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ABSTRACT

Existing data on youth employment and career guidance programs were analyzed to identify factors that are most important in producing individuals who can find and keep a job. The data were obtained longitudinally from 419 youth employment training program participants and from 356 non-participants over approximately three years beyond the time of training program completion. Both descriptive and relational analyses were carried out. Findings showed significantly more months of employment, greater job satisfaction, and more months of education/training for the participants. These differences were sustained after controlling for the effects of age, sex, race/ethnicity, economic status, local unemployment rate, and preprogram levels of education and reading ability. The employment effects were greatest in programs that emphasized work experience or on-the-job training. Participant-control differences in months of employment were greater for minority than non-minority youth and greater for females than males. Background, previous education, and local unemployment rates were shown to have a greater effect on economic outcomes than the effect provided by program participation. It was concluded that investment in youth employment training programs can be expected to have a direct payoff in reducing youth unemployment. (Thirty tables and 19 figures are included. The followup questionnaire is appended.) (Author/YLB)

Factors Affecting Job Search Behavior and Employment Outcomes for Youth

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Abstract

A three-year followup of a national sample of 419 youth employment training program participants and 356 non-participants of comparable background showed significantly more months of employment, greater job satisfaction, and more months of education/training for the participants than the non-participants. These differences were sustained after controlling for the effects of age, sex, race/ethnicity, economic status, local unemployment rate, and preprogram levels of education and reading ability. The employment effects were greatest in programs which emphasized work experience or on-the-job training. Participant-control differences in months of employment were greater for minority than non-minority youth, and greater for females than for males. Despite these significant results, background, previous education, and local unemployment rates were shown to have a greater effect on economic outcomes than did program participation.

It was concluded that investment in youth employment training programs could be expected to have a direct payoff in reducing youth unemployment.

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INTRODUCTION

Despite some two decades of national attention and resource commitment, aimed at alleviating the problem of youth unemployment, prospects for adolescents and young adults in the labor market remain grim--especially for disadvantaged minority teenagers. The persistence of high youth unemployment rates cannot be attributed to changes in overall labor market demand alone, since the rates have not only risen dramatically during periods of economic decline, but have remained at, or near, those higher levels over periods of economic recovery. The most striking change since the 1950's has been the widening gap between unemployment for White and minority group (especially Black) teenage youth. Although the two groups were comparable in the mid 1950's (unemployment rates of some 13% to 14% for both White and Black teenage males), they then diverged sharply with a rise to approximately 25% unemployment for Blacks in the 1960's, 30 to 35% by the mid 70's, and culminating in rates that hovered at all-time highs of approximately 45% for Black youth in 1982. White teenage males, by contrast, showed little change in the 1960's and 1970's from the 1950's rates and, although their unemployment levels in 1982 reached the 20 to 24% level, this still was half the rate for Black teenage males (U.S. Department of Labor, 1982). As of March 1984, during a period of economic recovery, a Black youth unemployment continued high, at 46% rate, 2 1/2 times the White youth unemployment rate of 19.9% (Roosevelt Centennial Youth Project, 1984).

The causes of youth employment problems have been sought in several areas. Some individuals feel that national and local economic conditions are the main culprit, others blame the nature of the work force. Demand for workers in an increasingly information-based economy dictate the need for more complex skills. At the same time, the growing service occupations, which provide opportunity to disadvantaged youth of lower academic achievement levels (e.g., in fast-food restaurants), are invariably the low paid "dead end" jobs that provide few prospects for training and advancement.

Added burdens to the absorption and retention of disadvantaged youth, even in entry-level jobs, can be found in work-force population changes in the form of increasing numbers of illegal aliens, a large proportion of whom tend to be young with minimal skills. Such workers tend to settle in the urban areas already occupied by a large proportion of minority, disadvantaged populations and are likely to increase the competition for the decreasing number of jobs available in those already high unemployment areas.

There are also increases in the work-force entry of mature women, older workers, and technologically displaced blue-collar workers (U.S. Department of Labor, 1982), adding further to the competition for entry-level and part-time jobs. In addition, while the total size of the youth labor force will decrease by 15% to 20% during this decade, predictions are for a higher proportion of disadvantaged minority youngsters to enter the work force. For Black and Hispanic youth this increase is expected to be at least 7% (Rodriguez, 1980).

This variety of structural-demographic influences operating on youth employability are politically and socially so broad in scope, and operate over such an extended time frame, that they are difficult to change through policy initiatives.

The education-employment linkage to explain youth unemployment problems can be considered to have three main components:

(1) The Formal Education Link--has been seen as the primary causal component in many earlier studies. Contrasts of employment outcome data for high school graduates and dropouts provides some of the most compelling evidence for the importance of educational attainment. Higher unemployment rates, lower level jobs with lower hourly wages, and declining labor force participation have been shown, in detailed analyses, to be the fruits of inadequate educational attainment (Sum, Harrington & Simpson, 1983). Using some of the most recent information available from the U.S. Department of Labor's National Longitudinal Survey and Current Population Survey, those authors demonstrate that the major proportion of the progressive decline in the labor market position of youth over the past 20 years is attributable to the dropout subgroup of that population, with young Black males showing the most dramatic deterioration. The effects of educational attainment have become even more critical over time (i.e., the "widening gap"); high school graduates in the late 1960's were 30% more likely to be employed than dropouts, shortly after leaving school. The advantage for graduates increased to 61% by the early 1980's. Predictably, the effects on income for young high school graduates in contrast to dropouts, have been similar, with the relative difference being greater among the males than among females.

Still another consequence of less formal education is a "circularity" of effect that leads those of less attainment to reduced chances of success in work-oriented training programs and in subsequent post-training employment. Thus, those with more education at training program entry benefit more in terms of chances of securing employment, length of employment during the post program period and level of earnings (Maller, 1980; Sadd, 1983; Rock et al., 1982).

(2) The Basic Skills-Achievement Link--is assumed to represent the mediating effect that forges the employment-education link, with reading ability specifically identified as the academic skill that influences eventual employment success. An inadequate level of literacy (i.e., functional illiteracy) has been implicated directly as the basis for lower annual

earnings (Meyer, 1982; Sadd, 1983), as well as other forms of employment deficiency and with the likelihood of going on to further education and training (Rock & Freeberg, 1981) The functional illiteracy problem has historically been greater among minority youth than among Whites and the disparities between the groups in this essential skill has been growing (Berlin, 1983). In a society where an increasing proportion of available jobs are becoming more complex and academic requirements are increasing, similarly, the education-basic skills-employment linkage would seem evident, even if not wholly understood in terms of other intermediate and associated variables.

(3) The Job Search-Career Awareness Link--has involved programmatic efforts and associated research aimed at pinpointing and overcoming deficiencies in "world-of-work" awareness and skills on the part of economically and educationally disadvantaged minority youth who, in contrast to Whites, are found to score as much as 30% lower on standard measures of those skills (Parnes & Kohen, 1975).

Relationships of modest size have been shown to exist between employment success and vocationally-oriented knowledges and attitudes regarding job requirements, appropriate behaviors in an employment setting, attitudes toward the value of work, feelings of vocational self-confidence and methods of searching for employment. Economically disadvantaged youth, who initially scored higher in these world-of-work skills at training program entry tended to do better in terms of subsequent social and vocational adjustments, as did those whose scores improved significantly on such measures following program participation (Freeberg & Rock, 1980, 1981; Rock & Freeberg et al., 1982). It was also found that greater gains in such skills tended to be achieved by those with higher reading levels. Similar findings of intellectual ability as an influence on world-of-work attitudes and knowledge have been reported elsewhere (Mott & More, 1980; Parnes & Kohen, 1975).

To date, significant changes in world-of-work skills, where achieved, have been somewhat inconsistent and show only modest practical effects. More effective and appropriate curricula for achieving change in most of these abilities, remain to be developed and systematically evaluated. The one exception is that of job search techniques, the vocational orientation skill that has received sustained attention in training programs and shows the greatest promise for improving the vocational prospects of minority youth. This may result from the fact that it is a highly "functional" activity that encompasses components of other career development skills and because it is the performance area in which many of those other skills are brought to bear. The primacy of job search behaviors in the transition from student-to-worker, has been stressed in a review of the education-work relationship by Becker (1979). Their unique value as skills for minority youth has also been discussed by Johnson (1982), who points out that most research in this area is specific to white collar professionals, so that results may not be applicable to disadvantaged youth populations. Enhanced job search capability (at least for short-term employment outcomes) is claimed for several training programs in which there was a major focus on job search methods (Brandeis University,

1982; Holden, 1980; Leone, 1980). There are, however, deficiencies that remain in such efforts regarding proper measurement of the job search skills construct and patterns of outcome performance that would best define criteria of demonstrated job search capability.

Background

Because of the evidence relating to education and employment, attempts to modify or correct the factors that are linked to youth unemployment have fallen within the purview of the nation's educational system. Both the formal academic institutions, at all levels, and governmental training agencies (vocational rehabilitation, military and veterans training, and subsidized employment programs, such as those formerly under CETA, now under JTPA) have all directed significant portions of their resources toward coping with employment problems of adolescents and young adults—each from the perspective of their particular institutional traditions and mandates. Their cumulative effects have, unfortunately, not proven to be as efficient or effective as desired because: "Each system has developed its own curricula, tests and competency standards, which have not been cross-referenced or standardized despite the fact that individuals frequently move from one system to another" (Berlin, 1983). The most comprehensive systematic response of the past decade, intended to integrate knowledge and develop techniques applicable to problems of youth employability, had been initiated in 1977 under the Youth Employment Demonstration Projects Act (YEDPA) administered by the U.S. Department of Labor (Taggart, 1980).

Numerous field experiments, involving career development and job training approaches, were carried out in order to determine what types of programs and curriculum variations are most effective in achieving employment success (Taggart, 1980). A large proportion of the programs were aimed at enabling students to move successfully from school to employment. These programs were subjected to formal evaluation to determine which were most effective for which types of trainees, and what program processes (curricula, services staff characteristics, etc.) contributed to the effects (Freeberg & Rock, 1982; Rock et al., 1982; Rock & Freeberg, 1981). Contrasts in outcomes obtained by YEDPA training program participants and control groups, when adjusted for background characteristics, showed that: (1) Participants generally exceeded their control counterparts' placement in full- and part-time employment at both short-term (3 month) and longer term (8 month) followup points. Although these employment advantages were modest, some 6 to 13% improvement, they tended to increase over the longer term. (2) Those participants who gained most in world-of-work knowledge and attitudes during the course of their training were more likely to perform better in a number of "career activity" outcomes (involving full- or part-time work and/or continued education). (3) Programs of differing types (stressing work experience, world-of-work skills, or world-of-work skills along with basic skills) all tended to produce favorable employability effects at the 8 month (longer term) followup period. (4) Of the participant characteristics that significantly influenced post-program vocational outcomes, only reading achievement and educational

level at program entry did so with any degree of consistency across program types.

Other evaluations of various programs funded under the YEDPA umbrella indicated that where basic skills education was combined with job training and work education, the ability to obtain and hold a job were enhanced. The jobs obtained tended to be of higher quality and to be classed as primary labor market jobs (Taggart, 1981). Job Corps training, although carried out in a residential setting, has often been cited as the prototypical model that blends basic skills literacy education with vocational skills training and pre-employment services to achieve greater job placement and earning success (Mollar, et al., 1982). But, the need has also been shown for "intense job development and job placement services with frequent followup contact and support" if the trainee is to move into the unsubsidized job market (Sum, Harrington & Simpson, 1983).

Still remaining to be confirmed, after the large-scale training efforts undertaken between the late 1970's and early 1980's, are the longer-term effects of program participation especially over multi-year time periods where there has been an opportunity to establish more definitive direction in the work and career patterns of youth. Information of reasonable quality, based on samples of adequate size, is needed to examine what has happened to those disadvantaged, largely minority-group youth who took part in the training process and then went on to face one of the most unfavorable labor market climates ever encountered by adolescents and young adults. How they searched for jobs, the types of jobs they tended to find and retain, their overall vocational stability and the background characteristics or personal experiences that influenced their employment, are of special concern for understanding the effectiveness of the various training approaches used, as well as for developing youth employment policy.

Prior studies have suggested that the consequences of participating in employment training programs vary according to the race/ethnicity and sex of the participants and according to program emphasis. Most have found that programs emphasizing on-the-job training have higher job placement rates and result in higher wages than do programs with other types of emphasis (Perry et al., 1975; Westat, 1981; Harlan & Hackett, 1984). It has been suggested that the lack of direct employer contact in classroom-based training programs may account for much of this difference. Analysis of the effects of various program models for participants from differing racial/ethnic and sex groups is complicated by the lack of randomized assignment to programs and, often, by questions about the comparability of participant and control groups. Post-program job placement rates and wages have been found to be higher for males than for females (Simeral, 1978; Westat, 1981; Zornitsky & McNally, 1980). However, these differences become negligible if the results are controlled for program emphases (Marcus, 1980; Sawheney et al., 1982). One study reports that males were twice as likely to be placed in on-the-job

training programs than were females (Westat, 1980). Nevertheless, the evidence also shows that female participants in both classrooms and on-the-job training programs make significant gains when compared to non-participants (Bassi, 1983; Goodfellow, 1979; Kiefer, 1979; Masters & Maynard, 1980; Westat, 1981). Harland and Hackett (1984) found the relative advantage of on-the-job training greater for females than males. According to Harlan and Hackett, "all studies which evaluate both males and females agree that women gain more compared to other women than male participants compared to male nonparticipants."

Findings focused on outcomes for Black and White program participants have been less clear. Goodfellow (1979) found that White male participants earned less than the control group but others were unable to reach conclusions about differential program effectiveness by race/ethnicity (Bassi, 1983; Keifer, 1979). Black men appear to benefit from classroom training but not from on-the-job training. Results for women are mixed with Westat (1981) finding that Black women gain twice as much from on-the-job training as from classroom training, but no significant program emphasis effect is found for White women. In contrast, Kiefer (1979) found Black women gaining more from classroom training and White women more from on-the-job training. Harlan & Hackett (1984) found that the relative advantage of on-the-job training was less for Blacks than for Whites.

Purpose of the Study

The main purpose of this study was to analyze existing data on youth employment and career guidance programs in order to identify those factors which are most important in producing individuals who can find and keep a job.

It is becoming increasingly evident that many students leave the public schools with little or no preparation that will enable them to compete effectively in the labor force. This problem is acute, with growing public concern about both the nature and quality of educational programs preparing adolescents to enter the job market. There is also concern about the increasingly large number of young men and women dependent on the government for support. Policymakers need a knowledge base that will assist them in planning and designing new and improved educational programs to provide adolescents and young adults with effective employment preparation. The analysis was aimed at answering the following major policy question:

- How do educationally-developable individual characteristics such as reading ability, job knowledge, job-seeking skills, job-holding skills, vocational attitudes, work attitudes, and sex stereotyping of occupations, impact on employment outcomes of youth?

- How do youth employment program characteristics impact on these employment outcomes?

The secondary questions included:

- How do these educationally-developed characteristics affect job-search behaviors?
- How do job-search behaviors affect employment outcomes?
- How do individual background, educationally-developed characteristics, labor market conditions and job-search experiences affect individuals' decisions to obtain additional education/training?

This study focuses primarily on those demographic, ability and educational characteristics that can be linked to employment and training outcome for economically disadvantaged youth. To accomplish this, it examines the degree to which both formal education and youth employment training programs, as well as various knowledges and abilities, have acted, in conjunction with job search strategies and the labor market environment, to shape a variety of career-oriented behaviors. The data utilized for this purpose were obtained longitudinally for training program participants and from a comparison (control) group over a time period of approximately 3 years beyond the time of training program completion. This followup time period provided sufficient opportunity for young workers to establish their career and training patterns, so that outcome measures might be considered a reliable and relevant reflection of vocational "success."

It is also intended that the results of this longer term study be contrasted with earlier assumptions and research conclusions based on shorter-term data. These contrasts help to determine the extent to which those early findings are confirmed and, also, which influences may have been weakened or enhanced over the more extended followup time period. From the identification of a range of individual environmental characteristics that produced an impact on career behaviors of youth, conclusions can be drawn regarding the bases for any positive effects achieved from youth employment training programs and directions can be drawn for program policy and design.

METHOD

Study Design

This longitudinal study incorporates data obtained from former youth career training program enrollees and comparison (control) group members, who were followed up over a period of approximately 3 years after the participants had completed their program enrollment. These data at 3 year followup, represent the end-stage in collection of information for a much larger sample, and a resulting data base that had been compiled between 1979 and 1982 for over 40 youth career training programs funded under the Youth Employment Demonstration Projects Act (YEDPA). Under U.S. Department of Labor sponsorship, these 10 program models were conducted nationally at about 370

project sites and had involved some 39,000 participant and control group members in the original evaluation sample. Youths who entered a program, as well as comparable controls, were pretested with a set of measures designated as the Standard Assessment Battery (SAB), containing seven vocational-orientation tests that dealt with world-of-work knowledge and attitudes (e.g., job search skills, work attitudes, proper on-the-job behaviors). In addition, demographic information was obtained along with a measure of reading comprehension for each sample member.

At the time of completion of program enrollment, participants and controls were posttested with the same battery of seven measures. Follow up data, obtained at 3-months and 8-months after the program, dealt with social and vocational adjustments measured by 20 performance outcome variables contained in an outcome questionnaire. This quasi-experimental design and the instrumentation utilized are described in detail in a number of evaluation reports (Freeberg & Rock, 1980, 1981; Rock & Freeberg, 1982; Rock et al., 1982).

The present study represents an extension of this design, with a 3-year followup of the former training program participants and those who servd as control group members. A newly designed followup questionnaire was utilized to collect data similar to those obtained at the 3- and 8-month time periods as well as more detailed information regarding respondent vocational and educational experiences over the 3 years following training program termination.

The outcome data used in the present study are, of course, drawn from the 3-year followup questionnaire. Some of the earlier information, that serves as explanatory or status measures (e.g., for control on initial status in test score gain), is also incorporated in the analyses. The measures are described briefly in the Descriptive Analysis section. For more detailed information about the measures, see Appendix E.

Description of the Measures

The variables used to carry out the study were derived from the 3-year followup questionnaire, the 7-measure Standard Assessment Battery, a background information form, a brief reading comprehension measure, and a "process" questionniare describing the characteristics of the youth training program in which the participants had been enrolled. Special variables, not present in the above instruments but requiring separate information for their derivation and use, include the regional (or area) youth unemployment rate by race, the complexity level of jobs held by the respondent and occupational classification codes.

The 3-Year Followup Questionnaire--which serves as the primary data source for the present study, contains detailed information on the employment and educational history of the participant and control group sample members over the 3-year time period since training program completion by the participants. The format is designed for individual administration with

sections on identification and background (demographic) data, general information on recent status pertaining to work and schooling, and a detailed history of educational and vocational activities (e.g., number and types of employers, length of time worked, hours, salary, how each job was obtained, types of training programs, time spent in each, etc.). Another section deals with details of military service.* Other items cover summary income information, respondent and family income sources, job satisfaction, self esteem and social adjustment (Appendix E contains a copy of the survey document).

The Standard Assessment Battery--consists of seven measures designed for use expressly with disadvantaged youth. The measures are designated as Vocational Attitudes, Job Knowledge, Self Esteem, Job Holding Skills, Job Seeking Skills, Work Related Attitudes Inventory and Sex Stereotyping of Adult Occupatons. Appendix C contains detailed descriptions of the measures and discusses their psychometric properties. Also described, is the background information form used to obtain demographic data at program entry. This 49-item form from youth program files encompasses a variety of variables, such as age, sex and race, as well as educational economic and labor force status variables. In addition, a measure of the respondent's verbal ability was obtained at the time of program entry using a short (20-item) wide-range reading comprehension test intended to span 4th- to 9th-grade reading levels (also described in Appendix C).

Three other indices, important to any analyses defining influences on career related outcomes for youth, were obtained for this study: (1) the regional youth unemployment rate by racial group serves as an environmental proxy for major barriers to employment faced by the youthful jobseeker. The variable has generally not been incorporated in studies of youth employment outcomes or, if utilized, has not been based on a sufficiently localized geographic region (i.e., unemployment rates vary widely for White and minority youth from region to region and between different metropolitan areas). Appendix B describes how the youth unemployment rates were derived from available government sources. (2) Job Complexity level was a score assigned to each job held by the respondent. That score was derived from the "Factor-Based Scale Scores" for 1970 U.S. Census Occupational Categories (Miller, Teiman, Cain & Roos, 1980). These values representing "substantive complexity" ratings for over 600 occupations range from 0.0 (Bootblack) to 10.0 (Lawyer). They provide levels of fine distinction between occupatons on skill and educational requirements, even within relatively unskilled industry groups, where often-used job status scales can be too gross to provide desired differentiation (e.g., an asbestos and insulation worker in construction is rated at 1.9 and clearly differentiated in complexity level from the job of a dry-wall installer and lather, in the same construction work group, which is rated a 2.8). (3) An occupational identification code was assigned to each job

*The sample size of those who entered military service was proportionally so small that information from this section of the questionnaire could not be analyzed separately.

held by the respondents. This was a 6-digit code drawn from The Dictionary of Occupational Titles (U.S. Department of Labor, 1972), wherein the first 3-digits define the "Three Digit Occupational Groups" under 9 categories (e.g., clerical, sales, service, machine trades) for some 650 job groupings. The three remaining digits define "worker function" codes in terms of level of responsibility and judgment required for the incumbent in a specific job in terms of activities involved with data (4th digit), people (5th digit) and things (6th digit).

Sampling and Data Collection

The three-year followup sample used for this study represents an initial phase of a larger sampling effort that was planned to continue until a 10% sample of the YEDPA participants and controls had been obtained (i.e., 4,000 of the nearly 40,000 participant and control group members from the YEDPA programs under evaluation). Followup questionnaires were administered to the 775 respondents who comprise the present study sample in August, 1982. Information was obtained from 419 participants who had been out of the training programs since the summer of 1979 along with 356 of their control group counterparts. After this time federal support for the continuation of data collection was no longer available.

Selection of programs, which could enter into this initial data gathering phase, was constrained almost entirely by whether they had been able to "graduate" participants by late summer of 1979, so that those individuals could enter into a 3-year followup sample by August, 1982. A large proportion of the YEDPA programs had either just been formed at that time, or had been underway for too short a period, in relation to their planned training, to have had participants leave in any reasonable numbers. Unavoidable limitations stemming from the sequence of program start up and training cycles meant that of 46 training program models for which data had been originally available, it was possible to obtain 3-year followup data for only ten of them.

Thus, a possible but not readily definable program bias may have occurred in the extent to which the 10 program models constitute an adequate representation of the of 46 program models in the data base. But, it should be noted that the 10 models represented were among the largest in trainee sample size and number of project sites. They also covered a range of programs with curricula and goals typical of the other 38 in most respects, as well as having geographic representation that was widespread nationally (Appendix D presents a brief tabular summary of types and site locations of programs from which the followup sample respondents had been drawn). Individual respondents were to be chosen for sample inclusion from a given program, based on a spaced-sample of every Nth individual to obtain, eventually, 40 participants and 40 controls from the total available sample for the program.

The followup questionnaire was administered on an individual basis and each respondent was paid $15 for his or her participation which was entirely voluntary. Where it was not feasible to administer the questionnaire on a

face-to-face basis (e.g., the individual had moved to a distant locale or was stationed at a military base where an interviewer was not readily available), the interview could be carried out by phone.

The response rate for the sample contacted (in person and by phone) was 89%, which is considered exceptionally high for a population of economically disadvantaged youth often classified as "hard-to-locate" (Barnes, 1971). Therefore, while type of programs available for followup sampling may reflect some undefined biases--in terms of the program models found in the original YEDPA sample--it can be assumed that the sample of respondents obtained was reasonably representative of the program enrollees who initially entered those training programs.

Data Analyses

The data analyses for this study were carried out and are reported in two major phases. The first is a descriptive analysis with distributions and/or means for background, process, and outcome variables for the participant and control groups. These distributions and cross tabulations reveal important trends in the patterns of career performance outcomes. However, to account for multiple influences that might act in conjunction with one another (simultaneously) on outcome variables, as well as to determine the relative degree of influence exercised by each explanatory variable, relational analyses were also carried out. The relational analysis supports and amplifies the descriptive interpretations.

The relational analysis involves the application of sequentially ordered regression analyses designed to test the relative importance of inputs on various outcomes. These outcomes consist of measures subsumed under categories of:

A. Work and Economic Outcomes--defined by (1) Activity Status (working vs. not working for those not in training); (2) Job Complexity Level (of current or most recent job); (3) Number of Months Worked over the 3-year period; (4) Salary (hourly wage) in current or most recent job; (5) Months Spent Doing "Nothing" (not working, not looking for work, not in training).

B. Education/Training Outcomes--consisting of (1) Total Time Spent in Education and/or Training; (2) Educational Gain (at the end of 3 years); and (3) Total Months Spent in Work plus Training and Education.

C. Attitudes--divided into (1) gain for short-term career attitudes--based on the total sample of participant and control group members--using posttest scores of the seven SAB measures as outcomes (i.e., Vocational Attitudes, Job Knowledge, Job Search Skills, Work Related Attitudes, Self Esteem and Sex Stereotyping of Occupations); (2) Four long-term social adjustment (attitudinal) outcomes of Self Confidence, Locus of Control, Job Satisfaction and Amount of Trouble with Police.

A separate analysis using the vocational performance and training variables as outcomes, for the former training program participant sample members only, included program characteristics as process variables. Whereas the analysis for the total participant-control sample was intended to examine the effects of program participation and of other background characteristics on outcomes when program participation is controlled for, the separate analysis of participants only was intended to examine program process variables along with other background characteristics as they may have influenced career and education outcomes.

The variables used throughout the relational analyses are presented in the descriptive analysis. These variables represent a mixture of individual and group level variables. Each sample member is assigned his or her individual characteristics, as well as those variables that deal with program characteristics, plus other group variables (such as the regional youth employment rate).

There are three analytical methods used in this report. The first approach presents a detailed population description that compares and contrasts the demographics, behaviors, and attitudes of program participants and controls. The second type of analysis presents the results of an ordered sequence of regression analyses that attempt to pinpoint the relative effects of individual explanatory variables on the various outcomes. This multivariate approach supplements the descriptive analysis by estimating the effects of individual variables on outcomes while "holding constant" the effects of other competing explanatory variables. The final analytic method is, in a sense, a convenient summing of the regression analysis results which partitions the variation in the outcome variables that can be uniquely assigned to separate blocks of explanatory variables. The blocks are based on logical groupings of variables that describe meaningful constructs. An explanation of this technique known as commonality analysis (Pedhazur, 1982) is presented in detail preceeding the results obtained from the analysis (see Results, Section IIc).

RESULTS

I. Descriptive Analysis

This section provides a description of the major variables in this study. These variables are classified within seven major groups: individual background characteristics, youth employment training program characteristics, educationally developable characteristics, job search behavior, work and economic outcomes, education and training outcomes, and other attitudinal and behavior outcomes. The descriptive analysis tables provide information separately for the subjects who participated in the youth employment programs and for the controls who did not participate in these programs.

A. Individual Background Characteristics. Age, sex, race/ethnicity, educational level, economic states, and reading ability were determined for both participants and controls in 1979 at the time when the participants entered the youth employment training programs. The intent of the study design was to have the participants and controls as similar as possible on these background characteristics.

Table 1 shows the age distribution for participants and controls. As can be seen, about half of the group were age 17 or 18. The participants are slightly older than the controls. (Participants $\bar{X}$ = 17.31, S.D. = 1.61; controls $\bar{X}$ = 17.05, S.D. = 1.75). This difference, which is due primarily to the higher proportion of controls age 15 or younger, is significant at the .03 level.

The majority of the subjects in this study are Black, as can be seen from Table 2. The other two large racial/ethnic groups represented are Whites and Hispanics. There is no significant difference in the racial/ethnic composition of the participant and control groups.

As indicated in Table 3, more than half of the subjects in this study are female. There is no significant difference in the proportion of females and males in the participant and control groups.

The mean initial grade level was 10.73 for the participants and controls. (See Table 4). Table 4.1 shows the mean initial grade level of the subjects by sex and by race/ethnicity. As can be seen, the females had more education than the males. The Black subjects had a higher initial educational level than did the White or Hispanic subjects.

Table 5 presents the distribution of scores on the reading test given to all subjects at the beginning of this study. Although the mean score for participants ($\bar{X}$ = 15.05, S.D. = 4.26) is somewhat higher than that for controls ($\bar{X}$ = 14.83, S.D. = 4.24), this difference is not statistically significant.

Table 1

Age of Participants and Controls

at Program Entrance Date

	Participants		Controls		Total	
	N	%	N	%	N	%
15 or younger	59	14.2	80	22.5	139	18.0
16	57	13.7	51	14.3	108	14.0
17	105	25.2	77	21.6	182	23.5
18	112	26.9	74	20.8	186	24.1
19	48	11.5	50	14.0	98	12.7
20 or older	36	8.6	24	6.7	60	7.8

Table 2

Race/Ethnicity of Participants and Controls

	Participants		Controls		Total	
	N	%	N	%	N	%
White	55	13.2	53	14.9	108	14.0
Black	266	63.8	230	64.6	496	64.2
Hispanic	87	20.9	70	19.7	157	20.3
Asian/Pacific Islander	9	2.2	3	0.8	12	1.6

Table 3

Sex of Participants and Controls

	Participants		Controls		Total	
	N	%	N	%	N	%
Male	187	44.8	148	41.6	335	43.3
Female	230	55.2	208	58.4	438	56.7

Table 4

Highest Grade Completed at Program Entrance Date

	Participants		Controls		Total	
	N	%	N	%	N	%
Grade 9 or less	37	14.0	55	22.0	92	17.9
Grade 10	70	26.5	53	21.0	123	23.9
Grade 11	81	30.7	56	22.4	137	26.7
Grade 12	76	28.8	86	34.4	162	31.5

Table 4.1

Mean Grade Completed at Program Entrance Date

By Sex and By Race/Ethnicity

	$\bar{X}$	SD		$\bar{X}$	SD
Males	10.47	1.17	Whites	10.36	1.43
Females	10.68	1.27	Blacks	10.70	1.18
			Hispanics	10.48	1.14

Table 5

Reading Test Scores of Participants and Controls

at Program Entrance Date

(Maximum Score = 20.0)

	Participants		Controls		Total	
	N	%	N	%	N	%
Below 8.0	27	6.5	26	7.3	53	6.8
8.0 - 12.0	82	19.7	71	19.9	153	19.8
13.0 - 17.0	159	38.1	144	40.4	303	39.2
18.0 - 20.0	149	35.7	115	32.3	264	34.2

Table 6

Economic Status of Participants and Controls

at Program Entrance Date

	Participants		Controls		Total	
	N	%	N	%	N	%
Unknown	25	6.0	41	11.5	66	8.5
Level 1 - OMB/70% LLSIL	290	69.5	206	57.9	496	64.5
Level 2 - 71-85% LLSIL	81	19.4	84	23.6	165	21.3
Level 3 - 86%-100% LLSIL	6	1.4	7	2.0	13	1.7
Level 4 - Above 100% LLSIL	15	3.6	18	5.1	33	4.3

The economic status of the participants and controls is shown in Table 6. As can be seen the majority of each group came from the OMB/70% LLSIL category. This category was defined as a family income level either not exceeding the most recently established poverty levels established by the Office of Mangement and Budget or a family income at or below 70% of the lower living standard income level. Although the controls tended to come from a slightly higher economic level than did the participants, (Participants $\bar{X} = 1.27$, Control $\bar{X} = 1.31$) there was no significant difference in the economic status of the two groups.

B. Program Characteristics. The youth employment programs attended by the participants differed widely. Some programs were short-term, lasting less than 100 hours, while others lasted more than 700 hours. The mean program duration was 350 hours. Some programs stressed personal development while others focused on providing job information or teaching good work habits; relatively few emphasized specific job-skill training or post-program employment placement. Vocational exploration, work experience, and pre-employment services were the services most frequently provided. Some programs utilized linkages and coordination with schools, private industry, labor, state and local government or community organizations while others were more autonomous. These program variations have considerable effect on what the participants learned and, consequently, on the long-term program effects.

The number and percentage of participants in programs of different duration and emphasis are shown in Table 7. Unfortunately, program characteristics were available for only 55% of the sites included in this follow-up study. Moreover, the process descriptions are open to question, since they are based on questionnaire responses from the programs rather than observations. As can be seen, slightly more than half (56%) of the participants were in programs which lasted for more than 250 hours. Also, slightly more than half (57%) of the participants were in programs which emphasized career development through vocational exploration, job information and other pre-employment skills. Slightly more than a third of the participants were in programs which stressed work experience or on-the-job training. As the cross-tabulation shows, the largest group of participants (39%) were in long duration programs that emphasized career development; the next largest group (22%) were in short duration programs that emphasized work experience.

C. Educationally Changeable Knowledge and Attitudes. The short term goal of the youth employment programs was to bring about changes in: 1) participants' knowledge of the world of work, job finding techniques, and job holding behaviors, and 2) the participants' attitudes about work and about themselves. To determine if these short term goals did indeed result from the educational program provided in the youth employment program, pre- and post-tests were given to both program participants and controls. The results are shown in Table 8. These preliminary results suggest that the programs had little effect on the participants' test scores.

The test score gains were analyzed after controlling for initial test score. Only two tests showed significant ($p < .05$) participant gains, when compared with control group gains. These tests were Vocational Attitudes and Self Esteem. Gains on the Self Esteem test were also influenced by sex, with females showing greater gains than males, and by educational level, as subjects with more education made greater gains than those with less education. The lack of major differences in most of these supposedly educationally changeable characeristics was unexpected and, as will be seen later, led the analysis into somewhat different areas than had been originally planned.

D. Youth Unemployment Rates. Because unemployment rates vary widely from one region of the country to another and for one racial/ethnic segment of the population to another, it was necessary to obtain local youth unemployment rates by race/ethnicity. The time period selected was 1982, the year in which the follow up data were obtained and, also, a year of high unemployment rates.

The source used was "Geographic Profile of Employment and Unemployment, 1982" (U.S. Dept. of Labor, 1983). This document provides youth unemployment rates by state and for major metropolitan areas, with some breakout of racial/ethnic differences. However, because this data is based on the Current Population Survey (CPS) sample of 60,000 households, it is not possible to obtain reliable data on minority youth unemployment rates in smaller cities, especially those where proportionately fewer Blacks or Hispanics reside. When minority youth unemployment rates were not available for a given metropolitan area, they were estimated from statewide data (See Appendix B for details of this procedure).

The followup sample of respondents was located in 163 cities and towns in 38 states. The national youth unemployment rates in 1982 was 23.2%, 20.4% for White youths, 29.9% for Hispanic youths, and 48.0% for Black youths. The local unemployment rates encountered by the youths in our sample ranged from a low of 10% for white youths in Kansas to a high of 70% for Black youths in Tennessee.

Table 7

Distribution of Participants by Program Characteristics

Program Duration	Program Emphasis: Career Development		Work Experience		Mixed		Total	
	N	%	N	%	N	%	N	%
Less than 250 hours	42	18.1	52	22.4	9	3.9	103	44.4
More than 250 hours	90	38.8	30	12.9	9	3.9	129	55.6
Total	132	56.9	82	35.3	18	7.8	232	100

Table 8

Pre- and Post-Program Test Scores for Participants and Controls

	Participants				Controls				Total			
	Pre		Post		Pre		Post		Pre		Post	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Job Knowledge	22.03	3.54	21.98	3.36	21.43	3.75	21.44	3.82	21.76	3.65	21.75	3.74
Job Search	11.86	2.92	12.02	3.06	11.34	3.12	11.43	3.33	11.62	3.03	11.77	3.19
Job Holding	30.40	2.36	30.39	2.71	30.30	2.46	30.11	3.16	30.36	2.41	30.27	2.91
Sex Stereotypes	45.07	8.19	45.33	8.64	43.76	8.03	44.79	8.37	44.47	8.14	45.10	8.53
Work-Rel. Att.	47.96	6.64	48.71	7.02	47.15	6.80	47.88	7.35	47.59	6.72	48.36	7.18
Voc. Attitudes	20.27	4.38	21.26	4.64	19.82	4.70	19.89	4.99	20.06	4.54	20.67	4.84
Self Esteem	36.59	3.03	36.71	3.65	35.93	3.23	35.63	3.65	36.29	3.14	36.26	3.69

The mean 1982 youth unemployment rate, adjusted for race/ethnicity, in the areas in which our subjects were located was 40.9%. The mean local youth unemployment rates encountered by White subjects was 22.8%, by Hispanic subjects 33.2%, and by Black subjects 47.7%. Sixty percent of the White subjects but only 0.4% of the Black subjects and 1.9% of the Hispanic subjects lived in areas with adjusted youth unemployment rates below 25%. The differences in local unemployment rate encountered by individuals from different racial/ethnic groups is highly significant (well beyond .001).

E. Job Search Behavior. Because many of the youth employment programs stressed the development of job finding skills, it was important to determine whether the program participants and controls differed in their job search behavior.

First the subjects were asked the source(s) they used in finding their current or most recent job. As shown in Table 9, program participants applied directly to employers at a significantly higher rate than the control group (31% vs. 24%). Apparently the programs made participants sufficiently more self-assured and knowledgable about job-finding than the controls so that they felt able to contact employers directly. Participants were also more likely than the controls to have used friends and relatives, newspaper ads, the youth program staff or a school or job training agency in their search for employment. Thus, the program participants were slightly more likely to have used multiple sources (mean = 2.97 sources) to find a job than were the controls (mean = 2.82 sources).

Table 9

Source(s) Used to Find Current/Most Recent Job

	Participants		Controls		Difference
	N	%	N	%	%
Applied directly to employer	131	31.3	85	23.9	7.4
Friends or relatives	160	38.2	131	36.8	1.4
Ads in newspaper or on radio/TV	32	7.6	20	5.6	2.0
Youth program staff	30	7.2	23	6.5	0.7
Public employment agency	22	5.3	21	5.9	-0.6
Private employment agency	8	1.9	9	2.5	-0.6
School or training agency	54	12.9	42	11.8	1.1
Church, union, and other	11	2.6	18	5.1	-2.5

Females used friends or relatives to find a job much less frequently than did males (33.64% vs. 42.69%) and were also less apt to contact an employer directly (26.36% vs. 29.85%). Females were more inclined (14.3%) to use a school or training agency than were males (9.9%). White and Hispanic youths were more likely to contact an employer directly (33.33% and 33.39%) than were Black youths (23.29%). Black youths found jobs through the youth program staff more often (9.04%) than did White (1.67%) or Hispanic youths (3.82%). Black and Hispanic youths also used schools or training agencies as job finding sources more often (13.5% and 12.7%) than did Whites (7.5%). These differences in job-search behaviors by individuals of different backgrounds have greater effects than do the participant-control differences, as will be seen in the commonality analysis.

As a second method of looking at job search behavior, individuals were asked if they searched for work during intervals when they were not working, in school or training, or in the military. As shown in Table 10, the majority of both groups replied affirmatively. There was, however, a large sex difference in this aspect of job search behavior. Seventy nine percent of the males, but only 67% of the females indicated that they looked for a job during periods of no work/school/military service. There were also racial/ethnic differences. Black youths were more likely to have sought work (77%) than were White (65%) or Hispanic (61%) youths.

The reasons for the differences in entering into the job search process were explored. As can be seen in Table 11, the most frequently cited reasons by participants not seeking work were child care and/or family resposibilities; handicap, illness or pregnancy; and waiting to begin school or training. The reasons mentioned most frequently by the control group were waiting to begin school or training; and child care or family responsibilites. Almost half of the participants but less than a third of the controls gave ill health, pregnancy or child care as reasons for not seeking employment during intervals of no work. This difference in health and family responsibilities apparently accounts for much of the participant-control difference in willingness to seek employment. The most frequent reason given by Whites (47%) and Blacks (44%) for not seeking work was illness, pregnancy, child care of other family responsibilities. The most frequent reason among Hispanics was "didn't want to work" (33%); only 13% of the Whites and 12% of the Blacks gave this as a reason. The second most frequent reason for not seeking work was waiting to begin school or a training program; 29% of the Blacks, 27% of the Hispanics and 23% of the Whites gave this as a reason. Blacks were much more likely (13%) to be discouraged job seekers, giving the reasons "I looked previously" or "I believed no jobs were available", than were Whites or Hispanics. The most frequent reason given by males who did not look for work was waiting to begin school (36%); "didn't want to work" was the second most frequent reason (21%). For females, 50% of those who did not seek work gave illness, pregnancy, child care or other family responsiblities as the reason. Waiting to begin school was the second most

Table 10

Did Youths Look for Work During Interval(s) of No Work/Training/Military?

	Participants		Controls	
	N	%	N	%
Yes	207	69.9	204	74.2
No	89	30.0	71	25.8

Table 11

Reasons Why Youths Did Not Seek Work

	Participants (n = 89)		Controls (n = 71)	
	N	%	N	%
Waiting to begin/resume job	4	4.5	7	9.9
Looked previously/no work available	6	6.7	6	8.4
Employers thought too young	1	1.1	2	2.8
Lacked training/experience	8	9.0	3	4.2
Waiting to begin school/training	20	22.5	23	32.4
Handicapped/ill/pregnant	20	22.5	8	11.3
Childcare/family responsibilites	22	24.7	13	18.3
In jail	5	5.6	4	5.6
Didn't want to work	17	19.1	12	16.9
Lacked transportation	2	2.2	1	1.4
Other	9	10.1	12	16.9

common reason, given by 23% of the females. Because the reasons for not seeking work varied so widely, this aspect of job search behavior was not considered in later analyses.

Those individuals who sought work during those intervals but who were unable to find it were asked why they were unable to obtain work. As can be seen in Table 12, the major reason for not finding work reported by both groups was that no suitable jobs were available. Controls were more likely than controls to cite lack of education, skills or experience as reasons why they could not find work. This suggests that, where jobs were available, participants were more likely to be viewed by employers as skilled and experienced potential employees than were controls.

There were few sex differences in the reasons given by youths who sought work but were unable to find it. More males (71%) than females (62.5%) felt that no suitable jobs were available. About equal proportions of both groups felt they lacked the necessary experience or that they lacked the skills or education necessary for the employment they sought. Males (14%) cited transportation problems somewhat more frequently than did females (11%). There were some racial/ethnic differences in the reasons youths gave for being unable to find work when they sought it. More Whites (48%) than Blacks (36%) or Hispanics (28%) gave lack of experience as a reason. Also, more Whites (32%) than Blacks (24%) or Hispanics (17%) gave lack of skills or education as a reason. There were only minor differences cross these three racial/ethnic groups in the perception that no suitable jobs were available (Hispanics 70%, Whites 66%, Blacks 65%).

Table 12

Why Youths Who Looked Were Unable To Find Work

	Participants (n = 207)		Controls (n = 204)		Difference
	N	%	N	%	%
No suitable jobs available	141	68.1	131	64.2	3.9
Employer thought too young	12	5.8	29	14.2	-8.4
Lacked skills, education	48	23.2	51	25.0	-1.8
Lacked experience	71	34.3	78	38.2	-3.9
No references	15	7.2	12	5.9	1.3
Transportation barriers	29	14.0	22	10.8	3.2
Other	32	15.5	37	18.1	-2.6

Finally, individuals were asked if they received job offers that they did not accept during those intervals of no work/school/military. As Table 13 shows, very few individuals (6%) had such an experience. Participants were slightly less likely than controls to have refused the offer of a job.

Table 13

Were Youths Offered Any Jobs They Did Not Take?

	Participants		Controls	
	N	%	N	%
Yes	11	5.4	14	6.9
No	193	94.6	189	93.1

F. Outcomes. The outcomes of this study are grouped into three categories: (1) work and economic outcomes, (2) education and training outcomes, and (3) other attitudinal and behavioral outcomes. The outcome information was collected in 1982, approximately 36 months after the participants completed the youth employment programs. It should be stressed that the period encompassed by this followup was one of rapidly rising unemployment and that 1982 was the year with the highest youth unemployment rate ever recorded. Thus, these data test the effectiveness of youth employment programs in what could be considered as a worst-case scenario.

1. Work and economic outcomes. There are three major groups of variables in this category. They are: (1) attainment and duration of employment, (2) type, and level of employment attained, and (3) extent of dependence on public funds.

Employment Attainment. As can be seen in Table 14, approximately equal proportions (49%) of participants and controls were employed in 1982 at time of the followup. However, significantly more control (11.5%) than participants had never been employed in the preceding 36 months. This suggests that youth employment programs may be effective in periods of normal employment but have less effect in periods of unusually high unemployment.

Table 14

Work History

	Participants (N=419)		Controls (N=356)	
	N	%	N	%
Never worked	25	6.0	41	11.5
Worked previously but not now	187	44.6	140	39.3
Currently working	207	49.4	175	49.2

In periods of unemployment, youths may enter the military or seek additional education or training as alternatives to work that will also increase human capital. Thus, enrollment in these activities should be viewed in a positive light, not as indicative of a failure of the youth employment program. Table 15 shows that fewer participants (71%) than controls (78%) reported that, during the 36 month followup period, they had intervals when they were not working, in school or training, or in the military. Thus, the participants not only were more likely to have been employed at some time during the followup period but they were also more likely to have found a positive alternative if employment was not available.

Table 15

Had Intervals of No Work/School/Military

	Participants (N=419)		Controls (N=356)	
	N	%	N	%
Yes	298	71.1	278	78.1
No	121	28.9	78	21.9

Because the work outcome data can be confounded if some subjects are working part-time while also engaged in school or training, the subjects were asked to identify their main activity in the week preceding the followup. The results are shown in Table 16. This shows that a higher proportion of program participants (49.6%) than controls (46.1%) considered work their main activity. There were sex and race/ethnicity differences in main activity, as can be seen in Table 16.1. Slightly more males (49.3%) than females (47.1%) reported working as their main activity. More Hispanics (56.7%) than Whites (50.8%) or Blacks (44.6%) gave working as their main activity.

Table 16

Current Main Activity

	Participants		Controls		Difference
	N	%	N	%	%
Working	208	49.6	164	46.1	3.5
In school or training program	45	10.7	36	10.1	0.6
Looking for work	72	17.2	73	20.5	-2.7
Keeping house	53	12.7	48	13.5	-0.8
In the military	10	2.4	9	2.5	-0.1
In jail	4	1.0	4	1.1	-0.1
Other, Nothing	26	6.2	21	5.9	0.3

Table 16.1

Current Main Activity by Sex and by Race/Ethnicity

	Males		Females		Whites		Blacks		Hispanics	
	N	%	N	%	N	%	N	%	N	%
Working	165	49.3	207	47.1	61	50.8	222	44.6	89	56.7
In school or training	34	10.1	47	10.7	10	8.3	57	11.4	14	8.9
Looking for work	81	24.2	64	14.6	15	12.5	103	20.7	27	17.2
Keeping house	11	3.3	90	20.5	21	17.5	67	13.5	13	8.3
In military	16	4.8	3	0.7	7	5.8	10	2.0	2	1.3
In jail	8	2.4	0	0.0	1	0.8	5	1.0	2	1.3
Nothing, other	19	5.7	28	6.4	5	4.2	23	4.6	10	6.4

Thus, although approximately equal proportions of participants and controls were employed at the time of the 1982 followup, participants were more likely to indicate that working was their main activity. In addition, fewer participants than controls were employed during the entire 36 month followup period and fewer participants than controls had intervals of no work/school/military participation. Thus, the youth employment training programs can be viewed as succesful in increasing work force participation. As will be seen in the relational analysis, this participant advantage remains but falls short of significance when background and education variables are controlled.

Duration of employment. Table 17 shows the duration of employment, presented as the mean number of months worked by participants and controls. These months are calculated on the basis of full-time work (Defined as 30 or more hours a week). Part-time work was prorated to obtain a full-time equivalent in months. As can be seen, the average number of months of full-time work was 19.74 for participants and 15.99 for controls, a difference of 3.75 months of work for each participant. Participants in every subgroup (both racial/ethnic and sex) averaged more months of work than controls in the same subgroup. Individuals of Hispanic background, whether participants or controls, worked more months than Whites or Blacks. However, the participant control difference is much greater for Blacks than for Whites and Hispanics. This shows that program participation had a much greater effect on Blacks. Males worked more months than females. The participant-control difference is, however, greater for females than for males. In sum, youth employment training programs can be considered successful in increasing the amount of time participating youths spend in the labor force. Program participation appears particularly beneficial for Blacks and for females.

Table 17

Months Worked by Participants and Controls

	Participants (N = 415)	Controls (N = 360)	Difference
White	21.22	18.86	2.36
Black	17.81	13.40	4.41
Hispanic	24.52	22.34	2.18
Males	21.05	17.74	3.31
Females	18.69	14.74	3.95
Total Group	19.74	15.99	3.75

Type of employment. The types of jobs which the employed youths found was analyzed next. The jobs were first classified by Dictionary of Occupational Titles (DOT) job families. As can be seen in Table 18, clerical jobs in DOT categories 20-24, were reported 31% by the currently employed participants and by 28% of the currently employed control group members. Service jobs, in DOT categories 30-38, were reported by 29% of the participants and by 37% of the controls.

Table 18

Job Family - Currently Employed Participants and Controls

DOT#	Job Family	Participants (N=207)		Controls (N=162)	
		N	%	N	%
00/01	Professional, Technical & Management	9	4.3	10	6.2
20	Clerical-Steno, Typing, etc.	28	13.5	27	16.7
21	Clerical-Bookkeeper, Computing, etc.	24	11.6	10	6.2
22-24	Other Clerical	13	6.3	8	4.9
25-29	Sales	22	10.6	14	8.6
30	Domestic Service	4	1.9	6	3.7
31-32	Food, Beverage & Lodging Services	24	11.6	24	14.8
33-37	Miscellaneous Services	19	9.2	20	12.3
38	Building Service	12	5.8	10	6.2
40-42	Agriculture	6	2.9	5	3.1
50-59	Processing	0	0	5	3.1
61-63	Machine Trades	9	4.3	4	2.5
70-78	Bench Work	8	3.9	2	1.2
80-86	Structural Work	13	6.3	5	3.1
90-97	Miscellaneous Occupations	16	7.7	12	7.4

Tables 18.1 and 18.2 show the DOT job families by sex and by race/ethnicity. The male-female differences are highly significant (p greater than .001). This is due, primarily, to higher females participation in clerical jobs and higher male participation in jobs in the machine trades and structural work. The racial/ethnic differences approach but do not reach significance (p = .08).

Worker functions. Next the worker functions--the extent to which the jobs involve working with data, with people, and with things--were examined. The worker functions range from 6 to 0 for data, 8 to 0 for people, and 7 to 0 for things. The lower numbers (e.g., 1 or 0) indicate the higher order skills. The distributions and means for the worker functions are shown in Table 19. As can be seen, the participants held jobs involving slightly but not significantly higher worker functions involving data and things. The participant-control difference in the data worker function approaches significance (p = .13). The worker functions were also examined by sex and by race/ethnicity. As Table 19.1 shows, females had jobs with higher worker functions in all three categories than did males. The differences for the people and the things categories are significant. Only the data worker function showed significant racial/ethnic differences. The mean level of the data worker function was higher for Whites than for Hispanics or Blacks.

Job complexity. Next, to obtain further information on the type of current employment, the substantive complexity level of each job was determined. Complexity level was coded using the scale in Table F-2, "Factor-Based Scores for 1970 US Census Occupational Categories," in Miller et al., (1980) Work, Jobs and Occupations. The scale ranges from 0.0 = Bootblacks to 10.0 = Lawyers. Representative anchor points are: 1.0 = Child care worker, 2.0 = Machine operatives, 3.5 = Practical nurses, 4.1 = Policemen, 5.0 = Tool and die workers, 6.2 = Elementary school teachers, 7.0 = Systems analysis, 8.0 = Veterinarians, and 9.0 = Chemical engineers. The distribution and means for complexity level are shown in Table 20. The currently employed youth program participants were in jobs with a slightly, but not significantly, higher mean complexity level. Job complexity level was also analyzed by sex and by race/ethnicity. (See Table 20.) The sex differences were not significant but the race/ethnicity differences were considerable. Hispanics held jobs with the highest mean complexity level, followed by Whites and then by Blacks.

Wages. As a third indictor of work outcomes, hourly wages were analyzed for the currently employed subjects. The distribution and means are shown in Table 21. The mean hourly wage is 1982 for currently employed youth program participants was $4.49, for controls $4.33. This difference is significant at the .05 level. Differences in mean wages of currently employed subjects were also examined by sex and by race/ethnicity. These results are shown in Table 21.1. Both differences are significant with females earning less than males and with Blacks earning less than Whites who, in turn, earned less than Hispanics.

Table 18.1

Job Family - Currently Employed Males and Females

DOT#	Job Family	Males (N=164)		Females (N=207)	
		N	%	N	%
00/01	Professional, Technical & Management	7	4.3	12	5.8
20	Clerical-Steno, Typing, etc.	5	3.0	50	24.2
21	Clerical-Bookkeeper, Computing, etc.	10	6.1	24	11.6
22-24	Other Clerical	6	3.6	15	7.3
25-29	Sales	19	11.5	17	8.2
30	Domestic Service	1	0.6	8	4.3
31-32	Food, Beverage & Lodging Services	21	12.8	27	13.1
33-37	Miscellaneous Services	13	7.9	26	12.6
38	Building Service	15	9.1	7	3.4
40-42	Agriculture	9	5.5	2	1.0
50-59	Processing	3	1.8	2	1.0
61-63	Machine Trades	12	7.3	2	0.5
70-78	Benchwork	3	1.8	7	3.4
80-86	Structural Work	17	10.3	1	0.5
90-97	Miscellaneous Occupation	21	12.8	7	3.4

Differences in job families are significant well beyond the .001 level.

Table 18.2

Job Family - Currently Employed Whites, Blacks & Hispanics

DOT#	Job Family	Whites (N=61)		Blacks (N=221)		Hispanics (N=89)	
		N	%	N	%	N	%
00/01	Professional, Technical & Management	4	6.6	10	4.5	5	5.5
20	Clerical-Steno, Typing, etc.	10	16.4	32	14.5	13	14.6
21	Clerical-Bookkeeper, Computing, etc.	4	6.6	21	9.5	9	10.0
22-24	Other Clerical	2	3.3	11	5.0	8	9.9
25-29	Sales	8	13.1	15	6.8	13	14.6
30	Domestic Service	3	4.9	7	3.2	0	0
31-32	Food, Beverage & Lodging Services	12	19.7	29	13.2	7	7.9
33-37	Miscellaneous Services	2	3.3	35	16.0	2	2.2
38	Building Service	1	1.6	18	8.1	3	3.4
40-42	Agriculture	2	3.3	8	3.6	1	1.1
50-59	Processing	1	1.6	3	1.5	1	1.1
61-6[illegible]	Machine Trades	3	4.9	6	2.8	4	4.5
70-78	Benchwork	2	3.3	5	2.5	3	3.4
80-86	Structural Work	3	4.9	8	3.6	7	7.9
90-97	Miscellaneous Occupations	4	6.6	12	5.5	12	13.3

Table 19

Worker Functions - Currently Employed Participants and Controls

Note: Lower worker function numbers indicate higher level skills

	N=208 Participants						N=163 Controls					
	Data		People		Things		Data		People		Things	
	N	%	N	%	N	%	N	%	N	%	N	%
0	3	1.4	0	0	1	0.5	2	1.4	1	0.6	2	1.2
1	5	2.4	1	0.5	26	12.5	5	3.1	0	0	12	7.4
2	13	6.3	2	1.0	44	21.2	7	4.3	0	0	35	21.5
3	68	32.7	2	1.0	2	1.0	40	24.5	2	1.2	4	2.5
4	24	11.5	1	0.5	25	12.0	20	12.3	0	0	23	14.1
5	17	8.2	11	5.3	1	0.5	19	11.7	7	4.3	1	0.6
6	78	37.5	74	35.6	0	0	70	42.9	60	36.8	2	1.2
7	--	--	40	19.2	109	52.4	--	--	31	19.0	84	56.5
8	--	--	77	37.0	--	--	--	--	62	38.0	--	--
$\bar{X}$	4.2		6.8		4.7		4.5		6.8		4.9	
SD	1.6		1.2		2.5		1.6		1.2		2.4	

Table 19.1

Mean Worker Functions by Sex and Race/Ethnicity for Currently Employed Subjects

	Males (N=164)		Females (N=207)		Sig. of Diff.	Whites (N=61)		Blacks (N=221)		Hispanics (N=89)		Sig. of Diff.
	$\bar{X}$	SD	$\bar{X}$	SD		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	
Data	4.5	1.7	4.2	1.5	.10	3.9	1.6	4.6	1.5	4.1	1.6	.002
People	7.0	1.4	6.9	1.0	.03	6.6	1.1	6.9	1.7	6.7	1.3	ns
Things	5.1	2.5	4.6	2.4	.[illegible]	4.6	2.6	5.0	2.3	4.4	2.5	.10

To summarize the job type and level findings, currently the employed youths held jobs primarily in clerical and service areas. Participants' jobs tend to be at higher worker function and complexity levels than were control subjects' jobs. Participants' hourly wage was significantly higher than the hourly wage for the controls.

Table 20

Complexity Level of Job - Currently Employed Participants and Controls

	Participants		Controls	
	N	%	N	%
Complexity				
6.5 - 7.4	0	0	2	1.2
5.5 - 6.4	12	5.8	6	3.7
4.5 - 5.4	11	5.3	5	3.1
3.5 - 4.4	26	12.5	19	11.7
2.5 - 3.4	63	30.3	47	28.8
1.5 - 2.4	24	11.5	21	12.9
1.0 - 1.4	50	24.0	36	22.1
.0 - 0.9	22	10.6	27	16.6
	$\bar{X}$ =	2.6	$\bar{X}$ =	2.4
	SD =	1.5	SD =	1.5

Table 20.1

Mean Job Complexity by Sex and by Race/Ethnicity for Currently Employed Subjects

	Complexity $\bar{X}$	SD		Complexity $\bar{X}$	SD
Males	2.4	1.6	Whites	2.8	1.5
Females	2.6	1.3	Black	2.3	1.5
Sig. of Diff.	ns.		Hispanics	3.0	1.4
			Sig. of Diff	.001	

Table 21

Hourly Wage - Currently Employed Participants and Controls

	Participants		Controls		Total	
	N	%	N	%	N	%
Less than $3.25	16	8.6	11	7.3	27	8.0
$3.25 - 3.75	60	32.3	60	40.0	120	35.7
3.76 - 4.25	34	18.3	26	17.3	60	17.9
4.26 - 4.75	23	12.4	16	10.7	39	11.6
4.76 - 5.25	17	9.1	16	10.7	33	9.8
5.26 - 5.75	11	5.9	7	4.7	18	5.4
5.76 - 6.75	8	4.5	7	4.7	15	4.5
6.76 - 7.75	6	3.2	3	2.0	9	2.7
7.76 or more	11	5.8	4	2.7	15	4.5
	$\bar{X}$ =	$4.49*	$\bar{X}$ =	$4.33*	$\bar{X}$ =	$4.42
	SD =	$1.96	SD =	$1.84	SD =	$1.91

*Difference between participants and controls is significant at .05 level

Table 21.1

Mean Hourly Wage by Sex and by Race/Ethnicity for Currently Employed Subjects

	Hourly Wage $\bar{X}$	SD		Hourly Wage $\bar{X}$	SD
Males	$4.65	2.21	Whites	$4.45	1.54
Females	$4.24	1.62	Blacks	$4.12	1.40
Sig. of Diff.	.05		Hispanics	$5.09	2.78
			Sig. of Diff.	.001	

Previous jobs. A similar set of analyses was done, based on the most recent job, for participants and controls who had worked at any time during the 36 month followup period but who were not employed at the time of the followup. Some of these results are shown in Tables 22, 22.1-22.3. There were no significant differences in the most recent jobs of currently unemployed participants and controls in regard to job families, worker functions, complexity level or hourly wages. Neither were there significant racial/ethnic differences, although the White-minority difference in data worker function approached significance ($p = .08$). The sex differences, however, persisted. Formerly employed women had performed work at higher worker function and complexity levels than formerly employed men but the women had received lower wages.

The worker functions, job complexity, and wages were lower for formerly employed than currently employed subjects. This may be due to a higher turnover of young workers in low level, low paying jobs, the advancement of continuing workers into higher paying jobs, and/or the effect of inflation over time.

Dependence on public funds. The final area of economic outcomes relates to individual and family dependence on public money through various entitlement programs. The participant-control comparison for the subjects alone and for the subjects and their families is shown in Table 23. As can be seen, the differences are small and insignificant.

The final area of economic outcomes relates to individual and family dependence on public money through various entitlement programs. The participant-control comparison for the subjects alone and for the subjects and their families is shown in Table 23. As can be seen, the differences are small and insignificant.

Interactions. Although most of the study of interactions was left for the relational analysis, a few cross tabulations were run as part of the desriptive analysis of work and economic outcomes. Two of these cross tabulations show the relationship between job search behaviors and selected work outcomes. One shows the relationship between program characteristics and wages.

Individuals who sought work by applying directly to an employer were significantly more likely to be currently employed in 1982 than those who used other approaches. 53% of those who sought jobs by applying directly to an employer were currently working, as contrasted with 48% who sought jobs through friends and relatives, 47% of those who sought jobs through the youth program staff, and 46% of those who sought jobs through newspaper ads or through school or training agencies. Individuals who sought jobs through schools or training agencies were most likely to have never found work. Individuals who sought jobs through the youth programs were the least likely to have never worked but were the most likely to be previously but not currently employed.

Table 22

Job Family - Most Recent Job of Currently Unemployed Males and Females

DOT#	Job Family	Males (N=148)		Females (N=186)	
		N	%	N	%
00/01	Professional, Technical & Management	12	8.1	6	3.2
20	Clerical-Steno, Typing, etc.	9	6.1	33	17.7
21	Clerical-Bookkeeper, Computing, etc.	3	2.0	16	8.6
22-24	Other Clerical	3	2.0	13	7.0
25-29	Sales	10	6.1	21	11.2
30	Domestic Service	0	0	6	3.2
31-32	Food, Beverage & Lodging Services	26	17.6	33	17.7
33-37	Miscellaneous Services	9	6.1	30	16.1
38	Building Service	17	11.5	4	2.2
40-45	Agriculture	8	5.4	1	0.5
50-58	Processing	9	6.1	1	0.5
60-69	Machine Trades	3	2.0	4	2.2
70-78	Benchwork	4	2.8	4	2.2
80-86	Structural Work	13	8.9	2	1.1
90-97	Miscellaneous Occupations	22	15.0	12	6.4

Differences significant beyond .001 level

Table 22.1

Work Functions - Currently Unemployed Males and Females

	Males		Females		Sig. of Diff.
	$\bar{X}$	SD	$\bar{X}$	SD	
Data	4.9	1.5	4.3	1.4	.001
People	7.0	1.4	6.6	1.2	.003
Things	5.4	2.2	5.1	2.3	ns

Table 22.2

Complexity Level - Currently Unemployed Males and Females

	Complexity	
	$\bar{X}$	SD
Males	2.0	1.2
Females	2.3	1.2
Sig. of Diff.	.01	

Table 22.3

Most Recent Hourly Wage - Currently Unemployed Males and Females

	Hourly Wage	
	$\bar{X}$	SD
Males	$4.08	1.76
Females	3.48	0.98
Sig. of Diff.	.001	

Table 23

Receipt of Public Funds

Type of Funds	Participants				Controls			
	Individual only		Individual and/or family		Individual only		Individual and/or family	
	N	%	N	%	N	%	N	%
Food stamps	44	10.5	125	29.8	26	7.3	110	30.9
AFDC	34	8.1	78	18.6	23	6.5	63	17.7
Unemployment comp.	8	1.9	27	6.5	4	1.1	22	6.8
Social security	2	0.5	55	13.1	2	0.6	55	15.4
Other public assistance	20	4.8	48	11.5	8	2.3	43	12.1
Other gvt. payments	4	1.0	22	5.3	1	0.3	13	3.4

Table 24.1

Job Finding Source(s) Used and Work History

	Employer (n=168)	Friends Relatives (n=269)	Youth Program (n=47)	School or Training Agency (n=91)	Ads (n=37)
Work History					
Currently employed	52.98%	48.33%	46.81%	46.15%	45.95%
Previously employed, not now	39.29	42.38	46.31	42.86	45.95
Never worked	7.74	9.29	6.38	10.99	8.11

Individuals who found work through the youth program were much more likely to hold 1982 jobs that paid less than $3.50 per hour than were individuals who obtained work through other sources. As can be seen in Table 24.2, 82% of those who obtained work through the youth employment program staff held jobs that pay less than $3.50 per hour. Less than half the individuals who found jobs through employers, friends and relatives, or ads salaries at this low level. Slightly more than half of the individuals who found their current or most recent job through a school or training agency were receiving a wage lower than $3.50 per hour. Unfortunately, as later more sophisticated analyses will show, these differences in job search behavior relate more to background than to program participation.

Table 24.2

Job Finding Source(s) and Hourly Wage

Current/Most Recent Hourly Pay	Employer (n=170)	Ads (n=31)	Friends Relatives (n=227)	School or Training Agency (n=77)	Youth Program (n=44)
	%	%	%	%	%
Less than $3.50	30.6	41.9	46.7	54.5	81.8
$3.51 - 4.50	31.8	41.9	30.8	29.9	11.4
$4.51 - 6.00	30.6	12.9	15.0	14.3	4.5
$6.01 or more	7.0	3.2	7.5	1.3	2.3

The followup data, shown in Table 25, show that individuals who were in programs that emphasized work experience had higher hourly wages in their current or most recent job than did individuals in programs that emphasized career development. Longer program duration had a positive effect on wages of individuals in work experience programs but negative effect (probably due to foregone income) on the wages of individuals in career development programs.

Table 25

Mean Hourly Wage in Current or Most Recent Job

by Program Characteristics

Program Duration	Program Emphasis	
	Career Development	Work Experience
More than 250 hours	$3.53	$3.83
Less than 250 hours	$3.68	$3.79

The work and economic outcome data show that the youth employment program participants were more likely to have been employed during the 36 month follow-up period than the control group, were more likely to consider work their current main activity, were currently employed in jobs of higher complexity, and received a significantly higher hourly wage. These data also suggest that individuals who sought jobs by contacting employers directly were more likely to be currently employed and to receive higher wages than those who used other job search methods. Finally, the data suggest that individuals who participated in programs that emphasized work experience were likely to receive higher wages than participants in programs stressing career development.

2. Education and training outcomes. Education and training outcomes were considered important in this study both because of their role in increasing human capital and because, in a period of high unemployment, they may represent the wisest investment of time for individuals who cannot find paid work.

Educational level. Table 26 shows the distribution and mean for current highest grade completed by the particpants and the controls. As can be seen, the mean number of years of education for the particpants (12.08) is slightly higher than for the controls (11.97). However, this difference may have more practical than statistical significance. Seventy-five percent of the participants, but only 68 percent of the controls completed 12 or more years of education. The growth in grade level in this 36 month period was 1.35 years for the youth employment training program participants and 1.30 years for the controls.

Table 26

Current Educational Level

(Highest Grade Completed)

	Participants		Controls		Difference
	N	%	N	%	%
Grade 10 or less	48	11.46	64	17.98	-6.52
Grade 11	58	13.84	51	14.33	-0.49
Grade 12	210	50.12	154	43.26	6.86
Grade 13	45	10.74	31	8.71	2.03
Grade 14	32	7.64	30	8.43	-0.79
Grade 15 or more	26	6.21	26	7.30	-1.09
	$\bar{X}$ = 12.08		$\bar{X}$ = 11.97		

Information was also obtained from the education and training history of the particpants and controls. The results are shown in Table 27. As can be seen, there is very little difference in the education and training histories of the two groups.

Type of education/training. The type(s) of education or training particpants and controls took part in during the follow up period is shown in Table 28. Not surprisingly, high school was the most common form of education, with 32% of the particpants and 37% of the controls involved. Postsecondary education involved 39% of the particpants and 38% of the controls. Apprenticships and other types of on-the-job training involved 7% of the participants and 4% of the controls. Thirteen percent of the particpants were involved in CETA or other employment training programs, in addition to their participation in the youth employment programs that were the focus of this study. Eleven percent of the controls were involved in employment training programs.

Duration of education/training. The mean number of months of education or training, or shown in Table 29, was 19.98 for the particpants and 18.79 for the controls. This mean is based on months of full-time education/training, defined as 20 or more hours a week, or the full-time equivalent if the educational training program was part time. Most of the subgroups of participants averaged more months of education/training than the controls. The Black racial ethnic group is the single exception to this. White and Hispanic participants averaged more months of education and/or training than Black participants. This may be explained by the fact that Black controls averaged more months of education/ training than White or Hispanic controls, while Black participants averaged fewer months of education/training than other participants. Males averaged more months of education/training and showed a greater participant-control difference than did females.

Participants who took part in work experience type programs were involved in significantly fewer months of education or training than were those who took part in progams which emphasized career development. These results are shown in Table 30. This outcome suggests that either the career development programs were more successful in teaching their particpants the value of obtaining further education/training or that the career development programs were less effective than the work experience program in placing their participants in employment.

A variable combining the number of months of work and the number of months of education/training was created to obtain a better understanding of the extent to which those youths combined work and education/training. As will be recalled, full-time work was defined as 30 or more hours per week and full-time education was 20 or more hours per week. Full-time equivalents were computed when work or education was part-time. The participants averaged 39.72 months of work and/or education/training the controls averaged 34.78 months. We can conclude from this that a

Table 27

Education/Training History

	Participants (n = 419)		Controls (n = 356)	
	N	%	N	%
No school or training	69	16.47	54	15.17
Previous school/training, not now	275	65.63	241	67.70
Currently in school or training	75	17.90	61	17.13

Table 28

Type of Education/Training

	Participants		Controls	
	N	%	N	%
Regular high school	111	26.5	107	30.1
Voc/tech high school	23	5.5	25	7.1
Postsecondary voc/tech	32	7.6	14	3.9
Postsecondary business school	15	3.6	8	2.3
Junior/community college	48	11.5	51	14.3
Four year college	69	16.5	58	16.3
Apprenticeship	10	2.4	3	0.8
On-the-job training	18	4.3	13	3.7
CETA	41	9.8	23	6.5
Other programs	15	3.6	17	4.8

Table 29

Mean Number of Months of Education and/or Training

	Participants (n=415)	Controls (n=360)	Difference
White	22.19	18.46	3.73
Black	18.95	19.28	-0.33
Hispanic	21.49	17.40	4.09
Male	21.08	19.08	2.00
Females	19.10	18.58	0.52
Total	19.98	18.79	1.19

Table 29.1

Mean Months of Participant Education/Training

by Program Type and Duration

	Program Emphasis	
Program Duration	Career Development	Work Experience
More than 250 hours	21.14	16.50
Less than 250 hours	20.93	13.29

number of participants engaged in paid work and in education training simultaneously during some portion of the 36 month follow-up period but that control subjects were less likely to do this. This finding also indicates that the typical participant was engaged in either employment, education or both throughout the follow-up period but that the typical control had slightly more than one month with no work and no educational activity.

3. Other Attitudinal and Behavioral Outcomes. A third goal of the youth employment training programs, in addition to helping young adults attain work and/or further job training or education, was to help these young people grow in their attitudes about themselves and work and to help them apply these attitudes in positive work-related behavior. Therefore the followup questionnaire obtained information on self concept, locus of control, attitude toward work, and trouble with the police.

Self concept. Attitudes about self were measured by four agree-disagree items: (1) I feel good about myself, (2) On the whole, I am saisfied with myself, (3) I can do things as well as the next person, and (4) I feel I have a lot to be proud of. The results for the youth employment training program participants and the controls are shown in Table 31. As can be seen, there is little difference between the two groups. However, the participants exceeded the controls on three of the four items. The positive responses are very high on these questions. This suggests that these items may have been too transparent to function effectively.

Locus of control. The construct of external and internal locus of control is used to describe the extent to which individuals feel their lives are influenced by forces outside of themselves (external control) versus the extent to which they believe that they have the power to change their own lives (internal control). This construct was measured by five agree-disagree items and was scored for positive (internal) locus of control. As can be seen from Table 32, there was little difference between the participants and controls. However, the participants exhibited more positive (internal) locus of control on four of the five items.

Satisfaction with work. All of the subjects who had ever been employed were asked a series of questions about their satisfaction with their current or most recent job. The results are shown in Table 33. Satisfaction with the job as a whole was significantly higher for the youth employment program participants (82.6% were satisfied or highly satisfied) than for the controls (76.7%). Other significant participant-control differences were satisfaction with pay, fringe benefits, opportunities with the employer, opportunities in the field of work, job security, and the opportunity to develop new skills. There were no significant differences in overall job satisfaction by sex or by race/ethnicity, as can be seen in Table 33.1. Individuals who had obtained their jobs through a school or training agency or through a youth employment program

showed significantly higher levels of overall job satisfaction, as shown in Table 33.2, than those who found their jobs by applying to an employer, through ads, or through friends and relatives.

Trouble with police. Because delinquency and crime rates are highest in young adult populations, it was important to determine if participation in youth employment programs would reduce youths' trouble with the police. The results are shown in Table 34. As can be seen, the program participants were somewhat less likely to have been in trouble with the police in the last two years of the followup than were the controls.

In summary, youth employment program participation had a major impact on youth's satisfaction with work. There were significant participant-control differences in overall job satisfaction and in satisfaction involving salary and benefits, future opportunities with the employer and/or in the field of work, job security, and opportunities for developing new skills. Although participants tended to have higher self esteem a more internal locus of control, and lower levels of trouble with the police, these differences were not statistically signified.

The next section, relational analysis, shows how these background, education, job search, unemployment rate, and outcome variables interact.

Table 30

Positive Self Esteem Responses by Participants and Controls

	Participants		Controls	
	N	%	N	%
I feel good about myself	388	92.6	325	91.3
On the whole, I am satisfied with myself	333	79.5	289	81.2
I can do things as well as the next person	394	94.0	328	92.1
I feel I have a lot to be proud of	387	92.4	312	87.6

Table 31

Positive (Internal) Locus of Control Responses for Participants and Controls

	Participants		Controls	
	N	%	N	%
Every time I try to get ahead, something or somebody stops me (Disagree)	253	60.4	192	53.9
If I work hard, I will get ahead (Agree)	393	93.8	338	94.9
What happens to me is my own doing (Agree)	322	76.9	267	75.0
Success depends largely on luck rather than on hard work (Disagree)	316	75.4	258	72.5
Planning ahead usually makes things work out (Agree)	322	76.9	270	75.8

Table 32

Satisfaction with Aspects of Current/Most Recent Job-

Ever Employed Participant and Controls

	Participants		Controls		Difference
	N	%	N	%	%
Job as a whole	323	82.6	243	76.7	5.9
Pay	277	70.7	208	65.4	5.3
Fringe benefits	221	57.4	157	50.2	7.2
Importance	309	79.4	247	77.9	1.5
Challenge	267	68.5	217	69.1	-0.6
Working conditions	308	78.6	257	81.1	-2.5
Opportunities with this employer	222	56.8	153	48.3	8.5
Opportunities in field of work	233	59.9	163	51.3	8.6
Pride felt	323	82.8	254	79.6	3.2
Respect received	319	81.6	266	83.6	-2.0
Use of education/training	264	67.5	203	64.2	3.3
Job security	253	64.9	185	58.4	6.5
Supervisor	321	83.2	260	82.5	0.8
Opportunity to develop new skills	275	70.7	201	63.4	7.3
Opportunity to help others	351	90.5	285	89.6	0.9

Table 32.1

Overall Satisfied with Current/Most Recent Job

by Sex and by Race/Ethnicity

	N	%		N	%
Males	248	79.2	Whites	90	80.4
Females	318	80.5	Blacks	357	79.7
			Hispanics	119	80.4

Table 32.2

Percent Satisfied with Current/Most Recent Job

by Job Search Source

Source	N	%
Employer	121	78.1
Ads	25	75.8
Friends & Relatives	185	75.8
Youth Program	40	90.1
School/Training Agency	75	91.5

Table 33

Trouble with Police in Last Two Years

	Participants		Controls	
	N	%	N	%
None	376	89.7	311	87.4
Once	25	6.0	30	8.4
A couple of times	13	3.1	11	3.1
More than a couple of times	5	1.2	4	1.1

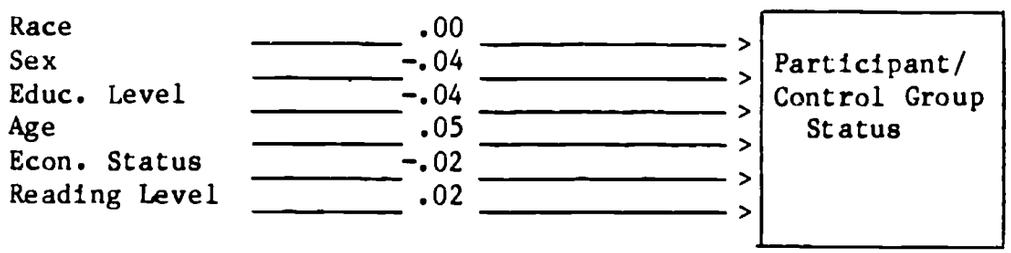
II. Relational Analyses

A. Effects of Individual Characteristics and Program Participation on Work and Career Outcomes

Before examining program effects on career-related success and adjustment outcomes, the first question for consideration is whether participant and control group members were comparable on key background characteristics. Figure 1 shows the standardized partial regression weights describing the relationship of those characteristics to the respondent's status as a participant or control group member. An asterisk beside a regression weight indicates that it is statistically significant.

Figure 1

Effects of Background Characteristics on Participant/Control Group Status



R = .09

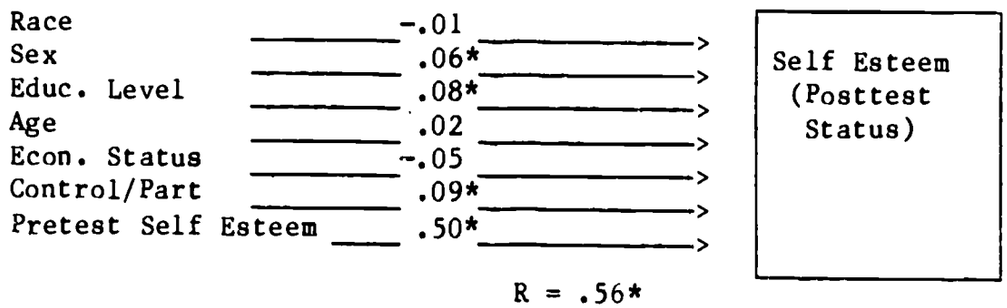
From Figure 1, it can be seen that none of the regression weights reach statistical significance. This serves as support for the comparability of the two groups. It is "legitimate," therefore, to contrast the two groups with respect to gain in career performance outcomes. That is, it would seem that the two groups are at least comparable on measured background variables. This does not, of course, mean that the participants and controls are equivalent with respect to other unmeasured and possibly confounding self-selection variables.

1. Effects of Background Characteristics and Gains on Career Knowledge and Attitude

Here the sequential regression analyses allow for an examination of whether participation in a youth training program, along with other background characteristics, accounted for gains achieved with regard to the 7 knowledge and attitude skill measures administered at pre- and post-training time periods. By controlling for initial status in the regression (i.e., pretest score), the role of each variable in achieving gain can be defined while simmultaneously controlling for the effects of the other variables.

Figure 2a

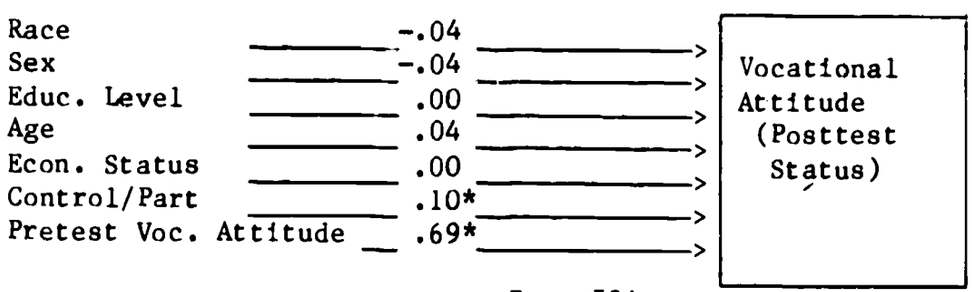
Effects of Background Characteristics, Unemployment Rate and Program Status (Participant/Control) on Gain in Self Esteem



R = .56*

Figure 2b

Effects of Background Characteristics, Unemployment Rate and Program Status on Gain in Vocational Attitude



R = .72*

Figures 2a and 2b present the results of the prediction of pre-post gains, in the areas of self-esteem and vocational attitudes, from background variables and program participation. These were the only two test measures that showed statistically significant gains in favor of participation. Inspection of the significant standardized partial regression weights ($p < .05$) shows that gains in self esteem--when controlling for initial (pretest) performance on the measure--prove to be significantly influenced by the individual's having been a program participant (i.e., the largest significant standardized regression weight appears for Participant/Control Status). That gain among participants in Self Esteem is also more likely to occur if the individual is female and if educational level at program entry was higher.

For the Vocational Attitude measure, the sole significant influence on gain (in these general perceptions of the value of jobs and maintaining employment) was found to be the individual's participation in a youth-work training program three years earlier.

Background variables related to gains for the other 5 vocational-orientation abilities, which were not significantly influenced by program participation, can be summarized briefly:

- o Job Search Skills--showed significant gain only on the basis of educational status at program entry; with those of a higher educational level tending to gain more in Job Search skill capability at the time of program completion.

- o Job Knowledge Skills--produced no significant background influences on gains achieved when initial job knowledge status is controlled--although the largest regression weight, just short of significance, occurred for educational level.

- o Job Holding Skills--which serves primarily as an attitudinal scale, was one in which gain was significantly associated with sex; such that females tended to be larger gainers in this attitudinal area than males.

- o Work-Related Attitudes--was not significantly influenced in gain by either background characteristics or participant/control group membership.

- o Sex Stereotyping of Occupations--resulted in gains that were significantly influenced only by racial group membership with White youth showing greater improvement than minority group youth (Blacks and Hispanics) in reducing their sex stereotyped perceptions of occupations.

It can also be pointed out that gain over these 5 career-skills measures, although not having been significantly influenced by participant/control status, was in the "positive" direction for 4 of the 5 measures (i.e., tending to favor training-program participants for all but the Sex Stereotyping of Occupation measure).

An analysis had additionally been undertaken to examine the effects on outcomes of the posttest scores for the 7 measures (unadjusted for initial status), along with the background characteristics and program participation as independent variables. No significant effects of posttest status were found on the career-related outcomes, when the other characteristics were controlled for.

2. Effects of Background Characteristics and Program Participation on Work and Economic Outcomes

This phase of the relational, multiple regression analyses defines the extent to which program participation and other background variables explain the work and training outcomes. As indicated in the preceding section, these outcomes include: (1) Current Main Activity, defined in terms of whether or not the respondent was employed during the week that he or she was interviewed (for those who were not in full-time training), (2) Number of months worked

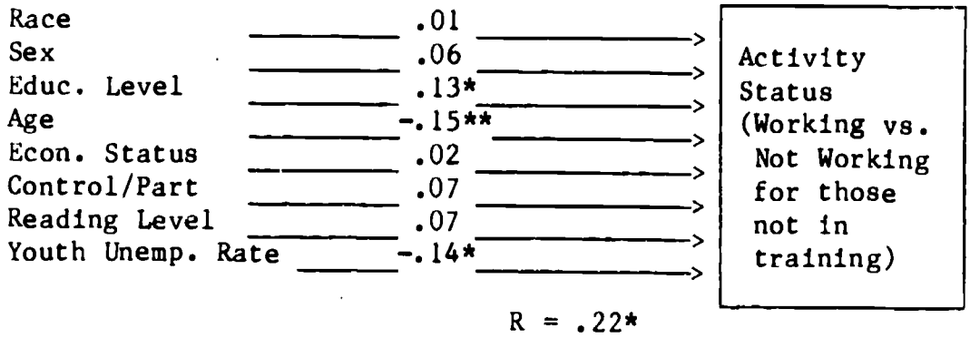
over the 3 years since training program completion,* (3) the time (in months) spent in full-time work, (4) Number of months that the individuals had spent "doing nothing" (not working, not in school, not looking for work)--a condition that would place them "at risk" for disruption of career development, (5) Complexity Level of the most recent or last full-time job that the individual obtained, and (6) Hourly salary on the current or most recent full-time job held.

Figures 3a through 3d show effects of background variables and program participation on the four outcomes of Current Main Activity, Number of Months Worked, Complexity Level of job obtained, and Salary Level.

Of primary interest, in assessing the significant standardized regression weights, is the extent to which program participation (participant/control status) played a role in the work and economic outcomes after control for background characteristics. The one outcome for which such an effect occurs is that of Total Number of Months Worked over the 3 years since program completion. This can be considered the most relevant of the outcomes, as a summary index of career "success." Those who had been training program participants tended to work more over the 3-year period than their control counterparts. The raw regression weight indicates that program participants worked an average of 4.6 more months during the followup period than the control group members. With regard to the other work and economic outcomes, participant/control status, even when not significant, always shows a positive effect and is just short of significance for the current main activity outcome (Figure 3a).

Figure 3a

Effects of Background Characteristics, Unemployment Rate and Program Status on Current Activity Status

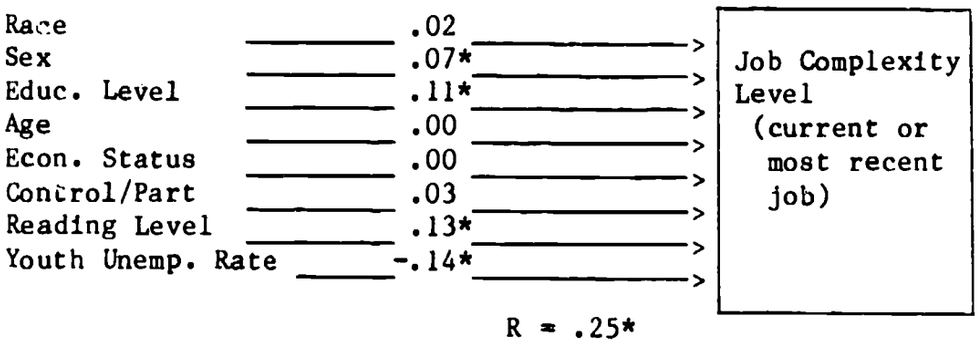


R = .22*

* Those who worked part-time for more than 10 hours but less than 30 hours in one month were credited with 1/2 month of full-time employment.

Figure 3b

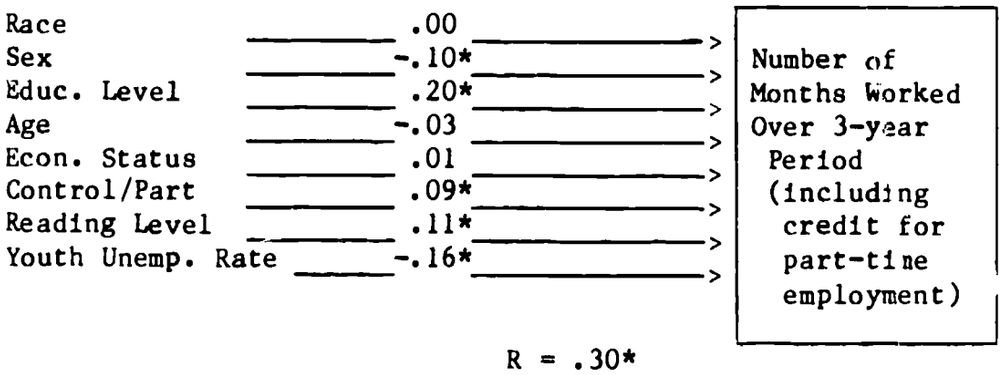
Effects of Background Characteristics, Unemployment Rate and Program Status on Complexity Level of the Job



R = .25*

Figure 3c

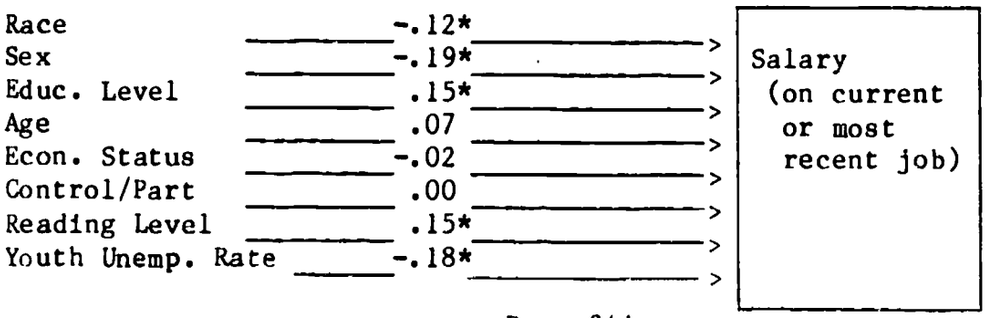
Effects of Background Characteristics, Unemployment Rate and Program Status on Number of Months Worked



R = .30*

Figure 3d

Effects of Background Characteristics, Unemployment Rate and Program Status on Salary



R = .34*

The two most significant influences on all four of the work-related outcomes are initial educational level and the local unemployment rate. The higher the youth unemployment rate that individuals of a given race faced in their region, the less successful these individuals were in the work outcomes. Correspondingly, the higher the individual's educational level, the greater the employment success (even when the youth unemployment rate and other background characteristics are controlled). The impact of reading level, at the time of training program initiation, remains dominant in a youth's ability to achieve job success. Higher earnings, longer total duration of employment and higher level jobs are each seen as byproducts of better reading skill on the part of these disadvantaged youth.

The role of sex in influencing these employment outcomes is somewhat mixed, but does follow the general pattern of previous findings. That is, females hold jobs of significantly higher complexity level. In part, this occurs because (as seen in the descriptive analyses) they tend to enter the white collar office, clerical and sales occupations which receive higher complexity level ratings than blue collar crafts, mechanic or machine operator jobs prevelant for the male sample. Despite the higher complexity level jobs for females, there was, nevertheless, a strong tendency, for them to work less and earn less--such effects occurring even when education and ability levels are taken into account.

The minimal occurrence of significant effects of race/ethnicity (White vs. minority group) in these regressions, can be attributed in large part to the result of substantial colinearity in the equations between race and the regional youth unemployment rate variables ($r = .60$). The one outcome where race does appear as significant, despite that strong colinearity, is salary level (Figure 3d). From the significant regression weights it is apparent that not only males of higher educational and reading level are likely to receive higher salaries, but that Whites have a distinct salary advantage over minorities.

It should be observed at this point that the use of the variable of Race, categorized as White vs. Minority (Black and Hispanic), represents a sensible dichotomy for purposes of a primary question being considered in these analyses—i.e., do Whites have an advantage over Minority group members, in general, during the post-training period with regard to work outcomes? From the analyses it can be seen that race had a negligible effect on most of those outcomes with the excepton of salary level. At least, in part, this is because of the colinearity between regional youth unemployment rate and race--as previously mentioned. However, in the earlier descriptive analyses of outcomes, it was of value to compare the two minority subgroups (Black and Hispanic) separately with one another and with Whites on a number of performance outcomes. Those results (Tables 19.1 and 20.1) showed a significant difference across the means of the three ethnic grops for the Job Complexity and the Mean Hourly Wage variables. The univariate F-tests were significant reflecting some advantage for Hispanic over Whites; with both groups having a clear advantage over Blacks on these two job performance outcomes.

In order to test this finding controlling for other background variables, it was appropriate to perform additional multiple regression analyses with the ethnic groups as separate independent variables against the salary and job complexity outcomes. This was done using "dummy" coding of Race, with Whites as the comparison group for the Black and Hispanic groups. The results clearly indicated that separating the ethnic groups while accounting (controlling for) the other background and ability variables in the system, removes any effects that could be attributed to ethnic group differences on the two job outcomes.

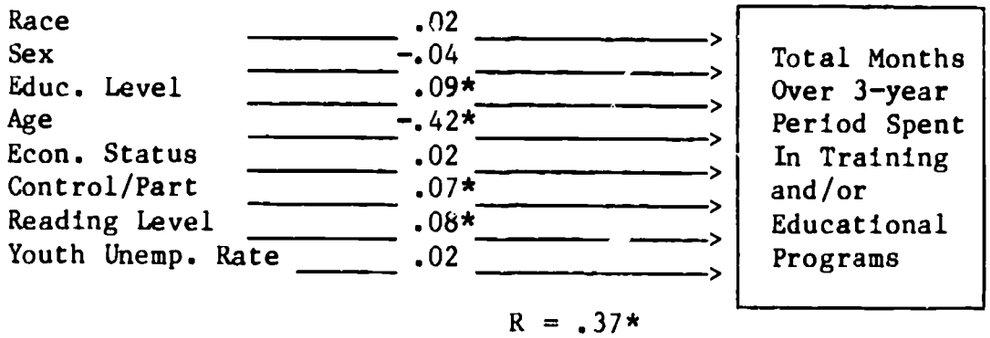
(b) Training/Education Outcome and Gain

When the total number of months spent in training or education is used as the dependent variable, there is a significant effect attributable to participant vs. control group membership, as seen in Figure 4a, with a standardized partial regression weight of .07 ($p < .05$). Participants averaged almost three additional months of education or training time during the 3-year followup than did members of the control group.

The effect of age on total training/education time is seen in the large regression weight for that variable (-.42), indicating that the younger individuals were much more likely to have spent a longer period of time in training. Younger individuals may simply have had greater difficulty in obtaining employment and been forced to turn to training activities in order to enhance their career prospects, or they may have been more likely to still be enrolled in school. Equally clear, however, from the pattern of significant weights is that the youths who went on to spend more time in training also tended to be the ones who had higher initial educational levels and/or better reading skills.

Figure 4a

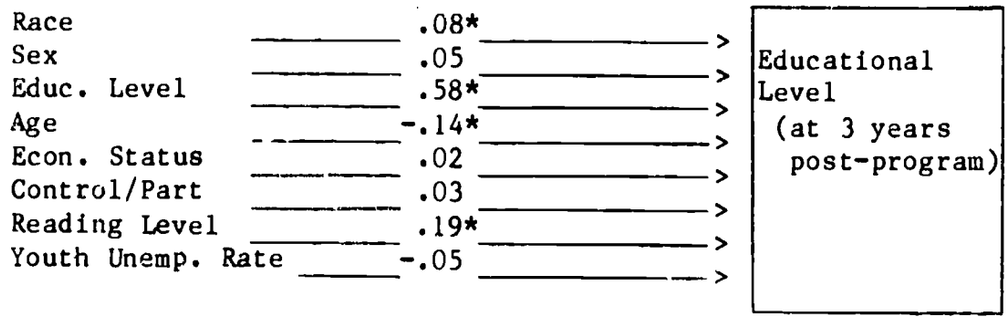
Effects of Background Characteristics, Unemployment Rate and Program Status on Total Months Spent in Training/Education Programs



R = .37*

Figure 4b

Effects of Background Characteristics, Unemployment Rate and Program Status on Educational Level Achieved (3 Years After Time of Training Program Completion)



R = .59*

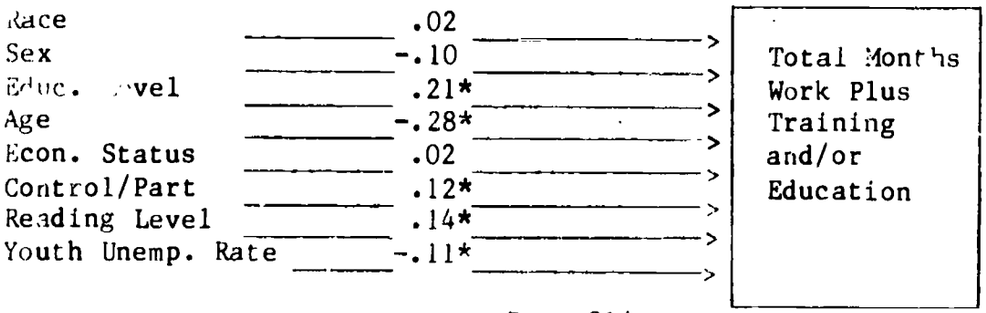
Somewhat similar results are shown in the analysis of the determinants of gain in formal educational level between program entry and the followup three years after program completion (Figure 4b). Initial educational status is, as would be expected, the best predictor of final educational status. But, when initial educational level is accounted for, it is minority group members who tended to gain more in formal education than Whites. It is also those of superior reading ability who achieved more formal education, as well as those who are younger. Program participation, although in a positive direction, does not significantly influence this outcome when the other variables are controlled for.

3. Effect of Background and Participant Status on Combined Work and Training Outcome

The combined outcomes of total months spent in full-time work and total months spent in full-time training/education constitute the single best overall index of successful career-oriented activity. Performance on this composite index is influenced by many of the same variables found when the two measures were analyzed as separate outcomes (Figure 5).

Figure 5

Effects of Background Characteristics, Unemployment Rate and Program Status on Total Months of Work Plus Training/Education



R = .31*

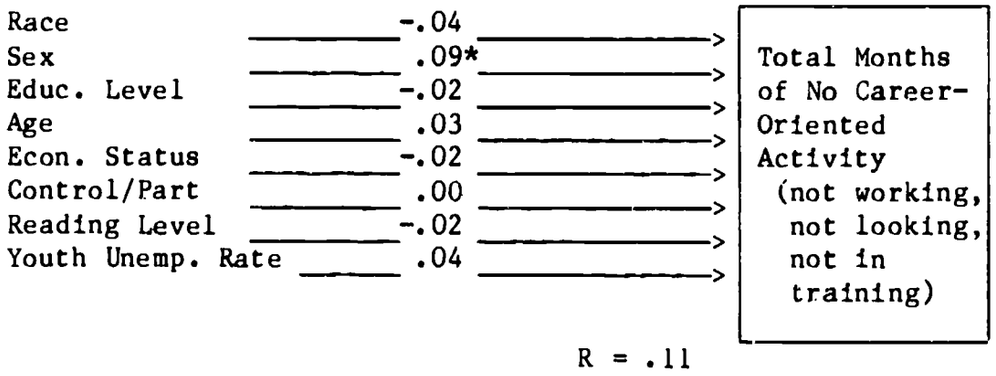
Those who had participated in a youth-work training program accrued a significantly greater number of months of work and training time. The advantage achieved in these career-oriented activities by the participants was approximately 7.5 months of combined work and training time over the 3-year post-training period. Reading ability and educational level remain important influences, with any advantage realized also favoring males. Probably as a result of its overwhelming influence shown for the full-time training outcome alone, age retains its significant effect on this combined index (i.e., the younger the individual the more work and training time achieved).

4. Relationship Between Background and Participant Status and Months Without Career-Oriented Activity

At the opposite end of the career success continuum, from the combined time spent in work and training, is the outcome defined by time spent not working, and not in any training or educational program (i.e., doing "nothing"). The one background characteristic that is shown to effect this cumulative time spent "at risk" in the career development of these youth is that of sex, with females as the ones more likely to accumulate more time under that condition (Figure 6). This result stems from the fact that females represent the largest proportion of those categorized as "housewives," who remain at home engaged in child care and homemaking tasks.

Figure 6

Effects of Background Characteristics, Unemployment Rate and Program Status on Months Spent in No Career-Oriented Activity



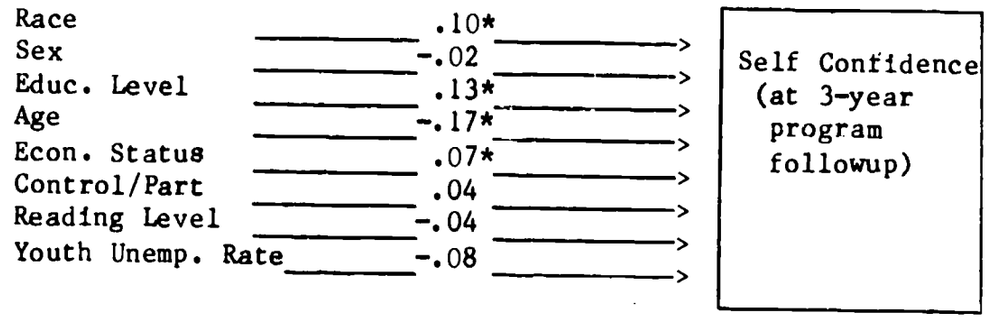
R = .11

5. Effects of Background Characteristics and Program Participation on Attitudes and Other Behaviors

The question of whether background characteristics and program participation act as influences on attitudinal and social adjustments, is considered in terms of a set of constructs dealing with how the individual perceived himself or herself at the time of followup based on (a) self confidence (self esteem), (b) ability to control one's vocational destiny (locus of control), (c) degree of expressed satisfaction with current or most recent job and (d) social adjustment in terms of keeping out of "trouble" with law enforcement authorities (i.e., the police). The partial regression analyses for each of these outcomes are summarized in Figures 7a through 7d.

Figure 7a

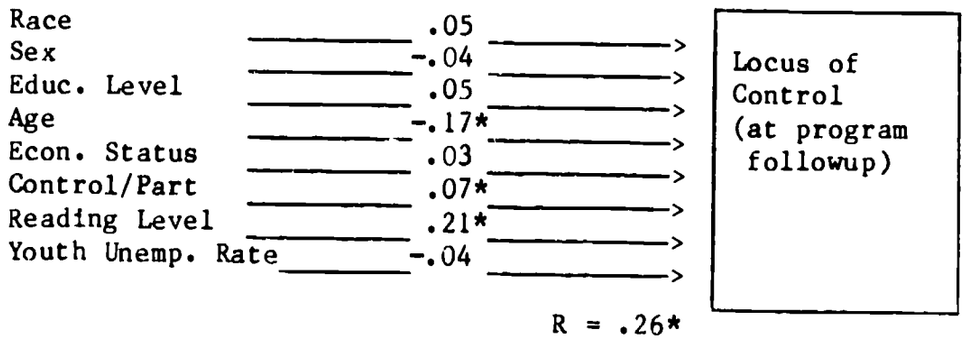
Effect of Demographics and Program Status on
Self Confidence at Time of Followup



R = .18*

Figure 7b

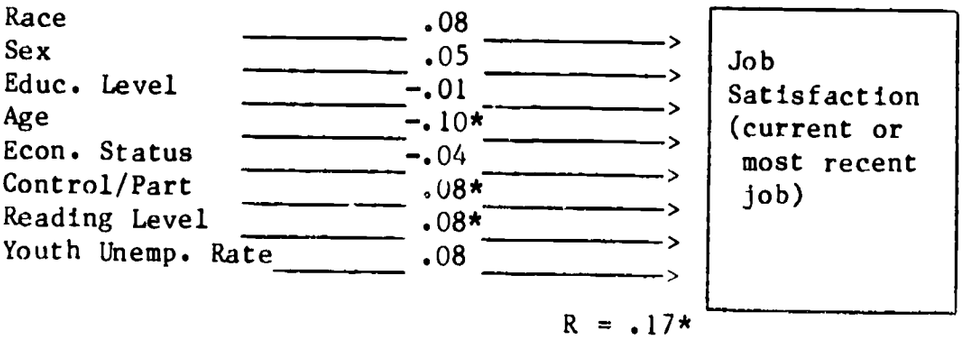
Effects of Demographics and Program Status on
Locus of Control



R = .26*

Figure 7c

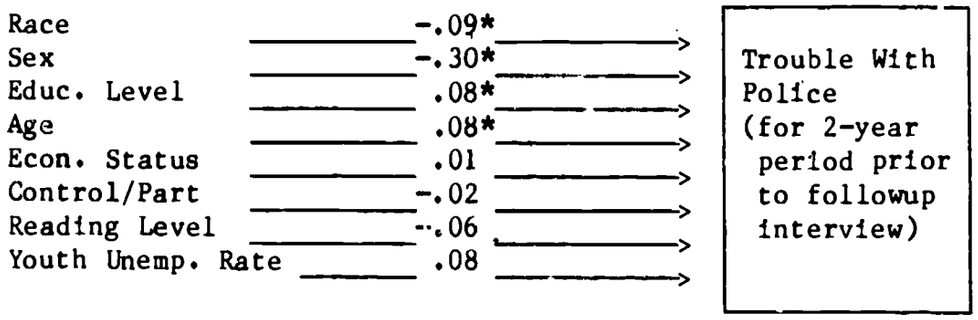
Effect of Demographics and Program Status on
Job Satisfaction



R = .17*

Figure 7d

Effects of Demographics and Program Status on Trouble with Police



R = .35*

With regard to feelings of self confidence (Figure 7a), younger minority group respondents expressed stronger feelings of self confidence, as did those of higher educational level and economic status. Although a sense of control over one's future success has often been considered conceptually similar to the self esteem construct, the pattern of variables that act to influence Locus-of-Control (Figure 7b) are by no means the same as found for Self Esteem (the two scales show a zero-order r of .20 for this sample). Age retains a dominant influence on Locus-of-Control with younger persons expressing stronger feelings of control. But, it is reading that has the highest effect on this attitudinal outcome. There is also a significant positive effect for those who had been training program participants three years before. Thus, better readers and those who had gone through youth-training programs were the ones who showed more specific feelings of personal mastery and ability to accomplish goals. The influence of age and training program participation also carry over into a significant positive effect for Job Satisfaction (Figure 7c) which tends to be higher for younger respondents. (Although just short of significance, minority group membership also influences job satisfaction positively).

Results for the analysis of trouble with police as a social adjustment outcome are shown in Table 7d. By far, the predominant influence is Sex which, as expected and in consonance with prior results for this variable, shows males to report more trouble with law enforcement authorities than females. Concommitantly, at much lower but significant levels of effect, there is the surprising finding that for this economically disadvantaged young adult population, it is older Whites with more education who reported more trouble with police. (More appropriately, however, but not quite reaching significance is the tendency seen for those of lower reading level and in an area of higher youth unemployment to report more trouble of this sort).*

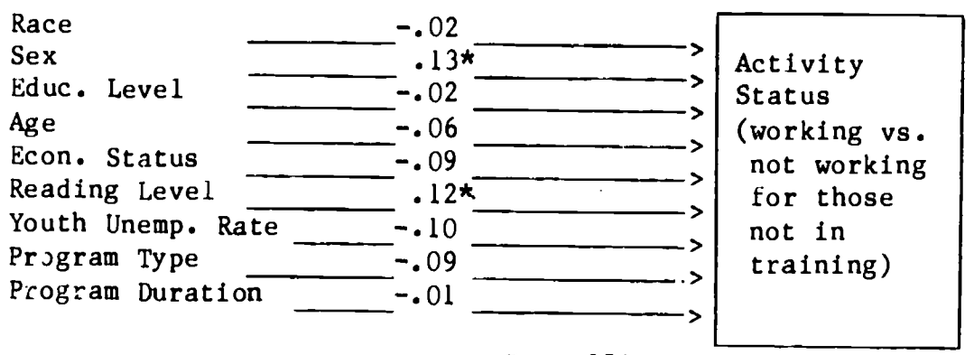
* The variable Trouble With Police represents the most highly skewed of the outcome variables (virtually Poisson in form) and could result in relatively unstable shifts of significance around the .05 level.

B. Effects of Individual and Program Characteristics on Participants' Work and Career Outcomes

This phase of the relational analyses deals primarily with influences of training program characteristics ("process") on work and career performance outcomes. It is, of course, feasible to conduct such analyses with the former training program participant sample only, and it parallels the regression analyses performed above (in Part A) for the total participant and control sample in that it uses the same 7 work-related outcome measures (i.e., Activity Status, Salary, etc.). The program process information, utilized as independent variables, includes program type and program duration. These are tested for their main effects on outcomes, along with any significant interaction produced. The program duration variable was based on total hours of instruction provided to clients who remained in the program for the prescribed training time. For the variable of program type, there were two categories used in the classification. One, designated as Career Development, consisted of those programs that provided world-of-work and career awareness instruction incorporating counseling and career exploration. The second category was composed of programs that offered any form of specific skills training (whether as basic remedial skills and/or on-the-job training).*

Figure 8

Effects of Background, Unemployment Rate, and Program Characteristics on Participants' 1982 Activity Status

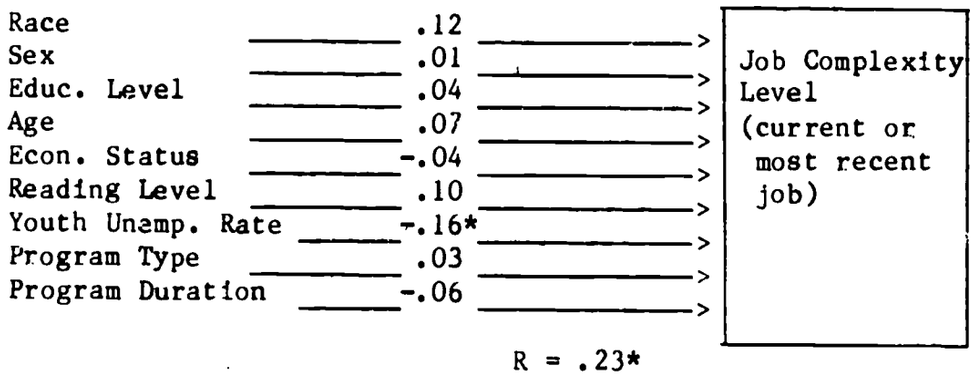


R = .28*

*Although some of the programs could be classified as a mix of these two types, the available samples did not provide sufficient numbers of participants in that category to permit its use for the analyses.

Figure 9

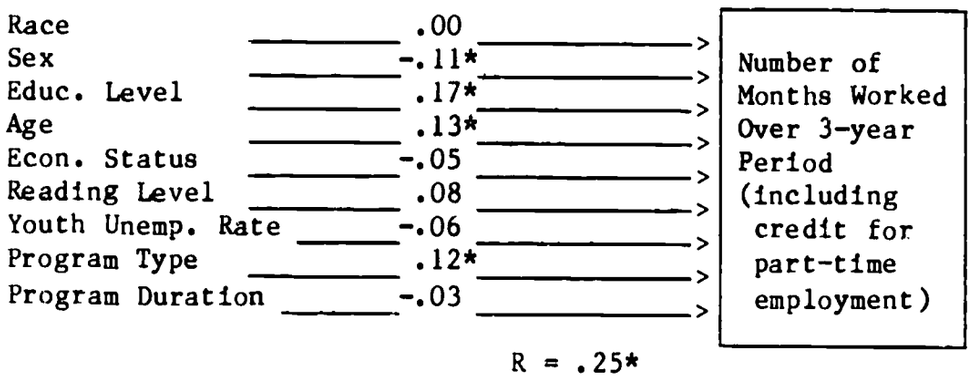
Effects of Background, Unemployment Rate, and Program Characteristics on Job Complexity Level for Participants



R = .23*

Figure 10

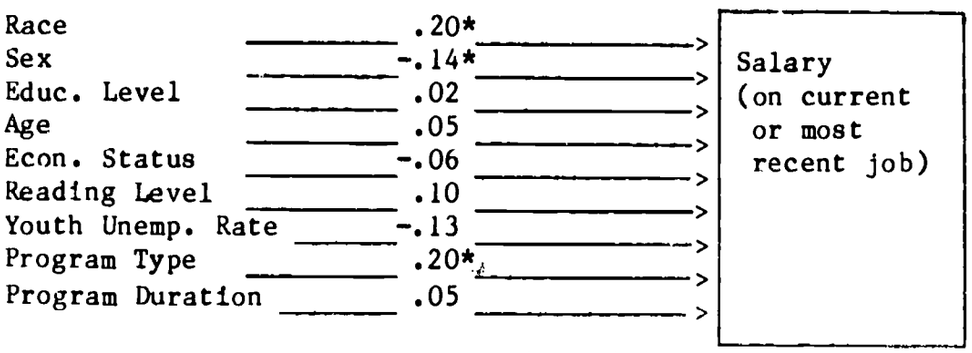
Effects of Background, Unemployment Rate, and Program Characteristics on Total Months Worked by Participants



R = .25*

Figure 11

Effects of Background, Unemployment Rate, and Program Characteristics on Participants' Wages



R = .29*

Results of the regression analyses for the four work-related outcome variables are presented in Figures 8 through 11. Demographic variables and youth unemployment rate are shown along with the program effects.

From the standardized partial regression weights presented, it can be seen that the program characteristics of type and duration had no significant impact on either current activity status or job complexity level but did have a significant impact on total number of months worked and on wages. Other independent variables exercised significant influences on these work-related outcomes. Specifically, it was females and individuals with higher reading level who were the ones most likely to have been employed at the time of the followup (Figure 8).

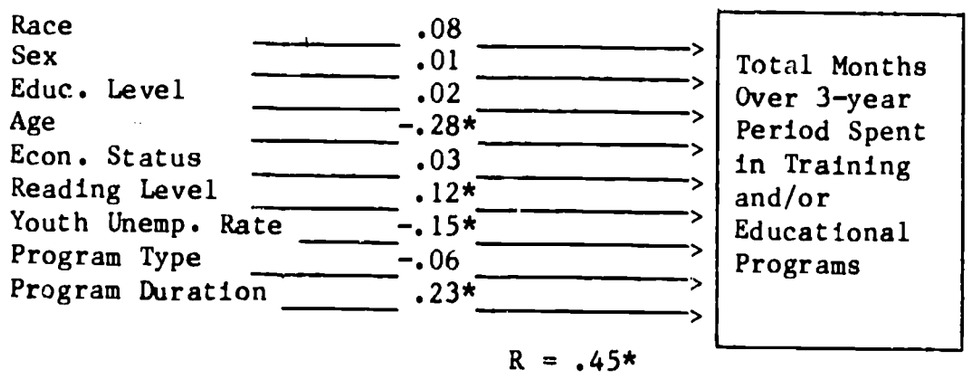
Complexity level of the job obtained by the participants is an outcome significantly influenced only by the extent to which the former trainee resides in a region with a lower youth unemployment rate (Figure 9). This lower unemployment rate makes it more likely that he or she will obtain a job of higher complexity level.

The total months worked by participants over the three years following completion of training are a function of sex, educational level, age, and type of program (Figure 10). Those participants who were enrolled in a work experience program were more likely to have worked for a longer cumulative time. Also, acting significantly on this important career outcome are the effects of educational level (participants with a higher educational level were likely to have worked for more months), age (older participants worked more) and sex (males worked more months). Salary (hourly wage) is an employment outcome effected significantly by program type, race, and sex, the work experience program again resulting in a more favorable outcome (i.e., higher wage). Race is also seen to have a significant effect on Wage. But, unlike the results for the total sample, wherein Whites tended to earn more, it is minority group members who now show up as higher wage earners for this participant sample when controlling for program type and duration (Figure 11). Along with this effect, sex assumes a significant role. Female participants tended to earn less than males (this difference is similar in magnitude to the effect found for the total participant/control sample in Section A).

The Training/Education outcome also shows a significant main program type effect. A significant interaction effect with program type and duration (Figure 12) was also found. The main effect indicates that participants who had been in programs of longer duration were more likely to go on to more training and education; while the interpretation of the interaction effect is that there is a likelihood for those from longer duration skill programs to obtain more training/education than those from shorter duration skill programs. Additional effects on this outcome are also seen for age, reading level, and unemployment rate. They show more time spent in post-program training and education for participants who are younger, have higher reading levels and reside in areas with lower youth unemployment rates.

Figure 12

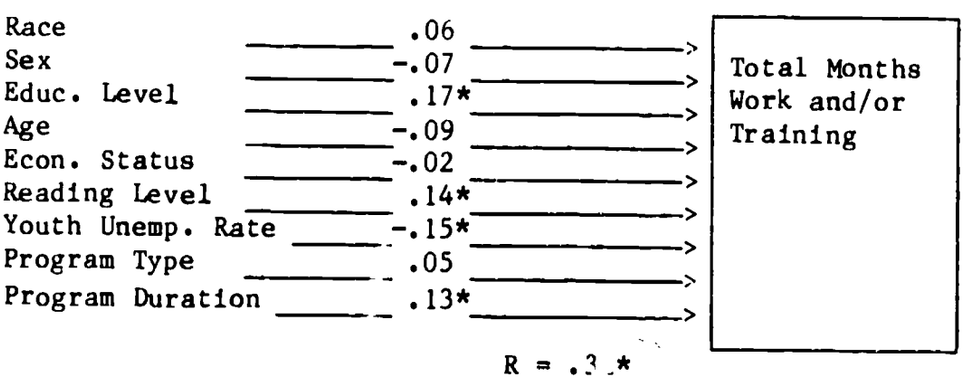
Effects of Background, Unemployment Rate, and Program Characteristics on Total Months of Training/Education by Participants



For the "all-encompassing" outcome of Total Months of Work and/or Training/Education (Figure 13), the major influences occur for educational level and reading level (both positively associated with outcome), and program duration (positive effects for longer programs). Regional youth unemployment rate had a significant negative effect on time spent in work and educational activities.

Figure 13

Effects of Background, Unemployment Rate, and Program Characteristics on Total Months of Work and/or Training by Participants



The outcome of "months of no career-oriented activity" (doing "nothing") showed no significant effects in the multiple regression analysis for any of the background or program process variables. Therefore, no figure showing its multiple regression weights is presented.

It can be noted that multiple R's obtained are significant for all outcomes, with the highest level occurring for Total Time in Training and Education (R = .46).

C. Commonality Analyses of the Relative Effects of Background and Job Search on Career-Related Outcomes

The intent of these analyses is to determine the relative unique effects in terms of variance added, of the background, education, program participation and environmental factors on job search and all of those, in turn, on each of a number of work and education outcomes. The multiple regression analyses of the previous section looked at effects of individual variables on a single outcome for one set of variables at a time. In these commonality analyses, (Pedhazur, 1982), variables based on rational groupings are treated as separate constructs, or "blocks" of explanatory variables, for the purpose of estimating their contribution to the standardized variance in the outcomes. Like path analysis, communality analysis also permits the use of intermediate variables as outcomes (in this study the Job Search construct), that can be acted upon by independent constructs, while, at the same time, serving as an explanatory variable that acts upon other outcomes. That is, one can partition the standardized variance of each dependent variable, whether intermediate or final, into: (1) the unique contributions of each explanatory block (2) an unexplained common part due to correlations between blocks and (3) the criterion variance that is unpredictable (i.e., $1 - R^2$).

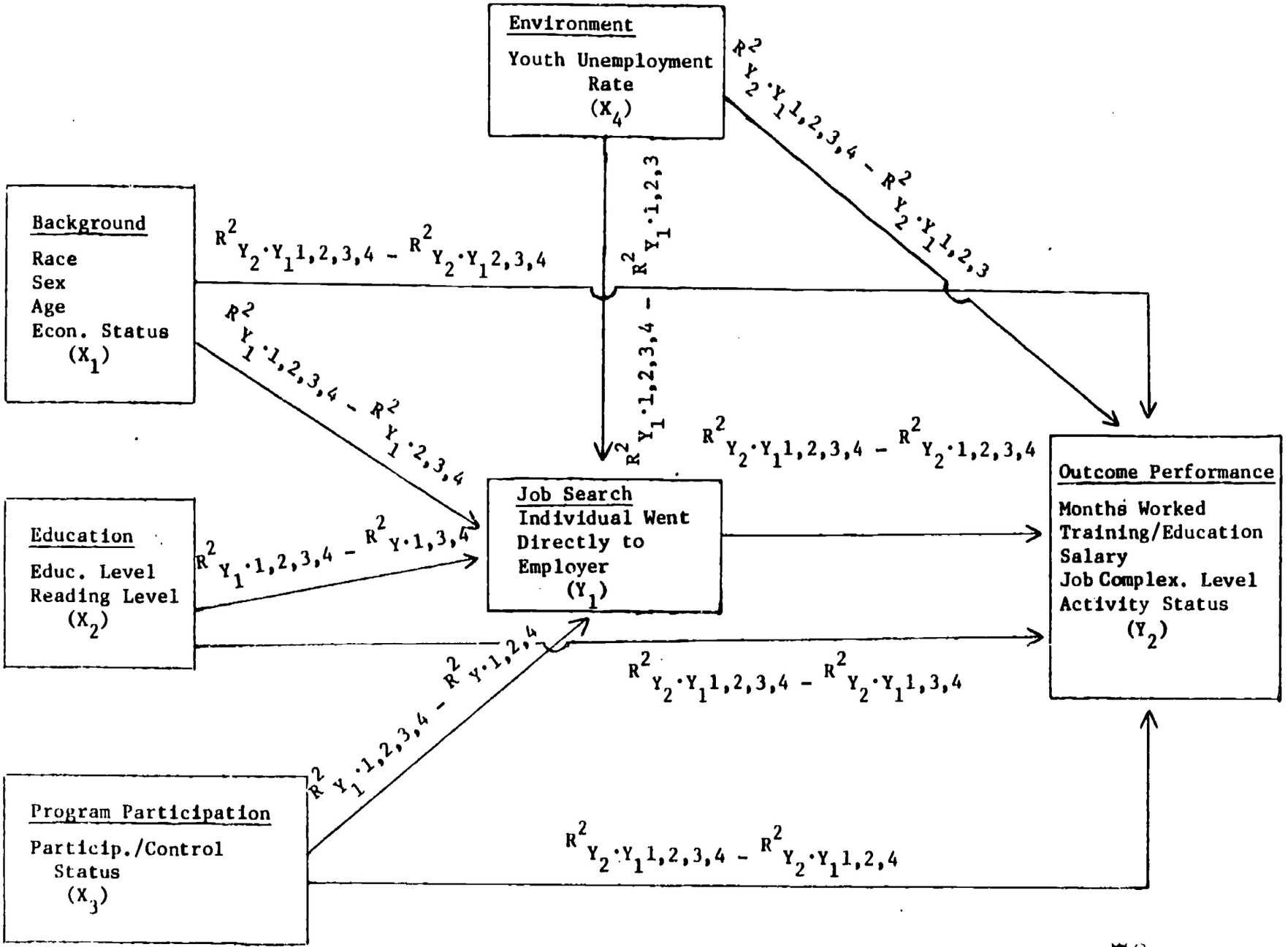
Commonality analysis is not a path analysis, but in a limited sense the comparison of the relative size of the unique variance contribution to dependent variables is analogous to comparing direct effects of standardized path coefficients, although on a different scale. Commonality analysis attempts to partition the standardized variance in the dependent variable, whereas direct effects in path analysis partition the observed correlation between an explanatory and dependent variable into that part that is uniquely due to the explanatory variable and that part that is spurious. Lastly, commonality analysis does not allow for direct computation of indirect effects, while path analysis cannot deal with blocks of variables.

The general model and the variables that define each construct, as well as the equations used to obtain the desired values of incremental variances, are shown in Figure 14.

In Figures 15 through 19, the values that represent the percent of dependent variable standardized variance that can be explained by the respective blocks are entered for each of the 5 models. As an indication of the extent to which each of the education and employment outcomes are predictable from the variables used in the model, the multiple R reflecting the total effect is presented at the lower right of each figure.

Figure 14

General Model for Communality Analysis of Relative Effects



The career-related dependent variables are Total Number of Months Worked, Total Number of Months Spent in Training/Education, Salary on Current or Most Recent Job, Job Complexity Level and Activity Status (currently working vs. not working if not currently in education/training). The block representing these dependent variables is designated as Y_2 in the model. The blocks of independent variables are designated as constructs of Background (identified as X_1), containing variables of Race, Sex, Age and Economic Status; Education (X_2), comprised of Educational Level and Reading Level; Program Participation (X_3), defined by Participant-Control Group Status; and Environment (X_4), defined by the Regional Youth Unemployment Rate. Each of these variables that make up the constructs are defined and scored as previously indicated in the section on the Regression Analyses. Rounding out the constructs used in the models is the intermediate variable of Job Search (Y_2, whether the individual found a job on his/her own by going directly to the employer or used some other source). The dichotomous form of the variable was chosen because of methodological problems in any attempt to construct a dependent variable for relational analyses from the multiple categories of job search techniques available.* However, attempts to incorporate each search method as a separate independent variable had been undertaken as part of the multiple regression analyses. The effects produced indicated only that, those who performed more poorly (in the various job-related outcomes) were the ones who resorted to more job search techniques in order to find employment--i.e., they had a more difficult time in obtaining employment. Thus, interpretations of the possible role of specific search techniques depend primarily on results discussed in the earlier section on Descriptive Analyses.

The results in terms of relative effects for each of the career and education outcomes are as follows:

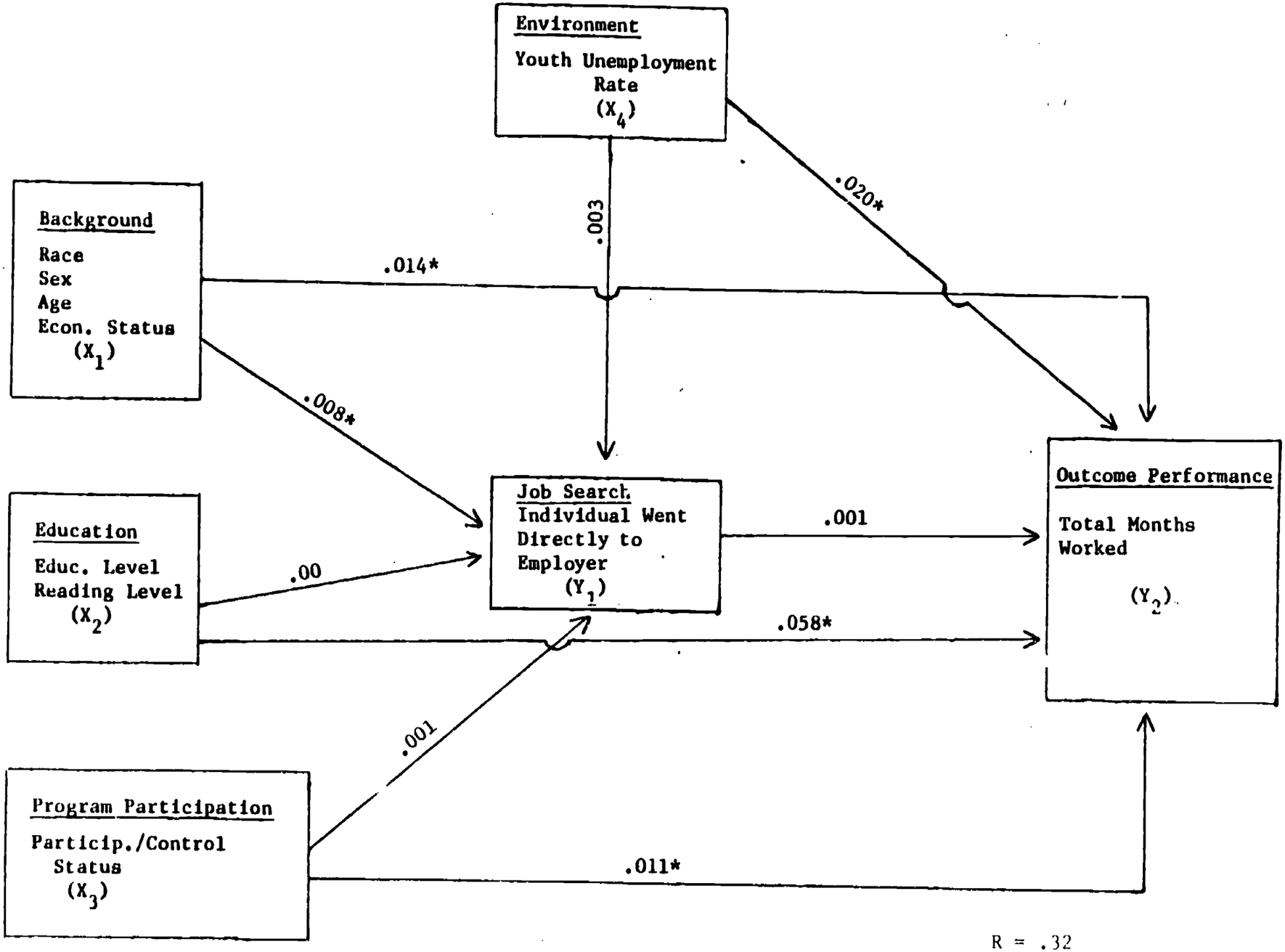
Number of Months Worked--As shown in Figure 15, the major influence on months of employment is the individual's educational level and reading ability. (The value of .058 indicates that 6% of the variance in the outcome can be explained by this construct.) From the regression analyses of the previous results section, it had been shown that both variables that make up the education construct had a significant positive relationship to the months worked outcome.

Other significant direct influences seen, in order of their importance, are: (1) the Youth Unemployment Rate (.020)--the lower the rate faced by the youthful job seekers the more time they spent employed; (2) Background characteristics (.014)--Sex serving as the primary influence within this block of variables, with males tending to be the ones who work more, as had been shown in the regression analysis; (3) Program Participation (.011)--the benefit of an individual's having been in an employment training program being shown in total months of employment achieved over the subsequent 3-year period. This employment outcome is particularly relevant in demonstrating program effectiveness, since it represents the primary goal that those youth training programs were designed to achieve.

*As many as 10 categories of job search sources appear in the followup questionnaire.

Figure 15

Communality Analysis of Relative Effects on Total Months Worked as Outcome



There is no significant effect realized for Job Search (finding a job on one's own by going directly to an employer vs. using other sources) on the number of months worked as outcome. With the other independent variables controlled for, any effect that might be attributable to Job Search method is lost, possibly as a result of confounding by background (demographic) characterisics (unique variance = .008; $p < .01$). This result can be attributable largely to Race since, as was seen in the descriptive analysis, Whites are more likely to go directly to the employer in seeking jobs than are members of the minority groups (especially Black youth). Whites are also found to be more likely to obtain employment than Blacks.

Number of Months in Training/Education--This model (Figure 16) shows the strongest single direct effect of any independent construct, that is the effect of background characteristics on the number of months spent in training and/or education over the 3-year followup (.147). This variance contribution is attributable almost entirely to the overwhelming effect of age, since younger individuals were more likely to go on to more training and education. The only other significant effect is found for the educational construct with both initial educational and reading levels being positively and significantly associated with the training/education outcome.

Salary Level--Wages are affected most by the Background variables (.024) as can be seen in Figure 17. This result is attributable primarily to the significant contributions of Race and Sex (Whites and males tended to earn more). A lesser contribution, just barely reaching significance, is the effect of the regional youth unemployment rate (.006). When all other dependent variables in the system are controlled for, there is a slight tendency for those in areas of lower youth unemployment to earn more in the current or most recent job they held. Salary had been shown in the decriptive analyses to be higher for those who found jobs on their own (i.e., went directly to employer rather than other sources). But, as in the other models, any effects are reduced when Background is accounted for.

Job Complexity Level--This model (Figure 18) produces a pattern that differs from the previous model, using Salary Level as outcome, in only one major respect. This is the significant effect shown for the Education construct (.033). The presence of this effect here, in contrast to its lack for Salary Level as outcome, could be attributed primariliy to the fact that higher salaries are often obtained in blue collar jobs which have lower complexity ranking.* Higher levels of job complexity are far more likely to be a direct function of education and academic abilities than was salary.

*The zero-order r between Wage and Complexity Level, in this sample of highly restricted range on both variables, is only .08.

Figure 16

Communality Analysis of Relative Effects on Total Months of Training/Education

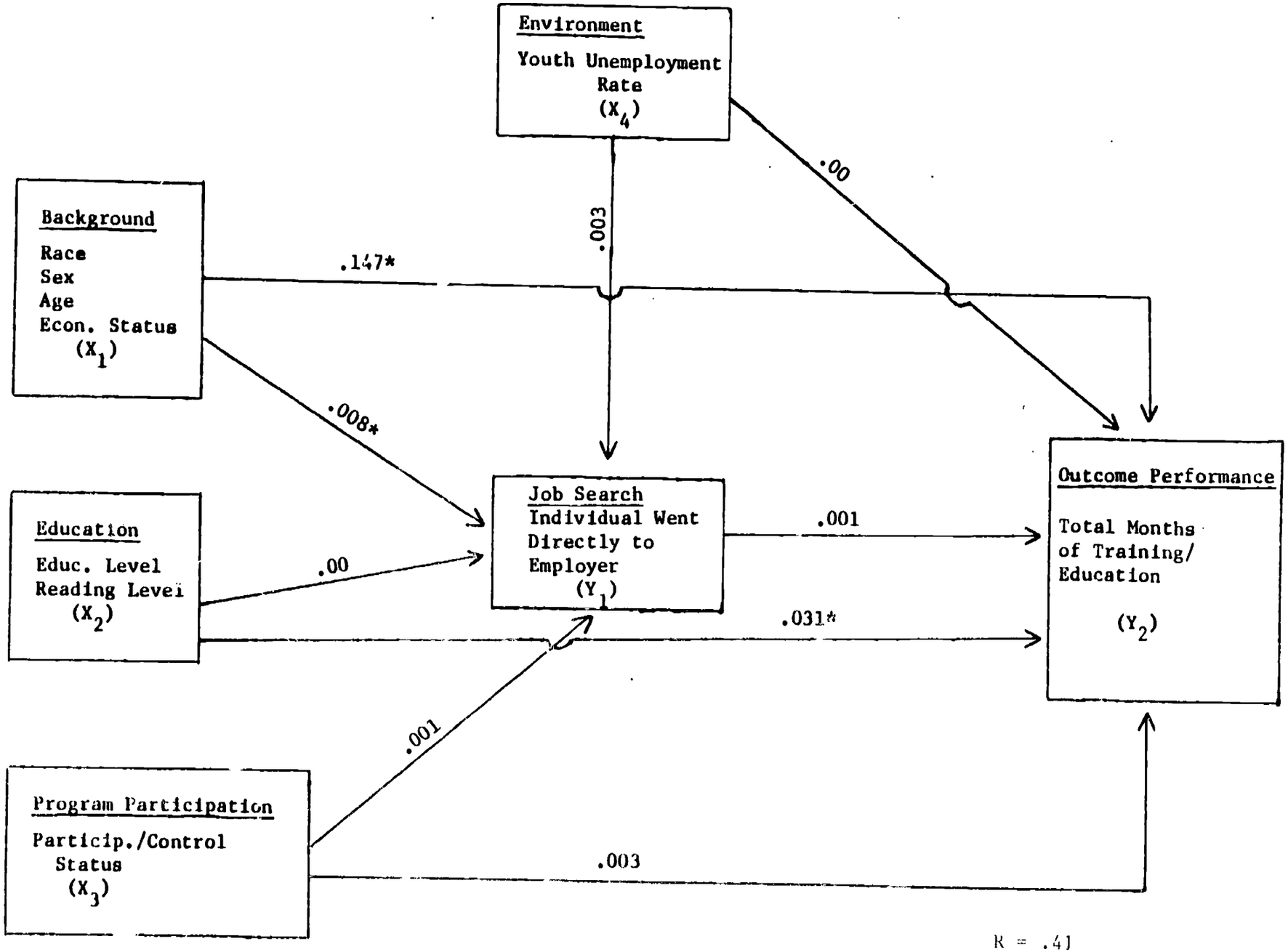


Figure 17

Communality Analysis of Relative Effects on Salary

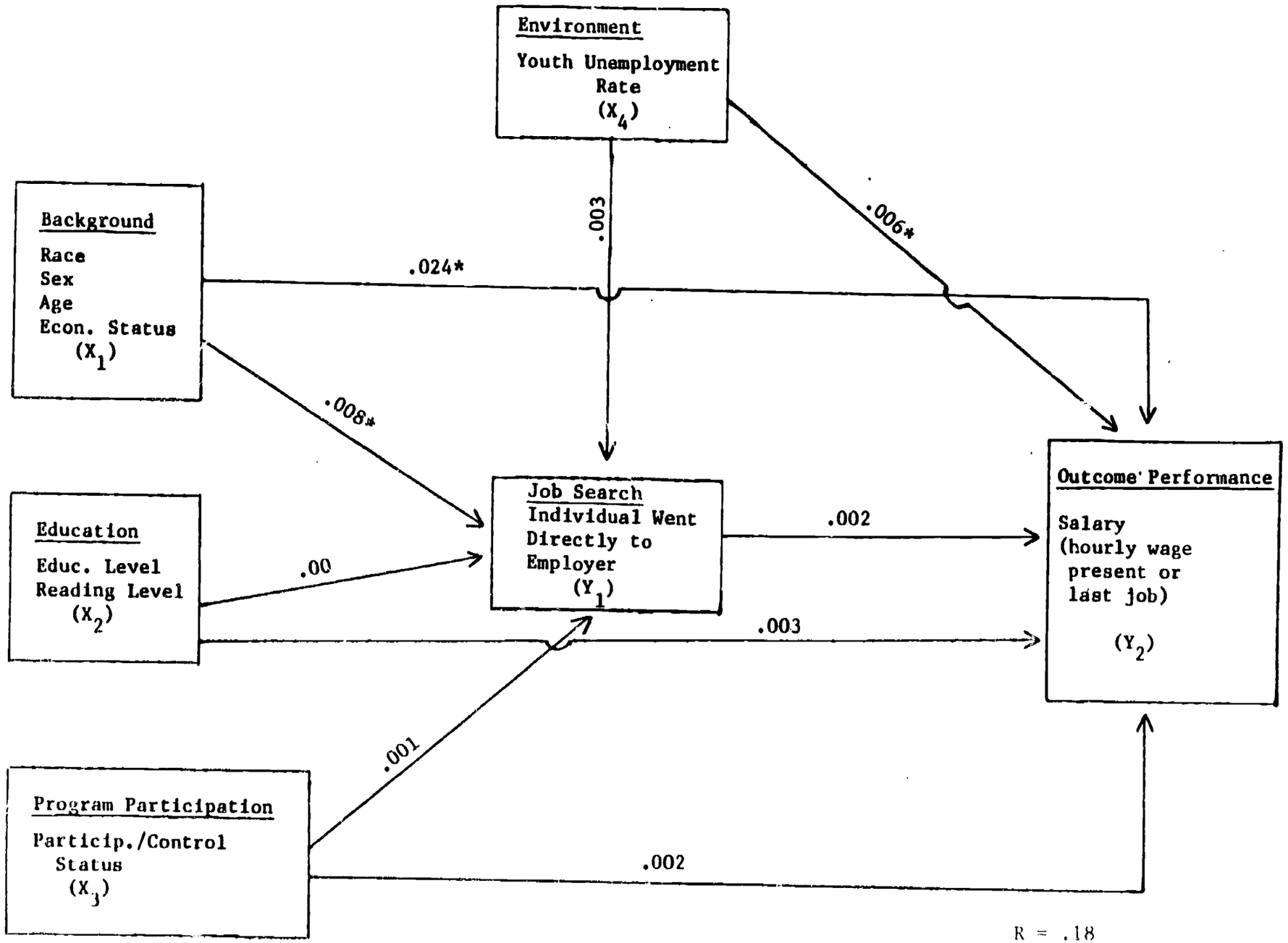
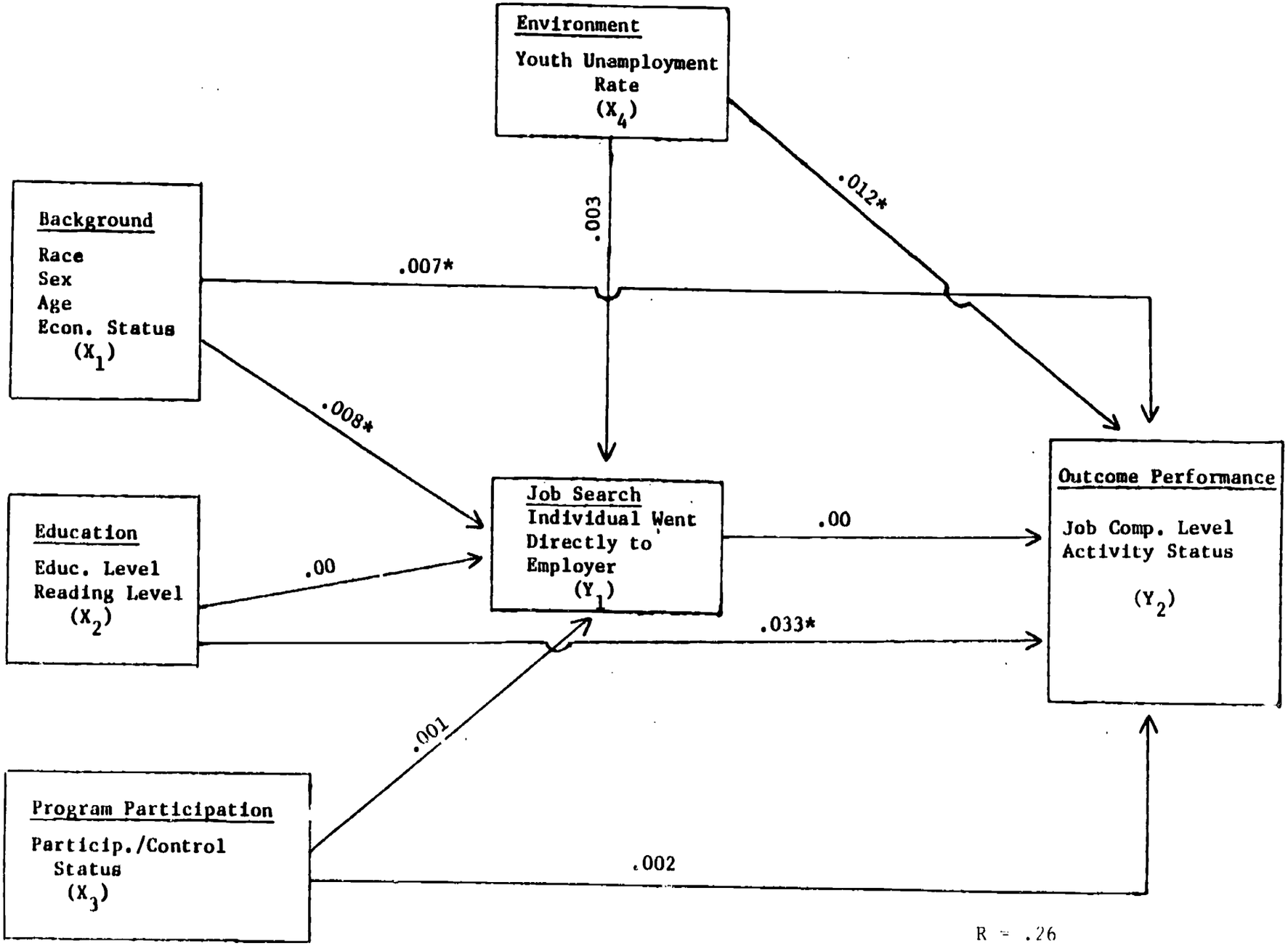


Figure 18

Communality Analysis of Relative Effects on Job Complexity Level



The significant effect of the Background construct (.007) helps to reinforce this interpretation, since it obtains its influence on the outcome primarily from the fact that it is women who tend to enter jobs of higher complexity level (primarily white collar jobs) rather than the higher paying blue collar ones.

Activity Status--This remaining career-oriented outcome is highly similar in its pattern of relative effects to that obtained in the model with Job Complexity Level as outcome (see Figure 19). Thus, whether or not the individual was engaged in full-time employment at 3-year followup, was explainable primarily by the Education (.039) and Background (.035) constructs. Educational and reading level both have positive relationships to Working. Also, showing lesser, but significant, effect is the Environment construct (.015). The only difference between this and the Job Complexity model is that Age (rather than Sex) is the dominant demographic variable serving to create the Background effect on the outcome--with the younger individuals more likely to be working at the time of 3-year followup.

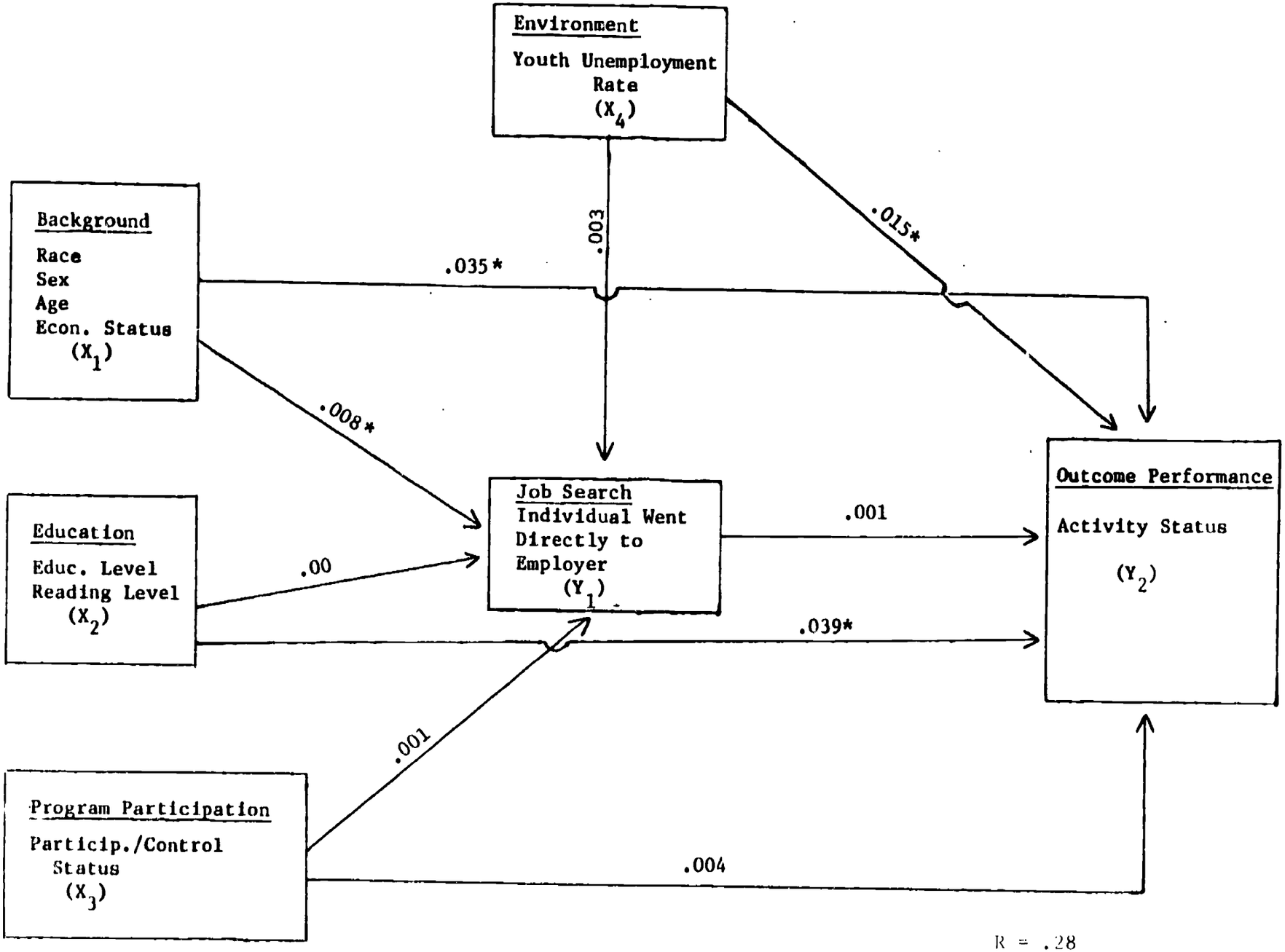
Overall, among the 5 models considered, it is apparent that significant effects appearing most consistently stemmed from the Background construct. (significant effects on outcome appear for all 5 models). Sex, Race and Age, within that block of variables, were seen to play differing roles in influencing particular outcomes.

Relative effects of Education/Academic ability, across 4 of the models, were next in the dominance of their presence and levels of variance accounted for, having a significant effect on all but the Salary outcome. Regional Youth Unemployment Rate faced by the individual (Environment construct) also had significant effects on 4 of the 5 career-related outcomes--lacking an influence only on the Training/Education outcome. This is a logical result, confirming the common sense assumption of the effect of the local unemployment rate on the individual's opportunity to establish a career pattern. It points up the need to account for local unemployment in any research involving the assessment of outcomes for employment programs. All multiple R's for the models are significant and it is evident that months of Education/Training and total months worked are the most predictable outcomes from the variables incorporated (R's of .41 and .32 respectively); while salary is the least predictable outcome (R = .18).

The Job Search approach taken by the individual, in contrast to the explanatory effects of the previously mentioned variables, is found to have no significant direct influence on the Employment or Training outcomes when other variables in the model are controlled for (particularly Background characteristics). Nor, do the Education, Background or Environment constructs act through this dichotomous variable (as mediator) to effect outcome. Additionally, it can be pointed out that Job Search was not significantly predictable as intermediate outcome in these models. A multiple R of only .14 is found for the combined contribution of the Environment, Background, Education and Program Participation blocks on the Job Search variable.

Figure 19

Communality Analysis of Relative Effects on Activity Status



Since Background was found to decrease the direct effects of Job Search on outcome (primarily through race), the need could be inferred for some sort of referral system designed to assist minority youth in job search efforts--particularly under conditions of possible employer discrimination.

SUMMARY AND CONCLUSIONS

This study of 775 disadvantaged youths, who were followed up after a three year period, showed several significant differences between youth employment training program participants and comparable nonparticipant control subjects.

- o Individuals who participated in the youth employment training programs achieved more months of paid employment during the 35 month follow-up period than the comparable individuals who did not take part in these programs. The participants averaged 19.74 months of full-time (or full-time equivalent) employment; the controls averaged 15.99 months of employment.

- o More participants than controls reported that they were satisfied with their current or most recent job; 82.6 percent of the participants, compared to 76.7 of the controls, indicated that they were satisfied or highly satisfied with their job.

- o Youth employment training program participants also obtained more months of education or job training during the follow-up period than did the controls. Participants averaged 19.98 months of education/ training during this 36 month period; controls averaged 19.79 months.

These three significant participant-control differences are independent of the effects of background factors (age, sex, race/ethnicity), prior educational achievement (grade level and reading ability at the beginning of the follow-up periods), and local youth unemployment rates.

In addition, youth employment program participants exceeded the controls on a number of other outcomes, but these differences do not remain significant after controlling for background, prior educational achievement, and local youth unemployment rates. Differences favoring the participants are:

- o They worked at some time during the follow-up period. Partaicipants were less likely to report that they had never found employment during the 36 month period than were controls (6.0% vs. 11.5%).

- o They had more continuous involvement in work, or other productive activity. Participants were less likely to have had intervals when they were not working, in school or training, or in the military than were controls (28.9% vs. 21.9%).

- o They held jobs of higher complexity. Among individuals employed at the time of the follow-up, participants held jobs of greater complexity than did controls (2.6 vs. 2.4).

- o They earned higher hourly wages. Currently employed participants received more money than did nonparticipants ($4.49 vs. $4.33).

- o They were more likely to find work through own efforts rather than through the intervention of others. Participants were more likely to have found a job by applying directly to an employer or by responding to help wanted ads than were participants (38.9% vs. 28.5%).

Characteristics of the youth employment training programs had a significant relationship to several participant outcomes.

- o Program emphasis on work experience resulted in more months of paid employment than did emphasis on career development.

- o Program emphasis on work experience resulted in higher average hourly wages across the entire 36 month period than did emphasis on career development ($3.80 vs. $3.56).

- o Program emphasis on career development led to more months of additional education or job training than did emphasis on work experience (21.07 vs. 14.46).

These significant program emphasis differences are independent of differences in participant background and prior educational achievement, as well as independent of local youth unemployment rates.

Program effectiveness, as measured by participant-control differences in the number of months of employment, was greater for Blacks than for Whites or Hispanics; effectiveness was also greater for females than for males. However, the total number of months of employment is lower for Blacks than for Whites and Hispanics, and lower for females than for males. In short, the youth employment training programs reduced, but could not overcome, the existing racial/ethnic and sex differences in youth unemployment rates.

The primary reason for the male-female differences in youth employment is the relatively high proportion of young women leaving the work force for reasons related to childbearing. Half of the young women in this study reported that they did not seek work at some time during the follow-up period because of pregnancy, child care, illness, or family responsibilities. The racial/ethnic differences in youth employment appear to be related to the highly significant interaction between race/ethnicity and local youth unemployment rates. The mean youth unemployment rate encountered by White youths in this study was 22.8 percent but the Black youths faced a labor market with a youth unemployment rate of 47.7 percent.

The greater effectiveness of the youth employment training programs for minority participants is also dramatically demonstrated in the hourly wage portion of the regression analysis. Race/ethnicity is significantly and negatively related to wage for the combined participant and control analysis, indicating that minority youths receive lower wages than White youths. However, in the participant only analysis this relationship is significant and positive, demonstrating that minority participants achieved higher hourly wages than White participants.

Factors that influenced work and educational outcomes for the total sample were considered on the basis of their relative effects: Background (age, sex, and race/ethnicity) affected alloutcomes, although differentially depending upon the nature of the outcome. For example, work-related outcomes were most strongly effected by the sex of the subjects, whereas educational outcomes were generally more influenced by age. Prior education also showed a strong direct influence on job outcomes. The higher the initial grade level and reading ability, the more success achieved in work. Local youth unemployment rates also showed a consistent but lesser influence on employment outcomes, indicating that the poorer the local job market encountered by a youthful job seeker the lower were the chances for employment and job success.

Strengths and Weaknesses

From a methodological point of view, this study has both strengths and weaknesses. The major weakness is lack of adequate information about the program content and instruction processes in the youth employment training program. Each youth employment training program participating in this study was asked to complete a "Project Information Questionnaire." The questionnaire included information on program duration, services provided, linkages to other groups, staffing, and costs. However, these questionnaires were available for only 55 percent of the programs represented in this follow-up study. Inspection of the available questionnaires revealed another problem--a number of internal inconsistencies in the descriptions of program emphasis. Finally, there was some evidence available from site visits which suggested that, although the program operators completed these questionnaires in a manner indicating that they were providing exemplary models of the program for which they had been funded, observed program emphasis and content varied considerably. Hence the program emphasis information is weak. Nevertheless there is clear evidence for the superiority of the work experience program model; moreover this evidence replicates what has been found in earlier studies. A second weakness centers around an inability to separate exemplary youth employment training programs from those of lesser quality. Thus, the findings may be considerably diluted by the inclusion of individuals from low quality programs.

Ideally, a study of youth employment training programs should involve a visit to each site in order to collect process data on the basis of observations and to make some preliminary judgments about program quality. Such a research model would, of course, be costly. However, without it there is less possibility of producing a body of knowledge that will enable policy makers, program designers, and program providers to make wise choices and to have more effective programs.

The major strength of this study lies in its multivariate analtyic approach. Most evaluations of youth employment training programs have simply compared the participants with other group of questionable comparability or merely assess changes in the participant group over time. The extent (or lack) of participant-control differences is usually the determining element in

evaluating program effectiveness. Simplistic comparisons often fail to control for any preexisting differences in background and/or education between the participant and control groups. As this study has shown, these differences, which represent long-term differences in individual experience, have (and should be expected to have) greater impact on most economic outcomes than does a relatively brief experience in a youth employment training program. If studies of youth employment training programs do not use multivariate analysis to control for differences in background, it is imperative that the participants and controls be matched by age, sex, race/ethnicity, economic background, amount of previous education, and achievement in their educational experience.

Another associated strength of this study lies in the inclusion of local youth unemployment rates in our model and in their inclusion in the multivariate analysis of outcomes. The omission of unemployment information in most other studies of youth employment training programs is not surprising. First, because such information is difficult to obtain and, secondly, because the use of this type of data is outside of the experience of most educational program evaluators. However, as this study shows, comparisons of the effectivness of local youth employment training programs cannot be appropriately determined if local economic conditions are not known and controlled for.

Implications for Educational Policy and Practice

The results of this project indicate that the decision to invest in sponsorship of a youth employment program can be expected to have a direct payoff in reduced youth unemployment. If resources are limited, providing youth employment program services to minorities and females will produce the greatest difference in employment outcomes. These programs will not entirely remove the differences in employment outcomes determined by background factors such as race and sex. When designing youth employment programs, components that include work experience or on-the-job training are especially desirable and can be expected to produce more months of participant employment and higher wages than classroom programs which emphasize career development, by providing vocational exploration and job information. This latter type of program, however, can be expected to have a significant impact on individuals' decisions to obtain additional education or job training.

The choice of youth employment program design should differ according to the target populations and the desired outcome(s). The evidence clearly indicates that programs directed toward out-of-school youth need to focus on providing work experience and that those which do so will be effective in enhancing youth employment. Although the evidence for their effectiveness is less clear, it is suggested that programs directed toward in-school youth should probably focus on providing occupational exploration and information for career development; such programs appear more able to encourage youths to remain in school and to obtain additional education or training than do work experience programs.

It is also clear that, despite their effectiveness, comparatively brief youth employment programs cannot overcome the much stronger, long-term effects of background education and environment. It is clear that programs which encourage and enable youths to remain in school, to obtain additional education and to develop good reading skills will have an even greater impact on reducing youth unemployment rates. Therefore, programs directed toward reducing unemployment among low income youths should provide a component which assesses and, if necessary, remedies reading skills. All programs should also stress the value of obtaining the high school diploma or, for out of school youths, a GED.

In selecting occupational areas for youth employment training programs with a work experience focus, there are four job families which appear especially promising, based on the frequency with which they provide employment for youths. These are: (1) office and clerical occupations, (2) food service occupations, (3) health care occupations, and (4) sales occupations. Cooperative work and study programs appear to be a possibility in each of these areas. For example, a program for future office and clerical workers could provide classroom training in typing or word processing, the use of other office machines, filing, bookkeeping, etc., and could provide work experience in local business offices. Other occupations which have been shown to be major potential employers of youths could also be explored for local programs. These include: (1) lawn care services, (2) package delivery services, and (3) hospitality services (in hotels and motels).

Cooperative programs combining work experience with related classroom study appear to be a better choice than on-the-job training without a classroom component because of the importance of providing all youths with good reading skills and with a high school diploma or its equivalent. Cooperative programs can provide both the kind of "hands-on," "real world" learning that seems more meaningful to many youths than most classroom instruction while, at the same time, ensuring competency in the basic skills.

Because of the importance of educational credentials in our society, all youth employment training programs should work toward enabling their participants to obtain a high school diploma or its equivalent. In addition, to providing preparation for tests for the GED, youth employment training programs should also provide for experienced-based high school diplomas if they are available, or could be made available, in their state.

Future research in this area must strive for adequate and appropriate evaluation designs and methodologies. These are necessary if policy makers are to make accurate decisions about the effectiveness of youth employment training programs. The most common evaluation problems in this type of research are:

- Failure to match participants and control groups on such critical factors as age, race/ethnicity, sex, economic status, prior education, and educational achievement.

- Failure to use statistical techniques to adjust for pre-existing differences in background and/or educational factors.

When studies compare program effectiveness across several different communities or states, it is also important that evaluators take into account differences in local economic conditions, most especially differences in local youth unemployment rates.

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Appendix A

List of Explanatory Variables

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Individual Variables

1. Race	White - 1; Minority (Black or Hispanic) = 2
2. Sex	(Male = 1; Female = 2)
3. Educ. Level	9th grade or less to 12th grade plus
4. Age	15 yrs. or younger to 20 or older
5. Economic Status	4 levels (1 Lo to 4 Hi)
6. Program Status	Control = 1; Participant = 2
7. Reading Level	STEP Reading; # right
8. Vocational Attitudes (Posttest)	Posttest scale score
9. Self Esteem (Posttest)	Posttest scale score

Labor Market Variable

10. Regional Youth Unemployment Rate

Program Process Variables

11. Training Program Type	Career Dev. = 0; Skills = 1
12. Program Duration	Less than 250 hrs. vs. Greater than 250 hrs.

Appendix B

Derivation of Regional Youth Unemployment Rate by Ethnic Group

Appendix B

Derivation of Regional Youth Unemployment Rate

by Ethnic Group

Regional Youth Unemployment

Data for the White, Black and Hispanic subgroups are not only known to vary widely but are extremely difficult to obtain (if available at all) from published government documentation for any desired time periods. The time period considered most appropriate for present study purposes was taken as calendar year 1982, the year during which the followup questionnaire data were obtained and during which the highest youth unemployment rates in U.S. history were experienced.

An annualized youth unemployment rate by race, for that year, was obtained using as basic information the data found in the Geographic Profile of Employment and Unemployment, 1982 (U.S. Department of Labor, 1983). That document provides youth unemployment rates, with some degree of racial categorization, by states and by a number of major metropolitan areas (Standard Metropolitan Statistical Areas or SSMA's). Since the rates are based on the Current Population Survey (CPS) sample of 60,000 households, it is not feasible to obtain sufficiently reliable subsamples (i.e., of sufficient size and of sufficiently small sampling error) to provide youth unemployment rates in most smaller cities especially where proportionally few Black or Hispanic youth may reside. Thus, where rates were not provided directly for youth by racial subgroup (as they are for a number of SSMA's) they had to be derived from the best available statewide data.

It can be noted that the followup sample of respondents represented in the present study were from 163 cities and towns in 38 states (although a number of the smaller towns were suburbs of metropolitan areas). The Black and Hispanic youth unemployment rate for Troy, Alabama, as an example, is simply not directly obtainable from the CPS for 1982. As a result such rates had to be imputed from the next largest area for which youth unemployment rates are available (i.e., the statewide rate).

This was accomplished, using the ratio of the statewide total White youth unemployment rate to the White adult unemployment rate along with the total statewide Black adult unemployment rate in order to solve for the Black youth unemployment rate.* That is,

$$\frac{\text{White Youth Unemp. Rate}}{\text{White Adult Unemp. Rate}} \cdot \frac{X}{\text{Black Adult Unemp. Rate}}$$

In the relatively small number of instances where there were no local unemployment rate data for Hispanics in the desired city (e.g., Troy) or the state (e.g., Alabama), the best available estimate, based on national data was that the Hispanic youth unemployment rate falls about midway between the White and Black youth unemployment rates.

* The proportions of youth to adult unemployment rate were similar, nationally, for the two ethnic groups in 1982 (i.e., 2.3 for Whites and 2.5 for Blacks) so that the solution used here can be considered a reasonable estimate.

Appendix C

Description of the Seven Measures of the SAB, The Demograhpic Data Form and the Reading Scale

- Vocational Attitude Scale--is derived from the Career Maturity Inventory developed by John Crites (1978).* The measure contains 30 verbal items found in a longer 75-item Attitude Scale (Counseling Form B-1) that are scorable as 3 ten-item subscales. Those scales are designated as "Decisiveness" in Career Decision Making (CDM), "Involvement" in CDM and "Independence" in CDM. The respondent indicates his or her agreement or disagreement with each of 30 statements about vocational careers and employment.

  Reliability of the measure as internal consistency is reported to range from .72 to .77 for students in grades 10, 11 and 12, while test-retest reliability (i.e., stability) of the scale over a one year interval was found to be .71. Validity based on various forms of criterion performance involving vocational aspiration, vocational choice and vocational maturity (i.e., relationships between the Attitude Scale scores and scores those criterion measures), resulted in correlations ranging from the mid .20's to the high .30's.

- Job Knowledge Test (Educational Testing Service, 1978)** --is a 33-item scale containing pictorial and verbal material dealing with various job qualifications, requirements and tasks. The items, in multiple choice format, require the respondent to indicate the correct response to questions about the specific occupations depicted.

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* Crites, J. O. (1978). Attitude Scale: The Career Maturity Inventory. Form B-1. Monterey, CA: Cooperative Test Bureau/ McGraw-Hill.

** Educational Testing Service. (1978). Program for Assessing Youth Employment Skills (PAYES). New York: Cambridge Books.

Reliabilities of the measure as internal consistency estimates have been found to average .75 for CETA and vocational school samples (Freeberg & Vitella, 1979) and for NYC samples. Validity of the Job Knowledge test is found to be statistically significant, for a number of training program adjustment outcomes as criteria (r's in the mid to high .20's) as well as proficiency ratings by program personnel (i.e., low to mid .20's for counselor ratings as a criterion and a high of .32 against work site supervisor ratings). The measure has also been shown to be predictive of post training employment some six months after NYC program completion (r = .22).

- Self Esteem Scale (Educational Testing Service, 1978)*—is a 15-item scale containing pictorial and verbal material used to assess perceived self-worth in terms of expectation for acceptance or achievement, in various social, vocational and educational degree to which he or she would be successful or receive acceptance in the specific situation portrayed. Studies to support the value of the Self Esteem Scale are based on the same set of data obtained for development and research use with the Job Knowledge Test, discussed above, using NYC and OIC study samples.

  Reliabilities for the Scale averaged .64 for CETA and Vocational student samples and ranged from the mid to high .50's for NYC samples. Validation of the scale, against a variety of performance outcomes at completion of an NYC program, indicated that its highest validities are for a factor of "Positive Vocational and Social Attitudes" (r = .34) and proficiency rating ratings by program guidance counselors (r = .34). Other validities for various program adjustment criteria and proficiency ratings ranged from the low to mid .20's.

- Work Relevant Attitudes Inventory—(Whalther, 1975),** contains 16 items in a short form that had been developed by the author from a longer 26-item measure. The 16 items provide not only a single total scale score, but can be scored on the basis of three factored subscales defined as, "Optimism," "Self Confidence" and "Unsocialized Attitudes." Responses to each of the attitudinal statements are based on a 4-point scale of degree of agreement with, or applicability of, the statement.

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* Educational Testing Service. (1978). Program for Assessing Youth Employment Skills (PAYES). New York: Cambridge Books.

** Walther, R. (1975). The measurement of work-relevant attitudes. Washington, DC: U.S. Department of Labor.

- Job Holding Skills (Educational Testing Service, 1978)*-deals with respondent awareness of appropriate on-the-job behaviors in settings that depict interaction with supervisors and co-workers. This 11-item scale, containing pictorial and verbal material, requires the trainee to indicate which one of three alternatives best define what his or her response would be in the situation described. (Response alternatives have been scaled to represent "most" to "least" acceptable behaviors for maintaining employment.)

  Evidence for the suitability of the measure is based on longitudinal samples of trainees from NYC and OIC programs, from which item and scale characteristics were determined, and is derived from the same data set used for the other three ETS measures of the SAB.

  Reliability of the measure (as internal consistency) was found to be in the low .70's for NYC samples, while samples of CETA and vocational high school students yielded reliabilities of approximately .60. Predictive validity has been found, for youth-work training program samples, to range as high as the mid .30's for criteria of training program adjustment, work site supervisor and guidance counselor proficiency ratings; with an r of .29 for a criterion measure of overall social and vocational adjustment following completion of training.

- Job Seeking Skills Test (Educational Testing Service, 1978)*-is a 17-item measure of job search capability that samples some of the skills needed to initiate an employment search, interpret information about prospective jobs (in newspaper want ads) and understand the information requirements for filling out a job application. Items in a multiple-choice format require selection of the one correct response to each question.

  Reliability of the measure as internal consistency has been found to range from the mid .60's to the low .70's for study samples from NYC and CETA programs; while its predictive validity has been found to be relatively satisfactory over a number of important post program criteria. For example, it yields significant relationships to post-training employment of r = .36 for an NYC sample and r = .21 for an OIC sample. It has also yielded validity coefficients in the mid .30's with criteria of program counselor and work site supervisor proficiency ratings as well as r's in the .20's when used predictively with criteria of training program adjustment, and job success and satisfaction following training.

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* Educational Testing Service. (1978). Program for Assessing Youth Employment Skills (PAYES). New York: Cambridge Books.

- Sex Stereotyping of Adult Occupations Scale—was developed by Garrett, Ein and Tremaine (1977)*, and used with elementary school children from 1st- to 5th-grade. This relatively short (21-item) verbal scale presents job titles along with a one sentence description of each job and requires the respondent to indicate: "Who should be a "_____" (job title as given). A five-point response scale ranges from "Only Women" to "Only Men".

  The 21 items are categorized and scorable under three gender designated groups of "male", "female" and "neutral" jobs, with seven jobs (items) assigned to each of those three categories. Although previously applied only to grade school students, the measure, based on its format and content, was considered the most readily adaptable one for low verbal skill, economically disadvantaged (i.e., CETA qualified) youth.

  The SSAO scale based on research by Garrett, Ein, and Tremaine (1977) has shown reliabilities ranging from .85 to .90 for samples of school children, and has shown similar reliabilities (generally about .90) for a YEDPA sample enrolled in a Youth Career Development Program.

- The Individual Participant Profile

  This document is used to record information for 49 items dealing with the participant's characteristics. The first 29 of these items are largely demographic and cover such information as the individual's age, sex and race as well as economic, educational and labor force status—all at time of entry into the youth program. (These first 29 items are also applicable to control group sample members for those YEDPA studies using a control group in their evaluation design.) The remaining 20 items are designated as the "Program Status" items which indicate the status of the participant at the time of program completion or termination. These include such information as entry and termination dates, total hours spent participating in the program, whether or not the program provided the participant with academic credit and specific forms of termination status under "positive" and "non-positive" categories. A set of definitions which accompanies the IPP form defines each item in detail and how it is to be completed by the youth program project personnel from their project records.

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* Garrett, C. S., Ein, P. L., & Tremaine, L. (1977). The development of gender stereotyping of adult occupations in elementary school children. Child Development, 48, 507-512.

Although the items of the IPP cannot, generally, be considered as performance outcome (criterion) variables, some few of the items in the Profile are obviously usable in that way. For example, there are items dealing with employment status which, to some extent, duplicate forms of outcome information found in the Program Completion Survey. These and several other IPP items can serve as a limited check on the reliability of the data obtained in the survey by contrasting program--provided IPP information with participant-provided Survey information.

o The STEP Reading Scale

This status measure was compiled specifically for purposes of YEDPA evaluation studies. It is intended to fill the need for a very short (10 to 15 minute) easily administered measure of reading skill that would also cover a fairly wide range of the reading levels likely to be found in the YEDPA enrollee population (i.e., and estimated range from 4th to 9th grade reading level).

None of the conventional (published) measures of reading ability would appear to meet these particular requirements since they are usually lengthy, require different forms of the measure for widely differing ability levels and are intended either to define the students' reading grade level, with some precision, or identify specific skill deficiencies for diagnostic purposes.

The sole application of the score from this 20-item reading comprehension measure is to serve as a contral variable for analytical uses in subgrop equating on verbal ("academic") skill level. The 20 items chosen for this short reading measure were selected from the STEP Locator tests (ETS, 1979) covering 4th- to 9th grade reading levels. Those locator tests are short reading comprehension measures used as preliminary (quick-screening) devices for deciding which level of the complete STEP Achievement tests is suitable for administration to a particular student. Appropriate item and total scale analyses were undertaken by the publisher, during the development of the measures, to assure the accuracy of the items for reading grade level identification. However, verification of the suitability of this 20-item compilation derived for purposes of YEDPA evaluation, can most readily be determined by the level of relationship between its scores and scores on some widely used (published) reading measure(s). If a high degree of positive relationship is found, this 20-item wide-range reading scale can be considered applicable for its purpose in the SAS. Such data are expected to be available from at least one sample of YEDPA participants during the course of the evaluation data collection.

Appendix D

Program Designations and Site Locations

Appendix D

Program Designations and Site Locations

Programs and Sponsors	Sites
Youth Career Development Program (YCD), U.S. Employment Service	Rome, GA Jersey City, NJ Yakima, WA Kansas City, MO
YCD, Urban League	Cambridge, MA Englewood, NJ Winston-Salem, NC New Orleans, LA St. Louis, MO
YCD, SER	Miami, FL
YCD, La Razz	Houston, TX
YCD, Women's Bureau	Atlanta, GA Mason City, IA Dallas, TX Portland, OR
YCD, NCNW	Charleston, SC San Bernadino, CA Bronx, NY
YCD, R&TP	Buffalo, NY Evansville, IN Greensboro, NC
HOPE, Summer Program	Oakland, CA
Public vs. Private Sector Jobs, St. Louis University	Philadelphia, PA Portland, OR
Summer Career, OIC	Grand Rapids, MI Providence, RI Atlanta, GA San Antonio, TX Washington, DC Nashville, TN Philadelphia, PA
Jobs for Delaware Graduated	New Castle Co., DE (2 sites)

Appendix D(continued)

Program Designations and Site Locations

Programs and Sponsors	Sites
Summer Career Exploration, RTP	Bridgeport, CT Pittsburgh, PA Rochester, NY Youngstown, OH
Summer Career Exploration, SER	Tampa, FL Chicago, IL Hayward, CA San Benito, TX Colorado Springs, CO Omaha, NE Houston, TX
Vocational Ed. Demo Project, St. Louis NAB	Akron, OH Allentown, PA Atlanta, GA Colorado Springs, CO Duluth, MN Haverhill, MA Helena, MT Kennebunkport, ME Lansing, MI Memphis, IN New Orleans, LA Omaha, NE San Francisco, CA Tacoma, WA
Summer Employment, ALNA	Kansas City, KS Columbus, OH Santa Anna, CA Tualatin, OR Washington, DC New York, NY Cranston, RI Miami, FL
Summer Career Exploration, HRDI	Atlanta, GA Columbus, OH Kansas City, MO Little Rock, AR New York, NY Norfolk, VA
New Youth in Apprenticeship, BAT-RI	Providence, RI

Appendix E

Three-Year Followup Questionnaire

SECTION II: PERSONAL AND FAMILY BACKGROUND DATA

(1) SEX OF RESPONDENT:

MALE	1
FEMALE	2

(2.) How do you describe yourself? Are you:

(CIRCLE ONLY ONE)

White (NOT HISPANIC),	1
Black (NOT HISPANIC),	2
Hispanic,	3
American Indian/Alaskan Native, or	4
Asian/Pacific Islander?	5

(3.) What is the highest grade or year of schooling you have ever completed?

(CIRCLE ONLY ONE)

(CONTINUE)	Elementary	01	02	03	04	05	06	07	08
	High School	09	10	11	12				
(SKIP TO Q. 5)	College	13	14	15	16	17	18	or more	

4. Did you complete a GED (Graduate Equivalency Diploma) or other high school equivalency?

Yes	1
No	2

(5.) Are you:

(CIRCLE ONLY ONE)

Married,	1
Divorced,	2
Separated,	3
Widowed, or	4
Never married?	5

(6.) Do you have any children?

Yes	1
No	2

Skip to Q. 8

7. How many? _____

(8.) How many people including yourself usually live in your immediate household? _____

SKIP TO Q. 10 IF ONLY ONE PERSON

9. (SHOW CARD A) Who are the people who live in your immediate household?

(CIRCLE ALL THAT APPLY)

My parents	1
My brothers and sisters	2
My husband or wife	3
My children	4
Other relatives	5
Other people who are not my relatives	6

(10.) (SHOW CARD B) What is your military status:

(CIRCLE ONLY ONE)

Never served in military,	1
Current full-time member of Armed Forces,	2
Current member of National Guard or Active Reserves,	3
Veteran, or	4
Accepted for service, awaiting assignment?	5

(11.) Do you have a health or physical condition that limits your ability to work?

Yes	1
No	2

INTERVIEWER: WHO HAS PROVIDED YOU WITH THE INFORMATION UP TO THIS POINT? (Circle all that apply.)

Youth himself/herself [1] Parent of the youth [2]

Other relative of youth [3] A friend or neighbor of the youth [4]

END CARD 02

CARD #8

SECTION III: RECENT ACTIVITY

We are interested in learning more about what you have been doing. Let's begin with your current activities and work our way back.

(12) What was your main activity last week? Were you: (CIRCLE ONLY ONE) 11

SKIP TO Q. 16		
CONTINUE	Working,	1
	Attending school (high school, college, vocational, etc.),	2
	Enrolled in a training program,	3
	Looking for a job,	4
	Keeping house,	5
	Serving in the military, or	6
	Something else? (SPECIFY)	0

12

13. Did you do any work at all for pay or profit last week, not counting work around the house? 13

SKIP TO Q. 16	Yes	1
	No	2

14. Did you have a job or business from which you were temporarily absent or on layoff last week? 14

	Yes	1
SKIP TO Q. 16	No	2

15. Why were you absent from work last week? (CIRCLE ONLY ONE) 15

Illness	1
Vacation	2
Bad weather	3
Labor dispute	4
New job to begin within 30 days	5
Temporary layoff (under 30 days)	6
Indefinite layoff	7
Didn't feel like working	8
Other (SPECIFY)	0

16

(16) Have you looked for work during the past four weeks? 17

	Yes	1
SKIP TO Q. 18	No	2

17. (SHOW CARD C) What have you done during the last four weeks to find work: (CIRCLE ALL THAT APPLY) 18

Telephoned an employer,	1
Wrote to an employer,	2
Talked (met in person) with an employer,	3
Checked with CETA,	4
Checked with public employment agency,	5
Checked with private employment agency,	6
Checked with friends or relatives,	7
Placed ads for employment,	8
Checked with military recruiter,	9
Checked classified/want ads, or	10
Something else? (SPECIFY)	20

19

(18) Could you have taken (a job/an additional job) last week if you had been offered one? 20

SKIP TO Q. 20	Yes	1
	No	2

19. Why couldn't you have taken (a job/another job) last week? (CIRCLE ALL THAT APPLY) 21

Already had a job	1
Sickness	2
Going to school	3
Caring for children	4
Needed transportation	5
Didn't want a job	6
Other (SPECIFY)	0

22

SECTION IV: EMPLOYMENT ACTIVITIES

(PRESENT CALENDAR TO RESPONDENT) Now I would like to know about your work activities, from _____ to _____
Let's begin with the jobs you had, starting with your most recent job.

IF NEVER WORKED, CHECK BOX [1] AND SKIP TO SECTION V, PAGE 6.

	MOST RECENT JOB	SECOND JOB
20. When did you begin this job?	MONTH YEAR	MONTH YEAR
21. When did this job end? (IF STILL WORKING AT JOB, CHECK CURRENT)	MONTH YEAR [1] CURRENT	MONTH YEAR [1] CURRENT
22. What's the name of the company you work(ed) for? What's the address?	COMPANY NAME: _____ ADDRESS: _____	COMPANY NAME: _____ ADDRESS: _____
23. What kind of business or industry (is/was) this?	BUSINESS: _____	BUSINESS: _____
24. What kind of work (do/did) you typically do for this employer? (PROBE TITLE AND DUTIES)	TITLE: _____ DUTIES: _____	TITLE: _____ DUTIES: _____
25. (Is/Was) this a CETA job?	Yes 1 / No 2	Yes 1 / No 2
26. (SHOW CARD D) How did you find out about this job: (READ) (CIRCLE ALL THAT APPLY)		
Applied directly to employer	1	1
Newspaper, radio, TV ad	2	2
Friends or relatives	3	3
Youth program staff	4	4
Gov't (public) employment agency	5	5
Private employment agency	6	6
School or training agency	7	7
Community or church, or	8	8
Somewhere else? (SPECIFY)	0	0
27 How many hours per week (do/did) you usually work on this job?	HOURS PER WEEK: __ __	HOURS PER WEEK __ __
28 When you first started this job, what was your hourly pay before deductions, including bonuses, tips, commission, etc.?	INITIAL HOURLY PAY: $__ __ . __ __	INITIAL HOURLY PAY: $__ __ . __ __
29 What (is/was) your hourly pay before deductions (now/when you left this job)?	CURRENT OR LAST HOURLY PAY: $__ __ . __ __	CURRENT OR LAST HOURLY PAY: $__ __ . __ __
IF CURRENT JOB, SKIP Q. 30, AND GO TO NEXT JOB		
30. Why did you leave this job? (CIRCLE ALL THAT APPLY)		
Took another job	1	1
Seasonal/temporary job ended	2	2
Laid off	3	3
Fired	4	4
Dissatisfied with pay or hours	5	5
Dissatisfied with type of work	6	6
Dissatisfied with working conditions	7	7
Moved	8	8
Health problem/illness	9	9
Enrolled in school or training	10	10
Family responsibilities	11	11
Did not get along with supervisors or co-workers	12	12
Other (SPECIFY)	20	20

END CARD 00

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THIRD JOB

MONTH YEAR

MONTH YEAR

COMPANY NAME: _____
ADDRESS: _____

BUSINESS: _____

TITLE: _____

DUTIES: _____

	Yes 1 / No 2
Applied directly to employer,	1
Newspaper, radio, TV ad,	2
Friends or relatives,	3
Youth program staff,	4
Gov't (public) employment agency,	5
Private employment agency,	6
School or training agency,	7
Community or church, or	8
Somewhere else? (SPECIFY)	0

HOURS PER WEEK: _____

INITIAL HOURLY PAY: $_____

CURRENT OR LAST HOURLY PAY: $_____

Took another job	1
Seasonal/temporary job ended	2
Laid off	3
Fired	4
Dissatisfied with pay or hours	5
Dissatisfied with type of work	6
Dissatisfied with working conditions	7
Moved	8
Health problem/illness	9
Enrolled in school or training	10
Family responsibilities	11
Did not get along with supervisors or co-workers	12
Other (SPECIFY)	20

FOURTH JOB

MONTH YEAR

MONTH YEAR

COMPANY NAME: _____
ADDRESS: _____

BUSINESS: _____

TITLE: _____

DUTIES: _____

	Yes 1 / No 2
Applied directly to employer,	1
Newspaper, radio, TV ad,	2
Friends or relatives,	3
Youth program staff,	4
Gov't (public) employment agency,	5
Private employment agency,	6
School or training agency,	7
Community or church, or	8
Somewhere else? (SPECIFY)	0

HOURS PER WEEK: _____

INITIAL HOURLY PAY: $_____

CURRENT OR LAST HOURLY PAY: $_____

Took another job	1
Seasonal/temporary job ended	2
Laid off	3
Fired	4
Dissatisfied with pay or hours	5
Dissatisfied with type of work	6
Dissatisfied with working conditions	7
Moved	8
Health problem/illness	9
Enrolled in school or training	10
Family responsibilities	11
Did not get along with supervisors or co-workers	12
Other (SPECIFY)	20

FIFTH JOB

MONTH YEAR

MONTH YEAR

COMPANY NAME: _____
ADDRESS: _____

BUSINESS: _____

TITLE: _____

DUTIES: _____

	Yes 1 / No 2
Applied directly to employer,	1
Newspaper, radio, TV ad,	2
Friends or relatives,	3
Youth program staff,	4
Gov't (public) employment agency,	5
Private employment agency,	6
School or training agency,	7
Community or church, or	8
Somewhere else? (SPECIFY)	0

HOURS PER WEEK: _____

INITIAL HOURLY PAY: $_____

CURRENT OR LAST HOURLY PAY: $_____

Took another job	1
Seasonal/temporary job ended	2
Laid off	3
Fired	4
Dissatisfied with pay or hours	5
Dissatisfied with type of work	6
Dissatisfied with working conditions	7
Moved	8
Health problem/illness	9
Enrolled in school or training	10
Family responsibilities	11
Did not get along with supervisors or co-workers	12
Other (SPECIFY)	20

CARD 09

SECTION V: SCHOOL/TRAINING ACTIVITIES

I would like to know about your School or Training Activities, from_____ to _____ Let's begin with your most recent School or Training.

IF NO SCHOOL/TRAINING, CHECK BOX ☐ AND SKIP TO SECTION VI, PAGE 8. 11

31. When did you begin this school or training activity?

32. When did you end this school or Training activity? (IF PRESENTLY IN THIS SCHOOL/ TRAINING ACTIVITY, CHECK CURRENT)

33. (SHOW CARD E) In what type of school or training program (are/were) you enrolled:

(READ)

(CIRCLE ALL THAT APPLY)

IF CODE 1 IN Q. 33 CONTINUE. OTHERWISE SKIP TO Q. 35.

34. (SHOW CARD F) What type of CETA training program (are/were) you in:

(READ)

(CIRCLE ALL THAT APPLY)

35. How many hours per week (do/did) you usually attend this school or training program?

36. (Do/did) you receive any money for attending this school or training program?

37. (Do/did) you receive job training in this school or training program?

38. Do you think you (are learning/learned) a useful skill in this job training?

39. Do you think your chances for getting a job are better, the same, or worse as a result of going to school or receiving training? (As opposed to not having had any schooling or training.)

IF CURRENT SCHOOL OR TRAINING PROGRAM GO TO NEXT PROGRAM.

40. Did you complete your schooling or training program?

41. After you left this program, did you take a job for which this program prepared you?

42. Why not?

	MOST RECENT SCHOOL/TRAINING ACTIVITY		SECOND SCHOOL/TRAINING ACTIVITY	
	MONTH YEAR	12-16	MONTH YEAR	36-39
	MONTH YEAR ☐ CURRENT	18-20 21	MONTH YEAR ☐ CURRENT	39-42 43
CETA training program.	1		1	
Regular high school.	2		2	
Vocational/technical high school.	3		3	
Post-secondary trade or technical school.	4		4	
Junior college, community college.	5		5	
Post-secondary business school.	6		6	
Apprenticeship program.	7		7	
Four-year college or university.	8		8	
On-the-job training.	9		9	
Some other program? (SPECIFY)	0	22	0	44
On-the-job training.	1	23	1	45
Classroom training-basic education, GED preparatory.	2		2	
Classroom training-job skills.	3		3	
Classroom training-combination.	4		4	
Something else? (SPECIFY)	0	29	0	46
HOURS PER WEEK: _____		25-26	HOURS PER WEEK: _____	47-48
Yes	1	27	Yes	1 49
No	2		No	2
Yes	1	28	Yes	1 50
SKIP TO Q. 39 No	2		SKIP TO Q. 39 No	2
Yes	1	29	Yes	1 51
No	2		No	2
Better	1	30	Better	1 52
Same	2		Same	2
Worse	3		Worse	3
Yes	1	31	Yes	1 53
No	2		No	2
GO TO NEXT TRAINING PROGRAM Yes	1	32	GO TO NEXT TRAINING PROGRAM Yes	1 54
No	2		No	2
		33		55
		34		56

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THIRD SCHOOL/TRAINING ACTIVITY			FOURTH SCHOOL/TRAINING ACTIVITY			FIFTH SCHOOL/TRAINING ACTIVITY		
MONTH YEAR			MONTH YEAR			MONTH YEAR		
MONTH YEAR			MONTH YEAR			MONTH YEAR		
CETA training program.	1		CETA training program.	1		CETA training program.	1	
Regular high school.	2		Regular high school.	2		Regular high school.	2	
Vocational/technical high school.	3		Vocational/technical high school.	3		Vocational/technical high school.	3	
Post-secondary trade or technical school.	4		Post-secondary trade or technical school.	4		Post-secondary trade or technical school.	4	
Junior college, community college.	5		Junior college, community college.	5		Junior college, community college.	5	
Post-secondary business school.	6		Post-secondary business school.	6		Post-secondary business school.	6	
Apprenticeship program.	7		Apprenticeship program.	7		Apprenticeship program.	7	
Four-year college or university.	8		Four-year college or university.	8		Four-year college or university.	8	
On-the-job training.	9		On-the-job training.	9		On-the-job training.	9	
Some other program? (SPECIFY)	0		Some other program? (SPECIFY)	0		Some other program? (SPECIFY)	0	
On-the-job training.	1		On-the-job training.	1		On-the-job training.	1	
Classroom training-basic education, GED preparatory.	2		Classroom training-basic education, GED preparatory.	2		Classroom training-basic education, GED preparatory.	2	
Classroom training-job skills.	3		Classroom training-job skills.	3		Classroom training-job skills.	3	
Classroom training-combination.	4		Classroom training-combination.	4		Classroom training-combination.	4	
Something else? (SPECIFY)	0		Something else? (SPECIFY)	0		Something else? (SPECIFY)	0	
HOURS PER WEEK: _____			HOURS PER WEEK: _____			HOURS PER WEEK: _____		
	Yes 1 / No 2			Yes 1 / No 2			Yes 1 / No 2	
	Yes 1 / No 2			Yes 1 / No 2			Yes 1 / No 2	
SKIP TO Q. 39	Yes 1 / No 2		SKIP TO Q. 39	Yes 1 / No 2		SKIP TO Q. 39	Yes 1 / No 2	
	Better 1 / Same 2 / Worse 3			Better 1 / Same 2 / Worse 3			Better 1 / Same 2 / Worse 3	
	Yes 1 / No 2			Yes 1 / No 2			Yes 1 / No 2	
GO TO NEXT TRAINING PROGRAM	Yes 1 / No 2		GO TO NEXT TRAINING PROGRAM	Yes 1 / No 2		GO TO NEXT TRAINING PROGRAM	Yes 1 / No 2	

CARD 08

SECTION VI. MILITARY SERVICE

Now I would like to know about any military service you have had from _____ to _____. Let's begin with your most recent military service.

IF NO MILITARY SERVICE, CHECK BOX 1 AND SKIP TO SECTION VII, PAGE 10. 11

	MOST RECENT		SECOND MILITARY SERVICE	
43. When did you begin service in the armed forces?	MONTH _____ YEAR _____	12-15	MONTH _____ YEAR _____	25-27
44. When (did/will) you end service in the armed forces?	MONTH _____ YEAR _____	16-19	MONTH _____ YEAR _____	28-30
45. ASK Q. 45 ONLY FOR MOST RECENT MILITARY SERVICE. How likely is it that you will re-enlist? Would you say: (READ)	Definitely re-enlist, 1 Probably re-enlist, 2 Probably not re-enlist, 3 Definitely not re-enlist, 4 Too early to tell, or 5 Already have re-enlisted? 6	20	[redacted]	31 (BLANK)
46. (SHOW CARD G) What branch of the military did you enter?	Active Army 1 Active Navy 2 Active Air Force 3 Active Marines 4 Coast Guard 5 Active Army Reserves 6 Active Navy Reserves 7 Active Air Force Reserves 8 Active Marine Reserves 9 Army National Guard 10 Air National Guard 11 Other Branch (SPECIFY) 20	21 22	Active Army 1 Active Navy 2 Active Air Force 3 Active Marines 4 Coast Guard 5 Active Army Reserves 6 Active Navy Reserves 7 Active Air Force Reserves 8 Active Marine Reserves 9 Army National Guard 10 Air National Guard 11 Other Branch (SPECIFY) 20	37 38
47. How many years of duty did you sign up for?	# OF YEARS: _____	23	# OF YEARS: _____	39
48. What were your reasons for enlisting in the military? (CIRCLE ALL THAT APPLY)	Bonus for enlisting 1 Wanted a career in the military service 2 Could not find a regular civilian job 3 Wanted training to help me after service 4 Friends enlisted 5 Save money for education 6 Avoid trouble with the law 7 Help me mature 8 Encouraged to enlist by parents or relative 9 Other (SPECIFY) 0	24 25	Bonus for enlisting 1 Wanted a career in the military service 2 Could not find a regular civilian job 3 Wanted training to help me after service 4 Friends enlisted 5 Save money for education 6 Avoid trouble with the law 7 Help me mature 8 Encouraged to enlist by parents or relative 9 Other (SPECIFY) 0	40 41
IF CURRENT ENLISTMENT, GO TO NEXT ENLISTMENT PERIOD 49. Why did you leave the service? (CIRCLE ALL THAT APPLY)	Period of enlistment completed 1 Illness, injury in service 2 Dissatisfied with pay 3 Dissatisfied with training 4 Dissatisfied with conditions 5 Personal reasons 6 Discharged for cause 7 Didn't get training I was promised 8 Other (SPECIFY) 0	26 27	Period of enlistment completed 1 Illness, injury in service 2 Dissatisfied with pay 3 Dissatisfied with training 4 Dissatisfied with conditions 5 Personal reasons 6 Discharged for cause 7 Didn't get training I was promised 8 Other (SPECIFY) 0	42 43

THIRD MILITARY SERVICE			FOURTH MILITARY SERVICE			FIFTH MILITARY SERVICE		
MONTH	YEAR		MONTH	YEAR		MONTH	YEAR	
MONTH	YEAR		MONTH	YEAR		MONTH	YEAR	
[redacted]			[redacted]					
Active Army	1		Active Army	1		Active Army	1	
Active Navy	2		Active Navy	2		Active Navy	2	
Active Air Force	3		Active Air Force	3		Active Air Force	3	
Active Marines	4		Active Marines	4		Active Marines	4	
Coast Guard	5		Coast Guard	5		Coast Guard	5	
Active Army Reserves	6		Active Army Reserves	6		Active Army Reserves	6	
Active Navy Reserves	7		Active Navy Reserves	7		Active Navy Reserves	7	
Active Air Force Reserves	8		Active Air Force Reserves	8		Active Air Force Reserves	8	
Active Marine Reserves	9		Active Marine Reserves	9		Active Marine Reserves	9	
Army National Guard	10		Army National Guard	10		Army National Guard	10	
Air National Guard	11		Air National Guard	11		Air National Guard	11	
Other Branch (SPECIFY)	20		Other Branch (SPECIFY)	20		Other Branch (SPECIFY)	20	
# OF YEARS: _____			# OF YEARS: _____			# OF YEARS: _____		
Bonus for enlisting	1		Bonus for enlisting	1		Bonus for enlisting	1	
Wanted a career in the military service	2		Wanted a career in the military service	2		Wanted a career in the military service	2	
Could not find a regular civilian job	3		Could not find a regular civilian job	3		Could not find a regular civilian job	3	
Wanted training to help me after service	4		Wanted training to help me after service	4		Wanted training to help me after service	4	
Friends enlisted	5		Friends enlisted	5		Friends enlisted	5	
Save money for education	6		Save money for education	6		Save money for education	6	
Avoid trouble with the law	7		Avoid trouble with the law	7		Avoid trouble with the law	7	
Help me mature	8		Help me mature	8		Help me mature	8	
Encouraged to enlist by parents or relative	9		Encouraged to enlist by parents or relative	9		Encouraged to enlist by parents or relative	9	
Other (SPECIFY)	0		Other (SPECIFY)	0		Other (SPECIFY)	0	
Period of enlistment completed	1		Period of enlistment completed	1		Period of enlistment completed	1	
Illness, injury in service	2		Illness, injury in service	2		Illness, injury in service	2	
Dissatisfied with pay	3		Dissatisfied with pay	3		Dissatisfied with pay	3	
Dissatisfied with training	4		Dissatisfied with training	4		Dissatisfied with training	4	
Dissatisfied with conditions	5		Dissatisfied with conditions	5		Dissatisfied with conditions	5	
Personal reasons	6		Personal reasons	6		Personal reasons	6	
Discharged for cause	7		Discharged for cause	7		Discharged for cause	7	
Didn't get training I was promised	8		Didn't get training I was promised	8		Didn't get training I was promised	8	
Other (SPECIFY)	0		Other (SPECIFY)	0		Other (SPECIFY)	0	

SECTION VII: NOT WORKING/NOT IN SCHOOL OR TRAINING/NOT IN MILITARY

We would like information about those times when you weren't working, weren't attending school or training, and weren't in military service. Let's start with the most recent.

IF WORKING, ATTENDING SCHOOL OR TRAINING, OR IN THE MILITARY SERVICE FOR THE ENTIRE TIME PERIOD CHECK BOX [1] AND SKIP TO SECTION VIII, PAGE 12. 11

INTERVIEWER: DERIVE THESE DATES FROM CALENDAR AND USE THEM AS REFERENCE FOR THE RESPONDENT.

	MOST RECENT		SECOND RECENT	
50. Beginning date.	MONTH YEAR	12-13	MONTH YEAR	35-36
51. Ending date. (CHECK CURRENT IF THE YOUTH IS PRESENTLY INACTIVE.)	MONTH YEAR [1] CURRENT	14-15	MONTH YEAR	37-38
52. What was the *main* reason you were not working, attending school, or in the military during this time period? (CIRCLE ONLY ONE)	Could not find a job 1 Waiting for a new job to begin in 30 days 2 Awaiting recall to job following layoff 3 Waiting for school or training to begin 4 Illness, disability 5 Family responsibilities 6 Personal reasons 7 In jail 8 Labor dispute 9 Other (SPECIFY) 0	21 22	Could not find a job 1 Waiting for a new job to begin in 30 days 2 Awaiting recall to job following layoff 3 Waiting for school or training to begin 4 Illness, disability 5 Family responsibilities 6 Personal reasons 7 In jail 8 Labor dispute 9 Other (SPECIFY) 0	43 44
53. Were you looking for a job during any part of this time period? SKIP TO Q. 58	Yes 1 No 2	23	Yes 1 No 2	45
54. Were you mainly looking for full-time or part-time work?	Full-time 1 Part-time 2	24	Full-time 1 Part-time 2	46
55. What were the reasons that you were unable to find a job? (CIRCLE ALL THAT APPLY)	No suitable jobs available 1 Employer thought I was too young 2 Lack skills, education 3 Lack experience 4 No references 5 Language barriers 6 Racial discrimination 7 Handicapped 8 Criminal record 9 Transportation barriers 10 Other (SPECIFY) 20	25 26	No suitable jobs available 1 Employer thought I was too young 2 Lack skills, education 3 Lack experience 4 No references 5 Language barriers 6 Racial discrimination 7 Handicapped 8 Criminal record 9 Transportation barriers 10 Other (SPECIFY) 20	47 48
56. During this time period were you offered any job that you did not take?	Yes 1 No 2	27	Yes 1 No 2	49
57. (IF YES TO Q. 56 CONTINUE: OTHERWISE, GO TO NEXT INACTIVE PERIOD.) Why didn't you take this job? (CIRCLE ALL THAT APPLY)	Pay too low 1 Insufficient hours 2 Inappropriate hours 3 Unsatisfactory job duties 4 Unsatisfactory working conditions 5 Poor location 6 Couldn't arrange transportation 7 Couldn't arrange child care 8 Health problems 9 Other (SPECIFY) 0	28 29	Pay too low 1 Insufficient hours 2 Inappropriate hours 3 Unsatisfactory job duties 4 Unsatisfactory working conditions 5 Poor location 6 Couldn't arrange transportation 7 Couldn't arrange child care 8 Health problems 9 Other (SPECIFY) 0	50 51
58. (IF NO TO Q. 53 CONTINUE: OTHERWISE GO TO NEXT INACTIVE PERIOD.) Why weren't you looking for a job during this time period? (CIRCLE ALL THAT APPLY)	Waiting to begin new job or resume an old job 1 Previously looked but could not find work 2 Believed no work available 3 Employer thought I was too young 4 Lacked necessary schooling or training 5 Lacked experience 6 Race or sex discrimination 7 Handicapped or ill health 8 Lacked transportation 9 Lacked child care 10 Waiting for school to begin 11 Other (SPECIFY) 20	30 31	Waiting to begin new job or resume an old job 1 Previously looked but could not find work 2 Believed no work available 3 Employer thought I was too young 4 Lacked necessary schooling or training 5 Lacked experience 6 Race or sex discrimination 7 Handicapped or ill health 8 Lacked transportation 9 Lacked child care 10 Waiting for school to begin 11 Other (SPECIFY) 20	52 53
59. What were you doing?		32 33 34		54 55 56

CARD 10

THIRD RECENT

MONTH YEAR

MONTH YEAR

Could not find a job	1	
Waiting for a new job to begin in 30 days	2	
Awaiting recall to job following layoff	3	
Waiting for school or training to begin	4	
Illness, disability	5	
Family responsibilities	6	
Personal reasons	7	
In jail	8	
Labor dispute	9	
Other (SPECIFY)	0	

SKIP TO Q. 58	Yes	1
	No	2
Full-time	1	
Part-time	2	
No suitable jobs available	1	
Employer thought I was too young	2	
Lack skills, education	3	
Lack experience	4	
No references	5	
Language barriers	6	
Racial discrimination	7	
Handicapped	8	
Criminal record	9	
Transportation barriers	10	
Other (SPECIFY)	20	

	Yes	1
	No	2
Pay too low	1	
Insufficient hours	2	
Inappropriate hours	3	
Unsatisfactory job duties	4	
Unsatisfactory working conditions	5	
Poor location	6	
Couldn't arrange transportation	7	
Couldn't arrange child care	8	
Health problems	9	
Other (SPECIFY)	0	

Waiting to begin new job or resume an old job	1
Previously looked but could not find work	2
Believed no work available	3
Employer thought I was too young	4
Lacked necessary schooling or training	5
Lacked experience	6
Race or sex discrimination	7
Handicapped or ill health	8
Lacked transportation	9
Lacked child care	10
Waiting for school to begin	11
Other (SPECIFY)	20

END CARD 09

FOURTH RECENT

MONTH YEAR

MONTH YEAR

Could not find a job	1	
Waiting for a new job to begin in 30 days	2	
Awaiting recall to job following layoff	3	
Waiting for school or training to begin	4	
Illness, disability	5	
Family responsibilities	6	
Personal reasons	7	
In jail	8	
Labor dispute	9	
Other (SPECIFY)	0	

SKIP TO Q. 58	Yes	1
	No	2
Full-time	1	
Part-time	2	
No suitable jobs available	1	
Employer thought I was too young	2	
Lack skills, education	3	
Lack experience	4	
No references	5	
Language barriers	6	
Racial discrimination	7	
Handicapped	8	
Criminal record	9	
Transportation barriers	10	
Other (SPECIFY)	20	

	Yes	1
	No	2
Pay too low	1	
Insufficient hours	2	
Inappropriate hours	3	
Unsatisfactory job duties	4	
Unsatisfactory working conditions	5	
Poor location	6	
Couldn't arrange transportation	7	
Couldn't arrange child care	8	
Health problems	9	
Other (SPECIFY)	0	

Waiting to begin new job or resume an old job	1
Previously looked but could not find work	2
Believed no work available	3
Employer thought I was too young	4
Lacked necessary schooling or training	5
Lacked experience	6
Race or sex discrimination	7
Handicapped or ill health	8
Lacked transportation	9
Lacked child care	10
Waiting for school to begin	11
Other (SPECIFY)	20

FIFTH RECENT

MONTH YEAR

MONTH YEAR

Could not find a job	1	
Waiting for a new job to begin in 30 days	2	
Awaiting recall to job following layoff	3	
Waiting for school or training to begin	4	
Illness, disability	5	
Family responsibilities	6	
Personal reasons	7	
In jail	8	
Labor dispute	9	
Other (SPECIFY)	0	

SKIP TO Q. 58	Yes	1
	No	2
Full-time	1	
Part-time	2	
No suitable jobs available	1	
Employer thought I was too young	2	
Lack skills, education	3	
Lack experience	4	
No references	5	
Language barriers	6	
Racial discrimination	7	
Handicapped	8	
Criminal record	9	
Transportation barriers	10	
Other (SPECIFY)	20	

	Yes	1
	No	2
Pay too low	1	
Insufficient hours	2	
Inappropriate hours	3	
Unsatisfactory job duties	4	
Unsatisfactory working conditions	5	
Poor location	6	
Couldn't arrange transportation	7	
Couldn't arrange child care	8	
Health problems	9	
Other (SPECIFY)	0	

Waiting to begin new job or resume an old job	1
Previously looked but could not find work	2
Believed no work available	3
Employer thought I was too young	4
Lacked necessary schooling or training	5
Lacked experience	6
Race or sex discrimination	7
Handicapped or ill health	8
Lacked transportation	9
Lacked child care	10
Waiting for school to begin	11
Other (SPECIFY)	20

CARD 11

SECTION VIII: INCOME

(60) What were your total earnings, before deductions, from all jobs last month? (IF NO INCOME FROM JOBS LAST MONTH, ENTER 0.) $_____ 11-14

(61) During the last month, did you or anyone in your immediate household receive: (READ SOURCE)

62. FOR EACH YES IN Q. 61 ASK: Did you or another household member receive the (SOURCE) payments?

SOURCE	Q. 61 Yes	Q. 61 No	Q. 62 Respondent	Q. 62 Other Household Member	
Food stamps?	1	2	1	2	15-16
AFDC (that is, aid to families with dependent children)?	1	2	1	2	17-18
Unemployment compensation or insurance?	1	2	1	2	19-20
Social Security (retirement and survivor's benefits)?	1	2	1	2	21-22
Other public assistance; for example SSI or general relief?	1	2	1	2	23-24
Other government payments; for example, veteran's benefits, workmen's compensation, other government pensions?	1	2	1	2	25-26

SECTION IX: ADDITIONAL QUESTIONS

(63) What job would you like to be doing five years from now?

_____ 27-28

(64) What job do you expect to have five years from now?

_____ 29-30

65. (IF NEVER HAD JOB, CHECK BOX ☐ AND SKIP TO Q. 66) (SHOW CARD H) Using this card, please tell me how satisfied you (are/were) with each of the following aspects of your current or most recent job.
How about:

	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	
Pay?	1	2	3	4	33
Fringe benefits?	1	2	3	4	34
Importance?	1	2	3	4	35
Challenge?	1	2	3	4	36
Working conditions?	1	2	3	4	37
Opportunity for promotion and advancement with this employer?	1	2	3	4	38
Opportunity for promotion and advancement in this line of work?	1	2	3	4	39
The pride you (feel/felt)?	1	2	3	4	40
Respect you receive(d) by being in this line of work?	1	2	3	4	41
Opportunity to use past training and education?	1	2	3	4	42
Job security and permanence?	1	2	3	4	43
Supervisor(s)?	1	2	3	4	44
Opportunity for developing new skills?	1	2	3	4	45
Job as a whole?	1	2	3	4	46
The opportunity to be helpful to others?	1	2	3	4	47

(66) I would like to ask you how you feel about yourself and your future. Please tell me whether you agree or disagree with the following statements.

(READ)	Agree	Uncertain	Disagree	
I feel good about myself	1	2	3	48
On the whole, I'm satisfied with myself	1	2	3	49
I can do things as well as the next person	1	2	3	50
Every time I try to get ahead, something or somebody stops me	1	2	3	51
If I work hard, I will get ahead	1	2	3	52
What happens to me is my own doing	1	2	3	53
I feel I have a lot to be proud of	1	2	3	54
Success depends largely on luck rather than on hard work.	1	2	3	55
Planning ahead usually makes things work out.	1	2	3	56

(67) In the last two years, how often, if at all, have you gotten into any trouble with the police, that is been arrested, charged or booked? Was it:

(READ) 57

Not at all,	1
Just once,	2
A couple of times, or	3
More than a couple of times?	4

(68) How important is it to you to keep out of trouble with the police and the law:

(READ) 58

Real important: I go out of my way to avoid trouble,	1
I usually try to steer clear unless I'm pushed real hard, or	2
Not too important: if I get in trouble, I don't care too much?	3

THANK RESPONDENT, GIVE INCENTIVE, SIGN FRONT COVER AND ENTER ENDING TIME

END CARD 11