 1960s, nonprofessionals have been increasingly involved in diverting youthful offenders from the criminal justice system. Some of the most frequently utilized nonprofessionals are often university undergraduates; however, the use of these volunteers restricts the applicability and usefulness of such interventions to community with access to major universities and the students there. This study examined a beginning dissemination of a successful diversion program for adolescents in legal jeopardy which had previously featured university undergraduates.

Juvenile offenders were diverted from the court system and were randomly assigned to work one-to-one with a nonprofessional from one of three groups--university undergraduates, community college students and community members. Each youth met with the assigned nonprofessional for six to eight hours a week for 18 weeks. Two primary intervention strategies were employed. Behavioral contracting was used to clarify and alter the interpersonal contingencies operating between the youth

and his/her significant others. Second, advocacy techniques were utilized to better the welfare of the youth by protecting his/her rights and helping to locate or create resources to meet the youth's needs and assets.

A series of issues were raised in this study. Which of the three varieties of utilizers would be willing to become involved and stay involved in the program? Of those who committed themselves to the experience, would they attend the mandatory training/supervision meetings? Would they learn and retain the material presented during training? Would they like the program and would they do activities prescribed by the model? What else would they do? What impact would the nonprofessionals have on youth? And finally, what impact did the experience have on the nonprofessionals?

By looking at attendance data, repeated paper-and-pencil measures, repeated process interview data and archival data, the following results emerged. Community members were not willing to become involved in the experience. Community college students participated more than the community members, but less than the university undergraduates. The community college nonprofessionals attended fewer training/supervision meetings than did the university nonprofessionals; both types learned and retained training material. Both equally liked the experience, but the university nonprofessionals did more purposeful activities with their youth than the community college nonprofessionals did. However, both groups were equally successful in having positive impact on their youth. Also, the nonprofessionals felt more positively

about the target population and less positively about themselves as a result of this experience.

These results pointed to the fact that although community members could not be enticed to become involved with the program as it was presented, there were no significant differences between the university undergraduates and the community college students as nonprofessionals participating in this training/intervention package. Further interpretations of these results and implications for the mobilization of new sorts of nonprofessionals with delinquents were discussed. Future research needs were also presented.

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CHAPTER I

INTRODUCTION

The last decade has brought forth increasing debate concerning the area of juvenile delinquency. Much of the debate concerns the current strategies in dealing with the juvenile offender. The first criticism, stemming from the Supreme Court decision concerning the case of Gault (1967), alleged that in the name of desire that the youth receive the best treatment possible, the courts were suspending or ignoring the consistutional rights of the youth. A second criticism focused upon the malignant correctional and treatment facilities for youth, which appeared to be doing more harm than benefit (Irwin, 1974). The third general criticism centered around the courts' determination to view the problems of delinquency as those of the apprehended and convicted youth alone, as opposed to those of youth and society in general (Erickson, 1973).

The turmoil present in the area of juvenile delinquency and its "treatment" led to several policy changes. One encompassed moving the focus to programs away from the malignant institutions and toward community-based intervention (Empey, 1967). With this recommendation came the concept of "diverting" youth from the justice system altogether. This suggestion stemmed from the idea that "the juvenile courts had been ineffective in preventing or correcting delinquency, and fiscal projections indicated that there were not likely to be

the resources available to substantially upgrade the court's functioning" (Seidman, Rappaport, Davidson & Linney, in press). From this line of thinking arose the Youth Service Bureau concept, in which professionals attempted to deal with juvenile offenders via diversion. The literature on professional diversion attempts is at best weak, with little or no data concerning the impact of the programs on the individual and the systems involved (e.g., Klein, 1979); however, it would appear that professional diversion has not provided an effective method of dealing with adolescent offenders (Elliot, Dunford & Knowles, 1979; Klein, 1979).

The apparent failure of professional diversion has led to a second recommendation: the utilization of nonprofessional and volunteer staffing of diversion projects. There are several reasons for this suggestion. First, professional staffing shortages have been caused by the intra-individual approach taken by court workers. A similar problem has plagued the mental health field in general (Albee, 1968; Gruver, 1971). Also, present mental health ideology has prevented some subpopulations needing help--e.g., alcoholics or juveniles--from receiving help, due to the fact that professional contact with them has proved to be fruitless. Of special interest to this study is Levitt's (1971) research showing that "conventional psychotherapy methods appear to be least effective with delinquents. The reported improvement rate is more that a standard deviation below the mean for all treated cases" (p. 484). Finally, the effectiveness of nonprofessionals over their professional counterparts has been shown with

some populations. Gruver (1971), Karlsruher (1974) and Durlak (1979) have all substantiated that nonprofessionals were often more effective than professionals, thus suggesting that the use of nonprofessionals be expanded.

Thus, programs dealing with juvenile delinquents have had two major thursts--diversion away from the justice system and the utilization of nonprofessionals. Detailed examinations have been made elsewhere of the impact of diversion on adolescents (Elliot et al., 1979; Klein, 1979). In this study, however, the focus will be upon looking at the impact of different dimensions of nonprofessionals on the adolescents. As has been shown here, the fields of mental health and juvenile justice often share parallel issues, problems and phenomena. Much of the extensive literature on nonprofessionals is centered in the mental health field and most of the findings are generalizable to work with juveniles in legal jeopardy.

Based on diversion research conducted within the juvenile justice system and nonprofessional research conducted within the mental health system, the Adolescent Diversion Project at Michigan State University was created. It was funded by the National Institute of Mental Health to examine nonprofessional diversion of juvenile offenders, based upon earlier research (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes & Herring, 1977). The issues involved with nonprofessional programs such as these are numerous: what kind of training is most effective, what type of intervention produces the most positive outcome, what is involved in the process of intervention, and basic to all

of these, who is the most effective intervener. Usually, programs compare one type of nonprofessional to a no-treatment or treatment-as-usual group. Occasionally, a study compares a nonprofessionally-treated group to a professionally-treated group. However, the simultaneous comparison of different types of nonprofessionals on the same target population is rarely tackled. The Adolescent Diversion Project offers an excellent setting to begin to examine issues such as these which have been plaguing the mental health field for quite some time now.

In this section, the "roots" of and general issues involved in the nonprofessional movement will be presented as gleaned primarily from mental health literature. Next, the two major types of nonprofessionals will be discussed, looking at the strengths, weaknesses and empirical evidence concerning the effectiveness of both. Finally, previous research findings leading to this study will be examined, and issues involved in the beginning dissemination of a successful training/supervision modality will be presented.

The Nonprofessional Movement

Background

In looking at the history of the current mental health ideologies, there appear three important trends which have developed over the years. The first mental health "fork in the road" is connected with Philippe Pinel in France, William Tuke in England, and Benjamin Rush and Dorothea Dix in America (Hobbs, 1969). These people purported that the insane were human beings rather than atrocities to be restrained

and hidden from society. With this in mind, they acted on the notion that the insane should be treated with kindness and dignity.

A second "revolution" in mental health evolved in Vienna, spearheaded by Sigmund Freud. This camp turned mental illness treatment from mere custody, albeit it kind, to a focus upon intrapsychic forces underlying and causing behavior in individuals. Although the entire fields of psychology and psychiatry owe a great debt to Freud, Hobbs (1969) stated, "We must break with him and discover our own authentic idiom" (p. 15).

This break has been the underpinnings of a third turning point in mental health. It is not easily linked to one person's name, but is an undercurrent to many widely varying changes and innovations which have been occurring during the last 20 years. Up to this point, mental health ideologies have been based upon the ubiquitous medical model--the "patient" is sick; the "doctor" removes him/her from his/her environment, diagnoses the problem, fixes him/her and sends him/her back to the community "healthy". With the advent of this third revolution, "we are committing ourselves to a new and more promising public health model and are seeking specific ways to make it work in practice" (Hobbs, 1969, p. 16). A more positive attitude has been adopted concerning mental health which prior to this change was mainly focused on mental illness rather than its positive counterpart. Basic assumptions concerning mental disorder and mental health are changing, with an eye not only toward the eradication of mental disorder, but also the enhancement of human well-being.

A fourth area could be considered an off-shoot revolution from this more positive third revolution--that of labeling theory. In labeling theory, the "deviant" is seen not as a person with characteristics which make him/her "different", nor as someone subject to socioeconomic constraints, but rather as one who suffers the effects of special contingencies (Schur, 1973). Behaviors are not inherently deviant; rather societal reactions to behaviors define them as such. "Whatever may lead initially to deviant behavior is of less significance in perpetuating such conduct than the 'societal reaction' and the cycle of processes and responses it thereby initiates" (Klein, Teilmann, Lincoln & Labin, 1978). Thus, the focus has again shifted, this time from distinguishing between deviants and non-deviants toward an in-depth scrutiny of the interaction between deviants and those responding to their deviant behaviors.

With the arrival of these last two new ideologies, the traditional model of mental health has blanched in the fact of some rather serious problems and inadequacies. Through lack of concern or lack of manpower, the inability of mental health professionals to meet the needs of great diversities of people requiring and demanding services is purported to be a result of at least four main problems:

1. Inadequate professional personpower.
2. The inability to make contact with large numbers of potential target groups.
3. The clinical ineffectiveness of traditional treatment approaches.
4. Conceptual errors in our approach to problems in living on both theoretical and style of delivery grounds.

(Rappaport, 1977, p. 374)

There has been much written concerning each of these problems. Albee (1959) was one of the first to portend the problem of sheer numbers in the current model of professional service delivery. In addition to those pointing out the actual shortage of professionals (Grosser, 1969; Heller & Monahan, 1977; Zax & Specter, 1974), authors also noted that even those professionals who did appear on the service frontier had not proven that their extensive training was very effective in meeting the needs of the diverse clientele (e.g., Cowen, 1967; Durlak, 1971). Second, the current mental health model deals fairly well with the middle-class, articulate, slightly neurotic client, but falls far short of meaningful intervention with other populations such as drug addicts, psychiatric patients, alcoholics and juvenile delinquents (Durlak, 1971). Third, there is even concern about the effectiveness of traditional, one-to-one, intrapsychic exploration of any client in producing long-term behavior change (Bandura, 1969, 1977; Malan, 1973). And finally, due to the third revolution of mental health, old concepts which underlay common approaches to daily life were changing. Emotional difficulties are now viewed within a social context; there has been a de-emphasis on the dyadic therapeutic relationship in favor of the development of preventive mental health programs.

In response to these "revolutions", as well as the four problems examined by Rappaport, many programs began to search for new sources of personpower. Since increasing the number of professionals exiting graduate training was both unlikely and of questionable use, many in

the field turned to the tapping of a new pool of workers which had been previously relatively unused--that of "nonprofessionals". The literature is replete with many categories and classifications of these new workers; however, in this work, the term "nonprofessional" will include, as did Zax and Specter (1974),

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

Although the use of nonprofessionals has proliferated mainly in the last ten to fifteen years, their popularity can be traced primarily from three earlier experiences. The first documented use of nonprofessionals occurred with the advent of moral therapy in psychiatric hospitals in the late eighteenth and early to mid-nineteenth centuries. A basic postulate of moral treatment was that "positively changing a patient's milieu and recognizing the reciprocal interaction between patients and hospital personnel would consequently lead to therapeutic change" (Gershon, 1976, p. 4). This way of thinking offerred quite a change from the earlier, bedlam-like "snake pits" which were prevalent prior to this era. In addition, it made use of many nonprofessional hospital workers who were heavily involved in the creation of a positive milieu for the patients.

Unfortunately, the ideas of moral therapy dissipated in the late nineteenth century, as did the new-found status of the nonprofessional worker. However, a second root of the current proliferation of non-

professional workers developed with the work of Margaret Rioch (1963) and her co-workers. They trained unemployed housewives for two years and produced effective therapeutic change agents. Rappaport (1977) noted, "Their research led to a then startling break from the belief that one must be a traditionally trained psychotherapist in order to have 'therapeutic' effects" (p. 376). In addition to this avenue, a third antecedent of the popular nonprofessional movement was the utilization of college students as far back as the 1950s, when the Harvard-Radcliffe group began to make use of undergraduates as mental health helpers with chronic, hospitalized mental inpatients. Thus, with these three positive experiences, mental health workers began to seriously experiment with the new personpower source.

Rationales

There is one simple tenet which underlies each of these historical adventures, as well as any new program utilizing nonprofessionals: "Such workers can be effective in specific treatment situations" (Durlak, 1971, p. 2). All other rationales offered for employing nonprofessionals are embellishments of this basic premise. Grosser (1969) summarized five reasons which related to this tenet. First, nonprofessionals could be used to fill personpower needs. As discussed earlier, there has been an increasing demand for mental health services due to the expansion of existing programs providing services, such as those under the Social Security Act, as well as newly created programs under urban renewal and the Community Mental Health Act of

1963. The number of professionals not only has not kept pace with this expansion, but the training of the existing professionals has not convincingly proved itself adequate to deal with these populations.

Second, nonprofessionals could be used to bridge the gap between the clientele and the organizations. With the expansion of services, the range of clientele has increased as well. Professionals who traditionally staffed such programs were often vastly different from the new client populations, and their style of delivery of service has been often aimed only at those most amenable to treatment rather than those most needing service. Factors such as these have created a gap between the service receivers and the service providers. Thus, a nonprofessional who was indigenous to the area of the target population might be able to serve as a go-between or an interpreter for the two parties in their attempts to form a more comfortable union.

A third reason often offered for the use of nonprofessionals was that of providing jobs for unemployed. However, in addition to merely the provision of jobs, some advocated a career "ladder" of advancement into the mental health field for those nonprofessionals starting at the bottom. Thus, not only were jobs offerred, but careers were made possible. Also, positions as mental health nonprofessionals served as recruitment for those who were interested in becoming professionals through the already established modes.

Fourth, Grosser (1969) stated that the use of nonprofessionals helped to fulfill the democratic ideology. This country was founded on the ideology that all citizens should participate in the govern-

mental and decision-making process. However, there are many studies which have shown that the lower classes were less involved in such activities than upper classes. Thus, nonprofessional programs could be designed to provide "maximum feasible participation" of the lower classes.

Finally, Grosser (1969) cited the helper therapy principle (Riessman, 1969) as a reason for the utilization of nonprofessionals. Observers were often struck by the positive changes which could be seen when troubled people helped others with a similar problem. Also, the use of nonprofessionals might produce "therapeutic results simply by awarding these workers status, regardless of the benefits derived in the helping process" (Grosser, 1969, p. 121).

In addition to these five rationales, Durlak (1971) stated that the third revolution of mental health--the advent of community psychiatry--further increased the use of nonprofessionals. Community psychiatry was viewed as

> an extension of the traditional clinical theory and practice. . .emphasizing group rather than individual treatment; it is a movement out of the psychotherapist's office into the community and social system of the target population; and it is. . .directed toward a positive mental health approach and intimately involved in the primary and secondary prevention of mental disorders. (pp. 24-25)

All of the aforementioned rationales encouraged the use of nonprofessionals to enhance the skills of the professional.

Prevalence

In response to these rationales and the growing empirical support

(to be examined in later subsections), nonprofessional programs flourished in this country. Zax and Specter (1974) examined two major surveys which have attempted to determine the prevalence and size of nonprofessional programs. Sobey (1970) surveyed 185 National Institute of Mental Health-sponsored programs employing nonprofessionals. She found nearly all of these nonprofessionals were utilized in direct service roles. In contrast, however, Grosser (1969) found that nonprofessionals were most frequently used in subordinate services such as clerical work, administrative functions, and transportation. According to Zax and Specter (1974),

> In addition to finding that direct service is the role that nonprofessionals are least likely to be called on to provide in the programs he surveyed, Grosser (1969) also found those nonprofessionals who were providing direct service were more likely to be middle class nonprofessionals rather than lower class indigenous nonprofessionals. (pp. 371-372)

This wide discrepancy could be explained by the nature of the programs surveyed by the two researchers. Sobey (1970) contacted the most innovative programs in mental health--those dealing with new approaches to current problems which the National Institute of Mental Health deemed worthy of further support and investigation. Grosser (1969), on the other hand, most likely tapped into the more typical organizations and agencies, funded by a variety of sources, but which were not in the forefront of innovative professional practices. Thus, Grosser's (1969) findings seem to carry more weight concerning the most prevalent practices on the mental health scene--nonprofessionals are currently being utilized in non-critical service functions.

This corroborates points made by both Zax and Specter (1974) and Rappaport (1977). Both believed that, despite the plethora of articles depicting nonprofessional programs in the nation, these programs in general represented the exception rather than the rule to mental health services. Zax and Specter (1974) stated, "Actually, many of the programs cited stand out dramatically just because they are unique structures on an otherwise unremarkable horizon" (p. 371). According to Rappaport (1977), "By and large, professionals continue to be unwilling to give up the direct delivery of service role, despite its inefficiency" (p. 375). This is indeed unfortunate, for, as noted by Guerney (1969), "Initial efforts in this direction suggest that the nonprofessionals, at least in certain instances, seem to provide therapeutic effectiveness beyond that which would be achieved by professionals" (p. 4). Rappaport (1977) pointed out that often the underlying assumption is that the professional's service is inherently best, while the effectiveness and utility of the nonprofessional's service must be empirically, extensively and definitively proven. However,

> Even in those cases where a professional service is offered, the burden of proof for effectiveness must rest on the professionals, because such services will generally cost more and be less available. If nonprofessionals do no worse than professionals, then their use may be justified. (p. 375)

Several studies and surveys of the literature have offered this evidence (Durlak, 1979; Gruver, 1971; Karlsruher, 1974; Poser, 1966); however, it seems that more must be done within individual communities in order

to propose, enhance and support extensive use of nonprofessionals in various meaningful therapeutic capacities.

As mentioned earlier, these issues which have appeared in the field of mental health are crucial in other settings as well. Therefore, it is important to examine relevant issues in other settings. One example of such a setting is the diversion of juvenile delinquents. Nonprofessionals and diversion have already been noted as two new major trends in juvenile justice. Thus, diversion of adolescents offers an excellent setting within which to examine important nonprofessionals issues.

With this in mind, this review will be concerned with the differing types of nonprofessionals which have been utilized in programs throughout the United States. There are many different types of nonprofessionals which have been utilized. Some of the more frequently described include self- or mutual-help groups (Alcoholics Anonymous, Parents without Partners), symbionts (family members), teachers and police (Durlak, 1971; Gershon, 1976). However, the most has been written about two major types of nonprofessionals. The first to be examined here will be the "indigenous" helpers--people residing in the community from which the target comes. Second, "exogenous" nonprofessionals will be described--those people with few obvious characteristics in common with the target population.

Since there are several recent reviews of specific aspects of many of these programs (Durlak, 1979; Gruver, 1971; Karlsruher, 1974), details of the many projects will not be specified here; rather, the

focus will be on the general issues surrounding each type of non-professional. With each type of nonprofessional, three different areas will be presented. First, the unique attributes and strengths of each type will be delineated. Second, the disadvantages or weaknesses concerning programs using such nonprofessionals will be described. Last, empirical support for these two areas will be scrutinized and conclusions will be drawn based on this evidence.

Indigenous Nonprofessionals

Strengths

The group of workers who are native to the neighborhood of the target population is often labeled "indigenous workers". There are at least six prevalent reasons found in the literature for the implementation of indigenous nonprofessionals. First, the New Careers movement attempted to upgrade indigenous workers with jobs designed to advance them into meaningful careers. The New Careers movement had a double-barrelled attack on poverty:

> direct alleviation of poverty by provision for immediate employment and eventful upward mobility; and humanizing social institutions by reducing the status differential between the service providers and the clients served. (Heller & Monahan, 1977, p. 312)

Second, the benefit to society could be maximized if these helpers were drawn from the most needy groups, those with the highest likelihood for latter problems (Heller & Monahan, 1977; Zax & Specter, 1974). In this respect, it might also be possible to impact upon the economic status of a group to such an extent as to effect the mental health of

the group. Third, the use of indigenous workers could help provide services to the under- and unserved, with whom professionals traditionally have either been relatively ineffective in dealing or have completely ignored (Durlak, 1979; Gartner, 1971). Fourth, by including different types of helpers into the system, it might be possible not only to increase the quantity but also the quality and "humaneness" of the services (Goldberg, 1969).

Fifth, the use of indigenous personnel in nonprofessional positions, as with any nonprofessional program, could upgrade the jobs of the professionals; the professionals were alleviated of more menial aspects of their assignments and could use their consultative skills as supervisors and trainers of the lower-rung personnel. Finally, the sole reason for the utilization of any nonprofessionals was that they could be effective as human service workers. However, in the case of indigenous workers, some believed that the helpers could benefit at least as much as the helpees. Riessman (1969) coined the phrase "helper therapy" to describe this process. Riessman stated,

> Perhaps, then,. . .the strategy ought to be to devise ways to transform recipients of help into dispensers of help, thus reversing their roles, and to structure the situation so that recipients of help will be placed in roles requiring the giving of assistance. (p. 88)

Thus, not only could indigenous nonprofessionals offer services to fellow neighborhood members, but they might also receive help themselves in doing so.

Personnel native to a region can indirectly help the clientele by offering some special skills to the professionals. They can help

familiarize the professionals with the unique problems and assets of the clientele; they may be able to offer insights or perspectives on behavior which can enhance the professional's understanding of the issues and problems facing the clientele. Also, the nonprofessional can incorporate some of the traditional self-help patterns of the poor into the human services being offered (Goldberg, 1969).

In addition to these indirect services, the indigenous worker can also offer special assets directly to the client population. The demographic characteristics of the indigenous workers show them to be obviously closer than professionals to the lower-class population: "They are poor, from the neighborhood, minority-group members, from poor families, and they share common language, background, ethnic origin, style and interests with the client" (Gartner, 1971, p. 49) Similarly, their style of dealing with people can be related to their effectiveness. They tend to be less formal, more directive and active, with a greater tendency to externalize causes rather than to search for intra-psychic ones (Pearl & Riessman, 1965; Zax & Specter, 1974). In addition, the use of indigenous personnel may "circumvent the special inter-class role distance difficulties that arise from the middle-class-oriented therapy (and therapist) being at odds with the low-income clients' expectations and style" (Riessman, 1969, p. 89). Also, since it is believed that the lower-class client will identify more easily with a worker of his/her own class (Christmas, 1969), the indigenous worker can more readily be utilized as an appropriate coping role model.

Gartner (1971) listed six possible reasons for the alleged effectiveness of indigenous nonprofessionals:

1. a greater ability to enter the world of the troubled;
2. an ability to enter into peer-like relationships with the clients;
3. an ability to become an active member in the client's total life;
4. an ability to naturally empathize more fully with the client for having experienced similar situations;
5. an ability to teach the client new skills and coping strategies from within the client's own frame of reference;
6. an ability to offer clients a better transition to more effective levels of coping within the social system.

Thus, it appears that there are many aspects of the native workers which bode well for their use in nonprofessional human service programs.

Weaknesses

In spite of all of these positive aspects of the indigenous nonprofessional, there are some who offer words of caution concerning the use of such workers. Andrade and Burstein (1973) noted work that suggested that an "expectation of cure" may operate when a client is working with an appropriately credentialed professional which would be absent when working with an indigenous nonprofessional. They found that people with less education perceived professional mental health workers as more helpful than did more highly educated people. They also found that differing socioeconomic and ethnic classes of clients

> did not vary significantly in their perceived ratings of paraprofessional mental health workers. Thus, it would appear that the much-emphasized view of the advantages of using indigenous, nonprofessional aides in community mental health centers is ill-founded empirically. (p. 386)

Also, there is no proof that professionals cannot learn those unique traits of natives which are most impactful--only that they are not currently offered or emphasized in professional training (Goldberg, 1969).

Barr (1967) noted nine problems inherent in the use of indigenous nonprofessionals, in an attempt to temper the extreme enthusiasm of the popular movement.

1. The special characteristics attributed to indigenous workers have not been present in either the quantity or the quality expected.
2. Even when these attributes were present, they tended to dissipate after the worker had been exposed to the frustrations of the human service field.
3. The impact of being a "significant" other from the neighborhood became less important as the center with which he/she worked gained acceptance in the area.
4. Only the most sophisticated indigenous nonprofessionals have gained the necessary "know-how" to successfully manipulate the bureaucracies.
5. Some have questioned the appropriateness of using indigenous nonprofessionals to teach the poor to cope with their environments by surviving more skillfully on less than they should have; energy should be focused upon obtaining more resources for the impoverished.
6. As the nonprofessional became an established worker, with regular weekly paychecks, he/she began to grow distant from the clientele he/she was hired to closely represent.
7. Some have found that indigenous workers occasionally had extremely negative, judgmental and punitive attitudes toward other people who were not coping with their lives as well as they have.
8. Unless the New Careers career-ladder was firmly ensconced, there was a good possibility that a new group would be created for who upgrading of careers was impossible; although indigenous workers would find themselves employed, they would be locked into lower-rung positions with no hope of advancement further into the system.
9. It is important to consider whether the "poor serving the poor" was merely a way to divert attention from the real inability or unwillingness to train poor people for higher paying positions which could draw them from the ghettoes.

Empirical Support

It is obvious that there are strong reasons for and against use of indigenous nonprofessionals. However, Durlak (1979) noted, "Comparative research has offered only partial support for the value of indigenous therapists. The only controlled evidence for the effectiveness of indigenous therapists has involved college students" (p. 89). He stated that it is often believed

> the indigenous nonprofessional can more easily establish rapport and identification with previously underserved areas; however, empirical data supporting this hypothesis is lacking. . . The comparative effectiveness of indigenous and professional helpers working with non-college populations awaits empirical documentation. (p. 89)

Durlak then posed some basic questions which remain unanswered, in spite of the proliferation of the belief in the superiority of the indigenous worker:

> Are indigenous therapists the treatment agent of choice for any client population? If so, what factors account for this finding? For example, in comparison with professionals, is the supposition correct that indigenous helpers are more accepted by and more empathic toward clients similar to themselves? Furthermore, are these variables associated with therapeutic outcome? (p. 89)

In order for research to begin to answer some of these crucial questions, the focus should shift away from narratives and theories. Indigenous nonprofessionals should be utilized with caution, and programs should be examined very carefully and systematically using sound empirical methods.

Exogenous Nonprofessionals

The "exogenous" nonprofessional is the second type of nonprofessional group to be examined, and is the one which is furthest from the target's problems, typically. In contrast to the indigenous nonprofessional, who shares many of the same demographic characteristics and background as the target population, the exogenous nonprofessional usually is more closely aligned with the traditional professionals, sharing middle-class values and attitudes, educational training and aspirations and life experiences (Gershon, 1976). Heller and Monahan (1977) noted that exogenous workers generally are utilized to further the traditional model of human service through providing direct services with little orientation toward the specific community's needs and wants. Christmas (1969) stated,

> With supervision and development, the middle-class aide can use his greater ease in dominant culture verbalization and conceptual thinking to advantage. The talents and skills which may have come from advanced education and employment may help patients. . .to develop their skills. (p. 166)

Therefore, due to the lack of empirical support for the indigenous worker, it is logical to explore this second group of nonprofessionals.

In this section, three major (although not the only) types of exogenous nonprofessionals will be discussed--the citizen nonprofessional, the university nonprofessional and the community college nonprofessional. As before, issues for and against the use of each type will be examined and empirical support concerning the effectiveness of each type will be presented.

Citizen Nonprofessionals

Strengths. According to a U.S. Department of Labor study, the "average" citizen nonprofessional in the 1960s was between 30 and 44 years old, Caucasian, and a middle-class housewife. Her time had become freer as her children spent more time in school. She provided some form of direct services and often had the financial resources to donate some of the out-of-the-pocket expenses entailed in transportation, meals and incidentals (Miller, 1974). This picture has been changing since then. One city in the 1970s, for example, reported a dramatic change indicative of the current trend in America. They found that there was an increase in single, employed people of all ages, males as well as females, from all types of income groups now serving in various volunteer capacities (Miller, 1974).

There are five major reasons for this expansion of the citizen volunteer force. First, the lack of professional personpower again encouraged professionals to create positions and to allow volunteers to provide more interesting services. Second, there was a great increase in the number of healthy, retired people. Also, there was a luxury of free time for another large part of the population: there was a growing segment of both executives and manual workers who were working at their paid jobs only four days of the week. Fourth, young people were no longer expected to rush into a job immediately upon completion of high school; even for those who wanted work, there was a shortage of such unskilled jobs open to them. Miller (1974) stated,

> However engrossing one's paid job,. . .individuals with a reasonable amount of free time often lack a sense of participation, lack the stimulation and experience frustration in being unable to resolve the myriad of societal problems affecting him and his family. Many wish to engage in intellectual pursuits to compensate for lack of satisfaction in the day-to-day routine work and would engage in volunteer experiences if they added meaning and zest to living. (pp. 188-189)

Finally, federal legislation facilitated the expansion and development of volunteer service agencies, and the incorporation of volunteers into already existing agencies (Cull & Hardy, 1974; Miller, 1974).

The exact extent of citizen nonprofessionals is very difficult to ascertain (Hubbell, 1974). During the week of April 7 to April 14, 1974, ACTION attempted to determine how many American citizens were involved in voluntary action. That week, they found 15,455,000 Americans were volunteering their services in various capacities (Schwartz, Jensen & Mahoney, 1977). Kelly, Snowden and Munoz (1977) reported, "There is estimated to be 50 million Americans involved in five million voluntary groups" (p. 343). The rationale existing behind the proliferation of citizen nonprofessionals seems to be that people, left to their own devices, consult many different types of people to help them with their problems--physicians, clergy, neighbors, friends and associates. Therefore, there should be a variety of people available for assistance within the human services system (Lichtenberg, 1969).

The generally regarded hallmark program in citizen nonprofessionals was the work done by Rioch et al. (1963) in training and utilization of mature housewives as mental health counselors (Heller & Monahan, 1977).

She showed that with one year of training full-time, the housewives could do their jobs as mental health counselors well. From this program, which broke the ground for other citizen nonprofessional programs, agencies began to experiment with such issues as the amount of training needed to produce effective change agents and the types of positions in which citizen nonprofessionals could function effectively.

Another extremely popular program utilizing a wide range of citizen workers is the Big Brother/Big Sister program. The Big Brother/Big Sister program is based on the idea that youth "need the stabilizing and helpful influence of a mature and responsible" adult. The program was created with the following goals:

> 1. To help reduce juvenile delinquency by providing individual guidance in sound character development for (youth) who lack wholesome adult. . .companionship, and who reflect such deprivation in behavior pointing towards delinquency.
> 2. To help (youth) with problems and who lack the influence of a mature, responsible (adult) to reach their highest physical, mental, emotional and spiritual development. (Wollin & Royfe, 1960, p. 111)

Volunteers join the program because they desire to create and build a positive relationship with a youth in the public schools, believing that both of their lives will be enriched in the process. The intervention is usually nonspecific, although the literature claimed that the volunteers always work in close connection with the professional assigned to the youth. In addition, volunteers allegedly draw support from each other in periodic meetings, where they exchange ideas and problem-solving techniques (Lee & Rubenstein, 1977; Wollin & Royfe, 1960). Demographic characteristics are rarely reported in the literature;

however, Wollin and Royfe (1960) claimed "The big brothers are mature, stable, personable men of good character who are willing to take time to help unfortunate youngsters. . . Although age is not the determining factor for selection of big brothers, most fall within the age range of 25-50" (pp. 113-114).

Still a third area which commonly utilizes citizen volunteers is the justice system. According to Schwartz et al. (1977), there are approximately 2,000 volunteer programs in criminal justice systems in the United States. They also estimated that 250,000 people participate in these programs. The Juvenile Justice and Delinquency Act of 1974 was designed to deal with two main problems facing the juvenile justice system:

> 1. inadequate resources for the prevention and treatment of juvenile delinquency; and
> 2. inadequate coordination among the various public and private agencies dedicated to service youth. (Schwartz et al., 1977, p. 3)

This, coupled with the creation of the Law Enforcement Assistance Administration in 1967, has provided the impetus and financial support for volunteer programs in both juvenile and adult criminal justice systems.

Weaknesses. There appears to be very little written concerning reasons for not using citizen nonprofessionals. The belief seems to be that citizen volunteers can do no harm in these positions. Perhaps this is because, with the exception of Rioch's work, citizen nonprofessionals are generally placed in positions which are relatively "safe"--mainly companionship roles--rather than roles as active change agents.

Empirical support. According to Kelly et al. (1977), the major evaluation which occurs with citizen volunteers is vague, but those who "carry out helping roles do perform very well and increase their own sense of self-worth when doing so. Volunteering for community work is good for the community and for the volunteer" (p. 343). Schwartz et al. (1977) claimed,

> The result of such (volunteer) research has been disappointing. To date, no one is certain exactly which factors contribute to success or failure of a volunteer programs. This is because a large majority of research studies are poorly conceived and operated. The few good studies available are limited in their perspectives and fail to account for a systems framework in assessing volunteer performances. (p. 59)

However, since the nonprofessionals are rarely placed in significant positions where they could be compared directly to professionals, this type of volunteer needs to be examined empirically in order to consider the future of utilizing citizen volunteers.

University Students

Strengths. The use of university students in nonprofessional programs has had a two-pronged effect. First, and often overlooked,

> Universities have increasingly seen the need for some type of intensive laboratory experience in order to communicate adequately many of the basic tenets of some of our disciplines. . .This is a unique opportunity for the students who attempt to solve problems outside the academic setting by principles they have learned in the academic setting. (Cull & Hardy, 1974, p. 10)

Cull and Hardy pointed out five basic purposes that such field programs accomplish in universities.

1. The program gives students of the university an education in reality.

2. The program reforms the traditional professor-student relationship. The student is made an active partner in the relationship.
3. The program revolutionizes the university curriculum and changes it from its current situation of being an intellectual endeavor to a place where its views of life have some basis in reality.
4. The program "humanizes" the university, . . .attempts to use the community as a new common ground where through common efforts, failure and success, the university participants might come to know one another again. . .
5. The program provides competent, compassionate and consistent help to the people in the community who need it and want it. (pp. 12-13)

The second effect of the use of university students in helping positions concerns the inadequate personpower available to the mental health system. The university students represent a large, eager and willing pool of personpower which has been mobilized to help alleviate the personpower squeeze in the human services. Gruver (1971) summarized many of the qualities and characteristics of university students in helping positions as nonprofessionals.

1. They are less resistant to and more motivated for face-to-face contact with clients.
2. They have a sense of personal conviction to their work.
3. They are "crusaders", feeling the joy of discovering a worthwhile cause.
4. They are "revolutionists" in a struggle against mental illness.
5. They have an element of altruistic novelty.
6. Their casual dress, idealism, spontaneity and enthusiasm are disarming, and enhance their effectiveness.
7. Their youth, zest and enthusiasm can elicit response from those who have been rejected by the culture.
8. They have similarities with many institutionalized clients (e.g., residence within a developmental institution, seeking life changes).
9. There is a reduction of social distance between university students and those seeking help.
10. Their use of a naive, commonsense approach to their work, due to their lack of training, often is effective.
11. They have a greater diversity of appropriate and acceptable behaviors when working with clients
12. They may bring less stigma for the clients working with them.

University students are utilized in many capacities and in great numbers throughout the nation. Since the Harvard/Radcliffe students acted as companions to institutionalized mental patients in the late 1950s, such positions as mental health aides with chronic hospitalized mental patients, emotionally disturbed children, as well as play therapists and behavior therapists with children and adolescents are only some of the more common positions held by university nonprofessionals.

In addition to the variety of jobs utilizing university nonprofessionals, the number of programs available has been increasing steadily. Rappaport (1977) reported,

> One National Institute of Mental Health report. . .estimated that during the academic years 1955-1966, 8,000 students from more than 300 schools served as volunteers in programs for mental hospital patients alone. Cowen. . .has reported that there are now over 500 such programs. (p. 381)

Heller and Monahan (1977) noted that although university students might not have been the most logical choice for researchers to explore as alternative personpower, the early preference for university students may be as much a reflection upon their great availability to university researchers as their inherent aptitude for helping others.

Weaknesses. Few authors deal with negative issues surrounding the use of university nonprofessionals. Rioch (1966) noted that while the zest and enthusiasm of the students were positive aspects, it was always a possibility that the same "burnout" which affects professionals would set in with the university nonprofessionals after a period of time. Rosenbaum (1966) also criticized empirical studies which equated groups run by university students to groups run by professionally trained

therapists. He ruminated that student group leaders might be more likely to be didactic and rational, limiting the amount of emotions expressed. Therapists may or may not act similarly, depending on their "insights" into the needs of the members of the group. Thus, he cautioned those interpreting empirical evidence which claimed that university nonprofessionals performed as well or better than professionals.

Empirical support. The empirical evidence concerning university students as nonprofessionals is, overall, extremely positive. Poser (1966) surprised the field with his study wherein he found that female undergraduate nonprofessionals generated greater change in their clients than did professionals. Effect in terms of the ultimate criterion--that of return to the community--was not differential; however, the university students' clients appeared "healthier" on paper and pencil measures as well as on ward behavior measures. In a review of the literature, Karlsruher (1974) showed that most populations who worked with university nonprofessionals improved more so than a no-treatment (or treatment-as-usual) group. Durlak (1979), also in a survey of literature, showed that mental health professionals did not have a superior effect on those populations also treated by university nonprofessionals. These articles speak to Rappaport's (1977) caution that unless professionals are clearly superior, nonprofessionals should be the mode of choice, due to availability and cost of services. Thus, university nonprofessionals in general provide willing, inexpensive and helpful personpower to a beleagured human service system.

Community College Students

Although many articles of varying empirical soundness have been written concerning the use of university students as nonprofessional change agents, it appears that the community college students have been completely overlooked. This is puzzling, for community colleges are becoming much more common and accepted throughout the nation. Why have researchers ignored this potential pool of untapped personpower while dealing so heavily with the university population? This subsection will differ slightly in organization from the others before it. In this subsection, characteristics of the community college students will be delineated and comparisons between community college and university students will be examined. Finally, a case will be made for the beginning exploration of this group as change agents.

Characteristics. Raines (1971) stated that the community college population is made up of two, quite disparate population groups. One group consists of those under 20 who enter the community college directly from high school and who represent the traditional undergraduate population of freshmen and sophomores. These students typically attend mainly daytime classes and are enrolled in classes full-time while holding part-time jobs. The second group is made up of older, part-time students who attend primarily evening classes. Most are employed full-time and carry only one or two classes each term (Raines, 1971). The size of this "educationally delayed" group of students is ever increasing, and is becoming the majority group in many public community colleges, although this trend is not often reflected in

demographic information collected each Fall term by officials. This is because the traditional freshmen and sophomores predominate the Fall headcounts, while the older students tend to stretch their studies over many terms; however, over one-half of the younger freshmen may not re-enroll in the following Fall (Raines, 1971). In addition to these groups, however, there is also the group of those people who are simply taking a class or two for their own recreation or personal development, with no long-range goals in mind.

In attempting to profile the "typical" community college student, it is important to remember that these diverse populations have caused any demographic description to be a bi-modal one, if truly representative. Palinchak (1973) stated, "those who are served by the community college best characterize its uniqueness. Yet, descriptive studies of the student clientele are often inconclusive and paradoxical" (p. 186). With this in mind, however, he cautiously proceeded to list some general characteristics of community college students, as found by the American College Testing Program in a survey of more than four thousand community and junior college sophomores. The "typical" community college student:

1. attends high school just prior to enrolling at college and enters a transfer program, although this number is declining.
2. sees his/her vocational interests to be of primary importance.
3. reports few extracurricular activities and nonacademic achievements.
4. has a fervent desire to explore and experiment with various programs and courses of study.
5. shows a strong commitment to vocational-occupational education, often choosing a major such as engineering, business and teaching rather than the humanities or

social sciences.
6. has a median age of 27 (due to the bi-modal distribution).
7. comes from a middle or lower class background.
8. lives in an unaesthetic setting with minimal privacy.

Comparisons. Many authors have attempted to compare the community college student to his/her university counterpart. Palinchak (1973) noted community college students were:

1. more conventional.
2. less independent.
3. less attracted to reflective thought.
4. less tolerant.
5. more cautious, prudent and controlled.
6. more apprehensive and rigid in academic matters.
7. less academically able.

Collins (1972) stated that the community college students were:

8. from lower socioeconomic classes.
9. more frequently employed while attending college.
10. lower in educational and occupational aspirations.
11. older.

Cross (1972) claimed that community college students were:

12. influenced more by practical considerations and less by intellectual interests.
13. less self-confident about their ability to do college work.

As is obvious from this primarily negative list of comparisons,

> We possess only traditional measures to describe a student who does not fit the tradition. The inevitable result is that we picture America's newest college student as being less adequate than his peers at the tasks of higher education--as those tasks have been developed over the years for a different type of student. (Cross, 1972, p. 33)

Perhaps it is this habit of negatively defining the community college student (how he/she has less of some attribute than the university student) which has caused researchers to avoid branching out into this new personpower pool. However, there are at least two reasons why community college students should be considered for use in

nonprofessional programs. First, Collins (1972) noted that many community college students lack a sense of "community", possibly due in part to the lack of a residential culture enhanced by dormitory life. He suggested,

> One of the best ways to establish a "we" feeling is for "us" to do some significant things together. Projects in the outer community, aide work in some types of social service. . .there fall in the category of doing significant things together. (p. 23)

Second, the community college students reflect the communities which they serve more so than any other institution of higher education (Collins, 1972; Palinchak, 1973). This might further enhance one of the important reasons postulated for the effectiveness of university students as nonprofessionals--that of the reduction of social distance between the helper and helpee. With these two points in mind, it would appear that exploring the community college student as a resource in human service positions could benefit both the student and the clientele as well.

Summary

In this section, the history of and general issues behind the use of nonprofessionals were examined. Two general groups of nonprofessionals which are most commonly discussed were described: indigenous workers, native to the neighborhood of the target, and exogenous helpers. Strengths and weaknesses were presented for both, along with empirical support concerning the effectiveness of each.

Of the two types, the exogenous nonprofessionals have the clearest

empirical support. In nearly all studies, the exogenous nonprofessionals were at least as effective as a no-treatment or treatment-as-usual group; professionals were not found to be significantly superior to the non-professionals. Although the exogenous nonprofessionals have generally proven to be successful, many issues remain concerning nonprofessionals which need to be examined systematically. In the following section, some issues which have been already scrutinized will be discussed, and new questions will be posed concerning the dissemination of the described intervention package to communities in general.

Rationale for This Study

This study took place within the context of a larger research project, the Adolescent Diversion Project. The project had previously examined two general areas concerning the diversion of delinquents--issues surrounding youth outcome (does this concept of diversion improve upon court "processing as usual" with regard to youth recidivism) and issues concerning nonprofessional outcome (the impact of different training/supervision modalities on volunteer attitude change, career goals, course satisfaction, etc.). These issues will be dealt with in this subsection in this order. Next, issues surrounding the theory of the dissemination of knowledge will be examined. Finally, a case will be made for the research to be detailed in the remainder of this work.

Youth Outcome

The project began as one of four projects at the University of

Illinois at Champaign-Urbana. These projects were funded by the National Institute of Mental Health and examined issues surrounding the use of nonprofessionals with four types of targets: elementary school children, institutionalized adult mental patients, elderly adults and adolescents in legal jeopardy. The project utilizing university undergraduates with adolescents looked at the effects of two different types of training for the nonprofessionals. First, students were trained in techniques of behavioral contracting with the youth and his/her family and/or school personnel. Second, those not receiving behavioral skills training were trained in child advocacy techniques in order to mobilize community resources which had been denied the youth. In an experimental study comparing the effects of the two types of training on different youth outcome to outright release (a no-treatment control group), neither training modality appeared to be significantly superior to the other, yet both were significantly superior to the no-treatment control group (Davidson, 1976). Thus, the decision was made to combine the two types of training into a multi-level, youth specific intervention strategy in order to optimally benefit the youth.

The Adolescent Diversion Project at Michigan State University started as a replication of aspects of the adolescent project from the University of Illinois. The major issue of replication was the effects of the diversion of adolescents from the juvenile justice system to a structured nonprofessional intervention for a time-limited period. In addition, the effects of the multi-level training and intervention were examined with regard to youth outcome. Even looking only at the first

two of five groups run in East Lansing (See Figure 1), the mode of intervention has proved to be superior to court "processing as usual" (a treatment-as-usual control group). This approach to juvenile delinquency has demonstrated substantial effectiveness in reducing the rates of further official delinquent activity. These results have been replicated in five separate experiments and have shown durability in one-year follow-up (Emshoff, Jeppesen, Blakely & Kushler, 1979). Because of these consistent results based upon a sample of 218 youth, it was decided to eliminate the creation of a control group of youth from further analyses. It was believed that a control group of 63 youth would be sufficient to provide a community base-rate of comparison for the future experimental youth.

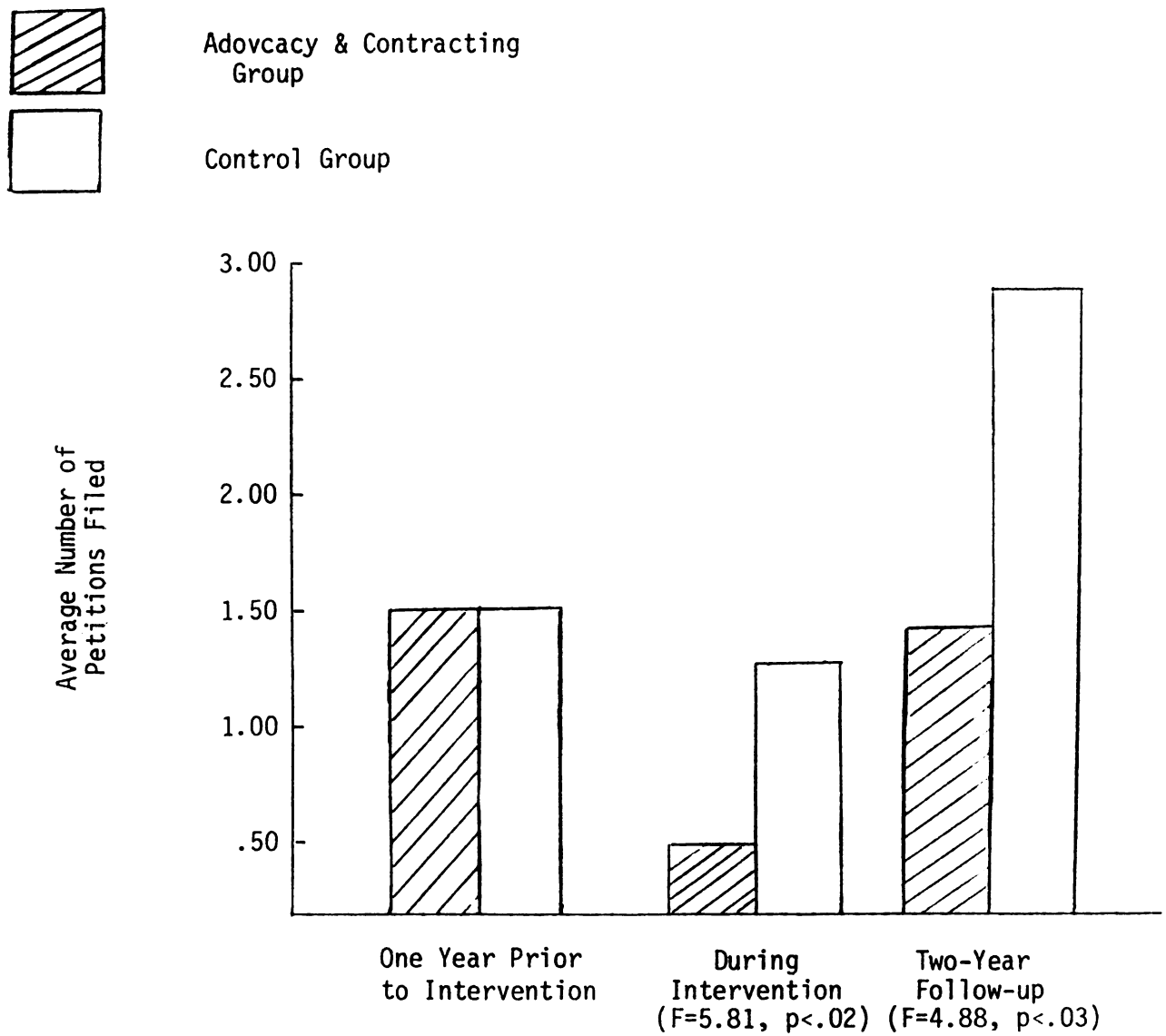
Nonprofessional Outcome

Obviously, the diversion of the youth away from the juvenile justice system has proved to be at least as successful in reducing recidivism as both outright release and court processing. This outcome, though, obviously involved a complex set of relationships between events in the lives of the youth, the intervention modality and the resultant characteristics of the interventions carried out. In addition, there are many aspects of the nonprofessionals which could be interacting with these relationships. Rappaport (1977), drawing from Kiesler (1971) and Paul (1969), stated,

> Change agent effectiveness. . .is far more complicated than the simple question "who is effective" seems to imply. . . The question must be put something like, "who works best with whom, using what techniques and what criteria?" (p. 387)

Figure 1

Comparison of Nonprofessionals to Treatment-as-Usual Control Group



It was therefore deemed necessary to continue the process of unraveling the critical components of the intervention model, to refine it where necessary, and to observe its impact on the juvenile justice system.

Two major issues have been examined experimentally thus far in the project. First, different types of training have been implemented and studied with respect to youth outcome (i.e., recidivism) as well as nonprofessional outcome (e.g., nonprofessional attitude change and satisfaction with the experience). Four training modalities have been examined. Action training was a multi-level, youth-specific intervention strategy from the project's early days, offering behavioral contracting and child advocacy (Kantrowitz, 1979). Family training represented a "narrow band" version of the Action training, wherein the volunteer focused solely upon the youth within the context of his/her family. This training centered primarily on behavioral contracting skills, although advocacy skills were occasionally taught within the family (Emshoff, 1980). Relationship training focused upon the feelings of the youth, helping him/her to acknowledge and deal with feelings about problems he/she was having and systematically problem-solve once these feelings were dealt with (Kantrowitz, 1979). Finally, a natural skills training (also an attention placebo condition) emphasized the innate capabilities and assets (enthusiasm, flexibility, similar social status) of the nonprofessionals, offering them basic information concerning the juvenile justice system as well as hints about working with youth (Kantrowitz, 1979). Overall, those volunteers receiving a specific set of skills to use were happier and more satisfied with the volunteer

experience itself (Mitchell, Kantrowitz, Parisian & Davidson, 1979). In addition, those youth working with volunteers trained in one of the first three, more structured modalities have shown a significantly lower recidivism rate both in seriousness and frequency of crime (Kantrowitz, 1979).

A second issue concerning the nonprofessionals which has been varied systematically has been the structure of training/supervision groups. Both the frequency and the size of group meetings have been examined. Frequency was either once a week or once a month. The group size for training and supervision involved either a "small" group (6-7 per group) or a "large" group (15 per group). Again, those meeting in the small groups and meeting more frequently were more satisfied and happy with the experience. Also, the youth working with volunteers in the small groups with frequent meetings showed less recidivism (Kantrowitz, 1979; Mitchell et al., 1979).

Dissemination of Innovations

The previous subsection described an example of an in-depth examination of a nonprofessional intervention. Typically, outcome research on nonprofessionals follows the two-step model represented above. First, the effectiveness of nonprofessionals (who are trained using pre-determined techniques, intervening in a set modality and supervised in a certain fashion) is compared to either a no-treatment or a treatment-as-usual control group. If there is a positive effect with the nonprofessionals, the second step is to begin to pull apart

the "black box" of the nonprofessional intervention to attempt to determine what components may have which effects.

However, this type of research has dealt primarily with issues surrounding the intrinsic characteristics of the intervention modality--particularly those concerning the scientific status of the intervention (Havelock, 1973). Fairweather, Sanders and Tornatzky (1974) have noted that many well-researched and empirically validated intervention techniques simply disappear due to the lack of a systematic plan for the dissemination of the new intervention to new utilizers. Thus, one must focus not only on the intrinsic characteristics, but also one must examine the extrinsic characteristics of the intervention from the viewpoints of the new utilizers.

Havelock (1973) noted two types of extrinsic variables. The relative advantage of an innovation concerns economic and non-economic cost factors as well as economic and non-economic reward factors. But even more basic to an initial acceptance of an innovation is its compatibility with the new utilizers' systems. Havelock defined compatibility as "the degree of congruence between the intrinsic characteristics of an innovation and various aspects of the user system" (p. 8-42). Rogers (1962) further defined compatibility as "the degree to which an innovation is consistent with existing values and past experiences of the adopters" (p. 126).

Thus far, the intervention modality of nonprofessional training and intervention using behavioral contracting and child advocacy skills has been shown to be more effective than a treatment-as-usual control

group. In breaking apart the intervention package, it was found that nonprofessionals given specific intervention skills and receiving intense supervision had a more positive experience. In order that this intervention be useful to more communities (i.e., communities without access to a major university and its students) though, a new line of research was necessary.

• This study was designed to turn the focus on the successful intervention from its intrinsic characteristics to extrinsic characteristics. This research was a first examination of the compatibility of the training/intervention package with new utilizers.

Social Distance

In looking for new utilizers, one variable discussed often in the nonprofessional literature is that of the effects of the social status of the nonprofessional change agent. As noted earlier, Grosser (1969) stated that, indeed, one anticipated function of the nonprofessional was to bridge the gap between target and service-providing professionals as the human services sought to impact upon much more divergent populations from those traditionally served (e.g., ethnic minorities, the poor, adolescents). Riessman (1969) stated that the use of nonprofessional agents closer in social status "may circumvent the special inter-class role distance difficulties that arise from the middle-class-oriented therapy (and therapist) being at odds with the low-income client's expectations and style" (p. 89). Cowen (1967) purported that lower-class targets are at times even considered "inferior" due to their

values and concerns which do not respond to traditionally based approaches. Cowen also stated,

> In a broader sense, we are speaking of the variable phenomenology of people who need help. Among them there are undoubtedly some who will perceive the professional as an unapproachable authority, as someone who is removed from the problems, or as a person with whom they cannot communicate because he is what he is. (p. 428)

An important question then becomes, why might social proximity enhance change for some? The most frequent response is that the target may be more willing to identify with, cooperate with and model after someone who appears more like him/herself (Christmas, 1969; Cowen, 1967; Riessman, 1969; Rioch, 1966). This has been the central element of programs using indigenous helpers or peer change agents (e.g., Reiff & Riessman, 1965; Yablonsky & Dederich, 1963)--the reduction of social distance factors to zero. Indeed, there has been support for these ideas in the modeling literature, stating that model attributes such as perceived similarity do have impact on creating behavior change (e.g., Bandura, 1968, 1969).

Studies have not been conducted systematically examining the differential impacts of helpers of varying perceived social proximity. In fact, aside from the modeling literature, there has been practically no empirical examination of this issue in the human service field. Thus, in disseminating an innovation utilizing nonprofessionals, an important variable could be the perceived similarity between the target and the change agent. However, this should be examined more systematically before such an assumption can be made.

Questions Posed in This Study

Thus far, it has been demonstrated that the use of exogenous nonprofessionals has theoretical and practical support. Previous research has shown that, in dealing with juvenile offenders, nonprofessionals receiving a specific set of skills and frequent supervision have reduced target recidivism as well as felt better about themselves and the volunteer experience in general.

In order to examine the generalizability of this intervention modality, one must examine the compatibility of the modality with the new utilizers--how does it fit with their past experiences, skills, values and expectations? Can this intervention be utilized with people who are not university undergraduates? Will new groups of utilizers create similar relationships and do the same kinds of activities, or will they adjust these to fit their values and attitudes? Just how will this experience impact on the groups? Will they learn the training material? How will their attitudes change during the experience? Will they be satisfied with the training/intervention modality? A second variable discussed was that of perceived social distance from the target. Does this variable create differential effectiveness in target outcome? If so, in what way?

This myriad of questions was collapsed into seven research questions. First, would other nonprofessional types besides university undergraduates be interested in trying this intervention modality? Data were collected concerning figures generated during the recruitment process. Second, would those who became involved attend the required

training and supervision meetings? Data from the attendance records of supervisors were used here. Third, would the nonprofessionals learn the training material and retain it during the experience? A Knowledge Retention measure examined this issue. Fourth, for those who became involved, how compatible was the modality? How did they like it, and did they do the model as they were trained? This was scrutinized using a Volunteer Satisfaction measure and process data.

The fifth question was what else went on during the intervention: what did the nonprofessionals and the youth do during the period and how was the nonprofessional perceived by the youth? This information was gathered through process data focusing on the intervention and through a Relationship measure. The sixth question was what impact did the intervention have on the youth. Here, the issue was addressed using archival data from the court, as well as self-reported data concerning delinquent acts and positive activities at home and at school.

The seventh question was what impact did the volunteer experience have on the nonprofessionals' attitudes. Volunteer attitudes were examined with a Semantic Differential attitude questionnaire. Details of these measures will be delineated in the following chapter.

CHAPTER II

METHOD

Setting

The research took place within the context of a larger research project funded by the National Institute of Mental Health. The research had already been in operation since April, 1977. The project was staffed by the project director, seven graduate students and two undergraduate students who served as research and supervision co-ordinators in the educational pyramid paradigm, as set forth by Seidman and Rappaport (1974).

The project was aimed at experimentally examining and replicating a diversion project for delinquent youth (Davidson, 1976; Davidson & Rapp, 1976; Davidson & Rappaport, 1977; Davidson et al., 1977; Seidman, Rappaport & Davidson, 1976a, 1976b; Seidman et al., in press). The project diverted adolescents from the juvenile justice system via intervention on a one-to-one basis of a nonprofessional for 18 weeks. The project was examining such components of the diversion model as the degree of involvement of the youth with the juvenile justice system at the time of referral, characteristics of the nonprofessionals, selection of nonprofessionals and the scope of the intervention approach. The project took a multi-level approach, focusing on individual, group and systemic variables and interventions.

In order to initiate this phase of the research, two sets of administrative agreements had to be negotiated. The first was developed

in September, 1976, with key individuals within the juvenile justice system. While there was a willingness on the part of these individuals to try this approach to juvenile justice and to refer a significant number of youths to this project, several important decisions had to be made. It was decided that a youth would be referred only after having had an inquiry and preliminary hearing and having admitted to the charges presented to him/her. Procedures were established for determining which youths were acceptable to the research, for diverting and referring the youths, for randomly assigning them to experimental conditions and for ensuring voluntary participation. Decisions to refer the youth were left to the discretion of the court referree who conducted the preliminary hearing.

In addition, since one of the new utilizer groups was to be community college students (see below) and because this was the first involvement with the local community college, an administrative agreement was negotiated between the Lansing Community College and Michigan State University during August, 1979. This agreement delineated responsibilities for both parties for areas such as space for class meetings, course supplied, employee benefits and administrative channels.

The Human Subjects Committee at Michigan State University has reviewed and approved the procedures followed by this research.

Subjects

Target Youth

The Ingham County Probate Court saw approximately 1000 youthful offenders each year. It was from this group that research referrals were made. The adolescents were chosen for the research in the manner depicted in Figure 2. Adolescents who pled guilty to a petitioned charge in Ingham County Probate Court and who were deemed appropriate for the research by court personnel (e.g., not guilty of extremely minor or major charges, not been involved in the project before, not currently on probation) were referred to a project Intake interviewer. This interviewer, a research staff member, met with the youth and his/her parent(s) to explain the option of participation in the research. If all involved were interested in being involved with the research, they signed a contract acknowledging their interest and affirming their knowledge of their rights as participants. They were then assigned randomly to one of the three experimental groups stratified by sex, race, order of referral and court referree.

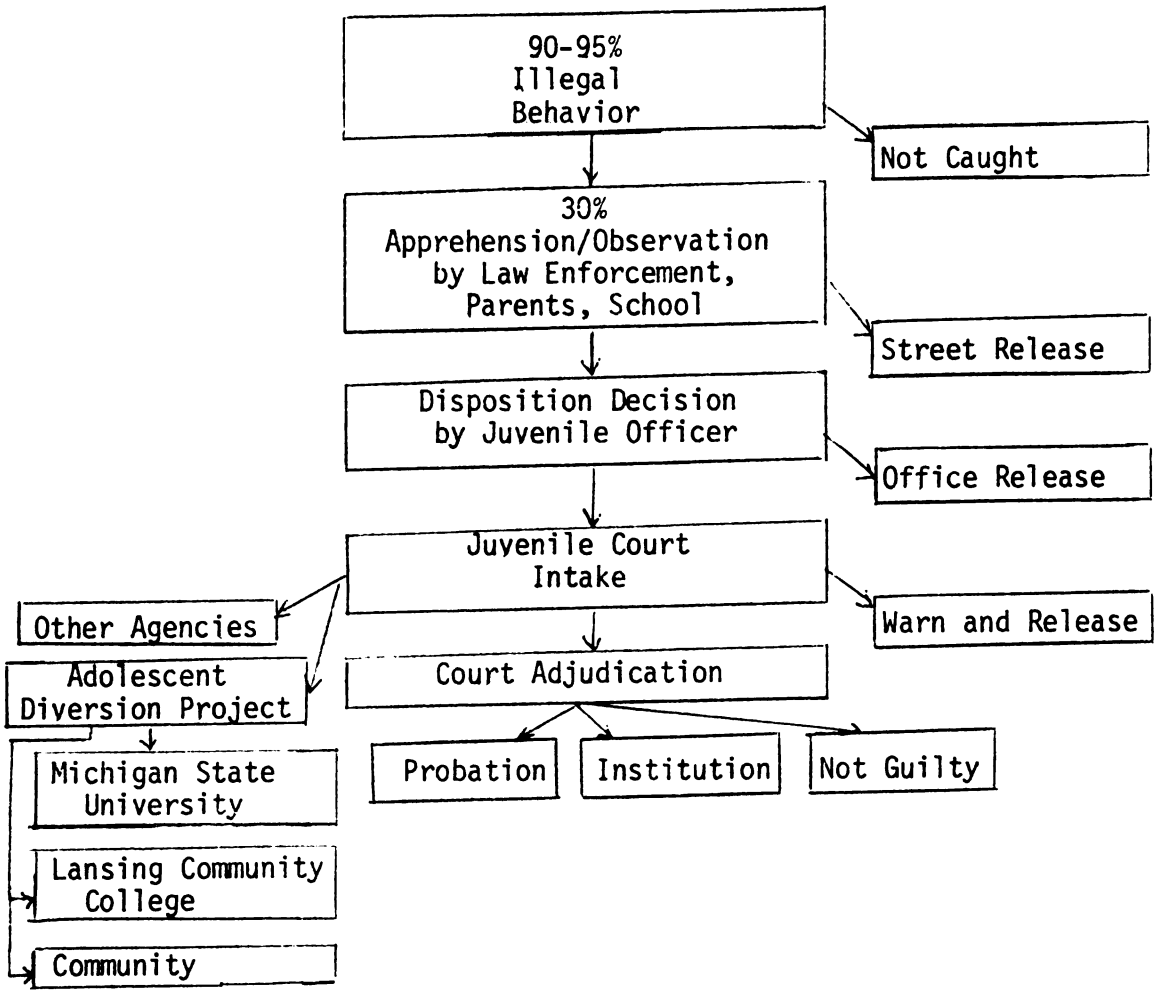
Thirty-four youth were referred to the program. Two youth refused to participate. Approximately 68% were Caucasian; 18% were females. They ranged in age from 11 to 16 years old, with an average age of 14.6 years. The average grade was ninth grade. All had pled guilty to a non-serious to serious misdemeanor or a non-serious felony.

Nonprofessionals

Rarely, if ever, have different types of nonprofessionals been compared simultaneously using the same target population. This study

Figure 2

Flowchart of Adolescent Selection



was designed to do just that. Two groups besides Michigan State University (MSU) undergraduates were chosen to focus upon, in order to represent types of nonprofessionals commonly available to many communities. First, volunteers were recruited from Lansing Community College (LCC). The LCC group represented a mid-point on a conceptual continuum of perceived social distance between the MSU group and the community itself. Examining the durability of the research with community college students goes part of the way toward enhancing the generalizability of the findings so far. The use of community college student volunteers is a possibility in many more communities than the use of students from a major university.

The second group chosen to focus upon was a non-student community resident group. The community volunteers were volunteers who resided and/or worked in the Lansing area. None of them were in student roles and all were in adult roles in the local community. The durability of the intervention model when carried out by this type of change agent is of critical and theoretical importance. Any community potentially has access to a pool of nonprofessionals such as these; if community volunteers can effectively utilize this intervention modality, the first step toward the dissemination of it (according to Havelock (1973)) has been accomplished.

Recruitment and Selection of Nonprofessionals

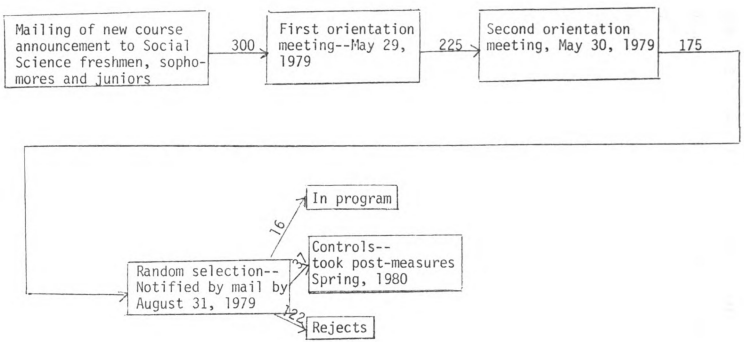
University nonprofessionals. The university nonprofessionals were undergraduates at Michigan State University who first enrolled in

Psychology 371, Section 1, during Fall term, 1979. Figure 3 presents a flowchart of the selection process for the University undergraduates. Students were recruited by the mailing of a new course announcement to all Freshmen, Sophomore and Junior social science majors (approximately 2100 students) at Michigan State University during May, 1979. Three hundred students responded initially to the letter by phone, expressing interest in participating. Students were subsequently required to attend two orientation and assessment sessions. Approximately 225 students appeared at the first general orientation meeting May 29, 1979. At this meeting, the project director spoke to the students regarding the background of the project and requirements of participation in the research; later, students' questions were answered. Finally, demographic data and career goals were collected, and people signed contracts stating both their willingness to commit themselves to three terms in the course (Fall, 1979, Winter, 1980 and Spring, 1980) and their willingness to participate in further assessment measures. A second meeting time was announced for additional measures. Of the 225 people who filled out the measures, 175 students returned for the final meeting, where various questionnaire measures were administered--the Personality Research Form, a version of the Semantic Differential attitude questionnaire adapted to the area and target population, a Delinquency Orientation scale attempting to assess the respondent's stance on treatment of delinquents, and Rotter's Locus of Control scale.

Obviously, this "recruitment" procedure in itself acted as a

Figure 3

Flowchart of University Nonprofessional Selection



selection device. From this "self-selected" pool of 175, 16 students chosen randomly, controlling for equal numbers of each sex. Students selected were sent letters informing them of their status; they were asked to return an enclosed postcard confirming their acceptance. All 16 accepted. Once all had accepted, letters were sent to the remainder of the students, asking them to serve as no-training/experience controls in Spring term, 1980. The selected students met with their two trainers/supervisors on September 18, 1979 and divided into two groups of eight students.

In May, 1980 the Control group was "reconvened". All 33 males who were not selected were sent letters asking them to attend a one and one-half hour meeting to take measures in return for $12. Of the remaining 126 females, 33 were randomly selected to receive the same letter. Follow-up calls were given to all one week prior to the meeting. Nineteen males and 18 females returned to take the post measures. Those who did not receive the letter, as well as those who received the letter but did not fill out the measures were classified as "Rejects".

Of the nonprofessionals participating, all were single, with an average age of 20 years. Approximately 85% were Caucasian; 60% were at the Junior level in school or higher; 20% were criminal justice majors and 45% were psychology majors.

Community college nonprofessionals. The students in the community college condition were recruited from Lansing Community College. Lansing Community College is a two-year college with an approximate enrollment of 19,000 students. The college offers two-year Associate degrees as well as programs for those wishing to transfer to other

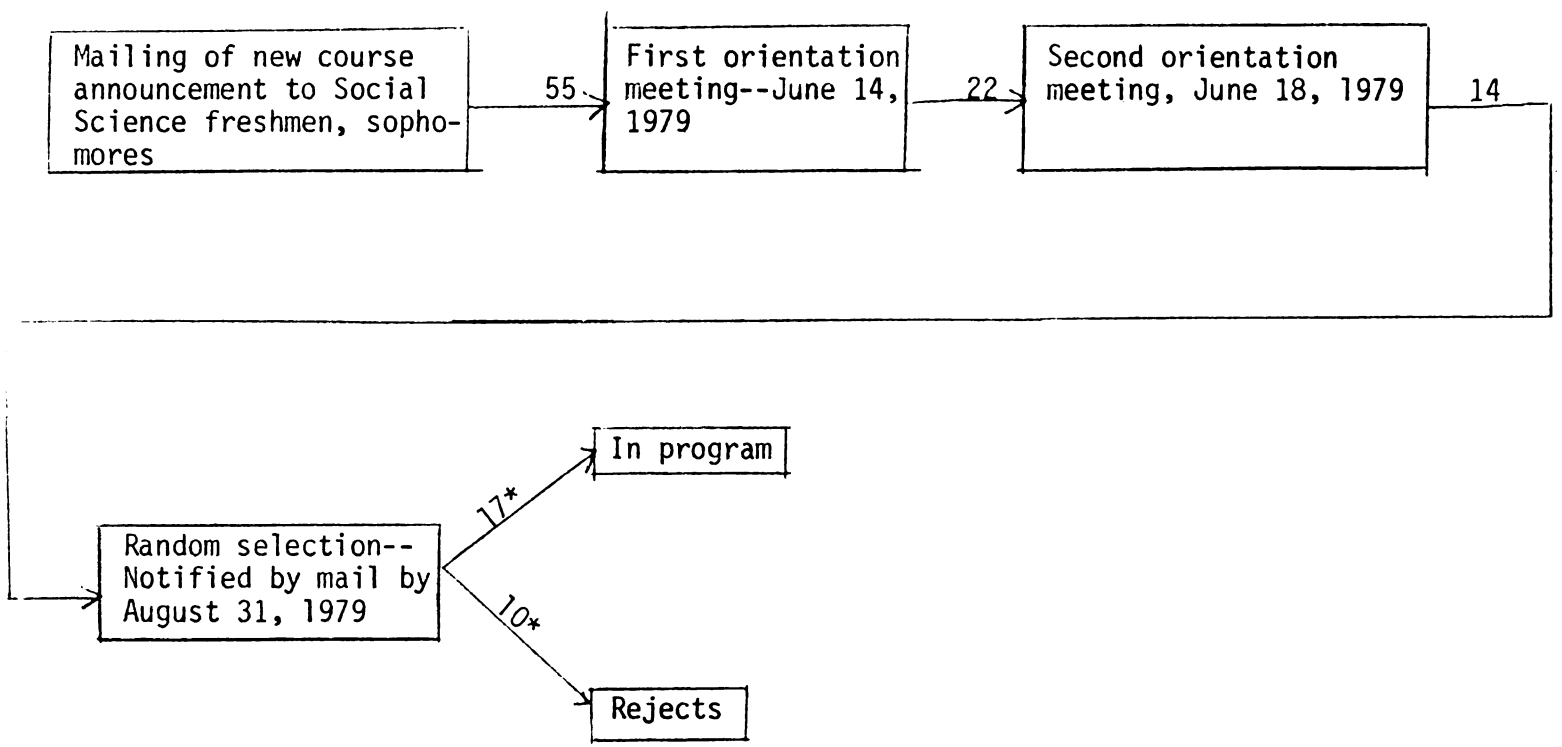
colleges and universities to complete Bachelor's degrees. In addition, there are many adults who take classes simply for their own enjoyment.

The nonprofessionals were enrolled at Lansing Community College, registering for Child Advocacy 296, Section 1, during Fall term, 1979. The process which the community college students went through was identical to that of the university students; the numbers responding at each step are shown in Figure 4. Students were recruited by the mailing of a new course announcement to all Freshmen and Sophomores in social science majors as well as other related majors such as criminal justice and law enforcement (approximately 740 students). Fifty-five students responded initially to the letter by phone, expressing interest in participation. Again, interested students were required to attend two orientation and assessment sessions. Twenty-two people attended the first general orientation meeting on June 14, 1979. Demographic data and career goals were collected at this meeting, with the project director also offering information concerning the project and the course requirements. People also signed contracts stating both their willingness to commit themselves to three terms in the course and their willingness to participate further in assessment measures. Fourteen people returned to the second meeting and completed all the measures. Since this was still below the minimum number desired for this condition, the process was repeated one month later.

The only difference in the second recruitment process came in the course announcement mailing. In addition to mailing letters to the same majors as the first time, a random sample of 20% of the non-declared

Figure 4

Flowchart of Community College Nonprofessional Selection
(First Recruitment)



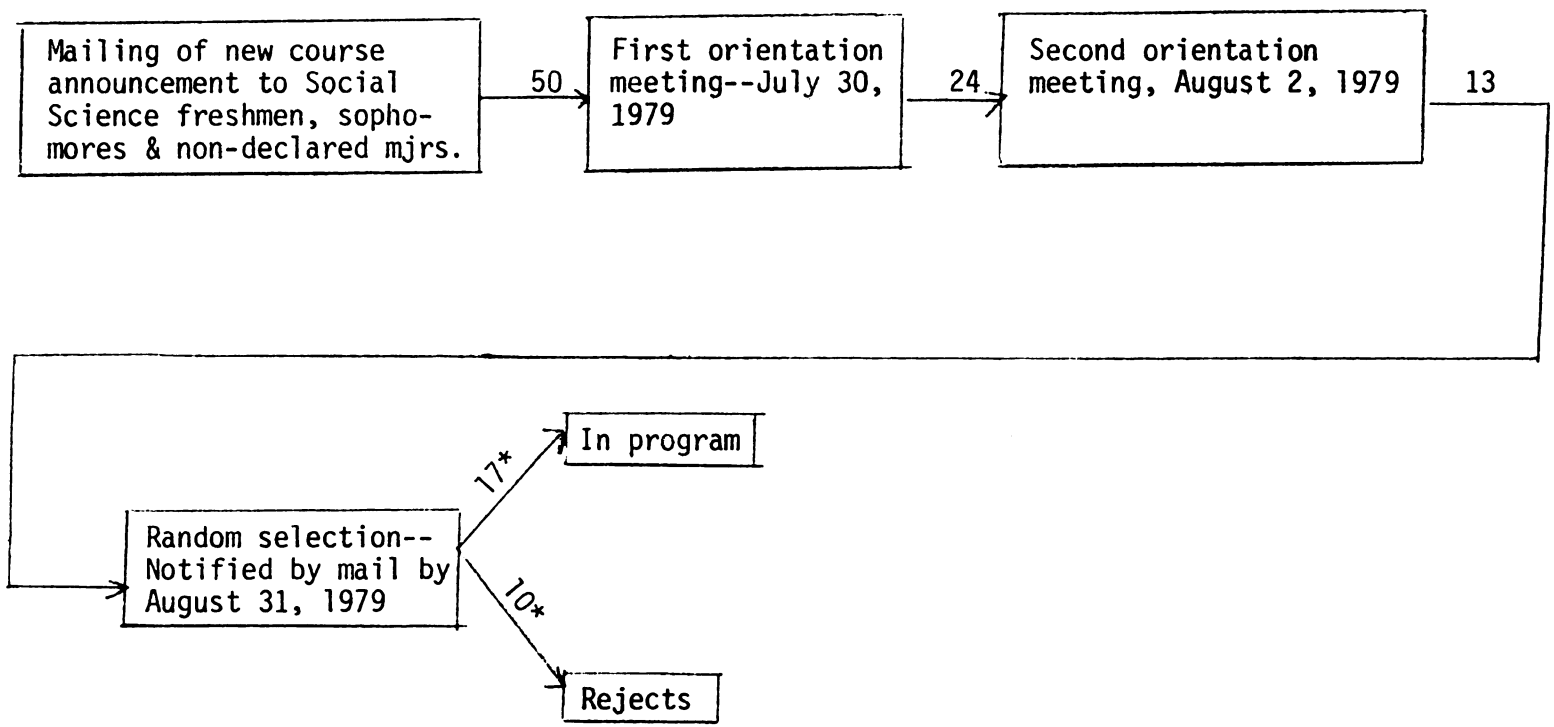
*Total number from both recruitments

majors were included. Thus, letters were sent to approximately 2000 students. In spite of this increase, only apporixmately 50 students called to inquire about the first meeting. Approximately 24 students filled out demographic data, career goals and contracts; 13 students returned to the second meeting and filled out the complete measures. (See Figure 5.) Thus, at the end of the community college recruitment, there were 27 students who had completed all measures. These people formed a pool from which 17 students were chosen. There were only nine males who completed all measures; all were asked to be in the program. The eight females were randomly chosen from the 18 females who had completed the measures; one refused to participate and was replaced by another randomly selected female.

Due to the proximity of the community college students and the enrollment deadlines of the community college, the selected students were contacted by phone in order to more quickly ascertain their interest in participating. All were then sent letters confirming their acceptance and asking them to return postcards with their intentions noted on them. Those not selected were sent letters informing them of their rejection. The selected students met with their trainers/supervisors on September 25, 1979 and divided themselves into two groups of nine and eight students. Two males dropped the course after the first meeting due to personal problems. Two females dropped prior to case assignment, again for personal reasons. Consequently, these nonprofessionals met in groups of seven and six; those who quite were not considered in any of the results reported in the next chapter.

Figure 5

Flowchart of Community College Nonprofessional Selection
(Second Recruitment)



*Total number from both recruitments

Of those who participated in the experience, 46% were either married or divorced; the average age was 27 years; and each person had an average of 1.2 children. Approximately 90% were Caucasian; 40% were psychology majors and 40% were Social Work majors. Only 30% reported an educational status of Junior or higher.

Community nonprofessionals. Community nonprofessionals were recruited in several ways. First, information concerning the program was disseminated through the local county court's volunteer recruitment which annually occurs during the Fall ("Youth Needs You"). Next, public service announcements were distributed to all local television and radio stations. Also, an advertisement was placed in a local trading paper, and an announcement was placed in the local newspaper. Finally, local volunteer clearninghouses, local churches and neighborhood groups were contacted personally with background concerning the program as well as a request for volunteers.

This extensive recruitment procedure lasted from September 15, 1979 through December 1, 1979. During this period, 10 people expressed at least an initial interest in the program. However, only 6 people (two males and four females) filled out the initial measures. At this point, time became the deciding factor. Due to breaks in the intervention period for Christmas (approximately three weeks) and Easter (approximately 1 week) and the absolute minimum training requirement prior to the first meeting with an assigned youth (2 weeks), any volunteers starting after December 1 could not have completed the entire intervention period. Because of this, it was decided to terminate the

recruitment process. It should be noted finally, that although six people were available to participate, only five (two males and three females) actually began the training, and only three (all females) completed the entire nine-month experience.

Results. Even at this early stage, the answer to the first research question posed by this study was evident. This question concerned the ability to obtain volunteers representing all three groups. The data generated by the recruitment of the three nonprofessional groups are of extreme interest and importance in this study. Thus, a brief recap of the recruitment procedure and the number of people participating at each step will be presented here. Next, analyses based on these data will be examined in the form of contingency table analyses. Finally, the ramifications of these findings for this study will be discussed prior to preceding with the remaining methodological issues.

In the recruitment process, there were four distinct steps which nonprofessionals from all three groups were to complete: expressing interest through a phone call; completing all requirements (attending a meeting(s) and filling out six paper-and-pencil questionnaires); beginning training; and finishing the nine-month involvement. Table 1 summarizes the numbers from each condition participating at each step.

From these data, two meaningful chi-square analyses emerged. First, the number of people who expressed an interest and completed all requirements were compared to those who expressed an interest but did not complete all requirements. (See Table 2.) A significant corres-

Table 1

Number of Participants

Group	Expressed Interest	Completed Requirements	Began Training	Finished Program
MSU	300	175	16	16
LCC	115	27	17	13
Community	20	6	5	3

Table 2

Participants Following through after Expressing Interest

Group	R	$\overline{R}$	
MSU	175	125	
LCC	27	78	$\chi^2_2=36.13$, $p<.001$
Community	6	14	

R: Expressed interest and completed all requirements to be considered as a nonprofessional.

$\overline{R}$: Expressed interest but did not complete all requirements.

pondence between nonprofessional type and completion of the program pre-requisites for consideration as a nonprofessional is indicated (χ^2_2=36.13, p<.001). Approximately 58% of the university students who expressed an interest followed through completely, while only 23% of the community college students and 30% of the community volunteers did so.

The second chi-squre analysis compared the number of people who finished the program to those who were asked to begin but did not complete the nine-month involvement. (See Table 3.) A significant relationship between type of nonprofessional and completion of this experience is again noted (χ^2_2=8.04, p<.02). All of the MSU students who were invited to participate completed the program; about 24% of the LCC students quit prior to completion of the involvement; 50% of the community nonprofessionals who were asked to begin the experience completed it.

There are two related issues which arise from these analyses. First, there are clear differences among groups concerning both their willingness to be initially involved in the program and their willingness to finish the experience. The community college group recruitment generated sufficient people in order to begin with the desired number. (Anticipating dropouts, all nine males plus the planned eight females were asked to be involved.) The community group, however, did not reach even one-half of the desired total of 16 experimentals, thereby ruling out the possibility of random assignment to an experimental or control group. Thus, all who completed the measures from the community

Table 3

Participants Completing Program once Accepted for Training

Group	C	$\overline{C}$	
MSU	16	0	
LCC	13	3	$\chi^2_2=8.04$, $p<.02$
Community	3	3	

C: Completed nine-month experience.

$\overline{C}$: Did not complete nine-month experience.

group were asked to participate. However, due to the attrition rate of the community nonprofessionals (leaving a statistically meaningless cell of three), this group was dropped from further analyses.

Related to this issue is the problem of control groups for the community college and the community nonprofessionals. Due to the differential response rate of both groups, as noted above, there were barely enough responders to generate a full experimental group of community college nonprofessionals. There were no males left from that group, though, so an equivalent control group of community college volunteers could not be created. In addition, as noted above, there were not enough nonprofessionals to even create a statistically meaningful group of community nonprofessionals. Thus, random assignment of people to either an experimental or a control group would have jeopardized the statistical salience of both experimental groups (and therefore, the meaningfulness of any further analyses).

At this point, there were two choices. First, non-equivalent control groups for the community college and community nonprofessionals could have been created. The most pressing concern with this option centered around the design. Since non-equivalent control groups would have been formed at a later date, the design would in effect have been a post-only, non-equivalent control group design. Cook and Campbell (1979) described this design as one that does not really permit reasonable causal inferences. They stated, "any posttest differences between the groups can be attirubted either to a treatment effect or to <u>selection</u> differences between the different groups. The plausibility of selection

differences in research in non-equivalent groups usually renders the design uninterpretable" (p. 98-99).

This could easily be an important issue here, especially concerning the dimension of motivation and enthusiasm. The literature has stated that the high level of motivation and enthusiasm exhibited by volunteers may be a unique and a crucial characteristic distinguishing them from non-volunteers (e.g., Conter et al., in press; Gruver, 1971; Poser, 1966). Thus, a non-equivalent control group would necessarily differ on this dimension for none in the groups created later would have expressed this motivation. Based on this weakness, it was decided to not attempt to utilize non-equivalent control groups for either of these groups. Rather than muddy the issues by ignoring the motivation dimension, it was decided to follow the second option: to utilize a control group only for the MSU group for this study.

Trainers/Supervisors

There were six trainers/supervisors involved in this research study. Brief descriptions of each of the six will be provided below.

The first trainer/supervisor was an advanced graduate student in ecological psychology. He had been involved as a trainer/supervisor in the project for 2½ years and had primary responsibility in the area of development and analysis of process data. He had extensive experience as a volunteer and paid staff member working with delinquents and was interested in the evaluation of innovative social systems modifications.

The second trainer/supervisor was an undergraduate student in multidisciplinary social science. She had been involved in the project

for 2½ years, although never before as a trainer/supervisor. She had served in many capacities of research, such as interviewer, data coder, computer programmer; she concurrently shared primary responsibility for the training and supervision of research interviewers collecting process data. She was interested in counseling with youth and their families.

The third was a graduate student in clinical psychology. He had previously taught and supervised two classes of undergraduates in the project, as well as taught Adolescent Psychology in a nearby institution. He shared responsibility for the collection, coding and analysis of data on the nonprofessionals. He was interested in counseling and supervision of programs involving adolescents.

The fourth training/supervisor was an undergraduate in psychology. She shared responsibility for the training and supervision of research interviewers collecting data. She was interested in sex roles, adolescents and women's studies.

The fifth was an advanced graduate student in clinical psychology. She had been involved in the training and supervision of nonprofessionals on the project for 2 years, and concurrently shared primary responsibility for the training and supervision of research interviewers collecting process data. She was interested in training nonprofessionals as well as family therapy.

The sixth trainer/supervisor was a graduate student in ecological psychology. He was involved in the collection and analysis of data on such systems as court, school and police. He was primarily interested

in public interest consumer adovcacy.

Trainers/supervisors were given their choices as to which type of nonprofessional they preferred to train and supervise, although care was taken that at least one experienced trainer/supervisor work with each nonprofessional group. Based upon this, the first two worked with the university nonprofessionals; the third and fourth worked with the community college nonprofessionals; and the fifth and sixth worked with the community nonprofessionals. Ideally, the same trainers/supervisors would have been used with all conditions, in order to eliminate the trainer/supervisor pair as a possible source of variation. However, due to the amount of time needed for the training and supervision of just one class (approximately six hours per class), and the research commitments of all on the project, it was decided to nest trainers/supervisors within condition.

Research Design

This research included seven basic designs. First, to examine the first research question (p. 43) concerning the willingness of other nonprofessional groups to try this modality, chi-square analyses of attendance data at recruitment meetings were used. The results of this study pertaining to this question have already been presented. The second question, dealing with attendance at training and supervision meetings, was explored with a two by three factorial design with repeated measures. The two factors were condition (university-experimental, community college-experimental) and time (Time 2, Time 3, Time 4). The third question regarding the acquisition and retention of

training material used a two by two factorial design with repeated measures. The two factors were nonprofessional type (university-experimental, community college-experimental) by time (Time 2, Time 4). In addition, knowledge of intervention skills was compared to a base-rate of knowledge among university undergraduates through a one-way analysis of variance, adding the university control group to the two experimental groups at Time 4 only. (See Table 4.)

Fourth, to examine the first aspect of compatibility--volunteer satisfaction--the research utilized a two by two factorial design with repeated measures. The two factors were nonprofessional type (university-experimental, community college-experimental) by time (Time 2, Time 4). (See Table 4.) The second aspect of compatibility--following the model--as well as the fifth question concerning other activities employed a two by three factorial design with repeated measures. The two factors again were nonprofessional type (university-experimental, community college-experimental) and time (Time 2, Time 3, Time 4). (See Table 5.)

In order to answer the sixth question about the impact of the experience on the youth (using both archival and self-reported data), the research design was a two by four factorial design with repeated measures. The two factors were nonprofessional type (university-experimental, community college-experimental) and time (for archival data, Time 1 and Time 2; for self-reported data, Time 1, Time 2, Time 3, Time 4). (See Tables 5 and 6 for further details.)

Seventh, to examine the question of the impact of the intervention

Table 4

Research Design for Nonprofessional Characteristics Data

Condition	Time 1 prior to selection	Time 2 after 10 weeks	Time 3 after 20 weeks	Time 4 after 30 weeks
University--Experimental	1	1-3		1-3
Community College--Experimental	1	1-3		1-3
University--Control	1			1,3

Measures

1 Volunteer attitude measure
2 Volunteer satisfaction measure
3 Knowledge acquisition and retention measure

Table 5

Research Design for Interview Data
(Youth Outcome and Process Measures)

Condition	Time 1 (at assnmt.)	Time 2 (after 6 weeks)*	Time 3 (after 12 weeks)*	Time 4 (after 18 weeks)*
University	1-3	1-5	1-5	1-5
Community College	1-3	1-5	1-5	1-5

Measures

Youth outcome measures:

1 Self-reported Delinquency
2 Positive Change at Home
3 Positive Change at School

Nonprofessional-youth Intervention Characteristics:

4 Intervention scales
5 Relationship Inventory

*While interviews were done for every six weeks of actual intervention, breaks for Christmas and Easter (during which no intervention occurred) resulted in an average real interval of approximately eight weeks.

Table 6

Research Design for Archival Data
(Youth Outcome)

Group	3 months after*	6 months after*
University	1	1
Community College	1	1

Measures
1 Court data (number and seriousness of offenses)

*Although there were 18 weeks of actual intervention, breaks for Christmas and Easter resulted in an average real intervention period of approximately 24 weeks.

on the nonprofessionals themselves, the research utilized a two by four factorial design with repeated measures. The two factors were nonprofessional type (university-experimental, community college experimental) and time (Time 1, Time 2, Time 3, Time 4). Also, in order to compare the impact of the nonprofessional experience with a baseline (control) group, a three by two factorial design with repeated measures was employed: nonprofessional type (university-experimental, university-control, community college-experimental) and time (Time 1, Time 4). (See Table 4.) As noted above, the control conditions for the community college and community nonprofessionals were not available due to the lack of a sufficient number of interested participants. The same was true for the community-experimental condition as well.

Referral of Delinquent Youth

After the decision was made to divert the adolescent to the research, the court referree briefly explained the research to the youth and at least one of his/her parents. If the youth and parent(s) were interested, a referral interview was set up and then conducted by a member of the research staff. During the initial interview, the research was explained in detail along with the assessment methods involved and the random assignment procedures. If the youth and at least one of his/her parents were voluntarily willing to participate in all aspects of the program, to commit themselves both verbally and in writing to this effect, to fill out basic demographic information and to sign release of information forms for school, police and court data, they were

admitted to the research. A card was drawn containing the experimental condition to which the youth was to be assigned; the youth and his/her family were told that both an interviewer and a volunteer would be contacting them shortly. (As mentioned earlier, youth assignment was stratified by sex, race, order of referral and court referree.)

Assignment to Nonprofessional

Once the youth was randomly assigned to one of the two experimental conditions, the nonprofessional in the particular condition was assigned to the youth randomly, keeping in mind the nonprofessional's transportation needs. Thus, a volunteer without a car was, whenever possible, matched with a youth on or near a community bus line. The volunteer was told to initiate the first contact by phone, and from that point on, to plan to work with the youth for six to eight hours per week for a full 18 "school" weeks. Some volunteers received assignments as early as the fourth week of training, during October, 1979. Since there was not a constant rate of youth referred, it took until January 13, 1980 before all volunteers were assigned.

Training of Nonprofessionals

All conditions were trained in a similar format; however, the university and community college nonprofessionals received grades and academic credit, while the community nonprofessionals received neither. This was decided upon in order to more accurately represent volunteer programs available in a community, even though it did make the community

condition slightly different from the other two. In addition, the university and community college students had access to assigned readings through their respective libraries' reserved reading rooms; the community nonprofessionals were each given a copy of the readings since there was no parallel structure available in the community. In this section, therefore, the grading procedures, which applied only to the university and community college students, will be detailed; the common training and supervision will be delineated after that.

Grading. The university and community college nonprofessionals received grades and academic credit for their involvement in the research. Each university and community college nonprofessional received four academic credits per term. He/she was required to attend all group sessions scheduled for his/her particular training/supervision group, to hand in a weekly progress report, to keep a log book (a running account of contacts with the youth and with others on behalf of the youth), to participate in assessment procedures and process interviews throughout the three terms and to meet with his/her youth six to eight hours a week for 18 school weeks. The grade during training was based on weekly oral and written examinations and practice assignments in the training segments. Grading during case supervision was based on responsibility demonstrated in class and with the youth, class attendance, case presentation, class discussion and ethical standards. It should be noted that the community nonprofessionals were expected to do all the same things (weekly oral and written tests, weekly progress reports, log books, class attendance); however, there simply

was no academic enforcement or evaluation of the performance of these tasks.

Training/supervision structure. All types of nonprofessionals received the following training. Each group was composed of no more than eight volunteers and two project staff co-leaders or supervisors. During training, each small group met for two and one-half hours weekly. After training, groups met for two hours weekly. The first eight weeks of Fall term were designated the training segment, and volunteers were expected to master outside readings and the content of the training manual for their class. Mastery of subject matter was demonstrated on oral and written questions in the first hour of the group and onhomework assignments, roleplays and group discussions in the second half of the meeting.

Although the university and community college nonprofessionals were trained in the allotted eight weeks, community nonprofessionals took longer to cover the required material satisfactorily. Partly, this appeared to be due to the advanced reading level of the outside readings, as well as the lack of a "hammer" (i.e., grades) to overcome outside commitments (primarily family and work) of the community non-professionals. Therefore, considerable time was spent by supervisors orally presenting the material in the outside readings and the manual. Thus, training covered 12 weeks.

After the training component was completed, the groups were used solely for supervision. Since volunteers were assigned cases as early as the fourth week of training, part of each training session after that

was supervisory in nature as well.

Training/supervision content. All nonprofessionals were trained in the use of child advocacy and behavioral contracting techniques. The first unit of training involved an overview of the course and detailed project expectations. A brief history of the juvenile justice system and the notion of diversion was provided, as was a description of the local court system. Finally, the theoretical rationales behind the behavioral conception of human behavior and delinquency were presented in the manual, forming a basis for behavioral contracting.

In the manual for unit two, a rationale for the environmental resources conception of human behavior and juvenile delinquency were provided, for child advocacy was based on this rationale. A section explaining the reasons for the use of a combination of contracting and advocacy was also included.

During the third unit of training, there was a brief description of the initial meetings between the volunteer and the youth. The main emphasis for the nonprofessional was on performing an in-depth assessment of the youth and his/her situation, for this was seen as the essential starting point for both the contracting and advocacy methods. An in-depth assessment entailed gathering information about the youth's interpersonal network, identifying the unmet needs for the youth and discovering the available community resources for meeting these needs. All of this information was to be considered when formulating an intervention strategy.

The fourth unit of training was experiential in nature. Volun-

teers were assigned the assessment of a friend's situation or behavior as "homework". This task gave them experience in the gathering of specific usable information--an essential part of conducting an assessment. Roleplays of the situations described in the homework and of the initial meetings with the youth and his/her parents were performed.

The fifth unit covered selection and initiation of an intervention strategy. Once the situation was assessed from both the behavioral and advocacy perspectives, each was expected to select and implement a plan of action. This plan included either or both methods. For behavioral contracting, initiation of a plan involved the negotiation of a contract between the youth and some significant other(s). The volunteer learned how to assume the role of mediator between the youth and his/her interpersonal network. The contract itself included such components as privileges, responsibilities, bonuses and sanctions and had a means for monitoring the performance of each party. For advocacy, the initiation of a plan involved choosing an advocacy strategy ranging from positive to neutral to negative action with or against the critical individual or agency. Second, the volunteer chose to bring about change at either an individual, administrative or policy level. Thus, the volunteer assumed the role of advocate for the youth and his/her situation. At the beginning, advocacy was carried out for the youth. However, the youth was kept informed about these advocacy efforts and was as involved as possible.

The sixth unit was another totally experiential session, so that volunteers had the opportunity to practice contracting and advocacy

interventions. For homework, each was expected to set up a hypothetical contract between two people and decide how to go about talking a person into performing an advocacy effort.

Unit seven presented information about how to monitor the intervention that was to be made. It stressed that, for both approaches, it was not enough to merely implement a strategy. Rather, the volunteers were taught that they had to continually evaluate the progress toward the achievement of goals and that they needed to be sensitive to sources of feedback. They learned that they might need to renegotiate a contract or make additional advocacy efforts. Roleplays of situations where these steps were needed were utilized.

The manual for unit eight, the final unit of training, discussed the termination of involvement with the youth. Both individual models stressed the importance of relaying the training that the volunteer received to the youth him/herself and his/her significant others so that they could continue to use these methods and techniques to perpetuate and/or expand the changes that had been made. Finally, there was a section on how to prepare a termination report and how grades and the group itself would change as the training component ended.

Supervision content. Once the units of training were completed, the weekly group period for the remainder of the three terms (nine months) was spent in supervision. Those who had already been assigned cases presented their cases to the group. This presentation entailed relating the past week's activities with the youth--focusing on the phase where each was in the intervention model and on what he/she had

learned about the youth and his/her situation. Supervisors and group members helped the volunteer clarify and understand what had been learned and accomplished in the past week. They also helped the volunteer plan the implementation of the next step of the intervention strategy and the development of overall goals for the youth during the 18-week intervention period.

The intervention that was implemented by the nonprofessional was expected to follow the steps outlined and modeled in the training segment. Each volunteer engaged in whatever activities were necessary with the youth and his/her significant others so that the youth's situation could be accurately assessed. Based on this information, discussions with the youth and significant others and decisions made in the supervision group, each were then expected to choose a specific intervention strategy, implement it and monitor its impact. For example, if a particular situation seemed to require a contracting intervention, the nonprofessional was expected to discuss with both parties what they wanted to be included in the contract, to help them initiate and monitor its use and to help them determine its success in improving the original situation. If not resolved, the volunteer had the option of renegotiating another contract. Once the situation was dealt with, the volunteer could decide to expand the contract to include other areas of concern, could negotiate contracts between the youth and other individuals, or could choose to begin advocacy efforts. These decisions depended, of course, on the needs of the youth and which strategies seemed most appropriate.

If an advocacy approach was selected, the nonprofessional decided on the best approach to use with the target individual, agency, etc., having the desired resource. For example, the volunteer might have decided to take a positive approach with a school counselor, telling him/her of all the strengths and interests of his/her youth and requesting that the youth be allowed to enter a special school program. If that approach did not work, the nonprofessional might have decided to go to see another individual or take another approach with the same person. Each volunteer, using either or both strategies, was expected to instruct the youth and significant others in the specific techniques he/she had employed during the 18-week intervention period, so that these individuals could learn to implement them on their own. This instruction was to include discussions of what had been accomplished and how, roleplays of possible future situations, and actual trials if a situation seemed appropriate.

Monitoring the training/supervision. Supervisor behavior was monitored weekly in all experimental conditions. All supervisors met together. They met one and one-half hours a week in a large group to discuss case-relevant and training-relevant issues, which all shared. However, once each month, each pair also met alone to discuss specific group process issues. The research coordinator was involved in all of these meetings. They listened to part of one audio-taped group session in each condition per week. If discrepancies from the training/supervision/intervention strategy seemed to be occurring, they were discussed in the supervision meeting.

Measures

Measure Development

Due to the recognized impact of the helping experience on the nonprofessional helper as well as the target group (e.g., Durlak, 1971), and the understanding that target outcome is a function of the interaction of a number of variables (Rappaport, 1977), a variety of tests, questionnaires and other measures were used to assess the nonprofessionals and the youth.

General approach to measurement development. In order to simplify the interpretation of a great number of variables included on the measures, a variety of rational-empirical scale construction and refinement strategies had already been employed with all but one measure discussed in this section (Jackson, 1970). (The same approach was used with the newly created "Relationship Inventory" questionnaire, and deatils of this will be presented as well.) This process involved a number of separate steps. First, endorsement frequencies of the items were checked. Items with low variance were eliminated from further analyses. Second, either a principal components analysis with varimax rotation (Tatsuoka, 1973) was performed in order to extract components, or inter-item reliability scores were calculated on rationally generated scales. When principal components analyses were performed, the number of components was determined by the use of either Kaiser's criteria (Kaiser & Caffry, 1965) or the "scree" test (Cattell, 1966). The minimum acceptable loading for inclusion of an item on a component was .50. Scale composition of the rationally

generated items was determined by the achievement of high coefficient alphas (Cronbach, 1970) and by significant corrected item-total correlations (statistical significance, $p<.05$). Third, in deciding upon final component and scale solutions, convergent and discriminant validity properties of the components/scales were attended to, for the goal (using one or a combination of both methods of data reduction) was to maximize reliability properties and minimize inter-component or inter-scale correlation. Logical and empirical fit of the item with the component/scale were also considered important.

The following subsections will discuss outcome measures, measures of nonprofessional change and measures of the nonprofessional-youth intervention, and will present the analyses which resulted in the final data reduction decisions.

Youth Outcome

There were many divergent aspects upon which research such as this could theoretically have impacted. Thus, there were several different areas examined as outcome criteria in this study. It was decided to include such areas as "official" recidivism, self-reported delinquency and positive change in the home and school. Each of these measures will be discussed in detail in the following subsections.

Archival measure of outcome. The most common outcome criterion is "official" recidivism. Official outcome data were examined through the collection of archival data from the Ingham County Probate Court. Data were gathered by coders blind to nonprofessional type, and were

collected immediately after the three-term span of this study. Court data included number and seriousness of petitions filed during the intervention period.

The recidivism data from the court were then dichotomized into a "success-failure" variable. If any further petitions were filed with the court, the youth was classified a "failure".

Self-reported delinquency measure. Although archival data are often reported in outcome studies with adolescents in legal jeopardy, they have often been criticized as more a measure of the behavior of systems officials (teachers, principals, police and court workers) than a measure of deviant behavior (e.g., Farrington, 1973; Gold, 1966). Thus, in this study, the differential impact of nonprofessional type upon youth's delinquent activities as reported by him/herself was examined in addition to the more traditional measures.

Items for this measure were drawn from items used by Lincoln, Teilmann, Klein and Labin (1977), Gold (1970) and several items written by research staff (Blakely, Kushler, Parisian & Davidson, 1979). The item set was designed to determine self-reported incidence of behaviors representing a wide spectrum of frequently occurring delinquent activities. Thus, infrequently occurring behaviors such as serious crimes against a person were excluded. In addition, the 35-item set included five filler items depicting positive activities in an attempt to discourage response patterns of bias[1]. Youth were asked whether they had committed each behavior once, twice, more than twice or not at all during the last six weeks. These items generated one major

scale (α=.88).

The measure was administered at the four interview time periods, immediately following the process interview. (See Table 5, p. 68.) In order to avoid problems due to inconsistent reading abilities of the interviewees, the items were read aloud to the youth and responses were recorded by the interviewer. Through the employment of this questionnaire, it was possible to examine the differential impact of nonprofessional type upon the youth's delinquent activities as reported by him/herself.

"Life Domain" measures. Stuart (1971) has noted that family and school are two vital areas upon which to impact with juvenile offenders. Therefore, in order to examine changes in the youth's home and school situations, two "Life Domain" scales were utilized as outcome areas. The Life Domain information was gathered from process interview data. Interviewers were university undergraduate students in a three-term interviewing and data collection course. They were trained by one graduate student in clinical psychology, one graduate student in criminal justice and two undergraduates in the social sciences who had been extensively involved in the research. The training period lasted for approximately one term. Students were oriented to the research and received a general background in interviewing techniques. They then were given the opportunity to perform several practice interviews, at first doing segments of interviews and then conducting entire interviews. They were also trained in coding procedures. Each interviewer was assigned an entire set of interviews--youth, parent and volunteer. All interviewers were relatively blind to nonprofessional condition.

(Since some interviews took place on the MSU campus, it was impossible to keep the interviewers totally blind to condition.) All interviews were open-ended, and audio-recorded in order to maximize data retrieval.

The interview consisted of two major portions--the "Life Domain" and the "Intervention" sections. Only two of the Life Domain scales were utilized and will be discussed in this subsection; the Intervention scales will be discussed in a later subsection as a measure of nonprofessional-youth characteristics.

Questions on the Life Domain portion of the interview concerned events occurring in the youth's life during the intervention time period. This portion of the interview was administered at all four interview time periods--immediately after the assignment to condition, and after six, 12 and 18 weeks of involvement. Again, a sequential scale development procedure was undertaken which involved the generation of behaviorally specific items from the perspectives of participants in the research. Following the construction of the item set, the resulting data were submitted to a sequential rational-empirical scale construction procedure. The result was a series of scales reflective of the youth's activities in and relationships to important social systems (family, school, employment, etc.).

Scales were created by initial rational groupings of the items. The internal consistency of these groupings was then determined according to two criteria. First, in order for an item to remain in its scale, it had to show a significant correlation with the sum of other items on the scale. Second, the item had to demonstrate significantly higher

correlation with its own scale than any other scale. If it showed a greater degree of convergence with another scale, it was moved if the move was to a rationally sound alternative. Otherwise, the item was discarded from further analyses. This rather lengthy process of scale construction produced scales which were maximally reliable and maximally orthogonal.

As a result of this process, 11 Life Domain scales were generated. In this research, however, only two scales which indicated the degree of positive change in important social systems (home and school) were examined as outcome criteria. The first scale, Positive Change in the Home Domain (10 items, α=.83), was drawn from common complaints from parents and youth. (See Table 7.) The basic dimension for this scale was the "improved to worse" dimension over the preceding six weeks. The second scale, Positive Change in the School Domain (seven items, α=.86), was similar to the first scale, however, the context of the items was school performance. (See Table 7.) Using these two scales, it was possible to determine any differential impact on the nonprofessional types on the youth's life in the family and school systems across time. (Although both the youth and the parent were interviewed concerning these issues, due to high intercorrelation of sources, only the youth's responses were utilized in this study.)

Nonprofessional Characteristics

As with the outcome criteria, there were many aspects of the nonprofessionals which could be examined. In this study, however, three frequently discussed areas were scrutinized: knowledge acquisition and

Table 7

Life Domain Scales
Internal Consistency Analysis

Positive Change in Home Domain

Variable		Corrected Item-Total Correlation
1036.	Youth's neatness	.31
1037.	Youth's talking to parents	.78
1038.	Youth's and parent's getting along	.77
1039.	Youth's performance of household responsibilities	.34
1040.	Youth's spending time at home	.49
1041.	Parent's lessening restriction on youth	.32
1042.	Youth's moodiness	.32
1043.	Youth-parent arguing	.71
1044.	View of change occurring in home area	.77
1045.	Parnet's hassling youth about school	.48

Cronbach's alpha = .83

Positive Change in School Domain

Variable		Corrected Item-Total Correlation
1107.	School attendance	.68
1108.	Academic performance	.78
1109.	Classroom behavior	.44
1110.	Youth's completing homework	.71
1111.	Youth's attitude toward school	.69
1112.	Youth's relationship to teachers	.46
1113.	View of change occurring in school area	.73

Cronbach's alpha = .86

retention, volunteer satisfaction and volunteer attitudes. The measures utilized to quantify each of these areas will be described in this subsection.

Knowledge acquisition and retention. As both a manipulation check and a comparison of the mastery level of different concepts and skills--to see how well nonprofessionals learn and remember different skills from training/supervision--a training test was created. To eliminate the volunteer's fear that he/she was being tested per se, the measure was entitled "Intervention Opinions". The test included items based on the skills taught in the training segment--behavioral contracting and child advocacy. In addition, there were extra filler items not relating directly to training. As a result of scale construction of the items, one "Action" scale was formed (14 items, α=.74). (See Table 8 for a list of the items on this scale.)

The training test was administered at Time 2 (end of training) and Time 4 (the end of the research) to experimental nonprofessionals. Controls from the university undergraduate sample were given the test during the Time 4 assessment.

Volunteer satisfaction. Since enthusiasm, vitality and zest are among the characteristics which nonprofessionals possess and which help to make them successful (e.g., Durlak, 1971; Korchin, 1976), it was thought to be important to examine how such factors as satisfaction with the training approach and group structure affected the levels of those characteristics. Therefore, an extensive Project Evaluation questionnaire was generated and was given at Time 2, Time 3 and Time 4.

Table 8

Knowledge Retention Measure
Internal Consistency Analysis

Variable	Corrected Item-Total Correlation
3. Shortcoming of medical model	.21
5. Rules for contract	.62
6. Characteristics of good monitoring system	.36
8. Tinker vs. Des Moines	.25
9. Environmental resources explanation of delinquency	.46
10. Premack principle	.33
12. Assessment period	.41
16. Multiple strategy approach	.27
18. Operant explanation of delinquency	.27
20. Positive approach to advocacy	.44
21. Information for advocacy	.37
22. Measures for Illinois project	.34
26. Initiation and maintence of human behavior	.24
30. Implementation of advocacy	.38

Cronbach's alpha = .74

On the basis of principal components/varimax rotation procedures described earlier, and using Kaiser's criteria, six components were extracted. The first, Evaluation of Academic Project Learning, contained items reflecting how much the nonprofessionals felt they learned and how their involvement might affect their future, in terms of going to graduate school, returning to school or getting a job. The second, General Project Evaluation, was composed of such questions as whether they might be involved in the experience again, or recommend the experience to a friend. The third, Evaluation of Didactic Training, had items evluating the training and intervention models. The fourth, Evaluation of Case Discussion, consisted of items reflecting the usefulness and feelings about discussion of cases. The fifth, Social Support Received, was composed of items relfecting the amount of time spent talking with other nonprofessionals and friends about the experience and cases. The sixth, Evaluation of Grading Scheme, was not included since only two of the original three conditions were to be graded. Table 9 presents the component structure of this measure.

The second section of the Project Evaluation measure was composed of a series of open-ended questions and was administered to all experimental nonprofessionals upon completion of their involvement. These items are reported only anecdotally. Also, since control nonprofessionals were not involved in the experience, they did not take this measure.

Volunteer attitude. Attitude change has been found to occur in different directions depending upon the concept involved: e.g., more positive attitude change toward the target, mental health careers,

Table 9

Volunteer Satisfaction Measure
Principal Components Solution

Component 1: Evaluation of Project Learning (27.9% of variance)

Variable	Loading
3. Relevant to career goals	.66
5. Amount learned compared to other experiences	.75
6. Amount learned	.72
7. Useful in future coursework or jobs	.73
9. Effect on obtaining good job	.56
10. Effect on being admitted to grad. school	.65

Component 2: General Project Evaluation (12.1% of variance)

Variable	Loading
1. Be involved again	.81
2. Recommend to a friend	.78
4. Met initial expectations	.70
13. Liked training presentation	.63

Component 3: Evaluation of Didactic Training (10.9% of variance)

Variable	Loading
11. Liked intervention model	.71
12. Liked amount of training	.78
23. Liked role plays	.80
24. Found role plays useful	.71

Component 4: Evaluation of Case Discussion (8.2% of variance)

Variable	Loading
19. Liked class discussion of own case	.82
20. Found class discussion of own case useful	.81
21. Liked class discussion of others' cases	.66
22. Found class discussion of others' cases useful	.68

Component 5: Social Support Received (6.4% of variance)

Variable	Loading
14. Talk with friends about training	.63
15. Talk with students about training	.85
16. Talk with friends about case	.73
17. Talk with students about case	.81

oneself and one's own ability; more negative change toward institutions and systems of care (Gruver, 1971; Rappaport, Chinksy & Cowen, 1971). However, Kantrowitz (1979) showed that this may not be quite as clear-cut even as this by demonstrating that different nonprofessional experiences can produce differential attitude change. Therefore, the differential impact of the experience on attitude change of the types of nonprofessionals was examined, using a Semantic Differential attitude questionnaire (Osgood, Suci & Tannenbaum, 1957).

This measure had gone through a complicated process of data reduction. The original measure was a Semantic Differential attitude questionnaire with concepts and dimensions generated to adapt the measure to the target population and locale (Kantrowitz, 1979). The original measure contained 22 concepts, with each concept rated on 12 dimensions. The final measure was created by first, the deletion of low variance dimensions from all concepts. Next, a principal components analysis with varimax rotation on the dimensions across all 22 concepts was used; and third, a principal components analysis with varimax rotation of the 22 concepts was utilized. The two marker concepts from each of the five components and five marker dimensions (plus a singlet--"predictable") were retained to create the measure administered in this study--ten concepts with six dimensions on each concept. This measure generated five components (self, juvenile justice system, school, parents and juvenile delinquents) with an evaluative and a predictable dimension on each component.

The final version of the Semantic Differential attitude question-

naire was administered to all nonprofessionals (experimental and controls) at Time 1 and Time 4. In addition, experimental volunteers were administered the questionnaire at Time 2 and Time 3.

Nonprofessional-Youth Intervention Characteristics

Two general classes of variables were examined in this context. First, in order to assess what types of activities the nonprofessional and the youth participated in, and thus examine one aspect of the compatibility of the modality with the new utilizers, questions were asked concerning the intervention process itself. Second, in order to examine the impact of perceived social similarity, questions were asked concerning the relationship created between the nonprofessional and the youth, and the roles in which they perceived each other. These two measures will be discussed in detail in this subsection.

Intervention measures. Data concerning the total experience of the research involvement was gathered during process interviews. These were conducted four times during the course of the intervention. (Table 5, p. 68 shows an interview timetable.) This provided a detailed monitoring and understanding of events that occurred in the life of the youth and important components of the interventions implemented and the training/supervision modality. Approximately 130 questions made up the Intervention portion of the interview.

Endorsement frequencies of the Intervention scales questions were examined, and questions with little variance were dropped. Scales of the remaining items were constructed using a rational-empirical method

(Jackson, 1970), in the same manner as that described for the Life Domain questions. Thirteen maximally reliable and maximally orthogonal scales thus emerged from this procedure, with Cronbach's alphas ranging from .51 (Recreational Activities) to .95 (Contracting Activities). (See Table 10.) Since there were extremely high correlations across sources, again, the only source used was that of the youth. Thus, there were 13 scale scores at each of three interview time periods--Time 2, Time 3 and Time 4 (after six, 12 and 18 weeks of the intervention). Although the entire interview was conducted at four time periods, as mentioned, only the last three time periods included questions concerning the intervention, per se.

Relationship Inventory. A Relationship Inventory was created to attempt to quantify some of the more subtle aspects of the youth/volunteer relationship. In this way, it was possible to examine differences in relating to adolescents among nonprofessional type. Questions concerning the volunteer's trust of the youth, the volunteer's eagerness and perceived ability to impact on areas of the youth's life and the volunteer's caring about the youth were generated. These variables are considered basic to helping relationships of any kind (e.g., Rogers, 1957; Carkhuff, 1969a, 1969b). In addition, three items were created to examine the volunteer's similarity to the youth in thought, speech and action. In this way, it was possible to begin to examine the idea that change agents who are perceived as more similar to the targets may be more effective in producing behavior change (Cowen, 1967; Christmas, 1969). This measure was read to the youth immediately following the process

Table 10

Summary and Reliability of Intervention Scale Scores

1. Volunteer/Target Involvement: frequency and amount of contact (α=.53)

2. 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. (α=.86)

3. Parent 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. (α=.86)

4. Peer Involvement: extent to which friends of the youth are involved in the intervention. (α=.81)

5. Recreational Activity: amount of recreation involved in the time spent with the youth by volunteer. (α=.51)

6. Family: Focus on Changing Parents: extent to which the intervention focused upon changing the parent's behavior in the family. (α=.86)

7. Family: Focus on Changing Youth: extent to which the intervention focused upon changing the youth's behavior in the family. (α=.71)

8. School: Focus on Changing School: extent of the intervention focusing on bringing improvement to the school environment by focusing on school staff. (α=.70)

9. School: Focus on Changing Youth: Extent of the intervention focusing on school behavior of the youth. (α=.86)

10. Job-seeking: extent to which the intervention focused upon getting the youth employment. (α=.86)

11. Legal System Involvement: extent to which the volunteer became involved in the juvenile justice system for the youth. (α=.77)

12. Contracting Activities: extent to which the volunteer utilized behavioral contracting as an option in the intervention. (α=.95)

13. Advocacy Activities: extent to which the volunteer intervened on behalf of the youth to gain needed resources. (α=.82).

interview containing the intervention questions. Thus, it was administered at Time 2, Time 3 and Time 4. (See Table 5, p. 68).

As a result of scale construction, two scales emerged from this measure. First, a general Style scale (eight items, α=.81), was formed, reflecting such things as the volunteer's perceived warmth, interest in the youth and competence. The second, scale, a Perceived Social Distance scale, was formed by the three items asking for the youth's perception of the volunteer's role (α=.72). (See Table 11.)

Table 11

Relationship Inventory
Internal Consistency Analysis

Interpersonal Style

Variable		Corrected Item-Total Correlation
3090.	Close and warm	.65
3091.	Trust you with his/her secrets	.43
3094.	Sure of him/herself	.54
3098.	Trust you to stay out of trouble	.37
3100.	Eager to help you change what you want	.50
3103.	Trust you to be honest with him/her	.65
3105.	Knows how strongly you feel	.51
3107.	Consistent with you	.53

Conrbach's alpha = .81

Perceived Social Distance

Variable		Corrected Item-Total Correlation
3108.	How volunteer acts	.59
3109.	How volunteer talks	.57
3110.	How volunteer thinks	.50

Conrbach's alpha = .73

CHAPTER III

RESULTS

In this section, the results from the analyses of the measures will be detailed in the order of the research questions posed on pages 43-44. First, which has already been addressed, would volunteers of all three types show sufficient interest to become involved in this experience? Of those who volunteered, did they attend the training and supervision meetings? Did they learn the material taught in those meetings? Did they like the model and the program, and did they actually carry out the model as expounded during training and supervision? What else did they do during the intervention period? How did these activities impact on the youth involved? And finally, how did the experience impact on the nonprofessionals' attitudes?

A series of univariate analyses was conducted on these variables. In addition, multivariate analyses were conducted within measure. Since the findings of the multivariate analyses supported the findings of the univariate analyses, only the univariate analyses will be discussed. (See Appendix A for the intercorrelations of the dependent measures by measure type.) Any F ratios reported are those of Scheffe (Scheffe, 1959) for paired comparisons.

Random Assignment

Before preceding to the bulk of the results, the effectiveness of the randomization should be considered. The youth were examined on 21 pre variables: age, race, self-reported delinquency, 5 label

spread scales, 11 Life Domain scales and number and seriousness of petitions. The two conditions differed on only one variable. Similarly, comparisons of the selected MSU nonprofessionals with the non-selected MSU Controls on 19 pre variables--10 attitude scales, 4 delinquency orientation scales, 4 personality traits and one locus of control score--resulted in significant difference on only one variable as well. For both the youth and the nonprofessionals, this was not greater than that expected by chance, so it was concluded that the randomization procedure was effective.

Attendance

As reported earlier, there were clear differences among non-professional types concerning their willingness to initially become involved in the program. Once the nonprofessionals began training, the question of attendance at training and supervision meetings became important. Table 12 displays a summary of the analysis of variance and group means for the attendance data for both the MSU and LCC groups during Fall, Winter and Spring terms. A significant effect for time and condition as well as a significant condition by time interaction are noted. MSU attendance remained stable throughout all three terms, while the LCC attendance dropped from Fall to Spring ($F_{2,54}=60.32$, $p<.0001$). Obviously, the MSU nonprofessionals attended meetings much more consistently once they began than did the LCC nonprofessionals.

Knowledge Acquisition and Retention

The third concern of this study was the learning of the material

Table 12

Training/Supervision Meeting Attendance

	Group Means		
	2	3	4
MSU	.98	.97	.94
LCC	.93	.84	.39

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	1.25	65.61	<.0005	.24
Subjects (S)	27	.02			
Time (T)	2	.58	26.90	<.0005	.22
C x T	2	.52	24.09	<.0005	.19
S x T	54	.02			

presented during training. First, a two by two (condition by time) analysis of variance was used. Second, a one-way analysis of variance of the Time 4 scores of all three groups (including Controls) was performed and the results will be included in the presentation as well.

Table 13 presents a summary of the two-way analysis of variance and the group means for the Action scale. There is a marginal effect for both condition and time. The MSU group consistently scored higher than the LCC group ($F_{1,27}=3.65$, $p<.06$). In addition, both groups decreased from Time 2 to Time 4 ($F_{1,27}=2.69$, $p<.11$). In looking at the one-way analysis with the Controls (Table 14), Controls at Time 4 scored lower than both the MSU group ($F_{2,63}=42.46$, $p<.0001$) and the LCC group ($F_{2,63}=21.00$, $p<.0001$). The MSU nonprofessionals learned the material better than the LCC nonprofessionals, and both groups forgot some of the material. However, even at the post time period, the two trained groups knew more than the untrained group of university undergraduates. Thus, both groups did learn and retain the material.

Compatibility

The fourth question focused on nonprofessional satisfaction with and compliance with the model. The five components of the Volunteer Satisfaction measure and two scales of the Intervention measure helped examine this issue. Only one of these variables failed to produce any significant results in a two-way analysis of variance (condition by time)--Social Support Received from the Volunteer Satisfaction

Table 13

Knowledge Retention Measure: Action Scale

	Group Means	
	2	4
MSU	11.6	10.7
LCC	10.1	9.8

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	21.81	4.19	.05	.07
Subjects (S)	27	5.21			
Time (T)	1	6.22	3.24	.08	.02
C x T	1	1.42	.74	.40	
S x T	1	1.92			

Table 14

Knowledge Retention Measure: Action Scale
(with Controls)

	Group Means 4
MSU	10.69
LCC	9.77
Controls	6.89

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	2	96.11	25.30	<.0005	.25
Subjects (S)	63	3.80			

measure. The results of the others will be detailed below.

Volunteer Satisfaction

Table 15 contains a summary of the analysis of variance and the group means for the Academic Project Learning component. A significant time effect is revealed. Both groups dropped from Time 2 to Time 4 ($F_{1,27}$=9.46, p<.005). Both conditions felt less positively about the academic learning gained throughout the program experience.

The General Project Evaluation component exhibits a significant time effect as well, as shown in Table 16. From Time 2 to Time 4, both groups decreased ($F_{1,27}$=17.39, p<.0001). Again, both types of nonprofessionals generally felt less positively about the volunteer experience by the end.

Table 17 presents a summary of the analysis of variance and the group means for the Evaluation of Didactic Training component. A significant time effect is once more observed. As before, both groups felt more negatively about the didactic training across time ($F_{1,27}$=17.85, p<.0003).

The summary of the analysis of variance and the group means for the component of Evaluation of Group Discussions are displayed in Table 18. On this component, there is a significant condition effect. The MSU group rated this lower than did the LCC group ($F_{1,27}$=5.20, p<.04). The MSU students liked the group discussions of their and others' cases less than did the LCC students.

Engaging in Activities of the Model

The second part of the compatibility issue centered on the non-

Table 15

Volunteer Satisfaction Measure: Academic Project Learning

	Group Means	
	2	4
MSU	4.36	4.06
LCC	4.38	3.92

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	.05	.15	.70	
Subjects (S)	27	.34			
Time (T)	1	2.03	9.26	.005	.10
C x T	1	.09	.42	.53	
S x T	27	.22			

Table 16

Volunteer Satisfaction Measure: General Project Evaluation

	Group Means	
	2	4
MSU	4.30	3.50
LCC	4.19	3.77

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	.10	.09	.76	
Subjects (S)	27	1.04			
Time (T)	1	5.74	18.71	<.0005	.13
C x T	1	.50	1.63	.21	
S x T	27	.31			

Table 17

Volunteer Satisfaction Measure: Evaluation of Didactic Training

	Group Means	
	2	4
MSU	3.78	3.44
LCC	3.98	3.58

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	.41	.47	.50	
Subjects (S)	27	.87			
Time (T)	1	1.99	18.15	<.0005	.06
C x T	1	.01	.12	.73	
S x T	27	.11			

Table 18

Volunteer Satisfaction Measure: Evaluation of Group Discussion

	Group Means	
	2	4
MSU	3.83	3.81
LCC	4.21	4.21

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	2.20	5.23	.03	.09
Subjects (S)	27	.42			
Time (T)	1	.001	.01	.95	
C x T	1	.001	.01	.95	
S x T	27	.24			

professionals' actual performance of activities specifically emphasized in the training and supervision. This intervention focused primarily on contracting and advocacy activities. Thus, these two scales (Contracting Activities and Advocacy Activities) from the Intervention questionnaire were examined using a two by three (condition by time) analysis of variance.

The summary of analysis of variance and the group means is presented in Table 19 for the Contracting Activities scale. A significant time effect and a significant interaction between condition and time are present. MSU nonprofessionals remained stable from Time 2 to Time 4. However, the LCC nonprofessionals increased from Time 2 to Time 3 ($F_{2,54}$=13.37, p<.0001) and then decreased from Time 3 to Time 4 ($F_{2,54}$=14.84, p<.0001).

Table 20 displays a summary of the analysis of variance and the group means for the Advocacy Activities scale. There is a significant effect for condition on this scale. The MSU group utilized more advocacy activities than did the LCC group ($F_{1,27}$=12.09, p<.002).

Summary

In general, the two groups liked the training and intervention modality equally. However, the MSU volunteers engaged in more contracting and advocacy activities, indicating that they were more active in pursuing a model intervention with the youth.

Other Intervention Activities

The remaining 11 scales of the Intervention questionnaire were

Table 19

Intervention Measure: Contracting Activities

	Group Means		
	2	3	4
MSU	2.08	2.26	1.92
LCC	1.61	2.73	1.55

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	.32	.12	.74	
Subjects (S)	27	2.79			
Time (T)	2	4.37	7.17	.002	.06
C x T	2	1.92	3.15	.05	.05
S x T	54	.61			

Table 20

Intervention Measure: Advocacy Activities

	Group Means		
	2	3	4
MSU	2.45	2.55	2.21
LCC	1.79	1.76	1.48

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	11.39	12.09	.002	.17
Subjects (S)	27	.94			
Time (T)	2	.83	1.98	.15	
C x T	2	.03	.07	.93	
S x T	54	.42			

analyzed using a two by three (condition by time) analysis of variance. Only four of the scales produced no significant results--Positive Involvement, Family: Focus on Changing Parents, School: Focus on Changing Youth and Legal System Involvement. The results of the other analyses will be presented below.

Table 21 contains a summary of the analysis of variance and the group means for the Volunteer/Target Involvement scale. A significant effect for time is observed. For both groups, the amount of time spent with the nonprofessional did not change significantly from Time 2 to Time 3, but did drop from Time 3 to Time 4 ($F_{2,54}$=10.51, p<.0002). In order to examine this issue even further, the three items of the Volunteer/Target Involvement scale were scrutinized separately as well. The first and third items concerning the frequency of contacts and the frequency of spontaneous activities exhibited patterns similar to the scale (a significant decrease across time), but Table 22 shows an interesting result concerning the amount of time spent working on the case itself. A significant condition effect is noted. The MSU group spent more time working on case-related issues than did the LCC group ($F_{1,27}$=7.10, p<.02). Another measure of the amount of time spent was gathered from the nonprofessionals' report of the total number of intervention hours in their log books. Table 23 shows a summary of the one-way analysis of variance and group means for this variable. A significant condition effect is noted. The LCC nonprofessionals reported spending much less time during the intervention period than the MSU nonprofessionals ($F_{1,24}$=6.27, p<.02). (It should be noted that

Table 21

Intervention Measure: Volunteer/Target Involvement

	Group Means		
	2	3	4
MSU	3.81	3.81	3.06
LCC	3.62	3.31	2.66

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	2.94	2.17	.15	
Subjects (S)	27	1.35			
Time (T)	2	5.94	8.82	<.0005	.12
C x T	2	.18	.27	.77	
S x T	54	.67			

Table 22

Intervention Measure: Time Spent Working on Case

	Group Means		
	2	3	4
MSU	3.75	3.88	3.31
LCC	3.31	3.00	2.62

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	9.70	7.15	.01	.07
Subjects (S)	27	1.36			
Time (T)	2	2.62	1.98	.15	
C x T	2	.34	.26	.78	
S x T	54	1.32			

Table 23

Total Hours Spent during Intervention According to Log Books

	Group Means
MSU	94
LCC	69

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	3846	6.37	.03	.04
Subjects	24	715			

three LCC nonprofessionals did not turn in useable log books.)

A summary of the analysis of variance and the group means for the Parent Involvement scale is presented in Table 24. There are both a significant condition effect and a significant interaction between time and condition. The MSU group remained stable, while the LCC group increased from Time 2 to Time 3 ($F_{2,54}$=5.64, p<.006) and then decreased from Time 3 to Time 4 ($F_{2,54}$=7.95, p<.001). Thus, the LCC group was more variable in the amount of parental involvement in the intervention than was the MSU group. Overall, the MSU group involved the parents significantly more than did the LCC group ($F_{1,27}$=6.32, p<.02).

Table 25 displays the summary of the analysis of variance and the group means for the Peer Involvement scale. A significant effect for condition is noted here. The MSU group scored significantly higher than the LCC group ($F_{1,27}$=10.75, p<.003), indicating that the youth's peers were involved to a greater extent in interventions conducted by the MSU students.

Table 26 reports the summary of the analysis of variance and the group means for the Recreational Activity scale. Here, a significant time effect is observed. Overall both groups decreased across time ($F_{2,54}$=6.40, p<.003). Throughout the period, the nonprofessionals and youth spent less time in purely recreational activities.

The summary of the analysis of variance and the group means for the Family: Focus on Changing Youth scale is contained in Table 27. Once again, a significant time effect is displayed. Both groups increased significantly from Time 2 to Time 3 ($F_{2,52}$=9.15, p<.0004) and

Table 24

Intervention Measure: Parent Involvement

	Group Means		
	2	3	4
MSU	2.98	2.89	2.85
LCC	2.45	2.77	2.39

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	3.04	6.51	.01	.11
Subjects (S)	27	.47			
Time (T)	2	.27	2.28	.11	
C x T	2	.35	2.99	.06	.02
S x T	54	.12			

Table 25

Intervention Measure: Peer Involvement

	Group Means		
	2	3	4
MSU	1.55	1.55	1.52
LCC	1.10	1.31	1.15

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	2.65	10.54	.003	.15
Subjects (S)	27	.25			
Time (T)	2	.09	.83	.44	
C x T	2	.07	.73	.49	
S x T	54	.10			

Table 26

Intervention Measure: Recreational Activity

	Group Means		
	2	3	4
MSU	1.87	1.60	1.46
LCC	1.71	1.65	1.62

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	.03	.01	.91	
Subjects (S)	27	.23			
Time (T)	2	.54	3.92	.03	.05
C x T	2	.19	1.38	.26	
S x T	54	.14			

Table 27

Intervention Measure: Family: Focus on Changing Youth

	Group Means		
	2	3	4
MSU	2.04	2.25	1.96
LCC	1.62	2.26	1.86

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	.61	.39	.54	
Subjects (S)	27	1.59			
Time (T)	2	1.33	4.85	.01	.04
C x T	2	.37	1.33	.27	
S x T	54	.27			

then decreased from Time 3 to Time 4 ($F_{2,52}$=6.03, p<.005). Clearly, Time 3 was the largest push to change the youth with respect to his/her family. This finding clearly fits with earlier findings which showed that LCC nonprofessionals did more contracting activities and involved the parents more at Time 3 than any other time period.

Table 28 presents a summary of the analysis of variance and the group means for the School: Focus on Changing School scale. Both a significant time and condition effect are noted. From Time 2 to Time 4, both groups focused less on changing the school ($F_{2,54}$=7.18, p<.002). Also, the MSU group scored higher on this scale ($F_{1,27}$=16.28, p .0005). Thus, although both conditions were involved less in changing the school, the MSU group was consistently more involved in such action than was the LCC group.

The summary of the analysis of variance and the group means of the Job-Seeking scale are contained in Table 29. There is a significant time effect, and a marginal condition effect on this scale. While both groups remained stable from Time 2 to Time 3, they both dropped from Time 3 to Time 4 ($F_{2,54}$=5.42, p<.008). There was also a trend for the MSU nonprofessionals to be more involved in more job-seeking activities than the LCC nonprofessionals ($F_{1,27}$=3.76, p<.07).

In addition to the actual activities done by the nonprofessionals and the youth, it was of interest what kind of relationships were set up. This was explored through the use of the Relationship Inventory, which produced both an Interpersonal Style and a Perceived Social Distance scale. In a two by three (condition by time) analysis of variance, neither of these scales produced any difference between conditions.

Table 28

Intervention Measure: School: Focus on Changing School

	Group Means		
	2	3	4
MSU	2.33	1.96	1.75
LCC	1.39	1.23	1.00

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	13.96	16.19	<.0005	.20
Subjects (S)	27	.86			
Time (T)	2	1.80	3.87	.03	.04
C x T	2	.10	.21	.81	
S x T	54	.47			

Table 29

Intervention Measure: Job-Seeking

	Group Means		
	2	3	4
MSU	2.36	2.28	1.73
LCC	1.80	1.75	1.44

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	4.62	3.82	.06	.05
Subjects (S)	27	1.21			
Time (T)	2	2.20	4.51	.02	.05
C x T	2	.16	.33	.72	
S x T	54	.49			

Thus, the youth did not see the MSU nonprofessionals as more socially distant nor interpersonally different from the LCC nonprofessionals.

In summary, then, the MSU nonprofessionals spent more time working on the case, involved the parents more, dealt with the youth's friends more, spent more time looking for jobs for the youth, and focused on changing the school more. In general, the MSU volunteers seem to have simply done more purposeful things with their youth. In addition, everyone spent less time changing the youth within the family context, spent less time in recreational activities and generally spent less time with the youth during the intervention period. Also, the youth did not perceive any interpersonal distance or style differences between the two types.

Impact on Youth

The sixth question examined in this study looked at the impact of the intervention on the youth. Archival court data, as well as self-reported delinquency and changes at home and school were used to explore this question.

Court Records

The court data were analyzed using a two by two (condition by time) analysis of variance design. Court data consisted of the number of petitioned offenses and the seriousness of those offenses averaged across youth within each condition. There were no significant results produced from either the Number of Offenses or the Seriousness of Offenses during the youth's involvement in the program. Thus, both

nonprofessional groups were equally effective in helping their youth remain out of the court system.

The criterion for target success or failure was determined from these data. Any youth who had a petition filed on him or her during the two "during" quarters (Time 1 or Time 2) was considered a "failure" from this study's point of view. All others were considered "successes" at the point of termination of this study. In fact, there were only two LCC youth and two MSU youth who recidivated according to this rule. Obviously, the number of failures was not significantly different between conditions.

In order to get a sense of a baseline of recidivism for this population, this rate can be compared to the rate of recidivism of a control group of 63 youth previously examined by the project. These youth were processed as usual by the court after having been randomly selected to not participate in the project. Controls had a mean of 1.07 offenses during the equivalent two quarters, while the youth in this study had an average of .17 offenses. Clearly the experimental youth in this study had fewer offenses than youth who had received court processing as usual.

Self-Reported Delinquency

The frequency scale derived from the Self-Reported Delinquency measure was analyzed using a two by four (condition by time) analysis of variance. Table 30 presents a summary of the analysis of variance and the group means of the Self-Reported Delinquency frequency scale. A significant effect for time is noted. Both conditions decreased

Table 30

Self-Reported Delinquency: Frequency Scale

	Group Means		
	2	3	4
MSU	16.63	9.13	7.94
LCC	12.08	10.48	5.85

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	1	40.29	.20	.66	
Subjects (S)	27	198.88			
Time (T)	3	307.99	6.65	<.0005	.08
C x T	3	51.25	1.11	.35	
S x T	81	46.16			

across time ($F_{3,81}$=17.29, p<.0001). There was, however, no difference between conditions.

Changes at Home and School

The two scales used as outcome data from the Life Domain questionnaire (Positive Change in the Home Domain and Positive Change in the School Domain) were analyzed using a two by four (condition by time) analysis of variance as well. Neither scale resulted in any significant effects either for time or between conditions. Thus, neither group surpassed the other at achieving positive activities at home or at school.

Summary

There were no differences between MSU and LCC groups on any of the youth outcome measures. The youth of one condition did not get in more legal trouble, did not report more delinquent acts or did not report more positive home or school environment than those of the other group.

Impact on Nonprofessional Attitudes

The seventh research question dealt with the impact of the volunteer experience on the nonprofessionals themsevles. The ten components (five Evaluative and five Predictable) of the Semantic Differential attitude questionnaire were used here and were analyzed using a two by four (condition by time) analysis of variance. In addition, a three by two analysis of variance design compared nonprofessional attitude change with a Control group of university undergraduates across time. Since no different results occurred with the two-condition analyses, only

the latter will be presented. In these analyses, seven of the ten components resulted in no significant differences--School-Evaluative, Parents-Evaluative and all five Predictable components. Those components producing significant effects will be discussed below.

Table 31 presents a summary of the analysis of variance and the group means for the Self-Evaluative component. A significant effect for time and a marginal interaction between condition and time are observed. In comparing the experimental groups to the Control group, the LCC group decreased significantly from Time 1 to Time 4 ($F_{1,63}$=11.59, $p<.002$); the MSU group decreased as well ($F_{1,63}$=3.92, $p<.03$); the Control group remained stable. Thus, both the MSU and LCC nonprofessionals felt less positively about themselves as a result of their involvement in this experience, while non-participating MSU students remained stable in their evaluation of themselves.

A summary of the analysis of variance and the group means for the Juvenile Justice System-Evaluative component is shown in Table 32. Here, the Controls scored higher than both the MSU participants ($F_{2,63}$=9.28, $p<.0003$) and the LCC students ($F_{2,63}$=3.26, $p<.05$). In addition, all three groups combined dropped from Time 1 to Time 4 ($F_{1,63}$=9.33, $p<.004$). Again, there were no differences between LCC and MSU groups concerning the juvenile justice system and all three groups felt less positively about the system over time.

Table 33 presents a summary of the analysis of variance and the group means for the Juvenile Delinquents-Evaluative component. There is a significant effect for time and a marginal interaction between

Table 31

Volunteer Attitude Measure: Self-Evaluative

	Group Means	
	1	4
MSU	6.14	5.71
LCC	6.49	5.67
Controls	5.93	5.81

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	2	.43	.83	.44	
Subjects (S)	63	.52			
Time (T)	1	3.73	9.92	.003	.05
C x T	2	1.21	3.20	.05	.03
S x T	63	.38			

Table 32

Volunteer Attitude Measure: Juvenile Justice System-Evaluative

	Group Means	
	1	4
MSU	3.45	3.14
LCC	3.95	3.29
Controls	4.45	3.94

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	2	10.00	5.17	.01	.08
Subjects (S)	63	1.95			
Time (T)	1	8.15	11.56	.001	.04
C x T	2	.23	.32	.72	
S x T	63	.71			

Table 33

Volunteer Attitude Measure: Juvenile Delinquents-Evaluative

	Group Means	
	1	4
MSU	4.03	4.64
LCC	3.75	4.68
Controls	3.86	3.97

Analysis of Variance

Source	DF	MS	F	Prob.	ω^2
Condition (C)	2	2.24	2.22	.12	
Subjects (S)	63	1.01			
Time (T)	1	4.96	7.03	.01	.03
C x T	2	1.89	2.67	.08	.02
S x T	63	.71			

time and condition. Both the MSU group ($F_{2,63}$=4.22, p<.02) and the LCC group ($F_{2,63}$=7.96, p<.0009) felt more positively about the target population, while the Control group remained stable from Time 1 to Time 4.

In summary, all nonprofessionals felt less positively about themselves and the juvenile justice system, and more positively about their target population. University undergraduates who were not involved in this experience remained stable on self evaluations as well as evaluations of juvenile delinquents; however, they too felt less positively about the juvenile justice system.

CHAPTER IV

DISCUSSION

In this chapter, answers to the seven questions which were posed by this study will be examined, and the implications of these answers will be explored. Next, conclusions concerning the two larger issues of the dissemination of this training and intervention package--perceived social distance and compatibility with new utilizers--will be analyzed. Finally, future directions of research will be delineated.

Questions Posed in This Study

Recruitment of Nonprofessionals

The first question examined in this study focused on the recruitment of three nonprofessional groups--university undergraduates, community college students and community people. Would people from all three groups be willing to become involved in this program? The research showed that indeed there were large differences among the three groups on this dimension. The community people in general were not willing to even begin training; the community college nonprofessionals were willing to become involved to a slightly greater degree, but they were much less willing than the university undergraduates. And once both the community and community college nonprofessionals committed themselves to the experience, they dropped out more than did the undergraduates.

Two implications ensue from these results. First, the utilization of community nonprofessionals, at least in this area is extremely difficult. Two conditions may be operative. First, one traditional

volunteer force (homemakers with children in school) has turned away from volunteer activities as a result of the women's movement. In the 1960s, researchers such as Rioch (1963) found homemakers with plenty of time on their hands and a willingness to enter into new experiences for no reimbursement. However, recently, women have been told that their time is important, and they deserve to be valued somehow--be it for acting as cooks and housekeepers or other outside-the-home activities (Feldman, 1974; Loesser, 1974; Mitchell, 1977). Thus, the movement of volunteering for the sake of filling spare time may have passed. A second possible explanation is related to this issue. There are many more homemakers who in the past had traditionally stayed at home and perhaps volunteered at the local hospital or neighborhood school, but who now, for economic reasons, must take a job to supplement the family income (Hall & Hall, 1978; Hoffman, 1979; Hopkins & White, 1978). Also, with the increase of single-parent families, women are forced to work full-time in order to support the family (Hoffman, 1979; Jouch, 1977). Thus, since a portion of the former volunteer force is now employed to a greater extent, their free time has been seriously curtailed. The value of volunteering naturally would drop with this decrease. These issues together may have acted to deplete the group of adults looking to fill time by serving others in a voluntary capacity.

This could have serious implications for human service programs in general. As inflation causes budget problems for programs, the interest in volunteer personpower may increase. However, this "work-force" simply may not be as available as it was before. This could

portend ever increasing caseloads for already overworked paid staff.

Attendance

The second issue explored in this study concerned the attendance at mandatory training and supervision meetings of those who finally did commit themselves to the program. This study showed that of the two nonprofessional groups who proceeded to this stage, the community college nonprofessionals attended far fewer of the sessions than did the university undergraduates.

Why this occurred is an interesting conjecture. There are two conceivable explanations. First, the community college students reported a significantly larger number of outside working hours than did the university undergraduates--a mean of 35 hours per week for the community college volunteers compared to a mean of 17 hours per week for the university undergraduates). This is in line with others' findings comparing community college students (e.g., Collins, 1972). Perhaps the community college students, who were attending school and working to help put themselves through or support a family, had less free time within which to attend class. Of course, the university students had homework with which to contend. The university traditionally figures that approximately three hours per credit hour are spent outside of the classroom in class-related work. Assuming most undergraduate students took 12-15 credit hours, this would at least equal the 35 hours per week reported as outside work commitments for the community college students. (Of course, the community college students did have other classes with homework as well, but other course expectations

seemed to be lower than those of the university.) Perhaps the issue, however, was that of fixed versus flexible time. The university students would be able to schedule study hours around class and time spent with the youth, whereas the community college nonprofessionals may have had more rigid work schedules with which to contend.

A second explanation, which might encompass the first issue, might be that the training and intervention modality was not sufficiently compatible with the community college students to keep them involved in the program fully. Previously, it was stated that community college students were more conventional; more cautious, prudent and controlled; and more apprehensive and rigid in academic matters than were university undergraduates (Palinchak, 1973). Perhaps the role change demanded for the community college students was too drastic. They had been much more used to courses which required less time and less studying than this one did. This was supported by comments from the Project Evaluation measure administered immediately after training: "You should have told us that we would have to spend so much time on this course" and "Other courses I have had here don't ask this much from me, and I think it is too much for a four-credit course." Thus, even if the intervention had been a clearly wonderful experience, since the community college students were getting by with their old time commitments, they could not see an advantage to giving more of themselves.

This explanation has been supported in dissemination literature. Fairweather et al. (1974) demonstrated that when a role change was

requested of new utilizers, it was much more difficult to convince people to try the innovation. One avenue for social change is through the creation and adoption of new roles in society (Fairweather, 1972). Thus, social innovators must be aware of increased resistance which can occur when role changes are proposed.

Learning and Retention

The third question of this study asked whether the two types of nonprofessionals would learn and retain the training material. This research has shown that both groups did learn the material and retain it during the nine-month experience. However, the community college group performed less well on the test. Both groups forgot some of the information, but even at the low point, both groups knew more than the untrained Control university students.

The major impact of this finding is that the training material as it exists at this time can be learned by both groups. The most frequent complaints by the community college group concerned the comprehension level of the assigned reading and the accessibility of the readings. Some representative samples from the Project Evaluation measure were "Outside readings were a waste of time, because of the amount of reading was too much for the amount of time we had to do it in" and "Outside readings were difficult and hard to obtain. The Library kept losing them." Yet in spite of these protests, the community college nonprofessionals still were able to absorb and retain the information from training.

These findings speak to issues surrounding community college students in general. Earlier, it was noted that community college students tended to be less academically able (Palinchak, 1973) and less self-confident about their ability to do college work (Cross, 1972). However, community college students can learn this type of material in spite of their perceived difficulties with it. This opens the door to the use of community college students as nonprofessionals in many capacities, even those requiring rather extensive training.

Compatibility

Two aspects of the compatibility of the training and intervention package were examined in response to the fourth question. First, the volunteers' liking of the program experience was measured, and while it was found that both groups decreased across time, there were no differences between groups. Thus, both groups liked the experience equally. Second, the volunteers' actual performance of activities specifically required by the training was examined. Here, though, it was found that the university undergraduates performed more contracting and advocacy activities than did the community college nonprofessionals. So, while they both seemed equally satisfied with the program, the undergraduates actually carried out the model more.

Two different possibilities could account for this result. First, since the community college nonprofessionals spent less time working on case-related issues, it makes sense that they would also spend less time in contracting and advocacy activities. Second, since the

community college nonprofessionals attended fewer supervision meetings, they did not receive the guidance in the model and the social support for their model-related actions. Thus, they performed fewer of these activities with the youth.

These results point out difficulties with the sole use of self-report data in gauging the compatibility of an intervention with the users. Social desirability may cause the nonprofessionals to respond positively toward the moadlity. Or perhaps they truly do feel satisfied with the package, but do not actually carry it out as expected. Thus, for administrators considering evaluations of nonprofessional programs, the utilization of process data as well is crucial in order to get a more complete picture.

Other Activities

The fifth concern addressed by this research was that of other activities engaged in by the nonprofessionals and their youth. It has already been established that although both groups learned and similarly liked the model, the university undergraduates executed more contracting and advocacy activities. What else went on? In general, it appears that the university undergraduates simply did more purposeful things with their youth. They brought in parents and peers more; they worked more on changing the school for youth and they helped the youth seek employment more.

The implications of these findings are interesting. Looking back, the major manipulation of the study was the setting of the nonprofes-

sionals--a university and a community college. It was expected that the people from these different settings would be different. However, it was found that they did not differ on the variables examined here. (Still, it cannot be stated that the people were the same, since there were many variables not scrutinized.) Both groups learned the material, and they did not differentially like the program. Yet they clearly performed different activities. The reasons for the differential performance of these activities may be explained by issues similar to those delineated in the preceding subsection. Since the community nonprofessionals came to class less, they felt less of the peer and supervisor pressure to do different things with their youth. Also, although the amount of time as measured by the interviews with the youth was not significantly different between groups, the number of hours which the nonprofessionals reported in their log books as spending with their youth was different between groups, with the community college group reporting less time. If this was true, it is possible that the community college nonprofessionals, perhaps due to their less flexible free time, primarily spent less time with their assigned youth and therefore spent less time involved in all of these activities as a result of this. Since there is discrepant data, a definite conclusion cannot be reached on this issue.

Again, a relevant dissemination issue is raised. The same training and supervision with people from a slightly different setting can result in different interventions. This offers support to Fairweather's (1972) belief that social innovations must be carefully

and continually evaluated at all points--it simply cannot be assumed that we know what is occurring based on what we have done in the past.

Impact on Adolescents

The sixth topic addressed in this investigation was that of the impact of the intervention on the youth. Again, no differences were found between groups of nonprofessionals. There was no differential effectiveness of the nonprofessionals on such variables as youth involvement with the legal system, and self-reported delinquent activities and positive activities at home and at school. Therefore, despite differential activities with the nonprofessionals, these did not make a difference in the impact on the youth during the intervention period.

It is clearly too early to speak definitively on this issue. The conclusions drawn on these variables must be treated with caution, therefore, since the true impact of the intervention cannot be gauged until further follow-up data (at least one year after termination of the program) have been gathered and analyzed. However, one reason for the similar impact of such different activities may be that simply the action of diverting the youth from the court was enough to keep him or her from further legal problems for a while (e.g., Klein & Carter, 1976). This line of reasoning is consistent with labeling theory, discussed previously as a fourth revolution in the human services field. Through diversion programs, youth who would typically be labeled "deviant" by the legal system are spared that label

(Schur, 1973; Klein et al., 1978). Perhaps simply preventing a youth from initially being labeled a "delinquent" is sufficient to keep him or her from later "societal reactions" of deviance labeling.

Impact on Nonprofessionals

The final problem explored in this inquiry was that of the impact of the volunteer experience on the nonprofessionals. The consequences here are rather clear. First, all nonprofessionals felt less positively about themselves as a result of their involvement in this experience. Second, all nonprofessionals felt more positively about their target population due to their involvement in this experience. (The other finding--that people felt less positively about the juvenile justice system--was true for the Control group as well, and thus cannot be attributed solely to participation in this experience.)

Of these findings, one is consistent with the established literature and one disputes much of the literature. First, the increased favorable reaction to the target population is reported frequently (e.g., Holzberg, Gewirtz & Ebner, 1964; Rappaport et al., 1971). Thus, it appears that exposure to the target populations creates more favorable reactions of the nonprofessionals to the targets.

However, the impact of such experience on self-concept in this study differs from some of those reported in the literature. There have been mixed conclusions drawn about self-evaluation of nonprofessionals. Cowen, Zax and Laird (1966), as well as Goodman (1971) and Kantrowitz (1979) found that volunteers reported less positive self-evaluations across time. Yet others (Durlak, 1971; Gruver, 1971;

Kelly et al., 1977; Rappaport et al., 1971) reported significant increase in self-evaluations. The results from this study support those which report the decrease in self-concept. In previous studies, two different variables may have been at work. First, those who interacted with the target for a shorter time period tended to maintain their positive outlook; those who worked for a complete school year with fairly frequent and lengthy visits (particularly to the target's home rather than to a specific institution) often became frustrated and disillusioned. (It should be noted that this finding was not corroborated in this study. Self-concept suffered a steady decline from the pre assessment period, rather than a rise and a fall. Perhaps this is explained by the nonprofessionals' knowledge that they were involved for the longer period.) Second, in general those working with mentally ill targets appear to have felt more positively about themselves than those dealing with troubled adolescents (Kantrowitz, 1979).

Limitations of This Study

Clearly, final results and conclusions must be scrutinized with caution for there are a number of unanswered concerns appearing in this study. First, this research was considered exploratory in nature, and was a beginning step in the much larger process of the dissemination of a training/supervision/intervention modality. The importance of exploratory research, its potential for aiding in future hypothesis generation and the resultant increase in understanding in the area of nonprofessional programs cannot be overemphasized. In terms of future

research, replications of this study, generating larger numbers of nonprofessionals, are needed.

Second, follow-up data were not included in the current study. Long-term follow-up data will be included as a part of the on-going Project in order to assess impact over time. More definitive conclusions about these results will be possible in approximately two years.

Third, a series of univariate analyses was performed on these data Since some variables were significantly correlated, this may have inflated the results reported herein. However, all measures were developed and used in such a way as to maximize their orthogonality. Thus, given the statistical properties of the measures and the way in which the results have been interpreted, appropriate levels of caution have been taken.

Fourth, trainer/supervisors were nested within training conditions and may have provided a potential confounding in the results. While the effects of the confounding cannot be specifically determined at this point, checks that were taken concerning students' perceptions of their supervisors showed the supervisors to be perceived fairly similarly. Future research might include using the same trainer/supervisors to train both types of nonprofessionals.

Fifth, since there was the loss of one group of experimental nonprofessionals (the community volunteers), the examination of the generalizability of the study is not as complete as was hoped. The variable of the social distance included a three-point continuum from the university to the community. Since one endpoint of the continuum

was missing in this study, the ability to disseminate the intervention can only be partially addressed here.

Sixth, since there was also the loss of an equivalent control group for the community college nonprofessionals, there is a limitation placed upon the generalizations made from the nonprofessional data as well. Since there was no baseline of attitude change for those from the community college population who were not involved in the research, it is impossible to determine the exact impact that participation in the program had on attitude change in relation to change exhibited in that population in general.

Implications and Conclusions

Major Questions Raised in This Study

Perceived social distance. One major issue raised in the first chapter concerned social distance. Would the youth find any social distance difference between the types of nonprofessionals? If they did, would the perceived social distance between the youth and the nonprofessional make a difference? The measures collected in this research, however, were unable to completely answer these questions. Although demographically the community college nonprofessionals were found to be older and from slightly lower social economic status (lower family income and lower educational level of the father), the youth did not perceive the community college nonprofessionals to be any closer to them socially.

Since one group of volunteers was not found to be socially

more proximal by the youth, further conclusions concerning the connection between perceived social distance of the nonprofessional and the impact on the youth must be postponed.

One conjecture may be of importance in this study. Is it possible that a significant difference came in the nonprofessionals' perceptions of the social distance between them and their supervisors? Modeling literature, as mentioned earlier, has shown that people will be more likely to model someone whom they perceived to be like them (Bandura, 1968, 1969; Cowen, 1967). Could it be that the university undergraduates saw their supervisors as more similar to them and their goals in life than did the community college nonprofessionals? Clearly, the university undergraduates would be more likely to be concerned with being a graduate student (which the majority of the supervisors were) than would the community college students. Indeed, literature on community college students supports this, reporting them to be lower in educational and occupational aspirations (Collins, 1972). Perhaps the willingness of the university undergraduates to participate in activities with the youth and attend meetings can be explained also by their greater desire to emulate the supervisors.

Compatibility of the intervention modality. The first four of the seven questions posed in this study actually concerned various aspects of the compatibility issue. The first, concerning the willingness of people to volunteer for the program, dealt with a very basic compatibility area. Would people find the training and the intervention initially compatible enough in introductory meetings to commit

themselves to trying the program? Obviously, those who could see more concrete, extrinsic rewards (credits for higher education, letters of recommendation or job experience for later positions) found this to be true. But for those for whom the experience meant little but intrinsic rewards, the experience was not sufficiently appealing. It may be that without "sweetening the pot" for the community volunteers--perhaps through giving them a nominal monetary recompense or relating the experience more to developing parenting skills--they will not become involved. This idea was born out by the comments of some community people who expressed an interest in the program, but did not complete all of the requirements. One group which was initially approached was senior citizens. Although these people frequently had the time, the lack of reimbursement at least for gasoline expenses made the idea of traveling to the youth's home and back a minimum of once a week for 18 weeks unreasonable.

A second area which caused community people to turn away from the program even though interested was the difficulty of the training and the associated readings. Several people had gone so far as to pick up the manual and the first week's readings but soon decided that they found the amount of reading or the level of the readings to be prohibitive. Those who had been out of school for a while or who had not gone past high school were particularly affected by this. It appears that asking people who have been away from school for a while to master readings designed for undergraduates who are familiar with the field is unrealistic. Even those community

nonprofessionals who did participate complained frequently about the vocabulary and the advanced level of the readings. Thus, it would appear that in order to attract more community nonprofessionals, it would be necessary to offer more external motivations and/or to lower the amount of reading and the level of comprehension (perhaps through modeling or the use of films/videotapes) required at the very least.

The remainder of the compatibility questions concerned those who at least initially stated that they would give the program a try. All volunteers learned the material, although the undergraduates learned it better than the community college students; all volunteers liked the experience less across time. The major differences between groups occurred in the actual performance of the model. As stated before, the settings for selection of the nonprofessionals were chosen to be different. However, the people who volunteered from these settings were not discernibly different on any of the pre measures examined in this study. In addition, they learned the material and seemed to like it equally. So why did they perform different activities? This has been answered in part earlier: the community college nonprofessionals spent less case-related time on the case and and they attended fewer group meetings in which they were urged to engage in and rewarded for the performance of the various activities.

A larger issue is raised here, though. What are the critical ingredients of the dissemination of this intervention? Does the amount of time the volunteer has free to schedule for the youth matter, or does the appearance at frequent meetings for guidance and support

count more? Or does the magnitude of the role change requested account for both variables of time and attendance? These issues cannot be separated in this study, but need to be addressed. A beginning has been made here. It has been found that both nonprofessional groups can have equal success with the target population. However, the "black box" must be pulled apart even further in order to determine the minimal requirements for the successful dissemination of the modality.

Future Directions

Community Volunteers

This study raises serious questions concerning community volunteers. There are many programs claiming to use community volunteers. But who are these people? For those organizations who say that they have them, what are they doing? Perhaps one difference between this study and more conventional volunteer programs was the asking of people to adopt high-risk roles. Traditional voluntary activities such as delivering library books to hospital patients are quite safe, concrete tasks. However, in this study people were asked to venture into the youth's world and grapple with many ambiguous facets of his or her life. Possibly in order to get people to venture into more innovative experiences, they need more extrinsic lures. It may be necessary to reimburse them at least minimally in order to repay them for expenses accrued as well as to signify the worth of their efforts in the program. Or it may be advisable to alter the slant of the training to include

applications of the skills to family situations. Program administrators will need to be extremely creative and persistent in their pursuit of untapped funds or incentives for these new workers.

Nonprofessional Issues

One important finding is that in spite of differences between the two groups of nonprofessionals, both groups were similarly effective in helping the youth stay out of trouble during the intervention period. This answers one crucial question of the dissemination study quite clearly: the success of this training and intervention package is not restricted to use with university undergraduates.

Another salient issue to arise from this study is a confirmation of findings that nonprofessionals experience more negative feelings about themselves as a result of such an intensive experience with an adolescent (Kantrowitz, 1979). This is related to the "burnout" problem in the mental health field. As people feel less positively about themselves, they can become discouraged about their ability to impact on the targets and their problems. Some have stated that for people beginning in the field, this is a useful readjustment of their self-definitions to a more realistic level (Cowen et al., 1966). If this is true, then the experience may prove beneficial in career choices and perseverance in the chosen career (Kulik, Martin & Scheibe, 1969).

Changes in the Training and Intervention Modality

Although the training and intervention package was successfully used by the community college nonprofessionals, one of the future

directions to which this study points is the advisability of adapting the modality more to these new utilizers. Although the data gathered did not reflect any major differences between the groups concerning their satisfaction with the training and supervision experience, there were many informal complaints. Some of these were reflected in the written comments on the Project Evaluation measure. Clearly, the most consistent complaint of the community college students reflected their dissatisfaction with the accessibility and the difficulty level of the assigned readings, as discussed earlier. Thus, there seems to be at least one area of the modality which was extremely bothersome to the volunteers. This could perhaps be alleviated by making the readings more available, either through requiring the reading of synopses of each reading rather than the original literature or through having personal copies of the readings available to the volunteers. Or it may be better to redirect the focus of the information-giving away from relying on reading comprehension, and offer more visual modes of learning--modeling demonstrations, videotape or films could be utilized.

Although it did not show up in the measures, throughout the experience there were additional complaints by the community college volunteers concerning the amount of time they were expected to spend on the course and with their youth. Perhaps another modification could be made in the expectation of the time spent with the youth by the nonprofessional. In fact, in examining log book entries regarding the amount of time spent with the youth, there was a difference, with the

community college nonprofessionals reporting less time spent. Yet this made no serious difference in the success of the youth. The university nonprofessionals clearly have a primary focus in their lives of pursuing their higher education. Perhaps as the program reaches out to other nonprofessionals who have several areas of their lives which are at least as important to them as their academic pursuits (such as family responsibilities and jobs), it may become necessary to downplay this aspect of the program (the 6-8 hours per week involvement with the youth) and focus primarily on accomplishing certain activities within whatever amount of time is required to do so. However, further research is needed to discern the impact of this alteration.

This all raises the issue of whether the training and intervention modality should be changed simply to make the nonprofessionals happier, since as it now stands, they were successful. Perhaps by altering the model, the volunteers will be happier during their involvement. If they are happier, it seems feasible that they may be more willing to engage in activities with the youth which are prescribed by the model. It is clear from Kantrowitz (1979) that the following of a model can be crucial in the success of the youth, as well as in the impact on the nonprofessional. Thus, it seems wise to look at the various aspects of the training and intervention model which are absolutely vital to the success of the program and to separate them from those which can be altered without any serious effect on the final outcome of the program. This research points to the study of two such variables: amount of time spent with the target and easier training

materials.

Fairweather et al. (1974) suggested another alteration which could be made. According to their principles of participation and group action, it may be useful to try to build a group within the setting of the new utilizers who feel committed to the program in order for it to gain its own robustness within the new site. Perhaps an experienced community college volunteer could be recruited upon completion of the program to serve as a trainer/supervisor and coordinator with the community college. This might generate more enthusiasm and commitment within the setting, thereby helping to ensure the continuance and growth of the program there.

Social Change

The most all-encompassing question which is raised by this research concerns that of innovative social programs and the dissemination of those programs. In this research, the only variable which was altered was the setting of the selection of the volunteers. Even with that alteration, the people could not be discerned to be different. And yet, they performed differently within the program. Are social programs so frail that they cannot be run with even the slightest changes without changing drastically? Some would say that this is no surprise. Fairweather et al. (1974) stated that in order for social programs to work, they should be molded to fit the new utilizers and the people involved must feel that the intervention is their own, thus having a personal stake in the final outcome. This idea speaks again for the

use of a successful ex-volunteer from the new utilizer group acting as a supervisor for new trainees, and gradually being moved into a position of authority within the program itself. Thus, the new utilizers could be eased into the existing organization and could become leaders of the new utilizers.

However, the greater question which surfaces here deals with the larger issue of social change in general. Can innovative social programs be so fragile that they cannot be transplanted with slight manipulations without crumbling? If this is so, it tolls a sad knell for impact through dissemination in general. If the dissemination of social programs is limited to incremental, long-range diffusion experiments, the idea of social change through creative solutions to ever-present problems such as crime and mental health seems doomed to failure. Obviously, there needs to be further systematic examination of relatively immediate methods of enticing people to successfully adopt innovations without seriously threatening the integrity and impact of the programs.

APPENDICES

APPENDIX A

APPENDIX A

Intercorrelations of Dependent Measures[1]

Project Evaluation measure

	1	2	3	4	5
1	1.00				
2	.66*	1.00			
3	.32	.44*	1.00		
4	.02	.10	.42*	1.00	
5	-.15	.33*	.12	-.02	1.00

Components

1 Academic Project Learning
2 General Project Evaluation
3 Evaluation of Didactic Training
4 Evaluation of Group Discussion
5 Social Support Received

Relationship Inventory measure

	1	2
1	1.00	
2	.15	1.00

Scales

1 Interpersonal Style
2 Perceived social distance

*significant at $p<.05$ level

[1]All correlations are from the first time period of the measure.

Volunteer Attitude measure

	1	2	3	4	5	6	7	8	9	10
1	1.00									
2	.34*	1.00								
3	.48*	.62*	1.00							
4	.33*	.20	.42*	1.00						
5	.08	.12	.10	.29	1.00					
6	.37*	.32	.32	-.15	-.18	1.00				
7	-.12	.03	.18	-.03	-.01	.09	1.00			
8	.02	.21	.35*	.00	.12	.04	.11	1.00		
9	.10	-.16	.00	.28	.27	-.15	.14	.50*	1.00	
10	-.21	.08	.08	.05	.18	.04	-.11	-.11	.06	1.00

Components

1 Myself-Evaluative
2 Juvenile Justicy System-Evaluative
3 School Systems-Evaluative
4 Parents-Evaluative
5 Juvenile Delinquents-Evaluative
6 Myself-Predictable
7 Juvenile Justice System-Predictable
8 School Systems-Predictable
9 Parents-Predictable
10 Juvenile Delinquents-Predictable

*significant at a $p<.05$ level.

Intervention interview

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1.00												
2	.32*	1.00											
3	.25	.06	1.00										
4	.06	-.48*	.32*										
5	.23	.15	.34*	.43*	1.00								
6	-.20	-.46*	.46*	.62	.24	1.00							
7	.08	-.35*	.30	.42*	-.06	.65	1.00						
8	.10	-.11	.46*	.45*	.31	.30	.18	1.00					
9	.17	.07	.38*	.33*	.29	-.05	-.06	.66*	1.00				
10	.52*	.13	.24	.42*	.31	.03	.09	.38*	.34*	1.00			
11	-.28	-.54	.14	.58*	.25	.72*	.07	.22	-.04	-.01	1.00		
12	.08	-.03	.32	.34*	.11	.31	.30	.34	.08	-.11	.38*	1.00	
13	.24	.07	.48*	.42*	.33*	.21	.14	.63*	.39*	.51*	.14	.59*	1.00

Scales

1 Volunteer/Target Involvement
2 Lack of Complaints
3 Parent Involvement
4 Peer Involvement
5 Recreational Activity
6 Family: Focus on Changing Parents
7 Family: Focus on Changing Youth
8 School: Focus on Changing School
9 School: Focus on Changing Youth
10 Job-Seeking
11 Legal System Involvement
12 Contracting Activities
13 Advocacy Activities

Life Domain interview

	1	2
1	1.00	
2	.52*	1.00

Scales

1 Positive Change in Home Domain
2 Positive Change in School Domain

*significant at $p<.05$ level

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FOOTNOTES

[1] All measures may be obtained from the author; address requests to Department of Psychology, Gilmer Hall, University of Virginia, Charlottesville, VA 22901