

THE EFFECTS OF A VOCATIONAL EXPLORATION GROUP
PROGRAM WITH INCARCERATED YOUTHS

By

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The effects of a Vocational Exploration Group (VEG) experience on three dimensions of the career development of incarcerated youths in two State of Florida Youth Service Programs' institutions for delinquents were studied. The design of the study was the Solomon four-group re-search design replicated in each institution. The Vocational Exploration Group (VEG) is a small group, with a carefully defined approach, based on a sequence of tasks leading participants to better understand their personal relationship with the world of work and to take concrete next steps toward achieving their specific job goal.

Completed data on 214 subjects were utilized in multivariate analysis of variance (MANOVA) procedures, followed up by univariate analysis of variance (ANOVA)

procedures and examination of mean scores on posttest and difference scores.

The dependent variables of: Career maturity attitudes (CMI); job personalization--Employability Perceptions Inventory subscore 1, (EPI-1); movement toward job personalization (EPI-2); self-recognition of work potential and aspiration (EPI-3); attitudes of alienation from the world of work (WWAI); frequency of exploratory career behaviors (Next Step) remembered, and; frequency of exploratory career behaviors (Next Step) taken; were investigated for each independent variable measure of: Treatment (experimental/control) group; sex; race; pretest status; and VEG leader.

Examination of the results indicated the following; There was no evidence (at the .10 level) of any VEG leader interaction for any of the obtained data; a significant treatment group and sex interaction indicated through further examination of WWAI posttest and difference score means, significant differences at the .05 level favoring male experimental subjects over male controls and all females. There were no significant pretest score differences on the WWAI; on the CMI, main effects for posttest mean scores favored female and white subjects; on the EPI, higher posttest mean scores for males on EPI-1; no significant differences for EPI-2; greater differences (.05) on EPI-3 for subjects of the second institution, with a significant (.05)

decrease from pre- to posttest; for the 64% of subjects remembering the "Next Step," 77% were from the first and 52% from the second institution; for the 30% of subjects who took the "Next Step," there was a significant (.05) difference favoring non-pretest subjects; additionally, 78% of the experimental subjects indicated a wish to see a counselor immediately after completion of the VEG.

It was concluded that the VEG had some definite positive effects with this hard to reach population and that a short two-and-one-half hour treatment cannot be dismissed as ineffective with incarcerated youths. This study provides a firm basis for further investigation of short-term treatments with incarcerated youths.

CHAPTER I

INTRODUCTION

Crime and fear of being a crime victim are growing concerns of the American public. We constantly hear of the overcrowded conditions in our nation's correctional institutions while at the same time crime rates continue to rise. There seems to be little being accomplished in the effective rehabilitation of incarcerated individuals.

Across the country as many as 300,000 children are living in reform schools and detention homes. Many of these youths will become adults locked behind bars unless more effective ways can be found of diverting them from adult correctional institutions.

Need for the Study

Effective methods of dealing with youths in trouble with the law must be developed and implemented. Efforts must be made to rehabilitate delinquent youth already in correctional institutions. In many such institutions children get little or no treatment and are sometimes abused (James, 1971). New methods need to be developed to help rehabilitate these young people so they can return to society and

live within the law. In order to do so, positive self images must be developed. These youths need to see themselves as capable and worthwhile individuals. Traditional approaches have not demonstrated effectiveness in this area.

Many counseling approaches, as well as vocational training, have been used with this population as a means of helping youth prepare for reentry into society. Little research has been done on the effectiveness of these programs.

A vocational coordinator and at least one assistant are now working in each of Florida's training schools. They have been directed to begin working with their youths using group approaches. Few if any have developed effective group vocational procedures. In addition, most of these personnel have had no formal training in group counseling, and little if any counseling training at all. Even with the necessary training in counseling and group counseling, replicable group career counseling models are scarce in the literature and nonexistent with incarcerated youth.

The Vocational Exploration Group (VEG) is a small group, with a carefully defined approach, based on a sequence of tasks leading participants to better understand their personal relationship with the world of work and to take concrete next steps toward achieving their specific job goals. The group experience is designed to encourage creativity, increase motivation and provide occupational information. Both the group procedure and group leaders' training are standardized.

Some research has been done on the effectiveness of the VEG program. Most of this research has focused on young unemployed adults seeking jobs and on high school students. There has been no research on the effectiveness of the VEG with delinquents, although subjective reactions of delinquent probationers and their probation counselors has been favorable. The State of Florida's Bureau of Education for Training Schools, as well as several training school vocational coordinators, have expressed an interest in the program.

If the VEG can be shown to be effective with this hard-to-reach population, it could be a major breakthrough in career development education for incarcerated youth. Also, since the program is standardized, it could be expanded into a large-scale program with relative ease. It seems important to examine the effectiveness of this program with incarcerated delinquents.

Purpose of the Study

The purpose of this study was to measure the effects of a small group vocational exploration experience on three dimensions of the career development of incarcerated youth. The following questions were investigated.

1. What effect does a small group vocational exploration experience have on incarcerated youths' attitudes toward the world of work?

2. What effect does a small group vocational exploration experience have on incarcerated youth's employability perceptions of themselves and the world of work?

3. What effect does a small group vocational exploration experience have on incarcerated youth's frequency of initiating behaviors oriented towards achieving a specific job goal?

Definition of Terms

Incarcerated youth. Any delinquent youth committed to the state of Florida's Youth Service Programs' Training Schools.

Career development. The lifelong continuous process of establishing identity through the world of work. This process is related to the individual's environment, interests, attitudes, abilities, values, and behavior patterns.

Vocational maturity. An index of an individual's career development relative to others of the same age group.

Employability perceptions. The degree to which one sees himself/herself as employable including awareness of work potential and aspiration.

World of work alienation. The degree to which an individual sees himself/herself as unable or is unwilling to engage in the career development process and establish positive identity through working.

Organization of Remainder of Study

A review of the literature providing a rationale for the study is presented in Chapter II. Chapter III contains the experimental hypotheses, experimental design, treatment procedures, and discussion of criterion instruments. The results of the study are reported in Chapter IV. Chapter V includes a summary and discussion of the results, limitations of the study, and recommendations.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

The review of related literature providing a rationale for the study will focus on the following areas: 1) incarcerated youth, 2) group treatment with incarcerated youth, 3) alienation, 4) vocational maturity as a measure of career development, 5) facilitation of career development, and 6) Vocational Exploration Group.

Incarcerated Youth

Juveniles are incarcerated for a variety of reasons. They may have been involved in offenses for which adults are also liable for prosecution such as for felonies and misdemeanors. A juvenile may be adjudicated delinquent and subsequently committed to a facility as the result of committing a juvenile or "status" offense--an act prohibited by, and often applicable only to juveniles, e.g., truancy, curfew violation, or the consumption of alcoholic beverages. The court can also commit because parents have asked for help in controlling the child. The traditional goal of the juvenile justice system has been the care and reformation of the young offender rather than punishment.

Training Schools for Delinquent Youth

The training school was the first widely accepted institutional setting for juvenile corrections. The physical configuration is often restricting and affords little contact with the community. It is the most secure form of incarceration for juveniles and tends to receive youngsters who present more serious discipline problems and are difficult to control.

The first public youth correctional institution in the U.S. was the "House of Refuge for Delinquents." It was opened in 1825 under the management of a private society, and later became public. Other states followed the lead of New York and by 1866, 12 states had built juvenile reformatories while another 9 states had erected facilities called "houses of refuge" (Carter, McGee, & Nelson, 1975).

By 1972 each of the 50 states, the federal government, the District of Columbia, the Commonwealth of Puerto Rico, and the Virgin Islands all had institutions housing juvenile delinquents. A census of these juvenile detention and correctional facilities has been taken by the U.S. Department of Justice, Law Enforcement Assistance Administration, National Criminal Justice Information and Statistics Service (1974). The report is based on a survey of 722 facilities to a questionnaire. As of June 30, 1971, 57,239 youths were in the custody of the correctional institutions. Of

the facilities surveyed, 192 were training schools with a total population of 35,931 youths; 27,839 were male and 8,092 were female.

Florida's state training school population was 1,254 youths (see Appendix F). This figure is comparable with other large states. For example, New York's state training schools held 1,687 youths, Illinois held 1,182, Michigan held 783, and Texas held 2,366. In the continental U.S., Vermont's state training schools had the lowest population with 98 youths held, while California had the greatest state training school population of 3,784 youths.

Only 35 of the 192 training schools were coeducational with 106 holding only males and 51 holding only females. These training schools have varying capacities ranging from as few as 20 and as high as 500. Some 60% of the institutions in the census had designed capacities of 150 or more. The average length of stay for youngsters committed to these correctional facilities is eight and seven-tenths months.

Most juvenile training schools in the country fall far short of providing any really viable educational programs for their wards. Vocational and trade training always have been emphasized in correctional training schools from their very beginning. The recent trend is to emphasize skills in reading and understanding written directions as well as computation and measurement skills common to most trades. In order to maximize the effectiveness of vocational

training, related counseling is provided with the goal of motivation toward pursuit of an occupation best suited to individual interests and skills (Carter, McGee, & Nelson, 1975).

Vocational programs are exploratory and prevocational. They are designed to provide information, interest, and only introductory training while a responsible attitude toward work is developed (U.S. Department of Health, Education, and Welfare, Children's Bureau, 1957).

The Offenders

Of the 621 facilities holding adjudicated delinquents, category of offense data were available for two-thirds of the population (U.S. Department of Justice, 1974). Seventy percent of the females and 23% of the males were being held for offenses for which only juveniles can be charged (i.e., truancy and curfew violation). One-third of the youth for whom offense data were reported were in custody as a result of having committed "status" offenses. One-half of the male adjudicated delinquents were guilty of felonies while only 8% of the female delinquents were confined for these offenses (U.S. Department of Justice, 1974). The least common violations were drug offenses with only 6% of both the male and female populations being held on this account. The unavailability of much of this offense data might be due in part to the practice of judges of committing

children under the descriptive label of "child in need of supervision" (CINS), rather than a specific offense.

Future Trends

Carter, McGee, & Nelson (1975) make the following predictions related to incarceration of delinquents: 1) Serious juvenile delinquency will continue to rise, at least until 1980; 2) the rise in delinquency will be especially prevalent among girls; 3) Confinement of delinquent youth to large training schools will decline sharply; 4) Alternatives to incarceration such as community-based treatment programs will expand; 5) Residential treatment facilities will become a back-up resource for community programs but primarily reserved for the severely maladjusted and dangerous individuals; 5) The use of volunteers will increase during the next decade; 6) Efforts to totally reorganize the juvenile justice system throughout the country will continue; 7) The costs of juvenile correctional services will increase; and 8) Increasing responsibility for financing and operation of juvenile delinquency programs will be assumed by the states, while their actual operation will become more centered in the populous communities.

Group Treatment with Incarcerated Youth

Methods of Group Treatment

Group treatment methods vary considerably from one youth correctional institution to another. In an effort to better understand and simplify the many group approaches in the literature, Sarri and Vinter (1965) identify two principal methods of group treatment: direct and indirect. Direct methods include group education, group counseling, and several types of group therapy. Indirect methods, also called milieu methods, include institutional management and other forms of environmental manipulation.

Of the direct methods group counseling is the method most frequently referred to in the literature as group treatment. Nonprofessional staff usually conduct the groups with 5 to 15 youths. "Group therapy" includes group psychotherapy, social group work and "guided group interaction." While the goals of group counseling and group therapy overlap, the main difference is the training level of the leader. Group therapy leaders are usually professionally trained and include psychiatrists, psychologists, and social workers. Group psychotherapy is most frequently directed toward personality change, while social group work and guided group interaction are directed toward attitudinal and behavioral change (Sarri & Vinter, 1965).

Numerous authors addressing themselves to the treatment of institutionalized delinquents make no mention of vocational counseling or career guidance in groups (Carter, McGee, & Nelson, 1975; Cavan, 1969; Downes, 1966; Garbedian & Gibbons, 1970; Gilman & Gorlich, 1968; Konopka, 1954; Platt, 1969; Polsky & Claster, 1968; Sanders, 1976; Sarri & Vinter, 1965; Street, Vinter, & Perrow, 1966; Teeters & Reinemann, 1950; U.S. Dept. of H.E.W., 1957; Wheeler, 1968; and Wheeler & Cottrell, 1966).

Reality Group Therapy

Reality therapy as a group treatment approach is employed in all of Florida's training schools for delinquent youth (Blanton, 1971). Peer influence is identified as the primary vehicle for change and accomplishment of treatment program objectives.

The following principles of reality therapy have been specified as an integral part of youths helping each other to become more responsible:

1. Be involved - The helping person must be dedicated to helping another person, by being warm and friendly.
2. Ask what not why - The helping person always asks what and not why. The use of why implies blame and the helping person is more concerned with changing behavior than placing blame.
3. Judge behavior - One must learn to identify and evaluate behavior and make a value judgment.

4. Make a plan - The helping person must assist in formulating a plan to resolve problems. This should be a concrete plan with acceptable alternatives.
5. Make a commitment - The helping person encourages commitments from the person needing to change. A behavioral change is more likely to occur if the person has made the commitment to change. The helping person encourages reasonable commitments.
6. No excuses - The helping person will not accept any excuses for a broken plan and/or commitment. If a commitment is not kept, a new plan should be developed.
7. Help - not hurt - There is no room for hurt. Although no excuses will be accepted - normal and natural consequences will occur.
8. Don't give up - The helping person never gives up, and he never pushes too hard. (Blanton, 1971, pp. 105)

All institutional programs including academic, vocational, cottage life, recreation, and food service revolve around the group meeting. The group leader is provided with daily feedback on all institutional activities so that each youth's behavior is subject to daily review by the small group. The group meeting lasts for one hour and takes place five days a week. The 9 or 10 youths in each group live, attend school, work, and eat together. The format of the reality therapy group meeting is provided in Appendix E. The approach is essentially the same as that of guided group interaction.

Guided Group Interaction

Several authors (Bixby & McCorkle, 1951; McCorkle, Elias, & Bixby, 1958, Richardson & Meyer, 1972; and Scott, 1970) have described techniques employed in guided group interaction programs with incarcerated youths. The emphasis of the process is on the peer group as the catalyst for change while utilizing high levels of interaction (Blanton, 1971; Glasser, 1965; and Richardson & Meyer, 1972). The techniques include "reversal," "hot seat silent treatment," "harassment," "work projects," "isolation," "isolation-confrontation," "supportive confrontation," "restriction," "strict assignment," "group assignment switch," "nonreward," "field trips," and "restraint-release."

Group Treatment Goals and Objectives

Sarri and Vinter (1965) describe the objectives of group counseling with incarcerated youth as 1) providing information, 2) assisting clients in the perception and acceptance of social reality, 3) encouraging fuller expression of feelings and attitudes, 4) providing positive group experiences and meaningful interpersonal relations with peers and adults, and 5) enhancing the self-esteem of the clients.

Gilman and Gorlich (1968) identify the following goals for delinquents in group counseling: 1) to release tension, 2) to provide opportunities for testing new ideas, 3) to

reduce stigma, 4) to develop inner controls and understanding of the world, 5) to find different methods of resolving problems, and 6) to gain new perceptions and competence.

The U.S. Department of Health, Education and Welfare's (1957) Guides and Goals for Institutions Serving Delinquent Children suggests the use of group treatment as a means of furthering the individual's understanding of problems and increasing motivation toward self-improvement. Confidentiality is also stressed as an essential ingredient of successful group treatment.

Empey and Rabow (1961) describe the goals of guided group interaction as 1) to juxtapose clearly for clients socially approved and delinquent alternatives, 2) to induce them to question the utility of delinquent alternatives, and 3) to guide them toward identification with socially approved values and norms.

Blanton (1971) identifies the goals of reality group therapy as employed in the state of Florida's training schools: 1) identification of individual problems, 2) work on solving problems, 3) overcoming sitting on problems, 4) youth helping each other to go home, and 5) preparation for making it at home.

Konopka (1954) outlines the following principles of group treatment with incarcerated delinquents: 1) voluntary participation, 2) intelligent grouping of members, 3) informal discussion, 4) focus on feelings, 5) establishment

of relations, 6) avoidance of quiz sessions, 7) participation of the group leader, 8) use of a variety of techniques, 9) constructive use of limitations, 10) relating reality situations to feelings, and 11) extensive recording.

Difficulties in Group Treatment of Incarcerated Youth

A criticism of the use of group counseling methods with incarcerated delinquents is the tendency to seek unrealistic changes. Sarri and Vinter (1965) criticize group counseling in many institutions as seeking changes in the attitudes or behavior of the client which have little connection with, or only tangential relevance to, immediate living situations as well as behavior in the community. They also criticize group psychotherapeutic methods as ineffective with lower-class delinquents, because these procedures require considerable verbal ability, internalized conflict, and high potential for development of insight about one's attitudes and behavior. Another concern is with group treatment provided by nonprofessional staff without adequate supervision.

Konopka (1954) describes several disadvantages of working with incarcerated delinquents in groups. The wide variety of characteristics and behavior difficulties of individual delinquents may be difficult to treat effectively in a group situation. Also discussed is the difficulty in providing adequate individual attention to group members.

Gilman and Gorlich (1968) identify the following disadvantages of group treatment with delinquents: 1) the content of group sessions may be shallow and superficial, 2) youngsters who know each other may not be honest in the group, 3) confidentiality cannot be adequately safeguarded, and 4) there may be rivalry among the youths for attention.

Advantages of Group Treatment with Incarcerated Youth

There are advantages of using groups in the treatment of incarcerated youths. Most of the earlier mentioned goals and objectives of group treatment can also be considered as advantages.

Additional benefits from using groups in the treatment of delinquents are discussed by Sarri and Vinter (1965). Discussed is the relative economy of group treatment as compared with individual treatment. The powerful potential of the peer group as an effective means of creating change is another advantage mentioned in their discussion as well as by numerous earlier cited authors.

Gilman and Gorlich (1968) identify the following advantages of group counseling as compared with individual treatment with delinquent youth: 1) youths may feel freer to talk in the group than in individual counseling sessions, 2) peer respect is more important than adult respect, 3) in the group, youths not only learn from others, they contribute, 4) some youths accept correction from

peers easier than from adults, 5) differing opinions by group members can be tolerated and understood whereas in individual counseling, the adult's beliefs can inhibit expression of opinions and values.

Group Treatment Research with Incarcerated Youth

Research on the effects of group treatment with incarcerated delinquents suffers from many of the shortcomings of group counseling research in general (Gazda, 1970). Lack of treatment replicability, small samples, inadequate control groups, and use of subjective criteria for evaluation are common problems (Sarri & Vinter, 1965). However, some studies have shown signs of the efficacy of group treatment with this population.

Redferring (1970) studied the effects of group counseling on the connotative meanings of concepts held by girls in a state training school. Subjects were selected on the basis of counselor recommendation, reading ability and parole possibility. The 48 subjects were randomly placed in either a control or experimental group. The experimental group was further divided into four subgroups of six members each. Experimental subjects participated in weekly group counseling sessions lasting approximately two hours. The control group experienced the same institutional treatment with the exception of the group counseling. The counseling

groups were led by a female staff psychologist and a male psychology intern. A semantic differential technique comprised of 12 sets of bipolar-evaluative adjectives was used to measure the connotative meanings of "father," "mother," "myself," and "peers." It was hypothesized that the meanings of these terms would be more positive for the experimental subjects after participation in group counseling as compared with the control subjects. Group means for experimental and control groups were obtained for each of the four concepts on the pre- and posttest administrations. Significant differences between the groups were obtained at the .05 level through a two-tailed t-test.

In a study of the durability of the effects of group counseling with institutionalized delinquent females, Redferring (1973) conducted a one-year follow-up. An experimental group of 18 subjects was compared with a control group of 18 subjects again using the same semantic differential technique. It was sought to determine if the initial positive effects of group counseling on the perceptions of "father," "mother," "myself," and "peers" were still present in the experimental group. In addition, a post-institutional adjustment questionnaire was administered. Data were also collected on the number of girls on probation and parole, attending school, holding jobs, and returned to the institution. A two-tailed t-test was used in determining whether significant differences existed

between experimental and control groups on the semantic differential. With the exception of the concept of "peers," reported results show significant differences favoring the experimental group. Reported chi square analysis of the post-institutional status questionnaire indicates a significantly greater number of experimental subjects released from the institution with less recommitments. According to the author, the results should be interpreted with caution due to small sample size.

Dill (1970) compared single-therapist and multiple-therapist group counseling with incarcerated female delinquents. Subjects were chosen for the study on the basis of 1) suitability for group counseling, 2) age, 3) reading level, and 4) proximity to parole. A single-therapist group, a multiple-therapist group, and a no-treatment control group each received 19 subjects through a random assignment procedure. The 11 weekly group counseling sessions lasted approximately two hours. A three-way analysis of variance was used to determine if significant differences existed between the three groups on the Tennessee Self Concept Scale and the Fundamental Interpersonal Relations Orientation. All subjects were pre- and posttested. Only one variable showed significant changes from pre- to posttesting. The moral-ethical self variable in comparison between the control group and the single-therapist group changed significantly at the .05 level. Although not significant at

the .05 level, analysis of self-concept mean differences showed decreases for the control group while the two treatment groups showed increases.

Williams (1971) compared institutionalized delinquent females receiving group counseling with a placebo group and a control group. The 107 subjects were randomly selected. The experimental group received group counseling for one hour each week over a period of 10 weeks. The placebo group viewed films one hour each week for 10 weeks. The control group received no treatment other than regular institutional activities. All subjects were pre- and posttested on the Intermediate Form of the California Test of Personality. Other criteria used to determine if changes occurred included number of discipline reports and academic grades. An analysis of variance was performed in determining if significant differences existed between the means on the established criteria. All reported results were not significant at the .05 level. The author concluded that group counseling in the experiment was no more effective than viewing films or no treatment at all. Recommendations based on the findings included the use of more sensitive and appropriate measures to assess personality and behavior change as well as increasing the frequency of counseling sessions to more than once a week.

Sarason and Ganger (1973) investigated the relative effectiveness of two group methods of communicating

information described as relevant to the social, vocational, and educational adjustment of institutionalized male delinquents. The study utilized 192 male first offenders whose mean age was 16 years and 7 months old. There were 64 subjects in each of the modeling, discussion, and control groups. Subject assignment to groups is described as essentially random with occasional changes in order to accommodate new admissions. The modeling treatment, derived from social learning theory, involved imitating roles which subjects had observed models perform. Each of 16 one-hour sessions had a particular theme, such as how to apply for a job, how to resist peer temptation, and how to deal with a variety of problems. The discussion treatment groups focused on the same topics as the modeling treatment groups, except that all references to role playing were omitted. Both treatments lasted four weeks. The control group received regular institutional treatment only.

The measures used to assess changes included Sarason's Test Anxiety Scale (TAS), the Pd scale of the Minnesota Multiphasic Personality Inventory (MMPI), the Gough Impulsivity Scale, Navran's Dependency Scale, Wahler's Self-Description Inventory, the Word Rating Scale, Lyken's Activity Preference Questionnaire, and Rotter's Internalization-Externalization (I-E). The interval between pre- and post-testing was approximately five weeks. In addition, counselor ratings of subject behavior and recidivism data were used as outcome measures.

Comparisons of changes among the three groups revealed two significant differences. Modeling subjects showed a reduction in emotional reactivity on the Activity Preference Questionnaire that was significantly greater (at the .05 level) than for the other subject groups. Both discussion and modeling subjects showed a significantly greater shift (at the .05 level) toward internalization on the I-E scale than did controls. Differences between the modeling and discussion groups, however, were not significant. Between- and within-group comparisons of positive and negative behavior changes were performed by chi square tests. The proportion of subjects who continued to show positive change did not differ significantly among the three groups. However, a significantly greater number of control subjects changed negatively than did either modeling ($p < .01$) or discussion ($p < .07$) subjects. Significantly greater numbers of subjects within both the modeling ($p < .01$) and discussion conditions ($p < .05$) showed positive as opposed to negative behavior changes. This was not the case for the control group. A three-year follow-up to determine recidivism rate difference for the groups revealed that significantly fewer modeling ($p < .06$) and discussion ($p < .009$) subjects became recidivists than did controls. A chi-square test was used for this analysis.

Sowles and Gill (1970) investigated the institutional and community adjustment of incarcerated delinquents

following individual and group counseling. The subjects were 45 boys and 15 girls ranging in age from 13 to 17 years old. The boys were randomly assigned to either individual, group, or no counseling, under the direction of male social workers. The girls were assigned to a female social worker for either individual, group, or no counseling. The treatment subjects were seen twice weekly until all received a total of 40 hours of either group or individual counseling of an unspecified type. Each of the four social workers were randomly assigned 15 subjects. These subjects were then randomly placed into one of three groups administered by their worker as follows: five were counseled together as a group for two hours a week; five were counseled individually for two hours a week; and five were interviewed for approximately 15 minutes only when they requested.

Outcome measures included the California F Scale, Ethnocentrism Scale (E Scale), Eysenck's Intolerance of Ambiguity Scale (IAS), Taylor Manifest Anxiety Scale (MA scale) and the California Test of Personality (CTP). The measures were administered before and after the treatment. Institutional adjustment was measured by records of total escapes from the institution (AWOL), disciplinary reports, and total months until release from the institution. Community adjustment was measured 10 years following parole by recording, from each individual's record, the number of parole violators, their total parole violations, length

of time to the first parole violation, and recommitment to any correctional or rehabilitative institution. Significant differences at the .05 level were found between group counseled boys and controls on the mean scores of the CTP. No significant differences were found between groups for the girls on any of the attitude measures. Institutional adjustment and community adjustment as measured by the aforementioned indices showed no significant differences between any of the groups for boys or girls.

Persons (1966) studied psychological and behavioral change in incarcerated delinquent boys following individual and group psychotherapy. Forty-one pairs of boys were matched on age, intelligence, race, socioeconomic background, numbers and types of offenses, institutional adjustment, and total time spent institutionalized. One member of each pair was randomly assigned to either the therapy or the control group. Each of the 41 therapy group participants received one and one-half hours of group therapy twice a week, and one hour a week of individual psychotherapy. Throughout the 20-week treatment period, the control group participated in the regular institutional program but received no therapy. Two psychologists and three social workers conducted the individual and group sessions. In every case, a boy had the same individual and group therapist. The therapy is described as centering on relationships and how to live less self-defeating lives.

Interpretation, role playing and various reinforcement techniques were also used.

The instruments administered to assess outcome included the Taylor Manifest Anxiety Scale (MAS), the Delinquency Scale (DS), and the Minnesota Multiphasic Personality Inventory (MMPI). The therapy group's post-therapy scores were significantly lower than their pre-therapy scores on the MMPI, DS, and the MAS. The therapy group also showed a significantly greater decrease on these same tests when compared with the control group. The differences between the groups and the pre- and post-differences were significant well beyond the .001 level of confidence as computed in a Lindquist Type 1 mixed analysis of variance. The therapy group also received their privilege passes significantly sooner than did the control group ($p < .01$). The therapy group received fewer disciplinary reports than did the controls with differences significant at the .01 level for the 20-week period. During the school grading period coinciding with the treatment, significantly more therapy participants made the institution's honor roll than did the boys in the control group ($p < .02$).

Persons (1967) conducted a one-year follow-up investigation in order to assess the community adjustment of participants in his earlier study of institutionalized delinquents receiving psychotherapy (Persons, 1966). The therapy group committed significantly ($p < .10$) fewer

offenses, broke parole less ($p < .001$), and had a significantly greater number ($p < .01$) of boys employed for a longer period of time ($p < .05$).

Eckstein (1973) investigated self-concept differences with groups of incarcerated and nonincarcerated delinquent boys receiving group counseling. Two experimental groups received eight weeks of group counseling once a week for three hours. They were compared with two no-treatment control groups on a pre-posttest of the Tennessee Self Concept Scale (TSCS). The counseling treatment was not described. Sixteen incarcerated teenagers at a youth services' school for boys were randomly divided into either experimental or control groups. Fourteen probationers were also randomly divided into experimental and control groups. Reported differences between the groups on the TSCS were not significant. Reported trends did, however, favor the incarcerated experimental group.

The methods of group treatment in the cited studies vary. The outcomes of this research have provided mixed results even where the treatment was reasonably similar. The group procedures were often too briefly described to be replicable in other institutions. This problem also exists in the research with vocational group counseling and group counseling research in general (Anderson, 1969; Cross, 1975). There is a need for multivariate projects with multiple outcome criteria and specified differential treatments (Cross, 1975).

Alienation

Definitions of Alienation

An alienated person may be described as "one who has been estranged from, made unfriendly toward, his society and the culture it carries" (Nettler, 1957). Alienated persons are further described as politically disenchanting, frustrated, and having the feeling of living a meaningless life. The estrangement of the alienated individual may lead to criminal behavior (Nettler, 1957).

Feelings attributed to alienated individuals include powerlessness, meaninglessness, social and self-isolation (Clark, 1959). Alienation may be defined as "the degree to which man feels powerless to achieve the role he has determined to be rightfully his in specific situations" (Clark, 1959).

Five meanings of alienation are described by Seeman (1959) and are based on values, behavior, and expectations. They are 1) powerlessness--characterized by the individual's expectation that his behavior cannot bring about desired rewards, 2) meaninglessness--characterized by a low expectancy that satisfactory predictions about future outcomes of behavior can be made because minimal standards for clarity in decision-making are not met, 3) normlessness--a high expectancy that socially unapproved behaviors are required to achieve given goals, 4) isolation--characterized

by assignment of low reward value to goals or beliefs that are typically highly valued in the society, and 5) self-estrangement--characterized by the transformation of an intrinsically meaningful activity to one dependent upon anticipated future reward.

Two types of alienation described by Jackson (1973, 1974) are social alienation and self-alienation. Social alienation is characterized by negative assessment or rejection of roles and societal structures they represent. Self-alienation which is subjective is characterized by dissatisfaction with one's social evaluation in terms of self-identity and values.

Alienation is considered by Dean (1961) as having three major components: 1) powerlessness--as first suggested by Hegel and Marx which reflects the worker's feelings of helplessness and being used for purposes other than his own, 2) normlessness--involving the necessity to engage in socially unapproved behavior to achieve goals, and 3) social isolation--characterized by separation or isolation from group standards.

Work Alienation

The concepts of social alienation and work alienation may be brought together. Willensky (1964) for example combines the two. Social alienation is described as the feeling of incongruence between prized self-image and role

obligations. Work alienation can be similarly defined as the poor fit of work role with prized self-image. Sources of work alienation can be broken into four categories: 1) work role--this includes actual tasks as well as social relations in the work setting, 2) workplace and organizational structure, 3) occupational groups and associations crosscutting work milieux and workplaces, and 4) the type of career job pattern instituted by workplaces and occupational groups (Willensky, 1964).

Three predictors of work alienation identified by Willensky (1964) are 1) low freedom, high pressure work situation and organizational structure, 2) blocked and chaotic career, and 3) life-cycle squeeze (i.e., large number of children with low amount of savings).

Measurement of Alienation

A 17-item scale designed to measure alienation as estrangement from society has been developed by Nettler (1957). Nettler's alienation scale is designed to measure degree of estrangement from popular and favorable attitudes toward concepts such as family, mass media, current events, education, religion, and belief in the electoral process.

Clark (1959) suggests that measures of alienation should be a measure of the discrepancy between the power individuals believe they have, and what they believe they should have.

The DJ Social-Self-Alienation scale was developed by Jackson (1973). The six subscales are intended to measure acceptance of conditions of aloneness, powerlessness, meaninglessness, valuelessness, hopelessness, and self-abasement. A decrease in self-alienation as measured by the DJ Scale of Alienation for older adolescent males with vocational commitment was reported by Jackson (1974). This decrease in self-alienation with vocational commitment did not occur, however, with female subjects. The study, which controlled for age, sex, and vocational commitment utilized 290 adolescents (age 17-19 and 20-22).

The three components of alienation described by Dean (1961) showed a low but significantly negative correlation with occupational prestige, education, income, and rural background. Scales were constructed to measure inter-correlation. The correlation coefficients were significant at the .05 level of confidence for occupational prestige and education, and significant at the .01 level for income and rural background. The author strongly asserts the necessity of more research before the alienation concept can be empirically validated.

Measurement of alienation can be made through two types of observations according to Daane (1972). They are 1) social distance and 2) believability. Social distance is intended to be a measure of perceptual intimacy and feelings of comfort and safety with others during social

interaction. Believability is intended to be a measure of positive attitudes reflecting social trust toward others and the world of work (Daane, 1972).

Social distance scores are obtained through assessment of degree of distance between self and five items thought to symbolize the world of work. A test-retest reliability study with mean differences between teachers and Manpower trainees of 56 subjects were conducted. Results yielded a reliability coefficient $r=.92$ which is significant at the .05 level (Daane, 1972).

No method of obtaining scores for the five believability items is described by the author (Daane, 1972). A test-retest reliability study with mean differences between teachers and Manpower trainees was conducted with 56 subjects. Results yielded a reliability coefficient (r) of .77 which is significant at the .25 level (Daane, 1972).

Alienation and Delinquents

Fifteen percent of the total youth population is alienated according to Havighurst (1964). Delinquent youth are included in this category that are described as maladjusted to society. These youths do not accept the norms of society and many of them are hostile to the society. Special help is needed by these youths if they are to make a successful adjustment to the world of work. Their numbers could be reduced through help in examination of requisite

abilities and attitudes leading to entrance into ego-involving jobs (Havighurst, 1964).

A common source of alienation with delinquent youth described by Downes (1966) is the failure to achieve success in goals by socially accepted means. This leads to the attribution of blame to the social system rather than to the youth themselves and hence alienation.

Alienated delinquents believe work is only important as a source of income. They look elsewhere for feelings of achievement and satisfaction. Their dissatisfaction and alienation is related to the gap between aspiration and achievement (Downes, 1966).

World of Work Alienation

This concept developed by the author is defined as an individual's degree of unwillingness or perceptions of inability to engage in the career development process and establish positive identity through working.

The World of Work Alienation Inventory (WWAI, Appendix C) was developed by this author with the intention of measuring this concept through its hypothesized four dimensions: 1) "Assertiveness--Complacency" relative to working, 2) value attributed to working, "Value--Devalue," 3) perceptions of fairness of the world of work, "Fair--Unfair," and 4) pleasant or unpleasant feelings toward the world of work, "Positive affect--Negative affect." More

information on the instrument is provided in Chapter III.

Vocational Maturity

Vocational Maturity Definitions

Vocational maturity may be considered the level an individual has reached in the life-long career development process (Super, 1957; 1960). This process becomes more complex and specific with age and proceeds through the five life stages of 1) growth, 2) exploration, 3) establishment, 4) maintenance, and 5) decline.

The five tasks of crystallization, specification, implementation, stabilization, and consolidation are successfully dealt with as the individual matures to the next stage (Super, 1971).

In addition to long-term goal satisfaction, attitudes and age are important aspects of vocational maturity (Super, 1960; 1971). One conceptualization of the individual's vocational maturity is based on a comparison of actual coping behaviors with expected behavior in terms of age. Another definition considers the relative maturity of the individual's task behavior according to stage and regardless of age (Super, 1960).

Other authors (Ginzberg, et al., Havighurst, 1974) have described stages or tasks through which individuals proceed

as they become more vocationally mature. In addition there are numerous other authors providing definitions of vocational maturity that are quite varied (Bartlett, 1971; Crites, 1961; and Westbrook & Cunningham, 1970).

Crites (1961), for example, criticizes the many different definitions of vocational maturity on the grounds that an individual may be considered mature according to one definition and immature according to another. His definition is a combination of others (i.e., Ginzberg, et al., 1951 Havighurst, 1964; and Super, 1960) resulting in a measure of both degree and rate of vocational maturity. Degree is determined through measures which differentiate by age various vocational behaviors and tasks. The measure of rate of vocational maturity is determined through comparison of an individual's degree with peer norms.

Vocational Maturity Measurement

Numerous researchers have developed indices to measure the vocational maturity of the individual (Crites, 1973; Dilley, 1965; Gribbons & Lohnes, 1968; Hollender, 1971; Mathewson & Orton, 1963; Smith & Herr, 1971; Super, 1960; and Vriend, 1969).

Vriend (1969) studied high school seniors and developed the Vocational-Educational Survey for High School Seniors (V-ES). Eight areas were identified that differentiated the students according to vocational maturity. These

included knowledge of self and occupations, actual movement toward continuing education or work, participation in school and extracurricular activities, amount of actual work experience, level and attitudes toward vocational aspiration, level of self-confidence, and school grades. Super (1960) in his Career Development Inventory specified five dimensions comprising vocational maturity: orientation to vocational choice, information and planning related to chosen occupation, vocational preference consistency, trait crystallization, and wisdom of vocational preferences. Planning orientation emerged from his Career Pattern Study of ninth-grade boys as the factor which comprises four indices associated with each dimension.

Gribbons and Lohnes' (1968) eight Readiness for Vocational Planning scales are 1) curriculum choice, 2) occupational choice, 3) interests, 4) values, 5) independence of choice, 6) verbalized strengths and weaknesses, 7) accuracy of self-appraisal, and 8) self-rating.

Westbrook and Mastie (1973) used the Cognitive Vocational Maturity Test (CVMT) to assess vocational maturity through fields of work, job selection, work conditions, educational requirements, attributes required, and duties.

Crites' (1973) four dimensions of vocational maturity include consistency of career choices, realism of career choices, career choice competencies, and career choice attitudes. The competencies include problem solving,

planning, occupational information, self-appraisal, and goal selection. The attitudes include involvement, orientation, independence, preference, and conception.

Cross (1975) summarizes the various measures of vocational maturity as including 1) knowledge of both self and the world of work, 2) attitudes toward vocational goals as exemplified by Super's "planning orientation," 3) decision-making skills, 4) realism, and 5) activity.

Vocational Maturity Research Needs

More research is needed to better define and measure vocational maturity. Crites (1971) identifies four types of vocational maturity research: survey research to improve definitions, theoretical research for hypothesis testing, technique research to improve measurement, and applied research to improve the effectiveness of vocational counseling.

The CMI as a Counseling Outcome Measure

Several studies using the CMI-Attitude Scale (Crites, 1973) as an outcome measure have yielded positive results. For example, Gilliland (1966) counseled Negro high school students; Asbury (1967) counseled disadvantaged youth; Bovee (1967) counseled students in a church guidance program; Frost (1972) used the VEG with community college students; and Flake, Roach, and Stenning (1975) counseled

vocationally immature students. Negative results were also obtained. Examples are Carey (1965) counseled high school students; Guerriero (1967) studies vocational school students. Three studies of the BEG with high school students also failed to show significant results with this measure (Cross, 1975; Crow, 1973; and Williard, 1976).

Many of these previously cited studies contain methodological errors as well as problems with independent variable definition according to Crites (1971).

Career Maturity of Maladjusted and Delinquent Youth

Several authors have suggested that delinquent youth are vocationally immature as well as having occupational adjustment problems (Robbins, 1966; Westbrook & Parry-Hill, 1973; and Woodbury & Pate, 1974). A study of emotionally maladjusted high school students by Karayanni (1976) revealed significant differences in the career maturity attitudes of maladjusted and well-adjusted students, and between whites and nonwhites.

More research is needed to determine how to facilitate career maturity and occupational adjustment of those individuals whose career maturity is low (Crites, 1971; Flake, Roach, & Stenning, 1975; Robbins, 1966; and Woodbury & Pate, 1974).

Facilitating Career Development

Recommended approaches to facilitate career development generally involve the client in direct examination of the world of work as it relates to self-exploration.

Super's Approach

Vocational counseling involving self-exploration was described in one of Super's (1957; 1963) earlier works as a six-step process: 1) nondirective problem exploration and self-concept portrayal; 2) directive topic setting, leading to further exploration; 3) nondirective reflection and clarification of feeling leading to the self-acceptance and insight, 4) directive exploration of objective data from tests, occupational information, extracurricular activities, etc., for reality testing, 5) nondirective exploration and working through of feelings and attitudes aroused by reality testing, and 6) nondirective consideration of alternative courses of action, for help in decision making. Super's six-step model involves both affective components and factual information on the world of work. The process is intended to alternate between the two components.

Pritchard's Approach

Pritchard (1962) recommends that vocational counseling be based on the interrelationship of occupational information

with personal information. Encouraged is "self-at-work" exploration through the following four dimensions related to the counseling process:

1. We must seek to obtain, develop, and use occupational tools sensitive to the expanded kinds of variables, occupational as well as personal, identified as significant to vocational development, success, and satisfaction.
2. Occupational exploration should generally give precedence to the broader and longer view of progressive vocational planning over the limited view of a one-time final occupational choice.
3. Self-exploration and occupational exploration should become more fully correlative processes.
4. The systematic search for positive vocational suggestions should be based on the particular kinds of personal-vocational factors and relationships explicitly hypothesized as significant in the individual case and should contribute to the modification and verification of these hypotheses. (Pritchard, 1962, pp. 676-678)

Morrill and Forrest

Four types of career counseling which are related to the client's career development are described by Morrill and Forrest (1970): 1) counseling which provides the client with information and clarification of issues related to a specific decision, 2) counseling which focuses on decision-making skills rather than on a specific situation, 3) counseling which views career as a process of making a continual series of choices, and 4) career processes counseling which aides the individual in determining objectives in order to influence the course of future choices.

Other authors have discussed the relationship of client affective involvement in effective vocational development. Healy (1974) emphasized the need for vocational counseling to include exploration of feelings and attitudes related to career. Tuckman (1973) identified four developmental stages of career exploration which include affective involvement.

Group Vocational Guidance

In order to provide optimum vocational development of individuals through groups, Bennett (1964) describes three essential considerations: 1) the individuals' potential abilities, interests, values, goals, and aspirations, 2) occupational opportunities and socioeconomic trends and 3) psychological and environmental factors that may influence vocational decisions and plans. These considerations are essential to the goal of helping each person's lifelong quest for self-direction.

Other important elements of effective group vocational guidance according to Bennett (1964) are participation of leaders and members to establish cohesion necessary for exploration of goals and interests, leadership that establishes a group climate of real acceptance for all members, and prevention of group pressure.

For all of the above authors, there is an emphasis on the involvement of the clients' affective processes in effective vocational counseling.

Vocational Exploration Group

The Vocational Exploration Group (VEG) is a structured small group experience designed by Studies for Urban Man to make the process of occupational planning enjoyable. The program is designed to increase self-confidence and self-awareness of an individual in relationship with the world of work (Daane, 1972). The program, developed by Calvin J. Daane, personalizes career planning by involving participants in a process of relating themselves to the world of work and increasing their knowledge of occupational information. Various jobs are explored from the point of view of what they demand and what they give to workers in return. Self-disclosure and feedback activities related to jobs lead participants to gain increased self-confidence for creativity.

Five Phases of VEG

The VEG progresses through five phases in both the short program with 18 tasks (about two and a half hours) and the long program with 40 tasks (about five one-hour sessions).

The five phases of group experience are as follows: Phase I, the Inclusion phase which reduces fears of exploration, creates cohesiveness and increases levels of self-confidence in order to enhance creative thinking.

Phase II, the Job Inventory which increases knowledge of jobs while establishing a framework for looking at the world of work.

Phase III, the Job Personalization phase through which participants explore job function, job satisfiers, interest-skills, and training needs.

Phase IV, the Expansion of Jobs Personalized phase through which there is an exploration of other possible job alternatives.

Phase V, the Next Step. This final phase leads to formulation of specific exploratory behavior to bring the participant closer to a job goal. The program is described in greater detail in Chapter III

VEG Research

The first major study of the VEG was supported by the U.S. Department of Labor (Daane, 1971) and utilized 1,406 employment service applicants in eight states as subjects. The two major research objectives were 1) to assess the effectiveness of the program upon vocational decision making and adjustment over a one-month period and 2) to measure the effectiveness of a pyramid training approach to prepare VEG group leaders.

The following sampling procedures were used: 10 "trainer"-supervisors from the Bureau of Employment Security from 10 states received the VEG training and then

trained 5 more people in their own states, who in turn trained an additional 5 group leaders for a total of 245 group leaders and 6 supervisors. Each group leader selected 20 people from three categories--walk-in applicants, Man-power trainees, and high school students. Of these 20 people, 5 VEG subjects and 5 control subjects were randomly selected. In six states the control subjects received no assistance and in two states controls received equal amounts of staff time in individual interviews lasting a half hour.

Data collected were on 14 groups: three groups consisted of walk-ins, work training, and high school students; eight groupings by state; and three for totals. Eight trainer-supervisors, 31 trainer-assistants, and 156 group leaders were utilized in the study. In the study, 1,649 subjects were posttested. In addition, 1,406 were tested in a one-month delay assessment on tests for employability perceptions, perceptions of social alienation, Rokeach's dogmatism, and status concerning job immediately following the experience and again one month later (Daane, 1972).

VEG participant subjects achieved twice as many new jobs as did the control subjects. Also, those VEG participant subjects who were in training during the research period received twice as many jobs as those who did not receive the treatment.

Significantly higher scores were obtained by VEG participants on all three measures of employability perceptions immediately after the experience and again one month later (Daane, 1972).

For each of the subject groups, five measures of social distance were obtained. Significant results favoring the VEG participants were obtained for 29 out of 70 scores. Of 70 measures of believability and trust in others and the world of work, 29 significantly favored the VEG group. VEG participants also received favorable scores on 5 out of 15 dogmatism and flexibility scores (Daane, 1972).

Trainer and leader reactions as to the value and ease of conducting the VEG training were reported as favorable by 80% of the trainers and leaders (Daane, 1972).

These specific goals of the VEG experience will vary from individual to individual as each person provides the content of the experience according to their unique set of circumstances, abilities, interests, etc. Research has been conducted with several populations with varying degree of career maturity level as well as varied needs (Cross, 1975; Grubb, 1971; Hawxhurst, 1973; and Williard, 1976).

Research with High School Students

Beach (1975) used a pre-post and six-week delayed post design in a study of the VEG as a technique for

expanding perceptions of self and the world of work with high school students. Significant differences were reported for Employability Perceptions Inventory measures taken immediately following the VEG experience and repeated six weeks later. The study utilized 409 group participants and 86 VEG leaders who were school counselors. The students and counselors responded favorably toward the VEG on a questionnaire designed to assess reactions to the program.

Crow (1973) studied the effects of the VEG on locus of control, self-esteem, and vocational maturity of 300 high school students. No significant differences were found between three groups randomly assigned to VEG, a semistructured vocational counseling experience, or a no-treatment control group. The measures included the Rotter Internal-External Control Scale, the Rosenberg Self-Esteem Scale, and the attitude scale of the Career Maturity Inventory. Subjects were pretested, posttested immediately after treatment and again four months later with pretest scores used as a covariate in the analysis of covariance. Replication of the study was, however, recommended by the author with populations varying in grade level, abilities, and interests.

Bergland and Lundquist (1974) assigned 63 high school students to treatment and control groups using a stratified random design procedure. The treatment groups were more

able to differentiate among requisite job interests and skills, identify more job satisfiers, and name more job functions than were the controls as measured by a questionnaire administered one week following the VEG treatment. No differences were found for information-seeking behaviors as reported on a career planning inventory.

In another study, Bergland and Lundquist (1975) studied the effects of the VEG with Mexican American junior high school students. The 60 male subjects were randomly assigned to VEG, VEG without interaction, or a wait control group. One week after treatment, a career exploration questionnaire was administered. VEG participants showed significant increase over controls only on naming jobs with different subjects.

Grubb (1971a) compared ninth-grade students who had received the VEG with a group who visited job sites, listened to job topic speakers, and wrote career papers. The two groups of 28 students each were administered a 15-item attitude questionnaire developed by the author. VEG participants made significant gains from pre- to posttesting in self-knowledge, self-assessment, and attitudes toward jobs, while the classroom activity group made no significant gains.

Cross (1975) studied the effects of the VEG with 422 eighth-, tenth-, and twelfth-grade students. The Solomon

four-group design was used and subjects were assessed on the attitude scale of Crites' Career Maturity Inventory, Daane's Employability Perceptions Inventory, and a follow-up self-report questionnaire developed by the author. Significant increases in self-perceptions as measured on the Employability Perceptions Inventory were reported. Thirty-four percent of the VEG participants reported taking their "next step" within two weeks of the VEG session as measured by the author's self-report instrument.

Williard (1976) found no significant differences between 10 experimental and 10 control subjects on the attitude scale of the Crites Career Maturity Inventory administered on a pre-, post-, and six weeks delayed posttest basis. A three-way analysis of covariance was performed on the obtained scores of subjects randomly selected and stratified for sex from each of four ninth-grade classes in separate schools.

In a study of the effect of the VEG with handicapped, disadvantaged, and impaired secondary students, Neely and Kosier (1975) used 24 counselors and 470 volunteer students. Self and peer ratings were obtained on three dimensions of job personalization consisting of job satisfiers, work potential and selected items taken from the Employability Perceptions Inventory. An analysis of variance was performed and significant gains at the .05 level were reported

in the areas of information seeking and understanding as well as increased empathy of group members.

Two studies of the VEG with potential dropouts report no significant outcomes. Hawxhurst (1973) compared 42 potential eighth-grade dropouts with a no-treatment control group on the attitude scale of the Career Maturity Inventory and an inventory of career choice factors. Cross (1974) studied 87 eighth-grade potential dropouts who participated in either VEG, or a two-hour group session utilizing films about dropping out and choosing a vocation as a stimulus for discussion. No significant differences were found between the groups two weeks later on a semantic differential, the Employability Perceptions Inventory, a checklist for exploratory career behaviors, or educational expectations and aspirations.

Two studies have been done to assess the VEG's effects on outcomes other than career development. Grubb (1971b) used a pre-, post-, and two-week delayed posttest design to determine whether fathers could predict the occupational self-assessment of their eleventh- and twelfth-grade sons significantly better following participation in the VEG program with their sons. The students completed a 20-statement questionnaire ranking items such as job functions, job satisfiers, and job demands, according to importance to them while their fathers completed the same questionnaire

as they predicted their sons would. A matched control group of fathers and sons was administered the same questionnaire. This control group showed no pre-posttest significant differences over a two-week interval. The experimental group showed significant increased congruence between sons' ratings and fathers' predictions of sons' ratings. Underestimates by fathers tended not to change, while overestimates significantly decreased.

Powell (1973) studied the effect of the VEG on openness with 48 group leaders and 240 participants compared with 240 control subjects. The subjects were employment service applicants. The leaders were employment service workers. Significantly greater openness as measured by the Rokeach D Scale for the VEG participants was reported. No significant correlation between group leaders' degree of openness was found with that of the VEG participants.

Research with College Students

Two studies of the VEG have been done with community college students. Frost (1972) studied the effects of the VEG on measures of vocational maturity, employability perceptions, perceptions of social alienation and of dogmatism of 89 two-year college students who were registered in either a psychology or philosophy class. Analyses of covariance and variance were used to test for significant

differences between groups that either saw a demonstration of the VEG, saw a demonstration and then participated in the VEG, or had no treatment at all. Significant increases in employability perceptions and decreases in social alienation and dogmatism were reported for the group participating in the VEG experience.

Strachan (1974) studied the VEG's effects on attitudes toward the efficacy of vocational counseling with 92 randomly selected community college students. The study utilized the Solomon four group design and an analysis of covariance followed by an analysis of variance. Four of six of the statistical tests indicated significant gains on a questionnaire developed to assess attitudes toward vocational counseling.

Most of the research done on the effectiveness of the VEG program has been with young employed adults and on high school students (Beach, 1975; Bergland & Lundquist, 1974, 1975; Cross, 1974, 1975; Crow, 1973; Daane, 1971, 1972; Grubb, 1971a; Hawxhurst, 1973; and Williard, 1976).

Research with Disadvantaged Youth

There has been only one study of the VEG with disadvantaged youth (Neely & Kosier, 1975) and two with potential drop outs (Cross, 1974; Hawxhurst, 1973). There have been no studies done on the effectiveness of the VEG with delinquents.

The experience provides several recommended components of group treatment with incarcerated youth as well as facilitation of career development and vocational counseling. These include personalizing information, focus on process rather than content, emphasis on creativity and alternatives rather than on one choice, goals defined in terms of individual participant's perception of self and needs, and insistence on a behavioral outcome of the experience expressed in terms of an individual's own goals (Cross, 1975).

If the VEG can be shown to be effective with this hard to reach population, it could be a major breakthrough in career development education and counseling for incarcerated youth.

CHAPTER III

METHODS AND PROCEDURES

Chapter III contains the hypotheses tested and a description of the research design of the study as well as population, sampling procedures, experimental design, treatment description, instruments, data collection, timetable and procedures, and data analysis procedures.

Hypotheses

Six major hypotheses were tested in the proposed study of the effects of the Vocational Exploration Group (VEG) with incarcerated youth. The following null hypotheses were tested in the investigation:

1. There will be no significant differences between VEG participant subjects and control subjects in career choice attitudes as measured on the attitude scale of the Career Maturity Inventory (CMI).
 - a. There will be no significant interaction of sex with VEG participant and control subject scores.
 - b. There will be no significant interaction of race with VEG participant and control subject scores.

c. There will be no significant interaction of institution with VEG participant and control subject scores.

d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

e. There will be no significant interaction of VEG leader with VEG participant scores.

2. There will be no significant differences between VEG participant subjects and control subjects in degree of job personalization as measured by subscore 1 of the Employability Perceptions Inventory (EPI-1).

a. There will be no significant interaction of sex with VEG participant and control subject scores.

b. There will be no significant interaction of race with VEG participant and control subject scores.

c. There will be no significant interaction of institution with VEG participant and control subject scores.

d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

e. There will be no significant interaction of VEG leader with VEG participant scores.

3. There will be no significant differences between VEG participant subjects and control subjects in active movement toward job personalization as measured by subscore 2 of the Employability Perceptions Inventory (EPI-2).

a. There will be no significant interaction of sex with VEG participant and control subject scores.

b. There will be no significant interaction of race with VEG participant and control subject scores.

c. There will be no significant interaction of institution with VEG participant and control subject scores.

d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

e. There will be no significant interaction of VEG leader with VEG participant scores.

4. There will be no significant differences between VEG participant subjects and control subjects in self-recognition of work potential and aspiration as measured by subscore 3 of the Employability Perceptions Inventory (EPI-3).

a. There will be no significant interaction of sex with VEG participant and control subject scores.

b. There will be no significant interaction of race with VEG participant and control subject scores.

c. There will be no significant interaction of institution with VEG participant and control subject scores.

d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

e. There will be no significant interaction of VEG leader with VEG participant scores.

5. There will be no significant differences between VEG participant subjects and control subjects in attitudes of alienation from the world of work as measured by scores on the World of Work Alienation Inventory (WWAI).

- a. There will be no significant interaction of sex with VEG participant and control subject scores.
 - b. There will be no significant interaction of race with VEG participant and control subject scores.
 - c. There will be no significant interaction of institution with VEG participant and control subject scores.
 - d. There will be no significant interaction of pretesting with VEG participant and control subject scores.
 - e. There will be no significant interaction of VEG leader with VEG participant scores.
6. There will not be a 50% frequency of next steps remembered by experimental subjects within two weeks after participating in the VEG program as measured by a self-report questionnaire.
- a. There will be no significant differences between males and females.
 - b. There will be no significant differences between blacks and whites.
 - c. There will be no significant differences between institutions.
 - d. There will be no significant differences between subjects according to VEG leader.
 - e. There will be no significant differences between pretest and non-pretest subjects.
7. There will not be a 30% frequency of next steps taken by experimental subjects within two weeks after participating in the VEG program as measured by a self-report questionnaire.

- a. There will be no significant differences between males and females.
- b. There will be no significant differences between blacks and whites.
- c. There will be no significant differences between institutions.
- d. There will be no significant differences between subjects according to VEG leader.
- e. There will be no significant differences between pretest and non-pretest subjects.

Population and Sample

Population

The population for this study will consist of approximately 300 incarcerated youths at two of Florida's Youth Services Training Schools. The Lancaster Youth Development Center, located at Trenton, and the Alyce D. McPherson School, located at Ocala, are the system's only coeducational training schools.

The McPherson School receives admissions directly from the juvenile court system only when space is available. The population consists of approximately 16% males and 84% females; 50% black and 50% white. The average daily population during 1975 was 154 youths.

The Lancaster Center receives no admissions directly from the court. Children too difficult to handle in other treatment programs are transferred to

this highly intensive environment providing a high staff/child ratio. Transfer to Lancaster usually occurs when other training schools are no longer willing to work with the child, frequently due to their disruptive nature or the need for more individual attention. The average daily population during 1975 was 157 youths, consisting of approximately 60% black and 40% white youths; 55% males and 45% females. Ages ranged from 11 to 18 years old. The average female age is slightly younger than that of the male population.

Sample

A random selection procedure was used to provide 120 subjects from the 157 juveniles held at Lancaster Youth Development Center. This group was divided randomly into 60 experimental and 60 control subjects. The control group of 60 subjects was then divided randomly into a group of 30 subjects that were pre- and posttested and another group of 30 subjects that received only posttesting. Likewise, the 60 experimental subjects that received the VEG treatment were randomly divided into a group of 30 subjects that were pre- and posttested and another group of 30 subjects that were posttested only.

The experimental group was randomly assigned to one of three VEG leaders in groups of five (see Figure 1).

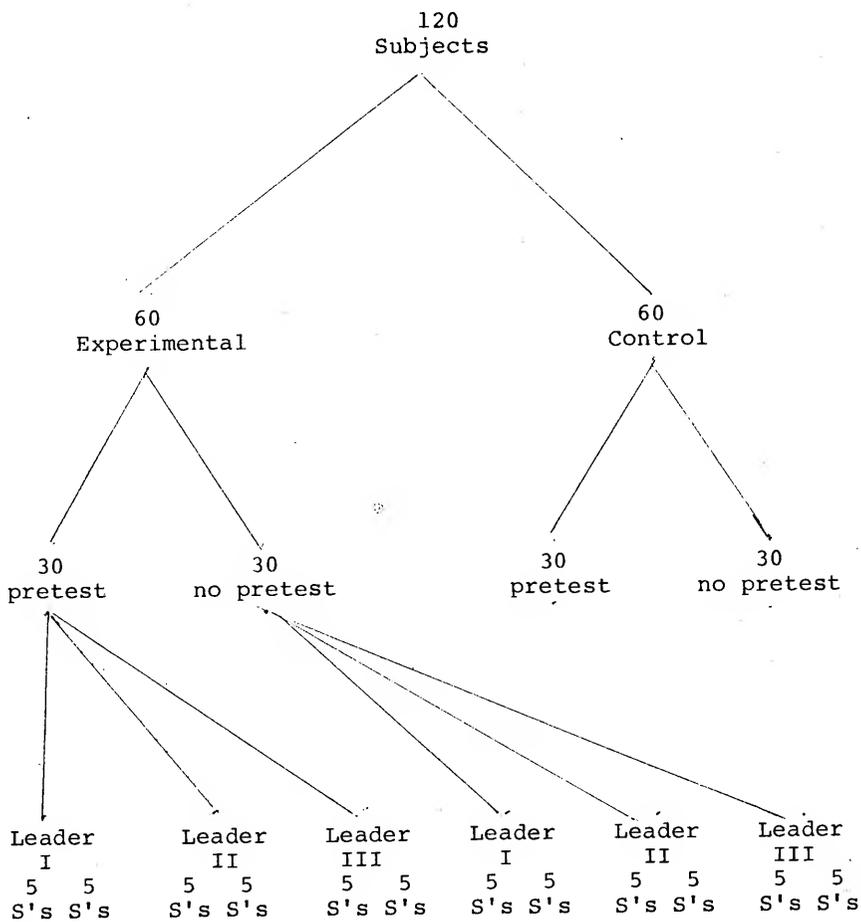


Figure 1

Subject Assignment for One Institution

An alternate list of experimental and control subjects was compiled through a random selection procedure and provided replacements as needed.

The sampling procedures described above and in Figure 1 were duplicated with the population of the Alice D. McPherson Training School. Thus, a total of 240 subjects were selected.

Group Leaders

The three VEG group leaders in this study had experience using the program with delinquent youth. Two of the leaders are doctoral candidates in the field of counseling, and the third has a doctorate in the field of counseling. All leaders received the standardized two-day training program in Vocational Exploration Group Leadership from a certified VEG trainer. All leaders followed the short 18-task VEG program from a standard leader's manual.

Design of the Study

This study utilized the Solomon four-group model, which was replicated in each institution. This design controlled for all sources of internal invalidation as described by Campbell and Stanley (1963). These sources

are history, maturation, testing, instrumentation, regression, selection, mortality, and interaction of those mentioned. Also controlled by this design is possible invalidity from the external sources of test main effects and interaction.

The design for the study, as applied in each institution, was as follows:

R	O	X	O
R	O	-	O
R		X	O
R		-	O

R = Randomly selected group

X = Treatment

O = Observation

Vocational Exploration Group Program

The VEG is based on the assumption of the existence and need for examination of a give and take relationship between man and his work through the critical links

of Job Function: What is the job like? Job Demands: What interests and skills are necessary? Job Satisfaction: What does the job offer?

The aim of the group is for each participant to understand the man-job relationship and to apply this understanding to himself and his own situation through the formulation of a realistic "Next Step."

Phases of the Vocational Exploration Group Process

Both the short and long programs entail similar tasks and proceed through the following five phases: Inclusion, Job Inventory, Job Personalization, Expansion of Jobs Personalized, and Next Step.

The Inclusion Phase entails activities designed to provide a comfortable atmosphere for exploration through reduction of fears of rejection and increased feelings of acceptance, and thereby maximizing creative thinking. The aims of a safe, close atmosphere with decreased defensiveness and increased self-confidence are brought about through introductions, self-disclosure and feedback.

The Job Inventory Phase involves the sharing of job information using graphic stimulus materials and is designed to bring out intrinsic rewards leading to increased motivation for further exploration.

In the Job Personalization Phase, job choices are examined by each participant relative to job demands, job satisfiers, job function and training needs.

In the Expansion of Jobs Personalized phase, choices are expanded through the consideration of other job possibilities to meet the needs of participants in relation to previously examined choice areas.

The Next Step phase has each participant formulating a specific behavior leading to a chosen job goal. Helpful comments and suggestions are elicited by the leader as the session ends with a group focus upon each member's realistic "next step."

A group of five or six participants is guided through a sequence of structured tasks by a VEG group leader using a programmed manual and kit of materials including charts, posters, job inventory sheets and job information books. The short program (Appendix A), as used in this study, consists of 18 procedures and takes approximately two and one-half hours to complete, while the long program consisting of 40 procedures takes approximately four hours in five 45-minute sessions.

The VEG Group Leader

VEG group leaders are prepared by VEG trainers who have also been leaders. The two-day standardized training

program begins with the actual VEG experience followed by instruction in theory, leader tasks, responding techniques, and role playing as leader. Leader trainees run practice groups, receive feedback from observers and participants, discuss strategies for VEG implementation with specific populations, and evaluate the experience.

The leader's function in the group includes two separate categories: 1) tasking and 2) selective responding. Tasking is the term used to describe delivery of brief and clear statements of instruction for each of the tasks in the program in a way that assists participants to proceed through the activities.

The second leader function of selective responding is designed to increase the enjoyment and quality of the group experience while moving through the tasks and includes the following: identification of the focus of participant statements, simple acknowledgment, self-disclosure, various types of questions, reflection and restatement based on both content and feeling, pairing and contrasting participant statements on either content or feeling, and the concept of excitement/comfort level variation of the individual or entire group through combination of response type and focus. Recommendations as to response type are included with instructions for each task in the leader's manual.

Instruments

Subjects participating in the study were assessed through the use of seven measures. Career choice attitudes were measured through the attitude scale of the Career Maturity Inventory. The three subscores of the Employability Perceptions Inventory were used to measure subjects' degree of job personalization, active movement toward job personalization, and self-perceptions of employability potential and aspiration. World of Work Alienation Inventory scores were used to measure subjects' degree of alienation relative to working. A count of "Next Steps" remembered and taken by experimental subjects was obtained from a self-report questionnaire.

Attitude Scale--Career Maturity Inventory (CMI)

The attitude scale of the Career Maturity Inventory was developed by John Crites over the past 10 years and published in 1973. The 50 items of the self-report instrument are designed to elicit feelings, subjective reaction, and dispositions of individuals toward making career choices and entrance into the world of work (Crites, 1973). The items are representative of attitudes as they have actually been verbalized by young people and fall into the following five clusters: involvement in the career choice process,

orientation toward work, independence in decision making, preference for career choice factors, and conceptions of the career choice process. These five dimensions are theoretical in nature and rather than yielding separate scores are grouped into one total score.

The 50 items of the scale are either first or third person statements about career choices and the world of work. First or third person singular item type as well as five-point scale compared with a true-false response format showed no significant differences on scores of the 2,822 subjects used as the standardization sample.

In determining the acceptability of the reliability and validity data for this scale, the following considerations are relevant: The variable is theoretical in nature including five dimensions in one total score and maturation over time takes place with developmental variables measured by the attitude scale.

A test-retest reliability coefficient of .71 for 1,648 subjects in grades six through twelve is reported over a one-year interval as well as item data showing a mean internal consistency coefficient of .74. These reliability coefficients are acceptable in view of the aforementioned considerations.

Content validity has been demonstrated through 80% agreement by expert judges (counseling psychologists) on what

constitutes a vocationally mature response to the items of the attitude scale, as well as 74% agreement by the same judges with an empirically derived scoring key.

Criterion-related validity has been demonstrated through correlation with other career maturity measures in studies yielding r 's in the .30's. These other career maturity measures include: Realism of occupational aspiration; consistency, decision, and realism of career choice; and the Readiness for Vocational Planning Scale.

Construct validity in the areas of response bias, correlations with other variables and experimental manipulations of counseling and didactic experiences is generally supported by studies (Crites, 1973).

Employability Perceptions Inventory (EPI)

The Employability Perceptions Inventory (EPI Appendix B) was developed by Daane (1971) as an outcome measure for use with the Vocational Exploration Group. The three subscores of the 19-item questionnaire are designed to measure the subject's perceptions of himself as being employable. The first subscore (EPI-1) is Job Personalization and is designed to measure understanding of man's relationship to work and the critical links of job function, job demands, and job satisfaction. The second subscore (EPI-2) Movement toward Job Personalization is designed to measure

level of active involvement in the job personalization process through less passive responses to the job personalization items. The third subscore, Self-Recognition of Work Potential and Aspiration (EPI-3), focuses on clarity of self-perceptions toward work potential and choice aspirations.

Statements about man/work relationships and the specific man/job links examined in the VEG program comprise the first 13 items of the EPI. Responses for each item are marked as "True," "False," or "Don't Know." The number of correct responses comprise subscore 1, while the number of "Don't Know" responses yield the second subscore. The last six items are first person statements relating self-perceptions to job choice aspects examined in the program. A five-point Likert-type scale has subjects responding to each item from "Very Sure" to "Don't Know." Subscore 3 consists of the sum of the values of each response.

Test-retest reliability is reported to be significant at the .01 level over a one-month interval for 500 no-treatment control subjects. No reliability coefficients, however, are reported by the author. Two reliability studies were performed to test the degree of consistency for the instrument when orally administered. The first study, which used two administrators and 15 subjects yielded a reliability (r) of .84. The second reliability study failed to show a significant degree of consistency between several

administrators with 38 subjects. A t-test was used for this analysis.

Content validity is apparent as the items are related to the concepts of job function, job demands, and job satisfiers as defined and examined in the VEG program. Part III of the EPI is closely related to the goals of the VEG experience. The items are intended to measure the subjects; certainty of interests, skills, training aspirations, and satisfiers as related to chosen jobs.

Construct and criterion-related validity are not reported by the author, although greater job placement and job satisfaction as well as less alienation and dogmatism was demonstrated by subjects scoring higher than controls on all subscores of the EPI (Daane, 1971).

World of Work Alienation Inventory (WWAI)

This instrument was developed by the present investigator as an intended measure of subjects' degree of alienation from the world of work. The 25 items of the inventory are either first- or third-person statements related to the world of work, and subjects respond through agreement or disagreement on a five-point Likert-scale for each item (Appendix C).

A test/retest reliability study of the instrument was conducted with 20 high school students over a one-week

interval. The results yielded a Pearson Product Moment Correlation Coefficient of .76 which is significant at the .01 level.

Content validity has been established through expert judge agreement of at least 70% on which items comprise the four dimensions hypothesized as indicative of accurate assessment of alienation from the world of work. Ten counselor educator judges were asked to sort an initial pool of items into four categories: "Assertiveness-Complacency" relative to working; value attributed to working "Value--Devalue," perceptions of fairness of the world of work, "Fair--Unfair," and pleasant or unpleasant feelings toward the world of work, "Positive-affect--Negative-affect." Five items receiving no less than 70% agreement and thought to be generally related to the concepts of alienation and identification with the world of work. A factor analysis of this instrument, with the data collected in this investigation, is planned.

Next Step

This self-report questionnaire (Appendix D) was developed by Cross (1975) as a follow-up frequency measure of exploratory career behavior for use with the VEG program. The questionnaire and its directions are intended to eliminate bias toward affirmative answers due to social acceptability and tester influence.

All experimental subjects were asked to complete this questionnaire which determines whether the "Next Step" identified during the final part of the VEG is recalled, and if so, was it taken by the participant.

Collection of the Data

Raw scores on the Career Maturity Inventory, Employability Perceptions Inventory, and World of Work Alienation Inventory were used in the analysis. Scores on the CMI consist of the number of correct responses. Subscore 1 of the EPI consists of the number of correct responses on items 1 through 13. Subscore 2 consists of the number of "Don't Know" responses on items 1 through 13. Subscore 3 consists of the summed values of checked responses to the five-point scale on items 14-19. A response of "Very Sure" has a value of 5, and a response of "Don't Know" has a value of 1. Scores on the WWAI consist of the summed values on items 2, 6, 11, 14, 15, 16, 18, 19, 22, 23, 24, and 25; added to the reversed sums of items 1, 3, 4, 5, 7, 9, 10, 12, 13, 17, 20, and 21. On the five-point scale a response of "Strongly Disagree" carries a value of 5 and a response of "Strongly Agree" carries a value of 1.

Completed data were collected for 119 subjects pre- and posttested and a total of 214 subjects. Missing data resulted from subjects who were not present for the

treatment session, pre-, or posttesting sessions because of the following reasons: There were 24 subjects locked up; there were four subjects who refused to complete the tests; there were two subjects away for home visits; and there were incomplete answer sheets for the remainder.

Experimental Procedures and Timetable

1. During the first week of the study, half of the experimental and half of the control group of the first institution were administered the preexperimental instruments--the attitude scale of the Career Maturity Inventory (CMI), the Employability Perceptions Inventory (EPI), and the World of Work Alienation Inventory (WWAI).

2. All experimental subjects at the first institution participated in the short 18-task program of the Vocational Exploration Group (VEG) during the first week (see Appendix A).

3. During the second week of the study, half of the experimental and half of the control group of the second institution were administered the preexperimental instruments--the attitude scale of the CMI, the EPI, and the WWAI.

4. All experimental subjects at the second institution participated in the short 18-task program of the VEG during the second week (see Appendix A).

5. During the third week of the study, all experimental and control subjects of the first institution were administered the postexperimental instruments--the same forms of the CMI, EPI, and WWAI. Experimental subjects were asked to report in writing the status of their "next step"--which is a specific career-goal exploratory behavior formulated by each participant at the conclusion of the VEG experience.

6. During the fourth week, all experimental and control subjects of the second institution were administered the postexperimental instruments--the same forms of the CMI, EPI, and WWAI. Experimental subjects were asked to report in writing the status of their next step. The experimenter administered all instruments to the subjects.

Analysis of the Data

Multivariate analyses of variance (MANOVA) procedures for unequal cell sizes were performed on posttest scores and difference scores for the dependent variables. The MANOVA tested the effects of factors and factor interactions on all dependent variables simultaneously. This initial analysis served as a screening device for factor and factor interaction effects. A significance level of .10 was chosen as the level indicative of the need for further investigation.

If a MANOVA showed that a factor or factor interaction had a significant effect on at least one of the dependent variables, a follow-up univariate analysis of variance (ANOVA) was performed. In order to determine the source of the significant multivariate effects, the follow-up ANOVA was performed on each dependent variable. The .05 level of significance was indicative of the significant differences necessary to reject null hypotheses.

"Next Step"

The frequency count of "next steps" taken by VEG treatment group participants was investigated through nonparametric analysis of variance procedures to test for significant differences in frequencies of "yes" responses by sex, race, pretest status, and between institutions. This analysis tested for any interactions with treatment group up to the two-way level. In addition, percentages of "yes" responses to the questions, "Do you remember what your next step was going to be?" and "Have you had a chance to take your next step?" were calculated for the total sample. Percentages were also calculated for groups that were significantly different.

CHAPTER IV

ANALYSIS OF RESULTS

Chapter IV contains a systematic report of the data analysis. The effects of five independent variables on seven dependent variables were determined from the obtained data.

Independent Variables

The independent variables were 1) institution, 2) pretest status, 3) sex, 4) race, 5) control/experimental groups, and 6) VEG leader.

Dependent Variables

The dependent variables were 1) the attitude scale of the Career Maturity Inventory (CMI), 2) subscore 1 of the Employability Perceptions--Job Personalization (EPI-1), 3) subscore 2 of the Employability Perceptions Inventory--Movement Toward Job Personalization (EPI-2), 4) subscore 3 of the Employability Perceptions Inventory--Self-Recognition of Work Potential (EPI-3), 5) the World of Work Alienation Inventory (WWAI), 6) frequency of "next

steps" remembered, and 7) frequency of "next steps" taken.

Statistical Analysis Overview

Multivariate analyses of variance (MANOVA) procedures for unequal cell sizes were performed on posttest scores and again on difference scores for the dependent variables. The MANOVA tested the effects of factors and factor interactions on all dependent variables simultaneously. This initial analysis served as a screening device for factor and factor interaction effects. A significance level of .10 was chosen as the level indicative of the need for further investigation.

If a MANOVA showed that a factor or factor interaction had a significant effect on at least one of the dependent variables, a follow-up univariate analysis of variance (ANOVA) was performed. In order to determine the source of the significant multivariate effects, the follow-up ANOVA was performed on each dependent variable. The .05 level of significance was indicative of the significant differences necessary to reject null hypotheses.

The first posttest MANOVA investigated the interactive effects of each of the first four independent variables (sex, race, institution, and pretest status) with the experimental/control group variable. This treatment group

variable was investigated as one factor with four levels to determine whether the data provided evidence of VEG leader interaction with the other independent variables. None of the multivariate hypothesis testing procedures furnished evidence (at the .10 level) of such interactions. F values are reported in Table 1. This suggested that all posttest score analyses were free from VEG leader interaction.

Difference scores were also analyzed with the same procedures described above; however, only the pretest group was involved in these analyses. The first difference score multivariate analysis investigated the interactive effects of VEG leader with the other independent variables of institution, sex, and race. No evidence (at the .10 level) of interaction between the factors was obtained. F values are reported in Table 8. Therefore, all subsequent posttest and difference score analyses considered the treatment group variable at two levels representing either control or experimental status.

Posttest Scores with Interactions

The interaction model obtained from a MANOVA procedure ($F = 3.20$) indicated a significant sex and treatment group interaction (.008) at the .10 level of significance (Table 2). An examination of the follow-up ANOVA indicated this interactive effect was strongly significant for WWAI (.021) and approached significance for EPI-1 (.08). F

values are reported in Table 2. Means are reported in Table 3. The sources of these significant differences are reported in Table 4.

Posttest Score Main Effects

Main effects significant at the .10 level were determined ($F = 2.198$) for institution (.055), for sex (.007) ($F = 3.441$), and for race (.0007) ($F = 4.667$) through a MANOVA (see Table 5). In order to determine the source of the effects, ANOVAs for each dependent variable were examined as reported in Table 6. For the CMI, both sex (.002) ($F = 9.81$) and race (.0001) ($F = 19.63$) were significant at the $>.05$ level in favor of females and whites. For EPI-1 (.03) ($F = 4.85$) sex was significant at the .05 level favoring males. For EPI-2 and EPI-3 there were no significant effects at the .05 level. For the WWAI, institution (.002) ($F = 10.23$) and race (.009) ($F = 7.03$) were significant at the .05 level, favoring the Lancaster Youth Development Center (LYDC) and whites. Means are reported in Table 7.

Difference Scores with Interactions

The interaction model obtained through a MANOVA showed a significant sex and treatment group interaction at $>.10$ level (.05) ($F = 2.28$). As reported in Table 8,

examination of the follow-up ANOVA indicated this interactive effect on the WWAI (.009) ($F = 7.11$) was significant at the .05 level, strongly favoring male experimental subjects over the other three groups. F values are reported in Table 9. Means by treatment group and sex are reported in Table 10.

Difference Score Main Effects

The main effects model obtained through a MANOVA reported in Table 1 identified institution as significant at the .05 level ($F = 2.30$). Follow-up ANOVAs reported in Table 12 indicated a significant interactive effect at the .05 level (.008) ($F = 7.17$) with EPI-3 favoring the Alyce D. McPherson School. The McPherson School scores rose from pretest to posttest while the Lancaster Youth Development Center scores dropped significantly (.05) from pretest to posttest. The McPherson School difference score gains were not significant at the .05 level while the LYDC score drop was significant at the .05 level. Mean differences by institution are reported in Table 13.

"Next Step"

The frequency count of "next steps" remembered and taken by subjects was relevant only for experimental treatment group participants. A multivariate nonparametric

analysis of variance was performed on these frequency counts in order to determine whether there were significant differences at the .10 level in frequencies of "yes" responses for the factors of institution, pretest status, VEG leader, sex, and race. The analysis held four factors constant while checking for the effect of the fifth factor. The significant factors were institution (.03) ($X^2 = 6.83$) and pretest status (.097) ($X^2 = 4.65$). The ANOVA follow-up revealed that institution differed on the remembering scale (.009) ($X^2 = .7321$), favoring LYDC, while pretest status accounted for significant differences (.033) ($X^2 = .3513$) in "next steps" taken, favoring the non-pretest group. Chi square values are reported in Table 14. Percentages and frequencies are reported in Table 15. Sixty-one of a total 95 VEG participant subjects (64%) remembered their next step. A 95% confidence interval for the true population fraction who remembered their next step was calculated as .54 to .74. For those who reported taking the next step, an estimate of 28 of a total 94 equaled 30%, with a 95% confidence interval for the true population fraction calculated as .21 to .39.

Posttreatment Counseling Requests

At the bottom of the Jobs Inventory form is a box, next to which is printed "I wish to see a counselor." Seventy-eight percent of the experimental subjects marked this box.

TABLE 1. MULTIVARIATE ANALYSES OF VARIANCE OF
DEPENDENT VARIABLE POSTTEST SCORES FOR
TREATMENT GROUP INTERACTIONS WITH
INDEPENDENT VARIABLES

<u>Independent Variables</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
Four levels of treatment group:			
Institution	576	1.4359	.1248
Pretest Status	576	1.3614	.1607
Sex	576	1.3614	.1505
Race	576	.7063	.7800
Two levels of treatment group:			
Institution	200	1.68058	.1399
Pretest Status	200	1.54842	.1755
Sex	200	3.20385*	.0085
Race	200	.86124	.5096

*p < .05

TABLE 2. UNIVARIATE ANALYSES OF VARIANCE OF DEPENDENT VARIABLE POSTTEST SCORES FOR TREATMENT GROUP AND SEX INTERACTION

<u>Dependent Variables</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
CMI	1	.74406	.3894
EPI-1	1	3.08314*	.0806
EPI-2	1	.90098	.3436
EPI-3	1	.01395	.9061
WWAI	1	5.40830**	.0210

*p < .10

**p < .05

TABLE 3. POSTTEST MEANS BY SEX AND TREATMENT GROUP

	<u>Control</u>	<u>N</u>	<u>Exp.</u>	<u>N</u>
Male				
EPI-1	4.18	(40)	3.63	(27)
WWAI	83.40	(48)	91.00	(29)
Female				
EPI-1	3.27	(78)	3.68	(69)
WWAI	87.26	(81)	86.22	(73)

TABLE 4. POSTTEST MEAN DIFFERENCES BY SEX AND TREATMENT GROUP

	<u>EPI-1</u>	<u>WWAI</u>
Male control versus male experimental	.90	4.75*
Male control versus female control	.70*	3.68*
Male control versus female experimental	.72	3.75
Male experimental versus female control	.80	4.37
Male experimental versus female experimental	-.05	4.43*
Female control versus female experimental	.60	3.26

*p < .05

TABLE 5. POSTTEST SCORE MANOVA F VALUES FOR MAIN EFFECTS
(EXCLUDING INTERACTIONS)

<u>Independent Variable</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
Institution	204	2.198*	.0552
Pretest status	204	.9810	.5687
Sex	204	3.4418**	.0066
Race	204	4.6665†	.0007
Treatment group	204	1.2945	.2667

*p < .10

**p < .05

†p < .001

TABLE 6. F VALUES FOR POSTTEST UNIVARIATE ANALYSES
OF VARIANCE MAIN EFFECTS BY INSTITUTION,
SEX, AND RACE

<u>Dependent Variable</u>	<u>Source</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
CMI	Inst.	1	.00075	.9782
CMI	Sex	1	9.80615**	.0002
CMI	Race	1	19.63140†	.0001
EPI-1	Inst.	1	.66001	.4175
EPI-1	Sex	1	4.84609*	.0288
EPI-1	Race	1	.68444	.4090
EPI-2	Inst.	1	.05831	.8262
EPI-2	Sex	1	.32151	.5713
EPI-2	Race	1	.57470	.4493
EPI-3	Inst.	1	3.51180	.0623
EPI-3	Sex	1	1.13834	.2872
EPI-3	Race	1	.71637	.3983
WWAI	Inst.	1	10.23495**	.0016
WWAI	Race	1	7.02946*	.0086

*p < .05

**p < .005

†p < .0005

TABLE 7. POSTTEST MEANS FOR DEPENDENT VARIABLES WITH SIGNIFICANT MAIN EFFECTS

<u>Dependent Variable</u>	<u>N</u>	<u>Means</u>
CMI		
Sex	214	
Male	67	26.3
Female	147	29.0*
Race	214	
White	95	30.3*
Nonwhite	119	26.4
EPI-1		
Sex	214	
Male	67	3.95*
Female	147	3.46
WWAI		
Institution	231	
McPherson	112	85.23
Lancaster	119	87.92*
Race	231	
White	99	89.09*
Nonwhite	132	84.77

*p < .05

TABLE 8. MULTIVARIATE ANALYSES OF VARIANCE OF DEPENDENT VARIABLE DIFFERENCE SCORES FOR TREATMENT GROUP INTERACTIONS WITH INDEPENDENT VARIABLES

<u>Independent Variables</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
Four levels of treatment group:			
Institution	303	.83590	.6380
Sex	303	.96343	.5055
Race	303	.99381	.5382
Two levels of treatment group:			
Institution	107	.16733	.0722
Sex	107	2.28577*	.0506
Race	107	1.67507	.1460

*p < .05

TABLE 9. UNIVARIATE ANALYSES OF VARIANCE OF DEPENDENT VARIABLE DIFFERENCE SCORES FOR TREATMENT GROUP AND SEX INTERACTION

<u>Dependent Variable</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
CMI	1	.17136	.6797
EPI-1	1	2.20660	.1403
EPI-2	1	1.01755	.3153
EPI-3	1	.10869	.7423
WWAI	1	7.10868	.0088*

*p < .01

TABLE 10. WWAI MEAN DIFFERENCE AND PRETEST SCORES BY SEX AND TREATMENT GROUP

	<u>Control</u>	<u>N</u>	<u>Exp.</u>	<u>N</u>
Difference Scores				
Male	-2.61	(28)	6.93	(14)
Female	1.64	(39)	-1.08	(38)
Pretest Scores				
Male	84.71	(28)	82.64	(14)
Female	86.77	(39)	87.71	(38)

NOTE: There were no significant pretest differences at the .05 level.

Male experimental mean difference scores on WWAI were significantly greater ($p < .05$) than male control mean difference scores and female mean difference scores.

TABLE 11. DIFFERENCE SCORE MANOVA F VALUES FOR MAIN EFFECTS (EXCLUDING INTERACTIONS)

<u>Source</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
Institution	110	2.30056*	.049
Sex	110	1.35222	.2471
Race	110	1.84201	.1097
Treatment group	110	.43509	.8245

*p < .05

TABLE 12. F VALUES FOR DIFFERENCE SCORES UNIVARIATE
ANALYSES OF VARIANCE MAIN EFFECTS BY
INSTITUTION

<u>Dependent Variable</u>	<u>df</u>	<u>F Value</u>	<u>F Prob.</u>
CMI	1	2.95829	.0882
EPI-1	1	.16890	.6819
EPI-2	1	1.05929	.3056
EPI-3	1	7.17049*	.0085
WWAI	1	3.38940	.9682

*p < .01

TABLE 13. EPI-3 DIFFERENCE SCORES BY INSTITUTION

<u>Institution</u>	<u>N</u>	<u>Mean Difference</u>
McPherson	52	2.21
Lancaster	67	-3.73*

*p < .05

TABLE 14. CHI SQUARE VALUES FOR MULTIVARIATE AND UNIVARIATE NONPARAMETRIC ANALYSES OF VARIANCE FOR NEXT STEP REMEMBERED AND TAKEN

Source	df	M A N O V A		A N O V A		A N O V A	
		χ^2 Value	Prob.*	χ^2 Next Step Remembered	Prob.	χ^2 Next Step Taken	Prob.
Institution	2	6.8271*	.0329*	.7321*	.0095	.8893	.3457
Pretest status	2	4.6554*	.0975	.8688	.3513	4.5416*	.0331
Leader	2	6.4968	.1650				
Sex	2	1.2586	.5330				
Race	2	1.2464	.5362				

*p < .05

TABLE 15. FREQUENCY AND PERCENTAGE OF NEXT STEPS
REMEMBERED AND TAKEN ACCORDING TO
INSTITUTION AND PRETEST STATUS

<u>Next Step</u>	<u>Yes</u>	<u>No</u>	<u>Yes/Total</u>	<u>% Yes/Total</u>
Remembered				
McPherson	26	24	26/50	.52
Lancaster	34	10	34/44	.77*
Taken				
Pretest	8	36	8/44	.18
Non-pretest	20	30	20/50	.40*
TOTAL REMEMBERED	60	34	60/94	.64
TOTAL TAKEN	28	66	28/94	.30

*Significantly greater fraction of "yes" responses.

Hypotheses

The multivariate analyses of variance procedure performed on posttest scores of the instruments of CMI, EPI-1, EPI-2, EPI-3, and WWAI investigated treatment group interaction with the independent variables of institution, pretest status, sex, and race. The only MANOVA F value significant at the .10 level was treatment group interaction with sex ($F = 3.20$) (see Table 2). Significant F values at the .10 level indicated the need of a follow-up univariate analysis to determine which instrument interacted with the treatment group indicating significant differences at the .05 level between experimentals and controls on that instrument.

An examination of the univariate analyses of variance for each instrument corresponding to each major null hypothesis (as reported in Table 2) was performed to see if there was a significant interaction with sex at the .05 level. The findings related to each hypothesis and subhypotheses follows.

Hypothesis 1. There will be no significant differences between VEG participant subjects and control subjects in career choice attitudes as measured on the attitude scale of the Career Maturity Inventory (CMI).

The only significant MANOVA F value was treatment group and sex interaction ($F = 3.20$). An examination of the obtained univariate F value of .74406 for treatment group and sex interaction showed no significance at the .05 level (Table 2). No additional interaction analyses were therefore needed. The null hypothesis and all sub-hypotheses were not rejected.

Hypothesis 1a. There will be no significant interaction of sex with VEG participant and control subject scores.

Hypothesis 1b. There will be no significant interaction of race with VEG participant and control subject scores.

Hypothesis 1c. There will be no significant interaction of institution with VEG participant and control subject scores.

Hypothesis 1d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

Hypothesis 1e. There will be no significant interaction of VEG leader with VEG participant scores.

Hypothesis 2. There will be no significant differences between VEG participant subjects and control subjects in degree of job personalization as measured by subscore 1 of the Employability Perceptions Inventory (EPI-1).

The obtained F value of 3.08314 for treatment group and sex interaction from the univariate analysis of variance is not significant at the .05 level (Table 2). No additional analyses were needed. The null hypothesis and all subhypotheses were not refuted.

Hypothesis 2a. There will be no significant interaction of sex with VEG participant and control subject scores.

Hypothesis 2b. There will be no significant interaction of race with VEG participant and control subject scores.

Hypothesis 2c. There will be no significant interaction of institution with VEG participant and control subject scores.

Hypothesis 2d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

Hypothesis 2e. There will be no significant interaction of VEG leader with VEG participant scores.

Hypothesis 3. There will be no significant differences between VEG participant subjects and control subjects in active movement toward job personalization as measured by subscore 2 of the Employability Perceptions Inventory (EPI-2).

The only significant MANOVA F value was treatment group and sex interaction ($F = 3.20$). The obtained F value of .90098 from the univariate analysis of variance (Table 2) for treatment group and sex interaction is not significant at the .05 level. No additional analyses

were needed. The null hypothesis and all subhypotheses were not refuted.

Hypothesis 3a. There will be no significant interaction of sex with VEG participant and control subject scores.

Hypothesis 3b. There will be no significant interaction of race with VEG participant and control subject scores.

Hypothesis 3c. There will be no significant interaction of institution with VEG participant and control subject scores.

Hypothesis 3d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

Hypothesis 3e. There will be no significant interaction of VEG leader with VEG participant scores.

Hypothesis 4. There will be no significant differences between VEG participant subjects and control subjects in self-recognition of work potential and aspiration as measured by subscore 3 of the Employability Perceptions Inventory (EPI-3).

The only MANOVA F value significant at the .10 level was treatment group and sex interaction ($F = 3.20$). The obtained F value of .01395 from the univariate analysis of variance (Table 2) for treatment group and sex interaction is not significant at the .05 level. No additional analyses were needed. The null hypothesis and all subhypotheses were not refuted.

Hypothesis 4a. There will be no significant interaction of sex with VEG participant and control subject scores.

Hypothesis 4b. There will be no significant interaction of race with VEG participant and control subject scores.

Hypothesis 4c. There will be no significant interaction of institution with VEG participant and control subject scores.

Hypothesis 4d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

Hypothesis 4e. There will be no significant interaction of VEG leader with VEG participant scores.

Hypothesis 5. There will be no significant differences between VEG participant subjects and control subjects in attitudes of alienation from the world of work as measured by scores on the World of Work Alienation Inventory (WWAI).

The obtained F value of 5.40830 from the univariate analysis of variance (Table 2) for treatment group and sex interaction is significant at the .05 level (.0210). On the same criterion the following subhypotheses were tested:

Hypothesis 5a. There will be no significant interaction of sex with VEG participant and control subject scores.

The obtained F value of 5.40830 from the univariate analysis of variance (Table 2) for treatment group and

sex interaction is significant at the .05 level (.021). Hypothesis 5a was therefore refuted. An examination of means for posttest scores as reported in Table 3 indicates significantly higher scores for male experimental subjects than male control subjects. The obtained multivariate F value of 2.28577 (Table 8) was significant at the .05 level for treatment group difference scores and sex interaction. A follow-up univariate analysis of variance indicated an F value of 7.10868 (Table 9), significant at the .05 level (.0088). Difference score means (Table 10) significantly favored male experimental subjects.

Hypothesis 5b. There will be no significant interaction of race with VEG participant and control subject scores.

The obtained multivariate F value of .86124 (Table 1) was not significant. The null hypothesis was not refuted.

Hypothesis 5c. There will be no significant interaction of institution with VEG participant and control subject scores.

The obtained multivariate F value of 1.6058 (Table 1) was not significant. The null hypothesis was not refuted.

Hypothesis 5d. There will be no significant interaction of pretesting with VEG participant and control subject scores.

The obtained multivariate F value of 1.54842 (Table 1) was not significant. The null hypothesis was not refuted.

Hypotheses 5e. There will be no significant interaction of VEG leader with VEG participant scores.

MANOVA procedures performed on posttest scores (Table 1) and difference scores (Table 8) with treatment group interaction at four levels (three VEG leaders and controls) provided no evidence of significant interactions at the .10 level of significance. No further analysis was therefore necessary. The null hypothesis was not refuted.

Hypotheses 6. There will not be a 50% frequency of next steps remembered by experimental subjects within two weeks after participating in the VEG program as measured by a self-report questionnaire.

Sixty of the 94 experimental subjects that responded to the question "Do you remember what your next step was going to be?" indicated "yes, as reported in Table 15. This is equivalent to 64%. A 95% confidence interval for the true population fraction that indicated "yes" in response to the question is .54 to .74. The 50% frequency specified in the null hypothesis is below the 95% confidence interval. The null hypothesis was therefore refuted.

On the same criterion the following subhypotheses were tested:

6a. There will be no significant differences between males and females.

The multivariate analysis of variance indicated a chi square value of 1.2586 which was not significant at the .05 level. The null hypothesis was therefore not refuted. See Table 14.

6b. There will be no significant differences between blacks and whites.

The multivariate analysis of variance indicated a chi square value of 1.2464 which was not significant at the .10 level. The null hypothesis was therefore not refuted. See Table 14.

6c. There will be no significant differences between institutions.

The multivariate analysis of variance indicated a chi square value of 6.8271 which was significant at the .10 level. The univariate analysis of variance indicated a chi square value of .7321, significant at the .05 level, favoring Lancaster. The null hypothesis was therefore refuted. See Table 14.

6d. There will be no significant differences between subjects according to VEG leader.

The multivariate analysis of variance indicated a chi square value of 6.4968 which was not significant at the .10 level. The null hypothesis was therefore not refuted. See Table 14.

6e. There will be no significant differences between pretest and non-pretest subjects.

The multivariate analysis of variance indicated a chi square value of 4.654 which was significant at the .10 level. The univariate analysis of variance indicated a chi square value of .8688 which was not significant at the .05 level. The null hypothesis was therefore not refuted. See Table 14.

Hypothesis 7. There will not be a 30% frequency of next steps taken by experimental subjects within two weeks after participating in the VEG program as measured by a self-report questionnaire.

Twenty-eight of the 94 experimental subjects that responded to the question "Have you had a chance to take your next step?" as reported in Table 15, indicated "yes." This is equivalent to 64%. A 95% confidence interval for the true population fraction that indicated "yes" in response to the question is .21 to .39. The 30% frequency specified in the null hypothesis is within the 95% confidence interval. The null hypothesis was therefore not refuted.

On the same criteria the following subhypotheses were tested:

Hypothesis 7a. There will be no significant differences between males and females.

The multivariate analysis of variance indicated a chi square value of 1.2586 which was not significant at the

.10 level. Hence, the null hypothesis was not refuted.

See Table 14.

Hypothesis 7b. There will be no significant differences between blacks and whites.

The multivariate analysis of variance indicated a Chi square value of 1.2464 which was not significant at the .0 level. Hence, the null hypothesis was not refuted.

See Table 14.

Hypothesis 7c. There will be no significant differences between institutions.

The multivariate analysis of variance indicated a chi square value of 6.827 which was significant at the .10 level (.0329). The univariate analysis of variance follow-up indicated a chi square value of .8893 which was not significant at the .05 level. Hence, the null hypothesis was not refuted. See Table 14.

Hypothesis 7d. There will be no significant differences between subjects according to VEG leader.

The multivariate analysis of variance indicated a chi square value of 6.4968 which was not significant at the .10 level. Therefore, the null hypothesis was not refuted.

See Table 14.

Hypothesis 7e. There will be no significant differences between pretest and non-pretest subjects.

The multivariate analysis of variance indicated a chi square value of 4.6554 which was significant at the .05 level (.0975). The follow-up univariate analysis of variance chi square value of 4.5416 was significant at better than the .05 level. Therefore, the null hypothesis was refuted. Non-pretest subjects took significantly more (.03) next steps, as reported in Table 15.

CHAPTER V

SUMMARY, DISCUSSION, LIMITATIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to investigate the effects of a Vocational Exploration Group (VEG) experience on three dimensions of the career development of incarcerated youths. The study investigated seven main hypotheses and 35 subhypotheses related to the career maturity attitudes, employability perceptions, world of work alienation attitudes, and exploratory career behaviors of incarcerated youths in two state of Florida Youth Service Program institutions for delinquents who either did or did not participate in a two and one-half hour VEG experience.

Incarcerated youths were randomly selected from the rosters of the two institutions to comprise an initial sample of 240 subjects. Alternate subjects used to provide replacements as needed were also selected randomly. Within each institution 120 youths were randomly assigned to one of four groups of 30 subjects each. One of the

groups was pretested, received the VEG experience, and was posttested. A second group received the VEG experience and was posttested only. A third group was pretested and posttested but did not participate in any type of treatment. The fourth group was posttested only and did not participate in any type of treatment. The subject assignment procedure followed was in accordance with the resulting Solomon four-group research design which was replicated in each institution. The completed data collected on 214 subjects consisted of scores on seven dependent variable measures: career maturity attitudes (CMI), job personalization (EPI-1), movement toward job personalization (EPI-2), self-recognition of work potential and aspiration (EPI-3), attitudes of alienation from the world of work (WWAI), frequency of exploratory career behaviors ("next step") remembered and frequency of exploratory career behaviors ("next step") taken.

The duration of the study was four weeks. Half the experimental and half the control group of the first institution were administered the preexperimental instruments. During the first week two days of VEG sessions conducted by three leaders for those subjects assigned to experimental groups followed. In the third week the postexperimental instruments--the same forms of the CMI, EPI, and WWAI--were administered to subjects of

the first institution. Only the VEG participant subjects were administered the "Next Step" questionnaire. The same procedures described above for the first institution were replicated in the second institution during the second and fourth weeks of the study.

An examination of the multivariate analyses of variance procedures performed on posttest scores of the dependent variable measures of CMI, EPI-1, EPI-2, EPI-3, and WWAI were utilized in the investigation of treatment group interaction with the independent variables of institution, pretested status, sex, and race. Significant MANOVA F values indicated the need for further univariate analysis of variance investigation for each dependent variable measure. Pre/posttest scores for the 119 subjects for whom complete data were obtained were utilized in a similar analysis of difference scores.

The effects of the independent variables were determined from the obtained data. MANOVA procedures were performed on dependent variable posttest and difference scores for treatment group interaction with independent variables. Treatment group was considered at four levels (three leaders and control) and two levels (experimental/control). There was no evidence at the .10 level of any VEG leader interaction provided by any of the analysis procedures performed on the obtained data.

MANOVA examinations of posttest (.009) and difference scores (.05) for treatment group interaction with independent variables indicated significant sex interactions at the .10 level. ANOVA follow-up for these treatment group and sex interactions indicated significance at the .05 level for the WWAI. Examination of posttest and difference score means indicated significantly (.05) higher means for male experimental subjects than male controls. Difference scores were significantly greater for male experimental subjects than male controls and all female subjects. There were no significant pretest differences at the .05 level. MANOVA examination for main effects indicated significant posttest main effect differences at the .10 level for sex, race, and institution. Examination of follow-up ANOVA procedures and mean differences indicated significantly higher posttest mean scores at the .05 level on the CMI for females and whites, on EPI-1 for males, and on the WWAI for Lancaster subjects and whites. Significant difference score MANOVA main effects at the .10 level were indicated for institution. Examination of the follow-up ANOVA procedures and mean differences for difference scores indicated significantly greater differences at the .05 level on EPI-3 (.0085) for Lancaster subjects with a significant (.05) decrease from pre- to posttest.

Examination of MANOVA chi square values for next steps remembered and taken were significant at the .10 level for institution (.03) and pretested status (.08). Examination of follow-up ANOVA procedures indicated that the 77% of Lancaster subjects who remembered their next steps and the 40% of the non-pretested subjects who took their next step was significant at the .05 level. The total number of experimental subjects that remembered their next step was 61 of a possible 95, or 64%. The calculated 95% confidence interval of .54 to .74 exceeded the hypothesized 50%. Null Hypothesis 6 was therefore not rejected. The total number of experimental subjects that took their next step was 28 of a possible 94, or 30%, which did not exceed the 95% confidence interval of .21 to .39 necessary for rejection of the hypothesis. Additionally, 78% of the experimental subjects indicated a wish to see a counselor by marking a box at the bottom of the Jobs Inventory form used in the formulation of the next step.

Discussion

WWAI

A vocational exploration group experience has been shown to have some effects on the world of work alienation attitudes of incarcerated youths, as measured by the WWAI.

The significant interaction of sex with treatment group supports VEG effectiveness with males. This is evidenced by posttest and difference score analyses in two institutions for delinquent youths. Further support comes from the lack of significant differences on pretests. The strength of the Solomon four-group research design is apparent in the ability to control for pretest differences as well as other sources of internal and external invalidation. The lack of pretest differences supports the randomization of subject assignment.

The lack of differences by VEG leader supports the standardization of the program and leader training.

CMI

Higher posttest main effect scores on the CMI for females and whites is consistent with another study of the VEG utilizing this instrument (Cross, 1975). Males had the lowest mean scores of the four groups. It is possible that since they had the lowest career maturity attitudes, they were most amenable to the treatment. Since males had the lowest career maturity attitudes and were the only group definitely affected by the treatment, it is plausible that the VEG is bringing about initial changes that precede changes in longer term, more stable attitudes. The lack of significant difference score changes on the CMI supports stability of the measure.

Main Effects

Main effects differences on EPI-1 posttest scores significantly favor males. EPI-1 an intended measure of job personalization through the understanding of job functions, demands, and satisfiers. Caution in interpreting this difference is warranted, although speculation might include a greater emphasis on man as the breadwinner and hence the awareness of this concept. Males in this population might have the awareness of job personalization without the willingness to engage in work behaviors. Main effects posttest scores on the WWAI also significantly favored subjects at Lancaster and whites. This means blacks were lowest on the WWAI and the CMI. The question arises as to the relationship of CMI to WWAI scores, or career maturity attitudes and alienation attitudes for blacks. Lancaster subjects' higher posttest main effects scores on the WWAI are difficult to interpret, although Lancaster experimental subjects remembered significantly more next steps than McPherson experimental subjects. If a relationship exists between the occurrences, it is not apparent.

Analyses of difference score main effects show a significant decrease from pre- to posttests on EPI-3. This subscore of the EPI focuses on clarity of self-perceptions toward work potential and choice aspirations.

It is interesting to note that while the mean difference scores at Lancaster dropped significantly, the scores at McPherson rose, although not significantly. Interpretation of this difference is approached most reluctantly (especially in light of significantly more next steps being remembered by experimentals at Lancaster). Only as a speculation the possibility might be considered that clarity of self-perceptions toward work potential might have decreased because of further examination by subjects who hadn't seriously considered this concept before, although this does not explain the difference from McPherson.

Next Step

Next steps were remembered by 64% of the VEG experimental participant subjects with 77% at Lancaster and 52% at McPherson. It seems to be important that 64% of the VEG participant subjects indicated recollection of their next step two weeks after the VEG. The next step is a specific career exploratory behavior formulated by each participant with the intention of moving closer to a personalized job goal. This recollection might indicate a successful formulation of a job goal for the youth. It certainly represents a step in the right direction.

This significant difference is also difficult to interpret. However, for the most part, groups began late at McPherson and subjects were anxious to leave at the time corresponding to their regular class periods. Since the next step was the last activity in the program, attention of the subjects could have been less concentrated on the formulation of the next step than would have been desirable. Groups at Lancaster, on the other hand, began much more promptly and terminated on time.

Of those subjects who remembered their next steps, less than half reported taking the next step. The percentage of those who remembered and then took the next step was greater at McPherson than Lancaster. The percentage of those who took their next step significantly favored non-prettested subjects. Although the difference between the 18% prettested subjects and 40% non-prettested subjects is significant, it is noteworthy that the 95% confidence interval for the total population fraction of subjects taking the next step is from .21 to .39. A possible explanation of this difference, though, might have been related to the testing situation itself. Many subjects appeared resistant to the testing situation. The self-report questionnaire used to determine next-step frequencies was the last instrument administered. Non-prettested subjects might have been less reluctant to

thoughtfully complete the questionnaire, as they were being exposed to the experimenter during the testing session for the first time.

The 30% of subjects that took the next step compares favorably with the 34% of high school students that took the next step as reported by Cross (1975). The percentage might have been higher with some form of follow-up as evidenced by the 78% of VEG participant subjects indicating a wish to see a counselor by marking a box at the bottom of the Jobs Inventory form used in the formulation of the next step.

Limitations

1. There was a loss of 36 subjects from the original sample. Subject loss was due to absence from the treatment session, pre- or posttest session for the following reasons: There were 24 subjects in "lock-up," meaning they were confined to a cell and not permitted to partake in any activity; two subjects were away on home visits; and the answer sheets of six subjects were incomplete.

2. There was a lack of control over subjects in at least one VEG treatment group. The leader for one group at the Lancaster institution reported having difficulty in proceeding through the tasks because of

the disruptive nature of subjects. This may have influenced the effects of the treatment for other subjects in that group.

3. There was a repeated problem with the time factor at the McPherson institution. Groups were late in beginning, and as a result, leaders reported feeling rushed to complete the program by the end of the corresponding school session. This may have affected results to an unknown extent.

4. Subjects' institutional routine was broken without prior notice for pre- and posttesting sessions as well as VEG sessions. This may have affected attitudes toward testing and treatment.

5. There were minor differences in testing sessions at the two institutions. Pretesting at the McPherson institution was conducted in one large group by the experimenter on one day and in a small group for alternate replacements conducted by an institutional staff worker on the following day. All pretesting was conducted by the experimenter at Lancaster in small groups. All posttesting was conducted by the experimenter in small groups; however, differing institutional personnel were present during the sessions. On several occasions disruptions occurred and were dealt with in varying manners and styles differing according to the situation and staff

member present. These factors may have influenced results to an unknown extent.

Recommendations

The following recommendations are proposed as a result of this study:

1. Other studies of the VEG with this population should be conducted investigating interactions at the four-way level to include institutional differences, sex, race, and treatment/control groups. This study has shown evidence of VEG effectiveness with male subjects. This evidence provides a basis from which further investigation might reveal more specific effects of the VEG with this population.

2. Other studies of the VEG with this population should be conducted using behavioral measures and possibly some form of systematic subject observation. The present investigation utilized self-report measures. Objective and independent assessment would provide further support of the effectiveness of VEG.

3. Other studies of the VEG with this population might compare subjects grouped according to race, sex, institutional rank, residential cottage, vocational maturity level, and readiness or willingness to experience counseling.

4. Other studies of the VEG with this population might compare the standardized short form of the program with the program broken into two separate sessions. The long form of the program might also be investigated with this population. The length of a session may be related to subjects' reactions to the experience. The attention span of this population of youths appeared to have been quite short. Briefer sessions may provide evidence of greater effectiveness.

5. The VEG should be incorporated into a comprehensive career development educational and counseling program for incarcerated youths.

6. Careful consideration should be given to the surrounding facilities where VEG sessions are conducted. In this investigation the smaller, quieter, and more isolated rooms seemed to enhance the experience while keeping distractions at a minimum.

7. A variety of follow-up procedures should be investigated in conjunction with the VEG. One possible follow-up session might include a complete review of the next step formulated by each individual with progress assessment and additional suggestions and recommendations elicited from the group.

8. Studies of the VEG with this population should give consideration to preparing subjects for the experience.

Institutional routine appeared to be important to this population. Some subjects seemed displeased with disruption of their everyday activities. If subjects are made aware of deviation from regular routine in advance, the disruption may be less abrupt.

9. Future studies of the VEG should investigate more specifically the effects of the program with female subjects as this study did not demonstrate effectiveness with this group. A questionnaire might be utilized to gain information concerning what was liked about the experience and what particularly was disliked.

Conclusions

A brief Vocational Exploration Group experience had some positive effects on the attitudes of incarcerated youths in two institutions for delinquents. Attitudes of alienation from the world of work improved for males receiving the treatment. This improvement was evidenced through analysis of posttest and difference scores in two institutions. It is noteworthy that none of the pretest scores were significantly different. The design of the study was the Solomon four-group model which controls extremely well for sources of internal and external invalidation. Rigorous application of both research design and statistical analysis procedures

further highlights the obtained evidence of significant effectiveness of the VEG with this population. Another major effect of VEG was the formulation of a specific personalized "next step" plan of action intended to bring participants closer to a chosen job goal. Next steps remembered by 64% of the experimental VEG participant subjects two weeks after the treatment indicated the impact of the experience on the subjects. This reported recollection certainly represents a step in the right direction for these youths. Further investigation is warranted to find ways of increasing the likelihood of implementation of the next step as well as to clarify the relationships of VEG interaction with race, sex, and institution.

Short-term treatment can be effective with incarcerated youths as is evidenced by this study. Additional research of other short-term treatments with this population may also be worthwhile.

APPENDICES

APPENDIX A

VOCATIONAL EXPLORATION GROUP TASKS

Short Program

1. Purpose of Group. Leader briefly explains purpose and structure of the group.
2. Introductions by Members. Members pair up for a few minutes of conversation, then turn back to the circle and introduce their partner to the rest of the group.
3. Million Dollar Story. Each member introduces himself by telling what he would do if he had a million dollars tax free.
4. Job Matrix. Leader uses chart depicting job functions -- data, people, things -- and job entry -- train on the job, special skill, or college -- to encourage discussion and stimulate members to think of jobs and place them in the appropriate cell.
5. Naming Most and Least Liked Jobs. Each member tells the group a top and a bottom job for himself -- the job he would most and least like to have if circumstances were right.
6. Cool Seat. Each member in turn sits in the extra chair while other group members give him their impressions of a top and a bottom job for him.
7. Response to Cool Seat. Leader facilitates discussion on member's feelings and thoughts during and about the Cool Seat experience.
8. Job Inventory Part I. Members complete section of the Job Inventory as a record of their thinking of jobs for themselves at that point in the group. Each job listed is assessed in terms of Job Function and Entry Level.
9. Wall Posters and Pictures. Group members generate lists of jobs and place them on a chart under the appropriate job function category. Memory and pictures are used to stimulate thinking.

10. Job Information Booklets. Leader distributes booklets, explains contents. Each member finds five more jobs not listed on charts and records them in the appropriate category on the wall chart.

10 Minute Break

11. Job Satisfiers. Leader introduces concept of satisfaction derived from work for discussion. Members select most important, least important, and a middle job satisfier for themselves from stimulus chart.
12. Interest Skills. Leader introduces idea of interest skills as job demands for discussion. Members select most important, least important, and a middle-interest skill for themselves from chart.
13. Jobs and Training. Members name jobs for themselves that they would most and least like in categories of "need more training" and "have enough training."
14. Job Inventory Part II. Members complete Section II of the Job Inventory with jobs that reflect their thinking in the group at this point and mark each job listed in terms of its job function, job entry level, satisfiers possible and interest skills demanded.
15. Job Choice Summary. Members name a job that seems to meet their needs in all areas of job choice discussed and use the summary chart to describe how their choice fits them in the areas of job function, entry level, satisfiers, and interest skills.
16. Expanded Choice. Each member names three more jobs that might meet his needs in each of the four choice areas.
17. Next Step. Each member decides on his goal area and with the assistance of other group members decides on a specific next step toward that goal. Members write what they will do, how they will do it, and when they will do it.
18. Closing. Members re-read their "Next Step" for rest of group to react to and/or make additional suggestions. Arrangements are made for any follow-up meetings.

APPENDIX B

EMPLOYABILITY PERCEPTIONS INVENTORY

Directions: This is a survey of how people look at the world of work. I am going to read some statements to you and I want you to answer Yes, No, or Don't Know to each statement. This is a sample of what the questions will be like:

Mechanics work with tools and machines.

Please answer Yes, No, or Don't Know. Do you understand what I want you to do?

- I. 1. Jobs demand more skills than interests.
2. Most people could do three or more jobs and would like them equally well.
3. There is one right job for a worker.
4. Gaining friends and teamwork are reasons why people work.
5. Some jobs give no real satisfaction.
6. Good pay will make a worker happy.
7. Except for skills, jobs make similar demands on workers.
- II. 8. Nurses work with people; bookkeepers work more with things.
9. All workers need supervision to be more distant.
10. Cab drivers and cabinet makers gain craftwork satisfaction.
11. Plumbers work more with things; air-line pilots, more with people.
12. Grocery clerks need interest and skills in numbers; personal relationships are more important for court reporters.

13. Close supervision is a worker satisfaction.

III. Directions: Following are some statements. Mark in the box on each statement that indicates how true the statement is for you. Mark as follows: 5--Very Sure; 4--Sure; 3--Fairly Sure; 2--Uncertain; 1--Don't Know.

Example: I know what job I want.

Put an X in the box that is the closest to how sure you are that the statement is true for you.

14. I know what interests and skills are demanded by the jobs I want.
15. I can name three jobs for which I have interests and skills.
16. For the job I want, I can name three skills required.
17. I know three jobs I would want that require more training.
18. People I know would agree with my choice of a job.
19. Of the jobs that I want which would require more training, I know which one I would like most and which I would like least.

APPENDIX C

WORLD OF WORK ALIENATION INVENTORY

DIRECTIONS: Listed below are a number of statements about the world of work. Read each one and decide how much you agree or disagree with the statement. Circle the letters that show whether you "strongly agree" (SA), "agree" (A), "are undecided" (U), "disagree" (D), or "strongly disagree" (SD).

1. I have enough training to get a job.
2. I don't know how to get information on jobs.
3. I know what kind of job would make me the happiest.
4. Work can be satisfying.
5. Having a job is a good way to get what I want out of life.
6. I get confused when I think of the many different kinds of jobs there are.
7. It is possible to get a job that would be fun.
8. Getting paid is the only reason for having a job.
9. I know what steps to take in order to get a job.
10. Work can be interesting.
11. I like to imagine myself doing a job I enjoy.
12. Learning about jobs is a drag.
13. If I don't have enough skill for a certain job, I can get more training.
14. Life is dull for people who have full-time jobs.
15. Hard work doesn't pay off.
16. There is little hope of being successful in the world of work once you have been in trouble with the law.
17. I have the ability to do a job well.

18. I would never want to have a job if I didn't have to.
19. A person like me has little chance of getting a good job.
20. I would be proud of myself if I had a good job.
21. I am going to get more training in order to get a job that is right for me.
22. Having a steady job would keep me from doing the things I want to do.
23. It is difficult to get a good job if you have been arrested.
24. People who work have to take too many orders.
25. There is no right job for me.

APPENDIX D

REPORT ON NEXT STEP

1. Two weeks ago you participated in a Vocational Exploration Group. At the end of the group you decided on a next step to take. Do you remember what your next step was going to be? (Circle one.) YES NO If so, write it down here.

2. Have you had a chance to take your next step? (Circle one.) YES NO If you said "yes," write here what you did and what happened. If you said "no," could you list some of the reasons why you have not been able or wanted to take your next step?

APPENDIX E

FORMAT OF A REALITY GROUP THERAPY MEETING

THE GROUP MEETING

The meeting begins promptly at a specified time each week day. The leader should be prepared with the group notebook and ready to begin on time. After stating problems and prior to deciding who gets the meeting, the group may have to give recommendations for such things as program reviews, off-campus trips, telephone calls, etc. Once these matters have been handled, the focus of the meeting will be directed toward assisting a group member with a problem. The meeting is divided roughly into three parts:

REVIEW OF PROBLEMS

Part I (first five minutes).

The meeting begins with a "review of the problems." Each group member, in turn, mentions the problems he or she is working on and any difficulties or problems experienced since the last meeting. In requesting the meeting, members may briefly describe the problem they wish to receive help with.

After stating the problems of the day, and taking recommendations, the group decides who gets the meeting. The student whose problem is most pressing gets the meeting.

POSITIVE PEER HELP

Part II (fifty minutes).

Most of the meeting is directed toward helping one group member with his or her problems. Fifty minutes is not a great deal of time to discuss and assist one group member with a problem if the group is really concerned and genuine in its efforts.

The techniques and methods of guiding the interaction of the group members is acquired through training and supervision. These are topics for discussion in group

leader training sessions and will not be elaborated upon here. Suffice it to say, that the presence of the adult group leader is to assist the group members.

THE GROUP MEETING SUMMARY IS AN INSTRUCTIONAL DEVICE

Part III (last five minutes).

The group leader uses the last five minutes to summarize the meeting. The real skill of the group leader is demonstrated in the summary. The leader uses the summary to:

1. Review what took place and what has been accomplished in the meeting.
2. Acknowledge participation of various group members (or lack of it).
3. Re-emphasize positive comments by students and their concern for the student who had the meeting.
4. Encourage the group to help each other outside of the meeting.
5. Reflect on the group attitude and undercurrents of what has taken place.
6. Recognize and acknowledge change, or the effort to change, on the part of individual members.

THE SUMMARY REQUIRES CONSTANT ATTENTION

The summary is an area which requires the constant attention of the group leader and should be carefully examined as group leaders work to improve their effectiveness.

APPENDIX F

INFORMATION ON THE FLORIDA JUVENILE JUSTICE SYSTEM*

Intake Referrals by Fiscal Year

	72/73	73/74	74/75
Delinquent	66,753	71,599	106,822
CINS**	37,667	41,017	38,671
TOTAL	104,420	112,616	145,493

Juvenile Dispositions--FY 74-75

Most serious offense charged:

Crimes against persons	7%
Crimes against property	41%
CINS (truancy, runaway, ungovernability)	28%
Victimless crimes	23%
Dependency and Preventive Counseling	1%

Commitments--FY 74-75

Crimes against persons	13%
Crimes against property	51%
Victimless offenses	28%
CINS	8%

Total number of commitments = 4,899

*Florida Youth Services Program Office (1976).

**Child in need of supervision.

Training School Population--Four School Total, July, 1972
through July, 1975

July, 1972	1,507	July, 1974	1,147
July, 1973	1,087	July, 1975	1,689

Training School Populations

Average Daily Population	1971	1972	1973	1974	1975
Dozier	488	457	352	408	603
Okeechobee	515	508	395	384	555
McPherson	262	276	194	172	154
Lancaster	92	142	149	164	157

Training School Recidivism*

FY 68-79	48%
FY 69-70	49%

*FY 68-69 rate is based on a random sample of 246 youths released from training school in FY 68-69. FY 69-70 rate is based upon a random sample of 100 youths released from training schools in 1970. The definition of recidivism includes all cases of return to youth services commitment, commitment to county jail, adult probation, or commitment to the Department of Offender Rehabilitation during the three years immediately following release from training school.

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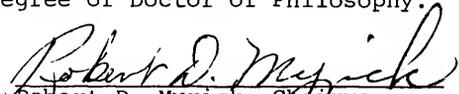
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BIOGRAPHICAL SKETCH

Corey Stephen Bercun was born in Brooklyn, New York, on December 12, 1949. He was graduated from North Miami Senior High School in June, 1967. He received the Bachelor of Arts degree with honors in psychology from the University of Florida in 1971. In 1971 he entered the counselor education program at the University of Florida. Upon receiving the Specialist in Education degree in 1973, he entered the doctoral program in guidance and counseling at the University of Florida.

Corey Bercun is currently employed as Alachua County Team Director for Project CREST--Counseling, Research, Educational Specialist Teams--working with juvenile delinquents. He has worked with Project CREST since 1973. He has received training in gestalt therapy and psychodrama. He is a member of the Association for Humanistic Psychology, a certified instructor in Parent Effectiveness Training and Teacher Effectiveness Training, and a certified trainer in VEG.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Robert D. Myrick, Chairman
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

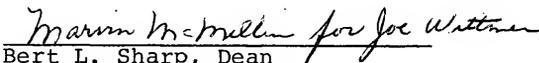

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