DOCUMENT RESUME

ED 095 279 95 CE 001 827

AUTHOR Walker, Yvonne Kimmons; And Others
TITLE Evaluation of the Availability and Effectiveness of MDTA Institutional Training and Employment Services for Women: Reanalysis of the MDTA Outcomes Study.
INSTITUTION Battle (Mark) Associates, Inc.; Exotech Systems, Inc., Falls Church, Va.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Office of Planning, Budgeting, and Evaluation.
PUB DATE [74]
CONTRACT OEC-0-73-0815
NOTE 123p.; For related documents, see CE 001 826 and 828

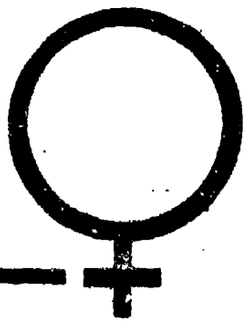
EDRS PRICE MF-$0.75 HC-$5.40 PLUS POSTAGE
DESCRIPTORS Adult Programs; Comparative Analysis; *Educational Assessment; Employment Patterns; *Employment Statistics; Equal Opportunities (Jobs); Institutional Role; Job Development; Job Training; *Manpower Development; Program Evaluation; *Sex Discrimination; Tables (Data); Trainees; Vocational Education; Vocational Training Centers; Womens Education; *Working Women

ABSTRACT

The document represents an integral part of a study undertaken as an evaluation of the impact of institutional training on women. The re-analysis of data for the Manpower Development Training Act (MDTA) Outcome Study, using measures such as job placement, length of training, post-training income, and the completion of training, indicates that in some ways the MDTA training has been at least as successful for women as men. These ways include: (1) females were more likely than males to use their acquired training in post-training employment (females-62 percent, males-39 percent), (2) females experienced highest incremental earnings across all training periods and occupational categories (females-$968, males-$692), (3) more female trainees (39 percent) than male trainees (32 percent) felt that MDTA training helped them get a job. In the following areas of the traiing program women did not fare as well: (1) a larger percentage of females (15 percent) than males (9 percent) were found to have reported no post-training earnings, and (2) females showed a lower correlation than males between months in training and large salary increases. (MW)

EVALUATION OF THE AVAILABILITY AND EFFECTIVENESS OF MDTA INSTITUTIONAL TRAINING AND EMPLOYMENT SERVICES FOR WOMEN

RE-ANALYSIS OF THE MDTA OUTCOMES STUDY



SUBMITTED BY:

MARK BATTLE ASSOCIATES
AND
EXOTECH SYSTEMS, INC.

ACKNOWLEDGEMENTS

Mark Battle Associates, the prime contractor for this study, and its subcontractor, Exotech Ssytems, Incorporated, worked as a team in all phases of the overall study. The following team members share the responsibility and the credit for the analysis presented in this report.

Mark Battle Associates (MBA)

Yvonne Kimmons, Project Director

Exotech Systems, Incorporated (ESI)

Carolyn Jefferson, Principal Investigator, Author
Beverly A. Lamont, Task Leader Author
Slagle Allbritton, Senior Analyst, Author

The MBA/ESI study team wishes to acknowledge the cooperation and assistance provided by Jonathon Seaman, Office of Program Analysis, and Helen Montague, Departmental Data Processing Center, both of the U.S. Department of Labor. Mrs. Montague provided the MBA/ESI study team with all of the computer tabulations required for this analysis of the MDTA Outcomes Study data.

The MBA/ESI team also wishes to acknowledge the support and help provided by the project monitors for this study of MDTA Impact on Women: Dorothy Shuler, Office of Planning, Budgeting and Evaluation of the U.S. Office of Education, Department of Health, Education and Welfare; and Frank Stanard, Division of Program Evaluation of the Manpower Administration, Department of Labor.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

In April 1972 the Office of Policy Evaluation and Research of the U.S. Department of Labor received the final report of an MDTA Outcomes Study of manpower institutional and OJT programs prepared by Decision Making Information (DMI). That study, conducted under the joint sponsorship of the Office of Evaluation of the Manpower Administration of the U.S. Department of Labor and the Office of Education of Health, Education and Welfare, presented data generated by personal interviews of 5,169 former MDTA enrollees conducted during February, March and April of 1971. Of the total interview samples — 3,467 were institutional enrollees and 1,702 were OJT enrollees. The institutional enrollee sample consisted of 970 men and 732 women.

As part of the current study of the availability and effectiveness of MDTA Institutional Training and Employment Services for Women, a reanalysis of the MDTA Outcomes Study was performed to try to examine in greater detail the impact of MDTA on the female respondents. This study task focused on the data pertaining to the personal and training-related characteristics of each respondent. These data were summarized by sex and race to enable specific issues to be addressed and comparison between the sexes and races to be made.

The major issues discussed in this report are:

- how a female trainee's characteristics related to her choice of training and post-training occupations
- to what extent the female trainees were locked into sex-stereotyped occupations (e.g., health or clerical) prior to, during, and after training

- to what extent did the MDTA institutional training program serve as a port of entry or re-entry into the labor force for the female respondents
- how comparable are the earnings, both pre- and post-training, of the female and male respondents
- to what extent did the MDTA institutional training program effect the respondents' participation in the labor force and his employment stability

In subsequent parts of the current study, Evaluation of the Availability and Effectiveness of MDTA Institutional Training and Employment Services for Women, these and other issues will be addressed using data obtained from MDT Skill Center and Employment Service personnel in addition to that obtained from trainee records and questionnaires completed by trainees themselves.

Approach to the Analysis

Initially, the MBA/FSI Study Team determined the reliability of basing national MDTA program measures and projections on the data from the MDTA Outcomes Study. A comparison of this data with Manpower Administration Data, as presented in the Manpower Report of the President dated March 1972, revealed disparities in the percentage distributions of the MDTA enrollee characteristics-sex, age and race (see Table 1.1). Thus, the observations and conclusions presented in this report may not be valid when applied to the total MDTA institutional population.

TABLE 1.1

Comparison of Data, Outcomes Study vs. Department of Labor: Characteristics of Trainees Enrolled in Institutional Programs Under MDTA, Percentage Distributions

Characteristics	Outcomes Study Data	Manpower Administration Data			
		1971	1970	1969	1968
Sex	100	100.0	100.0	100.0	100.0
Male	48	58.5	59.4	55.6	55.4
Female	52	41.5	40.6	44.4	44.6
Age	100	100.0	100.0	100.0	100.0
Under 19	1	13.8	9.1	12.5	14.9
19 - 21	13	26.1	28.0	25.0	23.6
22 - 34	51	40.2	42.3	38.2	35.5
35 - 44	17	11.4	11.9	14.0	15.2
45 years and over	18	8.5	9.0	10.3	10.8
Education	100	100.0	100.0	100.0	100.0
Under 8 years	9	5.4	6.4	9.0	9.2
8 years	9	7.0	8.2	9.8	10.2
9 to 11	35	36.2	38.1	38.8	40.6
12 years	36	45.4	42.7	37.9	34.7
over 12	11	6.0	4.5	4.5	5.5
Race	100	100.0	100.0	100.0	100.0
White	61	55.6	59.2	55.9	50.8
Negro	37	39.3	36.0	39.7	45.4
Other	2	5.1	4.8	4.4	3.8
Spanish American	12	12.8	12.8	12.8	12.8
Disadvantaged	69				

Sources: Decision Making Information, MDTA Outcomes Study, Final Report, April 1972

U.S. Department of Labor, Manpower Report of the President, March 1972

Earnings data from the MDTA Outcomes Study was not used in this analysis. Instead, Social Security income data for each respondent has been used. Although there were limitations inherent in the Social Security data (e.g., not all income is reported to the Social Security Administration, and this data is only available on a calendar year basis), it was determined to be best for the purposes of this study.

Throughout this analysis, pre-training income is defined as that recorded for the 12-month period immediately preceding the start of training, and post-training income is defined as that recorded for the 12-month period immediately following the completion of or termination from the training program. These time limits were determined on the basis of post-training income data availability. Using these limits, the study team noted that many of the respondent trainees had experienced increasing periods of unemployment during the 12 months prior to entering training.

The MBA/ESI study team selected data items from the MDTA Outcomes Study on the basis of their applicability to the issues being considered in this analysis. These data items fall into five categories:

1. personal characteristics of trainees
2. attitudes of trainees toward work and training
3. training program characteristics
4. profiles of occupational categories for trainees for three time periods (pre-, during, and post-training)
5. measures of earnings for two time periods (pre- and post-training)

The reanalysis of the MDTA Outcomes Study data consists of an analysis of a new set of tabulations, each containing from two to six data items (e.g., sex,

race, post-training occupation, and post-training earnings). The resulting percentage distributions are discussed and, for some tabulations, a statistical test (e.g., chi-square, t-test) has been made to determine the significance of the relationship between the distributions of two or more data items. Using these statistical techniques, this report has identified those data items and combinations for which the responses by sex and/or race (especially comparing white and non-white females are significantly different. In the interpretation of these statistical tests, the .01 confidence level has been used -- thus, the conclusion presented about a response pattern (or distribution) being analyzed has a 99% chance of being valid for the MDTA Outcomes Study respondent population.

The statistical tests used were chosen because they are "nonparametric" or "distribution-free". This means that in the interpretation of the results the user is not required to make any assumptions concerning the form of the distributions of the total MDTA institutional trainee population.

This report discusses the possible impact of the training program on occupational distributions -- i.e., the percentages of trainees having an occupation in each of the occupational cluster categories defined for this analysis. Also included is an analysis of the effectiveness of the training program in increasing a trainee's earnings, his employment duration, and in reducing the frequency and duration of periods of unemployment for trainees.

CHAPTER II

SUMMARY OF FINDINGS

The findings presented in this chapter are not a comprehensive set of conclusions regarding the impact of the MDTA Institutional Training Programs on females. These findings served as hypotheses for further analysis in Phase II of this study, the field survey.

The findings are presented under four general topics:

A. Female Trainee Characteristics: Personal and Household

B. Program-Related Characteristics

C. Training Program Effectiveness

D. Income/Employment Factors

A. FEMALE TRAINEE CHARACTERISTICS: PERSONAL AND HOUSEHOLD

- A profile of the typical female enrollee in the MDTA Outcomes Study sample population shows that she is likely to be of child-bearing age[1/] (76%), non-white (61%), living without a husband (65%), in a household composed of from one to five persons (73%), probably has not more than three dependents (80%), may have a high school education (57%), and probably has never been on welfare (58%).

1/ Between 19 and 44

- When the typical female enrollee in the MDTA Outcomes Study is compared to her male counterpart, she is likely to be better educated, more likely to be living without a spouse (F-65%, M-41%), more likely to have fewer dependents (four or more dependents, F-20", M-34%), and only slightly more likely to be currently on welfare (F-25%, M-18%).

- A typical non-white female enrollee will more likely be classified as an unmarried head of a household (12% vs 6%), have nearly the same educational level, and will have slightly more dependents than her white counterpart.

B. PROGRAM-RELATED CHARACTERISTICS

An analysis of the program-related characteristics (attitudes toward training and occupational distributions) from the MDTA Outcomes Study data show that:

- Both male and female trainee's attitudes toward the training program indicated a general satisfaction with program content and context. Good teachers and good training were cited as outstanding characteristics of the program; about one-half of each subsample picked these two as good points of program participation. Teachers were also picked as a negative aspect of the program. It is important that many of the study's participants disliked nothing about the training.

- For those females who were employed during the pretraining period, the MDTA Training Program seems to have stimulated individual occupational shifts by training them in a skill for a new occupation. The Training Program has also caused a shift in the occupational distributions of the total female trainee population. For example, 70 percent of all women having a post-training job were in Professional Health, Health Services and Clerical/Sales; less than 40 percent of these women had pre-training jobs in these same occupation clusters.

- Except for basic education training, males and females were trained in almost mutually exclusive occupations. Seventy-five percent of all females were trained in either Professional Health, Health Service, or Clerical/Sales; 71 percent of all males were trained in Metal Machining, Assembly, Mechanics and Repair, or Construction.

- Shifts in occupations for female enrollees have been beneficial in terms of securing better working conditions, and enhancing their earning potential.

C. TRAINING PROGRAM EFFECTIVENESS

Using data from the MDTA Outcomes Study and the Social Security Administration, some measures of program effectiveness which were analyzed are job placement, length of training and post-training income, and the completion of training. Analyses of these measures show that in some ways the MDTA Training Program has been at least as successful for women as for men.

- About 70 percent of the job placements of trainees, whether male or female, were by personal contact as opposed to MDTA Program Placement Service.

- A significantly greater percentage of the female trainees (39%) than male trainees (32%) felt the MDTA Training Program helped them get a job.

- Females were far more likely than males to use their acquired training in post-training employment (62% of females vs. 39% of males).

- Females experienced the highest incremental earnings across all training periods and occupational categories, i.e., $968 for females vs. $692 for males. Average post-training earnings for those females with no pre-training income were nearly as high as comparable pay for males ($2140 vs. $2057). However, female earnings were comparatively low in the male-oriented occupations. (For example average post-training earnings for males in Metal Machining were $4116, while comparable earnings for females were only $2523).

- The entry of females into male-dominated occupational categories was in the Service, Metal Machining, and Assembly occupations However, their earnings did not keep pace with males as illustrated in the previous comment.
- More than 70 percent of females were employed in traditional female occupations after training, including almost all of those with no pre-training earnings.

- A slightly larger percentage of females (62%) than males (59%) reported raises during the post-training period.

- A larger percentage of females (40%) than males (32%) reported that post-training salary was greater than 175 percent of pre-training salary.

- Positive correlation was found for females between length of training and large salary increases (Kendall's τ = .56).

However, there are other indications in the MDTA Outcomes Study data that the training program has not been as successful for women as for men:

- A larger percentage of females (15%) than males (9%) were found to have reported no post-training earnings.

- Females showed a lower correlation than males between months in training and large salary increases (Kendall's τ = .81 for total sample and τ = .56 for females).

- No significant correlation is found for females between the proportion receiving some salary increase (over 100% of pre-training salary) and length of training (Kendall's τ = .08).

Thus, even though the program seems to have been successful to some extent, the data suggests that the overall training provided to women (in terms of time invested in training) is less closely related to their subsequent success in the labor force than it is for men. Further, the training does not appear to have eliminated the gap between men and women in level of employment.

D. INCOME/EMPLOYMENT FACTORS

The relative success of the MDTA Institutional Training Program was also viewed in terms of income/employment factors. The analyses of these factors shows that:

- A significantly larger percent of males (71%) reported seeking jobs during their times of unemployment than females (47%). Higher unemployment rates for women, therefore, appear to have been more often a result of personal choice than were the unemployment rates for males.

- There is no significant difference in the response patterns between males and females or between race of females when comparisons were made of those who were satisfied or very satisfied with their work to those who were a little or very dissatisfied with their work, (χ^2_S = 1.778 and χ^2_R = 0.760 respectively).

- When comparisons were made between males and females with high income expectations (defined as more than $145 per week) and those with low income expectations (defined as less than $105 per week), 11 percent of the females as compared to 47% of the males had high income expectations. Twenty-four percent of the males as compared to 55 percent of the females had low income expectations.

- A comparison of white and non-white females who ranked the importance of salary first or second in the acquisition of employment shows that 81 percent of the non-white females and only 74 percent of the white females ranked salary first or second. Job security, however, was ranked as first importance by both males and females proportionately more frequently than any of the other characteristics. Comparisons between males and females who listed job security and income/salary first or second (high importance) shows that job security takes second place in

importance to salary/income for females, while it is ranked in the first position by males. This might suggest that mere employment is not as important for women respondents on the whole as it is for men, but that income/salary considerations tend to be more important in the females' decision to take a job (or remain unemployed).

In looking at employment stability in terms of the duration of pre-training unemployment and employment, and post-training unemployment and employment, the following were noted:

- On the average, females had longer periods of pre-training unemployment (7.78 months) than males (6.24 months) and longer periods of post-training unemployment (7.63 months) than did males (5.99 months). Females showed shorter periods of pre-training employment (7.05 months) and post-training employment (10.21 months) than did males, who showed an average of 7.93 and 10.58 respectively.

- A greater percentage of females than males had no pre-training employment (F-42.6%, M-25.0%) and no post-training employment (F-14.5%, M-9.3%).

- In terms of race, females showed practically no significant difference between their distributions when duration of employment and unemployment were used as measurements of employment stability.

Thus, when comparisons are made between the male and female MDTA Outcomes Study respondents, the female trainees did not show as much success from their enrollment in the program in terms of their ability to maintain continuous employment in the labor force. There are a number of factors that should, however, be considered in looking at the employment patterns of females. Historically, females have been excluded from male dominated segments of the labor force such as construction and mechanical occupations. Also, smaller salaries, in general, for females as compared to males provide little incentive for any extraordinary effort in seeking and maintaining employment — especially when day-care is an added expense. In other words, the problems underlying the apparent lesser degree of success of the training program for women as a whole than for men should be examined in light of the more fundamental problems currently existing in our social and economic systems.

CHAPTER III

FEMALE TRAINEE CHARACTERISTICS: PERSONAL AND HOUSEHOLD

In the re-analysis of the MDTA Outcomes Study data, personal and household demographic data, was used for female institutional trainees as a separate group. Comparative data for male enrollees was also used. This section includes the following variables: age, education, race, ethnic background, marital status, position in household, size of household, number of dependents, welfare status, and source of household income. This analysis has related race, age, sex and position in household to marital status in order to determine how many female enrollees are in fact heads of household.

The MDTA Outcomes Study provided enough data to construct a probable profile[1/] of the female enrollee in the MDTA institutional training as follows: the female enrollee is very likely to be of child-bearing age, 19 44, (76%), non-white (61%), living without a husband (65%), in a household composed of from one to five persons (73%), probably has not more than 3 dependents (80%), may have completed a high school education (57%), and who quite probably has never been on welfare (58%) (see Tables 3.1, 3.2).

If the typical female enrollee is compared with her male counterpart as illustrated in Table 3.3 it is clearly evident that she is better educated, more likely to be living without a spouse, more likely to have fewer dependents, and only slightly more likely to be on welfare.

1/Because of the biases in the data (discussed in Chapter 1), this profile may not be valid when applied to the total female MDTA institutional training population.

TABLE 3.1

PERSONAL CHARACTERISTIC OF INSTITUTIONAL ENROLLEES

Characteristic	Females			Males		
	Size of Subgroup		Distribution of Subgroups (Percent)	Size of Subgroup		Distribution of Subgroup (Percent)
Total Group	1773		100%	1383		100
AGE (Base year 1970)						
Under 19 years old	109		6	123		9
19-21 years old	397		22	292		21
22-34 years old	640		36	563		41
35-44 years old	317		18	195		14
45 years and more	310		17	210		15
EDUCATION						
Under 8 years	87		5	168		12
8 years	124		7	166		12
9-11 years	576		32	519		37
12 years	774	56%	43	395	38%	28
Over 12 years	226		13	140		10
RACE						
White	683		39	885		64
Non-white	1090		61	498		36
ETHNIC BACKGROUND						
Spanish-American	174		10			
Other	1613		90			
MARITAL STATUS						
Married	619		35	815		59
Separated	231		13	76		5
Divorced	339	65%	19	64	41%	5
Widowed	132		7	16		1
Never Married	466		26	417		30

TABLE 3.2

HOUSEHOLD CHARACTERISTICS OF INSTITUTIONAL ENROLLEES

Characteristic	Females		Males	
	Size of Subgroup	Distribution of Subgroups (Percent)	Size of Subgroup	Distribution of Subgroup (Percent)
Total Group	1787	100%	1388	100%
POSITION IN HOUSEHOLD				
Head of Household	834	47	925	67
Non-Head of household	953	53	463	33
SIZE OF HOUSEHOLD				
One	149	8	114	8
Two	331	19	221	16
Three	381	73% 21	294	64% 21
Four	344	19	241	17
Five	244	14	178	13
Six and more	337	19	340	25
NUMBER OF DEPENDENTS				
None	398	51% 22	74	33% 5
One	514	29	387	28
Two	278	16	209	15
Three	240	13	242	17
Four	153	9	175	13
Five	94	5	121	9
Six and more	109	6	178	13
WELFARE STATUS				
Currently on Welfare				
Yes	523	25	246	18
No	1257	75	1128	82
IF NO, HEAD OF HOUSEHOLD EVER ON WELFARE?				
Yes	288	22	200	17
No	1001	78	953	83

TABLE 3.3

PERSONAL CHARACTERISTICS OF TRAINEES BY SEX

Characteristic	Percent with Characteristic: Female	Males
Education: High School or Above	57	38
Living Without Spouse (Divorced, Separated, Widowed, Never Married)	65	41
Currently on Welfare	25	18
Four or More Dependents	20	34

As illustrated in Table 3.4, when compared with white female enrollees, a typical non-white female enrollee will be younger, will be more likely a never-married head of household, will have reached nearly the same educational level, will be equally likely to be living without a spouse, will have slightly more dependents, and will be more likely to be receiving welfare.

TABLE 3.4

CHARACTERISTICS OF FEMALE ENROLLEES BY RACE

Characteristic	Percent with Characteristic: Non-White	White
Never-married Head of Household	12	6
High School or Above	59	58
Living Without Spouse	66	63
Currently on Welfare	35	21
Four or More Dependents	22	18
Median Age (In Years)	26	32

Looking at the detailed breakdowns of these additional characteristics in Tables 3.5, 3.6, and 3.7, the differences between white and non-white females are notable. The older female trainees are predominately white and and very likely to be unmarried heads of household. Within the category "unmarried", non-white females are more likely to be separated (17%) or never-married (28%) than whites (7% and 23% respectively), whereas white females are more likely to be divorced (22%) or widowed (11%) than non-white (17% and 5% respectively). Although non-white females are more likely to be never-married, a greater percentage of the white females responded that they had no dependents.

In examining the head of household category by sex and race, notable age differences are illustrated between the white male and white female enrollees. The median age of white male heads of household is 31 while that for white females is 38. Similarly, the median age of white male non-heads of household is lower (21) than that for white females (25).

In addition, the typical female enrollee who classified herself as "head of household" (see Table 3.8) would probably be unmarried (83%), non-white (64%), and between the ages of 22 and 44 (62%). In contrast, a typical male enrollee who classified himself as "head of household" would be married (94%) and white (77%). Clearly, there are significant differences in the MDTA Outcomes Study characteristic data between females who reported themselves as being responsible for the support of a family and males who reported similar responsibilities. For example, the MDTA Outcomes Study reveals that only 47 percent of the female enrollees called themselves "head of household", but the data on marital status indicates that, in

TABLE 3.5

PERSONAL CHARACTERISTICS BY RACE
(FEMALE ENROLLEES)

	NON-WHITE		WHITE	
	Size of Subgroup	Percentage Distribution of Subgroup	Size of Subgroup	Percentage Distribution of Subgroup
Total Group	1090 (1068)[a]	100%	683 (663)[a]	100%
AGE				
Under 19 years	71	7	38	6
19-21 years	256	23	141	21
22-34 years	434	41	206	30
35-44 years	178	16	139	20
45 years and over	151	14	159	23
Median	(26 years)		(32 years)	
EDUCATION				
Under 8 years	57	5	25	4
8 years	65	6	56	8
9-11 years	353	33	199	30
12 years	479	56% 45	279	58% 42
Over 12 years	114	11	104	16
MARITAL STATUS				
Married	364	33	250	37
Separated	183	17	46	7
Divorced	183	67% 17	152	63% 22
Widowed	54	17	77	11
Never Married	306	28	157	23

[a]This is the total group size for enrollees responding to the request for education level.

TABLE 3.6

HOUSEHOLD CHARACTERISTICS BY RACE
(FEMALE ENROLLEES)

	NON-WHITE			WHITE		
	Size of Subgroup	Percentage Distribution of Subgroup		Size of Subgroup	Percentage Distribution of Subgroup	
Total Group	1090	100		682	100	
POSITION IN HOUSEHOLD						
Head of Household	520	48		306	45	
Non-head of Household	570	52		371	55	
MARITAL STATUS AND HEAD OF HOUSEHOLD						
Married Head of Household	30	6		18	6	
Unmarried Head of Household	490	94		288	94	
NUMBER OF DEPENDENTS			N=1089			N=683
None	210	19		185	27	
One	293	27	78%	217	32	87%
Two	186	17		90	13	
Three	169	15		68	10	
Four	87	8		66	10	
Five	67	6		26	4	
Six	42	4		15	2	
Seven	17	2		10	1	
Eight	7	1		5	1	
Nine and more	11	1		1	-	

PERSONAL AND HOUSEHOLD CHARACTERISTICS OF FEMALE ENROLLEES BY RACE AND AGE

	Non-White						White					
	< 19	19-21	22-34	35-44	> 44	Total	< 19	19-21	22-34	35-44	> 44	Total
	No. %	No. %	No. %	No. %	No. %	No.	No. %	No. %	No. %	No. %	No. %	No.
Head of Household	18 3	79 15	221 43	114 22	83 16	520	6 2	27 9	93 30	78 25	102 33	306
Married	0	13	9	2	6	30	2	2	1	7	6	18
Not Living with Spouse	18 4	66 13	215 44	114 23	77 16	490	4 1	25 9	92 32	71 25	96 33	288
Separated	6	16	71	41	22	156	1	5	6	17	8	37
Divorced	1	10	74	39	24	148	0	4	67	36	27	134
Widowed	0	2	8	20	21	51	0	1	5	11	57	74
Never Married	11	38	62	14	10	135	3	15	14	7	4	45
Non-Head of Household	53 9	177 31	210 37	62 11	68 12	570	32 9	114 30	113 30	61 16	56 15	376
Married	19	80	152	33	30	334	13	41	75	37	46	232
Not Living with Spouse	34 11	97 41	78 33	9 4	18 8	236	19 13	73 51	38 26	4 3	10 7	144
Separated	5	8	12	1	1	27	1	1	6	0	1	9
Divorced	3	6	14	3	9	35	1	5	9	2	1	18
Widowed	0	0	1	1	1	3	0	0	0	1	2	3
Never Married	26	83	51	4	7	171	17	67	23	1	6	114
Median Age of Head of Household:		Males = 21		Females = 30			Males = 30			Females = 38		
Median Age of Non-Head of Household:		Males = 20		Females = 28			Males = 21			Females = 35		

fact, 65 percent were living without a spouse and might therefore be classified as "head of household". However, some of the females living without a spouse may have been living with another relative (e.g., father) who was considered as the "head of household".

TABLE 3.8

COMPARISON OF HEAD OF HOUSEHOLD ENROLLEES BY SEX

Female Head of Household		Male Head of Household	
Unmarried	83%	Unmarried	6%
Non-White	64%	Non-White	33%
Median Age	33	Median Age	30

A comparison within the same data of position in the household and marital status, as illustrated in Table 3.9, indicates that the classification "head of household" seem to be considerably more accurate for men. Hence, it is possible to postulate that "head of household" is one of those words so laden with masculine connotations that in a survey where the respondent classifies himself it becomes a meaningless measure for the condition of females. It may be possible that women living alone with dependents to support are reluctant to classify themselves as "head of household" because that title is traditionally associated with a father, a husband or the eldest son. In such a survey, the question "how many

count on you for support?" and the question "do you live alone with your dependents?" also need to be asked in order to ascertain from the data the number of females who should be classified as "head of household".

TABLE 3.9

POSITION IN HOUSEHOLD AND MARITAL STATUS BY SEX

	Females		Males	
	Size of Subgroup	Percentage Distribution of Subgroups	Size of Subgroup	Percentage Distribution of Subgroups
Position in Household:				
Head	834	47	925	67
Non-Head	953	53	463	33
Marital Status				
Married	619	35	815	59
Separated	231	13	76	5
Divorced	339	19 (65%)	64	5 (21%)
Widowed	132	7	16	1
Never Married	466	26	417	30

An observation which emerges from this analysis is that "head of household" and marital status" can be contradictory, and therefore tend to obfuscate the real situation for females, and perhaps for males as well. This is particularly serious in view of the fact that, as illustrated in Table 3.10, 73 percent of the female enrollees report a [illegible]

two to five persons and 65 percent of them are living with no spouse. This suggests that in our field survey, an attempt must be made to differentiate between those females living with no spouse but with relatives and, validly, do not call themselves "head of household" and those females who actually should be calling themselves "head of household" but are not.

TABLE 3.10[a]

SIZE OF HOUSEHOLD REPORTED BY FEMALE ENROLLEES

Size of Household	Size of Subgroup	Percentage Distribution of Subgroups
One	149	8%
Two-Five	1300	73%
Six and above	337	19%

a/For more detailed breakdown of this data, see Table 3.1, 3...

One final dimension of the female enrollee profile to be analyzed relates to current post-training sources of household income. One NLS Outcomes Study question asked the respondents to check current sources of income derived from 13 different categories. Sixty-seven percent of the female enrollees marked their own wages as a current source of income and 50 percent marked "other's wages". In field research conducted by MPR and ESI, these questions will be put into one multichoice question so that the responses may be cross-tabulated to provide sufficient information from which to assess total sources of income for females.

When individual categories of income sources are examined, some useful comparative data emerge. For example, there is an interesting correspondence

between the fact that 67 percent of the 1787 female sample indicated "own wages" as a source of income and the fact that 65 percent of the same sample live without a spouse. All evidence seems to point to a realization that a much greater proportion of the female enrollees are the sole support of their family than the responses to the "head of household" category imply. In relation to that observation, the sources of income data also indicate that 25 percent of females were on public assistance at the time they were interviewed. However, a second query directed to whether or not the household had ever been on welfare, if it is not currently receiving welfare income, produced a response indicating that 78 percent of the households of remaining female enrollees had never been on welfare.

Another comparison between income source and marital status reveals that only 11 percent of the women received alimony payments, although 19 percent were divorced. In the field research conducted by MBA and ES', "alimony, support payments" will be specified as a possible source of income in order to clarify any difference in those two percentages.

TABLE 3.11

SOURCES OF HOUSEHOLD INCOME AND WELFARE STATUS

FOR FEMALE INSTITUTIONAL ENROLLEES

	Size of Subgroup		Percentage Distribution	
Total Group	1787			
Sources of Income:	Yes	No	Yes	No
Own wages	1189	591	67	33
Other's wages	898	873	50	50
Social Security	227	1543	13	87
VA Pensions	87	1675	6	94
Alimony	195	1576	11	89
Public Welfare	523	1257	30	70
Welfare Status:				
Received welfare in past	388		22	
Never received welfare	1401		78	

CHAPTER IV

PROGRAM RELATED CHARACTERISTICS

This section of the report examines the institutional training program in terms of the following variables: trainees' attitudes toward training and occupational distributions of trainees during the training program and the pre- and post-training periods.

A. ATTITUDES TOWARD TRAINING PROGRAM

1. Reasons Entered Program

The reasons that the MDTA Outcomes Study respondents elected to enter the MDTA training program can be broken down into two broad categories: job-related and self-improvement. Table 4.1 lists the distributions for males and females of the most often cited reasons. There is an enormous difference between sexes as to reasons for entering the program. The percentage of females citing self-improvement reasons (60%) is nearly as great as that of males citing job-related reasons (66%) as the primary cause for enrolling in the program. Nearly a third of the males in the sample entered MDTA in order to provide and improve support for their families; only one percent of females responded in this manner. Almost one-half of the female sample was attempting to improve their educational attainment, self-improvement. Sex and the two primary entry reason categories are not independent (χ^2= 798.6, 1 df), i.e., a greater proportion of men chose job related reasons, while a greater number of women picked self-improvement as their primary entry reasons.

TABLE 4.1

REASONS TEENAGE RESPONDENTS ELECTED MDTA PROGRAM

	Males (N=1691)		Females (N=1175)	
	No.	Percent	No.	Percent
Job-Related Reasons				
Help Support Family	513	30	28	1
Get Better Job	252	15	31	1
Need Diploma for Job	164	10	68	3
Receive Pay in School	153	9	14	1
Learn Skill	39	2	123	6
Sub-Total	121	66	548	23
Self-Improvement Reasons				
Education, Self-Improvement	50	3	968	45
Realize Ambitions	135	8	250	11
Learn English	107	6	92	4
Sub-Total	292	17	1310	60
Miscellaneous Reasons	278	16	317	15

The data indicate that male respondents viewed the program as a vehicle towards a better job, or a better-paying job - the objective being a higher standard of living. Women reported different motives. While many wanted a better job (14 percent), most were trying to better themselves intellectually. Of course, this self-improvement should lead to greater marketability, if a better job or pay is desired.

2. Opinions of Training Program

What are the trainees' opinions about the good and bad things experienced in the training program? Males and females were asked to recall good and bad things about the program; their first elicited responses appear in Tables 4.2 and 4.3, broken down by sex and race.

Trainees' attitudes toward the MDTA training program indicated a general satisfaction with program content and context. Good teachers and training were cited as outstanding characteristics of the program; however, teachers were picked also as a negative aspect of the training.

In looking at the trainees' opinions of the good things about the training program, there is little difference in the pattern of responses between sexes and between whites and non-whites within each sex. But among the good things cited, two stand out from the rest: good teachers and good training. Nearly one-half of each subsample picked these two as good points of their program participation. Any of the remaining 14 cited points is minor compared to good teachers and good training.

TABLE 4.2

TRAINEES' OPINIONS OF THE GOOD THINGS ABOUT THE MDTA TRAINING PROGRAM BY SEX AND RACE

	FEMALE				MALE			
	White		Non-White		White		Non-White	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
TOTAL RESPONSES	1,511	100	2,054	100	1,676	100	826	100
Substance of Instruction	893	67	1,349	65	1,200	72	546	66
Good Teachers	341	26	497	24	463	28	210	25
Good Training	302	22	456	22	466	28	198	24
Fun Learning	103	8	145	7	52	3	48	6
Patient Teachers	53	4	95	5	68	4	27	3
Good Equipment	57	4	73	4	84	5	30	4
Small Classes	26	2	26	1	33	2	15	2
Good Facilities	15	1	27	1	20	1	12	1
Convenient Hours	15	1	25	1	14	1	6	1
Personal Considerations	211	15	280	14	145	9	85	10
With Other People	99	7	129	6	61	4	41	5
Feel More Competent	59	4	57	3	36	2	16	2
Personal Interest	53	4	94	5	46	3	28	3
Economic Considerations	99	7	145	8	109	7	45	5
Job Preparation	53	4	73	4	59	4	21	3
Paid Well	40	3	59	3	42	3	19	2
Helped Find Job	6	-	13	1	8	-	5	1
Liked Everything	100	7	172	8	120	7	78	9
Liked Nothing	41	3	108	5	101	6	72	9

TABLE 4.3

TRAINEES' OPINIONS OF THE BAD THINGS ABOUT THE MDTA TRAINING PROGRAM BY SEX AND RACE

	FEMALE				MALE			
	White		Non-White		White		Non-White	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
TOTAL RESPONSES	916	100	1,417	100	1,[illegible]71	100	617	100
Substance of Instruction	392	43	545	38	603	47	220	36
Poor Teachers	101	11	130	9	104	8	38	6
Too Difficult	45	5	57	4	42	3	14	2
Need More Classroom Work	42	5	78	5	68	5	41	7
Too Elementary	41	4	40	3	61	5	19	3
No Practical Experience	36	4	37	3	66	5	15	2
Bad Facilities	35	4	59	4	29	2	12	2
Too Long Hours	30	3	44	3	47	4	10	2
Crowded Classes	[illegible]	3	40	3	[illegible]	6	26	[illegible]
Poor Equipment	22	2	44	3	91	7	37	6
Distance from home	13	1	16	1	18	1	8	1
Personal Considerations	132	14	144	10	175	14	75	12
Other Students not Interested	73	8	70	5	100	8	37	6
Not Helpful	47	5	60	4	61	5	30	5
Bored	12	1	14	1	14	1	8	1
Economic Considerations	37	4	81	6	66	5	42	[illegible]
No Help Finding Job	25	3	56	4	46	4	28	5
Not Paid Enough	12	1	25	2	20	2	14	2
Disliked Everything	3	-	8	-	13	1	4	1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

BEST COPY AVAILABLE

A tabulation of bad things remembered about the training program presents an entirely different distribution, although teachers are still a focal point. The most important observation of Table 4.3 is the large number of participants (one third to one half) who found nothing about the training program displeasing. Excluding the number identifying poor teachers (about 10%), the responses are distributed evenly throughout the list, especially for white females. Also the total number of "bad responses" is far less than the total number of "good responses" - an important point.

B. OCCUPATIONAL DISTRIBUTION

Because of the tendency for occupations to cluster by sex, occupational distribution becomes an important measure of the effectiveness of training for female enrollees. Mark Battle Associates, Exotech System, Inc., and the Office of Program Analysis, DOL, have developed an occupational transition matrix by which the occupation of employment in the pre-training period and occupation of training may be analyzed in relation to occupation of post-training employment. Two goals are achieved by this analysis: 1) the determination of whether the training program is assisting women in upgrading their previous skills; and 2) the determination of the extent of cross-occupational shifts within the three-stage time frame. This shifting is then related to the DOT occupational classifications to describe to what extent that shifting also represents an increase in job status, e.g., from domestic or food service to professional health service or office worker.

To assist this analysis we have re-organized the original occupational clusters used in the MDTA Outcomes Study so that the professional occupations

are isolated from service occupations, and so that distinctions may be made between various types of service occupations, e.g., health service, food service, child care, and domestic service. These occupational clusters have been related, in turn, to length of training, percentage income increase from pre- to post-training, race, sex, educational level and previous work experience within an occupational cluster.

In the analysis of MDTA's effect on the program related characteristics of trainees, the occupational distributions (pre-, during, and post-training) and the summary job history profiles are the variables from the MDTA Outcomes Study being used.

The data strongly support the hypotheses that:

- except for the basic education training, males and females are trained in almost mutually exclusive occupations;
- the extreme difference between the pre-training occupational distributions of males and females are further emphasized during training and, to a lesser degree, after training;
- for females who have been employed during the pre-training period, the MDTA program does affect an individual's occupational shift and does affect occupational shifts of the female subpopulation as a whole to a significant degree.

To facilitate analysis of occupational data, the list of occupation codes used by the MDTA Outcomes Study was regrouped and reduced to 12 occupational categories. The descriptions and definitions of these categories are presented in Table 4.4

TABLE 4.4

DEFINITION OF OCCUPATIONAL CATEGORIES

Occupation Category	MDTA Outcomes Study Code	Job Description	DOT Code
1: Professional			
	01	LPN	079.378
	02	RN	075.000
	04	Medical/Dental Assistant	079.368/079.378
	05	Surgical Technician	079.378
		Inhalation Therapist	079.368
		Operating Room	079.378
Service		(Knowledge Acquired Primarily Through Practical Experience)	
2: Health Service			
	03	Nurses Aide/Orderly/Ward Clerk	355
	06	Psychiatric Aide	355
	07	Dietary Aide	355
	08	Other Health Training	355 or 078/9
	16	Home Attendant	354
3: Food Service			
	11	Food Service	(*)
	12	Cook/Baker	314,315.313,317
	13	Waitress	311
	17	Other Food Service	317,318,etc.(*)
4: Domestic Service			
	14	Housekeeper/Homemaker/ Domestic	303,306
5: Other			
	15	Child Care	307.355

TABLE 4.4 (Con't.)

Occupation Category	MDTA Outcomes Study Code	Job Description	DOT Code
6: Clerical/Sales			
	21	Clerk/Typist	209.588
	22	Secretary/Stenographer	201/202
	23	Bookkeeping/Accounting	210/219
	24	Sales	289,250
	25	Key Punch Operator/ Bookkeeping Machine Operator	213.5,215
	26	Cashier/Checker	290,299.4, 211.3,211.4
	27	Data Processing/Programmer/ Computer Operator	213
	73	Duplicating Machine Operator	207
7: Service Trades			
	31	Cosmetologist/Barber	332/330
	32	Janitors/Building Maintenance	382/389
	34	Truck Driver	903,904,905,906
	35	Dry Cleaner/Cleaner/Finisher	362,363
	36	Tailoring/Sewing/Seamstress/ Upholster	785,782,780
	37	Landscaping/Gardening	406
	38	Other Service Trades (Furniture Refinishing/Carpet Laying)	763/299
Machine Trades (60)			
8: Metal Machining, Fabricating, Assembly			
	61	Production Machine Operator/ Machinist	(?)/600
	62	Set Up Operator/Lathe Operator	605,603/604,609
	63	Solderer/Welder	807.8/810,819
	64	Material Handler	(?)
	65	Engine Assembly/Operations Engineer	706/(?)
	66	Electrical Assembly/Machine Assembly/Small Parts Assembly	720-9,820-9
	67	Grinder	601,603
	68	Sheet Metal Worker	804.281
	69	Other Machine Trades	(?)

TABLE 4.4 (Con't.)

Occupation Category	MDTA Outcomes Study Code	Job Description	DOT Code
9:	Mechanics & Repair		
	41	Auto Mechanic/Auto Body/Auto Other	807.381,620.281, 628,625
	42	TV Repair	720.281
	43/44	Other Mechanics/Other Repair	723,637
	Structural (50)		
10:	Construction Trades		
	51	Electrician	824
	52	Bricklayer	859,861
	53	Painter	840,841
	54	Plumber	862
	55	Carpenter	860
	56	Draftsmen	017
	57	Other Construction Trades (Laborers/Floor Finishers)	(?)/864
11:	Miscellaneous		
	74	Crew Leader/Migrant Leader	(?)
	75	Farmer	401-429
	76	Other Skills	Undefined
12:	Basic Education (Non-DOT)		
	71	Communications	
	81	Orientation/Pre-Vocational	
	82	Basic Education/GED	
	83	English	
	91	No Answer	

1. Educational Attainment

To provide a background for the analysis of occupational distributions of trainees, the education level of the trainees by sex, race, and occupation category should be considered. As was previously discussed, the average educational level of female trainees was higher than that of male trainees.

A comparison of education attainment is valid in basic education training, which is the only training program category in which both sexes in the sample were enrolled in approximately equal numbers (see Table 4.5). Although a larger percentage of females (4.6%) than males (43%) have no education beyond grade 8, a larger percentage of females (24%) than males (19%) have at least completed high school These distributions by sex are not significantly different statistically at the .01 confidence level, as indicated by the $\chi^2 = 5.04$ (df=4). Among the female MDTA Outcomes Study respondents, the distribution of education level for whites in basic education training is nearly the same statistically as that for non-white ($\chi^2 = 9.96$, df = 4). However, by ovservation, white females were the best educated subgroup taking these courses.

The only other training occupation categories for which the sample size is large enough to make analysis of educational attainment meaningful are Professional Health, Health Services, Clerical Sales for females, and Metal Machining, Assembly, Mechanics and Repair, and Construction Trades for males. As shown in Tables 4.6 and 4.7, proportionately more females in training occupation categories Professional Health and Clerical/Sales had high school diplomas than did males in any category. Table 4.6 also shows that females in Health Service had a significantly lower educational level than

TABLE 4.5

ENROLLEES IN TRAINING CATEGORY BASIC EDUCATION
BY SEX, RACE AND LEVEL OF EDUCATION

Level of Education	FEMALE White No.	White Percent	Non-White No.	Non-White Percent	Total No.	Total Percent		MALE White No.	White Percent	Non-White No.	Non-White Percent	Total No.	Total Percent	
<8 yrs.	13	16	37	35	50	27	46	26	25	16	33	42	28	43
8 yrs.	15	19	20	19	35	19		19	18	4	8	23	15	
9-11 yrs.	27	34	27	25	54	29		38	37	20	42	58	38	
12 yrs.	16	20	18	17	34	18	24	11	11	7	15	18	12	19
>12 yrs.	8	10	4	4	12	6		9	9	1	2	10	7	
TOTAL	79	100	106	100	185	100		103	100	48	100	151	100	

TABLE 4.6

FEMALE ENROLLEES IN PREDOMINANTLY FEMALE TRAINING CATEGORIES BY RACE AND LEVEL OF EDUCATION

Level of Education	Professional Health						Health Service						Clerical/Sales					
	White		Non-White		Total		White		Non-White		Total		White		Non-White		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
<8 years	2	1	0	-	2	1	2	3	5	4	7	3	1	-	2	-	3	-
						2						17						4
8 years	1		1	1	2	1	17	27	11	8	28	14	13	4	16	3	29	4
9-11 years	30	19	35	27	65	23	20	32	65	47	85	43	96	33	152	29	248	30
12 years	74	48	65	51	139	49	19	31	50	36	69	35	144	49	291	56	435	53
						26						40						65
>12 years	47	31	27	21	74	26	4	6	7	5	11	5	37	13	63	12	100	12
TOTAL	154	100	128	100	282	100	62	100	138	100	200	100	291	100	524	100	815	100

TABLE 4.7

MALE ENROLLEES IN PREDOMINANTLY MALE TRAINING CATEGORIES
BY RACE AND LEVEL OF EDUCATION

Level of Education	Metal Machining Assembly						Mechanics and Repair						Construction Trades					
	White		Non-White		Total		White		Non White		Total		White		Non-White		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
8 years	22	7	6	4	28	6	31	15	15	10	46	13	4	4	3	9	7	6
						15%						27%						1%
8 years	30	10	12	8	42	9	35	17	16	11	51	14	12	13	0	-	12	9
9-11 years	111	36	63	44	174	39	75	36	65	44	140	40	26	29	14	40	40	32
12 years	112	37	52	36	164	36	53	26	38	26	91	26	32	36	14	40	46	37
						46%						33%						5%
12 years	32	10	12	8	44	10	12	6	14	9	26	7	16	18	4	11	20	16
TOTAL	307	100	145	100	452	100	206	100	148	100	354	100	90	100	35	100	125	100

those in Professional Health and Clerical/Sales ($\chi^2_{PH,HS} = 86.8$, $\chi^2_{HS,C/S} = 72.6$; df = 4). This is an expected observation since Health Service requires a lower skill level than the other two categories. For female trainees, the distributions for educational level differed by race ($\chi^2 = 20.0$, df = 4) - non-whites were better educated than whites. As expected, trainees in Basic Education had the lowest average educational level.

2. Pre-Training Occupations

For the remainder of this section of the analysis, only those respondents who were employed during the pre-training period and post-training period covered by the MDTA Outcomes Study are included. The reader should keep in mind that 25 percent of the males, 46 percent of the white females and 40 percent of the non-white female respondents showed no pre-training employment for that period.

According to the MDTA Outcomes Study data, only 16 percent of all males (18% of whites and 13% of non-whites) and 15 percent of all females (16% of whites and 4% of non-whites) in the institutional program had any previous experience in the occupational category for which they were trained. However, within the respondent sample that had recorded some pre-training employment, a vast majority of trainees (especially in the case of females) had the same occupational category after training as they were trained in; large proportions of these trainees had the same or related pre- and post-training occupational categories.

Table 1.8 shows the summary profile of pre-training occupational categories. As expected, these distributions for males and females are significantly different

TABLE 4.8

NUMBER OF JOBS IN PRE-TRAINING OCCUPATIONAL CATEGORIES BY SEX AND RACE

Pre-Training Occupational Category	MALES				FEMALES					
	White No.	Non White No.	Total No.	Total Percent	White No.	White Percent	Non White No.	Non White Percent	Total No.	Total Percent
1. Professional Health	6	0	6	-	23	4	5	1	28	2
2. Health Service	9	4	13	1	72	13	99	12	171	12
3. Food Service	72	32	104	6	93	17	123	15	216	16
4. Domestic Service	2	0	2	-	12	2	102	12	114	8
5. Other Service	1	1	2	-	15	3	13	2	28	2
6. Clerical/Sales	70	39	109	6	156	29	201	24	357	26
7. Service Trades	103	76	179	10	56	10	108	13	164	12
8. Metal Machining, Assembly	279	75	354	20	53	10	65	8	118	8
9. Mechanics & Repair	65	40	105	6	0	-	0	-	0	-
10. Construction Trades	216	61	276	15	3	1	2	-	5	-
11. Miscellaneous	9	3	12	1	11	2	19	2	30	2
12. Basic Education	451	172	623	35	44	8	98	12	142	10
TOTAL (No. Jobs)	1283	503	1786	100	538	100	835	100	1373	100

(χ^2 = 1203., df = 9) - reflecting the existing segregation of occupations by sex that exists in the labor market. All numbers in this and subsequent related tables represent actual number of jobs. For the purpose of this analysis, it is assumed that the relative percentages are valid representations of the sub-population being considered.

Referring again to Table 4.8 35 percent of the males, but only 10 percent of the females, received pre- training in Basic Education. This is compatible with the previous observation that the females enter the training program from occupation categories Health Service (12%), Food Service (16%), Clerical/Sales (26%) and Service Trades (12%). Contrastingly, most of these males enter the training program from Service Trades (10%), Metal Machining & Assembly (20%) and Construction Trades (15%). Within the female group, the difference between pre-training occupational distributions by race is also significant (χ^2 = 75.9, = df = 9), as also illustrated in Table 4.9.

3. Training Occupations

The training occupation distributions of trainees in MDTA programs are presented in Table 4.10. Clearly, the training categories for each sex are almost mutually exclusive (χ^2 = 2133, df = 8); and among females, the distributions across categories differ by race, with a much higher percentage of whites being trained in Professional Health (χ^2 = 65.6, df = 8). Seventy-five percent of all females were trained in either Professional Health, Health Service or Clerical/Sales; 71 percent of all males were trained in either Metal Machining & Assembly, Mechanics & Repair or Construction Trades. As shown, 11.5 percent of all males and 10.7 percent of all females were trained in Basic Education. Of

TABLE 4.9

NUMBER OF JOBS IN PRE-TRAINING OCCUPATIONAL CATEGORIES FOR FEMALE ENROLLEES BY RACE

	Pre-Training Occupation Category	White		Non-White		Total	
		No.	Percent	No.	Percent	No.	Percent
1.	Professional Health	23	82	5	18	28	100
2.	Health Service	72	42	99	58	171	100
3.	Food Service	93	43	123	57	216	100
4.	Domestic Service	12	11	102	89	114	100
5.	Other Service	15	54	13	46	28	100
6.	Clerical/Sales	156	44	201	56	357	100
7.	Service Trades	56	34	108	66	164	100
8.	Metal Machining, Assembly	53	45	65	55	118	100
9.	Mechanics & Repair	0	—	0	—	0	—
10.	Construction Trades	3	60	2	40	5	100
11.	Miscellaneous	11	37	19	63	30	100
12.	Basic Education[a]	44	31	98	69	142	100
	Total (No. Jobs)	538	39	835	61	1373	100

a/ Respondent listed MDTA basic education on the job sheet in the question.

TABLE 4.10

NUMBER OF ENROLLEES IN EACH INSTITUTIONAL TRAINING CATEGORY BY SEX AND RACE

Training Occupation Category	MALE				FEMALE					
	White	Non White	Total		White		Non White		Total	
	No.	No.	No.	Percent	No.	Percent	No.	Percent	No.	Percent
1. Professional Health	1	1	2	-	124	23	85	10	209	15
2. Health Service	8	4	12	1	61	11	92	11	153	11
3. Food Service	16	27	43	2	16	3	30	4	46	3
4. Domestic Service	0	0	0	-	12	2	7	1	19	1
5. Other Service	0	2	2	-	3	1	12	1	15	1
6. Clerical/Sales	26	15	41	2	243	46	409	49	657	48
7. Service Trades	32	12	44	2	12	2	53	6	65	5
8. Metal Machining, Assembly	591	157	748	42	4	1	18	2	22	2
9. Mechanics & Repair	277	139	416	23	0	-	1	-	1	-
10. Construction Trades	185	59	244	14	3	1	24	3	27	2
11. Miscellaneous	21	23	44	2	4	1	18	2	22	2
12. Basic Education	126	64	190	11	51	10	86	10	137	10
TOTAL (No. of Enrollees)	1,283	503	1,786	100	538	100	835	100	1,373	100

persons employed at least once during the pre-training period covered by the MDTA Outcomes Study, 74 percent of the females were trained in their three categories and 79 percent of the males were trained in their three categories. One possible explanation for the abundance of females being trained in these three categories is the general labor market demand. The institutional training program reflects the employment needs of the community; most available jobs (generally open to women) are in the clerical/sales and health-related fields. Therefore, women are more likely to enter this type of training program.

As shown in Table 4.11, a female trained in Professional Health, Health Service, or Clerical/Sales was very likely to enter the category Professional Health, during the post-training period. For training category Professional Health, 66 percent of the females had the same post-training category and 14 percent were in Health Service - thus, 80 percent entered the health care field. Similarly, for training category Health Service, 65 percent entered it after training, with an additional 5 percent entering Professional Health - thus, 70 percent had entered the health care field. This category, Health Service, was the only category for which the post-training occupations of white and non-white females differed significantly (χ^2 = 19.7, df = 6). A strong positive relationship between training and post-training occupations also existed for training category, Clerical/Sales; 70 percent had post-training employment in that category.

4. Post-Training Occupations

The post-training occupational distributions of males and females (see Table 4.12) are significantly different from each other (χ^2 = 1685., df = 9)

TABLE 4.11

NUMBER OF FEMALES IN POST-TRAINING OCCUPATIONAL CATEGORIES BY SPECIFIC INSTITUTIONAL TRAINING CATEGORIES AND RACE

Post-Training Occupational Category	PROFESSIONAL HEALTH							HEALTH SERVICE							CLERICAL SALES						
	WHITE		NON WHITE		TOTAL			WHITE		NON WHITE		TOTAL			WHITE		NON WHITE		TOTAL		
	No.	Percent	No.	Percent	No.	Percent		No.	Percent	No.	Percent	No.	Percent		No.	Percent	No.	Percent	No.	Percent	
1. Professional Health	83	67	54	64	137	66	80	1	2	7	8	8	5	70	2	1	0	-	2	-	
2. Health Service	16	13	13	15	29	14		35	57	64	70	99	65		7	3	15	4	22	3	
3. Food Service	8	6	2	2	10	5		12	20	1	1	13	8		17	7	27	7	44	7	
4. Domestic Service	0	-	1	1	1	-		0	-	0	-	0	-		4	2	3	1	7	1	
5. Other Service	0	-	0	-	0	-		0	-	1	1	1	-		1	-	0	-	1	-	
6. Clerical/Sales	8	6	11	13	19	9		8	13	9	10	17	11		172	69	288	70	460	70	
7. Service Trades	0	-	0	-	0	-		0	-	4	4	4	3		8	3	16	4	24	4	
8. Metal Machining, Assembly	3	2	1	1	4	2		3	5	3	3	6	4		10	4	26	6	36	5	
9. Mechanics and Repair	0	-	0	-	0	-		0	-	0	-	0	-		0	-	0	-	0	-	
10. Construction Trades	0	-	0	-	0	-		0	-	0	-	0	-		1	-	2	-	3	-	
11. Miscelleneous	1	1	3	4	4	2		0	-	1	1	1	-		10	4	9	2	19	3	
12. Basic Education	5	4	0	-	5	2		2	3	2	2	4	3		15	6	23	6	38	5	
TOTAL (No. of Enrollees)	124	100	85	100	209	100		61	100	92	100	153	100		248	100	409	100	657	100	

TABLE 4.12

POST-TRAINING OCCUPATIONAL DISTRIBUTION BY SEX AND RACE

CATEGORY	MALE						FEMALE					
	White		Non-White		Total		White		Non-White		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
1. Professional	6	1	1	-	7	1	107	19	85	10	192	14
2. Health Service	4	1	5	1	9	1	75	13	134	16	209	15
3. Food Service	28	4	13	3	41	4	36	6	56	7	92	6
4. Domestic Service	1	-	1	-	2	-	11	2	49	6	60	4
5. Child Care	0		0	-	0	-	5	1	7	1	12	1
6. Clerical Sales	64	9	32	8	96	9	222	10	353	41	575	41
7. Service Trades	73	10	55	14	128	11	32	6	57	7	89	6
8. Metal Machine Fabricating, Assembling	243	33	83	21	326	29	26	5	41	5	67	5
9. Mechanics Repair	96	13	43	11	139	12	0	-	1	-	1	-
10. Construction	93	13	53	13	146	13	4	1	4	-	8	1
11. Miscellaneous	15	2	21	5	36	3	11	2	25	3	36	3
12. Basic Education	111	15	87	22	198	18	32	6	45	5	77	5
TOTAL (No. of Enrollees)	734	101	394	98	1128	101	561	101	857	101	1418	101

and from their corresponding pre-training distributions presented in Table 4.8 (χ^2_M = 47.9, df = 5; χ^2_F = 210.3, df = 7). The latter difference is slightly more noticeable for non-white than for white females (χ^2_{N-W} = 14819., df = 8; χ^2_W = 83.98, df = 7). After training, more females were in the more highly skilled categories (Professional Health, Health Service, and Clerical/Sales) and fewer were in the less highly skilled categories (Food Service, Domestic Service, and Service Trades) than before training. However, these post-training distributions differed significantly by race (χ^2 = 59.4, df = 8) as also illustrated in Table 4.15. These occupational shifts are toward more desirable jobs (in terms of working conditions) and higher paying categories. Thus, the MDTA program had a positive effect on the female occupational classification and potential earning power.

5. Occupational Shifts

Looking at these occupational shifts in greater detail, two sets of tables were generated from the summary job history profiles. The first set, Tables 4.14 thru 4.17 traces the probable post-training occupation category of a female trainee having a particular pre-training category (only for those enrollees having a pre-training occupation). The second set of tables, 4.18 thru 4.21, trace the probable pre-training occupation category of a female trainee having a particular post-training category.

For pre-training category Health Service (see Table 4.14), 41 percent were upgraded to professional status in their field (to Professional Health) and another 18 percent remained in Health Service. There is a difference in the shift for this category by race although it is not statistically significant,

TABLE 4.13

POST-TRAINING OCCUPATIONAL CATEGORIES BY RACE
FOR FEMALE ENROLLEES WITH AT LEAST ONE PRE-TRAINING OCCUPATION

Post-Training Occupation Category	White		Non-White		Total	
	No.	Percent	No.	Percent	No.	Percent
1. Professional Health	86	59	61	41	147	100
2. Health Service	65	38	108	62	173	100
3. Food Service	61	51	59	49	120	100
4. Domestic Service	12	21	46	79	58	100
5. Other Service	4	33	8	67	12	100
6. Clerical/Sales	212	38	339	62	551	100
7. Service Trades	20	18	91	82	111	100
8. Metal Machining, Assembly	30	38	49	62	79	100
9. Mechanics & Repair	1	100	0	-	1	100
10. Construction Trades	3	38	5	62	8	100
11. Miscellaneous	13	38	21	62	34	100
12. Basic Education	31	39	48	61	79	100

TABLE 4.14

FEMALES WITH PRE-TRAINING OCCUPATION, HEALTH SERVICE, by POST-TRAINING OCCUPATION CATEGORY AND RACE

Post - Training Occupation Category	WHITE		NON-WHITE		TOTAL		
	No.	Percent	No.	Percent	No.	Percent	
1. Professional Health	36	50	34	34	70	41	59
2. Health Service	12	17	19	19	31	18	
3. Food Service	7	10	3	3	10	6	
4. Domestic Service	0	-	1	-	1	-	
5. Other Service	0	-	0	-	0	-	
6. Clerical/Sales	11	15	32	32	43	25	
7. Service Trades	0	-	3	3	3	2	
8. Metal Machining, Assembly	1	1	3	3	4	2	
9. Mechanics & Repair	0	-	0	-	0	-	
10. Construction Trades	0	-	0	-	0	-	
11. Miscellaneous	1	1	2	2	3	2	
12. Basic Education	4	6	2	2	6	4	
TOTAL	72	100	99	100	171	100	

except at the .1 level (χ^2 = 12.6, df = 6). Many more white (50%) than non-white (34%) females were upgraded to Professional Health, while many more non-white (32%) than white (15%) females shifted occupational fields into Clerical/Sales.

As shown in Table 4.15, only a small percentage (28%) of the females who were employed prior to training in Food Service remained in that occupation after training. A great many of them, 36 percent, also shifted to Clerical/Sales. White and non-white females had very different shifting patterns as seen by the χ^2 = 20.4 (df = 7).

Females having pre-training occupational category Clerical/Sales tended to stay in that category - 66 percent did so (see Table 4.16). A small shift was observable into the health care categories (6% into Professional Health and 10% into Health Service). No difference in the shifting pattern was detected by race (χ^2 = 14.04, df = 8) for those with pre-training category Clerical/Sales.

Significant shifts did occur for females having pre-training category Service Trades (see Table 4.17), and these shifts were very different for whites and non-whites (χ^2 = 32.3, df = 9). As shown, 34 percent of non-whites but only 11 percent of white females remained in the category during the post-training period. Of those shifting, 16 percent of the whites but only 1 percent of the non-whites entered category Professional Health and 41 percent of the whites but only 22 percent of the non-whites entered Clerical/Sales.

As shown in Table 4.18, 48 percent of those females in post-training category Professional Health were upgraded from Health Services and a total of 62 percent had been previously employed in the health care field. There was a significant difference in these shifts into Professional Health by race (χ^2 = 19.8, df = 7). Conversely, only 20 percent of the females in post-

TABLE 4.15

FEMALES WITH PRE-TRAINING OCCUPATION, FOOD SERVICE, BY POST-TRAINING OCCUPATION CATEGORY AND RACE

Post-Training Occupation Category	WHITE No.	WHITE Percent	NON-WHITE No.	NON-WHITE Percent	TOTAL No.	TOTAL Percent
1. Professional Health	3	3	5	4	8	4
2. Health Service	3	9	22	18	30	14
3. Food Service	33	35	28	23	61	28
4. Domestic Service	1	1	8	7	9	4
5. Other Service	0	-	0	-	0	-
6. Clerical/Sales	36	39	42	34	78	36
7. Service Trades	4	4	8	7	12	6
8. Metal Machining, Assembly	6	6	2	1	8	4
9. Mechanics & Repair	1	1	0	-	1	-
10. Construction Trades	0		0		0	
11. Miscellaneous	0	-	3	2	3	1
12. Basic Education	1	1	5	4	6	3
TOTAL	93	100	123	100	216	100

TABLE 4.16

FEMALES WITH PRE-TRAINING OCCUPATION, CLERICAL/SALES, BY POST-TRAINING OCCUPATION CATEGORY AND RACE

Post-Training Occupation Category	WHITE No.	WHITE Percent	NON-WHITE No.	NON-WHITE Percent	TOTAL No.	TOTAL Percent
1. Professional Health	13	8	8	4	21	6
2. Health Service	19	12	18	9	37	10
3. Food Service	2	1	7	3	9	3
4. Domestic Service	5	3	1	-	6	2
5. Other Service	1	-	0	-	1	-
6. Clerical/Sales	97	62	139	69	236	66
7. Service Trades	2	1	10	5	12	3
8. Metal Machining, Assembly	5	3	7	3	12	3
9. Mechanics & Repair	0	-	0	-	0	-
10. Construction Trades	2	1	0	-	2	1
11. Miscellaneous	6	4	5	2	11	3
12. Basic Education	4	3	6	3	10	3
TOTAL	156	100	201	100	357	100

TABLE 4.17

FEMALES WITH PRE-TRAINING OCCUPATION, SERVICE TRADES, BY POST-TRAINING OCCUPATION CATEGORY AND RACE

Post-Training Occupation Category	WHITE		NON-WHITE		TOTAL	
	No.	Percent	No.	Percent	No.	Percent
1. Professional Health	9	16	1	1	10	6
2. Health Service	9	16	12	11	21	13
3. Food Service	3	5	5	5	8	5
4. Domestic Service	0	-	4	4	4	2
5. Other Service	1	2	0	-	1	1
6. Clerical/Sales	23	41	24	22	47	29
7. Service Trades	6	11	37	34	43	26
8. Metal Machining, Assembly	0	-	6	6	6	4
9. Mechanics & Repair	0	-	0	-	0	-
10. Construction Trades	0	-	3	3	3	2
11. Miscellaneous	2	4	1	1	3	2
12. Basic Education	3	5	15	14	18	11
TOTAL	56	100	108	100	164	100

TABLE 4.18

FEMALES WITH POST-TRAINING OCCUPATION, PROFESSIONAL HEALTH, BY PRE-TRAINING OCCUPATION CATEGORY AND RACE

Pre-Training Occupation Category	WHITE No.	WHITE Percent	NON-WHITE No.	NON-WHITE Percent	TOTAL No.	TOTAL Percent	
1. Professional Health	19	22	2	3	21	14	62
2. Health Service	36	42	34	56	70	48	
3. Food Service	3	3	5	8	8	5	
4. Domestic Service	1	1	4	7	5	3	
5. Other Service	1	1	1	2	2	1	
6. Clerical/Sales	13	15	8	13	21	14	
7. Service Trades	9	10	1	2	10	7	
8. Metal Machining, Assembly	2	2	3	5	5	3	
9. Mechanics & Repair	0	-	-	-	0	-	
10. Construction Trades	0	-	1	2	1	1	
11. Miscellaneous	0	-	2	3	2	1	
12. Basic Education	2	2	0	-	2	1	
TOTAL	86	100	61	100	147	100	

training category Health Services had been previously employed in the health care field (see Table 4.19). Many of these females shifted from Food Service (18%), Domestic Service (11%), Clerical/Sales (21%) and Service Trades (12%). Unlike the occupational shifts into Professional Health, there was not a significant difference in these shifts into Health Services by race (χ^2 = 10.7, df = 7). However, it was observed that more whites shifted from Clerical/Sales (29%) and more non-whites shifted from Food Service (20%) and Domestic Service (15%).

For post-training occupation categories Food Service and Clerical/Sales, the shifts were not as strong. As shown in Table 4.20, 51 percent of those in Food Service were previously employed in that category. The shifts into Food Service were not significantly different by race (χ^2 = 17.03, df = 7); non-white females tended to shift from Domestic Service (17%) and Clerical/Sales (12%), while white females shifted into Food Service from Health Services (11%) Metal Machining (10%). Such shifts may have had negative effects on a trainee's potential earning power, but may have been necessitated by labor market conditions existent at the time the job was sought. As shown in Table 4.21, 43 percent of those females in post-training category Clerical/Sales did not shift occupational categories. Of the shifts into Clerical/Sales, 14 percent were from Food Service - considered a positive effect of training. These shifts into Clerical/Sales were very different for whites and non-whites, as shown by the χ^2 = 20.74, df = 8.

Using the data from the MDTA Outcomes Study, the beneficial effects of the MDTA training program on the occupational shifts for female trainees have been shown in this portion of the analysis. Identification and description of

TABLE 4.19

FEMALES WITH POST-TRAINING OCCUPATION, HEALTH SERVICE, BY PRE-TRAINING OCCUPATION CATEGORY AND RACE

Pre-Training Occupation Category	WHITE No.	WHITE Percent	NON WHITE No.	NON WHITE Percent	TOTAL No.	TOTAL Percent	
1. Professional Health	2	3	1	1	3	2	20
2. Health Service	12	18	19	18	31	18	
3. Food Service	8	12	22	20	30	18	
4. Domestic Service	3	5	16	15	19	11	
5. Other Service	2	3	1	1	3	2	
6. Clerical/Sales	19	29	18	17	37	21	
7. Service Trades	9	14	12	11	21	12	
8. Metal Machining, Assembly	3	5	5	5	8	5	
9. Mechanics & Repair	0	-	0	-	0	-	
10. Construction Trades	2	3	0	-	2	1	
11. Miscellaneous	0	-	3	3	3	2	
12. Basic Education	5	8	11	10	16	9	
TOTAL	65	100	108	100	173	100	

TABLE 4.20

FEMALES WITH POST-TRAINING OCCUPATION, FOOD SERVICE, BY PRE-TRAINING OCCUPATION CATEGORY AND RACE

Pre-Training Occupation Category	WHITE		NON-WHITE		TOTAL	
	No.	Percent	No.	Percent	No.	Percent
1. Professional Health	1	2	0	-	1	1
2. Health Service	7	11	3	5	10	8
3. Food Service	33	54	28	47	61	51
4. Domestic Service	0	-	10	17	10	8
5. Other Service	1	2	1	2	2	2
6. Clerical/Sales	2	3	7	12	9	8
7. Service Trades	3	5	5	8	8	7
8. Metal Machining, Assembly	6	10	1	2	7	6
9. Mechanics & Repair	0	-	0	-	0	-
10. Construction Trades	0	-	0	-	0	-
11. Miscellaneous	1	2	0	-	1	1
12. Basic Education	7	11	4	7	11	9
TOTAL	61	100	59	100	120	100

TABLE 4.21

FEMALES WITH POST-TRAINING OCCUPATION, CLERICAL/SALES, BY PRE-TRAINING OCCUPATION CATEGORY AND RACE

	Pre-Training Occupation Category	WHITE No.	WHITE Percent	NON-WHITE No.	NON-WHITE Percent	TOTAL No.	TOTAL Percent
1.	Professional Health	0	-	2	1	2	-
2.	Health Service	11	5	32	9	43	8
3.	Food Service	36	17	42	12	78	14
4.	Domestic Service	2	1	20	6	22	4
5.	Other Service	5	2	3	1	8	1
6.	Clerical/Sales	98	46	139	41	236	43
7.	Service Trades	23	11	24	7	47	9
8.	Metal Machining, Assembly	20	10	30	9	50	9
9.	Mechanics & Repair	0	-	0	-	0	-
10.	Construction Trades	0	-	1	-	1	-
11.	Miscellaneous	4	2	9	3	13	2
12.	Basic Education	14	7	37	11	51	9
	TOTAL	212	100	339	100	551	100

other beneficial effects such as work satisfaction and increased income possibly related to the occupational shifts, are included in subsequent chapters of this report.

CHAPTER V

MEASURES OF TRAINING PROGRAM EFFECTIVENESS

This chapter consists of an examination of the effectiveness of the MDTA training program, focusing on training program assistance in job placement, length of training and income (pre-and post-training), and program completion rates.

A. JOB PLACEMENT

One method of evaluating the effectiveness of the MDTA training program is to analyze its success in placing graduates and the kinds of jobs in which they are placed. Of course, a primary concern is whether a placement is considered a better job (job upgrading) or a better paying job, given the trainee had a pre-training job. An additional concern is whether the graduate was placed in a position for which he was given training.

1. Placement Methods

The first consideration is the method of job placement for MDTA enrollees. The methods may be categorized into two major areas: personal contact and program/agency assistance (see Table 5.1). Of the females placed, 69 percent obtained a job through personal contact as compared with 73 percent of the male enrollees who were placed by the same method. Agency assistance was provided to 27 percent of females and 23 percent of male enrollees.

TABLE 5.1

METHOD OF JOB PLACEMENT FOR
MDTA ENROLLEES BY SEX

Placement Methods	Female		Male	
	No. Jobs	Percent	No. Jobs	Percent
Personal Contact	2444	69	2721	73
Direct Application	1454	41	1613	43
Referral by Friends	744	21	920	25
Newspaper	246	7	188	5
Program/Agency Assistance	943	27	855	23
MDTA Program Staff	408	12	255	7
State Employment Agency	384	11	408	11
Union Referral	9	-	129	3
Misc. Agencies	142	4	65	2
Other	117	3	109	3
No Response	35	1	37	1
Total Placements	3539	100	3732	100

Although a significant difference exists between men and women in the method of job placement ($\chi^2 = 14.04$, 1 df, $p < .005$), the important consideration is the difference between the numbers of jobs obtained through personal contact and through program/agency assistance. For both sexes, approximately three times as many post-training jobs are obtained through personal contact than through agency assistance. This suggests that employment services are of minor assistance to males or females—either because they were not called on to provide assistance or because they are not fulfilling their responsibilities. However, these agencies are providing greater assistance to females—particularly the MDTA program staff.

A closer look at the assistance provided by the MDTA program staff, and by state and miscellaneous placement agencies is presented in Table 5.2. Direct referral was provided for 55 percent of females and 61 percent of males; 30 percent of females and 27 percent of males were assisted in setting up the job interview. There are statistically significant differences between the male and female distributions; however, these differences are of little practical significance. Table 5.3 presents the numbers and percentages of enrollees, by sex and race, who were given help by the MDTA program staff. A higher percentage of females (39%) received aid; 32 percent of males received help, the difference being significant ($p < .001$). No differences were found by race within sexes.

2. Usefulness in Obtaining Employment

Was the training provided by the MDTA program an aid in securing post-training employment? The enrollee's opinions regarding the usefulness

TABLE 5.2

SPECIFIC TYPES OF AGENCY ASSISTANCE PROVIDED ENROLLEES, BY SEX

Type	Males		Females	
	Number	Percent	Number	Percent
Referral	535	61	54[illegible]	55
Filled out Application	86	10	104	11
Set up Interview	239	27	298	30
Other	20	2	40	4
Total	880	100	986	100

TABLE 5.3

MDTA PROGRAM STAFF ASSISTANCE TO ENROLLEES BY SEX AND RACE

	Assistance Provided		No Assistance	
	Number	Percent	Number	Percent
Total Group	1334	36	2399	64
Males	519	32	1119	68
White	330	31	731	69
Non-White	188	33	386	67
Females	815	39	1280	61
White	299	38	478	62
Non-White	513	39	791	61

of the training program, is presented in Table 5.4 by sex and race. A significantly greater number of women (58%) than men (36%) felt the program helped them get a job. White female respondents were more positive about the training and received more help from it in securing employment than non-white females, but the difference is not significant. The data does indicate that females are much more positive than men about the benefits of the training.

TABLE 5.4

USEFULLNESS OF TRAINING IN OBTAINING POST-TRAINING OCCUPATION BY SEX AND RACE

Group	Training helped get job		Training no help in acquiring job	
	No.	Percent	No.	Percent
Male	900	36	1582	64
White	640	37	1087	63
Non-White	260	34	495	66
Female	1386	58	990	42
White	597	60	392	40
Non-White	789	57	598	43

Of those enrollees who felt the training helped them get a job, what specific aspects of that training were responsible? A breakdown of the importance of MDTA training in job acquisition, by sex, is shown in Table 5.5. Little difference is observed between males and females in their response distributions, but differences are observed in the training aspects chosen

as important. Three aspects are significant: learning a skill, qualification for a job, and the teaching of fundamentals. These account for 70 percent of the responses of females and 68 percent of responses for males. The program seems to provide the necessary occupational skills for success in a new job, as indicated by the responses of those graduates who actually obtained employment. Those graduates who did not find work may feel differently about the program's scope and usefulness.

A natural extension of the previous discussions is the degree of utilization of the training in the post-training job. Table 5.6 presents this breakdown by sex, and by race (within the female category). Females respond to the question in a more positive manner than males. In 62 percent of the jobs secured by female graduates, training was used to some degree, compared to only 39 percent for males. This suggests that female placements are more apt to be training-related.

B. LENGTH OF TRAINING AND TRAINEE INCOME

A breakdown of trainees by length of training by sex and race is found in Table 5.7. Frequencies and percentages for males and females, and for whites and non-whites are presented. Based upon this table, a comparison was made between those receiving 6 months or less of training and those receiving 7 or more months of training. There was a significant difference in the proportions of males and females classified in these two categories (χ^2=19.31, 1 df) with males occupying the 1-6 month category to a proportionately greater degree (see Table 5.8). The association, however, is very weak (ϕ =.08).

TABLE 5.5

IMPORTANCE OF MDTA TRAINING IN JOB ACQUISITION BY SEX*

	Female		Male	
	No.	Percent	No.	Percent
Training Aspects	1146	72	679	69
Qualified for job	391	25	234	24
Learn skill	373	23	242	25
Taught fundamentals	343	22	183	19
Program got job	140	9	125	13
Pass test	80	5	28	3
Find job	78	5	68	7
Personal	74	5	20	2
Basic education	73	5	63	6
OJT	39	2	20	2
Total Responses	1591	101	781	101

* All percentages have been rounded up.

TABLE 5.6

TRAINING-RELATED POST-TRAINING EMPLOYMENT, BY SEX AND RACE

	Training Used		Training not Used	
	Number	Percent	Number	Percent
Males	961	39	1521	61
Females	1470	62	906	38
White	639	65	350	35
Non-White	831	60	556	40

TABLE 5.7

SPECIFIC LENGTH OF TRAINING OF ALL RESPONDENTS BY SEX AND RACE

	1 Mo.	2 Mos.	3 Mos.	4 Mos.	5 Mos.	6 Mos.	7 Mos.	8 Mos.	9 Mos.	10 Mos.	11 Mos.	12 Mos.	>12 Mos.	TOTAL
Male:														
White	70	97	106	86	118	85	83	58	51	35	34	20	42	885
Percent	8	11	12	10	13	10	9	7	6	4	4	2	5	101
Non-White	28	67	56	47	51	57	53	32	32	36	6	7	26	498
Percent	6	14	11	9	10	12	1	6	6	7	1	1	5	99
Sub-Total	98	164	162	133	169	142	136	90	83	71	40	27	68	1383
Percent	7	12	12	10	12	10	0	7	6	5	3	2	5	101
Female:														
White	35	85	78	56	40	56	65	60	42	48	28	28	62	683
Percent	5	12	11	8	6	8	9	9	6	7	6	4	9	100
Non-White	24	147	123	101	112	118	124	103	69	39	24	32	74	1090
Percent	2	13	11	9	10	11	11	9	6	4	5	3	7	101
Sub-Total	59	232	201	157	152	174	180	163	111	87	52	60	136	1773
Percent	3	13	11	9	9	10	11	9	6	5	3	3	8	1 [illegible]
GRAND TOTAL	157	396	363	290	321	316	325	253	194	158	92	87	204	3156
PERCENT	5	13	12	9	10	10	10	8	6	5	3	3	7	2 [illegible]

TABLE 5.8

REGROUPED LENGTH OF TRAINING OF RESPONDENTS BY SEX AND RACE

Group	≤6 mos.	>6 mos.	Total
Male	868	515	1383
Female	975	798	1773
White	(350)	(333)	(683)
Non-White	(625)	(465)	(1090)

TABLE 5.9

RESPONDENTS WITH SHORT PERIOD OF TRAINING VERSUS LONG TRAINING PERIODS BY SEX AND RACE

Group	1-2 mos.	>12 mos.	Total
Male	262	68	330
Female	291	136	427
White	(171)	(74)	(245)
Non-White	(120)	(62)	(182)

As shown in Table 3.9, in the extreme categories ("two months or less" of training, and "greater than 12 months" of training), the comparison of males and females also resulted in a significant χ^2 value of 11.95, 1 df. This results from a higher relative frequency of females in the "greater than 12 months" category and a larger percentage of males in the "two months or less" category (a good indicator of the strength of this association between sex and length of training is indicated by Φ =.25).[1] Comparing for differences between white and non-white females, using the same categories, no significant difference was noted between races for either comparison (χ^2=6.30 for the comparison between "six or less months" and "seven or more months" of training; χ^2=.72 for the comparison between "two or less months" of training and "greater than 12 months" of training).

Examination of females and males with no pre-training earnings (Table 5.10) indicates that males in this category usually were given a longer training period than males having some pre-training earnings; for females this is not the case. The distribution of females for those without pre-training earnings is essentially the same as for females overall in the institutional training program. This may result from the large percentage of female MDTA Outcomes Study respondents in the zero pre-training earnings category. Thus, females in this category may differ very little from females with some pre-training earnings. This is not true for men; men in this category tended to receive additional training, compared with men who had pre-training earnings.

1/Should be noted, however, that high statistical significance and a high degree of association are not always synonymous.

TABLE 5.10

DISTRIBUTION OF RESPONDENTS WITH ZERO PRE-TRAINING EARNINGS BY LENGTH OF TRAINING, SEX AND RACE

	LENGTH OF TRAINING (months)													
	1	2	3	4	5	6	7	8	9	10	11	12	> 12	Total
Males														
Total	12	9	10	17	7	13	21	8	11	11	6	4	10	139
Percent	9	6	7	12	5	9	15	6	8	8	4	3	7	99
White	9	4	6	9	6	5	9	6	6	3	5	2	5	75
Percent	12	5	8	12	8	7	12	8	8	4	7	3	7	101
Non-White	3	5	4	8	1	8	12	2	5	8	1	2	5	64
Percent	5	8	6	13	2	13	19	3	8	13	2	3	8	103
Females														
Total	21	113	94	75	62	82	83	74	54	37	22	22	59	798
Percent	3	14	12	9	8	10	10	9	7	5	3	3	7	100
White	6	30	25	19	6	14	22	22	13	17	6	6	17	203
Percent	3	15	12	9	3	7	11	11	6	8	3	3	8	99
Non-White	15	83	69	56	56	68	61	52	41	20	16	16	42	595
Percent	3	14	12	9	9	11	10	8	7	3	3	3	7	99

A look at Table 5.11 presents a clear picture of the relationship between post-training earnings when taken as a percent of pre-training earnings.[2] A range from zero to greater than 175 percent, by sex and race is shown. Note the differences, by sex, among respondents with zero post-training earnings — females have a higher percentage without post-training income. Other comparisons will be explored in future sections.

It is indicated that length of training and earnings increase are correlated. Table 5.12 presents that percent of those in the category "greater than 175 percent of pre-training earnings" for males and females by months of training; and for white and non-white females by months of training received (Table 5.13). For the total MDTA Outcomes Study sample, there is a strong correlation between length of training and the percent of respondents (by month) reporting current earnings greater than 175 percent of their former earnings; Kendall's $\tau = .81$ indicates the strength of this positive linear association. For women, $\tau = .56$, again indicates that if the period of training is held constant, women's training programs or occupations after training may be more homogeneous than men's with respect to earnings potential, because increase in earnings is less closely associated with training period. For white and non-white women, there seems to be no difference in percent responding in the category "greater than 175 percent increase" by months of training, indicated by $t = -.194$, 12 df.

Likewise, between men and women, for those reporting 175 percent or more of their pre-training earnings as post-training earnings, $t = -2.10$,

---

2/Those respondents with zero pre-training earnings are excluded here, as there is no base for calulations.

TABLE 5.11

POST-TRAINING EARNINGS AS A PERCENT OF PRE-TRAINING EARNINGS BY SEX AND RACE

GROUP	Post Training Earnings	Percentage of Pre-Training Earnings																TOTAL *
Males:	=0	50	75	85	90	95	100	105	110	115	120	125	130	140	150	175	>175	
White	59	101	56	39	27	16	23	31	42	31	16	17	12	23	25	34	258	810
Percent	7	13	7	5	3	2	3	4	5	4	2	2	1	3	3	4	32	100
Non-White	52	62	36	14	7	9	10	14	7	10	7	5	5	17	18	22	142	434
Percent	12	14	8	3	2	2	2	3	2	2	2	1	1	4	4	5	33	100
Total	111	163	89	53	34	25	33	45	49	41	23	22	17	40	43	56	400	1,244
Percent	9	13	7	4	3	2	3	4	4	3	2	2	1	3	4	5	32	100
Female:																		
White	71	18	29	4	10	7	11	11	9	9	6	9	10	16	11	26	193	180
Percent	15	10	6	1	2	2	2	2	2	2	1	2	2	3	2	5	40	99
Non-White	77	61	21	9	6	8	7	12	9	5	8	9	7	19	19	21	198	196
Percent	16	12	4	2	1	2	1	2	2	1	2	2	1	4	4	4	40	100
Total	148	109	50	13	16	15	18	23	18	14	14	18	17	35	30	47	391	976
Percent	15	11	5	1	2	2	2	2	2	1	2	2	2	4	3	5	40	100
TOTAL-ALL	259	272	139	66	50	40	51	68	67	55	37	40	34	75	73	103	791	2,220
Percent	12	12	6	3	2	2	2	3	3	2	2	2	2	3	3	5	36	101

* Total excludes respondents with zero pre-training earnings.

TABLE 5.12

POST-TRAINING EARNINGS GREATER THAN 175 PERCENT OF PRE-TRAINING EARNINGS AND ANY EARNINGS INCREASE BY LENGTH OF TRAINING AND SEX

MOS.	MALE					FEMALE				
	>175% Earnings Increase	Percent of Total	Any Earnings Increase	Percent of Total	Total with Pre-Training Earnings	> 175% Earnings Increase	Percent of Total	Any Earnings Increase	Percent of Total	Total with Pre-Training Earnings
1	16	19	45	52	86	10	26	20	53	38
2	48	31	78	50	155	41	34	75	62	120
3	41	27	89	59	152	40	37	65	61	107
4	36	31	67	58	116	34	41	52	63	82
5	40	25	94	58	162	42	47	59	66	90
6	37	29	80	62	129	38	41	60	65	92
7	43	37	72	63	115	37	35	55	52	106
8	31	38	53	65	82	34	38	52	58	89
9	31	45	47	65	72	24	42	40	70	57
10	31	52	45	75	60	20	40	36	72	50
11	14	41	22	65	34	15	50	19	63	30
12	13	57	14	61	23	20	53	26	68	38
>12	19	33	30	52	58	36	47	48	62	-
TOTAL	400	32	736	59	1241	391	40	607	62	975

TABLE 5.13

FEMALE POST-TRAINING EARNINGS GREATER THAN 175 PERCENT OF PRE-TRAINING EARNINGS AND ANY EARNINGS INCREASE BY LENGTH OF TRAINING AND RACE

	WHITE					NON-WHITE				
MOS	>175% Earnings Increase	Percent of Total	Any Earnings Increase	Percent of Total	Total with pre-Training Earnings	>175% Earnings Increase	Percent of Total	Any Earnings Increase	Percent of Total	Total with Pre-Training Earnings
1	7	24	15	52	29	3	33	5	56	9
2	20	36	34	62	55	21	32	41	63	65
3	22	42	29	55	53	18	33	36	67	54
4	19	51	29	79	37	15	33	23	51	45
5	14	41	24	71	34	28	50	35	63	56
6	18	43	23	55	42	20	40	37	74	50
7	14	33	24	56	43	23	37	31	49	63
8	15	40	23	61	38	19	37	29	57	51
9	12	41	22	76	29	12	43	18	64	28
10	13	42	23	74	31	7	37	13	68	19
11	13	59	15	68	22	2	25	4	50	8
12	6	27	12	55	22	14	88	11	88	16
12	20	44	27	60	45	16	50	21	66	32
TOTAL	195	40	300	63	480	198	40	307	62	496

$p < .10$ indicates no significant difference in length of training between sexes. However, it is difficult to assess just what this test result means because of the larger proportion of females without pre-training earnings (45% vs. 10% for males), their lower expectation for income and the exclusion of those females without pre-training earnings from the analysis for this factor. An increase of 175 percent in income may represent less in dollar amounts for women than for men. One would expect that women's incomes, on the average, would be lower than men's for the pre-training income, given the lower employment rate in the women's group and the lower income expectations (to be discussed in a subsequent section).

A test for differences between the percentages of males and females reporting some increase in income (over 100% of their former salary) after training indicated no significant difference between males and females ($t = -1.25$, $p < .4$), although females had a slightly higher percentage reporting post-training income greater than pre-training income. For females, a t test ($t = .139$) also indicated no significant difference between whites and non-whites (see Table 5.14) having some increase in income. Likewise, a test for women resulted in a Kendall's $\tau = .077$, indicating no significant linear association between the two variables.

Similar findings resulted from tests for correlation using percentages of females, by months of training, reporting no post-training earnings and length of training (Kendall's $\tau = .026$) and from tests for differences between white and non-white females using percentages reporting no post-training earnings ($t = .1798$) — both indicating a lack of relationship between length of training and unemployment after training for females

TABLE 5.14

EARNINGS CHANGE:
PRE-TRAINING TO POST-TRAINING, BY SEX AND RACE*

	Earnings Change			
	Any Increase		No Increase	
Group	No.	Percent	No.	Percent
Males	736	59	508	41
White	489	60	321	40
Non-White	247	57	187	43
Females	607	62	369	38
White	300	63	180	37
Non-White	307	62	189	38
Total	1343	60	877	40

*Excludes respondents with zero pre-training earnings

whether white or non-white. Between males and females however, a "t" test ($t = -3.08$, $p < .01$) indicated a significantly higher percentage of females reporting no post-training earnings, pairing on months of training (see Table 5.15). A Chi-square test was performed also on the totals shown in Table 5.15 indicating a significantly greater ($p < .01$) percentage of females than males with zero post-training income.

Additionally, it should be noted that the respondents reporting zero post-training earnings in this analysis (Table 5.15) were persons who had had pre-training earnings, and that those without pre-training earnings were not included. More than two-thirds of those females without pre-training earnings, likewise, did not have post-training earnings. Thus, the unemployment picture for women after training may be even more severe than is indicated. It seems that the training program was more successful for men in gaining employment after training than it was for women.

However, the greater percentage of females in each category of months of training who received earnings increases after conclusion of training indicates that the program has been slightly more successful in increasing earnings for those females who had been employed prior to training than for men, especially in the group with six months or less of training. Examination of Table 5.12 indicates that after the six months training period the relationship is less clear. Likewise, the low correlation for women between length of training and earnings increase indicates the proportionately lower benefits derived from training by women in terms of return for time invested.

TABLE 5.15

RESPONDENTS WITH NO POST-TRAINING EARNINGS INCREASE
BY MONTHS IN TRAINING AND SEX

Months	MALES			FEMALES		
	Number with No Income	Percent of Total	Total	Number with No Income	Percent of Total	Total
1	7	8	86	7	18	38
2	12	8	155	9	8	120
3	12	8	152	14	13	107
4	10	9	116	15	18	82
5	13	8	162	14	16	90
6	12	9	129	12	13	92
7	14	12	115	24	22	109
8	2	2	82	15	17	89
9	7	8	72	4	7	57
10	5	8	60	3	6	50
11	2	6	34	6	20	30
12	2	9	23	4	11	38
> 12	13	22	58	21	27	77
TOTAL	111	9	1244	148	15	976

Comparison of the number of male and female respondents reporting the raises in salary had been received with those who reported no raises received indicated no significant association with sex of respondent, with $\chi^2 = 2.19$, 1 df; $\phi = .03$ also indicating the weakness of this association. However, a slightly higher percentage of females did report raises received. There was no significant association for female respondents between race and those reporting raises received ($\chi^2 = .038$, 1 df).

Specific information on post-training earnings by length of training and sex is provided in Tables 5.16 and 5.17. Table 5.16 presents average earnings for those respondents with zero pre-training earnings; Table 5.17 shows average incremental earnings for respondents with some pre-training earnings.

It is hypothesized that there is a positive linear relationship between length of training and post-training earnings; such a relationship is exhibited in Figure 1. The more technical and complex training courses should require longer training periods; these training courses also should demand higher relative wages. The more advanced and technical courses should be included in training categories Professional Health, Metal Machining and Assembly, and Construction Trades. An examination of the data justify such hypotheses.

TABLE 5.16

AVERAGE POST-TRAINING EARNINGS (DOLLARS) BY LENGTH OF TRAINING, AND SEX

(ZERO PRE-TRAINING EARNINGS)

Sex*	LENGTH OF TRAINING (Months)												
	1	2	3	4	5	6	7	8	9	10	11	12	>12
Males	1785	910	1551	2058	2762	1706	1978	3354	2743	2499	3330	3821	1624
Females	2403	1813	1922	1940	1923	1859	2130	1994	2270	2130	2508	1986	2653

* Data unavailable by race

TABLE 5.17

AVERAGE INCREMENTAL POST-TRAINING EARNINGS (DOLLARS) BY LENGTH OF TRAINING AND SEX
(RESPONDENTS WITH PRE-TRAINING EARNINGS)

Sex*	LENGTH OF TRAINING (Months)												
	1	2	3	4	5	6	7	8	9	10	11	12	>12
Males	206	128	587	525	377	815	1200	693	1404	1558	1189	1241	890
Females	389	455	576	933	967	960	751	938	1143	1341	1090	1515	2000

* Data unavailable by race

Figure 1

AVERAGE POST-TRAINING EARNINGS (DOLLARS) BY LENGTH OF TRAINING AND SEX
(ZERO PRE-TRAINING EARNINGS)

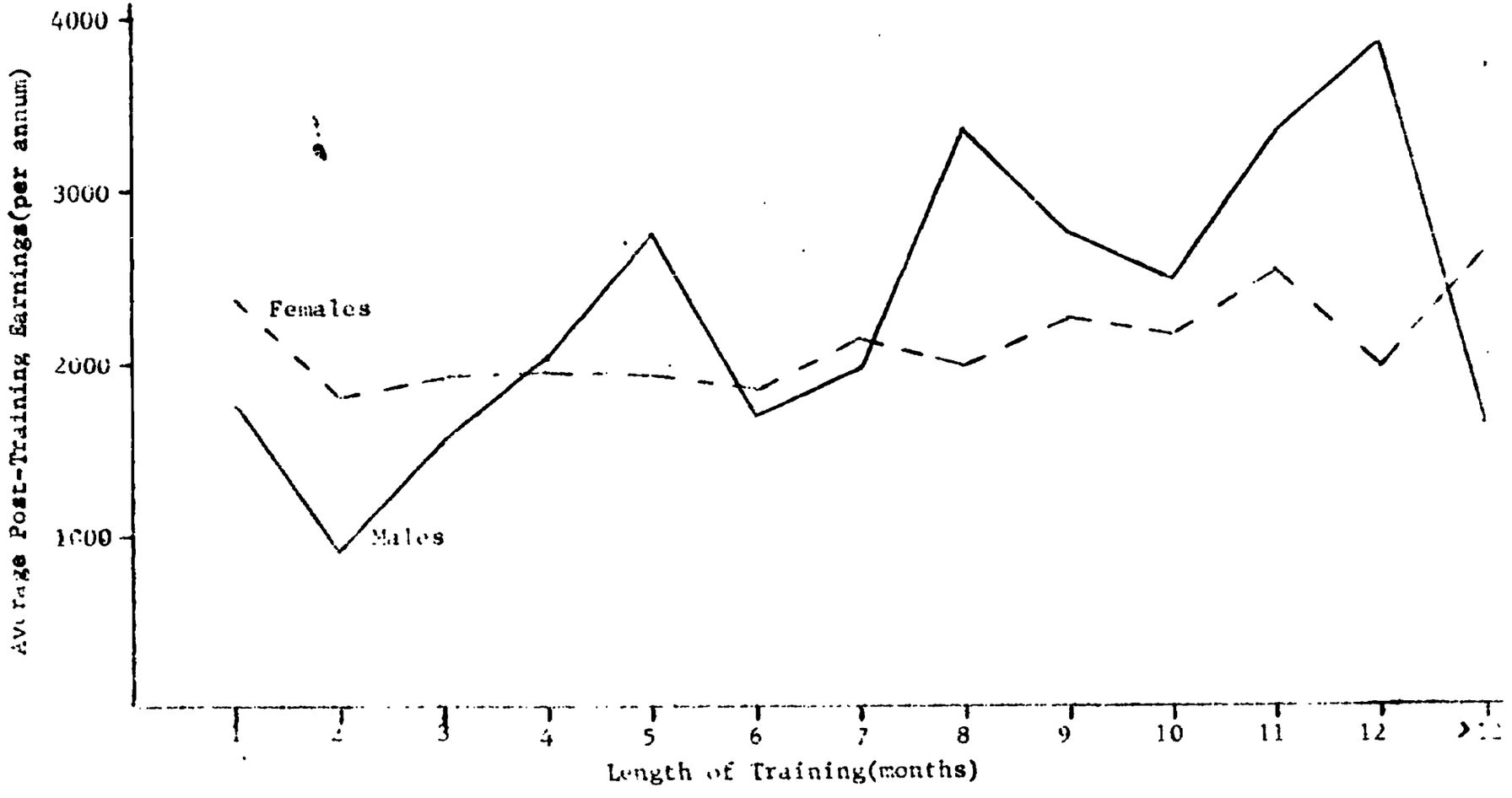
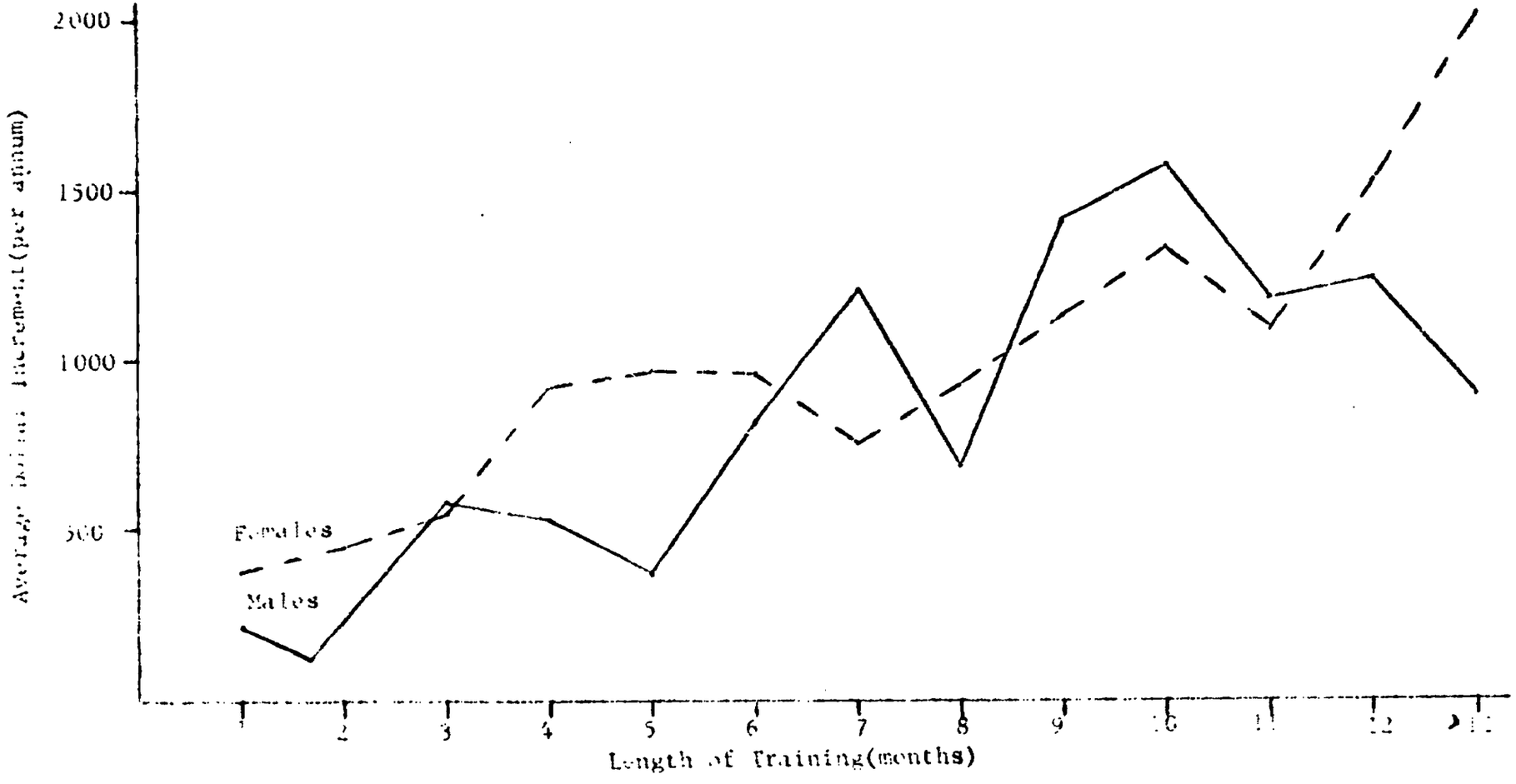


Figure 2

AVERAGE INCREMENTAL EARNINGS(DOLLARS) BY LENGTH OF TRAINING AND SEX
(RESPONDENTS WITH PRE-TRAINING EARNINGS)



In addition to the distribution just mentioned, summary statistics for post-training earnings (trainees with no pre-training earnings) by selected months of training are provided:

Group	≤6 mos.	>6 mos.	All months
Males	$1050	$1435	$1247
White	1125	1700	1401
Non-white	554	1163	887
Females	548	757	640
White	1376	1800	1591
Non-white	308	324	315

These figures provide evidence of the disparities among post-training incomes during short (≤6 mos.) and long (>6 mos.) training periods by sex. Average earnings during the longer period are higher for both groups, with males receiving the highest average earnings; females have higher average earnings in the shorter training periods. The strongest correlation between post-training earnings of those having no pre-training earnings and length of training is for males, although the correlation is not significantly higher than for females. Average post-training earnings for females having no pre-training earnings closely resemble those for males, but males do have the highest post-training earnings in seven of the 13 months — five of these are in the longer training period.

Similar findings result from an inspection of Table 5.17 and Figure 2, furnishing information about incremental earnings for those respondents with pre-training earnings. Selected averages are furnished:

Earnings (per annum)

Group	≤6 mos.	>6 mos.	All months
Males	$338	$ 966	$572
White	368	992	596
Non-white	281	932	532
Females	601	765	679
White	806	1045	922
Non-white	389	564	464

Disparities in earnings again are evident, with females maintaining higher incremental earnings than males. Dollar increments for all groups are highest in the longer training period, with male's earnings closely resembling those of white females. Incremental earnings in the shorter period are comparatively low for males. Females have higher incremental earnings in eight of the 13 months, but only three of these fall in the longer training period (as shown in Table 5.17).

Females in the shorter training period are expected to be paid more, as their traditional occupational categories (excluding Professional Health) correspond to these shorter training lengths. The high incremental earnings for females who had the longer training periods seems to indicate their acceptance into the more technical occupations. Coupled with previous findings, females experience earnings increases more frequently than males and the absolute size of these increments is, in many cases, greater than comparable increases for males. Of course this does not imply that average gross earnings of females (with pre-training earnings) are greater than comparable earnings of males. Female occupational shifts into Professional Health and Clerical/Sales account, in part, for their increase in earnings, as these occupational clusters are the better paying fields. A look at the

post-training occupation structure by post-training earnings will give a clearer picture of where these incremental earnings really appear.

Post-training earnings do vary depending upon the occupation category chosen. To determine job upgrading (in terms of status and/or relative wages) for females, it is necessary to follow their occupation shift from those "traditional" female categories into a more professional category or into generally more skilled male-dominated jobs, if such a shift does exist. For example, the flow of women into Health Professionals, is indicative of job upgrading.

Post-training earnings by post-training occupation and sex (for those respondents with zero pre-training earnings) is presented in Table 5.18. Average earnings across all occupations show that males report the highest average post-training earnings, although the amount is only slightly greater than that for females. In addition to their earnings superiority in male-dominated occupation categories, males also show high earnings in Food Service. This is not unexpected, for example, as bakers are more often male than female. The female average is weighted heavily by earnings in Professional Health, Services and Clerical/Sales, although significant earnings are noted in Metal Machining, Assembly and Construction Trades (still less than male earnings).

An entirely different picture is revealed when average incremental earnings by post-training occupation for respondents with pre-training earnings is examined; such a distribution is found in Table 5.19. Across all occupation categories females have higher incremental earnings than males, the difference being significant ($p < .1$). The incremental earnings

TABLE 5.18

AVERAGE POST-TRAINING EARNINGS(DOLLARS) BY POST-TRAINING OCCUPATION, AND SEX

(ZERO PRE-TRAINING EARNINGS)

Sex[1]	Post-Training Occupation Category[2]												Average Across[3] All Occupations
	1	2	3	4	5	6	7	8	9	10	11	12	
Male	648	60	1763	0	0	1578	2141	4116	1459	3114	0	869	2140
Female	3387	2176	1154	1443	132	2333	1309	2523	0	2547	1745	1512	2057

1 Data unavailable by race

2 Explanation of categories is found in Table 1.4.

3 Average across all categories also includes respondents not classified into one of the 12 occupation clusters.

TABLE 5.19

AVERAGE INCREMENTAL POST-TRAINING EARNINGS (DOLLARS) BY POST-TRAINING OCCUPATION AND SEX

(RESPONDENTS WITH PRE-TRAINING EARNINGS)

Sex [1]	Post-Training Occupation Category [2]												Average Across [3] All Occupation
	1	2	3	4	5	6	7	8	9	10	11	12	
Male	1459	629	72	-530	0	601	565	1014	806	957	696	661	692
Female	1748	865	70	305	1091	1185	542	1107	177	1927	814	867	968

1 Data unavailable by race

2 Explanation of categories is found in Table 4.4.

3 Average across all categories also includes respondents not classified into one of the 12 occupation clusters.

of females in the male-oriented categories, Metal Machining, Assembly and Construction Trades were substantial; but the number of females having those post-training occupations was only half the number having them as a pre-training occupation (see Tables 4.8 and 4.12). As shown previously by Table 4.12, the numbers of women in these male-dominated occupations is still relatively small; therefore, the observed higher earnings of females must be kept in perspective.

These findings do contain elements of contamination, e.g., pre-training job experience, quality of program graduates. Proportionately, more males had previous job histories (whether or not related to post-training occupation) which gave them advantages in securing new jobs. Similarly, among females, a greater percentage of non-whites than whites had some pre-training earnings.

In addition, for males and females, no data was available on the quality of trainees completing the program. That is, did they achieve any more than a minimal level of expertise; were they really capable of functioning in the occupation for which trained? The content of most of these training programs is such to assume that most trainees attained an acceptable level of proficiencey, adequately preparing them for their future specialty.

C. COMPLETION OF TRAINING

Women, regardless of race, have higher training program completion rates than men. Table 5.20 presents the number and percentage of males and females, by race, who completed the MDTA Training Program. The completion

TABLE 5.20

MDTA TRAINING PROGRAM COMPLETIONS
BY SEX AND RACE

	Completed Program		Did Not Complete		Total
	Number	Percent	Number	Percent	Number
Male	1021	74	362	26	1383
White	686	77.5	199	22.5	885
Non-White	335	67	163	33	498
Female	1409	79	363	21	1772
White	557	81.5	127	18.5	684
Non-White	852	78	236	22	1088

rate for females was 79 percent and 74 percent for males, a significant difference (χ^2 = 17.31, df = 1). Within sexes, little difference in overall completion rates was observed between white and non-white females; however, non-white males had a significantly lower completion rate than white males (67 percent vs. 77.5 percent), as shown by a chi-square value = 14.21, df = 1.

The higher training completion rates of females than males complement the higher education attainment level of female enrollees. When the two variables are combined (as is shown in Table 5.21), the positive relationship between completion rate and level of education can be observed for all trainee sub-groups except non-white males. For non-white females having at least an eighth grade education, this relationship between the two variables is particularly strong.

When the training completion rates are cross-tabulated by training occupation the rate differences between males and females and between whites and non-whites are again observable. For female enrollees in the MDTA Outcomes Study the health service training programs (Professional Health and Health Service) had higher completion rates than other program categories -- and significantly higher rates than any of the male-dominated training categories (see Tables 5.22 and 5.23).

Using completion rates as a measure of success of the MDTA Training Program, the program was more successful for females than for males in the study. But when the income measure was added, the program appears to have been more successful for males in the study, as the women continued to be paid less than the men during the post-training period.

TABLE 5.21

MDTA TRAINING PROGRAM COMPLETIONS BY SEX, RACE AND LEVEL OF EDUCATION

	Level of Education											
	<8		8		9-11		12		>12		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Male												
White Total	103	100	120	100	309	100	257	100	96	100	885	100
Completed	75	73	89	74	233	75	13	83	76	79	686	77.5
Did Not Comp.	28	27	31	26	76	25	44	17	20	21	199	22.5
Non-White Total	65	100	46	100	207	100	136	100	44	100	498	100
Completed	47	72	29	63	127	61	104	76	28	64	335	67
Did Not Comp.	18	28	17	37	80	39	32	24	16	36	163	33
Female												
White Total	26	100	57	100	210	100	285	100	106	100	684	100
Completed	19	73	42	74	166	79	241	85	90	85	557	81.5
Did Not Comp.	7	27	15	26	45	21	44	15	16	15	127	18.5
Non-White Total	59	100	68	100	358	100	487	100	116	100	1088	100
Completed	49	83	45	66	260	73	401	82	97	84	852	78
Did Not Comp.	10	17	23	34	98	27	86	18	19	16	236	22

TABLE 5.22

MDTA TRAINING PROGRAM COMPLETIONS FOR FEMALES BY RACE AND TRAINING

	TRAINING OCCUPATION							
	1		2		6		12	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
White Total	154	100	62	100	291	100	79	100
Completed	133	86	55	89	233	80	60	76
Did Not Comp.	21	14	7	11	58	20	19	24
Non-White Total	128	100	138	100	523	100	107	100
Completed	100	78	115	83	401	77	83	78
Did Not Comp.	28	22	23	17	122	23	24	22

TABLE 5.23

MDTA TRAINING PROGRAM COMPLETIONS FOR MALES BY RACE AND TRAINING OCCUPATION

	TRAINING OCCUPATION							
	8		9		10		12	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
White Total	307	100	203	100	89	100	106	100
Completed	224	73	159	78	70	79	77	73
Did Not Comp.	83	27	44	22	19	21	29	27
Non-White Total	115	100	148	100	35	100	49	100
Completed	68	61	100	68	25	71	33	67
Did Not Comp.	47	39	48	32	10	29	16	33

CHAPTER VI

INCOME/EMPLOYMENT FACTORS

This section of the report examines the data to determine what impact the MDTA Training program has on the general and specific patterns of employment and earnings outcome for women. We have analyzed these factors in terms of the following variables: work satisfaction, income expectations, employment stability, job preferences, and income impact measures. The data collection instruments for Phase II were designed to provide additional data so that further analysis can determine what factors within the MDTA program may influence the success or failure of females in the labor force.

Measurements of the success of the program for the trainee sub-groups must be determined not only by objective factors (e.g., income increase, advancement on the job, lower rates of unemployment) but also subjective factors (e.g., work satisfaction, achievement of income expectations, attitude toward employment of the value placed on the income or prestige of an occupation by the respondents). The latter constitute personal criteria for success; that is, are the respondents more successful as a result of the training according to their personal attitudes, values, and preferences?

A. IMPORTANCE OF EMPLOYMENT

Some assessment of the importance of employment can be inferred through reports from respondents that, during periods of unemployment, they either were or were not seeking employment. If respondents did not care to be employed, the resulting unemployment could not be considered

a direct failure of the federal program. The χ^2 for association between the job seeking during times of unemployment and the sex of respondents shows that a significantly larger percentage of males reported seeking jobs than females, ($\chi^2 = 245.96, \phi = .231$). The strength of this association (as shown by phi) indicates a good relationship between these two variables. Higher unemployment for women, therefore, appears to be more often a result of personal choice than unemployment among males. Whether the higher unemployment and lower desire for employment reflect women's general pessimism that their employment will not be personally satisfying or will not be economically profitable for them, or whether it results more from dissatisfaction with household activities among married women and less from pressure by economic concerns is a question that cannot be resolved in this analysis (see Table 6.1). For whatever reason, females reported not seeking jobs for over half the periods of unemployment reported (52.87%), whereas men reported not seeking employment for only 29.43 percent of unemployment periods.

Comparing white and non-white females, the $\chi^2 = 7.79$ indicates no significant association between race and job-seeking behavior in times of unemployment for females. (Table 6.1)

TABLE 6.1

PERIODS OF UNEMPLOYMENT BY WHETHER RESPONDENT WAS SEEKING WORK

	Yes		No		Total
	Number	Percentage	Number	Percentage	
White Females	455	43.71	586	56.29	1041
Non-White Females	857	49.17	886	50.83	1743
Total Females	1312	47.13	1472	52.87	2784
Total Males	1285	70.57	536	29.43	1821
Total Periods	**2597**	**56.40**	2008	43.60	4605

B. WORK SATISFACTION

A second factor, work satisfaction, was examined to determine significant differences between males and females, and significant differences between white and non-white females (see Table 6.2). The χ^2 tests for those who were completely satisfied or very satisfied with their work as compared with those who were a little or very dissatisfied indicates no significant difference in response patterns by sex of respondent or by race of females ($\chi^2_s = 1.778$ and $\chi^2_r = 6.760$, respectively). Differences in satisfaction with work, therefore, do not explain the differences between males and females in job-seeking behavior.

TABLE 6.2

REPORTED WORK SATISFACTION

Reported Work Satisfaction	Males	Females			Total
		White	Non-White	Total	
Completely Satisfied	282	223	266	489	771
Very Satisfied	563	239	388	627	1170
Neutral	239	103	203	306	545
Little Dissatisfied	195	86	163	249	444
Very Dissatisfied	105	32	70	102	207
Total	1384	683	1090	1773	3157
% Ranked High	61.05	67.64	60.00	62.94	62.12
% Ranked Low	21.68	17.28	21.38	19.80	20.62

C. INCOME EXPECTATIONS

Table 6.3 indicates the salary expectations of males and females. Comparisons were made between those with high income expectations (defined as more that $145 a week) and those with low income expectations (defined as less than minimum wage of $2.65 per hour, based on a 40 hour week--$105 or less per week). The χ^2 for association with sex of respondents, or with race for females indicated a significant difference between sex and income expectations being either high or low (χ^2 = 439.72, ϕ = .5051 but no significant difference between race of females and high or low income expectations (χ^2 = .074). The marked difference in income expectations between males and females, coupled with the equal importance placed on income in assessment of jobs between males and females indicates that a greater percentage of females may feel that work will not be a rewarding investment of their time than do males. The higher importance generally placed on salary by non-white females than by white females combined with the higher pre-training unemployment for non-white females may indicate that they are more pessimistic about work being rewarding than are their white counterparts. (see Table 6.4)

TABLE 6.3

INCOME EXPECTATION PER WEEK

$ Per Week	Total Male	White Female	Non-White Female	Total Female	Total Male & Female
Under $55	60	66	60	126	186
$55-$65	25	22	36	58	83
$66-$75	23	38	49	87	110
$76-$85	36	56	86	142	178
$86-$95	25	55	83	138	163
$96-$105	106	93	133	226	332
Sub-Total $0-$105 (Low Income Expectation)	275	330	447	777	1052
$106-$115	55	47	68	115	170
$116-$125	115	69	91	160	275
$126-$135	50	23	32	55	105
$136-$145	73	17	21	38	111
Over $145 (Hi Income Expectation)	532	64	91	155	687
Sub-Total	1137	568	821	1389	2526
% Hi Expectation	46.79	11.27	11.08	11.16	27.20
% Low Expectation	24.19	58.10	54.45	55.94	41.65
Don't Know, No Answer	247	115	269	304	631
Total	1384	683	1090	1773	3157

TABLE 6.4

RANK OF SALARY IMPORTANCE TO RESPONDENT GROUPS

Rank	Males	Females			Total
		White	Non-White	Total	
1	395	142	328	470	865
2	317	166	257	423	470
3	257	171	228	399	656
4	172	93	142	235	407
5	127	67	89	156	283
6	116	44	46	90	206
Total	1384	683	1090	1773	3157
Ranked 1 or 2	51.44	45.10	53.67	50.37	42.29
Ranked 5 or 6	17.36	16.25	12.39	13.87	15.49

D. JOB PREFERENCES

Respondents were asked to rank factors of importance to them in acquisition of employment. Table 6.5 provides a percentage breakdown of the responses to each of the factors by sex.

Comparisons were made between males and females for those ranking salary-income 1st or 2nd and those ranking salary-income 5th or 6th. The χ^2 association between males and females ranking the importance of salary-income indicates no significant difference as shown by (χ^2 = 4.30). However, for females χ^2 = 9.37 indicated a significant difference in ranking the importance of salary for white and non-white females, although the association was not highly significant, as shown by (ϕ = .091). A comparison shows that 81.25 percent of the non-white females compared with only 73.51 percent of the white females considered salary first or second importance in the acquisition of employment. Respondents were asked to rank other job characteristics in addition to income/salary according to the importance of factors to them in a job. Job security was listed as first importance by both males and females proportionally more frequently than any of the other job characteristics, (see Table 6.6).

Comparisons between males and females who listed job security and income/salary first or second (high importance) show that job security takes second place in importance to salary/income for females, while it is ranked in the first position by males. This might suggest that mere employment is not as important for women respondents on the whole as it

TABLE 6.5

ENROLLEE RANKINGS OF FACTORS OF IMPORTANCE IN ACQUISITION OF EMPLOYMENT BY SEX
(PERCENTAGE BREAKDOWN BY FACTOR)

Job Security			Like Co-Workers		
Rank	Females	Males	Rank	Females	Males
1	27	33	1	18	13
2	18	20	2	18	14
3	15	15	3	14	15
4	18	13	4	14	15
5	14	11	5	15	16
6	08	08	6	21	27
Salary - Income			**Promotion**		
Rank	Females	Males	Rank	Females	Males
1	27	29	1	06	07
2	24	23	2	11	12
3	23	19	3	15	19
4	13	12	4	17	19
5	08	09	5	20	22
6	05	08	6	31	20
Good Working Conditions			**Good Fringe Benefits**		
Rank	Females	Males	Rank	Females	Males
1	17	13	1	05	05
2	20	19	2	09	12
3	19	18	3	14	15
4	17	19	4	21	22
5	17	19	5	26	22
6	10	11	6	25	25

TABLE 6.6

FACTOR OF IMPORTANCE IN ACQUISITION OF EMPLOYMENT RANKED FIRST OR SECOND BY INSTITUTIONAL ENROLLEES (PERCENTAGE BREAKDOWN)

Factor	Females	Males
Salary-Income	51	52
Job Security	45	53
Good Working Conditions	37	32
Like Co-Workers	36	27
Promotion	17	19
Good Fringe Benefits	14	17

TABLE 6.7

PROPORTION OF MALES AND FEMALES RANKING SELECTED JOB CHARACTERISTICS AS HIGHLY IMPORTANT (1st OR 2nd)

Factor	Females		Males	
	Number	Percent	Number	Percent
Salary/Income	900	50.36	715	51.51
Job Security	794	44.43	734	52.88
Good Working Conditions	679	38.00	442	31.91
Like Co-Workers	651	36.43	374	26.95
Promotions	300	16.79	276	19.88
Good Fringe Benefits	250	13.99	235	16.93

is for men, but that income/salary considerations tend to be more important in the females' decision to take a job (or remain employed). It should be noted also that women consider working environment (good working conditions, liking co-workers) highly important more frequently than do men (see Table 6.7).

Combined with the ranking of work characteristics and stated income expectations, the higher post-training unemployment indicated for women than for men might reflect a choice on the part of women not to work, rather than to work for the low wages.

E. EMPLOYMENT STABILITY

This section examines the patterns of employment stability and continuity which occur prior to the enrollees having entered the MDTA Institutional Training Program and patterns resulting from the enrollees having participated in the training program. The term "employment stability" as discussed in this section, refers mainly to a trainee's duration and consistency patterns of employment in the labor force. The tabulations of employment stability are aimed at making determinations of how the employment patterns of females, as compared to males, differ prior to entering the training program and after leaving the training program. We also have made some comparisons of white and non-white females to determine whether race is a significant factor in determining employment patterns.

As mentioned in the introduction, there are many shortcomings in the raw data which limit our ability to draw specific conclusions about employment stability as a measure of the MDTA Institutional Training

Program for females. For example, the survey of program trainees was conducted in May 1971 and included those persons enrolled in training during 1969; thus the periods of post-training employment data were longer for some enrollees than their pre-training employment periods. Furthermore, no follow-up was made to determine how long trainees were employed after release from the training program. Therefore, some of the observations related to the average duration of post-training employment and unemployment of enrollees on a single job, and comparisons between the pre-training and post-training employment and unemployment may be somewhat misleading. Another factor to be considered in analyzing the data is that no tabulations have yet been made for duration and frequency of employment and unemployment by age of trainee and by the actual length of pre- and post-training periods.

1. Employment Stability and Average Duration Per Job

As previously indicated, comparisons can only be made within categories of pre-training employment and unemployment and within categories of post-training employment and unemployment since the length of the reporting periods for pre- and post-training data differ. Post-training data received from those enrollees completing training in early 1969, is for nine to ten months longer than that for the pre-training periods.

Table 6.8 illustrates, by sex and race, the average duration reported in months-per-job for pre-training employment and unemployment, and post-training employment and unemployment. The average period of pre-training unemployment is longer for females than for males. When comparisons are made by race (white and non-white) within the female category,

non-white females were found to have slightly longer periods of pre-training unemployment.

TABLE 6.8

EMPLOYMENT STABILITY-AVERAGE DURATION

(IN MONTHS) PER JOB BY SEX AND RACE

	Males			Females		
	White	Non-White	Total	White	Non-White	Total
Pre-Training						
Unemployment	6.24	6.88	6.47	7.76	7.79	7.78
Employment	7.93	7.96	7.94	6.90	7.14	7.05
Post-Training						
Unemployment	5.99	6.83	6.33	7.25	7.85	7.63
Employment	10.58	10.45	10.54	10.34	10.11	10.21

Comparing average periods of post-training unemployment for males and females, the females showed an average of 1.30 months more of unemployment than did males. When females are compared as a group in terms of race, there is no significant difference between the periods of employment of whites and non-whites.

Males also have longer periods of pre-training employment when

compared to females. Non-white females have slightly longer periods of pre-training employment than do white females, but the non-white females also show slightly longer periods of pre-training unemployment. One possible reason for this data characteristic in the non-white female sample is that pre-training data for non-white females might have covered longer periods than that for white females. In other words, the average non-white female could have entered training at a later time than did her average white counterpart. Another possible reason is that non-white females may have been in the labor force for a greater portion of the pre-training period than white females.

The post-training periods of unemployment reported by males and females show a difference in average duration of over five weeks - females showed the longer periods of post-training unemployment. Very little difference is noted between subgroups by sex and race in the category of post-training employment.

2. Periods of Employment and Unemployment by Sex and Job (or Situation)

In looking at the periods of pre-training employment on a single job by sex, there is a significant difference between the percentages of males and females in the extreme categories, i.e., those having no pre-training employment and those having more than 12 months pre-training employment. This significant difference is indicated by the $\chi^2 = 80.9$, df = 1. As shown in Table 6.9, 42 percent of the females had no pre-training employment as compared to only 25 percent of the males. Correspondingly, a higher percentage of the males are found in the category having more than 12 months of pre-training employment. The fact that a high

percentage of the women (approximately 30%) were on public assistance prior to entering the training program may be one possible reason for the high percentage of females with no pre-training employment.

There is also a significant difference between males and females regarding the extremes of pre-training unemployment as indicated by $\chi^2 = 47.7$, df = 1, and illustrated in Table 6.9. In the Outcomes Study, a considerably higher percentage of females experienced periods of more than 12 months unemployment than did males (12% vs 7%). Similarly, a considerably higher percentage of males experienced no pre-training unemployment (47% vs 33%).

In looking at the periods of pre-training employment on a single job, there is a significant difference shown between the extremes, i.e., those having no post-training employment, and those having more than 12 months post-training employment, those having no post-training unemployment and those having more than 12 months post-training unemployment.

The significant difference between males and females in post-training employment is indicated by ($\chi^2 = 19.5$, df = 1), and in post-training unemployment is indicated by ($\chi^2 = 31.9$, df = 1). Table 6.9 illustrates the percentage differences in the above mentioned categories by sex.

The measurement of the many forces within the labor force affecting the employment of females as well as many general constraints which might influence the post-training employment patterns of females was not within the scope of the Outcomes Study.

Table 6.9 illustrates that only 6.9 percent of the females had pre-training employment on a single job for more than 12 months but 45.4 percent had post-training on a single job for more than 12 months. The same notable increase is true for male enrollees.

TABLE 6.9

EMPLOYMENT AND UNEMPLOYMENT ON A SINGLE JOB BY SEX

(Percentage Breakdown)

	Pre-Training Employment		Pre-Training Unemployment	
	Zero	>12 Months	Zero	>12 Months
Male	25.0	13.2	47.1	7.1
Female	42.6	6.9	33.0	12.4
	Post-Training Employment		Post-Training Unemployment	
	Zero	>12 Months	Zero	>12 Months
Male	9.3	49.8	45.3	10.4
Female	14.5	45.4	38.9	17.0

3. Periods of Employment and Unemployment by Race and Job (or Situation)

In looking at the periods of pre-training employment and pre-training unemployment by race, no significant difference is found between the

percentages of whites and non-whites in the extreme categories of no pre-training employment, more than 12 months pre-training employment, no pre-training unemployment, and more than 12 months pre-training employment. These distributions by race are not found to be significantly different, as indicated by $\chi^2 = 6.0$, df = 1 for pre-training employment, and by $\chi^2 = 6.05$, df = 1 for pre-training unemployment. Table 6.10 illustrates these percentage distributions by race.

TABLE 6.10

EMPLOYMENT AND UNEMPLOYMENT OF FEMALES ON A SINGLE JOB BY RACE
(Percentage Breakdown)

	Pre-Training Employment		Pre-Training Unemployment	
	Zero	>12 months	Zero	>12 Months
White	32.6	10.6	41.7	9.1
Non-White	37.1	8.8	36.7	11.1
	Post-Training Employment		Post-Training Unemployment	
	Zero	>12 Months	Zero	>12 Months
White	9.4	50.2	42.2	10.7
Non-White	14.9	44.4	37.2	17.6

For post-training employment and post-training unemployment on a single job, also illustrated in Table 6.10, shows a significant difference exists

between the percentage of whites and non-whites in the two extreme categories. The significant difference between the distributions for post-training employment is indicated $\chi^2 = 19.9$, df = 1.

A lower percentage of the white trainees in the Outcomes Study had no post-training employment and a higher percentage of them had more than 12 months post-training employment on a single job than did non-white trainees. In post-training unemployment, a higher percentage of whites showed no post-training unemployment and a smaller percentage of them showed more than 12 months of post-training unemployment. The significant difference between the distributions for post-training unemployment is indicated by $\chi^2 = 41.3$, df = 1.

4. Periods of Employment and Unemployment for Females by Job (or Situation)

Table 6.11 illustrates that there is very little difference in the percentage distributions of the white female trainee and the non-white female trainee when looking at the extreme categories for pre-training unemployment. The lack of significant differences are indicated by $\chi^2 = 2.6$, df = 1 for pre-training employment, by $\chi^2 = 0.35$, df = 1 for pre-training unemployment. A slightly higher percentage of the white females in the study are found in the category of no pre-training employment and a slightly lower percentage of them are found in the category of more than 12 months pre-training employment. It should be noted however, that the percentages of white (6.1%) and non-white (7.5%) females reporting more than 12 months pre-training employment is extremely low. These low percentages may be related to the ages of the female trainees as well as to the large numbers of females receiving public assistance prior to entering the MDTA training program.

TABLE 6.11

EMPLOYMENT AND UNEMPLOYMENT [illegible]

ON A SINGLE JOB BY RACE

(Percentage Breakdown)

	Pre-Training Employment		[illegible]	
	Zero	>12 Months	[illegible]	[illegible]
White	36.1	6.1	35	15.
Non-White	40.1	7.5	33.0	11.

	Post-Training Employment		Post-Training Unemployment	
	Zero	>12 Months	[illegible]	[illegible]
White	11.3	48.9	41.7	[illegible]
Non-White	16.4	43.2	36.	[illegible]

There is a significant difference between the percentage of white and non-white females in the categories of post-training employment and post-training unemployment. The percentage distributions, as noted on Table [illegible], are small. The significant differences are indicated by χ^2 = 8.7 [illegible] for post-training employment, and χ^2 = 11.0, df = 1 for post-training unemployment. A larger percentage of the white than non-white reported having no post-training unemployment and a smaller percentage as having more than 12 months post-training unemployment.