Volunteer Youth Research:

An Evaluation of a Treatment and Research

Program with Juvenile Probationers

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Memorandum

LAW ENFORCEMENT ASSISTANCE ADMINISTRATION

ro : National Criminal Justice Reference Service Washington, D.C.

DATE: August 31, 1976

FROM

Martin V. Walsh

State Representative for Virginia

Philadelphia Regional Office

SUBJECT:

Volunteer Youth Research: An Evaluation of a Treatment and Research

Program with Juvenile Probationers

Forwarded as per instructions.

Admowledgements

Volunteer Youth Research owes its existence to the skills, time, and support of many people. Members of the College of William and Mary Metropolitan Criminal Justice Institute, particularly W. Anthony Fitch, were most supportive in getting the program initiated.

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Section I Overview

1'. Project Summary

Volunteer Youth Research (VYR) was a treatment and research program for juvenile delinquents funded by the Pilot Cities Program of the Law Enforcement Assistance Administration and implemented in the Portsmouth, Virginia Juvenile and Domestic Relations Court. It was initiated September 1, 1974, and ended August 31, 1975.

A review of the literature on treatment programs with delinquents revealed that recurring problems included a lack of motivation for treatment on the part of the delinquents, very limited contact time between the treatment agency and the delinquent dealt with, and that in many programs the goals were not oriented towards specific behavioral criteria.

In an attempt to improve on some of these past problems VYR was based on a treatment model developed by Schwitzgebel (1965) in which delinquent boys were hired as subject-experts in a research center for the study of delinquency. Subjects were recruited from probation rolls and given the option of program participation as an alternative to standard probation, thus participation was voluntary, and clients could withdraw at any time if they preferred to.

VYR was limited to boys between the ages of 13 and 17 and was conducted in a storefront center in downtown Portsmouth. The boys were to attend an average of about three visits per week and were paid for their participation.

The primary goals of the program were as follows:

(1) To significantly decrease the number of arrests and convictions of the treatment group during and after treatment.

- (2) To significantly decrease time incarcerated for the treatment group after treatment.
- (3) To produce a significant improvement in measured developmental level of moral judgment for those subjects who engage in discussions of moral dilemmas.

Secondary goals of the program included:

- (1) Determining the relationship between the number of arrests and convictions and frequency and rated quality of contact with the center.
- (2) To assess from staff and client ratings whether the activities and techniques used were differentially valued by the clients.

Treatment activities included the following series derived from research programs which had demonstrated some success: (1) Recorded individual personal interviews, (2) Group discussions, (3) Modeling and role play in interpersonal problem situations, (4) Group discussion of moral dilemmas, (5) Behavioral contracting, and (6) Outside employment. While none of these treatments is original with this program, their combination in one program does represent a new approach, particularly since the moral judgment and behavioral treatments have evolved from separate theoretical backgrounds. An additional activity which was not part of treatment but crucial to research was pre- and post-testing on a number of cognitive variables.

Inferring from court records and test results, VYR has been effective. The following points support this conclusion:

1. Comparing the court records of twenty-four matched pairs of active and control delinquents, fifteen pairs had no convictions at

the end of the project, for two pairs the active participants had more convictions and for seven pairs the control subjects had more convictions. Using the Sign Test for Matched Pairs, this difference significantly favors the active participants (p < .09).

- 2. Comparing the same twenty-four pairs for number of arrests, thirteen pairs yielded no arrests, four pairs revealed more arrests for the active participant, and seven pairs yielded more arrests for the control delinquent. This difference favored the active participants but was not statistically significant ($\underline{p} < .13$).
- 3. Comparing time incarcerated for the twenty-four pairs, nineteen showed no time incarcerated, one active participant was incarcerated for three and one-third months and four controls were incarcerated for a total of fourteen and one-third months. Again the difference favored the active group but was not statistically significant due to the small number of entries.
- 4. Moral judgment as measured in the Moral Development Interview improved significantly for all three groups (\underline{p} < .001); however, although the active participants made the largest improvement, doubling that of the delinquent controls, their change did not differ statistically from that of the other two groups who also improved (\underline{p} < .15). Thus, this was a qualified success.
- 5. Cognitive measures administered pre— and post— revealed the following changes in thinking for the active participants. The Picture Identification Test showed a change in the participants' concept of succorance, implying they regarded asking for help as a more constructive act (p < .05). Attribution measures indicated

that the active participants became more likely to make personal attributions of responsibility for problem behaviors than to attribute such responsibility to others (\underline{p} < .05). Finally, the Internal-External Control Scale showed that the active participants became significantly more internal, i.e., believed that they had more control over the consequences of their behavior than they did at the project's beginning. The cognitive measures thus reveal conceptually meaningful and convergent changes in the thinking of the participants.

2. Introduction

When the local Pilot Cities staff requested project proposals, a decision had been made to emphasize improvement in juvenile justice, and a general guideline was their preference for projects which would both provide needed service to the community and accomplish research. Philosophy

At the time a small but steadily increasing number of behavior modification programs with delinquents (e.g., Tharp and Wetzel, 1969; Sarason, 1968; Schwitzgebel, 1965) were showing positive results which contrasted with the general ineffectiveness of most programs in the area (Polk and Kobrin, 1972). This provided an opportunity to try combining from several programs, practices whose value had been demonstrated, into a single research and treatment program on the effectiveness of treatment with delinquents.

From a review of the literature several prominent problems were identified which seemed to have hindered prior programs, and an attempt was made to minimize these problems in the present instance. One of the most frequently cited characteristics of delinquent children hindering treatment efforts is their lack of motivation to seek or continue treatment (Stieper and Wiener, 1965). Commonly, the delinquent is not personally dissatisfied with himself but has created a problem for the community. To minimize the impact of this lack of motivation the current program was based on a model developed by Schwitzgebel (1965) in which delinquent boys were recruited and hired to act as subject-experts in a research center for the study of delinquency and its treatment. In the present program, boys on probation were given the option of participation in

this research project in lieu of standard probation. Participation was voluntary, and the child could withdraw if he chose and return to standard probation. To emphasize this freedom, the program was named Volunteer Youth Research (VYR) in the early months. To date very little attention has been directed to the effects of open or voluntary institutions as compared with closed or mandatory ones (Buehler, 1973). Hopefully, this issue will receive far more attention in the near future.

Another attribute of delinquents which often interferes with treatment efforts is the fact that their peer culture is a major influence in their lives and is likely to encourage behaviors antithetical to treatment goals (Buehler, Patterson, and Furniss, 1966). One aspect of VYR which accommodates to this problem is the fact that the participants formed friendships within the program and thus at least some of their friends were pursuing goals similar to their own.

Shifting from subject variables to program variables which have hindered treatment approaches, a frequent problem has been an attempt to change the "whole person" rather than specific behaviors which can be readily identified (Ostrom, Steele, Rosenblood, and Mirels, 1971). At the other extreme some behavior modifiers have focused on specific behaviors which are so molecular as to be trivial or which are unique to the treatment environment. In an attempt to avoid these problems VYR used treatment activities (to be outlined in a later section) which included specific limited goals. In turn it was hoped that accomplishing these goals would mediate changes on more global measures such as court records.

A further concession to the above problem was an emphasis on both specific behaviors and cognition within VYR. When the program was designed some few behavior modifiers had expressed a speculative interest in attempting to integrate behavioral and cognitive approaches (e.g., Beck, 1970). VYR represents a serious treatment program attempt to use both behavioral and cognitive treatment procedures and to attend to several cognitive variables other than content of educational material in assessing the impact of the program.

Berleman and Steinbaum (1969) suggest that limited contact time between the delinquent and the change agent has also been a serious detriment to past programs. A series of projects reviewed by these authors show either no record of contact time or low levels of contact (less than once per week). VYR was designed to yield an average of approximately three one-hour contacts per week between participants and staff members. Further, computer programs were developed during the program which yielded print-outs on both client and staff time at regular intervals throughout the year and assured an ongoing record of contact both for project feedback and later analysis of results.

A third problem in many delinquency treatment programs has been inflexibility of treatment personnel; frequently, despite recurrent negative results, treatment workers are as committed to non-productive behavior sets as are the clients whom they serve (Caplan, 1968). In VYR, since several treatment activities were used, some flexibility was implicit in that a client might respond better to some activities than to others. Further, for those clients who engaged in behavioral contracting, contracts necessarily had to be written which were designed for and acceptable to

the individuals involved. Finally, individual personal interviews involved talking about material which the client volunteered and therefore which was presumably of interest to him. Thus, there were both several activities any one of which might particularly suit a given client, and some activities were tailored to individual needs.

A final frequently occurring problem in past programs consisted of inattention to generalization and maintenance of treatment effects. If VYR had continued, plans were included for continuing low level involvement of past clients; however, the program was funded for one year only and this could not be implemented. Attention was directed to generalization, however, as most of the behavioral contracts attempted involved behavioral changes in the natural environment, and part-time jobs or job training were obtained for several participants. In addition, the fact that the program was conducted in the community rather than an isolated institution meant that many changes in behavior were occurring in the natural environment and did not have to be transferred from one living situation to another as is the case with a residential program.

Subject Pay. When Schwitzgebel conducted the program from which the present one was derived, he payed his subjects for their participation in the program just as college students are paid for their time as research subjects. Payment of participants was included as a part of the Volunteer Youth Research program and participants received two dollars per hour for any scheduled participation which was not recreational in purpose. Originally, this was a somewhat controversial aspect of the program, as some community members feared this might be viewed as subsidizing delinquency and receive unfavorable publicity. This was not an unreasonable fear

given the amount of negative publicity focused on corrections recently, however, payment was included for two reasons.

First, payment for their time had positive implications for the role the subjects were filling. Namely, their time was of value to someone and they were performing a service by participating. Secondly, most had to take the bus to reach the program and spent seventy cents for the round trip. Thus, the pay helped to enhance participant motivation as well as defraying the expense of participation.

With the exception of the weeks when testing was implemented the maximum amount that could be earned in a week was six dollars so that the participants could make a modest amount, perhaps comparable to an allowance, but it was not a particularly lucrative activity.

The authors' impression was that payment for participants was beneficial, but most would have been willing to participate without pay once they had established some rapport with the staff and a sense of being a part of the program. The staff implemented some free days on which participants could attend but no pay was available. Some attended, however, since it was only temporary, most preferred to wait until a payed time for an appointment. The staff, too, was reluctant to implement this very vigorously as they felt many of the participants needed the money. Perhaps more significantly, many participants spent spare time at VYR for which they received no pay, which made it apparent that participation and involvement in VYR was of value to them in addition to receiving compensation.

Eventually, VYR did receive publicity in a local paper, however, rather than being labeled as "subsidizing delinquency" the reporter was most helpful in labeling the program as an "investment against crime."

3. Staff and Organization

The staff of VYR included five positions, a coordinator, two counselors, a clerk-typist, and a half-time research assistant. In addition the designer of the program served as a co-coordinator initially and as a weekly consultant for the duration of the program.

For the coordinator position a person was sought who was experienced in working with delinquents and capable of assuming responsibility for the administration of the program. It was also necessary for the coordinator to have an interest in behavioral treatment methods and research as the program involved both.

The counselor positions required individuals with a bachelors degree and certificates as probation officers. They had to be willing to learn new treatment methods and to implement most of the research tasks, so at least a moderate understanding of research techniques was necessary.

The clerk-typist had to meet standard secretarial requirements, and in addition be able to relate effectively to the program's clients, as the clerk-typist handled scheduling of appointments and was present with the clients in the waiting room.

The research assistant position required a person who was familiar with computer programing. This person's duties consisted primarily of organizing and scoring data, converting it to computer card form, and developing needed computer programs.

The coordinator and one counselor had worked in and supervised group youth homes in Virginia, and their experience with delinquents, and with the correctional system was quite valuable. All staff members were in their late twenties. The two more experienced members were white males

and the second counselor and clerk-typist were black females.

The coordinator, two counselors and clerk-typist worked in a rented store front building in downtown Portsmouth, Virginia. They were responsible for the implementation of the program and exercised considerable freedom in conducting the treatment activities, within the restrictions of research needs and the experimental design of the program.

The author and the research assistant had offices at the College of William and Mary, approximately fifty miles away. The author visited the staff weekly for a variety of functions including training for treatment activities, providing treatment and research materials for use in VYR, and general supervision to insure that research requirements were being met.

Relationship to the Court. The program was conducted through the Portsmouth, Virginia Juvenile and Domestic Relations Court, and all personnel were responsible to the Director of Court Services. The Court provided needed services and cooperation (e.g., administering the payroll, providing subjects and access to records for matching the delinquent groups and collecting data) and permitted a comfortable degree of autonomy to the program. A significant consequence was that participants seemed to understand that VYR was part of the Court but also had the freedom not to reveal personal information which was discussed in interviews or which might be revealed in the many tests administered.

The relationship to the Court was facilitated by the location of the VYR building which was separate from the Court but within convenient walking distance for meetings and consultation.

4. Budget and Program Costs

Budget. VYR's budget for one year required \$69,078 of which \$48,264.00, or 69.9 per cent was in the form of a federal grant from the Law Enforcement Assistance Administration. Cash matching funds from the state of Virginia consisted of \$8,959, or 13 per cent of the total, and in-kind match consisted of \$11,855, or 17.1 per cent of the total. The in-kind matching services consisted primarily of evaluative research performed by faculty and students at the College of William and Mary and the use of college research facilities.

Table 1 shows the composition of the budget with the columns each corresponding to one of the above sources of funds and the rows corresponding to budget categories typically used in LEAA forms. The first category, Personnel, included salaries and fringe benefits of the program employees. Professional Services included consultant's fees and research evaluation services. The Travel category included mileage for local staff travel and travel fees for training purposes.

The Equipment category included audio and video recording equipment and standard office and waiting room furniture. Supplies and Operating Costs included office rental, telephone service, consumable supplies, and computer time.

The only budget category which would clearly not be required annually for continued operation of a program such as VYR is that of Equipment, or \$4,285.80. All other funds would be necessary on a yearly basis. An area of potential savings is that of the time spent in staff training during the first year. Many training activities could be drastically reduced once the skills were acquired during the first

year; however, this would result not in dollar savings but in an increase in staff time available for treatment activities at no increase in cost.

Cost of Services. In order to get an estimate of the cost of the services provided per participant one should take into account the fact that a considerable effort in the VYR program was directed to research. If one subtracts the total in-kind services, \$11,855, all of which were required for the research and evaluation aspects of the program and involved no actual cash expenditures from the total budget and divides the remainder by the 30 participants the result is an average expenditure of \$1,907.43 per participant. This is a somewhat inflated figure as it does not assign a value to the time spent testing control groups which was exclusively a research cost.

One way of estimating the cost per participant which yields a projected cost if research activities of the staff were focused on treatment is as follows. The average number of sessions attended by program participants was 54.5. The total number of testing sessions attended by control subjects was 703. Dividing the average attendance figure into the latter number yields the equivalent time for approximately 13 full time clients that was spent on testing control subjects. If the adjusted total budget is then divided by the total number of 43 clients the cost per full time equivalent client is \$1,330.76. Thus, an estimate of the cost per client is reasonably placed in the range of 1300 to 1900 dollars.

The cost of the research was not deducted from the above figures because the outcome research is less important than the treatment activities themselves. Rather, outcome research is a necessity if

treatment activities are to be reasonably decided on; however, the projected cost per client merely makes it easier to compare costs of this program with those of other treatment programs which have not included research efforts in their budget.

Table 1

		Budget Summary					
		Federal	Lo Cash	cal In-kind	Total	%	
Α.	Personnel	32,795.86	8959	0	41,954.86	60.4	
В.	Professional Services	5,353.65	0	5,731.00	11,084.65	16	
C.	Travel	570.28	0	0	570.28	0.9	
D.	Equipment	2,540.80	0	1,745.00	4,285.80	6.2	
Ε.	Supplies and Operating Costs	7,003.41	0	4,379.00	11,382.41	<u>16.5</u>	
		48,264.00	8959	11,855.00	69,078.00		
		69.9%	13.0%	17.1%			

Salaries. Staff salaries were established on the basis of the salary scale in the Juvenile and Domestic Relations Court. Thus, the Counselors received the equivalent of starting pay for probation officers. The Coordinator received more money which reflected the requirement for a more experienced person in this position. Since there was no equivalent in the court to the research assistant's position the half time research assistant was paid at the same rate as a beginning probation officer also.

5. Subjects

Subjects for this program came from two sources, juvenile court probation rolls and the Portsmouth City school system. Criteria for inclusion of delinquent subjects in the program were as follows:

- 1. They were to be between the ages of 13 and 17.
- 2. They should have a conviction in juvenile court and have at least six months remaining on probation at the start of the program.
- 3. They should not be repeated hard drug offenders.

A list of sixty names of boys on probation who fit the above criteria was provided by the Director of Court Services. From this list, pairs of subjects were matched for race, age, most serious offense and number of offenses, and when available, intelligence. Matching for severity of offenses was done using eight categories of offenses developed for research purposes by Fitch and Thomas(Note 1). This classification system can be seen in Appendix A. Subjects from each pair were then assigned to the delinquent experimental and delinquent control groups by tossing a coin to eliminate bias in assigning the subjects to groups as well as to eliminate the possibility that the groups might differ in degree of motivation if the subjects were permitted to select the group of their choice.

The option of participation in VYR was then introduced to these boys by their probation officers, and they were asked to visit the VYR building and see if they would like to participate.

Difficulty was encountered at this point as the probation officers were differentially effective in getting boys to come and examine the program. It was assumed that this reflected differing attitudes toward the program by individual probation officers as they may have regarded

it as a complement to their own work, a competitor for probationers who showed promise of improvement, etc. Eventually, after futher requests for additional referrals, all probation officers cooperated well, but for future similar programs establishing and maintaining a positive non-threatening, working relationship with other service agencies merits considerable attention.

A further difficulty encountered was that most boys wanted to be in the experimental group once the program was introduced, and some were openly disappointed at being assigned to the control group. It also proved difficult for the staff members to implement this group assignment in that they developed some attachment to the boys in the process of meeting and testing them and disliked having to tell the control subjects they could only participate in testing. A concession was made on this point in that control subjects who wanted to were permitted to participate in occasional recreational activities such as going to basketball games, but were not permitted to attend any treatment activities. This concession was made both to maintain the staff's morale and attitudes about the program and to minimize frustration for the control group subjects and thereby increase the probability of their attending the post testing sessions.

Non-delinquent subjects were obtained through the Portsmouth City School System. Range for age and intellectual level were specified by VYR staff and a list of potential subjects was provided by the school system. The staff members then contacted the parents and boys by phone and letter. Participation for all subjects was contingent on obtaining signed parental approval. Another problem encountered was

that in attempting to match subjects on age, race and intelligence more non-delinquent boys were excluded than was anticipated, Consequently we obtained a total of 24 non-delinquent subjects. Further, in some instances we were able to match only two of the three groups so that the final matching for the three groups was partial, and depending on the dependent variable under consideration, different numbers of subjects are compared in the analysis of the program.

Appendix B lists identification numbers of subjects from the three groups with their age, race, I.Q. scores when available, and offenses for delinquents, and it can be seen that total n's for the delinquent experimental, delinquent control, and non-delinquent groups are 31, 27, and 24 respectively. Concerning the matches, there are 20 matches for all three groups, 6 matches of delinquent experimentals and delinquent controls, 1 match of delinquent control and non-delinquent, and 2 matches of delinquent. Not all subjects completed every test so that the number of subjects varies for different comparisons in the program.

Delinquent Subtype. Quay and Parsons, (Note 2) has developed a system for the classification of four delinquent sub-types; inadequate-immature, neurotic, psychopathic, and subcultural. This assignment is made on the basis of three sources of data: (1) a self report questionnaire, (2) rating of life history data by someone who knows the subject, and (3) a behavioral checklist in which a probation officer or counselor checks behaviors actually observed for the subject. All delinquents in the present study were assigned to one of these subtypes after the program was initiated. Thus, delinquents were not matched on this variable before the study, but the information was available for subsequent analysis and delinquent subtype

therefore constitutes an additional independent variable in the study. Throughout this evaluation the terms "psychopathic" and "sociopathic" are used interchangeably as they are in much of the literature, with both being associated with attributes such as fighting, irresponsibility, disruptiveness, and disobedience.

One final point should be made concerning the manner in which the experimental subjects' data were analyzed. The author decided that 40 sessions seemed to delineate active and relatively inactive experimental subjects. Since it required a modal number of about 14 sessions just to complete testing this meant a subject had to complete more than 26 non-testing visits to be included in the active group of experimental subjects. Subsequently, analyses have been done using either all experimental subjects or actives and inactives separately.

It should be noted that this delineation into active and inactive participants is not intended to imply that one had to attend 40 or more sessions in order to benefit from the program. This is not the case. The staff observed positive changes in several of the inactive participants which seemed to result from their involvement with VYR. The division was made to try to assess whether differential changes, either behavioral or cognitive, were associated with level of attendance.

6. Procedures

The treatment process in this program consisted of a hierarchy of activities beginning with academic research participation requiring only attendance and passive cooperation by the subjects, and progressing through activities requiring the juveniles' increasing involvement and active participation in modifying their own behaviors. Following subject selection, and subject recruitment as discussed above, the order of progression through the treatment tasks from passive to active participation was as follows:

1. Academic Research. The measures chosen for the testing portion of the program heavily stressed cognitive variables in an attempt to sample the effect of the program on the thinking of the participants.

Tests collected before and after treatment include: (1) Kohlberg's Moral Development Interview, which is an individually administered interview which determines an individual's level of moral judgment within a six stage developmental theory, Kohlberg (1973), (2) Paragraph Completion Test, which samples the level of complexity of one's cognitive functioning, (3) Perry Stories, which consist of 40 brief situations for which the subject is asked to make an attribution of causality or responsibility for behaviors described (Shaw and Sulzer), (1964), (4) and attribution measure designed for this study in which four types of delinquents were described according to Quay and Parson's (1971) categories in order to assess the effect of the subject's similarity to the protagonist on attribution of causality and responsibility, (5) Picture Identification Test, which assesses an individuals concept of 22 types of motivation from Murray's need theory of personality (Chambers, 1972), (6) I-E Scale, which

measures whether an individual attributes control of their behavior primarily to the environment or to oneself, (Rotter, 1966) and (7) Personal Orientation Interview, which was administered only during post testing and yields 14 scales designed to reflect the extent to which a person is self-actualizing.

- 2. <u>Individual Personal Interviews</u>. This activity consisted of the participant talking into a tape recorder, usually with a staff member, but sometimes alone. The counselor conducted these sessions as they chose and generally tried to encourage trust and self-disclosure. The task was alternated with testing initially in order to provide some variety in the activities and to increase interest due to some uncertainty as to what might be done in any given session. This use of uncertainty was inferred from Quay (1965) who has postulated that delinquents require more variety and stimulation than non-delinquents. Individual interviews were conducted throughout the program although far more during the early months than later. Later individual sessions included more emphasis on specific goals such as behavioral contracting.
- 3. Group Discussions. Group meetings were used to discuss behavior of group members, to discuss issues with which they were concerned, and to solicit ideas from the participants on activities in which they would like to participate. Group sessions also helped to establish the idea that group activities had a purpose, familiarized participants with each other, and made it easier to conduct later more structured group activities. Activities which they worked on in groups included the discussion of feelings and problem behavior, the creation

of collages which were then posted prominently throughout the building, cleaning up a city building in which a museum was to open, and contributing art projects for a showing and sale at the museum to raise money for disadvantaged Nigerian school children, most of these activities being developed and maintained by the staff.

- 4. Modeled Problem Solving. Aside from the pervasive assumption that treatment personnel should be good models for delinquents to follow. very little systematic research concerning the modeling process with delinquents has been conducted. In VYR adaptive behavior was modeled for problem situations which delinquents are likely to encounter (Sarason, 1968). These situations included such scenes as resisting attempts by others to start fights, how to avoid provoking police, and how to minimize one's own contributions to a family argument. Scripts were read and sometimes portrayed by staff members and/or participants and then discussed. In each instance both positive and negative examples were portrayed and discussion centered on the relative merits of the differing ways in which the participants might behave. There were 12 scripts used, and they were done at the rate of one per week in sessions of approximately one hour each. At the end of the program during post-testing, participants were interviewed to determine how many of the stories they could spontaneously remember, and the amount. of detail they could remember. An example script and accompanying questions can be seen in Appendix C.
- 5. Moral Dilemma Discussions. Kohlberg's (1958) six-stage theory of moral development implies that delinquents are deficient in moral judgment and that moral development can be enhanced via discussion and

encountering reasoning that is slightly more advanced than one's own level. Drawing on the work of Blatt and Kohlberg (1973) moral dilemmas were presented and discussed in small groups in VYR for a period of twelve weeks. The dilemmas used centered on issues such as justice, value of life, property, and civil rights, and the staff members attempted to elicit and emphasize stage three reasoning. This activity will be discussed in considerably greater detail in the chapter devoted to moral reasoning.

- 6. Behavioral Contracting. This activity consisted of the participant actively working with a staff member to change target behaviors jointly decided upon. Agreement to participate in this kind of effort constituted a positive result of the program in itself. In each instance the participant and the staff member jointly created a contract in which the participant specified what he wished to accomplish and a time at which the contract would be evaluated as to its success. At that point they had the option of renegotiating the contract. Behaviors focused on included such things as school attendance, a variety of school behaviors, independent reading, job seeking, and avoiding misbehavior such as stealing.
- 7. Outside Employment. Because it has been empirically demonstrated that obtaining employment can have marked long range benefits for offenders (Massimo and Shore, 1963), staff members in VYR tried to obtain employment for participants when feasible. Five participants already had or obtained jobs on their own during the program. The VYR staff aided an additional six youths in finding jobs or job training.

Although this part of the program was somewhat hampered by VYR's one year duration and by the national economic picture at the time, considerable effort was exerted by staff members toward this end.

Local, state, and federal agencies were contacted about employment possibilities. Ads were run on local radio and a feature article in the local paper soliciting part—time jobs for teenagers. Unfortunately, the main result of the publicity was a series of calls from teenagers and parents inquiring about any left over jobs for themselves or their children, respectively.

While the small number of jobs obtained precludes any systematic evaluation of the effectiveness of this part of the program, it is still considered an activity well worth future emphasis.

Section II Evaluation: Primary Data

7. Court Data

The experimental design used in this program was the Pretest—Posttest Control Group Design as described in Campbell and Stanley (1963). The design includes a delinquent experimental group, two matched control groups, one delinquent and one non-delinquent, and pre and post measures on dependent variables. In some instances due to incomplete matching or testing of subjects, the design was modified. Delinquent groups were matched as closely as possible on age, race, intelligence and number and type of offenses. Thus, it was assumed that salient differences between the two groups at the project's completion should be attributable to the effects of the program.

Primary Data. Primary data for the program refers to data which reflects directly on the program's effectiveness. In this case that includes court records during the program, youth cards from police files, and pre and post moral development interviews. The original stated goals of the program were to significantly reduce the number of arrests, number of convictions, and time incarcerated for participants and to produce a significant improvement in moral judgment for the program participants. It was also hypothesized that attendance and rated degree of participation in the program would be related to court data results.

Charges and Arrests. Number of charges and arrests were combined due to a low frequency of occurrence of each taken separately. This data was obtained from youth cards filed by the police which record the nature and date of arrest, and from court records of number of charges.

On this measure twenty-four (24) pairs of delinquents were compared using

the Sign Test for Matched Pairs (Hayes, 1963). Although the total number per group included 31 actives and 27 delinquent controls, this comparison was done with 24 pairs due to the fact that 3 subjects originally assigned to the active group never attended any treatment sessions and four others: could not be adequately matched with subjects from the delinquent control group. None of the non-delinquent control subjects had any arrests or charges during the duration of the program, and they were not included in any court data comparisons.

Comparing the 24 pairs on charges and arrests combined, 12 pairs yielded no occurence of either. For 8 pairs the controls exceeded the experimentals and for 4 pairs the experimentals exceeded the controls. Expressed in percentages, 29 per cent of the active group were either arrested or charged during the program as compared to 42 per cent of the controls. Number of charges and arrests, as well as convictions and time incarcerated, per individual in each pair can be seen in Appendix D. The difference between groups in this instance is in the expected direction but not statistically significant due to the relatively short duration of the VYR program and consequent small number of charges and arrests. A later post-check should be more informative on this question and on the other court data as well.

Convictions. When the 24 pairs were compared on number of convictions 15 pairs yielded no convictions, 7 pairs yielded more convictions for delinquent controls than for the active group, and 2 pairs yielded more convictions for the active than for the control group. Expressed in percentages, 8 per cent of the active group had a court conviction during

the program's duration versus 33 per cent of the delinquent controleroup. Applying the Sign Test for Matched Pairs to this data, the difference even with such a small sample approaches statistical significance (p<.09).

Two prominent possibilities existed for explaining this difference. First, the active delinquents might have been guilts of fewer anti-social acts while the program was running, and this may have been reflected in fewer convictions. This seemed to be true in many instances, and the lower rate of charges and arrests for program participants supports this hypothesis. Second, the court might have been influenced by the fact that a boy was a VYR participant and have shown reluctance to convict a child if a staff member from VYR spoke in his behalf. While this latter alternative was possible, the point was clarified by a response from one of the two Juvenile and Domestic Relations Court judges, who explained that participation in our program had no effect on findings of innocence or non-innocence (i.e., convictions), as VYR staff members never spoke on behalf of a boy until after the finding was arrived at. This was also the procedure followed by probation officers of the court so that even this did not constitute special treatment for program participants. He did think that VYR participation had affected the disposition of some cases, however, and thus could have affected the results for time incarcerated.

Incarceration. Comparing the two groups for time spent incarcerated one active participant was incarcerated as compared to four control subjects. Nineteen pairs yielded no incarceration time for either member. Percentage of subjects incarcerated for each of the groups thus equals

4 per cent for the program participants and 17 per cent for the control group. The direction of the difference supports the <u>a priori</u> hypothesis; however, again due to the small numbers involved the difference is not statistically significant.

Court Data and Attendance. An additional hypothesis in the original proposal was that degree of improvement, i.e., decreases in the variables involved, should be significantly correlated with frequency of contact with the center. Due to the nature of the court data (in which each variable includes a majority of zero entries and very limited range) such a relationship is not easily demonstrated. The only variable with a sufficient number of occurrences to permit assessment of this relationship is that for charges and arrests combined. To test this hypothesis a point-biserial correlation was calculated using arrests and/or charges as a dichotomous variable (i.e., a subject was labeled as (1) having been arrested or charged, or (2) having no record of arrest or charge), and the number of sessions attended was used as a continuous variable. Subjects for this analysis consisted of all active participants including four for whom we had no matched delinquent controls. Therefore the sample size was 28 rather than 24. The point-biserial correlation between these two variables is -0.41, which is a statistically significant relationship (p< .05).

Thus, high attendance at VYR was significantly associated with no further court contacts during the program's duration, and conversely, low attendance was associated with the occurrence of either an arrest, a charge, or both.

This correlation might be interpreted as the VYR program having had a beneficial effect in reducing court contacts. It could also be

interpreted as reflecting a tendency for selective attendance in VYR so that perhaps high risk youths were less interested in the program. attended less, and got in more trouble, and vice-versa for low risk youths. If the latter interpretation were true, assuming that severity and number of offenses prior to the program's onset would reflect likelihood of later court involvement, one would expect that severity of past court record would correlate negatively with number of sessions attended. For matching purposes, subjects' prior convictions had been converted to a number between 1 and 8, a system developed by Fitch and Thomas (1972). The algebraic sum of their numbered convictions then represented past court record. A Pearson productmoment correlation calculated for number of sessions attended and combined number and severity of past convictions showed no relationship between the two (r=0.078). Thus, severity of past court involvement was clearly not differentially associated with low attendance in VYR, and the more likely of the two interpretations appears to be that VYR was beneficial in effectively reducing court contacts while the program was operating, and the original hypothesis is supported.

Generally, the court data support the original hypotheses and indicate that VYR did have beneficial effects on the court involvement of the participants while the program was operating. It will be important to determine whether this early trend is maintained at a one year follow-up assessment, and it should also be possible at that time to relate court records to some of the testing measures taken.

8. Moral Reasoning

Because most readers are probably relatively unfamiliar with the moral reasoning portion of this program and because a great deal of staff time was spent on this activity the background theory and literature is presented here in greater detail than for some other portions of the VYR program.

In <u>Streetcorner Research</u>, a program on which VYR is based, Schwitzgebel (1965) made the following comments on the value of attending to the philosophy, implicit or explicit, of juvenile offenders:

The theoretical orientation of our staff involves both an examination of the psychological processes of behavior change in an individual case and at the same time a consideration of the person's philosophical perspectives.

Some offenders might well be described along the philosophical dimension as primarily concerned about immediate physical pleasure (hedonism), or power over others (Chamberlain), or independence from social values (Nietzsche), or the absurdity of existence (nihilism).

One of the approaches used in VYR, discussion of moral dilemmas, utilizes a theory of moral development which assumes that all children are implicit moral philosophers and that the particular philosophy one uses is determined largely by the structure of one's thinking.

Kohlberg's cognitive stage theory of moral development posits 6 stages of moral reasoning and states that the sequence of progression through this sequence is universal, although individuals and cultures differ on the ceiling stage attained (Kohlberg and Turiel, 1971).

Stages 1 and 2 are labeled preconventional thinking in that the individual at either of these stages has little or no concept of social convention and orients toward external consequences of action.

Stage 1 is typically labeled the Punishment and Obedience stage; stage 2 is the Instrumental Relativist position.

Stages 3 and 4 represent conventional thought, and the thinking at these stages stresses conventions between individuals at Stage 3 and between the individual and society at Stage 4. They are labeled the Interpersonal Concordance and Law and Order orientations, respectively.

Stages 5 and 6 constitute post-conventional thought, and in both of these stages the individual requires that social conventions be derived from just and fair principles in order to merit support. Stage 5 is exemplified by the Social Contract and Stage 6 by an orientation to Universal Ethical Principles.

A finding of importance to the present research is Kohlberg's (1958) discovery that delinquent boys with a record of antisocial behavior reasoned at the preconventional level whereas nondelinquents of the same age showed more conventional moral reasoning than their delinquent peers. This finding has received further support and specification recently in a study by Campagna and Harter (1975) in which moral development was compared for sociopathic and normal children matched for mental age and I.Q. Campagna and Harter found a clearly significant deficit in moral reasoning for the sociopathic boys and attributed the deficit to inadequate opportunity for role taking and identification in their family interaction. Thus, past findings have shown that sociopathic delinquents use a lower level of moral reasoning than non-delinquent peers, and Campagna and Harter imply that the pre-conventional moral reasoning is a mediating variable in the emergence of delinquent behaviors.

If delinquent youths do show such a deficit, then it is an important issue as to whether their moral reasoning can be improved and if so, to what extent. Once the stages and their sequence were established via supportive research findings (e.g., Kohlberg, 1958; Turiel, 1966) the next emphasis in Kohlberg's work was on moral education. Rest, Turiel, and Kohlberg (1969) showed that people preferred moral reasoning at a stage level slightly above their own when given forced choice comparisons and that if an individual is exposed to a point of view approximately one stage above their own this is an optimal condition for producing improvement in their moral development. In a direct attempt at moral education, Blatt and Kohlberg (1973) conducted discussions of moral dilemmas with upper middle class 11 and 12 year old children in a Sunday school class and produced an average increase of 66 points on moral maturity scores. The moral maturity score has a range from 0 to 600, and one stage is equivalent to 100 points, therefore the authors were producing a mean improvement of roughly two thirds of a complete stage via these discussions. In a second experiment with disadvantaged black children a mean improvement of 34 points was obtained. Thus, for this population, improvement was less marked but still significant. Further findings by Kohlberg and his colleagues have implications for the age range at which one might best attempt moral education with delinquents. First, it has been shown that while moral maturity scores at age 10 for nondelinquent children correlate very poorly with adult moral judgment (r=.24), scores at age 13 correlate far better (r=.78). Second, developmentally during the interval from 10 to 14 years.

children typically move from preconventional (stages 1 and 2) to conventional levels (stages 3 and 4) of moral judgment. Considering that delinquents have been shown to be retarded in moral development relative to nondelinquents one might assume that an ideal time for facilitating the transition from preconventional to conventional moral thinking for delinquents would lie in the early to mid teen age years.

It was expected that boys participating in discussions of moral dilemmas would show significant improvement in moral reasoning and that their improvement would exceed that of both delinquent and nondelinquent control subjects not participating in discussions. The discussion procedure was based closely on that of Blatt and Kohlberg. Prominent differences between the present study and theirs include the use of discussion leaders who were unaware of moral development theory prior to training, and the use of delinquent subjects. Since pretesting of moral development was conducted on all subjects it was also possible to obtain additional data on the comparison of delinquent and nondelinquent moral development. From past findings cited above, it was expected that delinquents would initially show a significant deficit in moral development relative to matched nondelinquent controls.

METHOD

Experimental <u>Design</u>. The experimental design used in the moral reasoning portion of VYR was the Pretest-Posttest Control Group Design as described in Campbell and Stanley (1963), and the same as described in an earlier section of this report.

Subjects. When the moral development experiment was completed two criteria had to be met in order for a subject to be included in the data analysis. First, a subject had to complete both pre and post testing on moral judgment. Second, it was decided that delinquent experimental subjects had to complete a total of 40 or more sessions in the Volunteer Youth Research program or they would have received too little exposure to the moral dilemma discussions to be included as part of the test of its effectiveness. These two restrictions resulted in subgroup 1, 18 delinquent experimental subjects active in moral discussions, subgroup 2, 9 inactive delinquent experimentals, group 3, 20 delinquent controls, and group 4, 19 nondelinquent controls on whom the final analysis was conducted. For the 18 active participants the mean number of discussion sessions attended was 9. For the 9 subjects excluded from the active participants due to insufficient participation in the discussions, the mean number of discussion sessions attended was 1.5.

PROCEDURE

Testing. All subjects were given a pre-test moral development interview (Form A) which was individually administered and requires approximately one hour to complete (Kohlberg, 1973). The interview consists of three open moral dilemmas and standard probing questions for each. For example, the central issue in one is that a man's wife is dying of cancer. The only drug that may save her is too expensive for him to afford. Should he steal the drug? The interviews were individually administered by one of four testers. Care was

taken that each interviewer tested members from each of the three groups to avoid bias due to any interviewer differences. The pre-tests were conducted over a two month interval during the initial portion of the VYR program. Subsequently there was approximately a one month interval before the discussions were begun and the discussions were conducted for twelve weeks. The total interval from pre to post testing was then approximately 5 to 6 months.

After all discussions were completed all subjects were administered the moral development interview (Form B), an equivalent form which uses three dilemmas not included in the pre-test.

Scoring of the interviews was done by the author who was blind to both subject identity and group assignment of the protocols being scored until after the scoring was completed. All protocols were rescored for reliability by one of two members of the Moral Development Laboratory at Harvard. The Pearson product moment correlation coefficient for moral maturity scores was 0.73, and the mean difference between judges in moral maturity scores was 18.68 points.

Staff Training. Training of staff members for conducting discussions with the delinquent active subjects consisted of providing three lecture and discussion sessions to introduce Kohlberg's theory, providing readings consisting of published articles by Kohlberg and his colleagues on moral development and its enhancement, and the implementation of a two day workshop for the staff which included pre-assigned readings, lectures, discussions, and videotaped practice groups with volunteer teenage students from a school in another town. After conducting these groups, the tapes were viewed and both positive

and negative feedback given in response to each staff member's performance.

Once the experimental discussions were initiated, the author consulted with the staff weekly on the progress of the discussions and provided lists of possible questions for each dilemma which might be used to promote reasoning at given stage levels, particularly stage 3.

Actual questions provided can be obtained from the author.

Discussion Sessions. Dilemmas used in the discussions were selected from dilemmas used by Rest(Note 3)in the Defining Issues Test, an objective test for measuring moral development, and from dilemmas which Kohlberg has used for testing moral development in the past. Since the dilemmas in the pre-test were not to be used again, they were also included in the discussions.

The form for the discussions was based closely on that used in Blatt and Kohlberg although discussion leaders were free to implement them in a way consistent with their own personal preferences. An outline of the procedure can be seen in Appendix E, and an example set of discussion questions in Appendix F.

The issues stressed in the discussions included a sample of basic moral issues identified by Kohlberg such as the value of life, property rights, civil rights, law, and punishment. The discussions were conducted in small groups of from three to seven boys and their discussion leader, and, with an occasional exception, individual subjects met with the same group for the entire series.

RESULTS

A Trend Analysis of Variance was run using pre- and post-tests as equivalent form repeated measures and four subject groups were compared: Subgroups 1 and 2 of the delinquent experimentals (the actively participating and inactive subjects respectively), and the delinquent and non-delinquent control groups consisting of 18, 9, 20, and 19 subjects respectively. Subjects were excluded from analysis unless both pre- and post-interviews were obtained. Table 2 gives the means, standard deviations and mean pre- to post-difference scores for each of the four groups on the two measures. Table 3 shows the summary of the analysis of variance.

Table 2
Means, Standard Deviations, and Mean Pre- to Post-Differences of Moral Maturity Scores for Groups X Trials

Group		<u>n</u>	Pre-test		Post-test		Mean
			Mean	S.D.	Mean	S.D.	Difference
1 .	Delinquent Experimental (Active)	18	183.8	31.7	218.0	24.1	34.2
2.	Delinquent Experimental (Inactive)	9	186.1	26.7	203.0	21.5	16.9
3.	Delinquent Control	20	189.8	37.4	205.7	35.6	15.9
4.	Nondelinquent Control	19	187.7	23.2	207.8	31.7	20.1

Referring to Table 3, a highly significant pre- to post-effect was obtained (F(1,62)=28.54, p<.001). The interaction effect, however, was not significant (F(3,62)=1.09). Therefore, the data reveal a strong increase across groups from pre- to post-testing but not a statistically significant differential increase for the active program participants.

Table 3

Summary of Trend Analysis of Variance of Moral Maturity Scores: Groups X Trials

Source of Variance	Sum of Squares	df	Mean Square	F
A: Groups	595.85	3	198.62	.146
Error Between	84,365.84	62	1,360.74	
B: Trials	14,057.64	1	14,057.64	28.54*
AxB	1,610.69	3	536.90	1.09
Error Within	30 , 537	62	492.544	

^{*}p<.001.

Because the differences from pre- to post-testing were numerically greatest for the active group and the interaction effect was of crucial importance in the study, an additional analysis of variance was run on pre- to post-difference scores. In this instance the delinquent experimental subjects who did not participate in moral discussions were combined with the delinquent control group subjects to form a single larger control group for a comparison of three groups: active experimentals, non-delinquent controls, and the pooled groups of delinquents not participating in discussions. This resulted in n's of 18, 20, and 28 respectively.

The summary of this analysis of variance is presented in Table 4. This analysis of variance for difference scores approached significance (F(2,63)=1.93,p<.15). Although the significance level did not reach a probability of .05, the results do merit discussion.

Finally, psychopathic delinquents were compared with nondelinquents on moral learning. When psychopathic delinquents, from the Quay and Parsons (1971) classification system, were identified in the delinquent experimental group, this resulted in nine matched pairs of psychopathic delinquents and non-delinquent controls. The mean moral maturity scores were 181.3 for the delinquents and 191.5 for the non-delinquents which was not a statistically significant difference (t=0.83).

Table 4

Summary of Analysis of Variance of
Moral Maturity Score Pre to Post Differences

Source of Variance	Sum of Squares	df	Mean Square	F
Groups	3,742.8	2	1871.4	1.93*
Residual	61,082.1	-63	969.6	
TOTAL	64,824.9	65	997.3	

^{*&}lt;u>p</u><.15

DISCUSSION

Effect of Moral Dilemma Discussions. The mean difference score for the active participants, 34 points, is very similar to the mean difference score obtained by Blatt and Kohlberg with the disadvantaged black students who were exposed to leader directed discussions. Also, the pre to post difference scores for the delinquent and non-delinquent controls are consistent with the expectation of improvement with normal development over a six month interval. For example, Blatt and Kohlberg (1973) state that a 100 point change would be the normal expectancy in pre-adolescence during a three year period. In the present instance the difference scores of 15.9 and 20.1 for the delinquent and non-delinquent controls respectively closely approximate the prorated increase, one would expect over a six month period. When one further notes that the mean pre to post difference score for the original non-delinquent control group and that for the delinquent actives who did not participate is much the same, it appears that the differences obtained are conceptually meaningful if not clearly statistically significant, and the present study, using trained counselors relatively briefly introduced to Kohlberg's theory closely approximated the findings of the Blatt and Kohlberg efforts with disadvantaged black children.

In comparing the present results to those of Blatt and Kohlberg a puzzling result was noted in the latter study. While their experimental group showed an increment which was very similar to that for the experimental group in the present study, their non-treatment control group showed a decrement of 15 moral maturity score points, a finding which is contrary to expectation. Since moral reasoning is a developmental phenomenon the only change predicted with the passage of time would be

either no change or a slight increase. The authors treatment of this decrement appears to be a mistake. The 15 point decrement is included in the analysis of variance and contributes to the significant interaction for trials by groups. However, the decrement is subsequently explained away as a consistent scoring error in which a small number of stage 4 subjects were mistakenly labeled as using stage 1 reasoning. Thus, even the lack of a clear cut interaction in the present study is consistent with the findings of Blatt and Kohlberg when the latter are accurately interpreted.

It remains for future research efforts to determine whether improved discussion methods can enhance the moral development of disadvantaged delinquents to the same degree as previous efforts have produced with upper middle class youngsters.

Delinquents vs. Nondelinquents. The fact that delinquents' and non-delinquents' moral judgment did not differ on the pre-test was a surprising finding (see Table 2). Inferring from both theory and recent past findings (e.g., Campagna and Harter, 1975) delinquents were expected to be inferior to matched non-delinquent controls on moral judgment.

One factor which might have accounted for the lack of difference on pre-test across groups is the fact that boys were included in the delinquent category in this study by the criteria of having a juvenile court conviction and being on probation. Thus, the delinquent group was a relatively heterogeneous one, and one might expect that a deficit in moral development would be most probable in a psychopathic group of delinquents, i.e., boys showing a history of such things as impulsive behavior, little or no feeling of guilt, and destructive acts. A comparison of the moral reasoning of the nine psychopathic delinquents and their matched

nondelinquent controls produced no difference, however.

While no strong conclusions can be drawn from this absence of expected difference, one possible interpretaion is that inadvertently the school system referred predominantly psychopathic boys as nondelinquent control subjects. This is possible but not highly probable.

Another possible interpretation is that the Campagna and Harter study produced their difference via an artifact of the study. Although theirs is an exceptionally well controlled study, all their sociopathic boys had been incarcerated for an average interval of 18 months prior to testing. Incarceration has produced regression in moral reasoning in adult prisoners (Kohlberg, Kauffman, Scharf and Hickey, 1974). Whether it did so in this case is unknown, but incarceration is confounded with their independent variable of sociopathy vs. normals.

One might also assume that the findings in both studies are valid, in which case future research should be directed to determining why some adolescents showing predominantly preconventional moral reasoning are psychopathic and others not.

Section III Evaluation: Secondary Data

9. Staff Time

Secondary data consist of data which yield information about the functioning of the program but are not relevant to the basic hypotheses to be tested. The present chapter and the others in this section offer primarily descriptive information about how VYR functioned.

Daily Tabulation of Staff Activities. A computer program was developed which gave a daily tabulation of activities for VYR. The program is a modification of one which was developed for use at the student Center for Psychological Services at the College of William and Mary (Chambers, Note 4).

The program yields an approximation of the way in which staff time is apportioned among several different possible categories of activity. The printout is too long to be included in the report, but results will be described. Such a program has two main potential uses in a treatment and research program such as VYR. First, it may be used as feedback for individual staff members on a regular basis reflecting how their time is being spent and the proportion of various activities which each is conducting relative to others. Second, it may be used as a source of information for long range planning since it provides feedback about the proportion of time spent on differing activities.

The program printout is presented in this report more for its potential future use than for its use in VYR because it took approximately two months to implement it, and therefore data is missing for the early months. Further, there are errors in the existing printout due to initial inadequate definition of categories so that

staff members' interpretations of what to report varied at first.

Nevertheless, the use of programs such as this one is thought to have great potential for providing crude but specific behavioral feedback on staff time, much as a program like VYR attempts to specify behavioral goals to clients. It should be stressed that the use of such programs need not imply monitoring of staff behavior by supervisors as its goal. If printouts are regularly available to all, the printout may serve to document complaints of staff members if they feel they are being asked to do too much or an excessive amount of one activity relative to others on the staff.

In implementing the present computer program each staff member kept a record of their activities which was turned in monthly to the research assistant. Some categories were cross-checked with the daily appointment book at VYR to minimize errors. Cross-checked categories included Individual Interview Sessions, Number of Hours in Groups, and, to some degree, Number of Hours Spent Testing. The research assistant entered the data on computer cards and ran the program.

Activities included in the various categories on the printout are as follows:

Individual Interview Sessions. These sessions consist of each hour of individual appointment time spent with a client. They include primarily personal interviews, and behavioral contracting sessions.

Community Contacts. These include meetings with school personnel, parents, members of local civic clubs, and potential employers.

Number of Hours in Groups. This category includes the number of

- hours the staff member spends meeting with groups of clients (two or more) for purposes other than recreation.
- City-Court Contacts. This category includes time spent in meetings with members of the city government or members of the Juvenile and Domestic Relations Court.
- Staff Meetings and Training. Included here are hours spent in staff meetings or in training for various treatment activities in VYR.
- Recreation. This classification includes any staff time spent in recreational activities with clients such as team sports, attending basketball games, etc.
- Reports and Recruiting. This includes staff time spent writing reports for the court or attempting to recruit additional clients.
- Number of Hours Spent Testing. Included here are staff hours spent in gathering test data. Some obvious overestimates exist here as client time was sometimes recorded rather than staff time and participants were often tested in groups.

The categories were drawn up in an attempt to cover most of the activities regularly occurring in the implementation of the program. They are not all inclusive as may be readily seen from the fact that excluding vacation, sick leave, and lunch time, the total time in hours for nine months would be approximately 3500 hours as compared to 2910 total recorded in the program for the three full time staff. Thus approximately 83% of the total time is recorded in the programing categories. Although the numbers in the printout contain error, nevertheless, they are certainly accurate enough to support conclusions about general proportions and trends. Table 5 shows the percentage of staff

time accounted for by each category considering either the percentage of recorded time for the nine months for which there is adequate data, or the percentage of total working time for that interval. The following conclusions are offered, based on the printout information:

TABLE 5
Allocation of Total Staff Time

Categories	Staff Hours	Percentage of Recorded Time	Percentage of Total Time
To Jan 2 Jun 7 To be seen a page	r.Cr	19.4	767
Individual Interviews	565	19.4	16.1
Community Contacts	377	13.0	10.8
Group Hours	228	7.8	6.5
City-Court Contacts	194	6.7	5.5
Staff Meetings and Training	742	25.5	21.2
Recreation	77	2.7	2.2
Reports and Recruiting	215	7.4	6.1
Testing Hours	512	17.6	14.6
	2910	100.1%	83%

PERSONAL CONTACT WITH CLIENTS

The following formula was used to estimate the proportion of their time the staff spent engaged in treatment activities with the clients:

Individual Interviews + Group Hours/Total

Inferring from this formula the staff spent approximately 27% of their recorded time in treatment activities involving personal contact with clients. It is assumed this could be improved on, however, it would be valuable for comparison if most programs kept similar records, as expectations

and impressions are often somewhat discrepant from behavior. Further, it is obvious that this figure is a conservative estimate of total therapeutic contact time with clients. Since therapeutic influences may occur implicitly as well as explicitly, the following formula was used to reflect proportion of total time in contact with clients, whether the activity was primarily intended to be therapeutic or not:

Individual Interviews + Group Hours + Recreation + Hours Testing/Total

Using this formula, approximately 48% of recorded staff time was spent in contact with clients. This figure reflects the fact that a considerable demand was made on staff time by the tests administered in VYR as part of the research. Also, considering that everything in the program was being tried for the first time by the individuals involved, a fact requiring considerable time in training staff and coordinating various institutions and individuals, 48% contact time is considered an acceptable level during an initial year which could have been improved on in subsequent years had the program been continued.

10. Participant Involvement

During VYR's early months, a second computer program, LISTIAB, was developed to yield a record of participant involvement in the program. This program was also adapted from one developed by Chambers (Note 5). The program yields information on the four variables of attendance, punctuality, counselor ratings of appointments, and participant ratings of appointments. These four variables were then related in the program to age of the participants, delinquent typology, moral development stage, and experimental group to which the participant was assigned. If VYR had been continued then a sufficient number of subjects might have been involved to draw some conclusions on the basis of the variables such as age, delinquent typology, etc. With the small number of subjects involved, some tentative conclusions are suggested about the actual participants in VYR, but no attempt is made to generalize these suggested conclusions to all potential clients of a particular age or category.

Attendance. The mean number of sessions for all delinquent experimental participants was 54.5. The mean number of individual sessions and group sessions were approximately equal at 20.3 and 19.6, respectively. There were two exceptions in that thirteen-year-olds tended to have more individual sessions, 33.0 compared to 19.0 group sessions. A possible explanation for this difference is that the youngest boys were less adept at group interaction, particularly with the older boys and sometimes felt intimidated. The individual sessions with their counselor, however, were more protective. The seventeen-year-olds attended fewer individual sessions, 15.7 compared to 24.3 group

sessions on the average. These older boys seemed more drawn to the group interaction which they could to some degree dominate. Again, it should be noted that each of the two preceding groups consisted of 3 participants per group so these tentative conclusions are idiosyncratic to the individuals involved.

When attendance for the four delinquent typologies is considered, type 3, psychopathic delinquents, showed the highest mean attendance numerically although the difference was not statistically significant.

<u>Punctuality</u>. Tabulation of punctuality was included in the printout because it was originally planned that the staff would attempt to shape punctuality for appointments by rewarding participants for improvement in this area. This was not done because surprisingly few clients showed much of a problem with punctuality. The delinquent experimental group showed up for 76% of their scheduled appointments either on time or more than 5 minutes early. Also, showing up late for appointments and being absent seemed to occur occasionally throughout the year rather than being a stable behavioral deficit at the program's beginning. Thus, shaping was not implemented.

Staff Ratings. A standard brief rating sheet was developed for VYR on which the staff member rated five attributes of each participant's visit and the participant rated three attributes. At the end of each session, the participant was given the rating sheet first on which he wrote the three ratings. The counselor made his rating afterwards to minimize possible imitiation by the participant if the order were reversed. The boys understood that the purpose of VYR was research and that we were interested in their feelings and thoughts. Therefore, the

ratings were introduced as a way they could let us know what they thought of the activities. The staff member rated the participants' emotional involvement, liking, freedom and ease, constructive behavior, and candor for each session. The participant's three ratings will be described in the next section. The rating form can be seen in Appendix G and a brief explanatory sheet for the staff appears in Appendix H.

The purpose of the rating sheet was to record a brief but formal evaluation of each session for feedback about program effectiveness and to see whether any meaningful differences occurred in the way in which different groups and classifications of subjects responded to the treatment activities. The ratings were derived from those of Ostrom, et.al. (1971).

There were no clear patterns of differences between different groups classified by age, delinquent typology or moral development stage on the staff ratings. In the comparison of experimental groups the mean ratings were consistently higher though by a slight margin, for the delinquent experimental subjects. Thus, the staff ratings did not differentiate the groups.

Participant Ratings. Participants rated how much they liked the session thy had attended, their desire to return, and the helpfulness of the session. The modal rating given was a 7 on a 7-point scale. Thus, if nothing else, the participant ratings reflect either very positive attitudes about the program or a hesitance to give candid feedback. While it is difficult to say for sure that one or the other is the correct interpretation, it appears that the boys did like the program very much and in many cases, though a rating of 7 was the mode, lower ratings were given which corresponded to the participant's

dissatisfaction with a session.

Two trends emerged in the participant ratings. Sociopathic delinquents, of which there were 11 in the experimental group, gave the highest mean ratings on all three variables relative to the other three delinquent typologies, and the thirteen-year-olds gave the highest mean ratings on all variables compared to the older participants.

Higher participant ratings by the sociopathic delinquents parallels the earlier trend of higher attendance for this group. Neither of these tendencies was statistically significant, but the fact that the two findings are parallel deserves comment. The voluntary nature of the program did seem to appeal to sociopathic boys, and some of the closest counselor relationships were formed with these participants. The author's impression of this tendency is that the sociopathic delinquents in particular were favorably affected by the voluntary nature of the program and the opportunity to talk seriously with an adult who was reliably available and interested but non-coercive. Possibly, the voluntary non-coercive approach of VYR has attraction for sociopathic boys due to its contrast with their expectations, since frequently their antisocial behavior elicits close control from others, and is often related to past abuse or neglect.

11. Behavioral Contracting

Behavioral contracting was included in the hierarchy of treatment activities as one of the most active and personally demanding of the tasks available. To participate, a client and to work with his counselor either in attempting to change some behavior which they both could agree was a problem and should be reduced in frequency, or on enhancing some desired behavior. Training of the staff for writing contracts was minimal as two of the staff had written contracts with delinquents previously and had also supervised others in writing contracts. Because of this prior experience, materials consisting of Tharp and Wetzel (1969) and Stuart (1971) were provided, principles of contracting discussed, and the staff were encouraged to write contracts with their clients when feasible.

The contracts were written jointly by the counselor and participant during individual interview sessions. They were then typed by the clerk typist and one copy was left with the counselor, the other with the participant. The facts that the contracts were typed, that the counselor signed them with the participant, and that the participant got his own copy all seemed to enhance the process in the view of many participants. Often they were eager to get their typed copy and seemed to take pleasure in letting others know that they had made a contract.

Each contract was to include specific behavior(s) to be changed, some privilege which was earned, and a date on which the participant and counselor would judge it successful or unsuccessful. The more experienced counselors preferred to write contracts without any privi-

leges implied, i.e., the only reward was the satisfactory completion of the contract. Thus, some contracts were written in this manner, with a possible implicit privilege or reinforcer being counselor attention and encouragement for successful contract completion.

Contracts were initiated with 14 of the participants, and a total of 44 contracts were attempted. Of this total 14 contracts included the active involvement of teachers. Another seven involved one of the participant's parents. Of the 44, a total of 28, or 64 per cent, were successfully completed by the participants.

The following is an excerpt from an individual interview session conducted by the coordinator with a high school student who was having difficulty with class punctuality. In this sequence a contract is written and the conversation demonstrates the voluntary nature of the agreement and the manner in which it was established. Throughout the transcript, "C" stands for the counselor, and "R" stands for the participant. The client's name is a fictitious one. The counselor was Richard DiPeppe.

- C: Okay what do you want to talk about today?
- R: How about if I ask you--what do you want to talk about?
- C: Anything you want to talk about. How about school?
- R: What about school?
- C: What about school?
- R: That's just what I asked you.
- C: What are you gonna make this year? What kind of grades are you getting?
- R: ...Passing. I failed one subject this six weeks.

- C: What'd you fail?
- R: Math. I should have passed.
- C: Are you gonna fail it for the whole year?
- R: No.
- C: Well, what happens if you miss another day?
- R: I get suspended for the year and lose credit.
- C: Well, then you lose credit for all of them, right?
- R: All four.
- C: How could you not be late?
- R: I don't know. The building is so big.
- C: Well, how do you think you could not be late?
- R: Leave class early.
- C: Would they let you do that?
- R: No.
- C: How are you gonna avoid not gettin' kicked out of school again, Roddy?
- R: I'll try. This is the only year I really tried to stay in school and I can't stay in school for nothing. I have actually tried to stay in school, I mean . . .
- C: How do you pass a subject when you get kicked out of school for 19 days? That's what I don't understand. How did that happen? Huh?
- R: I missed 97 days one year, passed five out of six subjects.
- C: Why do you ever go to school?
- R: I don't know . . . first year I go there, I didn't want to go there.
- C: Well, how about this year, you got 19 days kicked out, right? That's an awful lot of days, that's a month of school.
- R: Not quite a month.

- C: Yeah, it is, that's 20 days, 20 school days. That's how many school days there are in a month. That's a month of school.
- R: I've been lucky, see. See, when I got kicked out it was at the beginning of a new six week time, the first day of a new six weeks, and that's when all my suspension days come. Well, I've been lucky 'cause you don't get no tests the first few weeks out of six weeks. So that's what's been keepin' me in.
- C: Well, you got 19 days, though. Well, you say one more and you're gone for the year. Right?
- R: Gone for the year.
- C: Well, how do you not get that one day?
- R: Got to make sure you don't be late.
- C: How do you make sure?
- R: I don't know—leave early.
- C: Well, you can't leave the class early, can you?
- R: Can't run up and down the halls either.
- C: Well, then how do you do it? How do you not be late?
- R: I don't know.
- C: Do you stop and talk on the way to classes?
- R: Mm-hm.
- C: That got anything to do with you being late?
- R: Mm-hm.
- C: It does. What if you didn't stop and talk?
- R: I don't know-there's still a 50/50 chance-that's a big school.
- C: Do you think you'd have a better chance?
- R: Yeah.
- C: Why don't we try something for a week?
- R: What?
- C: Why don't you and I make an agreement? That you don't stop and talk between classes. For a week.

- R: I'd hate to lie to you, Richard.
- C: No, well I don't want you to make the agreement if you can't make the agreement.
- R: I'd hate to lie to you—ain't no way in the world I'm gonna walk down that hall and go straight to class.
- C: Why?
- R: I just can't.
- C: Do you want to get kicked out?
- R: Mm-mm. (negative)
- C: Why wouldn't you do it, 'cause if you're late, you're gonna be kicked out again, and if you get kicked out again, you fail everything for the semester. And all you have to do is do it for two more months. I mean you can talk to people before school, at lunch, and after school. Or at least you could talk to them after you get outside your door, right to where your class is.
- R: I'll try.
- C: How about trying it for a week? Okay, we'll make up a contract.
- R: Well, see, I just talk to girls in the hall.
- C: Well, I mean you got two months left, and you can blow your whole damn school year, if you don't do it. You'll end up blowin' your whole year. I mean, that makes everything these last 8 months not worth a damn thing. And that's not worth it is it? It's up to you. Okay, how are we gonna write this? "I, Roddy Stewart, agree to go straight to class...
- R: Starting next week.
- C: No-starting tomorrow. No, wait, you get off school when?
- R: Tomorrow.
- C: You get out of school tomorrow. Why don't we try it tomorrow, just one day, okay? And if it works tomorrow we'll see if it's worth doing after that, how about that?

How's that—"I, Roddy Stewart, agree to go straight to class, go straight to each class and not stop and talk in the halls tomorrow. 3/26, right? And I'll put down that I will review, when are you gonna come in again? Well, you're not in school, Thursday or Friday, right? Why don't you come in one day? Are you comin' in for a group any time?

- R: Thursday or Friday.
- C: Which day is it? Let me check. Okay, You're comin' in Friday at 4:30. Do you want to come in Thursday?
- R: Yeah, I'll come in Thursday.
- C: What time do you want to come in? If you come in I want you here in the daytime. You name it.
- R: Eleven.
- C: Is that a good time for you? Can you get down here by then?
- R: Uh-huh.
- C: Okay, I'll put—I'll review this contract with you on Thurs—day 3/27/75, at eleven o'clock. I'll get this typed up for you, so we'll have an official contract, right?
- R: Okay.
- C: Okay, we'll see if that can help you get to class on time.

In this example, first a problem is mutually agreed on, some alternative potential solutions are suggested, and then a particular contract is suggested by the counselor. The interaction is relaxed as evidenced by occasional humor, and the participant appears to regard the intent of the contract as a desirable goal. The way in which this was developed is considered representative of the way in which most were written.

Perhaps the best example of the effectiveness of behavioral contracting in VYR occurred with a 15 year old participant who showed severe behavior problems in school including fighting with other students, hostility toward teachers, and class misbehavior.

A series of five contracts was written focused on minimizing misbehavior and encouraging effective study. The first contract stated that the participant would take his contract to each teacher

at the end of each class for one week and receive written feed-back on his behavior during that class. The participant successfully completed the contract and received very favorable comments on his behavior and class work during the week. At the end of the week the school administrator, to whom the participant was frequently referred for discipline, commented that it had been the worst week ever, and he thought the boy should be given up on. When shown the teachers comments his attitude became more positive. Subsequent contracts were done to maintain and strengthen the improved class behavior and to minimize opportunity for conflict between the boy and the administrator. This example is offered to emphasize the importance of focusing on specific behaviors. The administrator had experienced considerable trouble with the participant, and it is understandable that unless the focus was on specific sub goals his expectations would be negative.

Though the relationship between the two never became friendly, the boy, who had been suspended from school twice during the year prior to the initiation of the contracts and about whom the administrator openly said he had given up, did successfully complete the school year and passed in his work.

The effectiveness of behavioral contracting has been demonstrated in past studies, and its use in VYR also proved effective. The only criticism of the contracting in VYR is that it could have been used more often.

12. Modeled Problem Solving

The modeling of interpersonal problem solving was conducted using scripts developed by Sarason (1968). An example appears in Appendix C. Thirteen scripts were used concerning such things as family arguments, skipping school, and avoiding fights.

The sessions were conducted in small groups of three to six boys, and the scenes were role played by either staff or participants. Each situation depicted had two or three versions representing varying degrees of constructive behavior on the part of the protagonist, a teenager. The participants discussed the scenes after each was presented and compared and contrasted the different ways of handling the problems posed. Throughout, there was an emphasis on the fact that one's own behavior sharply affects the ways in which others respond.

A total of 24 participants engaged in these sessions, and the mean number of sessions per participant was 5.8.

During the post testing sessions, participants were questioned to see how many story situations they recalled by title and the number of correct details remembered corresponding to the titles recalled. While there was no check to determine whether they literally applied the information to real life problems, it was assumed that recall of the stories was necessary, though not sufficient, to insure that they were applied in situations outside of VYR.

Ten participants were asked whether they remembered any of the role play stories which were acted in and discussed. The 10 questioned participants constituted a somewhat biased sample since they had, on the average, attended more of the modeling sessions (viz., mean number of sessions for the questioned group equals 7.4; the mean for the others equals 4.6). This group was sampled because the questions were implemented late in the program when some boys were unavailable.

A mean of 4.5 stories was recalled by title or brief plot, and the mean total number of details recalled was 17.7 or roughly 4 per story. The story situations themselves were rather brief so that 4 details were often sufficient to establish the outline of the plot involved. Comparing the mean number of stories recalled to the mean number of sessions attended, the tested participants recalled approximately 61 per cent of the story situations to which they were exposed. Since the participants were questioned six weeks after the completion of the modeling sessions, this percentage for retention is considered good, particularly for the population involved. Although the remaining 14 participants were not questioned, it is assumed that they would have done less well as their lower attendance reflects less interest in the activity.

No direct tests of behavioral applications of the modeled situations were conducted but some participants spontaneously reported applying some of the lessons outside of VYR. One boy reported that he went out of his way to avoid a fight and that he intervened to prevent some other boys from picking on a smaller child shortly after the role play session involving avoiding fights. The fact that the same participant found a check written by school personnel and returned it to them, which was later verified by the school personnel, tends to lend credence to his account of avoiding fights.

Considering that many of the participants had difficulty with reading, it was surprising that they participated in the role play sessions with as much enthusiasm as they showed, since they read from scripts in these sessions. Also, although the stories usually had a particular point to convey, in the discussions the participants would sometimes show the ability to understand the intended point but prefer another interpretation.

To illustrate this, the story in Appendix C involves a youth who is questioned by a policeman at night after curfew. The scenes depict differing ways of responding to questioning including antagonistically, evasively, and in a matter-of-fact way. Some participants could paraphrase these conclusions but preferred a more fatalistic view that if a policeman wants to get you, he will. Thus, they saw the outcome as more dependent on the policeman's attitude than their own behavior. Whether this was based on experience is unknown, but it could clearly be a self-fulfilling expectation, and it exemplifies one of the cognitive variables measured, internal versus external locus of control, which showed positive change as a result of VYR participation.

Section IV Evaluation: Tertiary Data

13. Cognitive Measures: Picture Identification Test

There is growing interest in integrating cognition and behavioral approaches to therapy (e.g., see Mahoney, 1974; Beck 1970). Because the two areas have emerged from different theoretical perspectives, they have until recently remained relatively isolated from each other. In particular, behavior modifiers have evaluated their work solely in terms of overt behavioral changes with little explicit attention to changes in the thinking of their clients.

VYR included in its treatment activities both behavioral approaches, e.g., contracting, and cognitive approaches, e.g., moral dilemma discussions. The dependent variables also included behaviors, e.g., the court data already discussed, and cognitive data presently to be discussed. While admittedly one cannot isolate specific cause and effect relationships in this approach, it was considered worthwhile to note effects of the treatment program on several cognitive variables which have been widely used in psychological research, as a first step in determining types of cognitive variables which may be of particular relevance or sensitivity in reflecting changes in thinking which result from psychological treatment.

The measurement of cognitive changes resulting from treatment activities' is of potential importance for the promotion of generalization and maintenance of treatment effects. Identification of specific ways in which treatment activities affect the client's thinking may suggest treatment results which are not readily demonstrated via strictly behavioral measures but which could have significant behavioral effects in the long run. For example, when dealing with low frequency behaviors, which includes many criminal offenses, relevant changes in one's thoughts may mediate in the eventual elimination of the problem behaviors. Closer attention to clients thought patterns may thus

help to accomplish behavioral objectives and aid the client. It is highly likely that the well known difficulty of obtaining generalization of therapeutic change from one environment to another is a function of ignoring the most prominent mechanism for generalization of human learning, namely human cognition.

In order to assess possibly significant changes in the client's thinking, reveral cognitive measures were administered before and after the treatment procedures were implemented. None of these measures were included in the original hypotheses about the program, and none were crucial to demonstrating the effectiveness of the program, however, they could provide worthwhile information on cognitive changes in participants which resulted from involvement in the program. Each of the measures and their results in this study are described and discussed in the following sections.

Picture Identification Test. The Picture Identification Test (PIT) is an objectively scored semi-projective test (Chambers, 1972). In the form used for this study, the subject is given a set of four cards, on each of which are six head-and-shoulder year-book-type photographs. For each card, a list of 21 brief personality descriptions is supplied. The personality descriptions represent the Murray needs, e.g., n Ach is represented by a statement such as: "work hard to achieve goals." For each description of a need, the subject is required to select a picture from the designated card that he judges to be the best match for the description. Since there are 21 descriptions of needs to be matched with 6 pictures, the subject is forced to match some pictures with more than one need statement. An association between a particular pair of needs is accumulated each time the subject attributes both needs of the pair to the same person (picture). Thus, it is possible for the subject to associate each of the 210 different pairs of needs from 0 to 6 times in the test.

The number of times the subject associates a pair of needs constitutes his Need Association score for that pair. The test was administered to assess possible changes in the cognitive motivational structure of the subjects. No treatment activities were specifically addressed to producing changes in PIT variables, however, the assumption was that the test was a sufficiently comprehensive measure so that it might constitute a good sample of any general consistent change in the way needs were organized in the subjects' thinking.

The test was administered pre and post treatment for all these groups of subjects. Of 210 t-tests which were conducted on the pre to post P.T. results of the active delinquent experimentals for their Association scores, only four were significant at the .05 level or better. One would expect approximately eleven differences by chance, thus, this small number is unimpressive. The finding appears to be more than a chance difference, however, because all four differences are for associations with the Succorance need. The definition of the Succorance need in the test is "the need to receive help, support, and assistance." After the program the associations for Succorance-Achievement, Succorance-Understanding, Succorance-Deference and Succorance-Counteraction were all stronger than before. That these differences are non random is further supported by the fact that of four additional need pairs which approached significance all were Succorance associations. When the results for the active experimental subjects were compared to those of the other groups, it was found that inactive experimentals produced no need association changes, the delinquent controls produced 1 and the non delinquents produced 13. The 13 changes for the latter showed no patterning around a single need or needs as did that of the active delinquents so the consistency of the active delinquents' change is emphasized by the contrast. A possible post hoc interpretation of the differences for the

active delinquents is that participating in the program changed the subjects' thinking about seeking help. The pattern of change implies that seeking help came to be more associated with self improvement, hard work and accomplishment, understanding, and deferring to persons with more authority or experience. The finding needs further research, but possibly the clients would be more willing to seek help in the future as a result of such a change in their thinking.

Although not predicted, this change appears a meaningful result of their participation in the program in that all of the activities were oriented toward helping the participants avoid future trouble with the law, and in many of the activities the staff were serving as consultants on personal problems.

Only the pre to post changes were of particular concern in the evaluation of the VYR program. Future analysis will also be done examining possible patterns of scores which differentiate delinquents from non-delinquents. Past research has shown the potential value of assessing the need structure of delinquents (Cortes' and Gatti, 1972), and the PIT shows great potential for a more sophisticated and meaningful delineation of cognitive need structure in future research.

The Paragraph Completion Test and the Personal Orientation Inventory produced no information relevant to the evaluation of the effectiveness of VYR and are therefore not included in this report. The data may be included in later more detailed analysis for journal publication, however.

14. Attribution Measures

Attribution theory in social psychology is the study of how people attribute meaning to their own behavior or that of others. Theorists (e.g., Heider, 1958) have described a sequence beginning with determining who or what caused an event, attribution of causality, proceeding next to degree of responsibility for the event, i.e., was it intentional, accidental, etc., which is attribution of responsibility, and finally proceeding to personal dispositions of the actor which might be responsible for the event.

Shaver (1975) has stated that <u>causality</u> refers to the production of effects independent of social judgments about those effects. <u>Responsibility</u> refers to a value judgment in terms of moral accountability for the effects produced.

Heider (1958) first outlined five possible levels of responsibility. At the lowest level of responsibility, association, the person is held accountable for any event associated with him, whether or not he was causally involved. This is the level of some of the judgments of legal responsibility. The second level is causality, and at this level the person is held accountable for any event that he has caused, regardless of whether that causality was intentional, accidental, or even foreseeable. At the third level foreseeability, the actor is held accountable for any effects that he has caused, and that he should have foreseen, even if he is not thought to have intended to produce the effects. This level corresponds to the legal judgment of negligence. The fourth level, intentionality, includes all that has gone before, and adds to that the perceiver's belief that the actor intended to bring about the effects that were actually produced. Attribution of personal responsibility to the actor is highest at this level. The final level, justifiability, adds environmental coercion to the picture. Although the actor may be seen as

intentionally producing the effects, he is thought to be doing so under intense pressure from external forces, so his personal blameworthiness (or praise-worthiness) is reduced from the level of intentionality.

Subsequent research has supported the sequence which Heider hypothesized using a wide variety of subjects including juvenile delinquents and convicted felons (Shaw & Sulzer, 1964; Sulzer, (Note 6) and the attribution of responsibility typically appears to be a rational process which corresponds to the objective influences in the situation. There are exceptions to rational attribution, however, which are included under the general label of defensive attribution.

All of the exceptions to the general rule of rational attribution are characterized by the perceiver's high involvment in his task. Either he is trying to judge his contribution to the task outcome, to evaluate a victim who may be suffering in his place, or to assign responsibility for an accident whose victim or perpetrator he might have been. In each of these cases the attribution poses some threat to the perceiver, to his physical safety, to his self-esteem, or to his potential blameworthiness, and his attribution is a defensive reaction to this real or implied threat. According to a model proposed by Shaver (1970, Note 7) the course that defensive attribution will take will depend on two aspects of the threat's relevance for the perceiver. These are the situational characteristics that indicate the likelihood that the perceiver might find himself in similar circumstances, and the perceiver's personal similarity to the actor (which would suggest that the perceiver might then behave in the same manner). Further, it is under conditions of high levels of threat from situational possibility that defensive attribution of responsibility occurs, and its course will be determined by the degree of personal similarity. With low personal similarity, the perceiver will exaggerate the stimulus person's responsibility, and deny personal similarity to insure that he (the perceiver) would not make the same mistakes. But if both situational

possibility and personal similarity are high, the perceiver will <u>deny</u> the stimulus person's responsibility (that is, will attribute the effect to bad luck) in order to keep from establishing by implication harsh standards against which he might later be judged, himself.

A difficult task facing corrections officials is the problem of changing the attributions of responsibility made by offenders, whether they be adult or juvenile. An offender who views his incarceration or probation as the result either of "getting caught", or of "getting screwed by society", both external attributions, will be extremely difficult to rehabilitate. Only after an offender has accepted full personal responsibility for his troubles with the law, an internal attribution, will he have taken a step toward his eventual successful return to society. This is not to imply that an internal attribution is always veridical (there may be societal causes in some cases), or to suggest that internal attribution will be sufficient to accomplish the goal of rehabilitation. It is just that without internal attribution rehabilitation is unlikely. A recent study of convicted felons and misdemeanants conducted by Gilbert & Shaver(Note 8) indicates just how much attributional change may be required. Less than half of the respondents in this survey made self-attributions of blameworthiness for their own incarceration.

If criminal offenders disagree with society about the attributions for their intake into the criminal justice system, it might be for one of two quite different sorts of reasons. As a first possibility, offenders might see environmental coercion as a principal determinant of all action, with their own circumstances simply being another example of the power of environmental forces. Research with the Perry stories, designed by Sulzer (1971) to measure levels of attribution of responsibility, however, argues against this interpretation. In several studies Sulzer found that the attributional pattern among convicted

felons and juvenile delinquents was essentially the same as the pattern for non-offenders. The second possibility is that offenders show the same defensive attribution regarding their own life circumstances that non-offenders exhibit when the acceptance of personal blameworthiness would be much less consequential.

The present research was designed to test this hypothesis, and to determine the effects on these attributions of participation in a treatment program including both behavioral and cognitive treatment activities. Specifically, it was predicted that juvenile offenders would make defensive attributions about the responsibility of a stimulus person whose situation and personal characteristics were similar to those of the offender. In addition, it was predicted that participation in the behavioral training program would reduce these defensive attributions, although no activities were specifically focused on producing this result.

METHOD

Subjects. Subjects had to complete both pre and post testing in order to be included in the analysis of either of the two tests. Seventy-two subjects were included in the analysis of the Perry Stories with 30 in the delinquent experimental group, 21 in the delinquent control and 21 non-delinquents. Sixty-six subjects were included in the analysis of the Delinquent Typology Story data with 28 in the delinquent experimental group, 19 in the delinquent controls, and 19 non-delinquents.

All delinquent subjects were also assigned to one of the four delinquent typologies developed by Quay and Parsons (1971) which were described earlier.

Procedure. All subjects were administered two attribution measures pre and post, the Perry Stories to assess levels of attribution of responsibility, and four Delinquent Typology Stories designed for this study to assess possible defensive attribution in delinquents due to personal similarity to the protagonist.

The Perry Stories were administered in small groups of up to 10 subjects. Subjects were allowed as much time as they needed to complete the test, and for anyone who appeared to have difficulty reading the items, the test was administered orally.

The Delinquent Typology Stories were administered individually to each subject. Each story was presented orally, and the subject then assigned causality for the act in the story to the stimulus person, others, or bad luck, using 50 poker chips which could be apportioned to these three categories. The same was then done to assign moral responsibility (blame) for the act. Testing for both attribution measures was conducted by three staff members, with each staff member testing subjects from each of the three groups. To minimize experimenter bias, the testers were not informed of the hypotheses of the attribution study.

Pre-testing was conducted over a two to three month period with most delinquents (over three-fourths) and all non-delinquents tested within two months. The remainder of the delinquent subjects entered the program late and were tested as they entered.

After approximately six months average participation in the program post testing was then conducted during a one month period.

Intervening treatment activities included behavioral treatment approaches and moral dilemma discussions all of which are described in Chapter 6.

RESULTS AND DISCUSSION

<u>Levels of Attribution</u>. On the basis of earlier research with criminal offenders (Sulzer, 1971) it was anticipated that both the Delinquent Experimental and Delinquent Control groups would show approximately the same pattern of Level attribution as would the Non-delinquent subjects. Level scores were obtained in the following manner. For each of the 40 Perry vignettes, all subjects were asked to indicate Perry's responsibility on a five-point scale. Then each

subjects's scores for the eight items in each Level were summed (collapsing over outcome quality and intensity). Thus the Level scores could range from a low score of 8 to a high score of 40. The resulting mean scores for each Level were subjected to a two-way analysis of variance (Delinquency Condition by Testing Time) with repeated measures on the Testing Time factor. These analyses revealed no significant effects attributable to Testing Time, so the Level scores shown in Table 6 are collapsed over Testing Time.

Table 6

Mean Level of Attribution of Responsibility Scores

Condition	level l Association	Level 2 Causality	Level 3 Foreseeability	Ievel 4 Intentionality	Level 5 Justifiability
Delinquent Experimental	11.43	20.28	25.45	33.37	25.03
Delinquent Control	11.88	21.59	25.88	31.55	23.91
Nondelinquent Control	9.98	22.43	28.17	36.55	26.14

As the data indicate, all three experimental groups did show the usual increase in attributions to Perry from Level 1 (Association) to Level 4 (Intentionality) with a decrease at Level 5 (Justifiability). Contrary to expectation, however, there were two significant differences between the attributions made by delinquents (Experimental and Control) and the attributions made by the nondelinquent subjects. At Level 3 the two delinquent groups showed significantly lower attributions than did the nondelinquent group, \underline{F} (2,69) = 3.40, \underline{p} <.05. A similar difference was obtained at Level 4 with the delinquent groups again attributing less personal responsibility than the

nondelinquent subjects, F (2,69) = 4.62, p<.05.

These findings suggest that conclusions from earlier research about the attributional patterns of delinquents will need to be qualified. Delinquent subjects do show the same overall pattern of attribution as their nondelinquent peers, but they fail to reach the high levels of personal responsibility attributed by nondelinquents at Levels 3 and 4. Thus, part of the delinquent's inability to accept personal responsibility for actions that he should have foreseen, or that he intended to produce, may be the result of a difference in the processing of foreseeability and intention information, rather than being exclusively, a self-serving distortion.

<u>Defensive Attribution</u>. Defensive attribution predicts that people will be lenient in their judgment of others who are similar to themselves in life circumstances and/or personal characteristics. It was hypothesized that participation in VYR might result in less defensive attribution or greater willingness to accept responsibility for one's actions.

This was tested as follows. Each Delinquent Typology Story presented. a description of a young person fitting one of Quay and Parsons' delinquent typologies and involved in some trouble. For each of the four stories, all subjects were asked to distribute 50 poker chips across three categories, actor, others, and bad luck, first to indicate their impressions of what or who caused the effects, and then to indicate what or who was to blame for those effects. This procedure yields a percentage of causality or responsibility attributed to each of the three categories, for a total of six percentage values (totalling to 200%) for each story. A two-way analysis of variance (Delinquency Condition by Testing Time) with repeated measures on the second factor was performed on each of the six dependent

variables for each story. Since the percentage for causality must total to 100% only two of the three categories are free to vary, and the same is true for blameworthiness, so scores will be reported for no more than two of the categories within either variable.

In the first analysis of the data, results for the three experimental groups were analyzed without separating Active and Inactive program participants. The analysis of results for the Sociopath story produced the only significant results by this method.

For the Sociopath story there were no effects of Condition or of Testing Time on any of the causality measures. There were, however, significant interactions in the predicted direction on two of the blameworthiness measures. The percentages of responsibility (blame) assigned to the actor, and to other persons, for the Sociopath's arrest are shown in Table 7. At the beginning of the behavioral program the Delinquent Experimental subjects attributed less blame to the actor than did the Delinquent Controls or Nondelinquent subjects, but at the end of the training program the Delinquent Experimentals blamed the actor more than did the other two groups, F (2,63)=3.35, p<.05. The percentage of responsibility assigned to other persons for the Sociopath's consequences showed just the reverse pattern. At the beginning of the training program the Delinquent Experimentals attributed more blame to others than did the other two groups of subjects, but by the end of the program, the Delinquent Experimentals attributed less blame to other persons did the Delinquent Controls or the Nondelinquents, F (2,63)=3.43, p<.05.

Table 7

Percentage of Responsibility (Blame) Allocated to the Actor and to Other Persons in the Sociopath Story

	Blame to Actor		Blame to Others		
Condition	***				
	Beginning	End	Beginning	End	
Delinquent Experimental	70.79	84.29	26.57	11.43	
Delinquent Control	86.11	67.37	13.37	26.63	
Nondelinquent Control	85.05	77.68	13.05	21.26	

The Sociopath story data was then reanalyzed with the Active and Inactive participants data examined separately to form a total of four groups. Subgroup 1, the Active delinquents had 20 subjects, and there were 8 Inactive subjects for subgroup 2. Groups 3 and 4 the Delinquent Control and Nondelinquent subjects each had 12 subjects. The analyses of variance for blame to the stimulus person and blame to others produced no significant differences; however, Table 8 shows the mean percentage of blame data for the Active and Inactive participants comparable to Table 7 for the three groups.

Table 8

Percentage of Responsibility (Blame) Allocated
to the Actor and to Other Persons in the Sociopath
Story for Active and Inactive Participants

	Blame to	Actor	Blame to	o Others
Condition			 	
	Beginning	End	Beginning	End
Active Experimentals	69.90	87.50	27.40	8.90
Inactive Experimentals	73.00	76.25	24.50	17.75

If Table 8 is compared to the Delinquent Experimental row in Table 7, it is apparent that the significant interaction for Blame to Actor and Blame to Others was clearly more extreme for the Active group, and the changes in attribution corresponded to the degree of participation in VYR.

Thus, at the beginning of the training program the Delinquent
Experimentals appeared to be making defensive attributions, denying the
responsibility of a similar other, while at the end of the program their
attributions became more objective. Further, the changes in attribution
were greatest for the Active participants. This interpretation is complicated
by the changes toward greater defensive attribution shown by the Delinquent
Controls and Nondelinquent subjects, and by the fact that the Delinquent
Control subjects began the testing time with more rational attributions than

those held by the Delinquent Experimentals, but for now the preliminary results look encouraging: If a behavioral and cognitive training program can, indeed, produce the sort of attributional change suggested here, then the clients are making more personal attributions, the desired effect, and the likelihood of rehabilitation is greatly increased.

15. Internal versus External Control

A cognitive measure that has received much attention in psychological literature is the Internal-External Control Scale (Rotter, 1966), subsequently to be referred to as the I-E Scale. If a reward or reinforcement is believed to be the result, not of one's own efforts, but of outside influences such as luck, fate, powerful others, etc. then one has a belief in external control of this event. If a reward is believed to be contingent on one's own behavior, efforts, or characteristics then one has a belief in the internal control of the event. More important, people may have a generalized expectancy about whether most events in their life are internally or externally controlled. The I-E Scale measures one's generalized belief concerning internal vs. external control of events in one's life, with a general implication that a relatively internal belief should lead one to exert more control over one's life and relate one's own behavior more directly to the consequences received.

The I-E Scale was included as a cognitive measure in the present program because it was hypothesized that one influence on delinquents getting into trouble could be a relatively external belief system as compared to nondelinquents, thus they would be less prone to avoid or change illegal behavior if they saw the consequences as fate, or external. It was further hypothesized that many of the treatment activities in VYR might tend to produce a more internal generalized belief system in the participants. For example, behavioral contracting and modeled problem solving both were partially directed at clarifying the relationship between one's behavior and its consequences and that positive changes in behavior could result in improved consequences.

PROCEDURE

Subjects. For analysis of the I-E Scale data subjects were divided into four subgroups including Active Delinquent Experimentals (40 sessions or more), Inactive Delinquent Experimentals, Non-delinquents, and Delinquent Controls. This resulted in n's of 18, 9, 22, 21 subjects respectively. Again subjects were included in the analysis only if they had completed both pre and post testing.

The I-E Scale was administered prior to and after the treatment activities had been implemented. The test was administered in small groups of approximately five subjects at a time. Subjects who seemed to have any difficulty in understanding the items were administered the test using a taped version of the items to minimize the effect of reading disability. The tester was present for help if needed.

Results and Discussion. A trend analysis of variance was run on the I-E Scale data with pre and post trials constituting one factor and the four subgroups constituting the second factor. Table 8 shows the means, standard deviations, and mean pre to post difference scores for each of the four groups on the two measures. The higher the score the more external the subjects generalized beliefs. Table 9 shows the summary of the analysis of variance.

Table 8

Group Means, Standard Deviations

and Difference Scores for the I-E Scale

Group	n	Pre-test Mean S.I		Mean Difference
1. Delinquent Experimental (Active)	18	12.7 2.4	12 10.2 2.76	-2.5
2. Delinquent Experimental (Inactive)	9	9.7 2.9	2 10.9 2.85	1.2
3. Delinquent Control	22	10.2 2.6	3 11.6 2.92	1.4
4. Non-delinquent Control	21	12.6 3.8	34 10.8 4.08	-1.8

Table 9

Summary of Trend Analysis of Variance of I-E Scale Scores: Groups x Thials

Source of Variance	Sum of Squares	đf	Mean Square	F
A: Groups	36.06	3	12.021	1.068
Error Between	742.77	66	11.254	
B: Trials	5.37	1	5.37	0.600
AxB	93.99	3	31.33	3.499*
Error Within	590.94	66	8.95	

^{*}p<.05

From Table 8 it is apparent that the Active Delinquent Experimentals and the Non-Delinquents were relatively externally oriented at the pretest as compared to the Inactive Experimental and Delinquent Control groups. At pretesting, the mean for the Inactive Delinquent Experimentals (the subgroup operationally defined only after the fact) was significantly lower, that is more internal, than that for the Active Experimentals and the Non-Delinquents (p<.025). This finding is surprising and the first hypothesis concerning the relative scores of delinquents and non-delinquents was not supported. The second hypothesis concerning an expected change toward beliefs of internal control for active participants was supported clearly, however. Noting Table 8 again, the Active Delinquent Experimentals began the study as the most externally oriented group and showed the greatest numerical change of any group, ending the study with the lowest or most internal score of the groups. Thus, despite the fact that the relative scores for groups do not confirm expectations, the active participants in the program clearly became more internal in their general beliefs about control. It might also be noted that the other two delinquent subgroups tended to become more external in their beliefs in the absence of program participation.

Overall the scores tend to be roughly comparable to but somewhat higher than scores for 18 year old males from the Boston area in which the mean score was 10.00 (Crowne and Conn, 1965). That the present scores should be somewhat higher seems reasonable in that the subjects in VYR are younger than 18 and more subject to external controls.

Findings in the I-E Scale data and the Attribution measure offer some convergent support when the Active Delinquent Experimentals' results are

examined for both, in that the active delinquents show an increase in attribution of personal responsibility from pre to post testing on the Delinquent Typology Stories and an increase in their belief of internal control of events on the I-E Scale. Thus, at the end of the VYR program they appeared more willing to accept responsibility for their actions and also saw their behavior as having potentially more influence on the environmental consequences they received.

Section V

16. Conclusions

Accomplishments. Using an experimental design including both matched control groups and pre and post measures on most variables, Volunteer Youth Research was shown to be more effective than standard probation in reducing the number of convictions of participants and to a lesser extent in reducing the number of charges and arrests during the interval when the program was in effect. Participants also showed significantly more therapeutic change on cognitive measures administered pre and post treatment.

Decreased court involvement is a crucial variable in demonstrating the objective value to the community of the treatment approach. The demonstration of changes in cognition, including moral development, attribution of blame, and locus of control provides information on kinds of cognitive changes which possibly mediated the decreased court involvement.

Another general conclusion is that the participants enjoyed the program. This can be inferred from their fairly uniformly positive ratings of their sessions, the fact that many spent spare time at VYR for which they received no pay, and their open disappointment that the program could not be continued. This enjoyment can be attributed to rapport established by the staff members with their counselees, the interest elicited by the tasks themselves, and the totally voluntary nature of participation in the program. The fact that the participants were paid no doubt also enhanced their enjoyment of the program both in that it was profitable and that the pay placed them in a role of performing a needed service for the community.

An additional conclusion, not systematically studied though apparent, is that VYR received very favorable support from the community due to both the abilities and efforts of the staff members and the appeal of the general approach.

Some comment should also be made on staff attitudes and interactions which, although not systematically studied in this research, are necessarily crucial in any accomplishments in a program of this kind. The descriptions offered previously make no mention of staff interaction so that the reader might conclude all interactions were without serious disagreement. This is not the case. There were conflicts and disagreements, as there must be in any prolonged effort involving several individuals. Members sometimes had differing preferences over the way particular activities whould be implemented both in treatment and research. Some of these were resolved by consensus, others were not, but overall there appeared to be a conviction of doing something of worth with the participants and the community which helped to ease many differing preferences encountered; a conviction which is reflected in the staff's cooperation and continued openness to having the results of their effort evaluated objectively.

Delinquent typologies were included in the original design to try to assess whether the activities were differentially effective for different types of delinquents. The small number of subjects per category hindered a clear resolution of this question; however, convergent findings do tentatively suggest that the program was more effective with sociopathic delinquents. The finding is not conclusive and the data do not reveal the basis for this difference, but the voluntary nature of VYR seems a likely influence here. Sociopathic persons typically show considerable rebellion and antagonism to authority. Participation in VYR was voluntary so if a participant attended, he did so by his choice. Participation in the different treatment activities was also voluntary, but participants were not paid for activities they refused. Thus, the structure of VYR minimized authority against which one could rebel.

<u>Problems</u>. One serious problem encountered was the timing of funding for the program. It was originally planned that the program would begin in the summer when the author would have been available for a month devoted to training the staff in the theories and procedures to be used. The program actually began in the fall, and the author was available only one day per week for training and consultation. This resulted in early uncertainty by the staff about the research requirements of the program and in their having to learn procedures through much of the program rather than having a full understanding of what was to be done from the beginning.

A second problem by no means unique to VYR but representative of relatively brief programs involving personal interaction is that such programs are quite dependent on and vulnerable to the staff members who implement them. In particular, one counselor worked for approximately two months and then resigned. This resulted in a temporarily heavier work load for the remaining members, and it left the new replacement employee at a disadvantage in the amount of training received and in understanding of the program prior to beginning work with participants. This problem was compensated for by the remainder of the staff, but other similar programs might consider using contracts with employees much as school systems do currently with teachers.

An additional problem which can readily be avoided by others was the designation of co-coordinators at the beginning of the program. The fact that these two positions were listed as equivalent and their respective prerogatives and responsibilities not specified in detail resulted in some unnecessary conflict until the individuals concerned worked out the respective roles for the two positions. This kind of difficulty can be avoided in similar programs by specificity in job descriptions and line of authority.

Suggestions. Although VYR has been described in detail, little has been said about the integration of this or similar programs into a corrections system. This type of program should be viewed less as a competitor with other approaches than as a complementary approach. In combination with residential programs and more traditional probation it assures that there are several options available to the court for helping the youths dealt with. Those most appropriate for a program such as VYR appear to be youths with a high probability of continued delinquency but not requiring incarceration. For youths judged to be probable one-time offenders, the facilities and efforts of a program like VYR would be excessive. Thus, VYR can be regarded as prevention-oriented in that a prominent goal is to minimize prolonged and more severe court involvement for youths for whom such involvement appears likely.

An additional suggestion for other similar programs is that every effort be made to provide for continuing involvement for participants. If such a program were continuous, then a participant could be exposed to the treatment activities, initiate a job or job training, or continue in school and then be free to return to the center either for unpaid visits or to assist with later participants. It was painful to the staff and to the participants to engage in a program in which we and they invested so much personal effort and then terminate it after one year. Perhaps more important than the pain and frustration is the fact that continued availability of such a facility should help greatly in maintaining any therapeutic benefits which participants experienced.

Finally, other similar programs could well be made available to both sexes and more participants could be included without an increase in staff.

VYR was limited to males because it was a research program and the number of clients involved was minimal for demonstrating its effectiveness. Inclusion

of females would have meant that when the sample was divided for the variable of sex, the sample size would have been too small to analyze. A factor which limited the number treated in VYR was that everything was being learned and tried for the first time and consequently more time was necessary for training, community contacts, and establishing routine procedures than would be necessary had the program been continued. Any similar program would experience similar pressures initially, but continued operation could yield more time available for treatment activities.

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APPENDICES

Appendix A

Classification of Offenses

Offenses were classified according to eight categories, as follows:

1. Status offenses

Incorrigibility, uncontrollability

Runaway, fugitive from home

Truancy, habitual absentee, violation of compulsory school attendance laws

Violation of curfew

Welfare demands adjudication in that occupation, behavior, environment, condition, association, habits or practices are injurious to his or her welfare (as distinguished from a custody case)

2. Public order offerses

Trespassing

Concealment of weapons

Drunkenness, drinking

Disorderly conduct

Obstruction of justice

Resisting arrest

Disturbing the peace

3. Drug Offenses

Glue Sniffing

Possession of marijuana, hashish or any other drugs

Sales of marijuana, hashish or any other drugs

4. Misdemeanor against property

Throwing objects at an auto

Petty larceny, shoplifting of goods valued at under \$100

Tampering

Destruction of public or private property, vandalism

Concealed goods

Disturbing the peace

Cursing and abuse, obscene language

Malicious mischief

Loitering, failure to move on

Vagrancy

Destroying or defacing the flag

Turning in a false alarm

Making obscene telephone calls, misuse of the telephone

Bomb threat

Contempt

Escape from custody, fugitive from SDWI, fugitive from other authorities (not from home)

Driving while drunk, reckless driving, hit and run

Alter identification, using false name

Indecent exposure

Gambling

5. Misdemeanor against persons

Simple assault

Threat of bodily harm

Sex Offenses

Rape, attempted rape, statutory rape, sodomy

7. Felony against property

Burglary, attempted burglary

Grand larceny, auto larceny, shoplifting of goods valued at \$100 or over

Possession of stolen goods, possession of stolen auto

Unauthorized use of auto

Arson

Forgery, bad check

8. Felony against persons

Murder, attempted murder, manslaughter (voluntary or involuntary)

Kidnapping, abduction

Robbery, attempted robbery

Mayhem

Shooting into dwelling or vehicle, unlawful discharge of firearms

Aggravated assault, assault with a deadly weapon, assault with intent to kill, malicious wounding, maim, assault and battery

Project Participants and Matched Controls with Matching Variables

Match Number	Client I. D. Number*	Offenses**	Race	Age	IQ
1	1	711100	C	16	85
	164	740000	C	15	80
2	2	714100	C	13	84
	(134)	410000	C	14	
	261	0	C	14	88
3	3 165 235	810000 810000 0	B B B	17 15 16	 86
4	4	815100	B	16	99
	105	825100	B	17	
	264	0	B	16	95
5	5	410000	B	15	98
	(135)	410000	B	16	
	207	0	B	16	97
6	6 (103) 232	310000 310000	C C	15 16 15	<u>-</u> 96
7	7 101 236	410000 711400 0	C C C	14 15 14	<u></u> 97
8	8	510000	B	14	85
	108	814100	B	14	85–95
	201	0	B	14	105
9	9***	110000	В	14	
10	10	720000	B	15	78
	163	720000	B	16	78
11	11	110000	B	15	—
	138	110000	B	15	—
	208	0	B	15	90
12	31	710000	B	15	83
	133	810000	B	14	—
	(206)	0	B	15	90

Appendix B (continued)

Match Number	Client I. D. Number*	O.ffenses**	Race	Age	IQ
1.13	32	410000	B	13	86
	104	410000	B	14	
	266	0	B	13	87
14	33	710000	C	16	104
	136	712100	C	16	—
	(265)	0	C	16	101
1.5	34 (170) 234	710000 710000 0	C C C	15 15 16	88
16	35	834100	B	15	119
	(109)	510000	B	15	
	238	0	B	15	102
17	36	814121	B	15	100
	202	0	B	14	88
18	37	817100	B	14	103
	102	810000	B	15	
	263	0	B	15	91
19	38	710000	B	15	73
	(137)	410000	B	13	
	203	0	B	13	86
20	39	310000	C	16	99
	168	110000	B	16	71
	(268)	0	C	17	92
21 / 1	40	812100	B	14	62
	166	420000	B	14	
	237	0	B	16	100
22	61	410000	B	14	99
	107	411100	B	15	81
	262	0	B	14	90
23	62	711100	B	16	94
	132	710000	B	17	
	205	0	B	16	93
24	(63)	420000	C	14	<u>–</u>
	231	0	C	14	98

Appendix B (continued)

Match Number	Client I. D. Number*	Offenses**	Race	Age	IQ
25	64 161	210000 210000	B B	15 16	76 87
26	66 167	210000 220000	B B	16 15	80
27	67 106 204	210000 412100 0	B B B	13 14 13	106 101
28	(68) ***	214100	С	14	-
29	69 (162)	817100 422300	C C	17 17	92 104
30	71	210000	В	15	
31	72 (169)	710000 710000	B B	17 17	74 83
32	131 233	410000 0	B B	16 16	 85
33	239	0	C	13	100

^{*}I.D. numbers from 1 to 99 are Delinquent Experimentals.

Numbers from 101 to 199 are Delinquent Controls.

Numbers from 201 to 299 are Non-Delinquents.

I.D. numbers in parentheses indicate only partial testing.

^{**}Numbers under "Offenses" column show severity and number of offenses. The first, third, and fifth digits show type of offense on a scale from 1 to 8 which is described in a separate Appendix. The even columns show the frequency of each type of offense. The most serious offense is listed in the first column on the left followed by the number of convictions. The third column gives the next most serious offense, etc.

^{***}These matches are appropriate for test data comparisons, but not for objective data comparisons.

I. Cop Scene

Introduction: Sometimes we encounter some person in authority like a teacher, counselor, or policeman who we think hasn't considered our rights, and who seems only to want to push us around. Whether or not they really are unfair is not the point. What is important to keep in mind when dealing with people such as these is that the way we talk to them and act in front of them will have a big effect on how they treat us. We will do three scenes today. We want to compare three ways of talking to a policeman. Two of the ways aren't good, and would probably get a guy into trouble. We want you to watch real closely what is going on.

Here's the situation: A boy is walking home from a dance at night, just about curfew time. A policeman in a squad car stops by the boy and wants to talk with him. The boy's name is Ron, and he is on parole. He knows it's probably after curfew time and he is a parolee, and he is scared because he might get into trouble with the policeman. He doesn't know what's going to happen, and this makes him even more scared.

Scene a. A prowl car pulls up to the curb by a boy who is walking along the sidewalk.

Cop: Hey son, come over here a minute. I want to talk to you.

Ron: What do ya' want?

Cop: What are you doing out here?

Ron: I'm walking down the street. What's it look like?

Cop: Okay, okay. Where are you going?

Ron: I'm just going home from a dance. I didn't feel like committing any crimes tonight.

Cop: You've got a pretty smart mouth, son. Just who do you think you're talking to?

Ron: No one...no one at all.

Cop: Well, maybe you'd like to get in the car and come down to Juvenile Hall. We have lots of people you can talk to down there.

Ron: Yeah, I bet. Don't threaten me, man. I haven't done a damn thing. I'm just going home from a dance at Franklin. I'm minding my own business. Don't you have anything better to do than stop somebody that's just walking along the street?

Cop: Listen, son. There's been alot of trouble around this neighborhood tonight. How do I know you're not involved in it?

Ron: Aw, come on. You can't pin that stuff on me. It ain't against the law to walk home at night, is it?

Cop: If you keep smarting off to me, we'll go right down town.

Ron: Okay, okay. Why don't you just cool it then?

Cop: Okay, I've had it with you. (takes out pad and pencil) What's your name?

Ron: What do you want my name for?

Cop: I'm asking the questions. Let me see some I.D.

Appendix C (continued)

Ron: Not until I know what you're after. What are you going to do,

write me a ticket for walking on the sidewalk?

Cop: Get in the car. I'm tired of trying to get a straight answer from you. Now get in!

<u>Discussion points</u>. l. Ron's behavior makes the policeman antagonistic.

Scene b. The second way we'll do next is also likely to get a guy into more trouble. Here, the kid doesn't get mad and wise off, but he beats around the bush so much the policeman gets suspicious, and the kid gets into trouble. The setting is the same as Scene a.

Cop: Come over here a minute. I want to talk to you.

Ron: Who, me? I didn't do anything.

Cop: Come over here.

Ron: (walks over to the car)

Cop: What are you doing out here?

Ron: Nothing-I didn't do anything.

Cop: Where are you going?

Ron: I'm just going home.

Cop: It's pretty late for you to be out, isn't it?

Ron: Well, I'm not doing anything and I didn't think it was late.

Cop: Where have you been?

Ron: To the dance at Franklin. I was just going home.

Cop: Where do you live?

Ron: Just a little ways from here.

Cop: What's your address?

Ron: It's on Jensen Street.

Cop: You're out of your way if you're walking home from Franklin, aren't you?

Ron: Well, I guess so.

Cop: Look, there's been alot of trouble around here tonight. Now, you tell me that you've been to a dance but you're a mile out of your way and you're wandering around just "going home". That doesn't make sense to me. It sounds kinda suspicious.

Ron: Well, I guess I walked a friend home. He lives over on Dunmore.

Cop: You guess?
Ron: Well, I did.

Cop: You should have told me that in the first place. I'm going to take your name and address. May I see your I.D. card?

Ron: What do you want that for? I haven't done anything.
Cop: Then you don't have anything to worry about. Your I.D.

Ron: (hands the policeman his I.D. card)

Cop: I want your friend's name, too.

Ron: Well, I don't know his name. He is just a guy from school.

Cop: Okay, son. Quit stalling me. You say this kid is your friend and you go a mile out of your way to walk him home. Now you say you don't know his name. Maybe you'd like to talk about this at Juvenile Hall?

Ron: Well, his name's Jim, I guess.

Cop: Jim what?

Ron: Well, I dunno-- I guess I've forgotten his last name.

Cop: Okay, if that's the way you want it. Maybe you'll remember a few things downtown at the Youth Center. Get in the car.

Discussion points. 1. You all say that you know how to act with a cop. Sometimes you don't actually do it. Why? What happens when you get scared? 2. Do each of you see what this kid did wrong? Lots of guys don't think that their evasive behavior is easily seen through. They don't really fool anyone. 3. Lots of kids foul themselves up in one of these two ways—with teachers, bosses, and parents as well as policemen. Can you think of other ways?

Scene c. In the next scene, another boy handles the situation another way. The setting is the same—the boy is walking home and a prowl car pulls up to the curb.

Cop: Hey, son, come over here a minute. I want to talk to you.

Ron: (walks over to the car) Yes?

Cop: What are you doing out here?

Ron: I'm walking home from a dance at Franklin High School. Is anything wrong?

Cop: Well, there's been an awful lot of vandalism in this neighborhood and it's pretty late for you to be out, isn't it?

Ron: Yes sir, I guess so. But I'm not doing anything wrong and I'm going right home. I only live a few more blocks away.

Cop: Where?

Ron: On Jensen Street.

Cop: Then you're a little out of the way if you're walking home from Franklin.

Ron: Yes, you're right, but I was walking home with a friend who lives on Dunmore and I'm going to my house now.

Cop: You should have told me that in the first place.
Ron: Yeah, you're right. I just didn't think about it.

Cop: Did you boys stop at all, on the way home from the dance?

Ron: No, we walked right over to his house.

Cop: When did you leave the dance?

Ron: About twelve o'clock.

Cop: Well, I better take your name and address down, just in case. Ron: Well, okay, but I haven't done anything wrong, and I don't want

to get into any trouble.

Cop: I'll have to have your name and address. Don't worry, if you didn't do anything you won't have anything to worry about.

Ron: Okay, my name is Ron Scott and I live at 1010 Jensen Street.
Anything else?

Cop? Yes, who were you with tonight?

Ron: Well, now, I'm not trying to make any trouble but I don't think it's really right for me to get my buddy involved. We really didn't do anything wrong. I can't see any reason to get him mixed up in this.

Cop: I told you you don't have to worry if you didn't do anything. I just need to know, in case we have to check out your story. It

would be alot easier for you if you told me.

Appendix C (continued)

Ron: Well, I don't think it's right for me to have to... Okay, his name

is Dough Graham. You can see that I'm just walking home. You can

check and find out that we were at the dance tonight.

Cop: Don't worry. This is just routine.

Ron: If that's all then I'd better be going.

Cop: Okay, that's all.

<u>Discussion points</u>. l. Notice that the third scene is not as intriguing as the first scene. The right way to act is often less attractive on the surface that the not so correct way of dealing with this kind of a situation.

Appendix D

Charges and Arrests, Convictions, and Time Incarcerated

(in months) for Matched Pairs of Delinquent Subjects

Client I. D.			Number of Charges			er of		Time		
	mbers		and Arrests			ctions		Incarcerated		
DE	DC*	DE	\mathbb{C}		DE	DC	DE	DC		
1	164	2	0		0	0	0	0		
2	134	1	2		1	0	0	0		
3	165	0	1		0	1	0 - 1	0		
4	105	0	0		0	0	0	0		
5	135	2	1		0	1	0	0		
6	103	0	0		0	0	0	0		
7	101	0	1		0 -	1	0	0		
8	108	0	0		0 4	0	0	0		
10	163	5	1		5	1	3.3	0		
11	138	0	0		0	0	0	0		
31	133	1	0		0	0	0	0		
32	104	0	0	. '	0	0	0	0		
33	136	0	1		0	0	0	0		
37	102	3	4		2	3 :	0	5.3		
38	137	0	0		0	0	0	0		
39	168	0	0		0	0	0	0		
40	166	0	1		0	- 1	0	3.3		
61	107	0	2		0	2	0	1.7		
62	132	0	0		0	0	0	0		
64	161	0	0		0 -	0	0	0		
66	167	1	2		0	1	0	4		
67	106	0	0		0	0	0	0		
69	162	0	0		0	0	0, 1	0.		
72	169	0	0		0 .	0	0	0		

^{*}DE represents Delinquent Experimental subjects, and DC represents Delinquent Controls.

Appendix E

Moral Discussion Procedure

- 1. Present a dilemma.
- 2. Children are asked for ways to resolve it.
- 3. Suggestions noted on the blackboard.
- 4. Elaborate the consequences of each solution for the individuals involved. Psychological dimensions. Social dimensions.
- 5. Children are asked to specify the standard or hierarchy of values implicit in each of the decisions.
- 6. E would then try to stimulate controversy by introducing controversial questions and issues. (See appendix, e.g.)
- 7. As children of differing stages argue, E takes an average "one-stage-higher" solution and clarifies and supports the child argument. (See appended questions)
- 8. E elaborates this till everyone seems to understand it.
- 9. E leaves as much of the argument as possible to children. He would summarize, clarify and occasionally present a viewpoint.
- 10. E tries to encourage older children to point out why stages below are incomplete or inadequate.
- 11. If they were inadequate he would help out.
- 12. When they reach a consensus E presents the next higher stage viewpoint. (optional)

Appendix F

DISCUSSION QUESTIONS

Story I. Heinz and the Drug

Life

- 1. Should Heinz steal the drug? Why?
- 2. Which is worse, letting someone die or stealing? Why? Questions to promote Stage 3:
 - (1) What about Heinz' love for his wife?
 - (la) Wouldn't he feel like stealing the drug because he loved his wife so much?
 - (lb) Don't you think he should steal for her if he loves her very much?
 - (2) What about the sense of loss he would feel if his wife died?
 - (2a) Wouldn't he feel a greater sense of loss if his wife died than if he went to jail?
 - (2b) Which do you think he would feel worse about, losing his wife or spending some time in jail?
 - (3) Think about the druggist's money and the woman's life. Is one more important than the other?
 - (3a) Is the druggist's money more important than a woman's life?
 - (4) What about what other people would think of him if he let his wife die?
 - (4a) Even though he kept the law, wouldn't other people think he was a pretty bad person if he let his wife die?
 - (4b) What would you think of him if someone you knew let his wife die like that?
 - (5) What about the amount the druggist was charging?
 - (5a) Wasn't the druggist wrong to charge so much?
 - (6) In this story are there any reasons why you would feel that Heinz should be excused for stealing the drug?
 - (6a) Wouldn't you feel like excusing a person for stealing if it was to save the life of someone they loved?

Story I. Heinz and the Drug (cont'd)

- (7) How do you think the other members of his family would view his behavior?
 - (7a) What would his family think and/or feel about him if he let his wife die?
- 3. Is there a good reason for a husband to steal if he doesn't love his wife?
 - (1) What about just helping a person?
 - (la) Would he feel like helping another person?
 - (1b) Shouldn't he help another person in trouble?
 - (2) What about the fact that they have shared their life together?
- 4. Would it be as right to steal it for a stranger as his wife? Why?
 - (1) 1 above also applicable.
 - (2) What would his family and/or friends think if they knew he had let someone die?
 - (2a) Wouldn't they think it was wrong?
 - (3) If you were a sick stranger, what would you think?....
 - (3a) What would you expect him to do?
 - (3b) Would you want to be saved by him?
- 5. Suppose he was stealing it for a pet he loved dearly. Would it be right to steal for the pet?
 - (1) What about his feelings for the pet?
 - (2) Wouldn't you feel sorry for the animal's suffering?
 - (3) What would be the effects on everybody else?

Appendix G

SESSION DATA SHEET

NAME		I.D. NO	· ·			
COUNSELOR		DATE	YEAR			
TYPE OF SESSIC	N_		· · ·	•		
PUNCTUALITY:						
()	1:=5 min. early 2:=On time 3:=10 min. late (less)			4:10 min. 5:Absent	late	(more)
STAFF RATING (SCALE=1-7, RATE PARTIC	IPANTS)				
1. 2. 3. 4. 5.	Emotional involvement Liking of the session Freedom and ease in se Amount of constructive Candor in session	ession				
- <u> </u>						
STUDENT'S RATI	NG SHEET (SCALE=1 to 7					
1.	How much you liked the	e meeting				
2.	Desire to come to nex	t meeting				
3.	How helpful this meet	ing was for yo	a			

NOTES:

COUNSELOR RATINGS & STANDARDS

1. Emotional involvement:

- 1. Negativism
- 2. Apparent boredom
- 3. Indifferent
- 4. Mild interest
- 5. Intense interest
- 6. Emotionally expressive
- 7. Catharsis

2. Liking of session:

- 1. Disgust
- 2.
- 3.
- 4. Indifference
- 5.
- 6.
- 7. Strong enthusiasm

3. Freedom and ease:

- 1. Obvious unease e.g. (tense, suspicious, quiet, etc.)
- 2.
- 3.
- 4.
- 5. 6.
- 7. Complete ease: trusting, spontaneous

4. Amount of constructive behavior

- 1. Zero
- 2.
- 3.
- 4. Moderate
- 5.
- 6.
- 7. Optimal

5. Candor in session:

- 1. Deceptive
- 2.
- 3.
- 4. Moderate
- 5.
- 6.
- 7. Total

STUDENT'S RATING SHEET

1. How much you liked the meeting:

- 1. Not at all
- 2.
- 3.
- 4.
- 5.6.
- 7. Very much, thoroughly enjoyed it.

2. Desire to return:

- 1. Don't want to
- 2.
- 3.
- 4.
- 5.
- 6.
- 7. Want to very much

3. How helpful this meeting was for you:

- 1. Not at all
- 2.
- 3.
- 4.
- 5.
- 6.
- 7. Very much

END

7 destimen