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ABSTRACT

This report provides an analysis of young men in the Parnes National Longitudinal Surveys who were enrolled in manpower programs from 1963 to 1972. It provides information on the Probability that members of the 5,225 sample would enter a manpower program, given personal and economic characteristics. The report evaluates the relationship of manpower program participation to annual earnings from 1963 to 1972 (using Social Security Administration data); and draws comparisons for different types of programs and duration of participation among the enrollees. It also makes comparisons with those in the Parnes sample who did not enroll. (Author)

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AN EVALUATION OF MANPOWER PROGRAMS FOR YOUNG MEN, 1964-1972

BASED UPON THE NATIONAL LONGITUDINAL SURVEYS

by
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University of Wisconsin-Madison
September, 1975

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16. Abstracts

This report provides an analysis of young men in the Parnes National Longitudinal Surveys who were enrolled in manpower programs from 1963 to 1972. It provides information on the probability that members of the 5,225 sample would enter a manpower program, given personal and economic characteristics.

The report evaluates the relationship of manpower program participation to annual earnings from 1963 to 1972 (using Social Security Administration data); and draws comparisons for different types of programs and duration of participation among the enrollees. It also makes comparisons with those in the Parnes sample who did not enroll.

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GGS JLW

I. OBJECTIVES

Local planners under the Comprehensive Employment and Training Act hope to learn from the prior decade of Federal manpower policies. Unfortunately, the evaluations of Federal policies have provided a mixed picture. Individual case studies, and even some widespread national surveys, indicate economic gain for most of those enrolled in manpower programs. At the same time, many participants appear to have gained nothing and there were extensive failures within some manpower programs. Serious questions have been raised about the effectiveness of the JOBS approach to subsidized on-the-job training, and initial evaluations of the Work Incentive Program (WIN) have been less favorable than had been hoped by its proponents. These recent evaluations of JOBS and WIN have overshadowed some of the more favorable findings in the earlier studies of MDTA training.

There has been an extensive series of evaluations of government-sponsored training programs and other manpower policies since the enactment of the Manpower Development and Training Act in 1962. The individual studies are too numerous to list here. However, summary appraisals of the evaluation studies can be found in a number of reports.[1/]

[1/] Gerald G. Somers, ed., Retraining the Unemployed (Madison: University of Wisconsin Press, 1968); Einar Hardin, "Benefit-Cost Analysis of Occupational Training Programs: A Comparison of Recent Studies," in Cost-Benefit Analysis of Manpower Policies, edited by Gerald G. Somers and W. D. Wood (Madison: Center for Studies in Vocational and Technical Education, University of Wisconsin, 1969). See also Cost-Benefit Analysis: Theory and Application to Manpower Training Programs, A Bibliography (U.S. Department of Labor, May 1971).

The comparative studies of benefit-cost ratios made by Einar Hardin, by John Goldstein and by Steve Barsby indicate relatively favorable results for MDTA institutional and OJT trainees. However, the results for enrollees in other manpower programs, such as NYC, Job Corps, JOBS, and WIN, are less certain because of the absence of rigorous evaluation and the mixed results of the few comprehensive surveys which have been conducted.[2/]

The lack of conclusive findings has been blamed on methodological deficiencies of the evaluations. One of the major criticisms is that the evaluation period is too brief. Most government reports extend only six months beyond program termination, and even some of the most rigorous studies conducted by cost-benefit analysts are based on a one-year follow-up.

Two early attempts at longer term evaluation produced conflicting results, primarily because of differences in programs, locales, control groups, and other aspects of methodology.[3/] A similar conflict in results occurred in more recent longitudinal evaluations utilizing social security earnings data. Whereas David Farber and Orley Ashenfelter found that MDTA training was ineffectual, Louis Jacobson arrives at a far more favorable conclusion regarding the effects of training on earnings.[4/] The difference

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[2/] These findings are reviewed in a forthcoming monograph, "Evaluating the Evaluations," being completed by Gerald Somers for the National Manpower Policy Task Force.

[3/] See Michael F. Borus, "Time Trends in the Benefits from Retraining in Connecticut," and Gerald Somers and Graeme McKechnie, "Vocational Retraining Programs for the Unemployed," both in Industrial Relations Research Association, Proceedings of the 1967 Meeting.

[4/] The conflicting results are discussed in Louis S. Jacobson, The Use of Longitudinal Data to Assess the Impact of Manpower Training on Earnings (Public Research Institute, 1973).

in results appears to stem primarily from Jacobson's more careful utilization of a control group. Similarly favorable results have recently been reported by Michael Borus and Edward Prescott based on a longitudinal study of 3,339 persons who were assigned to MDTA training courses in Indiana during 1964-66.[5/] Like the longitudinal studies using social security earnings data, the Borus-Prescott evaluation was restricted to MDTA trainees. However, its concentration in Indiana also makes a comparison with the national surveys difficult to interpret.

Thus, there remains a need for a longitudinal follow-up evaluation of the effects of a wider range of manpower programs, based on a national sample of enrollees.

It was the purpose of the reported research: (1) to determine the characteristics of young, male enrollees in manpower programs; (2) to estimate the probability of enrollment of young men with specified characteristics; (3) to evaluate the long-term effects of enrollment on their future earnings; and, among the enrollees, (4) to determine the longitudinal effects on earnings of (a) completion of the program, (b) duration of enrollment, (c) the year of termination, and (d) the length of time since termination.

II. PROCEDURES

A. Sources of Data

The principal source of data for the analyses were the National Longitudinal Surveys of labor market behavior conducted for Professor

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[5/] Michael Borus and Edward Presoctt, "The Effects of MDTA Institutional Training Over Time and in Periods of High Unemployment" (unpublished paper, 1973).

Herbert Parnes of Ohio State University's Center for Human Resources Research by the Bureau of the Census under contract with the Manpower Administration. Begun in 1966, with annual follow-up surveys in each of the succeeding five years, these studies cover four groups: young men who were 14 to 24 years old in 1966; young women who were 14 to 24 years old in 1968; women who were 30 to 44 years old in 1967; and middle-aged men who were 45 to 59 years old in 1966.

For each of the four groups, a probability sample of the noninstitutional civilian population was drawn by the U.S. Census Bureau from 235 sample areas representing every state and the District of Columbia. Each sample consists of approximately 5,000 people. To permit statistically reliable estimates for blacks, a sampling ratio four times as great as that for whites has been used so that each sample consists of approximately 3,500 whites and 1,500 blacks.

Each individual in the sample was interviewed periodically over the course of five years in order to record work histories as well as to record changes in those characteristics that were hypothesized to be related to labor market behavior, for example, education and training, etc.

Since social security numbers were available for most of those in the Longitudinal (Parnes) Surveys, the Census Bureau was able to match numbers with those who had enrolled in manpower programs according to data on record at the Manpower Administration. For each enrollee it was possible to obtain information on (a) the type of program, (b) completion or noncompletion, (c) number of weeks in the program, and (d) year of termination.

B. Methodological Problems

The research was confronted with two major methodological problems from the outset, and these problems hampered the analysis and raised serious questions with regard to the initial findings. The first problem concerned the sample of manpower enrollees who were included in the Longitudinal Survey data. At the time the research evaluation was proposed there was speculation in the Manpower Administration that the number of manpower program enrollees would be too small to make the evaluation meaningful. However, the initial matching of Longitudinal Survey identification numbers and manpower enrollee social security numbers indicated that there would be over 500 observations for inclusion in the evaluation of manpower enrollees. It was decided to proceed with the research. However, even this number was unevenly distributed among the four cohorts as is indicated in Table 1. Most of the observations were found in the cohort of young men. The number of mature men and mature women among the manpower enrollees was especially small.

Since the largest number of observations were found in the cohort of young men, it was decided to concentrate the analysis and evaluation on this group first. The programs and models developed in the analysis of the young male cohort were then to be applied with suitable modifications to the cohort of young women and then some decision was to be made concerning the combination or separate treatment of the cohorts of mature men and mature women. The problems encountered in the evaluation of the young male cohort were such that only preliminary work has been done on the other cohorts. Until the data, methodological, and conceptual problems were solved for the evaluation of young men, it was deemed to be pointless

TABLE 1

NUMBER OF MANPOWER PROGRAM ENROLLEES IN PARNES' SAMPLES, BY YEAR OF TERMINATION

YOUNG MEN

Year Terminated Program*	1964	65	66	67	68	69B	69A	70	71	72
Number in Program**	4	14	33	59	42	20	22	33	49	13
				172				117		
						289				

MATURE MEN

Year Terminated Program*	1963-64	65	66	67	68	69B	69A	70	71	72
Number in Program**	1	2	1	3	5	5	2	1	5	2
				17					10	
						27				

YOUNG WOMEN

Year Terminated Program*	1963-65	66-69B	69A-72
Number in Program**	7	43	93
	50		93
		143	

MATURE WOMEN

Year Terminated Program*	1963-64	65	66	67	68	69B	69A	70	71	72
Number in Program**	7	3	5	14	8	2	10	17	15	7
				39				49		
						88				

*Termination before the Parnes interview survey in 1969 is designated by 69B. Termination after the Parnes interview survey in 1969 is designated by 69A.

**Includes those who enrolled in more than one program and those who enrolled in the same program in different years.

to extend the analysis to the relatively small sample in the other cohorts.

Although the initially indicated number of observations for young male manpower enrollees was 289, further analysis of the data severely reduced the size of the sample available for the follow-up evaluation. The last data available on the Longitudinal Survey tapes were gathered in the interview of 1969. Since 117 of the manpower enrollees in this cohort terminated their program after the 1969 interview (the last interview conducted at the time of the analysis), the Longitudinal Survey data could not be used to evaluate earnings, employment, hours worked, and other labor market variables for this sizeable group. As is seen in Table 1, the number eliminated from the follow-up evaluation for this reason was also significant for the other cohorts. Indeed, the number of mature men and mature women who terminated the manpower program prior to the 1969 interview date was so small as to raise questions about the propriety of a follow-up evaluation for these groups. Even for the cohort of young women, the number who terminated their program before the 1969 interview date was so small as to cause serious difficulties in any detailed follow-up evaluation.

Further investigation of the data for manpower enrollees in the cohort of young men revealed additional complications which resulted in a further reduction in sample size for some of the critical analyses. It was found that the numbers designated as "manpower enrollees" in the initial list provided by the Census Bureau included approximately 20 who had been enrolled in more than one manpower program or had enrolled in the same program in different years. Since a purpose of the evaluation was to determine the effects of enrollment in particular kinds of programs and,

especially, to determine the impact of year of termination and time period since termination on subsequent labor market performance, this duplication presented a major complication. Even in analyzing the sample impact of being in a manpower program or not (without regard to type of program, length of enrollment, termination date, etc.), the duplication of manpower programs in the same individual would make it difficult to interpret the results of the follow-up evaluation.

Since a basic purpose of the evaluation was to trace post-program earnings and employment over the longest possible period, the analysis was designed in terms of a comparison between earnings and employment in 1966 (the first year of the Longitudinal Survey interviews) and 1969 (the last year in which Longitudinal Survey data was available to us at the time of analysis). However, it was found that 62 of the steadily shrinking sample of young male manpower enrollees were interviewed in 1966 but were not interviewed in 1969. Therefore, these too had to be eliminated in any analysis utilizing the Longitudinal Survey data for information on post-program employment and earnings.

Analysis of the number of weeks in the training program for the "manpower enrollees" also revealed the disappointing information that a number of them had actually been in the program for less than one week. Approximately 15 percent of the so-called manpower program enrollees were in the program for so short a time, if they showed up at all, that one could hardly expect any meaningful impact on their labor market performance.

In comparing earnings, employment, and hours worked of this truncated sample of manpower enrollees with a comparison group matched for a number of key variables, missing data for some of the basic variables

used in regression analyses caused a further reduction in the sample size of manpower enrollees available for our analyses. Thus, even with the inclusion of manpower enrollees who were coded as having less than one week of program experience, the regression samples would be reduced to 140. It was decided to retain them. As can be surmised from the data in Table 1, similar reductions in the sample size of manpower program enrollees usable for comparative evaluation in the other three cohorts of the Longitudinal Survey would probably result in sample sizes too small for meaningful analyses.

In addition to the methodological problems surrounding the sample manpower enrollees, considerable delay and continuing difficulties in interpretation initially stemmed from the Longitudinal Survey data themselves. Because of the use of alphabetics instead of numerics in some cases and the lack of coordination between the code book and the data tapes, much time in programming was devoted to "cleaning up" the tapes for regression analyses. The details of these problems have been presented to the Manpower Administration and to the staff at Ohio State University and need not be repeated here. As a result of the common problems experienced by research investigators along this line--discussed fully at a Users' Conference on the National Longitudinal Surveys at Ohio State University on June 14, 1973--Prof. Herbert Parnes and his staff agreed to provide "clean" tapes in 1974. By that time our own programming staff had provided usable tapes.

The selection of a comparison sample of non-manpower enrollees posed less serious problems. It was possible to obtain more accurate data on them from the Longitudinal Survey tapes and, of course, they did not present the

problems of defining manpower program enrollment. Nonetheless, for purposes of the regression analyses, it was deemed appropriate to limit the comparison sample to approximately 140 young men, drawn on a random basis from the total Longitudinal Survey cohort, similar to the sample size of the study group, and matched on a one-to-one basis for the following characteristics: age, race, enrollment in school, education level in 1966, family income, receipt of welfare payments, and weeks of unemployment in the year preceding the 1966 interview.[9] The comparison group is described more fully in Part III.

C. Use of Social Security Earnings Data

Because the Longitudinal Surveys permitted a maximum time-span comparison of earnings for only the three year period 1966-1969, Social Security earnings data were obtained for the manpower enrollees and members of the comparison group in each year from 1964 to 1972. These earnings data provided analyses which related earnings before and after enrollment to such independent variables as "year terminated the program," and "time period since program termination," in addition to "type of program," "completion of program," and "number of weeks in program." The Social Security Administration prepared three-way cross-tabulations, relating various personal and economic characteristics of the manpower enrollees and non-enrollees to annual earnings. These are reported in Part V.

D. Analytical Models

Probit analysis was used to estimate the probability of manpower program enrollment for those in the Parnes sample of young men. This technique is described in Appendix B, and the results are discussed in Part IV.

The basic analytical tool used in the evaluation of the combined Longitudinal Survey and Social Security earnings data was the error components model. This model is discussed further in Appendix C, and the results are reported in Part V.

The Social Security Administration was asked to compute from our data, combined with the earnings data supplied by the Social Security Administration, two cross-product matrices. The final data set consisted of pooled, cross-section, and time series data: observations of N cross-section units over T years, with information recorded on p variables (N = 244, T = 9, p = 37). Total observations equal N x T = 244 x 9 = 2196. The first cross-products matrix was calculated over all N x T observations and p variables. The second cross-products matrix was calculated from the mean observation for each individual over the nine observations (for each of nine years) for that individual.

The error components model, utilizing the data in the cross-product matrices, included the independent variables discussed above. The dependent variable was the adjusted Social Security earnings data for each year from 1964 to 1972. This analysis provides an indication of the effects of year of termination from the manpower program and the effects of the number of years since termination on changes in Social Security earnings from the year prior to enrollment to the years following termination.

Because it is important in a longitudinal evaluation to work with income in real terms, the Social Security Administration was asked to adjust money income records for changes in the Consumer Price Index from 1964 to 1972.

III. Characteristics of Program Enrollees

A. Frequency Tabulations for Enrollees Who Terminated From Manpower Programs Before the "Parnes" Survey in 1969

Since the follow-up labor market data on manpower enrollees to be derived from the Longitudinal Surveys were obtained only for those who terminated their manpower program before the interview survey in 1969, the manpower program samples were divided between those who terminated before the survey in 1969 and those who terminated after that date. The numbers in each of these two categories is indicated in Table 1. By way of illustration of the enrollee sample, cross-tabulations are attached as Appendix A of this report, providing data on the personal characteristics, and employment and income reported in the 1966 Parnes survey for young men who terminated from manpower programs prior to the interview survey in 1969. Their enrollment in the specified manpower program could have occurred at any time before or after the 1966 interview survey.

The data in the cross-tabulations were useful in choosing the key variables needed for selection of a comparison group, and they were also of value in determining the variables to be included in the regression analyses.

The cross-tabulations indicate the number of young men who enrolled in programs of institutionsl training, on-the-job training and coupled training, the Job Corps and all other types of manpower programs, cross-classified by the following characteristics and variables: age, race, educational status and educational achievement, current employment status, employment activity most of the previous week, current occupation, current industry, hourly rate of pay, usual earnings, total net assets, total family income, receipt of welfare payments, attitude toward present job,

hours per week worked in the last twelve months, number of weeks currently unemployed, number of weeks unemployed in the last twelve months. The number of young men in specific manpower programs other than institutional training, OJT and coupled, and the Job Corps was too small for separate analyses and, therefore, these young men were grouped for purposes of cross tabulation as well as other analyses of the data (see Appendix A).

1. Type of Manpower Program, by Age, Race, and Education

Of the 189 who terminated their manpower program prior to the 1969 Parnes survey, 64 had been enrolled in institutional training, 45 were in on-the-job training programs (OJT), or in programs which combined OJT and institutional training, and 62 were in the Job Corps. The remaining 18 were scattered in various other types of manpower programs. Their ages ranged from 14 to 24 at the time of the 1966 interview survey. Three-fourths of the enrollees were under 20 years of age and 47 of the 62 enrollees in the Job Corps were 17 years of age or under (see Appendix Table A-1).

Almost two-thirds of the sample were nonwhite. However, they were unevenly distributed among the program types, with nonwhites representing almost 80 percent of those who had been enrolled in the Job Corps, 64 percent of those in institutional training programs, and only 35 percent of those enrolled in on-the-job training or combined OJT and institutional programs (see Appendix Table A-2).

Most of the manpower program enrollees reported that they were not enrolled in school at the time of the 1966 interview. Only 71 of the 189 respondents in the sample reported that they were currently "enrolled in school" at the time of the survey. Of these, 28 were in the Job

Corps, either before or after the survey, and the remainder were in institutional, OJT or some other type of manpower program. Among those who were currently enrolled in school in 1966, 44 were in high school below the senior year, and 10 were high school seniors. Of the remainder, 10 were still in elementary school, and 7 were enrolled in college. Approximately one-fourth of those who reported that they were no longer in school in 1966 indicated that they had obtained only eight years or less of formal education. Among the group of 118 non-school enrollees, 54 had not completed high school, 29 had received a high school diploma, and only 4 manpower enrollees had received some college education (see Appendix Tables A-3 and A-4). Further detail on school years completed by the manpower enrollees is presented in Appendix Table A-5. The numbers in the various educational categories do not always correspond exactly with those in similar categories in Appendix Table A-4, because the two tabulations resulted from different sections of the interview questionnaire. It is noted that the educational level of those enrolled in the Job Corps, heavily populated by nonwhites, was below the levels attained by enrollees in institutional and OJT programs, where the nonwhite enrollment was relatively smaller. Since the Job Corps enrollees were also younger at the time of the 1966 survey, it is possible that some of them may have continued their formal education after the survey and either before or after their enrollment in the Job Corps.

2. Employment Status, Occupation and Industry

Of the 189 manpower enrollees in the sample, 112 were employed at the time of the 1966 survey, 26 were unemployed, and the remainder were not in the labor force. The proportions of those employed were greater for enrollees in institutional and OJT programs than they were for those in the

Job Corps (Appendix Table A-6). As is seen in Appendix Table A-7, the non-labor force status of many of the respondents was accounted for by their school enrollment at the time of the survey.

Of the 170 respondents who indicated their occupation on their current or last job (17 had never worked), the distribution was heavily weighted toward unskilled jobs, as might be expected in this relatively young, disadvantaged work group. Although 20 reported that they had worked or were working as "operatives and kindred workers," larger numbers indicated their occupation as "janitors, kitchen workers, farm laborers, helpers, and laborers." (See Appendix Table A-8.) The respondents were or had been employed in a variety of manufacturing industries, but there were major concentrations in agriculture, construction, retail trade, and service industries (Appendix Table A-9).

Almost 40 percent of those holding jobs in 1966 reported that they "liked their job very much." However, the proportions in this favorable attitudinal category were considerably higher for those who were enrolled in institutional or OJT training as compared with Job Corps enrollees (Appendix Table A-10). Although half of the respondents had worked an average week of 40 hours or more in the year preceding the 1966 interview, there was a substantial amount of part-time work among the 166 respondents to this question. Even many of those who were enrolled in school at the time of the 1966 interview had been employed on a part-time basis during the preceding year (Appendix Table A-11).

Most of those who indicated that they were "currently unemployed" at the time of the survey had experienced relatively brief periods of unemployment. Approximately one-third had been unemployed for two weeks or less

(Appendix Table A-12). However, a number of the respondents had had lengthier spells of unemployment in the twelve months preceding the 1966 interview. Of the 59 respondents who reported that they had had some unemployment in the preceding year, 15 had been unemployed for 27 weeks or more. A disproportionately large number of these long-term unemployed were categorized as Job Corps enrollees (Appendix Table A-13). Of the 104 respondents who were not in the labor force during some part of the year preceding the 1966 interview survey, 27 were in the NLF category between 40 and 52 weeks, and 36 were in this category between 26 and 39 weeks. As befits their younger age, Job Corps enrollees were likely to be out of the labor force for longer periods than enrollees in other manpower programs (Appendix Table A-14).

3. Earnings, Assets, Family Income, and Welfare Status

Over 70 percent of the 119 respondents who had a job at the time of the 1966 interview were earning $2 an hour or less; and over one-fifth were earning $1 per hour or less. OJT enrollees received proportionately higher hourly wages than those enrolled in other manpower programs, with 14 of the 38 enrollees in this category reporting hourly earnings of $2 or more in 1966 (Appendix Table A-15). Reflecting their young age, as well as disadvantaged status, few of the respondents had any personal assets at the time of the 1966 interview survey. Only 10 of the 189 reported total net assets of $500 or more (Appendix Table A-16).

Of the 171 respondents who reported total family income in the twelve months preceding the 1966 interview, 30 percent indicated an income of less than $3000. Another 25 percent indicated annual family income of between $3000 and $4999. Only a little over 10 percent reported family income of $10,000 or more per year; and, of these, only three of the 171 respondents

reported that their families had annual incomes of more than $15,000. In keeping with other evidence on their disadvantaged status, Job Corps enrollees were disproportionately represented at the bottom of the family income scale. Almost half of the Job Corps enrollees reported that their family income in the year preceding the 1966 interview was less than $3000 (Appendix Table A-17).

The relative disadvantage of Job Corps enrollees, compared with OJT trainees, can also be seen in their welfare status. (Appendix Table A-18). Whereas almost 40 percent of the Job Corps enrollees reported that they were on welfare or receiving public assistance, only 7 percent of the OJT trainees were welfare recipients. As in other measures of disadvantaged status, enrollees in institutional training were in between these two extremes, with approximately one-fourth reporting that they were in receipt of welfare payments.

B. Characteristics of Young Women Enrolled in Manpower Programs

Similar cross-tabulations for program enrollees in the Parnes sample of young women are presented in Appendix D. Since it was decided to include only the analysis of young men in this report, no discussion of the tables in Appendix D is presented here. The interested reader may wish to compare the characteristics of male and female enrollees in manpower programs.

C. Characteristics of the Comparison Group of Non-Enrollees

The Parnes data provide a special advantage in permitting the selection of a comparison group which has basic characteristics which are similar to those of the study group of manpower enrollees. In selecting the non-enrollees group from the total Parnes sample of approximately 5,000 young men, an effort was made to match the study group and the control

group for approximately the same proportions with the following characteristics, as revealed by the 1966 survey data for the Parnes sample:

Age

for young men

14-18
19-21
22-24

Race

white
nonwhite

Education

in school
high school dropouts
high school graduate, college, or university

Family income

under $4000/year
$4000/year and over

Receipt of welfare payments

yes
no

Number of weeks unemployed in the last 12 months

0
under 15 weeks
15 weeks or more

As is discussed in Part V, the careful matching of the study and comparison groups was lost in the process of obtaining social security earnings data for the two groups. Missing social security information required the elimination of some in both samples, not always in the same proportions according to characteristics.

IV. THE PROBABILITY OF ENROLLMENT

The discussion and tabulations in the preceding section throw some light on the characteristics which were likely to lead young men into the manpower programs of the 1960s and early 1970s. However, these data were based on a limited sample, and the cross-tabular analysis could not isolate the statistical probabilities of enrollment associated with specific personal and environmental characteristics of a random sample of young men.

In this section, the entire Parnes sample of young men, a random national sample (see Section II), is analyzed to determine the probabilities of enrollment in programs in four time periods: 1966, 1969, 1966-68, and 1969-72. For each of these time periods a "probability coefficient" of program enrollment is determined for a number of personal and environmental characteristics of the men in the Parnes sample. The characteristics studied are as follows:

Age - a continuous variable (years)

Family size - a continuous variable (number of members)

Number of dependents - a continuous variable

No. of school years completed - a continuous variable (years)

Race - a dichotomous variable (1=nonwhite; 0=white)

Wage/salary for preceding 12 months - a continuous variable ($)

Family income - coded by income intervals (1,2,3...11)

Total assets - coded by asset intervals (1,2,3...7)

Welfare recipient - a dichotomous variable (1=yes; 0=no)

Residence: Northeast region - a dichotomous variable (1=yes; 0=no).
North central region - a dichotomous variable (1=yes; 0=no)
In SMSA (Standard Metropolitan Statistical Area) - a dichotomous variable (1=yes; 0=no)

Health limitation on work - a dichotomous variable (1=yes; 0=no).

Since the dependent variable in the regression is dichotomous (1= enrollment in a manpower program; 0=no enrollment in a manpower program), probit analysis was used as the appropriate technique. The special characteristics of probit analysis are described in Appendix B.

A. Probability of Participation in Manpower Programs

Much publicity was given to manpower policies in the 1960s, and programs for youth were accorded special emphasis. Yet, as indicated in Tables IV-1 to IV-4, a random probability sample of young men contained few who participated in manpower programs. This was true even though there was some oversampling of Blacks. In a sample size of 5225 in 1966, only 36 participated in manpower programs; and only 142 were enrolled in the years from 1966 to 1968. The sample of young men available for interviews had dropped to 4033 in 1969-72. The number of manpower enrollees in 1969 was 36, and 79 were enrolled in the four-year period 1969-72.

Although the overall probability of participating in a manpower program was low, a number of characteristics increased the probability of participation and other characteristics decreased the probability. Only variables with statistically significant relationships at the 1%, 5% or 10% levels are discussed here. Further detail can be found in Tables IV-1 to IV-4.

TABLE IV-1

PROBIT PROBABILITY COEFFICIENTS FOR MANPOWER PROGRAM PARTICIPATION, 1966

Regressor	Mean Value	Probit Index Coefficients	Standard Error	Regressor t-value
1. Age	18	-.043	.017	-2.56**
2. Family size	4.8	-.150	.030	-5.03***
3. No. of school yrs. completed	11	-.064	.029	-2.20*
4. Total assets	2	-.061	.076	-0.80
5. Family income	6.5	-.034	.029	-1.14
6. Race/1=nonwhite;0=white	.28	.114	.144	.79
7. Northeast region	.20	-.094	.168	- .56
8. North Central	.25	-.062	.244	-2.54**
9. SMSA/1=in SMSA;0=other	.63	-.052	.131	- .40
10. Health limitation on work/ 1=yes; 2=no	.08	-.234	.284	- .82
11. Welfare recipient/ 1=yes; 0=no	.09	.307	.175	1.76

*Significant at .10

**Significant at .05

***Significant at .01

Calculation of $\hat{I}$ at mean values of $(x_1, \ldots x_{11})$:

$\hat{I} = -.043(18) - .15(4.8) - .064(11) - .061\ (2) - .034(6.5) + .114(.28)$

$- .094\ (.20) - .062(.25) - .052(.63) - .234(.08) + .307(.09)$

$\hat{I} = -.774 - .72 - .70 - .122 - .221 + .032 - .019 - .016 - .033 - .019 +$

$.028 = -3.364 \qquad F(\hat{I}) = \hat{P} = .001$

Sample size; 5225; manpower program enrollees in 1966 = 36

1. Age. The age of the sample ranged from 14 to 24 in the 1966-68 period and from 17 to 27 in the 1969-72 period. The mean age was 18 in the former period and 21 in the latter. Within the age range, the younger the respondent, the greater was his probability of manpower enrollment. The negative relationship between age and probability of participation was statistically significant in each of the four time periods under study.

2. Education. The mean number of school years completed by men in the Parnes sample was 11 in 1966-68 and 12 in 1969-72, with a range for the Parnes sample as a whole reaching to 18 years. The lower the educational level of the respondent, the greater the probability of his manpower program participation. As in the case of age, the negative relationship between education level and probability of participation was statistically significant in each of the four time periods. In the 1969-72 period the negative coefficient was significant at the 1% level.

3. Race. Because of an oversampling of nonwhites, 28 per cent of the Parnes sample of young men were in this category. Given the selection process in manpower programs, the probability of participation in a program was higher for nonwhites than for whites. The relationship between race and the probability of program participation was statistically significant in each of the time periods with the exception of 1966.

4. Family Size. The mean number of family members at the homes of the young men in the Parnes sample was 4.8 in 1966 and 4.6 in 1969. Family size was found to be negatively related to the probability of program participation throughout the period, but the relationship was statistically significant only for the early years, 1966-68. The response to employment opportunities might explain the negative relationship and the difference in significance in the two periods. The larger the family, the greater the need for market income,

and young men from large families would be induced to go to work rather than to a manpower training course after leaving school. This would be especially true under the relatively buoyant employment conditions of 1966-1968. By 1970, unemployment rates for young workers had reached 12 per cent, and more of the young men may have been diverted from market work to manpower programs in spite of the pressure of large families.

5. Number of Dependents. Given the young age of the samples, they were not likely to be heavily burdened with dependents. The mean value for this variable in 1969-72 was .57. There was a positive, significant relationship between the number of dependents and the probability of program participation during this period. Dependents may have helped satisfy the "need" criteria for selection of manpower program enrollees. Rising unemployment may have forced the "needy" out of the labor market into manpower programs.

6. Total Assets. The code for total net assets of the respondent was:

1. $0	5. $5000-9999
2. 1-499	6. 10000-24999
3. 500-999	7. 25000+
4. 1000-4999	

The mean value of assets was coded as 2., i.e., $1-499, reflecting the young age of the sample. Assets were negatively related to the probability of program participation, significant at the 10% level in 1966-68. The explanation probably lies in motivation for application as well as in criteria for selection.

7. Total Family Income. The code for family income was:

1. $≤1000	7. $6000-7499
2. 1000-1999	8. 7500-9999
3. 2000-2999	9. 10000-14999
4. 3000-3999	10. 15000-24999
5. 4000-4999	11. 25000+
6. 5000-5999	

The mean value was coded 6.5. As in the case of assets, there was a negative relationship between income and the probability of program participation, again reflecting motivation for application and criteria for selection.

8. Wage/Salary for the Last 12 Months. The mean wage of respondents was $4,090 in the year preceding the interview survey of 1969. The average earnings of manpower enrollees were considerably smaller; and the annual wage/salary earnings are seen to be negatively related to the probability of participation.

B. Conclusions on Probability of Enrollment.

In a random sample of young men, there was a low probability of enrollment in a manpower program in the period 1966-72. However, probit coefficients can be determined, relating sample characteristics to the probability of enrollment. The significant relationships are along expected lines. They follow from the fact that the manpower programs were designed for the unemployed and were to give preference to the disadvantaged.

Youth, limited education, minority status, limited assets, low family income and low wage earnings are associated with disadvantaged status. Because they affect the motivation for applying and the selection decision, these characteristics are significantly related to the probability of enrollment in one of the manpower programs of the last decade.

TABLE IV-2

PROBIT PROBABILITY COEFFICIENTS FOR MANPOWER PROGRAM PARTICIPATION, 1969

Regressor	Mean Value	Probit Index Coefficients	Standard Error	Regressor t-value
1. Age	21	-.049	-.021	-2.389**
2. Family size	4.6	-.052	-.306	-1.688
3. Wage/salaries for past 12 mo.	4090	-.0001	-.000	-2.728**
4. Number of dependents	.57	.124	-.061	2.056*
5. No. of school years completed	12	-.081	-.023	-3.580**
6. Race	.28	.489	.153	3.183**
7. Welfare status	.07	-4.664	5.140	-.907

*Significant at .10

**Significant at .05

Calculation of $\hat{I}$ at mean values of regressors:

$$\hat{I} = -.049(21) - .052(4.6) - .0001(4090) + .124(.57) - .081(12) + .489(.28)$$

$$- 4.664(.07) = -1.029 - .239 - .409 + .071 - 010 + .137 - .326$$

$$= -2.013 + .208 = -1.805$$

$$F(-\hat{I}) = 1 - F(\hat{I}) = .0359$$

Sample size: 4033; manpower program enrollees in 1969 = 30

TABLE IV-3

PROBIT PROBABILITY COEFFICIENTS FOR MANPOWER PROGRAM PARTICIPATION, 1966-68

Regressor	Mean Value	Probit Index Coefficients	Standard Error	Regressor t-value
1. Age	18	-.044	.011	-3.95***
2. Family size	4.8	-.047	.014	-3.19***
3. No. of school yrs. completed	11	-.056	.019	-2.92**
4. Total assets	2	-.100	.052	-1.92*
5. Total Y for entire family.	6.5	-.057	.018	-3.08**
6. Race	.28	.332	.090	3.65***
7. Residence-NE region US	.20	-.034	.117	-0.29
8. North central	.25	-.042	.105	-0.40
9. Live in SMSA	.63	-.009	.084	-0.10
10. Health limitation	.08	-.058	.162	-0.36
11. Welfare	.09	.138	.113	1.22

*Significant at .10

**Significant at .05

***Significant at .01

Calculation of I at mean values of $(x_1, \ldots x_{11})$:

$$\hat{I} = -.044(18) - .047(4.8) - .056(11) - .100(2) - .057(6.5) + .332(.28) - .034(.20) - .042(.25) - .009(.63) - .058(.08) + .138(.09)$$

$$\hat{I} = -.79 - .23 - .62 - 2.0 - .37 + .09 - .01 - .01 - .01 + .01$$

$$\hat{I} = -2.14 \quad F(\hat{I}) = .0162 = \hat{P}$$

Sample size: 5225; manpower program enrollees in 1966-68 = 142

TABLE IV-4

PROBIT PROBABILITY COEFFICIENTS FOR MANPOWER PROGRAM PARTICIPATION, 1969-72

Regressor	Mean Value	Probit Index Coefficients	Standard Error	Regressor t-value
1. Age	21	-.042	.014	-2.915**
2. Family size	4.6	-.021	.020	-1.068
3. Wage/salaries for last 12 mos.	4089.8	-.0008	.000	-3.07**
4. No. of dependents	.57	.120	.042	3.059**
5. No. of school yrs. completed	12	-.073	.017	-4.400***
6. Race	.28	.447	.103	4.335***
7. Welfare status	.07	-5.124	3.501	-1.464

Change in probability evaluated at		
$\hat{P}$=	$\hat{P}$=	$\hat{P}$=.2296 $\hat{I}$=-.74
Age		.01

**Significant at .05

***Significant at .01

Calculation of $\hat{I}$ at mean values of variables:

$$\hat{I} = -.042(21) - .021(4.6) - .0008(4089.8) + .130(.57) - .073(12) + .447(.28) - 5.124(.07)$$

$$\hat{I} = -.882 - .0966 - 3.272 + .0741 - .876 + 0.125 - .359$$

$$\hat{I} = -5.287$$

(black, off welfare) $F(\hat{I}) = .0000 = \hat{P}$

Calculation of $\hat{I}$ at mean values, race=1, welfare=0:

$$\hat{I} = -.882 - .097 - 3.272 + .0741 - .876 + .125$$

$$\hat{I} = 4.86 \quad F(\hat{I}) = .0000 = \hat{P}$$

TABLE IV-4 (continued)

Calculation of $\hat{I}$ at minimum values (white, no school, no dependents, no welfare):

$\hat{I} = -.042(17) - .021(1) - .0008(16) + .130(0) - .073(0) + .447(0) - 5.124(0)$

$\hat{I} = -.71 - .021 - .013 = -.74$

$F(\hat{I}) = \hat{P} = .2296$

Calculation of $\hat{I}$ at maximum values (black, on welfare):

$\hat{I} = -.042(27) - .021(18) - .0008(25000) + .130(7) - .073(18) + .447(1) - 5.124(1)$

$\hat{I} = 1.134 - .378 - 20 + .91 - 1.314 + .447 - 5.124 = -26.593$

$F(\hat{I}) = \hat{P} = .000$

x_3 = wages/salary for past 12 mo.	$\hat{I}$	P(MP=1)	Δ(MP=1)
1000	-2.815	.0024	
2000	-3.615	.0001	-.0023
4090[m]	-5.287	.0000	-.0001

w_1 = age

Mean values are substituted for $(x_1, x_2, \ldots, x_4, \ldots, x_k)$

$\hat{I} = -.042(21) - .021(4.6) - .0008(x_3) + .130(.57) - .073(12) + .447(.28) - 5.124(.07)$

$\hat{I} = -.882 - .097 - .0008x_3 + .074 - .876 + .125 - .359$

$\hat{I} = -2.015 - .0008x_3$

Sample size: 4033; manpower program enrollees in 1969-72 = 79

V. PROGRAM ENROLLMENT AND EARNINGS

A. Cross-tabulation of Earnings and Characteristics of Manpower Enrollees and Comparison Group

As noted in the methodological discussions of Part II, approximately 140 manpower enrollees were matched with an equal number of non-enrollees in the Parnes sample of young men. The manpower program enrollees and the comparison group were matched for age, race, education, family income, welfare status, and weeks of unemployment as reported in the 1966 Parnes Interview Survey.

For purposes of cross-tabular analysis of these two groups with annual earnings, data were provided to the Social Security Administration on race, age, welfare status, unemployment, school status, educational level.* For those enrolled in manpower programs, data were also provided on the type of manpower program, the year the participant left the manpower program, whether or not the program was completed, and the number of weeks of enrollment in the manpower program. Of the list of manpower enrollees and non-enrollees submitted to the Social Security Administration and to the Census Bureau for the matching of the Parnes ID numbers and social security numbers, 52 were dropped because social security numbers were incorrect or were not in existence or because the name was incorrectly listed in the Parnes sample of young men. The Social Security Administration was forced to drop others from the list because their characteristics were such that disclosure of data about them would violate confidentiality.

Following these deletions, there remained 117 manpower enrollees and 95 members of the comparison group of non-enrollees. Unfortunately, as seen in Table V-1 , the deletions not only resulted in an imbalance in the totals within the two groups, but they also resulted in a departure from the matched

*These data do not include any nonlabor income.

TABLE V-1

NUMBERS AND CHARACTERISTICS OF MANPOWER AND COMPARISON GROUP USED IN EARNINGS CROSS-TABULATIONS*

	Manpower Enrollees	Comparison Group
Total	117	95
Nonwhite	72	55
White	45	40
1966 Age: Under 19	80	63
1966 Age: 19-24	37	32
Received Welfare in 1966	29	0
Unemployed in 1966	33	8
In School in 1969	17	18
School Years Completed by 1969:		
11 and under	78	52
12 and more	39	43
Type of Manpower Program:		
Institutional	33	n.a.
O-J-T	23	n.a.
Other	58	n.a.
Unreported	3	
Year Left Manpower Program		
1964-69	77	n.a.
1970-72	40	n.a.
Termination Status		
Completed Program	35	n.a.
Did not complete	82	n.a.
Weeks in Manpower Program		
0-20	41	n.a.
21-105	58	n.a.
Unreported	18	n.a.

*Numbers differ from those indicated in Part III and from those initially matched in manpower and comparison groups because of the absence of social security numbers or because of the need to maintain confidentiality of social security earnings data.

pattern of characteristics. Although the age composition of the two groups remained roughly similar, a larger proportion of manpower enrollees emerged with characteristics that are generally associated with disadvantaged status. Approximately one-third of the manpower enrollees and those in the comparison group were in the age range 19-24 at the time of the 1966 survey, and the remainder were between 14 and 18 years of age. Of course, they were all six years older in 1972, the last year of the earnings analysis. Nonwhites represented 62 percent of the manpower group and 58 percent of the comparison group. Whereas 29 of the manpower enrollees were receiving welfare at the time of the 1966 interview, none of the comparison group were in this category. Similarly, 33 of the manpower enrollees recorded weeks of unemployment in the year preceding the 1966 survey, as compared with only 8 reporting unemployment among the comparison group. The proportion of manpower enrollees who were in school at the time of the 1969 survey was somewhat greater than the proportion of those in school among the comparison group. Whereas 66 percent of the manpower enrollees had failed to complete high school by the time of the 1969 interview, only 54 percent of the comparison group were in this educational category.

In the sample of manpower enrollees, as it emerged from the Social Security Administration matching process, 33 had been enrolled in institutional training programs, 23 in OJT programs, and 58 were enrolled in other manpower programs, primarily the Job Corps. Of the 117 manpower enrollees, 77 terminated from their manpower program between 1964 and 1969, and 40 terminated between 1970 and 1972. From the standpoint of assessing the impact of manpower program participation on earnings, it is especially important to note that only 35 of the 117 had completed their program at the time of termination; and 35 percent

of the enrollees completed 20 weeks or less of the program at the time of their termination. Many of the "unreported" are also likely to be in this category. Indeed, a closer examination of the weeks of enrollment indicates that 22 of the so-called manpower enrollees spent less than one week in the program, and an additional 15 spent less than five weeks in the manpower program.

1. Annual Earnings by Race and Age, 1963-64

Since the manpower enrollees in our sample terminated their programs in various years from 1964 to 1972, the array of annual earnings reported in Table V-2 cannot be interpreted as establishing a relationship between manpower program enrollment and subsequent earnings. Younger respondents had earnings below those of older respondents in each of the years; and the earnings of non-whites were consistently below those of white workers.

However, the most notable finding is that, except for the early years and the youngest respondents, manpower enrollees had consistently lower earnings than the comparison group of non-enrollees. For those in the older group, this difference in earnings between manpower enrollees and non-enrollees was consistent in each of the years under study, regardless of race. This finding might be interpreted to mean that enrollment in a manpower program had perverse effects on annual earnings. More reasonable explanations are discussed following the regression analyses in the second section of this part of the report. It should be noted here, however, that the consistent differences in annual earnings before and after termination of manpower program enrollment, imply that the comparison group was capable of earning more than the manpower enrollees regardless of their program participation. In spite of the effort to match the manpower group and the comparison group according to various characteristics of

TABLE V-2

AVERAGE ANNUAL EARNINGS* OF MANPOWER AND COMPARISON GROUPS, 1963-1972, BY RACE AND AGE

	White				Nonwhite			
	1966 Age/Under 19		1966 Age/19-24		1966 Age/Under 19		1966 Age/19-24	
	Manpower	Compar.	Manpower	Compar.	Manpower	Compar.	Manpower	Compar.
1963	--	--	1020	1235	--	--	908	1027
1964	--	--	1492	1990	--	--	1293	1580
1965	264	133	2189	2887	128	115	2107	2394
1966	627	459	3208	3810	373	627	2478	2776
1967	1122	953	3920	4412	788	1033	2773	3592
1968	1887	1591	4380	4787	1223	1551	3051	3647
1969	2302	2473	4950	5416	1561	2129	3241	4299
1970	2740	3166	4484	5498	1692	2106	2973	4094
1971	2904	3510	4491	5598	1857	2118	2732	3638
1972	2951	4109	5217	6077	2352	2629	3368	4523

*Data provided by the Social Security Administration.

disadvantaged status, deletions of names favored the comparison group. The meager participation of many of the so-called manpower enrollees also calls into question a simple manpower-nonmanpower comparison. The regression analyses permit a more sophisticated assessment of the relationship of program participation and earnings.

A less consistent difference between the earnings of manpower enrollees and nonenrollees is found when educational level as well as race and age are kept constant. As seen in Table V-3, the annual earnings of those who had less than a high school education fell below persons with 12 or more years of education for whites as well as nonwhites in most of the years under study. And the earnings of manpower enrollees fall below those of the comparison group in most of these years. However, in the case of whites with 12 or more years of education, the annual earnings of manpower enrollees exceed those of the comparison group in 1967, 1968, 1969 and 1972. The annual earnings of nonwhites with 12 or more years of education are greater for manpower enrollees than for comparison group numbers in 1963, 1964, 1965, and 1966. Some marked differences are noted in 1972, the final year of the earnings analysis. Whereas the manpower group with less than a high school education averaged only $1,787, the comparison in this educational category averaged $6,047 among whites. On the other hand, white manpower enrollees with 12 or more years of education averaged $6,450 as compared to $6,104 for the comparison group. For nonwhites, the average annual earnings of the manpower enrollees who had less than a high school education actually exceeded those of the white manpower enrollees in the same educational category ($2,248). However, these average annual earnings fell below those of the nonwhite comparison group for 1972, $3,576. Unlike the better-educated white workers, the annual earnings of the more highly educated

nonwhites in 1972 were substantially lower for manpower enrollees as compared with nonenrollees, $3,172 as compared with $5,629.

TABLE V-3

AVERAGE ANNUAL EARNINGS OF MANPOWER AND COMPARISON GROUPS*, 1963-72, BY RACE AND EDUCATION

	White				Nonwhite			
	0-11 Educ.		12+ Education		0-11 Educ.		12 Education	
	Manpower	Compar.	Manpower	Compar.	Manpower	Compar.	Manpower	Compar.
1963	205	1097	1289	1360	468	930	1374	1139
1964	441	2094	1376	1895	673	1675	1756	1469
1965	900	2742	1862	3017	1580	2781	2504	1943
1966	1055	3512	3853	4078	1768	2849	3058	2691
1967	1790	4558	4775	4281	1729	3670	3010	3501
1968	2498	4685	5196	4878	2220	3582	3329	3723
1969	2841	5138	5839	5667	2114	3787	3215	4897
1970	1305	4976	5169	5968	1908	3768	2750	4475
1971	770	5451	5461	5731	1725	2796	2770	4620
1972	1787	6047	6450	6104	2248	3576	3172	5629

*Sample restricted to those aged 19-24 in 1966.

2. Annual Earnings and Program Characteristics

a. Program Category. The average annual earnings of On-The-Job trainees, 19 to 24 years of age in 1966, exceeded that of other program enrollees in each year from 1963 to 1972 (Table V-4). The earnings advantage of OJT participants occurred among whites and non-whites. In both racial groups, the OJT earnings in the final year of analysis exceeded those of previous years. The 1972 OJT earnings for non-whites were $3,636 and for whites, $6,411. The earnings that year for Institutional trainees were substantially lower, $2,694 for non-whites and $3,627 for whites.

A three-way comparison between Institutional, OJT and Job Corps trainees is possible only for the older non-white enrollees. For this group, the average annual earnings from 1963 to 1972 were OJT: $3,016; Job Corps: $1,865; Institutional: $1,558. Whereas the earnings of OJT and Institutional trainees increased substantially after 1967, those enrolled in the Job Corps and other programs received their highest earnings in the period 1965-67.

For enrollees who were under the age of 19 in 1966, earnings data are not available for Institutional and OJT participants. The earnings were low relative to those of older white trainees in Institutional and OJT programs. However, for non-whites, the younger Job Corps trainees exceeded the 1970-72 earnings of older Job Corps participants.

b. Completion vs. Non-Completion. The earnings of program Completers exceeded those of Non-Completers during the 10-year period in each age and racial group. The difference was more marked for whites and for older enrollees (Table V-5). In the entire period, average

TABLE V-4

AVERAGE ANNUAL EARNINGS AND PROGRAM CATEGORY, 1963-1972, BY RACE AND AGE

	Nonwhite				White			
	1966/Under 19*		1966 Age: 19-24		1966/Under 19*	1966: 19-24**		
	Job Corps & Other	Instl.	OJT	Job Corps & Other	Job Corps & Other	Instl.	OJT	
1963	--	274	1978	564	--	657	1149	
1964	--	479	1851	1111	--	912	1175	
1965	87	537	2614	2456	133	1292	1875	
1966	359	902	3275	2654	356	2275	3530	
1967	734	1416	2791	2487	827	3325	4285	
1968	1052	2500	3554	2278	1621	3352	4938	
1969	1532	2172	3611	2221	2055	4289	5248	
1970	1569	2430	3389	1485	2404	2798	4817	
1971	1723	2175	3458	1392	2586	2791	4898	
1972	2472	2694	3636	2000	2258	3627	6411	
1963-72	1191	1558	3016	1865	1530	2532	3833	

*For the 1966 age group under 19, the Social Security Administration omitted earnings data on Institutional and OJT trainees in order to avoid disclosure of individual records.

**"Job Corps and Other" participants' earningsdata were omitted from this tabulation by the Social Security Administration to avoid disclosure of individual records.

TABLE V-5

AVERAGE ANNUAL EARNINGS OF PROGRAM COMPLETERS AND NONCOMPLETERS, 1963-1972, BY RACE AND AGE

	Nonwhite				White			
	1966/Under 19		1966 Age/19-24		1966/Under 19		1966 Age/19-24	
	Compl.	Non-Compl.	Compl.	Non-Compl.	Compl.	Non-Compl.	Compl.	Non-Compl.
1963	--	--	1181	597	--	--	1039	487
1964	--	--	1374	928	--	--	1092	761
1965	68	148	1872	1952	396	236	1931	823
1966	205	429	2579	2087	487	658	3352	1618
1967	439	904	2251	2235	741	1205	4592	1996
1968	1121	1257	3469	2127	2716	1706	4713	3041
1969	1310	1645	3398	1991	2637	2229	5216	3542
1970	1914	1619	3354	1505	3182	2644	4230	2361
1971	2196	1744	3289	1380	4312	2598	4825	1486
1972	2305	2368	3710	1889	4112	2698	6482	1750
1963-72	1195	1264	2649	1669	2323	1747	3747	1786

annual earnings of older white Completers exceeded those of Non-Completers by approximately $2,000. Earnings of older non-white Completers exceeded those of Non-Completers by an average of approximately $1,000 per year.

The earnings advantage of Completers increased with the passage of time. From 1970 to 1972, the earnings of older non-white Completers were double those of Non-Completers; and older white Completers earned approximately three times more than Non-Completers. For this group, Completers earned an average $6,482 in 1972, as compared with only $1,750 for Non-Completers. The only exception to the increasing temporal advantage of Completers was found among non-whites who were under 19 years of age in 1966. They increased their lead over Non-Completers from 1970 to 1971 but fell slightly behind in 1972.

c. Year of Program Termination. The foregoing discussion of enrollee earnings has implications for the effects of program participation. However, no before-after relationship to participation can be established in the absence of information about the date in which enrollees left the manpower program. The relationship of program enrollment to subsequent earnings can be more fully explored when other factors are held constant in the regression models of the next section. Some insight into this question is provided through cross-tabulations of termination data and annual earnings, holding age and race constant within categorical boundaries.

As is set forth in Table V-6, the pattern of earnings relative to termination date differs according to age. For those who were under 19 in 1966, annual earnings rose steadily throughout the decade. The only exception is the slight dip from 1971 to 1972 for whites.

TABLE V-6

AVERAGE ANNUAL EARNINGS BY YEAR OF PROGRAM TERMINATION*, RACE AND AGE, 1963-1972

	Nonwhite				White			
	1966 Age/Under 19		1966 Age/19-24		1966 Age/Under 19		1966 Age/19-24	
	Termination in:		Termination in:		Termination in:		Termination in:	
	1964-69	1970-72	1964-69	1970-72	1964-69	1970-72	1964-69	1970-72
1963	--	--	804	911	--	--	1035	165
1964	--	--	957	1554	--	--	1140	447
1965	170	53	1491	3205	414	33	1754	584
1966	508	139	1908	3412	876	243	3209	920
1967	1029	369	1852	3408	1536	482	4159	1477
1968	1495	751	2403	3446	2572	827	4435	2704
1969	1917	945	2506	2697	2978	1257	5237	2487
1970	1997	1164	2488	1514	3639	1350	4200	1312
1971	2157	1335	2290	1703	3820	1489	4341	644
1972	2538	2029	2694	2389	3962	1388	5643	926
1963-72	1476	848	1939	2424	2475	884	3515	1167

*Omits those for whom completion data were unreported.

For program enrollees who were 19 or older in 1966, the pattern of annual earnings was more checkered. Non-whites who terminated in 1964-69 reached a high point of average annual earnings at $2,506 in 1969, declined to $2,290 in 1971 and rose to $2,694 in 1972. Older non-whites who terminated in 1970-72 received their highest earnings in the years 1965 to 1968 and had relatively low earnings in 1970-71. Older whites who terminated in 1964-69 also received lower earnings in 1970 and 1971 than in the preceding four years but reached their highest level of earnings, $5,643, in 1972. On the other hand, older whites who terminated in 1970-72 had much lower earnings in 1970-72 than in the preceding two years (see Table V-6).

For the 10-year period as a whole, those who left the manpower program in 1964-69 had substantially higher annual earnings than those who terminated in 1970-72. The only exception was found among older non-whites.

d. Weeks in the Manpower Program. The earnings data on duration of enrollment were inadequate, especially for the older group of participants. Many of the so-called manpower program participants had no weeks or less than 5 weeks reported for "duration." Others with "no report" on weeks in the program were also probably "no shows" even though they were listed as program participants in the Parnes sample that was culled by the Census Bureau and the Manpower Administration.

For enrollees who were under 19 years of age in 1966, lengthier program participation was associated with somewhat higher annual earnings. As in earlier comparisons, with four exceptions, white earnings exceeded non-white earnings in each "duration" and "age" group (see Table V-7).

TABLE V-7

AVERAGE ANNUAL EARNINGS BY WEEKS IN THE MANPOWER PROGRAM, RACE AND AGE, 1963-1972

	Nonwhite				White			
	1966/Under 19		1966 Age/19-24		1966/Under 19		1966 Age/19-24	
	In Program:		In Program:		In Program:		In Program:	
	Under 20 wks.	21-105 wks.	Under 20 wks.	21-105 wks.	Under 20 wks.	21-105 wks.	Under 20 wks.	21-105 wks.
1963	--	--	*	496	--	--	*	891
1964	--	--	*	1008	--	--	*	1001
1965	51	99	*	2186	194	153	*	1673
1966	211	444	*	2580	367	375	*	3004
1967	370	924	*	2617	763	634	*	3828
1968	1001	1241	*	2285	1262	1604	*	4637
1969	1365	1581	*	2131	1989	2170	*	4595
1970	1837	1436	*	1530	2378	2720	*	3560
1971	1764	1853	*	1254	2436	2986	*	3881
1972	2414	2486	*	1862	2638	2796	*	4998
1963-72	1127	1258	*	1795	1502	1680	*	3201

*Because of those whose number of weeks in the program was unreported and omitted from this table, the number of persons in these cells fell below the Social Security Administration's minimum level for disclosure.

B. Regression Models

An error components model as well as ordinary least squares regression models were used in an effort to determine the relationship of various aspects of program participation to earnings in the period 1964 to 1972. As noted above the annual earnings data, the dependent variable in these regression equations, were obtained from the Social Security Administration. The Social Security Administration provided a raw products matrix on the basis of data submitted for the program enrollees and comparison group described in the preceding sections. The regressor variables are similar to those described in the preceding section. They are discussed further below.

The appropriateness of the error components model for analysis of combined cross-section and time series data is covered in the description of the error components model presented in Appendix C.

The error components model presented in Table V-8 reveals the negative relationship between designation as a manpower program enrollee and annual earnings that was established in the cross-tabulations. However, it should be stressed here, as in the cross-tabulations, that the annual earnings utilized as a dependent variable are averages for the entire period, 1964-71, including years before as well as after enrollment in the manpower program. Therefore, in this initial approach, unlike the regressions beginning with Table V-9, there is no variable indicating the year of completion or years since completion in relationship to changes in annual earnings. Explanations for this result can be found in the factors discussed in the preceding section: the more disadvantaged status of the manpower enrollees (as seen in their age, education, race, pre-program earnings, unemployment, and family income); and the casual association of many of the

TABLE V-8

MANPOWER PROGRAM PARTICIPATION AND EARNINGS, 1964-71
(Error Components Model)
(Dependent Variable: Annual Earnings)

Regressor Variable	Coefficient	T-Statistic
Program Completion (1=yes; 0=no)	$754.00	4.44*
Weeks in Manpower Program	-4.17	-1.16
Education in 1969	-10.22	-.30
Age (each year)	323.39	26.28*
Race (nonwhite=1; white=0)	-687.89	-4.45*
Weeks Unemployed in 1969	-5.69	-.56
Manpower Enrollment (1=yes;0=no)	-614.29	-3.99*
Income in 1963	.39	4.24*
Constant	-3616.46	-7.80*

*Significant at the 1% level.

so-called manpower enrollees with the programs they supposedly participated in. Many of the "manpower enrollees" were initially excluded from the analysis because they enrolled in more than one program or enrolled in the same program more than once. Self-selection may well result in a manpower study group that is more disadvantaged than the comparison group even when an effort is made to achieve comparability. The thrust of manpower programs toward the disadvantaged from 1964 to 1972 would further this distinction. The objective variables included in the comparison group selection and included in the regression equations cannot capture the total configuration of attributes that make the manpower sample less "advantaged" than the comparison group.

The positive and significant coefficient for the Program Completion variable provides some support for this alternative interpretation. Whereas the mere fact of program "enrollment" was associated with a negative change of $614 in expected annual earnings, those who completed their program had a positive increase of $754, as compared with non-completers and non-enrollees.

As might be expected, age is positively and significantly related to earnings; and non-white status is negatively associated with earnings. Income received in 1963 is also positively and significantly related to earnings in 1964-72.

Although "the number of weeks in a manpower program" and "weeks of unemployment in 1969" have the expected signs, their relationship to earnings is not statistically significant.

In order to examine the long-term effects of manpower training on participants' annual earnings, a set of m dichotomous variables were created, indicating the number of years (m=0,...8) which had elapsed since a participant had terminated his training. For the i^{th} individual in the t^{th} year, the m^{th} variable in the set was equal to 1 if m years had passed since the individual's termination. Otherwise the value of the m^{th} variable was set equal to 0. The first variable in the set, (m=0), represents the year of termination.

In addition to this first set of variables, another set of eight dichotomous variables was created to indicate the year, 1964 through 1971 inclusive, in which termination occurred. Values were assigned in a similar fashion: for the i^{th} individual the n^{th} variable was set equal to 1 in the t^{th} and each successive year for which n > t, t being the year

of termination. For observations in years preceding termination (i.e., $n < t$), the n^{th} variable was set equal to zero. The remaining variables in the set were assigned zero values for each year of observation.

As in the preceding error components model, the formation of the earnings function to be estimated was completed by addition of variables which indicated whether the participant completed manpower training, the number of weeks in a manpower program, the number of years of formal schooling completed by 1969, age in each year, race, the number of weeks unemployed in 1969, the manpower-comparison group variable, and earnings in 1963. The schooling, unemployment and 1963 income variables were included as indicators of human capital skills. In all, annual earnings were regressed on twenty-six variables, using OLS techniques. The results of this regression appear in Table V-9.

Unexpectedly, the coefficients of the set of variables indicating the number of years having elapsed since termination are consistently negative. Except for the last member of the set, the variables are all statistically significant. These coefficients are difficult to interpret independently, however, because each manpower participant is a member of some termination class. Thus the whole story is not revealed unless these coefficients are combined with the coefficients of the termination class variables. The same argument applies to the manpower enrollment variable, and to a lesser degree the program completion and number of weeks in program variables.

Like the variables indicating time since termination, the coefficients of the termination class variables are highly significant. Unlike the previous set, their coefficients are positive. Once again, contrary to

expectation, the coefficient of the manpower enrollment variable is negative and statistically significant at the 1 percent level. The coefficients of both the program completion and weeks in program variables are positive, although only the former is statistically significant.

The long-run effect of manpower training is revealed by the combination of the coefficients of all of these variables. Results are presented in Tables V-10a, V-10b, and V-10c. The entries in these tables were arrived at according to the following procedure. First, all possible combinations of the coefficients of the time since termination and the termination class variables were identified (Table 10a). For example, a participant terminating in 1969 was observed for three years after termination (1970, 1971, 1972) but for no longer as 1972 was the last year of the time series. Thus, there are four possible entries (0 through 3 years since termination) for the class of 1969. Each is the sum of the coefficient of the 1969 termination class variable and the coefficient of the appropriate number of years since termination variable. In the case of our example 1969 terminator, $2055 was added to -$2130, -$1750, -$1785 and -$1599, respectively. The second step of the procedure was to add to each entry of Table 10a the constant value of the coefficient of the manpower enrollment variable, -$788 (Table 10b). The final step was to add to the entries of Table 10b the sum of: (1) the coefficient of the program completion variable, $464, and (2) the product of the average duration of training (18 weeks) and the coefficient of the weeks in program variable ($7). These results appear in Table 10c.

TABLE V-9

EARNINGS, YEARS SINCE PROGRAM TERMINATION AND YEAR OF TERMINATION, 1964-71
(Dependent Variable: Annual Earnings)

Regressor Variable	Coefficient (Rounded to nearest dollar)	T Statistic
Constant	$ -2731	-8.62**
Years Since Termination		
0	-2130	-3.21**
1	-1750	-2.50*
2	-1785	-2.52*
3	-1599	-2.23*
4	-1734	-2.38*
5	-1923	-2.58**
6	-2483	-3.11**
7	-3422	-3.38**
8	-1564	-.82
Year of Termination		
1964	2542	2.79**
1965	1877	2.56*
1966	2839	4.10**
1967	2154	3.11**
1968	2381	3.40**
1969	2055	3.03**
1970	1825	2.62**
1971	956	1.37
Program Completion (1-yes; 0=no)	464	2.65**
Weeks in Program	7	1.67
Education in 1969	3	.15
Age (each year)	269	21.11**
Race (1=nonwhite; 0=white)	-673	-8.35**
Weeks Unemployment in 1969	-8	-1.37
Manpower Enrollment (1=yes;0=no)	-778	-8.19**
Income in 1963	.5	9.20**

*Significant at 5% level; **Significant at 1% level.

TABLE V-10a

POSSIBLE COMBINATIONS OF COEFFICIENTS FOR (1) YEARS SINCE TERMINATION AND (2) YEAR OF TERMINATION

Years Since Termination	Year of Termination							
	1964	1965	1966	1967	1968	1969	1970	1971
0	$412	-253	709	24	251	-75	-305	-1178
1	792	127	1089	404	631	305	75	-798
2	757	92	1054	369	596	270	40	
3	943	278	1240	555	782	456		
4	807	142	1104	419	646			
5	619	-96	716	231				
6	59	-386	356					
7	-880	-1545						
8	978							

TABLE V-10b

POSSIBLE COMBINATIONS OF COEFFICIENTS FOR (1) YEARS SINCE TERMINATION, (2) YEAR OF TERMINATION, AND (3) MANPOWER ENROLLMENT

Years Since Termination	Year of Termination							
	1964	1965	1966	1967	1968	1969	1970	1971
0	-$366	-1031	-69	754	-527	-853	-1083	-1956
1	14	-651	311	-374	-147	-437	-703	-1586
2	-21	-686	276	-409	-182	-508	-738	
3	165	-500	462	-223	4	-322		
4	29	-636	326	-359	-132			
5	-159	-824	-62	-547				
6	-719	-1164	-422					
7	-1658	-2323						
8	200							

TABLE V-10c

POSSIBLE COMBINATIONS OF COEFFICIENTS FOR (1) YEARS SINCE TERMINATION, (2) YEAR OF TERMINATION, (3) MANPOWER ENROLLMENT, (4) PROGRAM COMPLETION, AND (5) NUMBER OF WEEKS IN PROGRAM

Years Since Termination	Year of Termination							
	1964	1965	1966	1967	1968	1969	1970	1971
0	$224	-441	521	1344	63	-263	-493	-1366
1	604	-61	901	216	443	117	-113	-996
2	569	-96	866	159	408	182	-148	
3	755	90	1052	367	594	298		
4	619	-34	916	231	458			
5	431	-234	528	43				
6	-129	-547	168					
7	-1068	-1733						
8	790							

We focus our attention on Table 10c. In interpreting these results, we note that the number of persons terminating in the years 1964, 1965, and 1971 are so small as to render those entries subject to small sample errors. Reading down the columns we see that the sums are predominantly positive for the years 1966-69. The third year after termination is the peak year of increased earnings for those who terminated in each of the years from 1964 to 1969. However, there are positive additions to annual earnings even after the third year.

It is seen, then, that the mere fact of registered enrollment in a manpower program provides no benefits in earnings. But when we add the coefficients of more meaningful human capital variables--program completion, weeks in the program, year of program termination and years since termination--increased earnings result, reaching their peak in the third year after program termination.

VI SUMMARY AND CONCLUSIONS

A. Summary of Findings

1. In a random national sample of 5225 young men, only 142 enrolled in manpower programs in 1966-68. Out of the 4033 of these respondents available for interview in 1969, only 79 were enrolled in programs in 1969-72.

2. The probability of program participation was inversely related to age, education, family size, total assets, family income, and earnings in the 12 months preceding the interview dates. It was positively related to nonwhite status and number of dependents.

3. Efforts were made to match the manpower program enrollees with a comparison group of non-enrollees also drawn from the national sample. However, eliminations because of missing data, self-selection, and administrative selection resulted in a study group of enrollees who were more "disadvantaged" than the comparison group. Their more disadvantaged status could be seen in differences in age, race, education, welfare status, unemployment, and earnings in years before their program enrollment. Many manpower enrollees entered more than one program or joined the same program more than once, attesting to their own low view of their marketable skills.

4. There were constraints on the potential effectiveness of manpower programs for this group of enrollees. Thirty-five percent spent 20 weeks or less in their program. Of those designated as enrollees, 22 spent less than one week in their program, and 15 were enrolled for less than five weeks. Only 35 percent completed the program.

5. The enrollees were concentrated in the Job Corps and work experience programs rather than in institutional or on-the-job training where subsequent earnings were higher.

6. Reflecting the foregoing facts, the cross-tabulations of annual earnings (derived from social security records) show a fairly consistent earnings advantage for the comparison group in the period 1963-1972.

7. In the regression analyses, the simple enrollee-nonenrollee comparison continues to show an earnings advantage for nonenrollees. However, a more detailed analysis of the nature of program participation and the timing of program termination provides a more favorable view of manpower enrollment.

a. Program completers earned more than non-completers and non-enrollees.

b. Combined coefficients for program enrollment, weeks of enrollment, program completion, year of program termination and years since termination indicate benefits in earnings for those whose programs terminated in 1966, 1967, 1968 and 1969. For those who terminated in 1964-65 and 1970-71, the sample size and/or brief time period render the results less reliable.

c. Increases in earnings reached their peak in the third year after program termination. However, benefits continued to accrue after the third year for those who terminated their program in the 1966-69 period.

B. Research and Policy Implications

The problem of an appropriate comparison or control group has plagued manpower evaluations. This study underlines the difficulties in selection of a group of non-enrollees who are similar to the study group of program participants.

Our approach would appear to be promising. An effort was made to match key characteristics of manpower enrollees and non-enrollees, both drawn from the same national random sample of the Parnes survey of young men. The use of social security data to trace their earnings over time would also appear to be potentially fruitful.

However, given self-selection and the selection criteria adopted by program officials, manpower enrollees are simply different from a random selection of persons who do not enroll. Even efforts to match some objective characteristics fail to capture the more "disadvantaged" status of the program participants. The use of social security earnings data does not overcome this bias; and, indeed, is likely to accentuate the bias because missing data is not a random process.

Regression analyses of pooled cross-section and time series data, and variables reflecting the characteristics of program participation, help to overcome the biases of a simple enrollment-nonenrollment comparison. But one can seldom include all the basic variables that distinguish the study group from the "control" group. Attitudes, ambitions and motivations remain elusive.

It is not likely that the control group problem can be solved within the confines of the current funding and methodology of manpower program evaluation. Thus, sceptics will continue to ask, "Yes, but do manpower programs really pay off?" Instead of reaching desperately to find an answer to this question, it may be best to concentrate on the policy question, "What is more effective and what is less effective in manpower policy?" If it can be shown, as in our study, that "completers" do substantially better in earnings than non-completers and non-enrollees;

or that O-J-T participants exceed the earnings of those in other manpower programs, these findings have important implications for manpower planners at national and local levels.

Similarly, the questions, "When does the payoff come and does it last," may be more useful than a simple enrollment-nonenrollment dichotomy. The time dimensions of program effectiveness also have important policy implications for budget-makers, program planners and labor market analysts.

APPENDIX A

CROSS-TABULATIONS OF YOUNG MEN BY MANPOWER PROGRAMS & SELECTED CHARACTERISTICS (196

A. 1. Age by Type of Manpower Program for Young Men**

AGE IN YEARS*	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	OTHER	JOB CORPS	TOTALS
14	0	0	2	7	9
15	6	4	5	11	26
16	9	5	4	19	37
17	12	5	1	10	28
18	7	4	2	6	19
19	8	9	1	6	24
20	3	1	2	2	8
21	3	4	1	1	9
22	7	6	0	0	13
23	5	4	0	0	9
24	4	3	0	0	7
TOTALS	64	45	18	62	189

**This and succeeding tables include only those who terminated the program between 1963 and the "Parnes" survey in 1969.

*Data on characteristics in this and succeeding tables derived from "Parnes" 1966 data for young men.

A. 2. Race by Type of Manpower Program for Young Men (1966)

RACE	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	OTHER	JOB CORPS	TOTALS
WHITE	23	29	3	13	68
NEGRO	40	16	15	49	120
OTHER	1	0	0	0	1
TOTALS	64	45	18	62	189

A. 3. School Status by Type of Manpower Program for Young Men (1966)

CURRENTLY ENROLLED IN SCHOOL	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	OTHER	JOB CORPS	TOTALS
YES	19	13	11	28	71
NO	45	32	7	34	118
TOTALS	64	45	18	62	189

A.4. Current Educational Status by Type of Manpower Program for Young Men (1966)

CURRENT EDUCATION STATUS	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
IN ELEMENTARY SCHOOL*	1	0	9	0	10
IN GRADES 1-3 HIGH SCHOOL*	11	7	17	9	44
HIGH SCHOOL SENIOR*	4	3	1	2	10
IN GRADES 1-3 COLLEGE*	3	3	1	0	7
OBTAINED ONLY 8 YEARS OR FEWER	12	3	14	2	31
1-3 YEARS HIGH SCHOOL ONLY	21	12	18	3	54
HIGH SCHOOL ONLY	10	15	2	2	29
1-3 YEARS OF COLLEGE ONLY	2	2	0	0	4
TOTALS	64	45	62	18	189

*Grade presently attending.

A.5. School Years Completed by Type of Manpower Program for Young Men (1966)

SCHOOL YEARS COMPLETED	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
NONE	0	0	0	1	1
GRADE 2	2	0	1	0	3
GRADE 4	0	1	0	0	1
GRADE 5	1	0	2	0	3
GRADE 6	1	0	4	0	5
GRADE 7	2	1	10	0	13
GRADE 8	8	4	15	4	31
GRADE 9	6	6	14	4	30
GRADE 10	20	7	10	2	39
GRADE 11	9	6	4	5	23
GRADE 12	12	17	2	2	33
1 YR. COLLEGE	2	3	1	0	6
2 YR. COLLEGE	1	0	0	0	1
TOTALS	64	45	62	18	189

A. 6. Current Employment Status by Type of Manpower Program for Young Men (1966)

CURRENT EMPLOYMENT STATUS	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	OTHER	JOB CORPS	TOTALS
EMPLOYED	39	31	7	30	107
EMPLOYED-NOT AT WORK	2	1	1	1	5
UNEMPLOYED	8	4	3	11	26
NON-LABOR FORCE--UNABLE TO WORK	5	6	2	7	20
OTHER NLF	2	2	1	9	14
NEVER WORKED (NLF)	8	1	4	4	17
TOTALS	64	45	18	62	189

A 7. Employment Activity by Type of Manpower Program for Young Men (1966)

EMPLOYMENT ACTIVITY LAST WEEK	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	OTHER	JOB CORPS	TOTALS
EMPLOYED	32	28	4	18	82
EMPLOYED-NOT AT WORK	2	1	0	1	4
LOOKING FOR WORK	5	2	0	6	13
IN SCHOOL	18	12	12	12	69
OTHER	7	2	2	10	21
TOTALS	64	45	18	62	189

A.8. Occupation of Current Job by Type of Manpower Program for Young Men (1966)

*OCCUPATION--CURRENT OR LAST JOB	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
FILE CLERKS	0	0	1	0	1
OFFICE MACHINE OPERATOR	0	1	0	0	1
SHIPPING & RECEIVING CLERK	1	1	1	0	3
STOCK CLERKS & STOREKEEPERS	0	1	1	0	2
*CLERICAL & KINDRED WORKERS	2	0	0	0	2
SALESMEN & SALES CLERKS	2	3	0	0	5
BRICKMASONS, STONE MASONS & TILE SETTERS	1	0	0	0	1
CABINETMAKERS	2	0	0	0	2
CARPENTERS	0	1	0	0	1
EXCAVATING, GRADING & MACHINERY OPERATORS	0	0	1	0	1
FOREMEN	0	1	0	0	1
LINEMEN & SERVICEMEN	1	0	0	0	1
MECHANICS & REPAIRMEN, AIRPLANE	1	0	0	0	1
MECHANICS & REPAIRMEN, AUTOMOBILE	2	2	0	0	4
MECHANICS & REPAIRMEN, OFFICE MACHINES	0	1	0	0	1
MECHANICS & REPAIRMEN, RADIO & TELEVISION	1	0	0	1	2
PAINTERS, CONSTRUCTION & MAINTENANCE	1	0	0	0	1

Table A8 (continued)

*OCCUPATION--CURRENT OR LAST JOB	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
TINSMITHS, COPPERSMITHS & SHEET METAL WORKERS	0	1	0	0	1
APPRENTICE PLUMBERS & PIPEFITTERS	0	1	0	0	1
ASSEMBLERS	1	4	0	0	5
ATTENDANTS, AUTO SERVICE & PARKING	1	1	1	0	3
DELIVERYMEN & ROUTE MEN	0	1	1	0	2
DYERS	0	1	0	0	1
FURNACE MEN, SMELTER MEN, POURERS	0	0	1	0	1
LAUNDRY & DRY CLEANING OPERATORS	1	0	0	1	2
PACKERS & WRAPPERS	2	0	0	0	2
TAXICAB DRIVERS & CHAUFFERS	1	0	0	0	1
TRUCK & TRACTOR DRIVERS	3	1	0	0	4
WELDERS & FLAME-CUTTERS	2	1	0	0	3
OPERATIVES & KINDRED WORKERS	5	9	5	1	20
ATTENDANTS, HOSPITAL & INSTITUTION	1	2	0	0	3
ATTENDANTS, REC. & AMUSEMENT	1	0	0	0	1
HOUSEKEEPERS & STEWARDS	1	0	0	0	1
JANITORS & SEXTONS	2	0	4	3	9

Table A8 (continued)

*OCCUPATION--CURRENT OR LAST JOB	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
KITCHEN WORKERS	0	1	5	2	8
PORTERS	1	1	0	0	2
WAITERS & WAITRESSES	0	0	1	0	1
SERVICE WORKERS	0	1	1	0	2
FARM LABORERS--WAGE	3	1	9	0	13
FARM LABORERS--FAMILY	1	0	0	1	2
GARAGE LABORERS	1	0	0	0	1
GARDENERS, EXCEPT FARM	2	0	3	2	7
TRUCK DRIVERS' HELPERS	1	0	2	0	3
LABORERS	11	7	20	3	41
TOTALS	55	44	57	14	170

*Standard 3 Digit Duncan Index Code.

A-9. Industry of Current Job by Type of Manpower Program for Young Men (1966)

*INDUSTRY--CURRENT JOB	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
AGRICULTURE	5	1	10	2	18
CONSTRUCTION	6	5	5	0	16
SAWMILLS, PLANING MILLS & MILLWORK	1	0	1	0	2
MISCELLANEOUS WOOD PRODUCTS	0	1	0	0	1
FURNITURE & WOOD FIXTURES	3	1	0	0	4
GLASS & GLASS PRODUCTS	1	0	0	0	1
BLAST FURNACES, STEEL WORKS	0	1	0	0	1
PRIMARY NONFERROUS INDUSTRIES	1	0	1	0	2
FABRICATED STRUCTURAL METAL PRODUCTS	0	1	0	0	1
MISCELLANEOUS FABRICATED METAL PRODUCTS	1	0	1	0	2
ELECTRICAL MACHINERY, EQUIPMENT & SUPPLIES	2	2	0	1	5
MOTOR VEHICLES	0	2	0	0	2
AIRCRAFT & PARTS	1	2	0	0	3
SHIP & BOAT BUILDING & REPAIRING	1	1	0	0	2
RAILROAD & MISCELLANEOUS TRANSP.	0	1	0	0	1
PROFESSIONAL PHOTOGRAPHY EQUIP.	1	0	2	0	3

Table 9 (continued)

*INDUSTRY--CURRENT JOB	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
MEAT PRODUCTS	0	1	0	0	1
CANNING & PRESERVING FRUITS & VEGETABLES	0	0	1	0	1
BAKERY PRODUCTS	0	0	0	1	1
BEVERAGE INDUSTRIES	0	0	1	0	1
MISCELLANEOUS FOOD PREPARATIONS	1	0	0	0	1
YARN, THREAD & FABRIC MILLS	1	3	0	0	4
APPAREL & ACCESSORIES	0	0	1	0	1
MISC. FABRICATED TEXTILE PRODUCTS	1	0	0	0	1
MISC. CHEMICALS & ALLIED PRODUCTS	1	0	1	1	3
RUBBER PRODUCTS	0	1	1	0	2
TRUCKING SERVICE	2	0	0	0	2
TELEPHONE (WIRE & RADIO)	1	0	0	0	1
WATER SUPPLY	1	0	1	0	2
SANITARY SERVICES	3	1	1	1	6
MOTOR VEHICLES & EQUIP.	0	1	0	0	1
FOOD & RELATED PRODUCTS	1	0	2	0	3
FARM PRODUCTS, RAW MATERIAL	0	1	0	0	1
MISCELLANEOUS WHOLESALE TRADE	0	0	1	0	1

Table 9 (continued)

*INDUSTRY--CURRENT JOB	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
FOOD STORES, EXCEPT DAIRY	2	3	5	0	10
GENERAL MERCHANDISE RETAILING	1	0	0	2	3
HOUSEHOLD APPLIANCES, TV & RADIO STORES	1	0	0	0	1
MOTOR VEHICLES & ACCESS. RETAILING	3	3	0	0	6
GASOLINE SERVICE STATIONS	2	2	1	0	5
DRUG STORES	0	1	0	0	1
EATING & DRINKING PLACES	0	4	7	1	12
HARDWARE & FARM EQUIP. STORES	0	0	1	0	1
LUMBER & BUILDING MATERIAL RETAILING	1	1	2	0	4
MISC. RETAIL STORES	0	1	0	0	1
REAL ESTATE	1	0	0	0	1
MISC. BUSINESS SERVICES	0	1	1	0	2
AUTOMOBILE REPAIR SERVICES & GARAGES	1	0	0	0	1
PRIVATE HOUSEHOLD SERVICES	0	0	4	2	6
LAUNDERING & CLEANING	1	0	0	1	2
MISC. ENTERTAINMENT	1	0	0	0	1

Table A9 (continued)

*INDUSTRY CURRENT JOB	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
MEDICAL & OTHER SERVICES	0	0	1	0	1
HOSPITALS	1	2	0	0	3
EDUCATIONAL SERVICES	4	0	2	1	7
WELFARE & RELIGIOUS SERVICES	0	0	1	1	2
FEDERAL PUBLIC ADMINISTRATION	0	0	2	0	2
LOCAL PUBLIC ADMINISTRATION	1	0	0	0	1
TOTALS	55	44	57	14	170

*Standard 3 digit Duncan Index Industry code.

A 10. Attitude Towards Current Job by Type of Manpower Program for Young Men (1966)

ATTITUDE	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
LIKE VERY MUCH	15	15	2	1	33
LIKE FAIRLY WELL	14	12	14	2	42
DISLIKE SOMEWHAT	4	1	3	1	9
DISLIKE VERY MUCH	1	0	1	0	2
TOTALS	34	28	20	4	86

A.11. Hours Per Week Worked in Past 12 Months by Type of Manpower Program (1966)

HRS/WK WORKED IN THE PAST 12 MONTHS	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
2	0	0	0	1	1
3	1	0	3	0	4
4	0	0	0	1	1
5	1	0	3	0	4
8	0	1	2	0	3
10	3	2	4	1	10
11	0	0	1	0	1
12	2	0	2	0	4
14	0	0	0	1	1
15	2	0	0	0	2
16	0	0	1	0	1
18	0	0	0	1	1
20	3	3	1	1	8
21	0	1	0	0	1
24	1	0	0	0	1
25	1	0	1	0	2
26	0	0	1	0	1
28	0	0	1	0	1
30	2	3	6	1	12
32	1	0	2	0	3
35	4	2	2	0	8

Table A 11 (continued)

HRS/WK WORKED IN THE PAST 12 MONTHS	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
37	0	1	0	0	1
38	2	3	4	0	9
40	19	12	9	5	45
42	0	1	1	1	3
44	1	1	1	0	3
45	1	1	0	0	2
46	0	0	1	0	1
47	0	1	0	0	1
48	3	2	4	0	9
49	0	0	1	0	1
50	3	2	3	0	8
52	1	0	1	1	3
55	1	0	0	0	1
56	0	1	0	0	1
58	0	1	0	0	1
60	1	1	0	0	2
65	1	0	0	0	1
70	1	2	0	0	3
72	0	0	1	0	1
TOTALS	55	41	56	14	166

A- 12. Number of Weeks Currently Unemployed* by Type of Manpower Program for Young Men (1966)

NO. OF WEEKS CURRENTLY UNEMPLOYED	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
1	0	2	1	0	3
2	5	1	3	0	9
3	2	0	1	1	4
4	1	0	1	1	3
5	0	0	3	0	3
6	1	0	1	1	3
8	1	0	2	0	3
9	0	0	1	0	1
12	1	0	1	1	3
23	0	1	0	0	1
TOTAL	11	4	14	4	33

*Includes some who reported that they had never worked, classified as currently NLF in Appendix Table A-6.

A.13. Number of Weeks Unemployed in Last 12 Months* by Type of Manpower Program for Young Men (1966)

NO. OF WEEKS UNEMPLOYED IN LAST 12 MONTHS	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
1	1	3	1	0	5
2	1	1	2	1	5
3	2	2	2	0	6
4	2	4	1	1	8
5	0	0	2	0	2
6	1	0	1	1	3
8	2	0	2	0	4
9	2	0	1	0	3
11	0	0	1	0	1
12	1	0	1	0	2
13	2	0	0	0	2
19	1	0	0	0	1
22	0	0	1	0	1
24	0	0	0	1	1
27	1	0	1	1	3
30	0	0	1	1	2
31	2	0	0	0	2
32	0	0	3	0	3
40	2	0	0	0	2
44	0	0	3	0	3
TOTAL	20	10	23	6	59

*Excludes those with no unemployment in last 12 months based on the 1966 interview survey

A-14. Number of Weeks Not in Labor Force* in Past 12 Months by Type of Manpower Program for Young Men (1966)**

NO. OF WEEKS NOT IN LABOR FORCE IN PAST 12 MONTHS***	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
1-5	6	4	1	1	12
6-15	6	6	6	2	20
16-25	3	1	4	1	9
26-39	6	8	17	5	36
40-52	9	6	11	1	27
TOTAL	30	25	39	10	104

*Excludes those who were in the labor force in the entire 12 month period based on the 1966 interview survey.

**This and the preceding tables include only those who terminated the program between 1963 and the "Parnes" survey in 1969.

***Data on characteristics in this and the preceding tables are derived from the "Parnes" 1966 interview survey data for young men.

A.15. Usual Hourly Earnings on Current Job by Type of Manpower Program for Young Men (1966)

USUAL HOURLY EARNINGS	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
$.01 - 1.00	7	4	11	3	25
1.01 - 2.00	21	20	16	4	61
2.01 - 3.00	6	10	6	0	22
3.01 - 4.00	4	4	0	2	10
4.01 - 5.00	1	0	0	0	1
TOTALS	39	38	33	9	119

A 16. Total Net Assets of Individuals by Type of Manpower Program for Young Men (1966)

TOTAL NET ASSETS	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT & INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
$ 0	43	24	51	11	129
1-499	12	14	11	4	41
500-999	2	2	0	0	4
1,000-4,999	1	2	0	1	4
5,000-9,999	0	1	0	0	1
10,000-24,999	0	1	0	0	1
TOTAL	58	44	62	16	189

A 17. Family Income* in Past 12 Months by Type of Manpower Program for Young Men (1966)

FAMILY INCOME	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT & INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
Under $1,000	4	1	2	1	8
1,000-1,999	4	2	10	4	20
2,000-2,999	6	4	17	1	28
3,000-3,999	11	5	6	4	26
4,000-4,999	7	1	8	1	17
5,000-5,999	10	6	6	1	23
6,000-7,499	1	8	6	2	17
7,500-9,999	5	8	4	2	19
10,000-14,999	2	5	2	1	10
15,000-24,999	1	1	0	1	3
	51	41	61	18	171

*Total income of all family members in the past 12 months.

A. 18. Whether the Individual Received Welfare or Public Assistance by Type of Manpower Program for Young Men (1966)

RECEIVED WELFARE OR PUBLIC ASSISTANCE	INSTITUTIONAL TRAINING	ON-THE-JOB OR OJT + INSTITUTIONAL	JOB CORPS	OTHER	TOTALS
YES	15	3	23	5	46
NO	44	35	35	12	126
TOTALS	59	38	58	17	172

APPENDIX B: PROBIT ANALYSIS

Probit analysis is a statistical technique that estimates the relationship of a group of independent variables to a binary (either/or) decision. Thus, its chief application in economics is the estimation of relationships with a dichotomous dependent variable. As such, the dependent variable or regressand, which we denote as y, can assume only two values. Goldberger (1964, 248) notes that without loss of generality these values may be designated as 0 and 1:

y = 1 if a said event occurs

0 if the event does not occur.

As usual y is specified in a regression equation as a function of explanatory variables (regressors), denoted as x's, indicated by the underlying economic theory. Our objective is to predict the conditional probability that the event y will occur, given the x's.

The statistical model most commonly employed in the case of dichotomous dependent variables is the linear probability function (Goldberger, p. 250). Therein the expected value of y is taken to be a linear function of the regressors: $y = x\beta + e$ with $E\varepsilon = 0$. Ordinary least-squares estimation techniques are applied to obtain estimates of the regression parameters. Treatment of the dichotomous dependent variable in this manner (i.e., as though it were an ordinary linear regression problem) is deficient for two reasons, however. The first is that the regression disturbances are heteroskedastic. Least-squares estimates will be unbiased but inefficient. The

second problem is that the probability predictions of y are not constrained to fall within the zero-one interval, but may, and indeed often do, fall outside of it. In the latter case, there is no interpretation which may be made of the probability predictions which is consistent with the definition of y. Such probability predictions are meaningless. The probit analysis model presents an alternative functional form to the linear probability function which avoids both of these problems. The basic proposition is that y, the probability that an event will occur, is expressed as a function of an index, call it I, which in turn is a linear function of the x's. Y is then an indirect function of the x's in the probit model in contrast to its direct linear relationship to the regressors in the linear probability model. In the latter, the conditional probability that an event would occur (the conditional expectation of y given the x's) is expressed by $E(y/x) = x'\beta$. The probit model on the other hand uses the cumulative normal distribution to transform the index function, $I=x'\beta$, into probabilities of "success." Let I* be a N(0,1) variable defined as the critical values of the index I. The value of y can be determined in relation to I and I* as follows:

$$y_t = 1 \quad \text{if } I_t \geq I_t^* \qquad \text{(Goldberger, 250)}$$

$$0 \quad \text{if } I_t < I_t^*$$

Letting F(I) denote the value of the standard normal cumulative distribution or I, the conditional probability of success is expressed as:

$$E(y/I) = \text{Prob}\{y = 1/I\} = \text{Prob}\{I^* \leq I/I\} = F(I);$$

that of failure (nonparticipation) by:

$$E(y/I) = \text{Prob}\{y = 0/I\} = \text{Prob}\{I^* > I/I\} = 1 - F(I).$$

Again, notice that, although the probabilities are linear in the index I, they are nonlinear in the x's. This distinction is important for the valid interpretation of estimated coefficients of the regressors, the $\hat{\beta}$'s. Because the probit function is nonlinear in probabilities, the estimated coefficients cannot be interpreted correctly as marginal probability changes. Rather, they indicate the change in the value of the index I associated with a unit change in their respective independent variables. This change in the index will always be a constant value for any one of the explanatory variables. The same is not true of the effect on the predicted probabilities of a unit change in the explanatory variables. Rather, that effect depends on the portion of the probability distribution over which the change in the index is measured.

Probit coefficients can be estimated using iterative maximum likelihood estimation techniques. The estimated coefficients are then used to compute values of the index function $\hat{I} = x'\hat{\beta}$, which in turn transforms into a probability estimate from the cumulative normal distribution which necessarily falls in the unit interval.

The final estimates of the regression coefficients are used to evaluate the matrix of second derivatives of the log of the likelihood function at the point of maximum likelihood. The negative inverse of that matrix gives large sample estimates of the variance-covariance matrix of the regression coefficients and, hence, estimates of their standard errors. Consequently, t-tests based on the estimated standard errors can be used to test single regressor hypotheses. Joint hypotheses about subsets of the regressors or about the relationship to all of the explanatory variables can be tested using the likelihood ratio method (Gunderson, 1972, p. 36).

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APPENDIX C: ERROR COMPONENTS MODELS

The earnings function in the text of the paper was estimated from observations on a number of individuals over several years. Observations combined in this manner are referred to as pooled cross-sections and time series data. Ordinary least-squares may be inappropriate for estimation of such models because certain assumptions of the classical linear regression model concerning the disturbance of the regression equation are apt to be violated. For example, a common problem encountered when dealing with pooled cross-section and time-series data is nonindependence of the disturbances in successive observations of the same behavioral unit. In this case, the non-autocorrelation or independence assumption of the classical regression equation is violated. As a result, estimates will be inefficient and their precision may be greatly overstated.

Several models have been designed to deal with pooled cross-section and time-series data. Each involves a different specification of the behavior of the disturbances. Of the available alternatives, we have adopted the so-called "error components model." Our reason for so doing will be clarified by exposition of this model. The basic assumption is that the regression disturbance, ε_{it}, is the sum of three independent components: The first associated with time, the second with the cross-sectional units, and the third a "properly-behaved" independent disturbance. Letting u_i denote the time component, v_t the individual component, and w_{it} the independent component, the regression disturbance can be expressed algebraically as

$\varepsilon_{it} = u_i + v_t + w_{it}$. The model specifies that each component is normally distributed with zero mean and constant variance, is uncorrelated with and independent of the other components. As a result, the regression disturbance is homoskedastic with variance equal to the sum of the variances of the three components. ε_{it} is both serially and contemporaneously correlated, however. The coefficient of correlation between the disturbances of two cross-sectional units at a given point of time,

$$\mathrm{Cov}(\varepsilon_{it}, \varepsilon_{jt}) / \sqrt{\mathrm{Var}(\varepsilon_{it})\mathrm{Var}(\varepsilon_{jt})} \quad (i \neq j),$$

is given by:

$$\sigma_v^2 / (\sigma_u^2 + \sigma_v^2 + \sigma_w^2).$$

For a single cross-sectional unit at two different points of time, the coefficient of correlation between the disturbances ε_{it} and ε_{is}, $(t \neq s)$ is

$$\sigma_u^2 / (\sigma_u^2 + \sigma_v^2 + \sigma_w^2).$$

Note that because each component has constant variance, these coefficients of correlation are also constant. This in turn implies that for each cross-sectional unit the correlation of the disturbances is always the same no matter how far apart in time they occur.

It is this key feature of the error components model that led to its selection among the available alternatives. Motivational factors of participants loom large in the discussion of the success or failure of particular manpower programs. Obviously, motivational factors cannot be measured precisely. Furthermore, it is not unreasonable, we think, to assume that the strength of motivational factors over time is more accurately described as

constant, than by a first-order autoregressive scheme. These motivational factors produce a correlation among the residuals for any one individual in violation of the independence assumption of ordinary least squares.

The final feature of the error components model is the assumption that the disturbances of two different individuals at different points in time are independent. This specification of the regression disturbance, combined with the usual assumptions regarding the explanatory variables retained from the classical linear regression model, place us within the framework of the modified generalized linear regression model. Least-squares estimates of the regression coefficients will be unbiased and consistent, but inefficient as we mentioned earlier. Because modified generalized least-squares estimators are consistent, asymptotically efficient, and asymptotically normal, they are preferred. The estimation technique essentially involves transformation of the data by the "between-unit" and "between-time" coefficients of correlation. The validity of the procedure rests primarily in the fact that least-squares estimates of the regression coefficients are consistent and thus allow consistent estimates of the correlation coefficient. Descriptions of specific algorithms can be found in Jan Kmenta, Elements of Econometrics, pp. 515-516.

CROSS-TABULATIONS OF YOUNG WOMEN BY MANPOWER PROGRAM AND SELECTED CHARACTERISTICS (1968 SURVEY DATA)

Table YW--1 Age by Type of Manpower Program for Young Women*

AGE IN YEARS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
14	0	0	0	0	0	0	0	0	2	10.5	0	0	0	0	2	1.4
15	0	0	0	0	4	19.1	2	10.5	4	21.1	1	4.2	1	12.5	12	8.3
16	2	5.3	0	0	0	0	0	0	1	5.3	8	33.3	2	25.0	13	9.0
17	5	13.2	1	6.7	4	19.1	3	15.8	3	15.8	3	12.5	0	0	19	13.2
18	5	13.2	3	20.0	0	0	2	10.5	3	15.8	4	16.7	2	25.0	19	13.2
19	6	15.8	3	20.0	4	19.1	1	5.3	2	10.5	1	4.2	1	12.5	18	12.5
20	8	21.1	1	6.7	5	23.9	5	26.3	2	10.5	5	20.8	0	0	26	18.0
21	4	10.5	1	6.7	2	9.5	1	5.3	0	0	0	0	0	0	8	5.6
22	2	5.3	2	13.3	0	0	2	10.5	2	10.5	2	8.3	1	12.5	11	7.6
23	3	7.9	0	0	1	4.8	2	10.5	0	0	0	0	0	0	6	4.2
24	3	7.9	4	26.7	1	4.8	1	5.3	0	0	0	0	1	12.5	10	6.9
TOTALS	38	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.0	8	100.0	144	100.0

*The data on characteristics of young women were derived from the 1968 national survey. The data on enrollment in manpower programs, which may have occurred at any time between 1963 and 1972, were provided by the Manpower Administration.

Table YW--2 Marital Status by Type of Manpower Program for Young Women*

MARITAL STATUS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
MARRIED, SPOUSE PRESENT	7	18.4	9	60.0	5	23.8	6	31.6	1	5.3	0	0	1	12.5	29	20.1
MARRIED, SPOUSE ABSENT	0	0	1	6.7	2	9.5	0	0	2	10.5	0	0	0	0	5	3.5
DIVORCED	2	5.3	0	0	2	9.5	0	0	0	0	1	4.2	0	0	5	3.5
SEPARATED	0	0	1	6.7	1	4.8	2	10.5	2	10.5	1	4.2	0	0	7	4.9
SINGLE	29	76.3	4	26.7	11	52.4	11	57.9	14	73.7	22	91.7	7	87.5	98	68.1
TOTALS	38	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.0	8	100.0	144	100.0

*See footnote to Table YW--1 for source of data.

Table YW--3 Race by Type of Manpower Program for Young Women *

RACE	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
WHITE	10	26.3	9	60.0	5	23.8	3	15.8	2	10.5	5	20.8	0	0	34	23.6
NEGRO	28	73.7	6	40.0	16	76.1	16	84.2	16	84.2	19	79.2	7	87.5	108	75.0
OTHER	0	0	0	0	0	0	0	0	1	5.3	0	0	1	12.5	2	1.4
TOTALS	38	100.0	15	100.0	[illegible]	100.0	19	100.0	19	100.0	24	100.0	8	100.0	144	100.0

Table YW--4 School Status by Type of Manpower Program for Young Women *

CURRENTLY ENROLLED IN SCHOOL	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
YES	7	18.4	3	20.0	6	28.6	6	31.6	9	47.4	5	20.8	4	50.0	40	27.8
NO	31	81.6	12	80.0	15	71.4	13	68.4	10	52.6	19	79.2	4	50.0	104	72.2
TOTALS	38	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.0	8	100.0	144	100.0

* See footnote to Table YW--1 for source of data.

Table YW--5 School Years Completed by Type of Manpower Program for Young Women*

SCHOOL YEARS COMPLETED	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
NONE	1	2.6	0	0	0	0	0	0	0	0	0	0	0	0	1	.7
GRADE 4	0	0	0	0	0	0	0	0	0	0	1	4.2	0	0	1	.7
GRADE 5	1	2.6	0	0	0	0	0	0	1	5.3	0	0	0	0	2	1.4
GRADE 6	0	0	0	0	0	0	0	0	1	5.3	3	12.5	0	0	4	2.8
GRADE 7	0	0	2	13.3	0	0	0	0	0	0	0	0	0	0	2	1.4
GRADE 8	2	5.3	0	0	2	9.5	0	0	3	15.8	4	16.7	1	12.5	12	8.3
GRADE 9	1	2.6	0	0	7	33.3	5	26.3	3	15.8	1	4.2	0	0	17	11.8
GRADE 10	10	26.3	5	33.3	1	4.8	4	21.1	1	5.3	3	12.5	2	25.0	26	18.1
GRADE 11	5	13.1	2	13.3	4	19.1	2	10.5	8	42.1	6	25.0	2	25.0	29	20.2
GRADE 12	16	42.1	3	20.0	7	33.3	7	36.8	2	10.5	5	20.8	3	37.5	43	29.9
1 YR.CLG.	1	2.6	2	13.3	0	0	0	0	0	0	1	4.2	0	0	4	2.8
2 YR.CLG.	1	2.6	0	0	0	0	0	0	0	0	0	0	0	0	1	.7
3 YR.CLG.	0	0	0	0	0	0	1	5.3	0	0	0	0	0	0	1	.7
4 YR.CLG.	0	0	1	6.8	0	0	0	0	0	0	0	0	0	0	1	.7
TOTALS	38	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.00	8	100.0	144	100.0

* See footnote to Table YW--1 for source of data.

Table YW-6 City-Rural Location by Type of Manpower Program for Young Women*

AREA	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
IN CENTRAL CITY	25	65.8	6	40.0	13	61.9	11	57.9	7	36.8	14	58.3	4	50.0	80	55.6
IN SMSA--NOT CENTRAL CITY	5	13.2	1	6.7	4	19.1	2	10.5	4	21.1	5	20.8	2	25.0	23	16.0
NOT IN SMSA	8	21.0	8	53.3	4	19.1	6	31.6	8	42.1	5	20.8	2	25.0	41	28.4
TOTALS	38	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.0	8	100.0	144	100.0

*See footnote to Table YW--1 for source of data.

Table YW--7 Employment Activity by Type of Manpower Program for Young Women*

EMPLOYMENT ACTIVITY LAST WEEK	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
EMPLOYED	18	47.4	8	53.3	4	19.1	0	0	2	10.5	3	12.5	3	37.5	38	26.4
EMPLOYED-NOT AT WORK	1	2.6	0	0	0	0	0	0	0	0	0	0	0	0	1	.7
UNEMPLOYED	0	0	0	0	1	4.8	1	5.3	0	0	1	4.2	1	12.5	4	2.8
IN SCHOOL	4	10.5	3	20.0	8	38.1	6	31.6	9	47.4	5	20.8	4	50.0	39	27.1
KEEPING HOUSE	11	28.9	4	26.7	7	33.3	11	57.0	7	36.9	9	37.5	0	0	49	34.0
OTHER	4	10.5	0	0	1	4.8	1	5.3	1	5.3	6	25.0	0	0	13	9.0
TOTALS	38	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.0	8	100.0	144	100.0

*See footnote to Table YW--1 for source of data.

Table YW--8 Number of Weeks Not in Labor Force in Past 12 Months by Type of Manpower Program for Young Women*

WEEKS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	14	37.9	2	15.4	2	12.5	5	29.4	2	18.2	3	16.7	2	40.0	30	25.6
1-5	1	2.7	2	15.4	0	0	1	5.9	0	0	1	5.6	1	20.0	6	5.1
6-15	4	10.8	1	7.7	1	6.3	2	11.8	0	0	3	16.7	0	0	11	9.4
16-25	4	10.8	0	0	5	31.3	1	5.9	1	9.1	0	0	0	0	11	9.4
26-39	5	13.5	3	23.1	2	12.5	3	17.6	3	27.3	5	27.7	1	20.0	22	18.8
40-52	9	24.3	5	38.5	6	37.5	5	29.4	5	45.5	6	33.3	1	20.0	37	31.6
TOTALS	37	100.0	13	100.0	16	100.0	17	100.0	11	100.0	18	100.0	5	100.0	117	100.0

*See footnote to Table YW--1 for source of data.

Table YW--9 Number of Years in The Labor Force by Type of Manpower Program for Young Women*

YEARS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
LESS THAN ONE	0	0	1	7.7	0	0	0	0	2	18.2	0	0	0	0	3	2.7
1-1.9	19	54.3	10	76.9	7	46.7	12	70.6	7	63.6	15	88.2	2	40.0	72	63.7
2-2.9	9	25.7	1	7.7	6	40.0	5	29.4	1	9.1	0	0	2	40.0	24	21.2
3-3.9	4	11.4	0	0	1	6.7	0	0	1	9.1	1	5.9	1	20.0	8	7.1
4-4.9	2	5.7	0	0	1	6.7	0	0	0	0	1	5.9	0	0	4	3.5
5-9.9	1	2.9	1	7.9	0	0	0	0	0	0	0	0	0	0	2	1.8
TOTALS	35	100.0	13	100.0	15	100.0	17	100.0	11	100.0	17	100.0	5	100.0	113	100.0

*See footnote to Table YW--1 for source of data.

Table YW--10 Number of Weeks Currently Unemployed by Type of Manpower Program for Young Women*

WEEKS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	0	0	0	0	0	0	1	12.5	0	0	0	0	0	0	1	4.2
2	0	0	1	50.0	0	0	2	25.0	1	25.0	0	0	0	0	4	16.7
3	0	0	1	50.0	1	100.0	0	0	0	0	0	0	0	0	2	8.3
4	2	40.0	0	0	0	0	2	25.0	1	25.0	1	50.0	0	0	6	25.0
6	2	40.0	0	0	0	0	2	25.0	1	25.0	0	0	2	100.0	7	29.2
17	0	0	0	0	0	0	1	12.5	0	0	0	0	0	0	1	4.2
23	1	20.0	0	0	0	0	0	0	0	0	0	0	0	0	1	4.2
26	0	0	0	0	0	0	0	0	1	25.0	0	0	0	0	1	4.2
52	0	0	0	0	0	0	0	0	0	0	1	50.0	0	0	1	4.2
TOTALS	5	100.0	2	100.0	1	100.0	8	100.0	4	100.0	2	100.0	2	100.0	24	100.0

*See footnote to Table YW--1 for source of data.

Table YW--11 Number of Weeks Unemployed in Last 12 Months by Type of Manpower Program for Young Women*

NO. OF WEEKS UNEMPLOYED IN LAST 12 MONTHS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	26	70.3	10	76.9	12	75.0	10	58.8	7	63.6	14	77.8	4	80.0	83	70.9
1-5	5	13.5	3	23.1	3	18.8	2	11.8	2	18.2	1	5.6	0	0	16	13.7
6-15	4	10.8	0	0	1	6.3	1	5.9	0	0	0	0	0	0	6	5.1
16-25	1	2.7	0	0	0	0	1	5.9	1	9.1	1	5.6	0	0	4	3.4
26-39	1	2.7	0	0	0	0	2	11.8	1	9.1	1	5.6	1	20.0	6	5.1
40-52	0	0	0	0	0	0	1	5.9	0	0	1	5.6	0	0	2	1.7
TOTALS	37	100.0	13	100.0	16	100.0	17	100.0	11	100.0	18	100.0	5	100.0	117	100.0

*See footnote to Table YW--1 for source of data.

Table YW--12 Attitude Towards Current Job by Type of Manpower Program for Young Women *

ATTITUDE	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
LIKE VERY MUCH	9	60.0	5	50.0	2	50.0	0	0	2	100.0	1	33.3	1	33.3	19	52.8
LIKE FAIRLY WELL	4	26.7	4	50.0	1	25.0	1	100.0	0	0	0	0	2	66.7	12	33.3
DISLIKE SOMEWHAT	2	13.3	0	0	1	25.0	0	0	0	0	1	33.3	0	0	4	11.1
DISLIKE VERY MUCH	0	0	0	0	0	0	0	0	0	0	1	33.3	0	0	1	2.8
TOTALS	15	100.0	8	100.0	4	100.0	1	100.0	2	100.0	3	100.0	3	100.0	36	100.0

*See footnote to Table YW--1 for source of data.

Table YW--13 Occupation of Current or Last Job by Type of Manpower Program for Young Women*

*See footnote to Table YW--1 for source of data.

OCCUPATION--CURRENT OR LAST JOB	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
PROFESSIONAL, TECHNICAL, & KINDRED WORK	2	5.3	2	13.3	1	4.8	0	0	1	5.3	0	0	0	0	6	4.2
CLERICAL & KINDRED WORK	15	39.5	2	13.3	5	23.8	10	52.6	1	5.3	5	20.8	1	12.5	39	27.1
SALES	2	5.3	0	0	0	0	0	0	1	5.3	1	4.2	0	0	4	2.8
CRAFTSMEN, FOREMEN, & KINDRED WORK	0	0	0	0	0	0	0	0	0	0	1	4.2	0	0	1	.7
OPERATIVES & KINDRED WORK	8	21.1	6	40.0	1	4.8	2	10.5	2	10.5	1	4.2	2	25.0	22	15.3
LABORERS (EXCEPT FARM & MINE)	0	0	0	0	0	0	0	0	0	0	1	4.2	0	0	1	.7
DOMESTIC SERVICE	3	7.9	1	6.7	3	14.3	1	5.3	1	5.3	4	16.7	0	0	13	9.0
OTHER SERVICE	6	15.8	0	0	6	28.6	4	21.1	4	21.1	4	16.7	2	25.0	26	18.1
FARM WORKERS	1	2.6	2	13.3	0	0	0	0	1	5.3	1	4.2	0	0	5	3.5
NEVER WORKED	1	2.6	2	13.3	5	23.8	2	10.5	8	42.1	6	25.0	3	37.5	27	18.8
TOTALS	38	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.0	8	100.0	144	100.0

Table YW--14 Duncan Occupational Index of Current Job or Last Job by Type of Manpower Program for Young Women *

INDEX NO.	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1-9	3	8.1	5	38.5	3	18.8	1	5.9	3	27.3	6	33.3	1	20.0	22	18.8
10-20	14	37.8	4	30.8	6	37.5	6	35.4	5	45.5	4	22.2	2	40.0	41	35.0
21-40	3	8.1	0	0	2	12.5	0	0	2	18.2	3	16.7	1	20.0	11	9.4
41-60	11	29.7	2	15.4	4	25.0	8	47.1	0	0	5	27.8	1	20.0	31	26.5
61 +	6	16.2	2	15.4	1	6.3	2	11.8	1	9.1	0	0	0	0	12	9.4
TOTALS	37	100.0	13	100.0	16	100.0	17	100.0	11	100.0	18	100.0	5	100.0	117	100.0

*See footnote to Table YW--1 for source of data.

Table YW--15 Industry of Current or Last Job by Type of Manpower Program for Young Women*

INDUSTRY--CURRENT OR LAST JOB	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
AGRICULTURE	1	2.7	2	13.3	0	0	0	0	1	5.3	1	4.2	0	0	5	3.5
MANUFACTURING	6	16.2	6	40.0	2	9.5	0	0	1	5.3	4	16.7	2	25.0	21	14.7
TRANSPORTATION & PUBLIC UTILITIES	1	2.7	0	0	1	4.8	1	5.3	0	0	1	4.2	0	0	4	2.8
WHOLESALE & RETAIL TRADE	11	29.7	0	0	1	4.8	5	26.3	5	26.3	3	12.5	1	12.5	26	18.2
FINANCE, INSURANCE, & REAL ESTATE	0	0	0	0	1	4.8	1	5.3	0	0	0	0	0	0	2	1.4
DOMESTIC SERVICE	3	8.1	1	6.7	3	14.3	1	5.3	1	5.3	4	16.7	0	0	13	9.1
OTHER SERVICE	11	29.7	3	20.0	7	33.3	7	36.9	3	15.8	5	20.8	2	25.0	38	26.6
PUBLIC ADMINISTRATION	3	8.1	1	6.7	1	4.8	2	10.5	0	0	0	0	0	0	7	5.0
NEVER WORKED	1	2.7	2	13.3	5	25.8	2	10.5	8	42.1	6	25.0	3	37.5	27	18.9
TOTALS	37	100.0	15	100.0	21	100.0	19	100.0	19	100.0	24	100.0	8	100.0	143	100.0

*See footnote to Table YW--1 for source of data.

Table YW--16 Hours Per Week Worked in Past 12 Months by Type of Manpower Program for Young Women*

S/WK WORKED THE PAST MONTHS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
-20 URS	2	6.3	4	30.8	1	7.7	5	33.3	1	11.1	4	25.0	0	0	17	16.7
-35 URS	10	31.3	0	0	4	30.8	3	20.0	0	0	6	37.5	1	25.0	24	23.5
-40 URS	18	56.3	6	46.2	1	61.5	5	33.3	5	55.6	3	18.8	3	75.0	48	47.1
+ URS	2	6.3	3	23.1	0	0	2	13.3	3	33.3	3	18.8	0	0	13	12.7
TALS	32	100.0	13	100.0	13	100.0	15	100.0	9	100.0	16	100.0	4	100.0	102	100.0

*See footnote to Table YW--1 for source of data.

Table YW--17 Usual Hourly Earnings on Current or Last Job by Type of Manpower Program for Young Women*

USUAL HOURLY EARNINGS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$.01-1.00	4	13.8	2	16.7	2	18.2	4	28.6	2	40.0	8	52.3	1	25.0	23	25.6
$1.01-1.50	7	24.1	2	16.7	6	54.5	6	42.9	0	0	5	33.3	1	25.0	27	30.0
$1.51-2.00	13	44.8	6	50.0	2	18.2	3	21.4	3	60.0	2	13.3	1	25.0	30	33.3
$2.01 & OVER	5	17.2	2	16.7	1	9.1	1	7.1	0	0	0	0	1	25.0	10	11.1
TOTALS	29	100.0	12	100.0	11	100.0	14	100.0	5	100.0	15	100.0	4	100.0	90	100.0

*See footnote to Table YW--1 for source of data.

Table YW--18 Total Net Assets of Individuals by Type of Manpower Program for Young Women*

TOTAL NET ASSETS	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT & INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$ 0	13	50.0	5	55.6	8	80.0	12	80.0	14	87.5	17	89.5	5	83.3	74	73.3
$1.00-$99.00	10	38.5	1	11.1	2	20.0	2	13.3	2	12.5	2	10.5	0	0	19	18.8
$500-$999.00	0	0	0	0	0	0	1	6.7	0	0	0	0	0	0	1	1.0
$1,000-$4,999.00	3	11.5	2	22.2	0	0	0	0	0	0	0	0	1	16.7	6	5.9
$5,000-$24,999.00	0	0	1	11.1	0	0	0	0	0	0	0	0	0	0	1	1.0
TOTALS	26	100.0	9	100.0	10	100.0	15	100.0	16	100.0	19	100.0	6	100.0	101	100.0

*See footnote to Table YW--1 for source of data.

Table YW--19 Family Income in Past 12 Months by Type of Manpower Program for Young Women*

FAMILY INCOME	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Under $1,000	2	7.4	0	0	2	20.0	0	0	1	5.9	4	19.1	1	16.7	10	10.0
$1,000-$1,999	3	11.1	0	0	0	0	0	0	1	5.9	2	9.5	1	16.7	7	7.0
$2,000-$2,999	1	3.7	1	14.3	2	20.0	4	33.3	2	11.8	4	19.1	1	16.7	15	15.0
$3,000-$3,999	6	22.2	1	14.3	2	20.0	1	8.3	3	17.7	5	23.9	1	16.7	19	19.0
$4,000-$4,999	1	3.7	0	0	1	10.0	1	8.3	1	5.9	1	4.8	0	0	5	5.0
$5,000-$5,999	1	3.7	0	0	0	0	1	8.3	5	29.4	1	4.8	0	0	8	8.0
$6,000-$7,499	4	14.8	1	14.3	0	0	2	16.7	1	5.9	2	9.5	2	33.3	12	12.0
$7,500-$9,999	3	11.1	2	28.6	2	20.0	3	25.0	0	0	0	0	0	0	10	10.0
$10,000-$14,999	3	11.1	1	14.3	1	10.0	0	0	1	5.9	1	4.8	0	0	7	7.0
$15,000 +	0	0	1	14.3	0	0	0	0	0	0	0	0	0	0	1	1.0
DON'T KNOW	3	11.1	0	0	0	0	0	0	2	11.8	1	4.8	0	0	6	6.0
TOTALS	27	100.0	7	100.0	10	100.0	12	100.0	17	100.0	21	100.0	6	100.0	100.	100.0

* Refer footnote to Table YW--1 for source of data.

Table YW--20 Amount of Welfare or Public Assistance Received by Type of Manpower Program for Young Women*

AMOUNT OF WELFARE OR PUBLIC ASSISTANCE	INSTITUTIONAL TRAINING		ON-THE-JOB OR OJT + INSTITUTIONAL		WIN		CEP		NYC		JOB CORPS		OTHER		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
$0-$500	26	70.3	14	93.3	14	70.0	17	89.5	14	73.7	16	69.6	7	87.5	108	76.6
$501-$1,000	3	8.1	0	0	0	0	1	5.3	2	10.5	1	4.4	0	0	7	5.0
$1,001-$1,500	2	5.4	1	6.7	3	15.0	0	0	1	5.3	2	8.7	1	12.5	10	7.1
$1,501-$2,000	2	5.4	0	0	0	0	0	0	1	5.3	3	13.0	0	0	6	4.3
$2,001-$3,000	4	10.8	0	0	2	10.0	1	5.3	0	0	0	0	0	0	7	5.0
$4,001-$5,000	0	0	0	0	1	5.0	0	0	1	5.3	1	4.4	0	0	3	2.1
TOTALS	37	100.0	15	100.0	20	100.0	19	100.0	19	100.0	8	100.0	23	100.0	141	100.0

*See footnote to Table YW--1 for source of data.