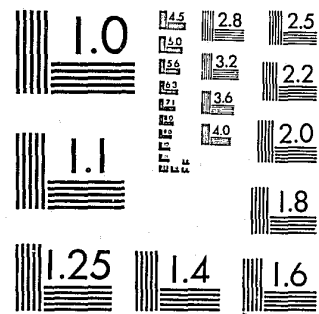


National Criminal Justice Reference Service



This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504.

Points of view or opinions stated in this document are those of the author(s) and do not represent the official position or policies of the U. S. Department of Justice.

National Institute of Justice  
United States Department of Justice  
Washington, D. C. 20531

1/03/83

SOME BACKGROUND CHARACTERISTICS OF  
THE STAFF OF THE MASSACHUSETTS  
DEPARTMENT OF CORRECTION

U.S. Department of Justice  
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by  
Massachusetts Department of  
Corrections

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

Prepared by:

Linda K. Holt

Staff Researcher

85404

Massachusetts Department of Correction

Louis M. Berman

Commissioner

February, 1981

Publication #12359- 42 - 250 - 2/81 - CR  
Approved by John Manton, State Purchasing Agent

Abstract

A description of all employees of the Massachusetts Department of Correction on September 30, 1980 is given. The modal staff person is a white male working as a correction officer in a major institution with 7 years of state service. Women are concentrated in two job groups: professionals and office/clerical. Their job grades are lower than males and their length of service is shorter. Minorities are concentrated in two job groups: protective services and professionals. Their length of service to the state is shorter than whites but job grades do not differ on the whole. Department of Correction staff differs from inmates in racial composition; Department of Correction staff differs from the state's labor force in proportion of females employed.

NCJRS

SEP 7 1982

ACQUISITIONS

Table of Contents

<u>Title</u>	<u>Page Number</u>
Abstract	1
General Description of Staff	6
Women in the Department of Correction	8
Minorities in the Department of Correction	10
Protective Service Staff	11
Institutional Staffing Patterns	12
Inmate, Staff, Labor Force Comparisons	13
Summary	14
Table 1 Frequency Distribution of Job and Background Characteristics, all Department of Correction Employees	16
Table 2 Analysis of Variance: Length of Service, Job Grade by Job Category, All Department of Correction Employees	20
Table 3 Job and Background Characteristics by Sex, All Department of Correction Employees	21
Table 4 Difference of Means Test Results: Length of State Service and Job Grade by Job Category and Sex, all Department of Correction Employees	23
Table 5 Job and Background Characteristics by Minority Status, all Department of Correction Employees	24
Table 6 Difference of Means Test Results: Length of State Service and Job Grade by Job Category and Minority Status, all Department of Correction Employees	26
Table 7 Frequency Distribution of Job and Background Characteristics, Protective Service Staff	27

Preceding page blank

Table of Contents

<u>Title</u>	<u>Page Number</u>
Table 8 Analysis of Variance: Length of State Service by Job Grade, Protective Service Staff	29
Table 9 Job Grade Level by Sex and Minority Status, Protective Service Staff	30
Table 10 Institutional Staffing Patterns: Inmate-to-Staff Ratios	31
Table 11 Institutional Staffing Patterns: Job Category by Budgetary Allocation	32
Table 12 Institutional Staff Patterns: Job Grades, Length of Service and Veteran Status	34
Table 13 Selected Background Characteristics of Department of Correction Staff, Inmates, and Massachusetts Labor Force	35
Appendix I Job Titles by Job Category	36
Appendix II Methodological Notes	41

Some Background Characteristics of  
The Staff of the Massachusetts  
Department of Correction

The purpose of this study is to provide a description of some of the background characteristics of the current staff of the Massachusetts Department of Correction (DOC). The description will include a number of background characteristics (sex, race and veteran status) and a number of job characteristics (grade level, location, type of job and length of service).

Several groups within the Department will be looked at separately. These groups are women, minorities and correction officers. Women and minorities are groups of particular interest in affirmative action efforts and equal opportunity programs. Correction officers form a large part of DOC staff and are currently the subject of other studies. This description will serve as background for those studies.

Two other issues will be discussed: institutional staffing patterns and staff/inmate comparisons. Institutional staffing patterns will consider the variations in inmate-to-staff ratios and the distribution of staff types among the major DOC institutions. Comparisons will be made between the characteristics of inmates DOC staff and the Massachusetts labor force.

This report would not have been possible without the efforts of Sandra Tott and John Hurley of the DOC who created, implemented and corrected the personnel data base on which this report was founded.

General Description of Staff

As of September 30, 1980 there were 2,546 active employees in the Department of Correction. An additional 450 positions were vacant. In this section a description of current DOC staff will be given.

The majority of DOC employees are male. Of all employees, 2,082 (82 percent) are males and 464 (18 percent) are females.

There are a large number of veterans among DOC staff. Of all employees, 1,160 (46 percent) are veterans and 1,386 (54 percent) are non-veterans. Veteran status can affect eligibility for civil service positions.

The majority of DOC staff are white. Of all staff, 2,375 (93 percent) are white and 171 (7 percent) are minorities. The specific breakdown by racial/ethnic group is shown in Table 1.

DOC staff can be divided into seven general job categories. official/administrative positions include superintendents, program directors and appointed officials. Professionals include nurses, librarians, counselors, accountants and some middle-management positions. Technical positions include laboratory, transportation and computer specialists. Protective service workers are the security staff including correction officers, as well as their seniors and supervisors. Office/clerical workers include all types of clerks, typists, bookkeepers and secretaries. Skilled crafts positions include power plant engineers, plumbers, carpenters and painters. Finally service/maintenance staff include

janitors, engineers and some agricultural staff.

DOC staff are primarily protective service workers. Of all staff 1474 (58 percent) are in this job category. The second most common job type is professional which accounts for 460 positions (18 percent). Table 1 shows the distribution of DOC staff by job category. Appendix I shows the distribution of specific jobs within the general categories.

Staff of the department have worked for the state up to 46 years. The average length of service to the state is 7.5 years. Half of all DOC employees have worked less than four and one half years. Table 1 shows the distribution of year entered into state service for all current DOC employees.

Length of service is related with job category. On the average technical workers have the longest state service with 18 years and office/clerical workers have the shortest term of state service with 5 years. The differences between job groups are statistically significant (see Table 2).

Grade levels, closely associated with salary, range from 3 to 32 among department employees. The median job grade is a 15. Table 1 shows the exact distribution of job grades in the department.

Grade levels vary among the various occupational groups. The average job grade of official/administrative staff is 22 compared with 7 for office/clerical staff. Table 2 summarizes these differences. Professional, technical and protective service job groups are all similar in their job grade levels and do not differ significantly. Official/administrative job grades are statistically significant from all other job categories as are

office/clerical, skilled crafts and service/maintenance.

Department staff work in a number of locations. Table 1 summarizes the distribution of employees by budgetary allocation. While this is not exactly the same as real job location it gives a general idea of the geographical distribution of DOC employees. Over half of all DOC staff work at five major institutions: Walpole, Concord, Framingham, Norfolk and Bridgewater.

In summary, the modal DOC staff person is a white male, working in a major institution in a grade 15 protective services position. This person is likely to be a veteran and has been a state employee for 7 years.

#### Women in the Department of Correction

There are a number of differences in the job and background characteristics of men and women at DOC. Tables 3 and 4 show information contrasting men and women which is discussed in this section. A larger proportion of women than men are minorities. Twelve percent of all women compared to 5 percent of all men are minorities. This difference is statistically significant.

Women are less likely than males to be veterans. Only 5 percent of women are veterans compared with 55 percent of men. This difference is large and statistically significant.

Women have shorter terms of service on the average with the state. Women averaged 5.3 years of service men averaged 8.0 years of service. This difference of almost three years is large and statistically significant ( $t=7.49, p<.001$ ). After controlling for job category this difference remains in only two categories:

technical and protective services.

The jobs that women hold, the grade level and the location of those jobs differs greatly from the male staff. Women are concentrated in two job groups areas: professional and office/clerical. Men are concentrated in the area of protective services. Women have significantly lower job grades than men. Women have an average job grade of 11.9 while men have an average job grade of 15.5. This difference of over 3 grade levels is statistically significant.

This difference in job grade is maintained even after controlling for job category in 4 of the 7 job categories. In the job areas of official/administrative, professional, technical and protective services women have significantly lower job grades than men. While these differences may not appear large in all cases, they are statistically significant. In office/clerical, skilled crafts and service/maintenance there is no significant difference in job grade level.

Women are likely to be in administrative or service budget allocations rather than institutional. The proportion of women in a particular job location ranges from 68 percent of medical staff to 6 percent of Walpole staff.

In summary women in DOC are concentrated in two job groups: office/clerical and professional. These jobs are traditionally areas in which women work. Women are less likely to be found in the non-traditional areas of security, administration, skilled crafts, technical and maintenance work. The large difference in job grades between men and women can be partially explained by

their concentration in certain job areas, in particular the office/clerical area. Women tend to have fewer years of service and fewer women are veterans. These two factors would also explain some of the variance in job grades. In the job areas of official/administrative and professional these factors do not explain the differences in job grades.

#### Minorities in the Department of Correction

There are several differences between minority and non-minority staff in terms of background characteristics and job characteristics. Tables 5 and 6 show information of minorities discussed in this section.

As mentioned previously minorities are more likely to be female. Of minority staff 33 percent are female, of white staff 17 percent are female. This difference is statistically significant.

Minorities are less likely than whites to be veterans. While 33 percent of minorities are veterans, 46 percent of non-minorities are veterans. This difference is statistically significant. After controlling for sex, minorities and whites do not differ significantly on veteran status.

Minorities are more likely to have jobs in the areas of protective services or professionals. Minorities are less likely to have jobs in the areas of official/administrative, office/clerical and service/maintenance. There are presently no minorities with technical or skilled crafts positions.

The distribution of minority staff differs by job location. Percentage of minority staff ranges from 0 percent for industries

to 51 percent for Boston Pre-Release Center/Lemuel Shattuck.

There is no difference in the grade level of minority and white staff. Minorities have an average job grade of 14.7 while whites have an average job grade of 14.8. This difference is very small and not statistically significant. After controlling for job category, differences appear in official/administrative and protective service categories where minorities have significantly lower job grade levels.

Minority staff have worked for the state a much shorter time than whites. The average tenure of minority staff is 4.0 years the average tenure of non-minority staff is 7.7 years. This difference of over three years is very large and statistically significant ( $t = 9.1, p < .001$ ). After controlling for job category this difference in length of service remains in 4 of the 5 job areas in which minorities are currently employed: official/administrative, professional, protective services and office/clerical.

#### Protective Service Workers

Protective Service workers make up the largest part of DOC staff. For that reason and because of the continuing interest of the department in studying this group of workers a careful analysis of them is warranted. Tables 7,8 and 9 show information on protective service staff that is discussed in this section.

The vast majority of protective service workers are male. Ninety-five percent are male compared with 82 percent of all DOC employees.

The majority of protective service workers are white. Ninety-three percent are white and 7 percent are minorities. This is the same composition as the department as a whole.

Over half of the protective service workers are veterans. The percentage of protective service workers who are veterans (53 percent) is larger than that for the department as a whole (46 percent).

Protective service workers have four job grade levels: 15, correction officer, 16, senior correction officer, 17, senior prison camp officer and 18, supervising correction officer. Over three-quarters of all protective service workers are grade 15 correction officers.

Protective service workers have an average of 7.9 years of service with the state. Tenure varies by grade level with senior and supervising correction officers averaging 13.0 and 18.3 years of service respectively.

Women and minorities are concentrated in the lower grades of protective service work. Only 15 percent of females and 11 percent of minorities are in senior or supervisory positions compared with 23 percent of the males and white staff.

#### Institutional Staffing Patterns

Previously it was shown that there were wide variations in the proportion of women and minorities in the various budgetary categories of the department. In this section other comparisons between institutions and other accounts will be made. Tables 10, 11 and 12 show this information fully.

For the various institutional budget categories a comparison between inmates and staff was made. There is an average of 1.6 inmates per staff and an average of 2.7 inmates per protective service staff in the Department as a whole. For all DOC staff there was a range from 3 inmates per staff for Medfield/Plymouth/Norfolk Pre-Release Center to 0 inmates per staff for Gardner and non-institutional accounts. When considering only protective services staff, the inmate to staff ratio ranges from 8.3 at Shirley/Lancaster to 0 at Gardner.

Job category varies by budgetary allocation as well. Federal grants have the highest proportion of official/administrative positions; SECC has the lowest. Education has the highest proportion of professional staff; Industries has the lowest. Central Administration has the highest proportion of office/clerical and technical staff. SECC and Walpole have the highest proportion of protective service staff. Industries has the highest proportion of skilled crafts staff and Framingham has the largest proportion of service maintenance staff.

Average job grade ranges from 18.0 in Federal Grant to 13.6 at Shirley/Lancaster. Percentage of staff who are veterans ranges from 59 percent at Bridgewater to 0 percent in federal grants. Length of service ranges from 11.1 years at Bridgewater to 2.5 years in education.

#### Inmate, Staff And Labor Force Comparisons

There are three background variables on which inmates and DOC staff can be compared: sex, race and veteran status. The

proportion of female staff is greater than the proportion of female inmates. The proportion of female protective service staff is similar to that of inmates. There is a large difference in the racial composition of inmates and staff. While 38 percent of inmates are minorities, only 7 percent of all staff and protective service workers are minorities. A much smaller proportion of inmates than staff are veterans. Table 13 shows these comparisons.

When compared with the labor force in Massachusetts the staff of DOC is very similar in the proportion of minorities employed. Seven percent of DOC staff compared with 6 percent of the Massachusetts labor force are minorities. DOC staff has a smaller proportion of female employees than the labor force. DOC has 18 percent female staff compared with 44 percent of the Massachusetts labor force.

#### Summary

The Department of Correction has almost 3,000 positions of which 83 percent are currently filled. The modal staff person is a grade 15 correction officer working in a major institution. This individual is likely to be white, male and a veteran with 7 years of state service.

Women in the department fall into two job categories: office/clerical and professional. They are more likely than their male counterparts to be minorities and less likely to be veterans. Their job grade levels are much lower than males. This is partially caused by their length of service and their job categorizations.

Currently there are 171 minority staff members. A large proportion of minorities are female. Minorities are found primarily in protective service and professional job categories. Minorities and whites do not differ in the average grade level of their jobs; their length of service to the state is much shorter than whites.

Protective service workers are primarily male, white and veterans. Over three-quarters are in grade 15 correction officer positions, with an average of 6 years of service. Senior correction officers have 13 years of service, supervising correction officers have 18 years of service on the average. Women and minorities are under-represented in senior and supervisory positions.

The various institutional and other accounts have different staff compositions in terms of background characteristics, job characteristics, length of service and inmate-to-staff ratios.

Inmates and staff are similar in the proportion of males and females. A much larger proportion of inmates are minorities and a smaller proportion of inmates are veterans when compared with all DOC staff and protective service staff. DOC staff is similar to the state labor force as a whole in its racial compositions. DOC staff has proportionately fewer women than the labor force of the state.



Table 1

Frequency Distribution of Job and Background  
Characteristics, All DOC Employees

Background/Job Characteristics	Number	Percent
<u>Sex</u>		
Male	2082	( 82)
Female	464	( 18)
Total	2546	(100)
<u>Veteran Status</u>		
Veteran	1160	( 46)
Non-Veteran	1386	( 54)
Total	3546	(100)
<u>Racial/Ethnic Group</u>		
White	2375	( 93)
Black	139	( 6)
Hispanic	19	( 1)
Asian/Pacific Islander	4	( 0)
American Indian	3	( 0)
Cape Verdean	6	( 0)
Total	2546	(100)
<u>Job Category</u>		
Official/Administrative	145	( 6)
Professional	460	( 18)
Technical	20	( 1)
Protective Services	1474	( 58)
Office/Clerical	188	( 7)
Skilled Crafts	126	( 5)
Service/Maintenance	133	( 5)
Total	2546	(100)

Table 1

Frequency Distribution of Job and Background  
Characteristics, All DOC Employees

Background/Job Characteristics	Number	Percent
<u>Year Entered State Service</u>		
1930 - 1939	3	( 0)
1940 - 1949	39	( 2)
1950 - 1959	216	( 8)
1960 - 1969	418	( 16)
1970 - 1974	509	( 20)
1975	129	( 5)
1976	212	( 8)
1977	241	( 9)
1978	209	( 8)
1979	326	( 13)
1980	244	( 10)
Total	2546	(100)
<u>Job Grade *</u>		
3	28	( 1)
4	5	( 0)
5	3	( 0)
6	61	( 2)
7	25	( 1)
8	7	( 0)
9	75	( 3)
10	37	( 1)
11	63	( 2)
12	26	( 1)
13	88	( 4)
14	247	( 10)
15	1201	( 47)
16	286	( 11)
17	87	( 3)
18	114	( 4)
19	36	( 1)
20	50	( 2)

Table 1

Frequency Distribution of Job and Background  
Characteristics, All DOC Employees

Background/Job Characteristics	Number	Percent
<u>Job Grade *</u>		
Continued		
21	15	( 1)
22	25	( 1)
23	8	( 0)
24	28	( 1)
25	6	( 0)
26	1	( 0)
27	11	( 0)
28	1	( 0)
29	1	( 0)
30	6	( 0)
31	1	( 0)
32	3	( 0)
Total	2545	(100)

\* Note: There is 1 grade 97 (Commissioner) not included in analyses involving job grade level.

Table 1

Frequency Distribution of Job and Background  
Characteristics, All DOC Employees

Background/Job Characteristics	Number	Percent
<u>Budgetary Allocation</u>		
Central Administration	144	( 6)
Community Reintegration	17	( 1)
Medical Services	116	( 5)
Industries	81	( 3)
Education	21	( 1)
Federal Grants	10	( 0)
Bay State Correction Center	49	( 2)
Park Drive Pre-Release Center	21	( 1)
Bridgewater	495	( 19)
Walpole	367	( 14)
Concord/NECC	369	( 14)
Framingham	120	( 5)
Norfolk	324	( 13)
S. Middlesex/Warwick	39	( 2)
Reception Diagnostic Center	34	( 1)
Boston Pre-Release Center/ Lemuel Shattuck	57	( 2)
Shirley/Lancaster	77	( 3)
SECC	138	( 5)
Medfield/Plymouth/Norfolk Pre-Release Center	37	( 2)
North Central Correction Institution	30	( 1)
Total	2546	(100)

Table 2

Analysis of Variance: Length of Service, Job Grade/by Job Category,  
All Department of Correction Employees

Job Category	Mean	Standard Deviation
<u>Length of State Service</u>		
Official/Administrative	12.4 Years	( 9.8)
Professional	5.3 Years	( 6.3)
Technical	18.0 Years	( 13.3)
Protective Services	7.9 Years	( 7.8)
Office/Clerical	4.7 Years	( 6.3)
Skilled Crafts	7.5 Years	( 8.4)
Service/Maintenance	7.1 Years	( 7.8)
F = 27.3 p < .001		
<u>Job Grade</u>		
Official/Administrative	21.6	( 3.9)
Professional	15.2	( 3.2)
Technical	15.4	( 3.6)
Protective Services	15.3	( 0.7)
Office/Clerical	7.4	( 2.9)
Skilled Crafts	13.8	( 2.4)
Service/Maintenance	12.1	( 3.0)
F = 68.5 p < .001		

Table 3

Job And Background Characteristics By Sex,  
All Department of Correction Employees

Job Background Characteristics	Males		Females		Percent Female
	Number	Percent	Number	Percent	
<u>Minority Status</u>					
White	1968	( 95)	407	( 88)	( 17)
Minority	114	( 5)	57	( 12)	( 33)
Total	2082	(100)	464	(100)	( 18)
Chi-Square = 27.0 with 1 degree of freedom, p < .001					
<u>Veteran Status</u>					
Veteran	1136	( 55)	24	( 5)	( 2)
Non-Veteran	946	( 45)	440	( 95)	( 32)
Total	2082	(100)	464	(100)	( 18)
Chi-Square = 371.2 with 1 degree of freedom, p < .001					
<u>Job Category</u>					
Official/Admini- strative	125	( 6)	20	( 4)	( 14)
Professional	284	( 14)	176	( 38)	( 38)
Technical	15	( 1)	5	( 1)	( 25)
Protective Service	1399	( 67)	75	( 16)	( 5)
Office/Clerical	12	( 1)	176	( 38)	( 94)
Skilled Crafts	120	( 6)	6	( 1)	( 5)
Service/Maintenance	127	( 6)	6	( 1)	( 5)
Total	2082	(100)	464	(100)	( 18)
Chi-Square = 1046.2 with 6 degrees of freedom, p < .0001					

Table 3

Job And Background Characteristics By Sex,  
All Department of Correction Employees

Job/Background Characteristics	Males		Females		Percent Female
	Number	Percent	Number	Percent	
<u>Budgetary Allocation</u>					
Central Administration	81	( 4)	63	( 14)	( 44)
Community Reintegration	10	( 0)	7	( 2)	( 41)
Medical Services	37	( 2)	79	( 17)	( 68)
Industries	59	( 3)	22	( 5)	( 27)
Education	13	( 1)	8	( 2)	( 38)
Federal Grants	5	( 0)	5	( 1)	( 50)
Bay State	42	( 2)	7	( 2)	( 14)
Park Drive P.R.C.	15	( 1)	6	( 1)	( 28)
Bridgewater	453	( 22)	42	( 9)	( 8)
Walpole	344	( 16)	23	( 5)	( 6)
Concord	330	( 16)	39	( 8)	( 10)
Framingham	50	( 2)	70	( 15)	( 58)
Norfolk	292	( 14)	32	( 7)	( 10)
S. Middlesex/Warwick	29	( 1)	10	( 2)	( 26)
Reception Diagnostic Center	27	( 1)	7	( 2)	( 20)
Boston PRC/Lemuel Shattuck	43	( 2)	14	( 3)	( 24)
Shirley/Lancaster	68	( 3)	9	( 2)	( 12)
SECC	127	( 6)	11	( 2)	( 8)
Medfield/Plymouth/Norfolk PRC	31	( 2)	6	( 1)	( 16)
North Central Correction Inst.	26	( 1)	4	( 1)	( 13)
<b>Total</b>	<b>2082</b>	<b>(100)</b>	<b>464</b>	<b>(100)</b>	<b>( 18)</b>

Table 4

Difference of Means Test Results: Length of State Service And  
Job Grade By Job Category and Sex, All DOC Employees

Job Category	Males		Females	
	Mean	Standard Deviation	Mean	Standard Deviation
<u>Length of State Service</u>				
Official/Administrative	13.0 Yrs.	( 9.6)	8.4 Yrs.	(10.8)
Professional	5.5 Yrs.	( 6.3)	5.1 Yrs.	( 6.4)
*Technical	22.3 Yrs.	(12.5)	5.4 Yrs.	( 4.4)
*Protective Service	8.0 Yrs.	( 7.8)	5.3 Yrs.	( 5.2)
Office/Clerical	3.5 Yrs.	( 6.2)	4.7 Yrs.	( 6.3)
Skilled Crafts	7.3 Yrs.	( 8.1)	10.5 Yrs.	(13.9)
Service/Maintenance	7.0 Yrs.	( 7.6)	9.3 Yrs.	(13.3)
<u>Job Grade Level</u>				
*Official/Administrative	22.0	( 3.8)	19.4	( 4.3)
*Professional	15.8	( 3.1)	14.1	( 3.2)
*Technical	17.1	( 2.2)	10.2	( 1.1)
*Protective Services	15.3	( 0.7)	15.2	( 0.6)
Office/Clerical	7.4	( 4.3)	7.3	( 2.8)
Skilled Crafts	13.8	( 2.4)	14.5	( 1.2)
Service/Maintenance	12.1	( 3.1)	11.7	( 2.5)

\* p < .05

Table 5

Job And Background Characteristics By Minority Status,  
All Department of Correction Employees

Job Background Characteristics	Whites		Minorities		Percent Minority
	Number	Percent	Number	Percent	
<u>Sex</u>					
Male	1968	( 83)	114	( 67)	( 5)
Female	407	( 17)	57	( 33)	( 33)
Total	2375	(100)	171	(100)	( 7)

Chi-Square = 27.0 with 1 degree of freedom,  $p < .001$

Veteran Status

Veteran	1104	( 46)	56	( 33)	( 5)
Non-Veteran	1271	( 54)	115	( 67)	( 8)
Total	2375	(100)	171	(100)	( 7)

Chi-Square = 11.6 with 1 degree of freedom,  $p < .001$

Veteran Status Controlling For Sex

Males Only

Veteran	1083	( 55)	53	( 46)	( 5)
Non-Veteran	885	( 45)	61	( 54)	( 6)
Total	1968	(100)	114	(100)	( 5)

Chi-Square = 2.8 with 1 degree of freedom,  $p = .09$

Females Only

Veteran	21	( 5)	3	( 5)	( 13)
Non-Veteran	386	( 95)	54	( 95)	( 12)
Total	407	(100)	57	(100)	( 12)

Chi-Square = 0.0 with 1 degree of freedom,  $p = 1.0$

Table 5

Job And Background Characteristics By Minority Status,  
All Department of Correction Employees

Job Background Characteristics	Whites		Minorities		Percent Minority
	Number	Percent	Number	Percent	
<u>Job Category</u>					
Official/Administrative	137	( 6)	8	( 5)	( 6)
Professional	422	( 18)	38	( 22)	( 8)
Technical	20	( 1)	0	( 0)	( 0)
Protective Service	1365	( 58)	109	( 64)	( 7)
Office/Clerical	176	( 7)	12	( 7)	( 6)
Skilled Crafts	126	( 5)	0	( 0)	( 0)
Service/Maintenance	129	( 5)	4	( 2)	( 3)
Total	2375	(100)	171	(100)	( 7)

Chi-Square = 16.6 with 6 degrees of freedom,  $p = .006$

Budgetary Allocation

Central Administration	132	( 6)	12	( 7)	( 8)
Community Reintegration	13	( 1)	4	( 2)	( 24)
Medical Service	110	( 5)	6	( 4)	( 5)
Industries	81	( 3)	0	( 0)	( 0)
Education	20	( 1)	1	( 1)	( 5)
Federal Grants	9	( 0)	1	( 1)	( 10)
Bay State	46	( 2)	3	( 2)	( 6)
Park Drive P.R.C.	18	( 1)	3	( 2)	( 14)
Bridgewater	474	( 20)	21	( 12)	( 4)
Walpole	339	( 14)	28	( 16)	( 8)
Concord	347	( 13)	22	( 13)	( 6)
Framingham	105	( 4)	15	( 9)	( 12)
Norfolk	315	( 13)	9	( 5)	( 3)
S.Middlesex/Warwick	37	( 2)	2	( 1)	( 5)
Reception Diagnostic Center	33	( 1)	1	( 1)	( 3)
Boston PRC/Lemuel Shattuck	28	( 1)	29	( 17)	( 51)
Shirley/Lancaster	71	( 3)	6	( 4)	( 8)
SECC	132	( 5)	6	( 4)	( 4)
Medfield/Plymouth/Norfolk PRC	36	( 2)	1	( 1)	( 3)
North Central Correction Inst.	29	( 1)	1	( 1)	( 3)
TOTAL	2375	(100)	171	(100)	( 7)

Table 6

Difference of Means Test Results: Length of State Service  
by Job Grade by Job Category and Minority Status,  
All DOC Employees

Job Category	Whites		Minorities	
	Mean	Standard Deviation	Mean	Standard Deviation
<u>Length of State Service</u>				
*Official/Administrative	12.8 Yrs.	( 9.9)	4.2 Yrs.	( 3.2)
*Professional	5.6 Yrs.	( 6.4)	2.8 Yrs.	( 4.2)
Technical	18.0 Yrs.	(13.2)	---	---
*Protective Services	8.2 Yrs.	( 7.8)	4.4 Yrs.	( 5.4)
*Office/Clerical	4.8 Yrs.	( 6.5)	2.6 Yrs.	( 2.0)
Skilled Crafts	7.5 Yrs.	( 8.4)	---	---
Service/Maintenance	7.1 Yrs.	( 7.9)	7.0 Yrs.	( 2.6)
<u>Job Grade Level</u>				
*Office/Administrative	21.8	( 3.9)	19.0	( 4.3)
Professional	15.2	( 3.3)	14.7	( 2.3)
Technical	15.4	( 3.6)	---	---
*Protective Services	15.4	( 0.8)	15.1	( 0.4)
Office/Clerical	7.3	( 3.9)	8.6	( 2.4)
Skilled Crafts	13.8	( 2.4)	---	---
Service/Maintenance	12.1	( 3.0)	11.8	( 3.2)

\* p < .05

Table 7

Frequency Distribution of Job and Background Characteristics,  
Protective Service Staff

Job/Background Characteristics	Number	Percent
<u>Sex</u>		
Male	1399	( 95)
Female	75	( 5)
Total	1474	(100)
<u>Racial Ethnic Group</u>		
White	1365	( 93)
Black	90	( 6)
Hispanic	10	( 1)
Asian/Pacific Islander	2	( 0)
American Indian	2	( 0)
Cape Verdean	5	( 0)
Total	1474	(100)
<u>Veteran Status</u>		
Veteran	776	( 53)
Non-Veteran	698	( 47)
Total	1474	(100)
<u>Job Grade Level</u>		
15	1130	( 77)
16	261	( 18)
17	6	( 0)
18	76	( 5)
Total	1474	(100)

Table 7

Frequency Distribution of Job and Background Characteristics  
Protective Service Staff

Job/Background Characteristics	Number	Percent
<u>Length of State Service</u>		
Less Than 1 Year	187	( 13)
1 to 5 Years	580	( 39)
6 to 10 Years	280	( 19)
11 to 15 Years	146	( 10)
16 to 20 Years	134	( 9)
21 to 25 Years	104	( 7)
More Than 25 Years	43	( 3)
Total	1474	(100)

Table 8

Analysis of Variance: Length of Service to State by  
Job Grade, Protective Service Staff

Job Grade Level	Years of Service	
	Mean	Standard Deviation
15	6.0 Years	( 6.8)
16	13.0 Years	( 7.3)
17	14.4 Years	( 6.1)
18	18.3 Years	( 7.2)
F = 135.9      p < .001		

Table 9

Job Grade Level By Sex, Minority Status  
All Protective Service Workers

Characteristic	Fifteen		Sixteen		Seventeen		Eighteen	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<u>Sex</u>								
Male	1067	( 94)	252	( 97)	6	(100)	74	( 97)
Female	64	( 6)	9	( 3)	0	( 0)	2	( 3)
Total	1131	(100)	261	(100)	6	(100)	76	(100)

Chi-Square = 3.5 with 3 degrees of freedom, p = .32

Minority Status

White	1034	( 42)	250	( 96)	6	(100)	75	( 99)
Minority	97	( 8)	11	( 4)	0	( 0)	1	( 1)
Total	1131	(100)	261	(100)	6	(100)	76	(100)

Chi-Square = 10.7 with 3 degrees of freedom, p = .01



Table 10

Institutional Staffing Patterns: Inmate To Staff Ratios

Institution	09/30/80 Inmate Population	All. DOC Staff	Inmates: Staff	Protective Service Staff	Protective Service Staff: Inmates
Medfield/Plymouth					
Norfolk P.R.C.	111	37	3.0	16	6.9
Norfolk/RDC	882	58	2.5	251	3.5
S. Middlesex/Warwick	81	39	2.1	21	3.8
Park Drive P.R.C.	37	21	1.8	0	-
Walpole	663	367	1.8	285	2.3
SECC	241	138	1.7	108	2.2
Bridgewater	837	495	1.7	348	2.4
Shirley/Lancaster	125	77	1.6	15	8.3
Concord/NECC	578	369	1.6	259	2.2
Bay State	77	49	1.6	31	2.5
Boston PRC/Shattuck	69	57	1.2	42	1.6
Framingham	142	120	1.2	62	2.3
NCCI	0	30	0.0	15	0.0
Other (Central Office, Community Reintegration)	0	821	0.0	21	0.0
Total	3964	2546	1.6	1474	2.7

NOTE: Inmate population includes Bridgewater Patients not usually counted in discussions of Department of Correction population.

Table 11

## JOB CATEGORY BY BUDGETARY ALLOCATION

	<u>OFFICIAL ADMINIS- TRATIVE</u>	<u>PROFES- SIONAL</u>	<u>TECHNICAL</u>	<u>PROTECTIVE SERVICES</u>	<u>OFFICE CLERICAL</u>	<u>SKILLED CRAFTS</u>	<u>SERVICE MAINTENANCE</u>	<u>TOTAL</u>
Central Administration	28 ( 19)	59 ( 41)	11 ( 8)	14 ( 10)	31 ( 22)	1 ( 1)	0 ( 0)	144 (100)
Community Reintegration	5 ( 29)	2 ( 12)	0 ( 0)	7 ( 41)	3 ( 18)	0 ( 0)	0 ( 0)	17 (100)
Medical Services	8 ( 7)	97 ( 84)	3 ( 2)	0 ( 0)	8 ( 7)	0 ( 0)	0 ( 0)	116 (100)
Industries	4 ( 5)	3 ( 4)	3 ( 4)	0 ( 0)	16 ( 20)	46 ( 57)	9 ( 11)	81 (100)
Education	2 ( 10)	18 ( 86)	1 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	21 (100)
Federal Grants	3 ( 30)	6 ( 60)	0 ( 0)	0 ( 0)	1 ( 10)	0 ( 0)	0 ( 0)	10 (100)
Bay State	3 ( 6)	9 ( 18)	0 ( 0)	31 ( 63)	2 ( 4)	0 ( 0)	4 ( 8)	49 (100)
Park Drive P.R.C.	4 ( 19)	14 ( 67)	0 ( 0)	0 ( 0)	3 ( 14)	0 ( 0)	0 ( 0)	21 (100)
Bridgewater	12 ( 2)	42 ( 8)	0 ( 0)	348 ( 70)	26 ( 5)	20 ( 4)	47 ( 9)	495 (100)
Walpole	15 ( 4)	25 ( 7)	0 ( 0)	285 ( 78)	14 ( 4)	12 ( 3)	16 ( 4)	367 (100)
Concord	15 ( 4)	44 ( 12)	0 ( 0)	259 ( 70)	23 ( 6)	18 ( 5)	10 ( 3)	369 (100)

Table 11

## JOB CATEGORY BY BUDGETARY ALLOCATION

(cont.)

	<u>OFFICIAL ADMINIS- TRATIVE</u>	<u>PROFES- SIONAL</u>	<u>TECHNICAL</u>	<u>PROTECTIVE SERVICES</u>	<u>OFFICE CLERICAL</u>	<u>SKILLED CRAFTS</u>	<u>SERVICE MAINTENANCE</u>	<u>TOTAL</u>
Framingham	9 ( 8)	16 ( 13)	1 ( 1)	62 ( 52)	11 ( 9)	5 ( 4)	16 ( 13)	120 (100)
Norfolk	12 ( 4)	34 ( 10)	0 ( 0)	233 ( 72)	17 ( 5)	14 ( 4)	14 ( 4)	324 (100)
S.Middlesex/Warwick	3 ( 8)	12 ( 31)	0 ( 0)	21 ( 54)	3 ( 8)	0 ( 0)	0 ( 0)	39 (100)
R.D.C.	2 ( 6)	9 ( 26)	0 ( 0)	18 ( 53)	5 ( 15)	0 ( 0)	0 ( 0)	34 (100)
Boston P.R.C./Shattuck	4 ( 7)	6 ( 10)	0 ( 0)	42 ( 74)	5 ( 9)	0 ( 0)	0 ( 0)	57 (100)
Shirley/Lancaster	4 ( 5)	36 ( 47)	0 ( 0)	15 ( 19)	6 ( 8)	9 ( 12)	7 ( 9)	77 (100)
SECC	4 ( 3)	12 ( 9)	0 ( 0)	108 ( 78)	7 ( 5)	0 ( 0)	7 ( 5)	138 (100)
Medfield/Plymouth/Norfolk	5 ( 14)	13 ( 35)	0 ( 0)	16 ( 43)	3 ( 8)	0 ( 0)	0 ( 0)	37 (100)
Gardner	3 ( 10)	3 ( 10)	1 ( 3)	15 ( 50)	4 ( 13)	1 ( 3)	3 ( 10)	30 (100)

Table 12

Institutional Staffing Patterns: Job Grades,  
Length of Service And Veteran Status

	Average Job Grade	Average Length of Service	Percentage of Staff Who Are Veterans
Central Admini- stration	16.5	5.9	30
Community Reinte- gration	16.2	5.2	12
Medical Services	14.6	5.4	26
Industries	14.3	10.0	58
Education	15.6	2.5	33
Federal Grants	18.0	2.3	0
Bay State	15.5	8.0	53
Park Drive PRC	15.1	2.6	14
Bridgewater	14.4	11.1	59
Walpole	15.0	6.3	50
Concord	14.7	6.8	45
Framingham	14.5	7.5	26
Norfolk	14.8	6.3	44
S.Middlesex/ Warwick	15.3	9.0	44
R.D.C.	14.6	5.6	35
Boston PRC/ Shattuck	15.0	5.1	35
Shirley/Lancas- ter	13.6	3.7	44
SECC	14.8	8.7	56
Medfield/Plymouth Norfolk	15.6	10.3	49
Gardner	15.1	4.6	30

Table 13

Selected Background Characteristics of DOC Staff,  
Inmates and Massachusetts Labor Force\*

Background Characteristics	All DOC Staff		Protective Service Staff		Inmates**		Massachusetts Labor Force	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<u>Sex</u>								
Male	2082	( 82)	1399	( 95)	2654	( 96)	1632000	( 56)
Female	464	( 18)	75	( 5)	100	( 4)	1259000	( 44)
Total	2546	(100)	1474	(100)	2754	(100)	2891000	(100)
<u>Minority Status</u>								
White	2375	( 93)	109	( 7)	1695	( 62)	2709900	( 94)
Minority	171	( 7)	1365	( 93)	1059	( 38)	181100	( 6)
Total	2546	(100)	1474	(100)	2754	(100)	2891000	(100)
<u>Veteran Status</u>								
Veteran	1160	( 45)	776	( 53)	573	( 11)		
Non-Veteran	1386	( 55)	698	( 47)	2181	( 79)		
Total	2546	(100)	1474	(100)	2754	(100)		

\* Source: Labor Market Information for Affirmative Action Programs 1980 Massachusetts, Massachusetts Division of Employment Security, Boston, 1980

\*\* Inmate Information is as of January 1, 1980.

APPENDIX I

<u>PAYROLL TITLE CODE</u>	<u>JOB TITLE</u>	<u>NUMBER OF STAFF</u>
Official/ Administrative		
14501	Administrative Assistant	1
14503	Administrative Secretary	1
15916	Administrative Assistant	12
15932	Contract Compliance Officer	2
18812	Institution Chief Power Plant Engineer	2
18915	Management Analyst	3
18924	Head Administrative Assistant	2
18951	Senior Hospital Administrative Assistant	1
18979	Program Specialist	1
19052	Assistant to Commissioner-Classification	1
19908	Coordinator of Volunteer Services	1
19911	Administrative Assistant-State Use Industries	1
20012	Director of Treatment	3
20756	Institution Chief Power Plant Engineer	3
20813	Director of Institutional Classification	4
21730	Director of Nurses	1
21773	Deputy Superintendent Pre-Release	9
21807	Deputy Superintendent RDC	1
22622	State Hospital Steward	1
22639	Jail Assistant Coordinator	1
22706	County Liaison Officer	1
22723	Director of Program Development	1
22724	Director of Security Services	1
22725	Executive Assistant to the Commissioner	1
22726	Project Director	2
22727	Associate Deputy Superintendent-Walpole	2
22770	Area Director of Administration	2
22771	Area Director of Classification	2
22772	Area Director of Programs	1
22775	Administrator of Correction Industries	1
22809	Contract Compliance Manager	1
22816	Manager of Data Processing Services	1
24611	Director of Employee Relations	1
24710	Deputy Superintendent for Administration	6
24711	Deputy Superintendent for Treatment	4
24729	Director of Planning and Research	1
24735	Superintendent of Pre-Release	12
24769	Area Director of Operations	1
24770	Assistant Director of Industries	1
24780	Superintendent RDC	1
25648	Deputy Superintendent	5
26581	Director of Budget & Facilities Planning	1
27401	Superintendent	4
27550	Counsel IV	2
28610	Director of Inmate Training & Education	1
29574	Director of Health Services, Administration	1
30559	Superintendent, Walpole	1
30571	Director of Finance	1
30573	Superintendent of Norfolk	1
30575	Superintendent of Bridgewater	1
30598	Assistant to the Commissioner, Executive	2

APPENDIX I

<u>PAYROLL TITLE CODE</u>	<u>JOB TITLE</u>	<u>NUMBER OF STAFF</u>
Official/ Administrative		
32542	Associate Commissioner	3
97061	Commissioner	1
Professional		
9625	Licensed Practical Nurse	18
9683	Juvenile Supervisor	2
10758	Licensed Practical Nurse	8
11817	Senior Licensed Practical Nurse	3
11821	Senior Juvenile Supervisor	1
12787	Medical Records Librarian	2
12823	Assistant Institution Treasurer	5
12868	Supervisor of Volunteer Services	1
12915	Industrial School Instructor	2
12945	Assistant Dietitian	2
12946	X-Ray Technician	1
13802	Counselor, DOC	1
13817	Occupational Therapist	1
13890	Junior Accountant	2
13895	Criminal Justice Planning Assistant	3
13961	Correction Medical Assistant	13
13962	Correction Social Worker	53
14014	Chief Hospital Supervisor Attendant	1
14960	School Resident Nurse	1
14961	Staff Nurse	5
14975	Rehabilitation Counselor	1
14981	Psychiatric Social Worker	15
14985	Counselor, DOC	83
14993	Librarian	5
14995	Institution School Teacher	29
14998	Recreation Officer, Correction Institution	11
15940	Assistant Staff Psychologist	2
15849	Assistant Institution Steward	5
15880	Senior Counselor	2
15890	Dietician	2
15903	Instructional Media Specialist	1
158	Head Nurse	20
15918	Research Assistant	1
15923	Semi-Senior Accountant	1
15994	Head Correction Social Worker	9
16941	Institution Treasurer	2
16970	Head Psychiatric Social Worker	4
16976	Senior Counselor, DOC	7
17007	Director of Classification	1
17028	Supervisor of Social Service	1
17031	Staff Clinical Social Worker	1
17033	Employment Services Coordinator	7
17034	Procedures Analyst	9
17044	Assistant Coordinator of Daycare	4
17046	Research Specialist	3

APPENDIX I

<u>PAYROLL TITLE CODE</u>	<u>JOB TITLE</u>	<u>NUMBER OF STAFF</u>
<u>Professional</u>		
17922	Hospital Supervisor, Graduate Nurse	7
17947	Research Analyst	1
17986	Assistant Criminal Justice Planner	4
18004	Supervisor of Recreation, DOC	1
18011	Head Social Work Supervisor	11
18033	Training Instructor, DOC	4
18867	Senior Criminal Justice Planner	1
18893	Staff Psychologist	6
18894	Pharmacist	3
18938	Program Analyst	1
18939	Project Coordinator	2
19665	Program Development Specialist	12
19721	Institution Steward	7
19782	Supervisor of Industries	3
19864	Supervising Accountant	1
19876	Personnel Analyst	1
19877	Personnel Training Technician	2
19966	Chief Hospital Supervisor, Graduate Nurse	1
19975	Physician Assistant	3
20402	Assistant Deputy Superintendent SECC	1
20642	Labor Management Relations Advisor	1
20831	Principal Criminal Justice Planner	1
20838	Director of Engineering Services	1
20847	Principal Psychologist	2
20873	Senior Methods and Systems Analyst	1
20878	Federal Accounts Analyst	1
20920	Supervisor of Research DOC	2
20922	Public Information Officer	1
20940	Supervisor of Education, DOC	2
21816	Assistant Director of Nurses	2
21848	Senior Program Analyst	1
22750	Social Science Research Specialist	1
22756	Associate Criminal Justice Planner	3
22757	Public Relations Representative	1
22774	Fire Protection and Energy Conservation	1
23620	Supervising Program Analyst	4
23689	Administrative Assistant	3
23869	Counsel, II	1
24680	Counsel, III	1
25657	Associate Structural Engineer	1
27580	Dentist	5
31534	Physician II	1

APPENDIX I

<u>PAYROLL TITLE CODE</u>	<u>JOB TITLE</u>	<u>NUMBER OF STAFF</u>
<u>Technical</u>		
9665	EDP Control Clerk II	1
10735	EDP Entry Operator III	1
10744	Laboratory Technician	2
11824	Hospital Technician	1
12881	EDP Entry Operator IV	1
15988	State Use Industries Agent	1
16960	EDP Programmer II	1
17036	Senior Transportation Officer	7
17043	Assistant Supervisor of Education	1
19910	Supervising Transportation Officer	2
19912	Senior State Use Industries Agent	1
21800	Market Analyst	1
<u>Protective Services</u>		
15986	Correction Officer	1091
15987	Female Correction Officer	40
16986	Senior Correction Officer	227
16987	Female Senior Correction Officer	5
16988	Prison Camp Officer	26
16989	Correction Officer-Head Farmer	3
17035	Senior Prison Camp Officer	6
18002	Supervising Correction Officer	76
<u>Office/Clerical</u>		
3519	Junior Clerk	2
3520	Junior Clerk and Typist	26
4537	Junior Clerk and Stenographer	5
6529	Senior Clerk	13
6530	Senior Clerk and Typist	41
6580	Telephone Operator	5
7553	Senior Bookkeeper	5
7555	Senior Clerk and Stenographer	16
9557	Principal Clerk	39
10557	Principal Clerk and Secretary to Dept. Head	1
10576	Principal Bookkeeper	3
11543	Head Clerk	20
13541	Head Administrative Clerk	7
14810	Confidential Secretary	1
15512	Chief Administrative Clerk	4

APPENDIX I

<u>PAYROLL</u> <u>TITLE CODE</u>	<u>JOB TITLE</u>	<u>NUMBER</u> <u>OF STAFF</u>
<u>Skilled Crafts</u>		
6570	Power Plant Helper	1
11753	Steam Fireman	28
11766	Carpenter	1
11778	Painter	1
12801	Assistant Sewage Treatment Plant Operator	2
12830	Plumber and Steamfitter	1
12833	Third Class Power Plant Engineer	8
12856	Maintenance Foreman	1
14821	Sewage Treatment Plant Operator	1
14871	Second Class Power Plant Engineer	14
14997	Industrial Instructor	35
16718	Senior Sewage Treatment Plant Operator	1
16990	Assistant Industrial Shop Manager	8
17038	Assistant to the Supervisor of Industries	1
17039	Industrial Shop Manager	18
17807	Assistant Institution Chief Power Plant Engineer	3
22796	Principal Structural Engineer	1
<u>Service Maintenance</u>		
5511	Head Dining Room Attendant	1
5550	Institution Domestic Worker	2
6567	Assistant Baker	1
7637	Storeroom Helper	4
8654	Chauffeur	7
9661	Correction Maintenance Worker I	2
9713	Cook	13
10782	Correction Maintenance Worker I	22
11815	Storekeeper	7
11841	Head Cook	1
13544	Head Farmer	1
13917	Principal Storekeeper	4
13954	Chef	3
14001	Correction Maintenance Specialist	6
14011	Head Storekeeper	1
14999	Correction Maintenance Worker II	35
15989	Correction Maintenance Worker III	9
16991	Senior Correction Maintenance Specialist	2
17037	Senior Construction Engineer	6
17040	Correction Maintenance Worker IV	6

Appendix II

Methodological Notes

The Sample

This study is based on data representing all positions within the Department of Correction. All analyses were done only on those positions filled as of September 30, 1980.

Analytic Methods

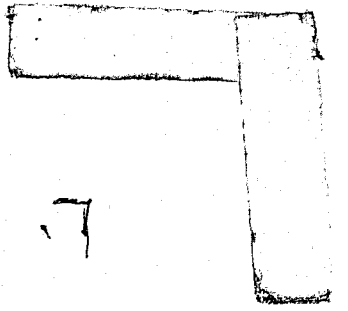
Frequency distributions are used for most descriptions and includes number of cases and percentages. In any case where 0 percent is indicated this means less than 1 percent. When doing comparisons between groups within the sample one of three basic tests were performed:

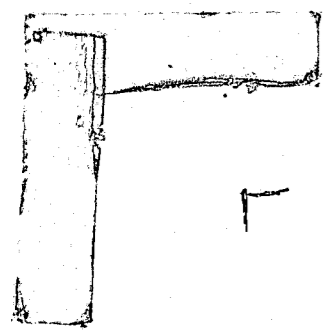
1. Contingency table analysis was used when the independent variable was nominal in its level of measurement. Chi-square was used as a measure of independence between the two variables. The .05 level of significance was used as it was in all tests.
2. Difference of means test was used when the independent variable was continuous and the dependent variable was dichotomous. The t statistic was used as a measure of significant difference. In all cases two-tailed tests were performed.
3. Analysis of variance was used when the independent variable was continuous and the dependent variable had three or more groups. The F statistic is reported as a



measure of difference between groups. In some cases the least significant difference procedure was used to locate which groups differed from each other.

In the narrative an attempt was made to point out both statistical significance and size of relationships. In many cases results proved to be statistically significant even though differences in means or percentages are not large. It is left to the reader to attach importance to the results of these tests based on both of these factors, statistical significance and size of difference.





**END**