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NPRDC TR 76TQ-43

DIFFERENTIAL PERCEPTIONS OF ORGANIZATIONAL CLIMATE HELD BY NAVY ENLISTED WOMEN AND MEN

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Using data obtained from the Navy Human Resource Management (HRM) Survey, this study addresses the interaction of sex and pay grade on organizational climate dimensions for 24,033 nonrated and rated shore personnel. Results show that women have an initial tendency to respond optimistically on the HRM Survey. However, as they advance to petty officer levels, women become disproportionately disillusioned on certain dimensions. This is consistently true in the area of attitudes toward peers. With increases in pay grade, women appear to feel less a part of the work group team, whereas the opposite trend is true for men.

Results are discussed in terms of the solo woman in work groups, expectations women may have built up during recruitment and basic training, role conflict, and possible "fear of success" in competitive situations as women advance in their careers.

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FOREWORD

This study was performed in conjunction with the Navy Human Resource Management Support System. The initial design was conceived while the authors were assisting the Human Resource Management Center (HRMC), Pearl Harbor, in preparing an Equal Opportunity briefing for CNO. The support of the HRMC staff, especially CAPT John Wissler, is gratefully acknowledged.

Appreciation is also extended to Patricia Thomas, project director for Personnel Assimilation and Supervision, for her assistance and manuscript critique, and to Natalie Powell, HRMC, San Diego, for her insightful comments. Special thanks are due Jan Dodson for her competent data editing and computer programming.

Portions of this study were presented at the Psychology in the Air Force Symposium, Colorado Springs, April 1976, and at the Annual Western Psychological Association Convention, Los Angeles, April 1976.

J. J. CLARKIN Commanding Officer



SUMMARY

Problem

Since 1972, the number of enlisted women in the Navy has increased from under 5,000 to a current strength of approximately 19,000, creating a male/female ratio unprecedented in the Navy's history and a situation which has far-reaching implications for human resource management.

Objective

The objective of this study is to investigate attitudes toward the Navy of enlisted men and women. It is postulated that their perceptions of organizational climate will differ, and that the profiles of men and women across different pay grade levels will be divergent, since advancement of women may cause unique problems not encountered by their male counterparts. Clarifying such differential patterns is a step toward improving the effective utilization and retention of Navy women.

Approach

The cross-sectional sample used in this study consisted of 1,960 women and 22,073 men in pay grades E-1 to E-6 at 137 Navy commands. The measure was the Human Resource Management Survey, administered from February 1974 through October 1975. Two-way analyses of variance (sex by pay grade) were performed on 19 HRM Survey indices.

Findings

Most dimensions of the Navy experience were viewed differently by the sexes. The newly enlisted nonrated women were consistently more positive in perceptions of the Navy than nonrated men. Moreover, nearly half of the analyses of variance yielded significant sex by pay grade interactions, supporting the prediction that perceptions by pay grade often are not parallel for males and females.

<u>Command Climate</u> (5 indices): Although women overall were more positive than men, the effect of pay grade status on assessments of organizational functioning was only significantly different for the sexes on the two indices of the most personal nature. That is, the upward trends in means with increasing pay grade on the Motivation and Human Resource Emphasis indices were steeper for men than for women.

Supervisory Leadership (4 indices): Women at the lower pay grades were consistently more positive than men in perceptions of supervisory adequacy. Nevertheless, the means for E-6 women were slightly below those for E-6 men. Only on Supervisory Work Facilitation did the differences across pay grades between male and female patterns achieve significance. <u>Peer Leadership</u> (4 indices) and <u>Work Group Processes</u> (3 indices): Most of the measures of peer interactions showed a common pattern. Women's attitudes were relatively positive initially but declined for rated women (E-4s). E-5 women were again more positive, but E-6 women fell considerably below E-6 men on all four peer indices. Significant sex by pay grade interactions were found for Peer Support, Peer Teamwork, Peer Work Facilitation, and Work Group Coordination.

Outcome Measures and Equal Opportunity (3 indices): Women reported a high level of overall satisfaction that was enhanced with increasing pay grade. Their initial optimism, as compared to nonrated men, was substantial. Entering Navy women also had more positive attitudes than males about the Navy's provision to them of equal opportunity. However, the means for men rose more steeply from the lower to the higher pay grades yielding significant sex by pay grade interactions for one Outcome Measure, i.e., Satisfaction, and for Equal Opportunity.

Conclusions

Despite views which are consistently more positive than those of their male counterparts at entry level, women are usually more negative than men at pay grade E-6. These E-6 women are also often more negative than nonrated women, despite the fact that by the second enlistment many discontented women have departed the Navy.

Indices which measure interactions among peers and work group coordination show consistent contrast between the sexes. Men's means increase greatly with increasing pay grade whereas women's do not. Navy enlisted women of middle rank, while viewing the Navy positively as an organization, appear to experience stress in the area of peer relations. Providing more female petty officers may ease the Navy situation since this would increase the numbers of women working in groups of men and in leadership roles. At the present time, women who move up occupationally in the Navy run the risk of losing team feeling and the relatively unquestioning favorableness with which they view their jobs.

Recommendations

The "Women in the Navy" Workshop should attempt to facilitate peer relationships throughout pay grade levels. In view of the initial optimism of women, it is important that recruiters supply accurate information to women applicants to lessen what appears to be a process of disillusionment as women move up in pay grade. A longitudinal study is necessary to confirm whether women actually do become disenchanted as they advance occupationally in the Navy and to determine more precisely the factors contributing to such a process and their relationship to attrition (pp. 29, 30).

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INTRODUCTION

Problem and Background

Although women have directly assisted the military in every crisis since the days of the Revolutionary War, it was not until the passage of the Women's Armed Forces Integration Act in June 1948 that women were accorded status as regular members of the military establishment (Central All-Volunteer Force Task Force, 1972). However, regular status did not mean equal status with their male counterparts. Thomas (Note 1) points out that military women experience "a dissonance resulting from conflicting policies that profess a military service based on equal opportunity for all, but that discriminate against women in selection, classification, assignment, and advancement" (p. 21).

As recently as 1972, the then Assistant Secretary of Defense Roger T. Kelley requested that "the Military Departments take action to eliminate all unnecessary distinction in regulations applying to women and, where appropriate, to recommend legislation to eliminate any inequities which are now required by law. The guiding principle is equal opportunity and treatment for women" (cited in King, Note 2).

Since 1972, the number of enlisted women in the Navy has increased from under 5,000 to approximately 19,000. By October 1976, this number will reach a programmed end-strength of 20,000. This expansion has created a male/female ratio unparalleled in the history of the Navy, a situation which has far-reaching implications for human resource management. The Navy, as with most large organizations, has a life span that exceeds the career of any given employee. Consequently, long-term effectiveness of the Navy is dependent upon developing an adequate supply of individuals competent to perform anticipated duties required to fulfill its mission. The Navy obviously has decided that women are to be included in its personnel pool. However, human resources are in a sense perishable, in that, once cultivated, they have to be used or they may be lost (Porter, Lawler, & Hackman, 1975).

The female enlisted applicant pool available to the Navy exceeds the currently allowable shore-based slots to be filled. There are four applicants for each available enlisted position and frequently a 6-month waiting list for entry. Therefore, the female recruits are, and consider themselves to be, a highly select group.

Women as a potential resource, however, are being lost to the Navy during the first enlistment at a higher rate than their male counterparts (Central All-Volunteer Force Task Force, 1972). This loss represents a substantial investment in training and other costs. It is also one of the most powerful arguments being used against an increased utilization of women in the armed forces. As noted by the Central All-Volunteer Task Force, however, the higher attrition rates for women appear to result from service policies rather than from inherent characteristics of female volunteers. In addition, the inequitable administration of service policies, such as the relative ease with which women are allowed to leave the service, also contributes to these higher attrition rates. In the civilian sector, U.S. Department of Labor statistics (1970, 1972) show that, overall, absenteeism and quitting rates for women workers do not exceed those for men.

Available evidence is nearly unanimous in pointing to the initial employment period as critical to the development of a healthy relationship between the individual and the organization (Porter et al., 1975). In industry, turnover during the early employment period is relatively higher than at later periods. Brodman and Hellman (cited in Porter et al., 1975) reported an attrition rate 491 percent higher for employees of less than 1 year than for those with more longevity. The Navy currently differs from industry in that employees do not have the option of leaving during the first year, except under exceptional circumstances. This means that a large proportion of the attrition due to initial experiences usually will not show up until the first enlistment is completed. The reenlistment decisions of individuals are formalized towards the end of the enlistment, typically in the third year. By this point in time, the enlisted person will ordinarily have advanced to the fourth pay grade level (E-4).

It has been stated that the immediate environment or climate that surrounds a job (the "job ecology") is one of the major factors affecting individual adaptation to organizations (Porter & Steers, cited in Porter et al., 1975). Although turnover has been related to numerous variables, little definitive work exists concerning the relationship between the early organizational experiences of employees and subsequent termination decisions (Johnson & Graen, 1973). These termination decisions can be defined as accepting or rejecting the organizational role, but it is important to determine who defines the role. In a study of the assimilation process, Johnson and Graen (1973) suggest that the newcomer, the immediate supervisor, and the peer group all hold expectations about the new employee's behavior and, thus, are involved in role definition. Impediments to successful assimilation, such as role ambiguity and role conflict, occur when a role is not defined clearly or when role expectations between the subordinate and supervisor are divergent. Johnson and Graen (1973) found that employees who were role rejectors experienced higher levels of supervisor ambiguity, increasing peer ambiguity, and lower job satisfaction.

The Navy, with its focus on male traditions, has a high likelihood of role conflict and ambiguity for women. On the one hand, the Navy recruits women into its ranks while, on the other hand, conditions conducive to sex-role stereotyping work against successful assimilation of women. For instance, it is frequently alleged that male supervisors in

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the Navy assign women to organizational housekeeping tasks and discriminate against them in terms of promotion and development (Thomas, Note 1). A woman who enters the Navy expecting fair treatment and a challenging job may de facto be doomed to disappointment as she increases in pay grade.

A mechanism exists within the fabric of the Navy to investigate the perceptions of women toward various elements of their organizational experience. In 1973, the Navy instituted a Human Goals Plan (OPNAVINST 5300.6 & 5300.6a) directed toward "the development of the full potential of the Navy's human resources and the application of that potential toward maximum effectiveness in the performance of the Navy's primary mission." A central component of this plan, updated in 1975 (OPNAVINST 5300.6b), is the Human Resource Management (HRM) Support System which directly assists commands through survey-guided development. The diagnostic instrument used in this program is the Navy HRM Survey, sea and shore versions. At the time of this study, over 400 commands and over 100,000 individuals had been surveyed. Their responses are stored in a data bank at the Navy Personnel Research and Development Center, San Diego, with exact command identifications removed to maintain confidentiality of data.

Several studies have thus far been conducted to determine the relationships between organizational aspects of Navy commands, as assessed by the HRM Survey, and criterion measures meaningful to the Navy. Using HRM Survey data, Drexler and Franklin (in press) established that, in general, positive relationships exist between organizational conditions and reenlistment. To the extent that causality can be assumed from such data, they concluded that organizational climate factors affect reenlistment. Correlating the criterion of nonjudicial punishment (NJP) rates with HRM Survey indices, Crawford and Thomas (1975) found that consistently lower NJP rates were associated with ships in which the human resource management was most favorably perceived. They concluded that the organizational climate dimensions measured by the HRM Survey are significant covariates of NJP rates on Navy ships. Mumford (1976) supported the hypothesis that HRM Survey indices are positively related to combat readiness as measured by the final battle problem for ships in refresher training. These studies established the sensitivity of this survey instrument as a means of assessing both respondent characteristics and perceived effective functioning of the Navy organization.

Purpose

It is apparent from attrition statistics that a lesser percentage of enlisted women than men are accepting the Navy organization and committing themselves to it. Identifying and clarifying differential perceptions of the organization by sex may be seen as a first step toward understanding this phenomenon. Inasmuch as women have traditionally faced obstacles and difficulties in pursuing military careers (Thomas, Note 1), the present study was designed to answer several pertinent questions concerning the organizational experiences of Navy women and men. Specifically, it was designed to determine whether (1) perceptions and degrees of favorability toward the Navy, as measured by survey responses, are clearly related to the sex of the respondent, (2) specific aspects of the organization (e.g., leadership, work group processes) are more likely than others to engender differential responses between men and women, and (3) different <u>patterns</u> of responses by pay grade exist for women and men in their perceptions of the organization. It is postulated that perceptions of organizational climate will differ, and that the profiles of men and women across different pay grade levels will be divergent, since advancement for women may cause unique problems not encountered by their male counterparts.

PROCEDURE

Sample

The sample used in this study comprised 1,960 enlisted women and 22,073 men who were administered the HRM Survey from February 1974 to October 1975. Subjects were from those commands represented in the HRM data bank as of 31 October 1975 whose respondents included women. These 137 shore-based commands are categorized in Table 1.

Table 1

Units by Command Category

Category	N	Percentage of Total
Air-related Units:	58	42
Replacement Air Group Squadrons (VA, VF, etc.)	17	12
Shore-Based Squadrons (VP, VC, etc.)	16	12
Naval Air Stations and Facilities	13	9
Helicopter Squadrons (HC, HSL, HS)	11	8
Naval Air Reserve Unit	1	1
Shore Units:	79	58
Single Mission Shore Commands (Hospitals, Communication Stations, etc.)	53	39
Shore Commands, Headquarters, Staffs	19	14
Naval Stations and Bases (excluding Air Stations)	7	5

The number of women surveyed per unit ranged from one or two in 24 units having from 10 to 545 total respondents, to 103 women in one unit having 1,112 respondents. There may have been more women assigned to the former units since all personnel at a given command are not necessarily administered the HRM Survey. However, the fact that so few women were surveyed is indicative of the relatively small proportion of women at these units. Most commands were located in such densely populated areas as Honolulu, San Diego, and Washington, D.C. However, a few were in very isolated geographical areas such as Newfoundland and Guam. Overall, about one quarter of the men and 18 percent of the women were stationed at overseas commands. Throughout this report, data are presented in terms of pay grade subgroups of active duty men and women. The pay grade groups used in the analyses were: E-1 through E-3 (nonrated), E-4 (Third Class), E-5 (Second Class), and E-6 (First Class). E-7 to E-9 personnel (Chief Petty Officers) were eliminated from the analyses due to the limited number of female respondents at these levels.

The pay grade groups are distinctive in terms of job responsibility and technical expertise. For instance, the E-1s through E-3s are nonsupervisory personnel who have been with the Navy for a relatively short time. They may have designated an occupational specialty and received Class "A" School training, but have had limited experience in the specialty. The E-4s have been rated with an occupational specialty and are generally facing the reenlistment decision. The E-5s typically have completed their first enlistment, have developed some expertise in their specialty, and are expected to carry more responsibilities than E-4s. The First Class Petty Officers (E-6s) have been in the Navy at least 6 years, since this is a requirement for advancement from E-5 to E-6. In their positions of supervision and responsibility, they are at a transition point. Depending upon the size of the command, the First Class Petty Officer can be primarily a supervisor (small command) or a "worker" (large command), and often ends up with responsibilities involving both roles.

Demographic characteristics of the men and women, such as age, educational level, and race, were compared because of their potential as modifiers of HRM Survey responses. These descriptive statistics are shown in Table 2. At each pay grade level beyond E-3, the proportion of married females was substantially smaller than the proportion of married males, which may reflect a tendency for married females to leave the service. This larger percentage of married men would have the effect of raising the male HRM Survey response means, since married status has been found to be associated with positive responses on the HRM Survey (HRM Studies and Analysis Group, Note 3).

Women at the lowest pay grade levels tended to be better educated than their male counterparts. The greater percentage of women entering the Navy with higher educational levels is due to the minimum requirement of high school graduation for females. This discrepancy evened out by pay grade E-4, but recurred at E-6, where a greater percentage of women had obtained an education beyond the high school level.

The consistently larger percentage of "other" ethnic groups in the male sample was accounted for by Filipino personnel. At the E-5 level, they represented 9 percent of the men surveyed, whereas there were essentially no Filipino women in the sample. Normative data show that Filipinos respond more positively on the HRM Survey than men in general (HRM Studies and Analysis Group, Note 3).

Group	Marital Status			Educational Level				nicity		Average Age	
	Married Single		Other	Non High School Graduate				White	Other	in years	
E-1-3											
Male N=5487	17.7	80.1	2.2	18.0	60.9	21.1	9.4	76.5	14.1	20.5	
Female <u>N</u> =1213	17.7	75.0	7.3	.6 ^a	69.3	30.1	15.1	79.5	5.4	20.8	
E-4											
Male N=4744	33.0	63.7	3.3	5.8	56.3	37.9	6.6	79.9	13.5	22.5	
$\frac{N}{1} = 489$	17.6 ^a	76.9 ^a	5.5	.3	53.8	45.9	8.1	85.6	6.3	22.3	
E-5											
Male	51.6	44.0	4.4	4.8	55.3	39.9	4.8	79.5	15.7	26.1	
<u>N</u> =6806 Female <u>N</u> =215	28.2 ^a	65.1 ^a	6.7	3.6	56.3	40.1	6.8	89.3	3.9	25.6	
E-6											
Male	56.7	38.0	5.3	6.3	62.1	31.6	6.4	81.6	12.0	32.1	
<u>N</u> =5036 Female N=43	28.6 ^a	50.0 ^a	21.4 ^a		43.7 ^a	56.3 ^a	9.5	85.7	4.8	33.9	

~

Demographic Characteristics by Sex and Pay Grade (in Percentages)

^aDenotes a difference of 10 percentage points or greater between female and male samples for that characteristic.

Table 2

Measure

The diagnostic instrument which serves as the cornerstone for the Navy's organizational development program is the Navy Human Resource Management (HRM) Survey (Appendix A). This survey was developed for the Navy from the University of Michigan's Survey of Organizations (Taylor & Bowers, 1972). Documented elsewhere are the theoretical background (Likert, 1967; Franklin, 1973), item analysis (Drexler, 1974), and the relationship of the HRM Survey to several Navy criterion measures (Crawford & Thomas, 1975; Drexler & Bowers, 1973; Mumford, 1976). Briefly, the Navy HRM Survey is based on the theory that in any organization two core variables, organizational climate and leadership, are mediated by peer relationships and work group processes, which, in turn, affect the individual worker's productivity. Each of these five conceptual elements is represented by a dimension: (1) Command Climate, (2) Supervisory Leadership, (3) Peer Leadership, (4) Work Group Processes and (5) Outcome Measures. As shown by Table 3, the current most widely used form of the HRM Survey consists of 88 items, which are aggregated into 24 indices. The first 56 items are grouped under the 18 indices of the five major organizational dimensions. The remaining items relate to miscellaneous areas and to special issues of current concern, such as equal opportunity and drug abuse.

Responses to the survey questions are presented on a Likert-type scale ranging from 1 (to a very little extent) to 5 (to a very great extent). Questions related to the Satisfaction index are similarly scaled from 1 (very dissatisfied) to 5 (very satisfied). The number of items comprising a particular index ranges from 2 to 11. Reliabilities for the HRM Survey indices range from .70 to .80 (Drexler, 1974).

Data Analysis

Analyses were performed on the 18 indices of the five major dimensions and on 5 questions from the index entitled Equal Opportunity.

HRM Survey index scores for individuals were calculated by summing relevant item responses and dividing this total by the number of items in the index; these were in turn averaged to yield group means for men and women at each pay grade. The dependent measures represent the averaged attitudes for the groups toward the Navy in the 19 areas corresponding to each index analyzed. Nineteen sex by pay grade analyses of variance (ANOVAs) were performed, using the least squares solution. These 2 x 4 ANOVAs were based on different sample sizes, as a result of incomplete data and the fact that not all survey questions were administered to the overall sample due to modifications of the survey over time. Total degrees of freedom for the analyses ranged from 11,509 for the Lower Level Influence index (Command Climate dimension) to over 24,000 for indices in the Supervisory Leadership and Outcome dimensions.

Ta	Ь	1	e	3

Structure of Navy HRM Survey (Form 9)

Dimension	Index	Number of Items	Item Numbers
Command Climate	Communications Flow	3	1-3
	Decision Making	3	4-6
	Motivation	3	7-9
	Human Resource Emphasis	4	10-13
	Lower Level Influence	2	14-15
		15	
Supervisory	Supervisory Support	4	16-19
Leadership	Supervisory Teamwork	2	20-21
	Supervisory Goal Emphasis	2	22-23
	Supervisory Goal Facilitation	3	24-26
		11	
Peer	Peer Support	3	27-29
Leadership	Peer Teamwork	4	30-33
	Peer Work Facilitation	4 2 3	34-35
	Peer Problem Solving	3	36-38
		12	
Work Group	Work Group Coordination	4	39-42
Processes	Work Group Readiness	3	43-45
	Work Group Discipline	3 2	46-47
		9	
Outcome	Satisfaction	7	48-54
Measures	Integration of Men and Mission	2	55-56
		9	
Miscellaneous	Training	3	57-59
	General	3	60-62
	Equal Opportunity ^a	11	63-73
	Drug Abuse	3	74-76
	Alcoholism Prevention	5	77-81
	Community Interrelationships	7	82-88
		32	
		88	

^aEqual Opportunity was the only one of the six indices in the miscellaneous area analyzed in the present study. An index was specially derived based on five of the ll Equal Opportunity items that were administered to sufficient numbers of people in the sample for analysis.



RESULTS

Table 4 summarizes the results of the analyses of variance performed for each HRM Survey index. Means are presented separately for women and men for each of the four pay grade groupings. Also presented are the levels of significance obtained for the main effects of sex and pay grade and for the interactions of sex by pay grade.

Nonrated women (pay grades E-1 through E-3) are consistently more positive in perceptions of their commands than nonrated men. For all 19 indices analyzed, mean scores for these newly enlisted women are higher than those of their male counterparts. For both male and female respondents in the sample, the functioning of the command as a whole (e.g., Command Climate indices) is not perceived as favorably as are aspects of supervisory, peer, and work group behavior.

The mean scores for females in 12 indices and males in all indices increase with increasing pay grade. The finding probably is due to the attrition of personnel holding negative feelings toward the Navy. Normative data for men who have taken the HRM Survey further demonstrate that this increased enthusiasm and identification with the organization continues with longevity and/or increasing rank; i.e., average perceptions of senior chiefs and senior officers are generally more positive than those of junior personnel (HRM Studies & Analysis Group, Note 3).

Of central interest in each analysis is the significance of the sex by pay grade interaction, which indicates whether the perceptions of men and women change differentially with increasing pay grade.

Table 4 reveals that, of the 19 HRM Survey indices examined, nearly half yield significant sex by pay grade interactions. This finding supports the prediction that the trend of changes in perceptions by pay grade often is not parallel for male and female enlisted personnel. Because of the frequency of significant interactions, it is appropriate to examine subgroup means, rather than the independent main effects of sex or pay grade.

Command Climate

With the Command Climate dimension, women view Communications Flow, Decision Making, and Lower Level Influence as significantly more adequate than do their male counterparts. The effect of pay grade status on these perceptions is not significantly different between the sexes (p > .05). Personnel at higher pay grades generally manifest more positive attitudes, though the women's patterns are variable. On the other hand, analyses of the Motivation index, which has a more personal referent, and of the index reflecting the commands' Human Resource Emphasis, yield significant sex by pay grade interactions. Table 4

Subsample Means for HRM Survey Indices

HRM		Wor	nen		Men				p			
Survey Indices	E-1-3 N=1213	E-4 N=489	E-5 N=215	E-6 N-43	E-1-3 <u>N</u> =5487	E-4 N=4744	E-5 N=6806	E-6 <u>N=5036</u>	Sex Sex	Pay Grade	Inter- action	
Command Climate												
. Communications Flow	3.01	2.95	3.06	2.99	2.87	2.87	2.97	3.10	***	***		
2. Decision Making	2.79	2.77	2.79	2.95ª	2.64	2.63	2.66	2.83	***	***		
. Motivation	2.95	2.95	3.03	3.15	2.72	2.73	2.97	3.20	***	***	***	
. Human Resource Emphasis	2.88	2.80	2.79	2.82	2.68	2.66	2.76	2.98	***	***	***	
. Lower Level Influence	2.75	2.67	2.48	3.00 ^a	2.62	2.55	2.57	2.69	***	***		
Supervisory Leadership												
. Supervisory Support	3.61	3.64	3.74	3.71	3.41	3.52	3.63	3.75	***	***	*	
. Supervisory Teamwork	3.30	3.27	3.40	3.41	3.14	3.22	3.38	3.56	***	***	*	
8. Supervisory Goal Emphasis	8 3.59	3.60	3.58	3.64	3.45	3.49	3.60	3.72	***	***		
. Supervisory Work												
Facilitation	3.21	3.17	3.13	3.09	3.06	3.10	3,20	3.29	***	***	***	
'eer Leadership									1			
10. Peer Support	3.65	3.62	3.69	3.57	3.57	3.63	3.70	3.82	***	***	***	
1. Peer Teamwork	3.12	3.10	3.18	3.18	2.97	3.06	3.19	3.39	***	***	***	
2. Peer Work Facilitation	3.07	3.01	3.01	2.91	2.95	2.95	3.04	3.22	***	***	***	
3. Peer Problem Solving	3.14	3.18	3.28	3.11	3.10	3.19	3.26	3.39		***	*	
Jork Group Processes												
4. Work Group Coordination	3.24	3.26	3.32	3.24	3.18	3.26	3.36	3.53	**	***	**	
5. Work Group Readiness	3.38	3.34	3.58	3.83	3.37	3.39	3.51	3.68		***		
16. Work Group Discipline	3.48	3.46	3.67	3.90	3.36	3.89	3.46	3.72	***	***		
Outcome Measures												
7. Satisfaction	3.37	3.46	3.52	3.70	3.12	3.28	3.46	3.62	***	***	**	
8. Integration of Men and Mission	2.34	2.33	2.45	2.49	2.06	2.07	2.29	2.62	***	***	*	
Special Index												
19. Equal Opportunity	3.25	3.23	3.36	3.29	2.98	3.09	3.28	3.55	***	***	***	

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Note. Results are for two-way analyses of variance. Analyses of variance were based on varying N's due to the fact that not all questions were administered to the total sample.

^aThese means should be interpreted with caution (N < 25).

* .10 > <u>p</u> > .05. ** .05 · <u>p</u> > .01. *** <u>p</u> < .01.

12

Motivation. Women reporting on their own motivation and perceived equity of rewards show no change from nonrated to E-4 status, but have increasingly higher means at the E-5 and E-6 levels (Figure 1). The means for males originate considerably below the means for females at the E-1 through E-4 pay grades. However, an upswing occurs between the E-5 and E-6 means for men, which surpasses the mean for women by the E-6 level and accounts for the interaction of sex and pay grade.



PAY GRADE



13

Human Resource Emphasis. The Human Resource Emphasis index, which addresses the command's concern for its human resources by the way it organizes and utilizes its personnel to achieve its mission, shows a slight drop in mean responses for both sexes from the nonrated to the E-4 level (Figure 2). Although responses of women at lower pay grade levels are typically more positive than those of their male counterparts, they tend to level off at the E-4 level. The male response means, on the other hand, show an upward trend from E-4 to E-6, crossing over the means for women at about E-5 and ending at a higher level than that for women at E-6. This accounts for the significant sex by pay grade interaction.





Supervisory Leadership

Although perceptions of women concerning supervisory adequacy are consistently more optimistic than those of men at the lower pay grades, they drop slightly below those of men by the E-6 level for all four indices. The means for both men and women generally increase on the supervisory indices with increasing pay grade. However, the trend toward more favorable evaluation of supervisors is much steeper for men than women.

Supervisory Work Facilitation (the extent to which the supervisor assists in improving performance and solving job-related problems) is the only index where the differences across pay grades between male and female patterns achieve significance (Figure 3). At each higher pay grade, women are less positive on this index, whereas the opposite is true for men. Nonrated males are relatively negative, but their views improve with increased pay grade so that the means for men cross over those for women after the E-4 stage and are higher by E-5 and E-6.



PAY GRADE



Peer Leadership

In the area of attitudes toward peers, three of the four ANOVAs show significant sex by pay grade interactions (Table 4). The attitudes held by men toward their peers show immediate improvement between the nonrated pay grades and E-4, and become increasingly positive with advanced pay grades. (This was also true in the case of attitudes held by men toward their supervisors--but not toward the more abstract aspects of Command Climate.)

This increasing sense of team solidarity is not typical of the women, whose peers are probably predominantly male. Figures 4 through 6 reveal the differential trends for women on the Peer Support, Peer Teamwork, and Peer Work Facilitation indices. Overall, women's attitudes toward their peers are relatively positive initially, but decline at the E-4 level. At E-5, women again have more positive perceptions, probably due to failure of the less satisfied women to reenlist. However, perceptions held by E-6 women are lower than those of E-5 women, except on the Peer Teamwork index, where no change is noted between pay grades E-5 and E-6 (Figure 5). The means for E-6 women fall considerably below those for E-6 men on all four indices in the peer area.

The Peer Problem Solving index, which measures perceived extent of idea exchange among work group members, does not show a decline in attitudes from nonrated to E-4 women. However, like the other peer indices, the attitudes held by E-6 women drop well below those of men at this pay grade, even though the sex by pay grade interaction is not significant (.10 > p > .05).

Work Group Processes

The questions which comprise the Work Group Coordination index relate to respondents' trust in members of their immediate work group, the extent of information exchange and group planning, and the adequacy of work group decisions. The pattern of subgroup means for this index is, as expected, similar to those evidenced in the Peer Leadership dimension, and there is a significant interaction between sex and pay grade. Figure 7 shows that perceptions of males become more positive with increasing pay grade, and undergo a sharp increase between E-5 and E-6. Women enlistees respond most positively at pay grade E-5, and drop off to a level well below their male counterparts at E-6.

The Work Group Readiness and Discipline indices do not measure peer interactions directly. Work Group Readiness assesses the team's perceived emergency preparedness, as well as its ability to meet day-to-day mission requirements. Men and women rate their work groups more positively on this index with increasing pay grade. Evaluations of Work Group Discipline, which relates to military grooming, order, and discipline, do not follow this pattern across pay grades. For this sample, nonrated and E-5 men and E-4 women are least satisfied with these aspects. Neither of these indices evidence significant sex by pay grade interactions.



Figure 4. Sex by pay grade interaction, Peer Support index.



Figure 5. Sex by pay grade interaction, Peer Teamwork index.

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Figure 6. Sex by pay grade interaction, Peer Work Facilitation index.



Figure 7. Sex by pay grade interaction, Work Group Coordination index.

Outcome Measures

The results for the Satisfaction index reveal that women report a high level of overall satisfaction with aspects of the job, supervisor, and command that is enhanced with increasing pay grade. Their initial optimism, as compared to nonrated men, is impressive. However, as shown by Figure 8, the means for men originate below those for women and rise more steeply from the lower to the higher pay grades resulting in a significant sex by pay grade interaction. Also, despite the pronounced optimistic responses of nonrated women relative to nonrated men on all seven Satisfaction questions, the means for E-6 women drop below those for E-6 men on two questions (satisfaction with work group and with progress made in the Navy "up to now").

The Integration of Men and Mission index measures the balance between the command's meeting of individual needs and its effectiveness in getting people to meet its objectives.¹ The means for women are consistently high but reveal only slight improvement with increasing pay grade. Nonrated and E-4 males score their commands low on Integration of Men and Mission. Perceptions of higher pay grade men are dramatically improved, however, and surpass those of the E-6 women surveyed. The interaction between sex and pay grade fails to achieve significance (.10 > p > .05).

Special Index

For the present study, the Equal Opportunity index means are based on responses to five of the 11 items that were administered to sufficient numbers of people in the sample for analysis. Four of these items ask the respondent directly whether she or he has experienced equal opportunity for job assignment, advancement, training, and recreation. The fifth asks whether military justice is fairly administered in the command. The entering Navy women sampled are positive in their attitudes relative to their male counterparts on this composite index (Table 4), revealing that the Navy's equal opportunity stance is being communicated to female enlistees. Certainly the Navy compares well to the civilian community on such issues as equal pay for equal work. Since the positiveness of the nonrated women on the Equal Opportunity index is similar to their optimistic tendency on all survey dimensions, it is not interpreted as evidence of favoritism experienced by women vis-à-vis male personnel. Objectively speaking, many doors for training and assignment remain legally closed to Navy women, and some difficulties are experienced in advancement,

^LUnlike other indices, this index is not calculated by averaging the questions which comprise it. The formula for the 2-item index, where A is the item with the lower score and B is the item with the higher score, is: $A/B \ge \frac{(A + B)}{2}$.

particularly in seagoing rates (Thomas, Note 1). By pay grade E-5 and E-6, men gain on and then surpass women on the Equal Opportunity index, although women are still not dissatisfied as evidenced by their responses. The steep increase shown in Figure 9 in male means from E-1 to E-6, in comparison to the women's pattern, yields a significant sex by pay grade interaction for the Equal Opportunity index.



PAY GRADE

Figure 8. Sex by pay grade interaction, Satisfaction index.



Figure 9. Sex by pay grade interaction, Equal Opportunity index.


DISCUSSION AND CONCLUSIONS

The focus on differential changes with pay grade in the organizational perceptions of men and women reveals a trend in the response patterns of this sample of Navy enlisted women which could be viewed as disturbing. Even though women hold views which are consistently more positive than those of their male counterparts at entry level, results on 14 of the 19 indices indicated that their views are more negative than those of men by pay grade E-6. The favorable attitudes of women relative to nonrated men may be due to the fact that the selection ratio and objective standards for enlistment are more stringent for women and, therefore, contribute to an initially greater sense of pride and identity with the Navy. Opportunities for women and guarantees of pay and training commensurate with men in the Navy may be perceived as extensive, relative to opportunities for women in industry. If subsequent disillusionment is occurring, it simply may be that the women's expectations are unrealistically high. Furthermore, with increasing rank Navy women are likely to use their male peers as a frame of reference rather than their female counterparts in civilian society, and thus become more aware of the limitations imposed upon them in the military.

Women's relative dissatisfaction at pay grade E-6 is slight but noteworthy since, by the second enlistment, many of the more discontented women have detached from the Navy. If increased positive attitudes and sense of identity with the Navy are typical of women beyond their first enlistment as they are of men, then one would expect that the women reenlistees would be more positive than their entering sisters. This is true on all indices for male petty officers vs. nonrated men, but it is <u>not</u> the case on seven indices for women.

Within the Command Climate dimension, the trend of perceptions of women and men by pay grade is not significantly different on the more abstract aspects of command functioning, such as Communications Flow. However, the two most "personal" indices of Command Climate yield patterns for the sexes that are significantly different across pay grades. Men of higher pay grades report greater motivation and a more favorable view of their command's Human Resource Emphasis than nonrated men, whereas women report relatively stable perceptions across pay grades.

Entering women are positive in assessments of their supervisors, and are more so at higher pay grades on three of the four supervisory indices. However, at the E-6 level they are not as favorable as men toward their supervisors on any measure. On the Supervisory Work Facilitation index, higher pay grade women are more negative than women of lower pay grades, while the opposite pattern is true for men. Thus, while the typical female E-6 sees her supervisor as personally supportive and otherwise effective in getting the job done, he is perceived as relatively less helpful in improving her performance. Perhaps at this level, where leadership training is appropriate, women are less likely to be accorded this type of attention. Overall, the content of the dimensions for which <u>few</u> significant interactions were observed key on less personal functions of the organization; i.e., the referent of the questions is less personal and the focus is on getting the job done. Thus, the Navy as an organization and supervisory effectiveness do not seem to be creating increased difficulties for women of higher pay grade.

The Peer Leadership indices and that assessing Work Group Coordination show the most consistent contrast between the patterns for men and women. Men of higher pay grades are increasingly positive in their attitudes toward peer interactions, while women are not. Research in civilian settings indicates that women may be frustrated when they reach more responsible levels within an organization. Cultural expectations calling for deferential behavior in women conflict with the appropriate interactions among male and female peers on the job, and women who do not fit the stereotypic female role of subordinancy are often perceived as "troublemakers" (Loring & Wells, 1972; Wells, 1973). The potential for role conflict is even greater if women are supervising men. Further, even indirect competition with men may impose additional hardships. Success is perceived as offering negative as well as positive payoffs for women and often is seen as unfeminine by both sexes (Horner, 1969). Such considerations help explain why Navy enlisted women of middle rank, while viewing the Navy positively as an organization, may experience stress in the area of peer relations. Studies in other organizational settings reveal that women generally experience greater isolation on the job than men and receive fewer sociometric choices from co-workers on such criteria as friendship, influence, and prestige (Miller, Labovitz, & Fry, 1975). These differences are more pronounced at advanced levels within the organizations. Similar speculations may partially explain why the means for women on the Motivation index do not show increases with rising pay grade commensurate with those of men, as well as why higher level women show some disappointment in their command's Human Resource Emphasis.

An increase in the sheer numbers of female petty officers may ease the Navy situation by decreasing the incidence of "solo" women working in groups of men and the rarity of female supervisors. One recent study showed that solo professional women are viewed as intruders and placed in marginal roles by their male peers who see this lack of acceptance as "her problem" (Wolman & Frank, cited in Wells, 1973). Increases in the proportion of senior to junior women in the Navy, which will occur automatically to some degree, will decrease the isolation of higher pay grade women as well as provide more role models for aspiring younger women.

Full equality for women--that is, integration throughout Navy ratings and ranks--is not possible given the current prohibition of sea duty for women and the concomitant restrictions on their utilization ashore. Navy women are often resented by men in the same ratings, since many males believe that women are occupying their shore billets despite the quota

system that prevents assignment of women from affecting the sea-shore rotation of men. On the other hand, interview data show that women in nontraditional ratings feel handicapped in that they cannot get on-job training commensurate with sea-going men. The present restricted system of sea-shore rotation provides a partial explanation for some women's disappointment in other areas as well. Because of the limited numbers of shore-based billets for women, many women have been assigned nondesignated positions despite the fact that all entering women are required to be A-School eligible. This is obviously disillusioning for those women who were led to believe, often by recruiters, that they were likely to receive training. The oversupply of qualified women is becoming less of a problem as the Navy approaches its current female endstrength of 20,000. The annual input of women into the Navy will decrease to an estimated 40% of what it has been throughout the buildup of the last 5 years, thus allowing those women who do enter more opportunities commensurate with their aptitudes. However, real as well as perceived inequities for both men and women will never be completely resolved as long as the present legal and structural barriers to full utilization of Navy women exist.

Interpretation of the Satisfaction and Equal Opportunity index results is not straightforward. Inequities may be imperfectly reflected in comparative subjective evaluations by women and men of job rewards and opportunities. For example, it has been found that low status women, who objectively experienced adverse working conditions and job constraints, actually reported less job strain and more job satisfaction than men. However, this pattern was reversed at the higher levels of education, authority, and occupational rank, where women began to pay a disproportionate price for their advancement (Miller et al., 1975). The Navy Satisfaction data show convergence in men's and women's responses by pay grade E-6. The Equal Opportunity measure, as well as the other eight indices evidencing sex by pay grade interactions, shows a full reversal pattern. Thus, despite the optimism of the entry-level females, women are less positive than men by the E-6 level. Longitudinal data and information on the composition of work groups by gender is necessary to further clarify the meaning of these trends.

In conclusion, the research questions posed earlier have been answered affirmatively. Most dimensions of the Navy experience are viewed differently by the sexes, which is not surprising since men and women comprise different populations in so many systematic ways. Further, the pattern of change in perceptions of Navy women and men of increasing pay grade often is not parallel.

The present study suggests that women who move up occupationally in the Navy, as in the external society, run the risk of losing friendship, team feeling, and the relatively unquestioning favorableness with which they view other aspects of their jobs. Such a trend, if confirmed with longitudinal data, portends not only frustration among the women but also a loss of personnel effectiveness for the Navy.



NPRDC. TR-76TR-43

RECOMMENDATIONS

The indirect nature of organizational climate information, such as these HRM Survey data, does not allow for the generation of specific recommendations. Further research is needed to determine whether the greater relative disillusionment of women in the peer relations and work group coordination areas is related to attrition of female personnel and to identify the causes of the hypothesized lack of team feeling of higher pay grade women. For, as has so cogently been pointed out,

> . . . the barriers to women's advancement and achievement are not merely a function of prejudice or incapacity. The structures of professions, narrow and inflexible as they often are, may create limits which are largely unintended. But groups and colleagues are powerful forces in shaping attitudes and behavior; the institutional settings and social mechanisms which inhibit commitment and identity can also be used to promote change and to encourage different consequences. (Epstein, cited in Freeman, 1975, p. 233.)

The Women in the Navy Workshop currently being conducted by the HRM Specialists targets middle managers. Since women generally respond favorably to items asking about their supervisors, it appears that the focus of the workshop, while commendable, should be supplemented. A forum is needed for addressing peer relationships throughout pay grade levels, as well as superior/subordinate interactions. Recommended future revisions of the workshop should include facilitation of teamwork not only among lower pay grade personnel, where the majority of women are now concentrated, but also the facilitation of acceptance by male managers and officers of women as <u>their</u> peers in supervisory and leadership roles.

Due to the consistent initial optimism of women and the subsequent pattern of the interactions between sex and pay grade, investigation of the expectations engendered in women at the time of recruitment is advised. Realistic and factual information about the typical experiences of female enlisted personnel needs to be conveyed to women applicants. Further, with a selection ratio of 4:1 for women, it may not be appropriate to select women with the highest aptitude scores from among the qualified, particularly if school quotas are filled. Job success may be more highly related to possession of nontraditional occupational interests and/or a preference for on-job skill training rather than classroom education. The availability of technical billets for women needs more emphasis in recruiting, for other research has shown that the Navy is attracting women from small towns who have traditional occupational goals and very little information about military life (Thomas, Note 4).

Job specialties open to women for entry level training also must provide valid opportunities for advancement and meaningful use of learned skills on the job. In those ratings which historically have had a heavy concentration of females, women need encouragement to aspire to leadership roles. Low levels of aspiration of the women themselves, as well as expectations of managers and co-workers, can become self-fulfilling prophecies leading to failure of women in nontraditional assignments. Such a cycle then ends in reinforcing stereotypes and "justifying" the familiar distribution of men and women into sex-typed jobs with characteristic levels of status and responsibility. Because in the past there has been an identity in most cultures between jobs in which women predominate and low status jobs, many career military men understandably fear intrusion of women into the Armed Forces, one of the last exclusive male milieus. Not only are the jobs in our society in which women predominate the lower paying, lower status jobs, but this phenomenon too is circular, in that when women move into a job its occupational prestige is lowered (Mednick & Weissman, 1975). To break such defeating cycles, the Navy as an organization must, at the highest levels of command, evidence an unwavering commitment to the full and meaningful integration of women. Otherwise, its efforts will be recognized as tokenistic and not to be taken seriously by those individuals whose attitudes most affect the Navy woman--her peers, and her immediate supervisors.

Finally, the generally high levels of response by women on the Equal Opportunity items indicates that the Navy's efforts to provide fair treatment in the more tangible areas have not gone unnoticed by the women in its ranks. Such policies against institutional sexism should be continued and expanded, at the same time that the more subtle barriers to women's advancement and satisfaction are recognized and ameliorated.

REFERENCES

- Central All-Volunteer Force Task Force. Utilization of military women. Washington, D.C.: Department of Defense, December 1972. (NTIS No. AD-764 510)
- Crawford, K. S., & Thomas, E. D. <u>Human resource management and non-judicial punishment rates on Navy ships (NPRDC Tech. Rep. 76-5).</u> San Diego: Navy Personnel Research and Development Center, August 1975. (AD-A013 226)
- Drexler, J. A. The human resource management survey: An item analysis (Tech. Rep.). Ann Arbor: Institute for Social Research, July 1974.
- Drexler, J. A., & Bowers, D. G. <u>Navy retention rates and human resource</u> <u>management</u> (Tech. Rep). Ann Arbor: Institute for Social Research, May 1973.
- Drexler, J. A., & Franklin, J. L. The effects of organizational conditions and practices on reenlistment rates, operational readiness, and satisfaction in the Navy (Tech. Rep.). Ann Arbor: Institute for Social Research, in press.
- Franklin, J. L. A path analytic approach to describing causal relationships among social-psychological variables in multi-level organizations (Tech. Rep.). Ann Arbor: Institute for Social Research, 1973.
- Freeman, J. (Ed.). Women: A feminist perspective. Palo Alto: Mayfield, 1975.
- Horner, M. S. Fail: Bright women. <u>Psychology Today</u>, November 1969, 3, 36-38; 62.
- Johnson, T. W., & Graen, G. Organizational assimilation and role rejection. Organizational Behavior and Human Performance, 1973, 10, 72-78.
- Likert, R. L. The human organization: Its management and value. New York: McGraw-Hill, 1967.
- Loring, R., & Wells, T. Breakthrough: Women into management. New York: Van Nostrand Reinhold, 1972.
- Mednick, M. T. S., & Weissman, H. J. The psychology of women--selected topics. Annual Review of Psychology, 1975, 26, 1-18.
- Miller, J., Labovitz, S., & Fry, L. Inequities in the organizational experiences of women and men. Social Forces, 1975, 54, 365-381.

- Mumford, S. J. Human resource management and operational readiness as measured by refresher training on Navy ships (NPRDC Tech. Rep. 76-32). San Diego: Navy Personnel Research and Development Center, February 1976. (AD-A022 372)
- OPNAVINST 5300.6, & 5300.6a. Navy Human Goals Plan. Washington, D.C.: Chief of Naval Operations, August and December 1973.
- OPNAVINST 5300.6b. Navy Human Resource Management Support System. Washington, D.C.: Chief of Naval Operations, October 1975.
- Porter, L. W., Lawler, E. E., & Hackman, J. R. <u>Behavior in organizations</u>. New York: McGraw-Hill, 1975.
- Taylor, J. C., & Bowers, D. G. <u>Survey of organizations: A machine-scored</u> <u>standardized questionnaire instrument</u>. Ann Arbor: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, 1972.
- U.S. Department of Labor. Handbook on Women Workers. Women's Bureau Bulletin, Washington, D.C.: U.S. Government Printing Office, 1970, 1972.
- Wells, T. The covert power of gender in organizations. Journal of Contemporary Business, Summer 1973, 53-68.

REFERENCE NOTES

- Thomas, P. J. <u>Utilization of enlisted women in the military</u> (NPRDC Tech. Note 76-7). San Diego: Navy Personnel Research and Development Center, May 1976.
- Quoted from a letter to Senator Edward W. Brooke, as cited in King, G. M. <u>Male and female attitudes toward the role of women in</u> <u>national security: Research methods</u>. Unpublished manuscript, Framingham, Mass.: Framingham State College, March 1973.
- HRM Studies and Analysis Group. Norms, HRMS (Forms 9-10) (Unpublished data). San Diego: Navy Personnel Research and Development Center, March 1976.
- Thomas, P. J. Why women enlist: The Navy as an occupational choice. Manuscript in preparation, San Diego: Navy Personnel Research and Development Center, 1976.

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APPENDIX A

NAVY HUMAN RESOURCE MANAGEMENT SURVEY



NAVY HUMAN RESOURCE MANAGEMENT SURVEY

The Navy is highly interested in improving the overall conditions within its commands, promoting individual command excellence, and increasing the satisfaction of personnel toward Navy life. Areas of particular concern include leadership, equal opportunity, race relations, training and utilization of people, motivation and morale, good order and discipline, communications, concern for people, drug and alcohol abuse, and interaction with peoples of other countries.

This survey is intended to provide information that can be used to decide the areas to receive greatest emphasis in the future, both within your command and the Navy in general. If the results are to be helpful, it is important that you answer each question as thoughtfully and frankly as possible. This is not a test; there are no right or wrong answers.

The completed questionnaires will be processed by automated equipment which will summarize the answers in statistical form. Your individual answers will remain strictly confidential, since they will be combined with those of many other persons.

Report Symbol BuPers 5314-6 Process Control No. 09

Department of the Navy Bureau of Naval Personnel Research and Evaluation Division (Pers-65) November 1974

INSTRUCTIONS

- All questions can be answered by filling in appropriate spaces on the answersheet. If you do not find the exact answer that fits your case, use the onethat is closest to it.
- Remember, the value of the survey depends upon your being straightforward in answering this questionnaire. Your answer sheets are forwarded directly to the computer center and no one from your command will see them.
- 3. The answer sheet is designed for automatic scanning of your responses.
 - Questions are answered by marking the appropriate answer spaces (-) on the answer sheet, as illustrated in this example:
 - Q. To what extent does your supervisor encourage people to give their best effort ?



- 4. Please use a soft pencil, and observe carefully these important requirements:
 - Make heavy black marks that fill the spaces.
 - Erase cleanly any answer you wish to change.
 - Make no stray markings of any kind.
- 5. Questions about "this command" refer to the ship, squadron or similar operational unit to which you are assigned. Questions about "your superviser" refer to the person to whom you report directly. Questions about "your work group" refer to all those persons who report to the same supervisor as you de.
- 6. Below are examples for filling in side 1 of the answer sheet.

Example A: 11. PAY GRADE:

Ε	Enlisted	Officer	Warrant	GS	Wage Grade	
E	==== 2	= =3= =4	in mitter	=6= =7=	-8910 -	
Э	=#= =12	= =13= =14	4= =15=	=16= =17=	18 - 19 - 20	

Example B: 13. What is your rating designation (EX. BM, ADR, SD) ? If your rating contains only two letters use the upper two boxes.

Ε	PAR EBRECCETDE Rute Ekrekreme Rute Ekrekreme	
Т	∵A= =8= =C= =D+ =J= =K= =1== =M= =S= == =10=	-E
R	=A= =B= =C= =D= =J= =K= =E= =M= =S= =T= =U=	E = = = = = = = = = = = = = = = = = = =

Page 2		
COMMUNI- CATIONS FLOW	1.	is the amount of information you get about what is going on in other departments or watch sections adequate to meet your needs ?
	2.	To what extent are you told what you need to know to do your job in the best possible way ?
	3.	How receptive are those above you to your ideas and suggestions ?
	4.	Decisions are made in this command at those levels where the most adequate information is available.
DECISION MAKING	5.	Information is widely shared in this command so that those who make decisions have access to available know-how.
	6.	When decisions are being made, to what extent are the people affected asked for their ideas ?
	7.	To what extent do you feel motivated to contribute your best efforts to the command's mission and tasks ?
MOTIVA- TION	8.	Do you regard your duties in this command as helping your career ?
	9.	Work group members who contribute the most are rewarded the most.
	10.	To what extent does this command have a real interest in the welfare and morale of assigned personnel ?
HUMAN RESOURCE EMPHASIS	Π.	To what extent are work activities sensibly organized in this command ?
	12.	This command has clear-cut, reasonable goals and objectives that contribute to its mission.
	13.	I feel that the workload and time factors are adequately considered in planning our work group assignments.
LOWER	14.	In general, how much influence do lowest level supervisors (supervisors of non-supervisory personnel) have on what goes on in your department ?
INFLUENCE	15.	In general, how much influence do non-supervisory personnel have on what goes on in your department ?
SUPERVI- Sory SUPPORT	16.	How friendly and easy to approach is your supervisor ?

	17.	When you talk with your supervisor, to what extent does he pay attention to what you are saying ?
SUPERVISORY SUPPORT (CONT.)	18.	To what extent is your supervisor willing to listen to your problems
	19.	My supervisor makes it easy to tell him when things are not going as well as he expects.
SUPERVISORY TEAMWORK	20.	— To what extent does your supervisor encourage the people who work for him to work as a team ?
	21.	To what extent does your supervisor encourage the people who work for him to exchange opinions and ideas ?
SUPERVISORY GOAL EMPHASIS	22.	To what extent does your supervisor encourage people to give their best effort ?
	23.	To what extent does your supervisor maintain high personal standards of performance ? —
SUPERVISORY	24.	To what extent does your supervisor help you to improve your performance
WORK FACILITATION	25.	To what extent does your supervisor provide you with the help you need so you can schedule work ahead of time ?
	26.	To what extent does your supervisor offer new ideas for solving job related problems ?
	27.	- How friendly and easy to approach are the members of your work group
PEER SUPPORT	28.	When you talk with the members in your work group, to what extent do they pay attention to what you are saying ?
	29.	To what extent are the members in your work group willing to listen to your problems ?
	30.	How much do members of your work group encourage each other to work as a team ?
PEER TEAMWORK	31.	How much do members in your work group stress a team goal ?
	32.	How much do people in your work group encourage each other to give their best effort ?

Page	4	
PEER TEAMWORH (CONT.)	33. K	To what extent do people in your work group maintain high standards of performance ?
PEER WOR	34. RK	To what extent do members in your work group help you find ways to improve your performance ?
FACILI- TATION	35.	To what extent do members of your work group provide the help you need so you can plan, organize and schedule work ahead of time ?
PEER	36.	To what extent do members of your work group offer each other new ideas for solving job related problems ?
PROBLEM SOLVING	37.	Members of my work group take the responsibility for resolving disagreements and working out acceptable solutions.
	38.	To what extent do p <mark>e</mark> ople in your work group exchange opinions and ideas ? — — —
	39.	To what extent does your work group plan together and coordinate its efforts ?
WORK GROUP	40.	To what extent do you have confidence and trust in the members of your work group ?
COORDIN- ATION	41.	To what extent is information about important events widely exchanged within your work group ?
	42.	To what extent does your work group make good decisions and solve problems well ? — — — —
WORK G RO UP	43.	To what extent has your work group been adequately trained to handle emergency situations ?
READI- NESS	44.	My work group performs well under pressure or in emergency situations.
	45.	My work group can meet day to day mission requirements well. — — — —
WORK GROUP DISC1- PLINE	46.	The members of my work group reflect Navy standards of military courtesy, appearance and grooming.
		I feel that Navy standards of order and discipline are maintained within my work group.

Questions 48 through 53 are answered, on the answer sheet, as shown below.

sfied

SATISFACTION

Very Dissatisfied Somewhat Dissatis Neither Satisfied	. Very Satisfi
48. All in all, how satisfied are you with the pe	eople in your work group ?
49. All in all, how satisfied are you with your s	supervisor ?
50. All in all, how satisfied are you with your ;	job ?
51. All in all, how satisfied are you with this of most others ?	command, compared to
52. All in all, how satisfied do you feel with th in the Navy, up to now ?	ne progress you have made
53. How satisfied do you feel with your chance fo Navy in the future ?	or getting ahead in the

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SATISFAC- TION	54.	Does your assigned work give you pride and feelings of self-worth ?
(CONT.) - INTEGRA-	55.	To what extent is your command effective in getting you to meet its needs and contribute to its effectiveness ?
TION OF MEN AND MISSION	56.	To what extent does your command do a good job of meeting your needs as an individual ?
	57.	I have been adequately trained to perform my assigned tasks.
TKA I N ING	58.	To what extent has this command trained you to accept increased leadership ?
-	59.	To what extent has this command trained you to accept increased technical responsibility ?
	60.	Our supervisor gives our work group credit for good work.
GENERAL	61.	To what extent does your supervisor attempt to work out conflicts within your work group ?
	62.	People at higher levels of the command are aware of the problems at my level.
EQUAL	63.	In my chain of command there is a willingness to talk about racial issues.
OPPORTUNIT	64.	To what extent does this comma <mark>nd ensure that you ha</mark> ve equal opportunity for advancement in rate/rank ?
	65.	To what extent does this command ensure that you have equal opportunity for job assignment ?
•	66.	To what extent does this command ensure that you have equal opportunity for housing ?
	67.	To what extent does this command ensure that you have equal opportunity for education and training ?
	68.	To what extent does this command ensure that you receive a fair and objective performance evaluation ?
	69.	To what extent does this command ensure that you have equal opportunity for recreation ?
	70.	To what extent is military justice administered fairly throughout this command ?
	71.	In my chain of command there is a willingness to talk about sex discrimination issues.

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EQUAL OPPORTUNITY	72.	In this command work assignments are fairly made.	
(CONT.)	73.	People in this command discourage favoritism.	
DRUG ABUSE	74.	To what extent do you understand the reasons contributing to the abuse of drugs ?	
	75.	To what extent do members of your work group discourage drug abuse	?
	76.	My supervisor can be depended upon to respond helpfully and appropriately to personnel with drug problems.	
ALCOHOLISM	77.	To what extent would you feel free to talk to your supervisor about an alcohol problem in your work group ?	
PREVENTION	78.	To what extent does this command promote attitudes of responsibility towards the use of alcoholic beverages ?	
	79.	To what extent do members of your work group discourage the abuse of alcoholic beverages ?	
	80.	To what extent does this command provide alternatives to the use of alcohol at command functions ?	
	81.	To what extent would your work group accept and support a recovered alcoholic ?	
0010/01/17/01	82.	Do members of your work group care about the image they project when ashore in this area ?	٠
COMMUNITY INTERRELATION- SHIPS	83.	Do you consider the effect of your behavior on how people of this area view Navy personnel ?	
	84.	To what extent do you expect to be fairly dealt with while spending money in this area ?	
	85.	To what extent do you feel you have sufficient understanding of the people and customs of this area to get along in this community ?	
	86.	To what extent has information been provided to assist you and/or your family to adjust to living in this area ?	
	87.	Do you have a good understanding of your personal role as a representative of the U.S. when overseas ?	
	88.	Do members of your work group look forward to visiting foreign countries ?	



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