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JOB CORPS TRAINEES AS A SAMPLE OF THE POPULATION.
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THE SIMILARITY OF JOB CORPS TRAINEES TO THE POPULATION OF THE SAME AGE FROM WHICH THEY WERE DRAWN AND PROPORTION OF TRAINEES COMING FROM EACH STATE WERE DETERMINED. DATA WERE OBTAINED FROM PREENROLLMENT APPLICATIONS, CENSUS REPORTS, AND PUBLICATIONS. FINDINGS INCLUDED -- (1) THE NUMBER OF 16- TO 17-YEAR-OLD MALE TRAINEES WAS DISPROPORTIONATELY LARGE, (2) THERE WAS A PREPONDERANCE OF 18- TO 20-YEAR-OLD FEMALES, (3) EDUCATIONALLY, THE TRAINEES WERE IN THE LOWER RANGES OF THE TOTAL YOUTH POPULATION IN TERMS OF HIGH SCHOOL GRADUATION AND HIGHEST SCHOOL GRADE COMPLETED, (4) THE TRAINEES HAD SHOULDERED MORE RESPONSIBILITY THAN MOST YOUNG PEOPLE OF THEIR AGE RANGE, MORE HAVING BEEN HEADS OF HOUSEHOLD OR PRIMARY WAGE EARNERS, ALTHOUGH MAINLY IN UNSKILLED JOBS, (5) STATES WITH LARGER POPULATIONS PROVIDED MOST OF THE TRAINEES, (6) ON THE AVERAGE, THOSE STATES HAVING HIGHER EDUCATIONAL LEVELS HAD FEWER TRAINEES, (7) IN GENERAL, THE NUMBER OF ENROLLEES BY STATES WAS A FUNCTION OF THE STATE'S SOCIOECONOMIC CHARACTERISTICS SUCH AS A HIGHER AGGREGATE BUT LOWER PERCENTAGE OF NONWHITES, A LOWER PERCENTAGE OF VETERANS AGED 16 TO 21, A HIGHER PERCENTAGE OF YOUTH IN THE LOWER 16 TO 21 AGE RANGE, AND A HIGHER PERCENTAGE OF ILLITERATES, (8) THE LARGER THE PERCENTAGE OF ARMED FORCES MENTAL TEST FAILURES IN A STATE, THE LARGER ITS SHARE OF JOB CORPS ENROLLEES, AND (9) THE HIGHER PER-PUPIL SUPPORT FOR SCHOOLS IN A STATE, THE SMALLER ITS JOB CORPS ENROLLMENT PERCENTAGE. THE JOB CORPS APPEARED TO BE DRAWING ITS TRAINEE POPULATION SUBSTANTIALLY IN KEEPING WITH THE PHILOSOPHY PUBLICLY EXPRESSED BY ITS LEADERS. (ET)

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JOB CORPS TRAINEES AS A SAMPLE
OF THE POPULATION

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JOB CORPS TRAINEES AS A SAMPLE OF THE POPULATION

1. THE PROBLEM

Since the Office of Economic Opportunity has initiated a number of training programs at such installations as the Job Centers, Job Training Camps, and the like, it has needed to know the similarity of its trainees to the population of the same age from which the trainees were drawn. How closely do the Job Corps trainees resemble their same age counterparts in such characteristics as level of education, job experience, veteran status, responsibilities as head of household, and marital status?

There is also the question concerning the extent that each state is getting its "fair share" of trainees in the Job Corps. The broad social and educational implications of the program have aroused great interest in the kinds of individuals who have been drawn into these programs from the various states.

The purposes of this study are threefold:

1. To compare the characteristics and backgrounds of Job Corps trainees with those of the U. S. population of similar age.
2. To make some comparisons of the distribution of the traits of the Job Corps trainees with comparable information regarding the traits of the same age group in different states and, where possible, in metropolitan areas.
3. To investigate the population characteristics associated with Job Corps enrollment from the various states. This might be rephrased; "To what extent are Job Corps enrollments in the states related to the census and other demographic data?"

2. HIGHLIGHTS

Some answers to the preceding questions can be summarized as follows:

- . The Job Corps has drawn more heavily from the 16 - 17 year old males than would be provided by a proportional sampling.
- . There is a preponderance of 18 - 20 year olds in the female trainee group.
- . Educationally, Job Corps trainees are in the lower ranges of the youth population, in terms of high school graduation and highest school grade completed.
- . Trainees have shouldered more responsibility than young people of their age range. More had been Heads of Household or Primary Wage Earners. But their employment history shows that most of those with employment experience were classified as "Unskilled."
- . States with larger populations provided more of the Job Corps trainees.
- . States whose 16-21 year old population showed a higher age (more in the older years of the group) provided fewer of the Job Corps trainees.
- . On the average, those states having the higher educational levels (Highest School Grade Completed) had fewer trainees in the Job Corps.

The recruitment policy of the Job Corps is reflected in the fact that Job Corps enrollees by states are highly related to the social, economic and educational characteristics of the states.

The numbers of Job Corps trainees enrolled by states is a function of the facts presented below. These facts are presented in order of their importance:

- . States with a higher aggregate non-white population produced more Job Corps enrollees.
- . States with smaller percents of non-white population produced more Job Corps enrollees.
- . States having a smaller percent of veterans in the 16-21 age group sent more trainees to the Job Corps.
- . States which had more than the average number in the younger years of the 16-21 age range sent more trainees to the Job Corps.

- . States having higher illiteracy rates provided more Job Corps enrollees.

If the Job Corps enrollment by states is expressed as numbers of enrollees per 1,000 of 16-21 year old males (Job Corps age), a somewhat different set of educational, economic and social evidences reflect selection policy as it is practiced. In order of importance, these policies are:

- . The higher per-pupil costs for schools in a state, the smaller its Job Corps enrollment per thousand.
- . The higher the median school grade completed by the employed 16-21 year olds in a state, the smaller its share of Job Corps enrollees.
- . The larger the percent of non-whites in a state, the smaller its share of Job Corps enrollees.
- . The larger the percent of Armed Forces mental test failures in a state, the larger its share of Job Corps enrollees.
- . The greater the proportion of younger persons in the 16-21 population, the greater the state's share of Job Corps enrollees.
- . The smaller the number of employed males (16-21) in a state, the larger the state's share of Job Corps enrollees.
- . The greater the population of males in the state, the greater the number of Job Corps enrollees.
- . The greater the proportion of 16-21 year olds who are veterans, the fewer the Job Corps enrollees.
- . The greater the average population per square mile in a state, the fewer its Job Corps enrollees.
- . The larger the number of 16-21 year old males who are Heads of Household, the greater the share of Job Corps enrollees.
- . The greater the state population of 16-21 year old males, the greater the state's share of Job Corps enrollees.

These data show clearly that the Job Corps is drawing its enrollees from states which spend less on education, have more young males in their populations, and fewer males who are employed or who have been in the Armed Services.

3. . DATA:

The data for this study were obtained from several sources:

1. Before enrollment, information about each Job Corps applicant was obtained by interview and recorded on OEO Form 16. This form contains identification data for each trainee and other information such as marital status, dependents, military service, education, and work experience. These data were made available on a computer tape for all applicants who had been enrolled in the Job Corps.
2. Census data for 1960, insofar as it was comparable to the OEO Form 16 information, were obtained. A careful search of the census data shows that very few of the variables appearing in OEO Form 16 had a sufficiently similar counterpart in census data that comparisons could be made. Several were found to warrant their inclusion in the study.

The census variables selected for the study were:

- a. age
- b. marital status
- c. head of household
- d. membership in the armed forces
- e. time since the trainee has been in school, and
- f. highest school grade completed

Examination of census sources indicated that data could be obtained for the 1960 census by states, by metropolitan areas, by counties, and for rural and urban populations. No population estimates later than 1960 were available. Data were obtained for the 16 through 21 age groups, wherever possible; and where such data were not directly available, estimates for these 16-21 year olds were made, using appropriate proportions of the nearest overlapped groups.*

* For example: Where census data were available only for a 15-19 year old group and a 20-24 age group, and the study needed to use the data for the 16-21 year olds, two-fifths of the numbers of the 20-24 year age group was used as the best available estimate of the 20 and 21 year old component, and four-fifths of the 15-19 year age group was used to estimate the 16-19 year old component. It is recognized that finer estimates might be made, but such simple linear interpolation seemed most sensible for the purposes.

3. In addition to census data obtained from the published census reports, three other sources of data were available:

- a. From the November 12, 1966 Business Week, the August 1965 Level of Personal Income was obtained. This was expressed both as aggregate personal income in the state as a whole, and as per capita personal income for each state.
- b. From the 1963 World Almanac, the following data were obtained for each state:

The percent of urban population

The percent change in gross population from 1950-1960

The number of non-white persons, both male and female,

The percent of the state population which was non-white

Population density, in terms of persons per square mile

- c. From American Education, October 1966, the following were obtained for each state:

Percent of illiteracy (1960) in the population over 14

Per pupil school expenditures

Percent of 18 year olds who failed the Armed Forces Mental Test

Organization of Data

Data for males and for females were analyzed separately since the Job Corps programs for boys and for girls are quite different. There is also considerable difference in the numbers of boys and girls who were enrolled in the program as well as differences in the selection criteria.

The original study plan called for organizing the data by metropolitan areas (as defined by the census) to see to what extent each metropolitan area was sending its youth to the Job Corps. It was found that most such areas, with the exception of those in the New England states, could be defined in terms of the counties included in each metropolitan area. However, for the taped data, state of residence was not recorded for about 8,000 of approximately 45,000 records of trainees. These were lost to the study because they could not be classified by state. County of residence was coded for about 1 in 20 trainees. The city from which the enrollee came was not coded but the name of each city or town was spelled out. Thus, it was not possible to classify the data for the trainees by metropoli-

tan area unless all of the individual records were listed and then hand-sorted for metropolitan areas. Hence, the study was limited to those for whom home state was coded, and data* were tabulated by state only.

* The pertinent data on characteristics of the trainees seemed quite complete and identifiable. Other than the codes noted above, the data tapes were in good shape.

4. ANALYSIS OF DATA

The data analyses are presented in three sets of tables. The first set (Tables 1-5) compares the Job Corps trainee data with the census data for males and females. The second set (Tables 6-14) offers some comparisons of Job Corps trainee data with census data by states. The third set of tables (Tables 15-18) shows the correlation, or the relationships, of the Job Corps enrollment to various census and demographic data for the several states. This portion of the study was completed only for males because there were too few cases for females in several states to permit proper analysis and interpretation.

Comparisons of Job Corps Trainees with Census Data

The data for this section are presented in Tables 1 - 5. Each table presents the data for the comparisons, and in addition the comments indicate the salient information and conclusions.

A review of the information given in Tables 1 - 5 can be summarized as follows:

- . Male Job Corps trainees have more in the 16 - 17 year ages than would be expected by chance, while there is a preponderance of 18 - 20 year olds among the female trainees.
- . Almost all trainees, both male and female, are single or unmarried and very few are married.
- . Educationally, the Job Corps trainees are seriously disadvantaged. This is reflected by data for the highest school grade completed, and percent of high school graduates.
- . Handicapped educationally, these people had tried to shoulder more responsibility than that of their age group in the population. More were Heads of Household and to a more limited extent many had been Primary Wage Earners.
- . Their employment history was also a sad one. Only 3/4 of the males and 1/2 of the females had ever had a regular job. Most of these jobs were classified as "Unskilled."
- . The percent who had been in military service was less than half that for the same aged males from the population in general. This picture points to the Job Corps trainees as a group having great need for the vocational, technical and personal training offered by the Job Corps.

TABLE 1

Comparisons of Age Distributions of Job Corps Trainees with 1960 Census Data

The trainee population of males is greater for the 18-20 year old group and smaller for both the 16-17 and the 21 year olds than is characteristic of the population. For the females, most of the trainees were in the 18-20 year age group, with distinctly fewer in both the younger and the older eligible ages.

Age	Males			Females		
	Job Corps	U.S. Census		Job Corps	U.S. Census	
	Nos.	%	%	Nos.	%	%
16	381	1.1	19.6	34	1.9	18.6
17	4905	14.4	19.7	201	11.5	19.0
18	8174	24.0	16.8	347	19.9	16.7
19	7481	22.0	14.9	414	23.7	15.6
20	6297	18.5	14.4	353	20.2	15.1
21	3956	11.6	14.6	250	14.3	15.0
22 & over	2848	8.4	-	147	8.4	-
Total	34,042	100.0	(00.)	1746	100.0	100.0

TABLE 2

Comparison of Marital Status of Job Corps Trainees With Population Data

The percents of both male and female Job Corps trainees who are single is distinctly greater than for the population. This is consistent with Job Corps selection policy and in addition should have been expected on the grounds that young persons in the 16-21 age group who marry may, have a higher rate of employment or employability, and also be less inclined to participate in a program requiring family separation.

Marital Status	Males			Females		
	Job Corps	Census		Job Corps	Census	
	No	%	%	No	%	%
Single	33296	98.3	88.5	1730	96.0	68.3
Married	368	1.1	11.2	18	1.0	30.9
Divorced	60	.2	-	20	1.1	.1
Widowed	3	-	.2	0	0	.7
Separated	150	.4	(.3)*	35	1.9	(.8)*
Total	33,877	100.0	99.9	1803	100.0	100.0

*Also included as married

TABLE 3

Comparison of Highest School Grade Completed by Job Corps Trainees With
Comparable Data for 16-21 Year Old Out of School Youth

The percents are arranged to show, for example, the percent of male enrollees who had completed no more than the 8th grade (79.3%) compared to 90.7% for the U.S. population of 16-21 year old males. About half of the male enrollees had finished no more than the 10th grade. Only 6.6% of the male enrollees, and 23.6% of the female enrollees were high school graduates. While not stated, it is inferred that 48% of the same age males, and 58% of the same age females in the population had completed high school.

Highest Grade Completed	Males			Females		
	Job	Corps	Census	Job	Corps	Census
	No	Cu %	Cu %	No	Cu %	Cu %
High School Graduate	2133	6.6	7.5	425	23.6	-
13 or more	22	.1	48.4	1	.1	9.1
12	2020	6.1	57.7	412	22.9	58.1
11	2140	12.5	70.3	181	33.0	67.2
10	5675	29.4	81.2	352	52.6	79.1
9	8375	54.4	90.7	422	76.1	87.7
8	8333	79.3	94.6	274	91.3	94.3
7	4309	92.2	96.6	110	97.4	96.6
6	1698	97.3	97.6	29	99.0	97.8
5	546	98.9	100.0	12	99.7	98.4
4 or less	394	100.0		6	100.0	100.0
Total	33512			1799		

TABLE 4

Job Corps Trainees in Terms of Family Responsibilities

Family responsibilities are reflected here. More male enrollees and fewer female enrollees were Head of Household than is true for the population. Slightly more were the Primary Wage Earner. The median size of household from which the male enrollees came was 4.9 persons, with almost a fourth coming from households of 8 or more. The median for females is 6.2, with 29% from households of 8 or more. No comparable population figures were available.

	Males		Females	
	Job No.	Corps %	Job No.	Corps %
Head of Household	1504	4.6	43	2.4
Primary Wage Earner	2022	6.2	67	3.7
No. of Dependents				
1	547	1.7	25	1.6
2	1937	5.9	94	5.8
3	4234	12.9	187	11.6
4	5017	15.3	216	13.4
5	4990	15.3	240	14.9
6	4303	13.2	216	13.4
7	3529	10.8	166	10.3
8	3083	7.4	138	8.6
9	5060	15.5	329	20.4
Total	32710	100.0	1611	100.0

TABLE 5

Job Corps Trainees Compared To Census Data in Time of Employment

Three quarters of the males and half of the females at some time had held a regular job. Most of these jobs were at unskilled labor, with most of the others in the service occupations.

As of the time of enrollment in the Job Corps, few were employed. Most were classed as "Unemployed - Looking for a job."

Only 3.5% of the Job Corps males trainees had been in military service. This may be compared (1960) with other males of the same age groups of whom 7.7% had been in military service.

	Males		Females	
	Job Corps		Job Corps	
	No.	%	No.	%
Ever Had a Job	25606	75.2	929	51.5
Major Area of Primary Employment				
Professional	8	-	0	0
Clerical-Sales	403	1.5	36	4.4
Service	3766	14.1	79	9.7
Agriculture	1896	7.1	7	.9
Skilled	39	.1	3	.4
Semi-Skilled	1315	4.9	46	5.6
Unskilled	19366	72.3	645	79.0
Total	26793*	100.0	816**	100.0
Labor Force Status				
Employed	4292	13.2	235	15.7
Unemployed-Looking	25936	79.8	896	59.9
Unemployed-Not Looking	2260	7.0	366	24.4
Total	32488	100.0	1497	100.0

*This is 78.7% of total number of males in the Study

** This is 45.3% of total number of females in the Study

Comparisons of Job Corps Trainees by States

Data for many of the characteristics of Job Corps trainees were organized by states. These data show primarily that Job Corps enrollments were distributed fairly among the states, and that no state was markedly "out of line" in its Job Corps enrollments. (There were no data for Wyoming on the tape). Such data could have been among the 8000 cases for whom state codes were not given, or there may have been no trainees from Wyoming on the tape.

The data are given in Tables 6-15

States having fewer than 10 female trainees were not included in the tabulations shown in Tables 6-14, since such small numbers of cases do not provide sufficiently reliable information. There were 10 or more female trainees from each of 38 states.

All in all, the Job Corps is drawing its trainees more or less proportional to the population of the corresponding states, but the characteristics of the trainee group are not necessarily following those of their age group in the states.

TABLE 6

Relationship of State Enrollments of Males in the Job Corps
to Coinciding State Populations of 16-21 year olds.

Table 6 shows the frequency distribution of the numbers of male Job Corps trainees in each state relative to the numbers of 16-21 year olds in the states. This table shows that the numbers of male trainees per state range from less than 200 (9 states) and more than 2799. The 9 states having so few trainees in the Job Corps were states having small populations, e.g., less than 100,000.

The state which produced the 2799 male trainees had a population of about 430,000 in the 16-21 age group. There is a significant relationship between the numbers of trainees from each state and state populations of the 16-21 year olds, that is to say - the states having smaller populations generally sent fewer trainees to the Job Corps, while those with larger populations usually sent larger numbers of trainees to the Job Corps. The median number of male Job Corps trainees per state is 500.

Populations of 16-21 year olds in States (Thousands)

		0-99	100-199	200-299	300-399	400-499	500-599	600-699	Total
Enrollment in Job Corps by States	2600-2799					1			1
	2400-2599						1		1
	.								
	.								
	.								
	1400-1599				1			1	2
	1200-1399		6		2	1			9
	1000-1299		2	1					3
	800-999	1	1						2
	600-799		4						4
	400-599	1	1	1	1				4
200-399	2	3						15	
0-199	9							9	
Total	23	17	2	4	2	1	1	50	

TABLE 7

Relationship of State Enrollments of Families in the Job Corps
to
Corresponding State Populations of 16-21 Year Olds

Table 7 shows the numbers of Job Corps female trainees by states in relationship to the numbers of 16-21 year olds in the states. These data for the females are based on the 38 states which had 10 or more trainees. From a statistical point of view, this should have been a greater number, but this number was used arbitrarily to get as much information as possible. The numbers of female trainees were smallest for those states having the smallest population of 16-21 year olds and largest for the states having the larger populations. For example: of the 7 states producing between 10 and 19 female Job Corps trainees, 4 had less than 50,000 in the 16-21 age bracket, 2 had between 50,000 and 100,000 in the 16-21 age bracket and 1 was a state which had between 150,000 and 200,000 in the 16-21 age bracket.

In general, states with the smallest populations had the fewest female trainees in the Job Corps and states with larger populations had more trainees in the Job Corps. This relationship is far from perfect; for example, note the state which had between 30 and 39 female trainees, but had a population of more than 400,000 16-21 year olds.

The median number of female Job Corps trainees per state was 37. The median value of 37 trainees given for females is based on the 38 states having 10 or more trainees. Had all states been included, the median number per state would be 28.

No. of 16-21 year olds (Thousands)

Number of Trainees	No. of 16-21 year olds (Thousands)												Totals	
	0-49	50-99	100-149	150-199	200-249	250-299	300-349	350-399	400-449	450-499	500-549	550-599		600-649
130-139								1						1
120-129														
110-119														
100-109												1		1
90-99									1					1
80-89			1									1		2
70-79		1	1	1										3
60-69				1	1		1	1						4
50-59		1	1	1										3
40-49		1		1										2
30-39		2	1	1	1				1					6
20-29	1	2	2	2	1									8
10-19	4	2		1										7
Total	5	9	6	8	3	-	1	1	2	1	-	-	2	38

TABLE 8

Relationship and the Percent of Male Job Corps Enrollees in Each State Who are Single to the Corresponding Percent Single in State Populations and 16-21 Year Olds

Table 8 (males) and Table 9 (females) show the relationship of percent of Job Corps trainees who are single in comparison to the percents of the 16-21 age groups in the states who are single. Both tables show that a very high proportion of trainees from all of the states are single, far more than shown for the 16-21 year olds in the population. There is no observable relationship between the percent of trainees who are single and the percents of 16-21 year olds in the corresponding states who are single. That is, one cannot estimate the percent of trainees from any one state who are single on the basis of the percent of 16-21 year olds in that state who are single.

Percent of 16-21 Year Old Males in Each State Who Are Single

	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	
100	1			1		2	2		6
99				1	3	11	4	2	21
98					1	11	3		15
97					3	2	1		6
96						1			1
95						1			1
	1	-	-	2	7	28	10	2	50

TABLE 9

Relationship of the Percent of Female Job Corps Trainees From Each State Who are Single Compared With the Percents of 16-21 Year Old Females in Each State Who are Single

Percent of 16-21 year old Females by State Who are Single

Percent of Female Job Corps Trainees By States Who Are Single	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95 - 99	Total
	100		1	2	2	1		2			
98 - 99			1		1					1	3
96 - 97			7	3	3	2					15
94 - 95		1		3	1						5
92 - 93			1	1		1					3
90 - 91			2								2
88 - 89											
86 - 87			1								1
84 - 85					1						1
Total		2	14	9	7	3	2			1	38

TABLES 10 & 11

Table 10 (males) and Table 11 (females) show for each state the percent of trainees who are Head of Household relative to the percent of 16-21 year olds in the state who are Head of Household.

Most of the states (19 out of 50) showed 16-17% of the 16-21 year old males as Head of Household.

The percent of females who were Head of Household (16-21 year olds) in the states ranged from about 1% to 9% with 33 of the 38 states showing less than 4%. Each of these tables show some relationship between the numbers of trainees per state who are Head of Household and the percent of 16-21 year olds given by the Census who are Head of Household.

For both males and females there is some relationship between 16-21 year olds in the state who are Head of Household. Generally, the smaller the percent of 16-21 year olds who are Head of Household for a state, the lower the percent of trainees from that state who are Head of Household.

TABLE 10

Percents of Male Job Corps Trainees in Each State Who are Head of Household Compared With the Percent of 16-21 Year Old Males in the Corresponding States Who are Head of Household

		Percent of 16-21 Year Old Males Who Are Head of Household										
		0 - 1	2 - 3	4 - 5	6 - 7	8 - 9	10 - 11	12 - 13	14 - 15	16 - 17	18 - 19	Totals
Percent of Male Trainees by States Who Are Head of Household	10.0-10.9											
	9.0-9.9						1					1
	8.0-8.9									2		2
	7.0-7.9						1					1
	6.0-6.9						1	2	3			6
	5.0-5.9				1			2	6			9
	4.0-4.9						3	2	2	3		10
	3.0-3.9						1	3	2	5		11
	2.0-2.9					1	2			1		4
	1.0-1.9			1			2			1		4
	0-.9						1	1				2
	Totals			1	1	1	11	11	4	19	2	50

TABLE 11

Percents of Female Job Corps Trainees in Each State Who are Head of Household Compared to 16-21 Year Old Females in the Corresponding States

		Percent of 16-21 Females Who Are Head of Household									
		0-.9	1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	Total
Percent of Female Job Corps Trainees In Each State Who Are Head of Household	16.0-17.9			1							1
	14.0-15.9										-
	12.0-13.9										-
	10.0-11.9						1				1
	8.0-9.9										-
	6.0-7.9			1					1		2
	4.0-5.9		2	1	1						4
	2.0-3.9		5	3	1						9
	0-1.9		11	9						1	21
	Total		18	15	2	-	-	1	-	2	38

TABLES 12 & 13

Do those states in which the level of education is lowest furnish Job Corps trainees who are most poorly educated?

Tables 12 (males) and 13 (females) show the medians of highest school grade completed by trainees relative to the average highest school grade completed by 16-21 year olds (census data) for the corresponding states.

In general, the table shows the affirmative answer, but leaves quite a few exceptions to the general rule. For example, in one state the average highest school grade completed by 16-21 year old males was 8.6 or 8.7, while the median highest school grade completed by Job Corps enrollees from that state was 7.8 or 7.9.

One thing that does stand out: the Job Corps trainees have a distinctly lower level of "highest grade completed" than is shown for the corresponding states for 16-21 year olds. For males, the median level of highest school grade completed for states is 8.2 while the corresponding figure shown by the 1960 census for 16-21 year olds is 10.7, a difference of 2.5 school grades.

TABLE 12

Median of Highest Grade Completed by Male Job Corps Trainees From Each State, Compared With the Mean of Highest Grade Completed by Male 16-21 Year Olds In the Corresponding States

Mean School Grade Completed by 16-21 Year Old Males
in Each of the States

Median School Grade Completed by Male Job Corps Trainees from Each of the States	8.6-8.7	8.8-8.9	9.0-9.1	9.2-9.3	9.4-9.5	9.6-9.7	9.8-9.9	10.0-10.1	10.2-10.3	10.4-10.5	10.6-10.7	10.8-10.9	11.0-11.1	11.2-11.3	11.4-11.5	11.6-11.7	Total
	9.0-9.1													1			
8.8-8.9												1	1	2			4
8.6-8.7											1	2	1	1			5
8.4-8.5								1	1	1		1	2	2			8
8.2-8.3								3	1		1	1	1				7
8.0-8.1										1	2	2		1			6
7.8-7.9	1					1					1	3	1				7
7.6-7.7							1	1	1	1	1	1	1				7
7.4-7.5							1						1				2
7.2-7.3													1				1
7.0-7.1										1						1	2
Totals	1					1	2	5	1	5	6	8	10	5	5	1	50

TABLE 13

Median of Highest Grade Completed by Female Job Corps Trainees From Each State
 Compared With the Mean of Highest Grade Completed by Female 16-21 Year Olds
 In the Corresponding States

Mean School Grade Completed by
 16-21 Year Old Females in Each of the States

Median School Grade Completed by Female Job Corps Trainees in Each of the States	9.0 - 9.4	9.5 - 9.9	10.0 - 10.4	10.5 - 10.9	11.0 - 11.4	11.5 - 11.9	Totals
	11.0-11.4			2		1	
10.5-10.9					1		1
10.0-10.4			1		3		4
9.5-9.9					4	2	6
9.0-9.4			1	1	6	2	10
8.5-8.9			1	3	1	2	7
8.0-8.4		1	1	3	1	1	7
Totals		1	6	7	17	7	38

TABLE 14

Percents of Male Job Corps, by States, Who Have Been in Military Service Compared With 16-21 Year Old Males in Each of the Corresponding States Who Have Been in Military Service

Table 14 shows the comparison state by state of the percent of Job Corps trainees who have been in military service with the percent of 16-21 year olds who have been in military service. With the exception of one state, the higher the percent of 16-21 year old males in a state who had been in military service, the higher the percent of Job Corps trainees from that state who had been in military service.

The Job Corps enrollees show a distinctly lower percent who have been in military service as great as for the 16-21 population

The Job Corps enrollees show a distinctly lower percent who have been in military service than is shown for the 16-21 year old male populations of the states. In only one state is the percent of Job Corps enrollees who have been in military service as great as for the 16-21 year population. Again it must be noted that many of the factors, such as inadequate education, which contribute to ineligibility for military service, do contribute to eligibility for Job Corps training.

Percents of 16-21 year Old Males in Each State Who Have Been in Military Service

Percents of Male Job Corps Trainees in Each State Who Have Had Military Service

	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	Total
10.0-11.9	1					1		1			3
8.0-9.9							1	2	1		4
6.0-7.9							1	1		1	3
4.0-5.9					3	2	2	3	1		11
2.0-3.9		3	2	4		6	4	3	3		25
0-1.9		1		2			1				4
Total	1	4	2	6	3	9	9	10	5	1	50

TABLE 15

**Correlations of Characteristics of Job Corps Trainees
With Comparable Census Data (by States)**

Table 15 is a summary of the data shown in Tables 6-14. These are the correlations between the characteristics of Job Corp trainees and the corresponding comparable census data by state. The number of trainees from each state in the Job Corps correlates substantially with the number of 16-21 year olds in the corresponding states (.69 for males and .50 for females). This shows that the Job Corps obtained trainees from each of the states in numbers approximately proportional to the age group population of the state.

For the males the percent Single in the Job Corps for each state is independent, unrelated to the percent Single in the corresponding age groups in the state populations.

For females, the correlation is small but positive.

For males, the median age of the Job Corps enrollees for each state shows a low but negative correlation with the mean age of the census group.

	BOYS	GIRLS
No. Trainees vs. No. 16-21 Year Olds	.69	.50
Percent Unmarried	-.06	.16
Median Age vs Median Age (Census)	-.33	.13
Percent Head of Household	.33	.31
Highest School Grade Completed	.30	.17
Percent Who Have Been in Service	.26	

Policy Capture

This section of this study throws some light on the above question. It indicates that the Job Corps appears to be drawing its trainee population substantially in keeping with the philosophy publicly expressed by the leaders of the Job Corps.

If the Job Corps enrollment by states can be predicted or reconstructed by using census data, demographic and economic data, then one has made a "policy capture" since such information shows socially how the actual practice (numbers of Job Corps enrollees by states) is related to differences in the socio-economic situation in the different states.

Insofar as census, demographic and economic data for the states show correlations with Job Corps enrollment from the states, it can be assumed that these correlations do reflect an implicit policy, since such data can be used to reconstruct the data of Job Corps enrollment. This portion of the study was done only for the male enrollees. The numbers of enrollees per state for females were insufficient for this type of analysis.

First of all it is necessary to have some measure of Job Corps enrollment. Two measures were the best of the available evidences of Job Corps enrollment performance:

1. The number of Job Corps enrollees per thousand of the state population of the same sex and age range (16-21). This shows the relative numbers (number per 1000) of enrollees drawn from each state. It is a kind of a state population density for Job Corps enrollees.
2. The number of Job Corps enrollees from each state. Such evidence of Job Corps enrollment should correlate substantially with other population data.

These two measures of Job Corps enrollment by states are shown in Table 16 as variables 1 and 2. Twenty-eight other measures of population, social and economic characteristics of the states were offered. These 28 measures appear in Table 16 as variables 3-30. Table 16 presents basic information used for this part of the study.

First, looking at the first column of correlations in Table 16: these are the correlations of each of 29 variables with Job Corps enrollment per 1000 of 16-21 year olds in the states.

TABLE 16
CORRELATIONS AMONG CENSUS DATA AND NUMBERS & RELATIVE NUMBERS OF
JOB CORPS ENROLLEES BY STATES (MALES) (DECIMALS OMITTED)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
1 Job Corps Enrollment per M of 16-21	39	-15	-08	-08	-09	-07	-05	-50	-51	-14	-31	-09	08	-09	04	-11	06	-11	05	-31	-34	-19	12	-27	12	06	-37	29	-52	50	
2 Job Corps Enrollment	-15	69	77	98	77	-26	76	-28	-35	69	-23	77	18	76	-02	77	10	70	03	-10	28	-10	82	04	12	61	-23	37	-05	50	
3 State Population (Male)	69	98	98	98	96	-29	89	-01	09	97	18	97	23	93	-04	96	17	94	16	-06	56	04	70	27	-13	75	15	-02	43	00	
4 State Population (Male) (16-21)	-09	77	98	98	98	-30	91	-07	00	98	11	98	18	94	-04	98	19	95	15	06	54	02	75	24	-08	75	09	05	35	07	
5 State Population (Male) (Ratio of 5:4)	-07	77	96	98	98	-27	93	-09	-03	97	04	98	09	96	-06	98	17	95	11	-07	51	-01	76	21	-04	75	04	08	26	12	
6 Percent (16-21) (Ratio of 5:4)	-05	-26	-29	-30	-27	-21	-21	04	11	-24	-30	-27	-32	-27	-01	-28	-18	-25	-18	04	-18	19	-16	-15	32	-20	45	17	-07	02	
7 Number Not in School (Male)	-50	76	89	91	93	04	04	-11	-11	89	-07	93	17	93	-02	94	20	89	06	-02	35	-04	79	05	06	68	-04	13	15	23	
8 Mdn. Grade Completed (Employed)	-51	-28	-01	-07	-09	11	11	55	55	-07	39	-08	-14	-06	15	-07	06	-01	06	16	22	22	-34	09	-40	-26	34	-50	30	-48	
9 Mdn. Years School	-14	69	97	98	97	-24	89	-07	08	08	46	96	18	92	10	96	18	95	20	-11	53	-04	67	25	-12	75	13	-01	38	-69	
10 No. of Veterans	-31	-23	18	11	04	-30	-07	39	46	17	06	06	30	05	31	08	27	14	49	-40	40	11	-31	17	-71	02	39	-70	43	-69	
11 Percent Ages 16-21 Veterans	-09	77	97	98	98	-27	93	-08	-04	96	06	22	22	95	-05	98	20	93	08	-07	48	-01	78	20	-01	74	07	07	30	12	
12 Number Single Males (16-21)	08	18	23	18	09	-32	17	-14	-11	18	30	22	13	13	-06	19	25	13	16	-37	-08	-28	19	-08	-02	17	-12	-11	11	-03	
13 Percent Single Males (16-21)	-09	76	93	94	96	-27	93	-06	-03	92	05	95	13	92	07	97	18	92	13	-03	51	08	76	12	-02	75	06	08	22	15	
14 No. Males Head of Household	04	-02	-04	-04	-06	-01	-02	15	10	-06	31	-05	-06	07	07	97	18	92	13	-03	51	08	76	12	-02	75	06	08	22	15	
15 Percent Head of Household	-11	77	96	98	98	-28	94	-07	-02	96	08	98	19	97	-02	94	12	94	12	-10	51	-02	77	17	-03	00	16	-29	-11	-07	
16 Number Employed	06	10	17	19	17	-18	20	06	05	18	27	20	25	18	11	24	24	16	16	-10	51	-02	77	17	-03	73	05	05	27	11	
17 Percent Employed	-11	70	94	95	95	-25	89	-01	06	95	14	93	13	92	-06	94	16	16	30	-07	48	-04	67	20	-13	70	11	00	30	-01	
18 Number Unemployed	05	03	16	15	11	-18	06	06	04	20	49	08	16	13	12	12	16	30	30	-36	04	-04	-06	-07	-37	17	-03	-21	10	-31	
19 Percent Unemployed	-34	-28	-06	06	54	51	-18	35	22	-11	-40	-07	-37	-03	-06	-10	-59	-07	-36	15	15	54	09	13	-12	26	34	29	16	-18	
20 Mean Age (16-21)	-19	-10	04	02	-01	19	-04	22	24	-04	11	-01	-28	08	29	-02	-45	01	04	54	33	33	30	54	-16	38	42	-06	45	-18	
21 Percent Urban (M & F)	12	82	70	75	76	-16	79	-34	-43	67	-31	78	19	76	-04	77	09	67	-06	09	30	04	05	0+	05	07	50	10	34	04	
22 Non-White Population Change 1950-60	-27	04	27	24	21	-15	05	09	14	25	17	20	-08	12	-35	77	09	67	-07	13	54	-04	05	0+	46	63	-11	50	-01	59	
23 Population Density	12	12	-13	-08	-04	32	06	-40	-48	-12	-71	-01	-02	-02	-25	-03	-12	20	-07	32	-16	05	46	-21	-21	14	29	-04	43	-22	
24 Percent Non-White 1960 (M & F)	06	61	75	75	75	-20	68	-26	-17	75	02	74	17	75	00	73	09	70	-37	38	-12	07	63	14	09	09	-01	17	22	15	
25 Gross Personal Income 1965	-37	-23	15	09	04	45	-04	34	51	13	39	07	-12	06	16	05	-11	11	-03	26	42	50	63	14	-18	17	-34	50	-47	77	
26 Personal Income Per Person	29	37	-02	05	08	17	13	-50	-59	-01	-70	07	-11	08	-29	55	-36	00	-21	34	-06	10	50	-04	76	17	-34	50	-47	77	
27 Illiteracy	-52	-05	43	35	26	-07	15	30	60	38	43	30	11	22	-11	27	-17	30	10	29	45	34	-01	43	-30	22	50	-24	77	-55	
28 Per Pupil School	50	50	00	07	12	02	23	-48	-76	-04	-69	12	-03	15	-07	11	-19	-01	-31	16	-18	04	59	-22	64	15	-47	77	-55	-55	
29 Armed Forces Mental Test Failure																															

Four of the 28 population, social and economic variables showed correlations of 0.50 or greater with Job Corps enrollment per thousand of 16-21 year olds in the states. These four are:

8. Median grade completed by 16-21 year olds who were employed (-.50)
9. Median years in school (-.51)
29. Per pupil expenditure for schools (-.52)
30. The percent of Armed Forces Mental Test failures (.50)

Each of these, in one way or another, reflect level of schooling, either in terms of achievement or in terms of the caliber of public school support. The direction (sign) of the correlation coefficients are easy to follow; e.g., the higher the median grade completed by 16-21 year olds in the state, the fewer Job Corps enrollees per 1000.

Selection policy, empirically viewed, is best reflected by the multiple correlation and the regression coefficients of these 28 variables with the measure of Job Corps enrollment. So far as the measure of Job Corps enrollment for each state can be reproduced from census, educational, or economic data, these form an empirical restatement of policy as it is practiced. Table 17 shows a statistical selection of the population, educational and economic data to obtain the best possible agreement with Job Corps enrollment per 1000 of 16-21 year olds per state. The method first identifies the one variable correlating highest with Job Corps enrollees per 1000 of the 16-21 age population. This one is State-per-pupil School Cost, (No. 29) which correlates -.519 with Job Corps enrollees per 1000. It has a negative weight (B), indicating that those states with the highest investment per pupil in school have relatively lower numbers of Job Corps enrollees. The second variable to be added is No. 8., Median Grade Completed by those 16-21 year olds who were reported (1960 Census) as employed. This variable is that one which combined with the one already selected adds the most to the multiple correlation with Job Corps Enrollees per 1000. Thus it raised the multiple correlation to .632. This, too, has a negative weight. The third variable (No. 25) Percent of Non-white Population (1960), has a negative weight, and raised the multiple correlation to .654. In fourth place is (No. 30) Number Who Failed the Armed Forces Mental Test. This variable has a positive weight. (No. 20), Mean Age in the 16-21 year old group goes in with a negative weight, followed by the number of the 16-21 year old group employed.

TABLE 17
MULTIPLE CORRELATIONS OF JOB CORPS TRAINEES PER 1000 OF
MALE POPULATION AGE 16-21, BY STATES

	VARIABLE	r	R	B
29	State Per Pupil School Costs	-.52	.519	-.14
8	Mdn Grade Completed (Employed)	-.50	.632	-.39
*25	Percent Non-White 1960 (M & F)	.12	.654	-.21
30	Percent Armed Forces Mental Test Failures	.50	.702	.15
*20	Mean Age (16-21)	-.31	.714	-.49
16	Number Employed	-.11	.735	-.36
4	State Population (Male)	-.08	.791	.37
*11	Percent Age 16-21 Veterans	-.31	.804	-.24
24	Population Density	-.27	.818	-.17
14	No. Males Head of Household	-.09	.827	.13
5	State Population (Male 16-21)	-.09	.837	.13
All Variables			.871	

*Predictors Common to Tables 17 & 18

Eleven of the 18 variables were successively selected, selection being continued until the variable to be added raised the multiple correlation less than .01. This produced a multiple correlation of .837. If all 28 variables had been used, the correlation would be .871.

Table 17 thus shows that the number of male Job Corps enrollees per 1000 of 16-21 year olds by states can be reproduced with considerable accuracy by using the 11 variables selected as described above. This tells that the empirical policy for selection of relative numbers of Job Corps enrollees in the various states is based on the economic effort for education, the relative numbers of non-whites in the population, educational achievement in the states, youth employment, state male population and population density. Because the numbers of Job Corps enrollees per 1000 in the state were reproduced so accurately, the data do reflect the fact that there has been a consistent practice of policies in Job Corps recruitment and selection. It is not the purpose of this study, however, to attempt to judge the social adequacy of this empirically expressed policy.

If one empirically reviews Job Corps selection policy, using a "population loaded" measure of selection, such as the number of enrollees in each state, results appear which are somewhat different from those discussed above. Going back to Table 16 and reviewing the second column of correlations, it may be seen that 11 of the 28 variables showed correlations of .50 or greater (disregarding signs), with the numbers of Job Corps enrollees by state. These eleven variables are largely related to population magnitude:

3. State Population (.69)
4. State Male Population (.77)
5. State Male Population of 16-21 year olds (.77)
7. The Number of 16-21 year old Males Not in School (.76)
10. The Number of Single Males in the 16-21 year old Group (.77)
14. The Number of Those in the 16-21 Group who were Head of Households (.76)
16. The Number of Males in the 16-21 year old Group who had been employed (.77)
18. The Number of Males in the 16-21 Group who were rated as Unemployed (.70)
23. The Non-white Population of the State (including both males and females) (.82)
27. The Gross Personal Income in 1965 for the State; (.61)
30. The Per Cent who Failed the Armed Forces Mental Test (.50)

These represent two kinds of variables, all related to population; but, again, some are population figures, while others reflect economic and educational status of the state. Those states with lower economic status and less education had more males enrolled in the Job Corps, while the states having stronger economic status and stronger education contributed fewer trainees to the Job Corps.

To refine these data and to obtain the simplest reproduction of the Job Corps enrollment figures for the states, the multiple correlation method was used.

Table 18 shows the multiple correlations of the population, educational and economic variables with the number of Job Corps trainees for the states. The multiple correlation used was operated as a "test selector." The first variable to be selected was No. 23., Non-white Population-1960. It correlated .82 with the numbers of Job Corps trainees in the states. The next step was to find another variable, which, when added to the one already selected, showed the greatest increase in correlation with the numbers of Job Corps enrollees for the states. This was No. 25., Percent of Non-White Population in 1960. This raised the multiple correlation to .870 and had a negative weight (B). The third variable to be selected was No. 11., Percent of Veterans in the 16-21 year Group. This raised the multiple correlation to .902. The fourth independent variable to be selected was No. 20., Mean Age of the 16-21 year olds, raising the correlation to .915. It should be noted that the 2nd, 3rd and 4th variables selected each received a negative weight. The fifth variable to be added to the correlation is No. 28, Illiteracy Rate. This raised the multiple correlation to .928.

In other words, the best prediction of Job Corps enrollments for the states is: non-white population for 1960 minus the percent non-white, minus the percent of the 16-21 age group who are veterans, minus the mean age of the 16-21 year old group, plus the illiteracy rate for the state. If all of the 28 variables were taken together there would be a multiple correlation (R) of .966. However, using more than five would likely add more chance error than new information to the multiple correlation. The starred independent variables appear in both Table 17 and Table 18.

Table 18 points to the fact that while the enrollment in the Job Corps in the states is a function of population, it does take into consideration the large non-white element among the disadvantaged, while giving some evidence of

TABLE 18

MULTIPLE CORRELATIONS OF INDEPENDENT VARIABLES WITH
NUMBERS OF JOB CORPS TRAINEES FOR STATES

VARIABLE	N	R	B
23 Non-White Population 1960 (M & F)	.82	.820	.42
*25 Percent Non-White 1960	.12	.870	-.60
*11 Percent Veterans in the 16-21 Age Group	-.23	.902	-.29
*20 Mean Age (16-21)	-.10	.915	-.48
28 Illiteracy Rate	.37	.928	.42
All Variables		.966	

*Predictors Common to Tables 17 and 18

- 14 -

avoiding those states having the greater number of men who have been in the service, and certainly includes those having the highest rates of illiteracy. This picture is consistent with the stated policy for seeking Job Corps trainees.