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# NAVAL PERSONNEL RESEARCH AND DEVELOPMENT LABORATORY

WTR 73-45

June 1973

ATTITUDES OF NAVAL PERSONNEL TOWARD  
POLICY CHANGES INITIATED THROUGH Z-GRAMS

David B. Greenberger  
with  
Gerry L. Wilcove

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Work Unit No.  
322723760

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WASHINGTON, D. C. 20374

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FOREWORD

Gerry Wilcove was responsible for the compilation of the questionnaire, the sampling design, and the administration of the survey. The author also wishes to thank Carol Fuller and Joseph Schneider for their assistance.

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## SUMMARY

### Problem

The goal of policy makers in the Navy is the continuing improvement of the Navy's efficiency. In order to achieve this goal, Navy managers must be cognizant of the perceptions and attitudes of human resources. The study of changes in policy that were implemented through Z-grams, can provide significant information on not only the effects of these changes, but also reflect on the characteristics of the organization itself.

### Purpose

The objective of this study is to try to understand the attitudes of naval personnel toward the policy changes that have been implemented through Z-grams. The areas of policy change are evaluated to ascertain which contribute most strongly to the formation of a person's general attitude toward Z-grams. Also, several possible influences are discussed to determine the effect of each on the perceptions of life in the Navy.

### Approach

The data were approached analytically rather than descriptively since it was not possible to assume that the sample was representative of the Navy population. The sample was drawn from the NPS 71-1 identifiable returns. Questionnaires were distributed by the commands of the personnel selected to be participants in this study. A total of 2857 male officers and enlisted men responded to the survey.

### Results

Small, but statistically significant relationships were found to exist among opinions toward the eight areas of policy change. For both officers and enlisted men, attitudes toward "regulations" contribute most to the overall opinion of Z-grams.

It was found that the differences between the attitudinal responses of officers and enlisted men were not as great as expected. In the few instances where differences between the groups were found, the differences were not large. In two of the three areas where these differences did occur, officers were found to be less favorable to the results of the policy changes than were enlisted men. Statistically significant differences in responses were found between those with differing lengths of active service.

As hypothesized, those with the least active service viewed the policy changes most favorably. Individuals with more than 20 years of experience generally perceived the ramifications of the policy changes least favorably. Persons on shore duty generally had a more favorable attitude toward the policy changes than did those stationed at sea. Race was found to affect attitudes on one of the two areas of study. Nonwhites were found to be more positive to changes in performance and readiness than were whites.

Finally, it was found that the respondents in this study viewed their immediate supervisors as supporting, to varying degrees, the policy changes implemented through Z-grams. As expected, those who perceived their supervisors as supporting only some of the policy changes were the group that viewed the most favorably the speed of the policy changes. However, this same group was found to have the least favorable opinion of the results of the policy changes. Those who perceived their supervisors as supporting all of the policy changes, were the most receptive to the changes.

### Conclusions

This research can be used to provide an indication of potential differences in attitudes among groups. In the evaluation of the present policy changes, it should be remembered that there are some groups that do not like them. In the future, efforts should be made to quantify more precisely these differences in order to predict the opinion of new policy changes. There were three variables that were found to be related to opinions regarding policy changes: years of active service, location of duty assignment and perceived extent of supervisor's support. Officer-enlisted status and race may be significant factors in deriving different opinions; the differences in this study were found to be small.

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 CHANGES INITIATED THROUGH Z-GRAMS, WTR 73-45

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## I. INTRODUCTION

### A. Problem

The goal of policy makers in the Navy is the continuing improvement of the Navy's efficiency. In order to achieve this goal, Navy managers must be cognizant of the dynamics of their organization. The study of changes can provide significant information on not only the effects of these changes, but also more general information on the characteristics of the organization itself. The objective of this study is to try to understand the attitudes of naval personnel toward some of these policy changes and the effects of the changes on Navy life.

### B. Purpose

This report is the second study investigating the attitudes of naval personnel toward the policy changes that have been implemented by Z-grams. Attention is centered upon the examination of the components of personnel opinions. First, the areas of policy change are evaluated to ascertain which contribute most strongly to the formation of a person's general attitude toward Z-grams. Second, several possible influences are discussed to determine the effect of each on the perceptions of life in the Navy.

### C. Background

The policy changes that have been instituted by ADM Zumwalt, Chief of Naval Operations, have received a considerable amount of publicity in both the Navy and the civilian press. These changes, implemented by the "Z-grams," have dealt with a diverse set of issues that are intended to improve the Navy.

The Naval Personnel Research and Development Laboratory was asked to conduct an analysis of the opinions of naval personnel regarding these changes. The results of the first survey of opinion, administered in May 1971, are presented in a report published in December 1971 (Wilcove, 1971).

Recently (a year and a half after the original survey), a similar questionnaire was sent out to the identifiable respondents of the original study. In the interim, much has occurred in the Navy which might be expected to have had some effect on men's perceptions of the results of the policy changes.

## D. Hypotheses

### 1. Areas of Policy Change

The first investigation involves the eight general areas of policy change: Regulations, Leave and Liberty, Personal Services, Equal Rights Opportunities, Retention Programs, Living and Housing Conditions, Family Services, and Job and Career Development. Correlations, although small, were expected to be significant between each pair of items. Those areas that are the most similar in nature (i.e. family services, personnel service and housing) were expected to be the most highly correlated.

Attitudes toward the eight areas were analyzed to determine how much the attitudes in each of these areas contribute to a "general opinion of Z-grams" (question 46). It was hypothesized that the most publicized and most controversial areas should have been most important in the formation of this general opinion.

### 2. Effect of Group Membership on Attitudes Toward Policy Change

Persons in the Navy tend to identify with a number of different groups. It was hypothesized that specific attitudes toward Navy policies are characteristic of these different groups. It is assumed that each person's attitudes toward policies in the Navy are influenced by the perceptions and attitudes of the groups of which he is a member. There were four characteristics studied: the officer-enlisted status of the individual, the number of years of active service he has, the person's race, and the person's type of duty assignment (sea-shore). In addition, the effect of the perceived extent of the supervisor's support of the policy changes was investigated.

The members of each of these groups have had different experiences than members of other groups; they had had different peers; and they have had different initial perceptions of Navy life. Opinions of Navy policy on many issues should, as a result, be different between groups. This study evaluates not only the effect of each of these factors on the policy changes, but also the effect of these factors in combination upon the individual's opinion.

Specifically, the following predictions were made:

a. Because officers and enlisted men have different functions, different reference and different experiences, their perceptions of the Navy should have been different. The answers of officers and enlisted men were expected therefore to be different. It was predicted that the enlisted men, who are often more directly affected by the policy changes, would have had more favorable attitudes to the results of the policy changes than would the officers. An exception was expected for the opinions regarding authority of petty officers. Here enlisted men were predicted to have less favorable attitudes than the officers.



b. Overall, persons with differing lengths of active service may have had different responses. The more time that a person has been in the Navy, the more definite his impressions of policy may have become. Personnel most recently entering the Navy may have found that the changes were quantitatively least different and therefore may have had the most favorable attitude toward them. Those persons who have been in the Navy the longest period of time would have experienced the most dissonance and therefore should have been most opposed to the changes.

c. The place that a person is assigned (sea-shore) should have resulted in differences in responses to the Z-grams. It was expected that those assigned to activities on shore would generally have demonstrated a more favorable attitude to the results of the policy changes than those assigned to sea duty. The only topic area for which persons at sea were predicted to have had more favorable attitudes was the question on performance and readiness. Persons at sea are the ones who directly contribute to the readiness of the Navy. To criticize the performance and readiness of the Navy is to criticize their work. It is believed that they would perceive the performance and readiness as having decreased less than those on shore.

d. A difference was expected between whites and nonwhites in their perceptions of an increase in performance and readiness. Nonwhite persons should have seen the changes as being less disruptive and more beneficial to the Navy. They consequently should have perceived less of a decrease in performance and readiness than whites.

e. Differences in mean responses may have occurred between the perceived levels of supervisor's support for the policy changes. It was expected that those persons whose supervisors supported all the policy changes would have exhibited attitudes that were most favorable to the policy changes. Those persons who had supervisors who supported only some of the policy changes were expected to show the least favorable score. The only exception to this should have occurred for the perception of the speed of the changes. Here, those persons whose supervisors supported only some of the policy changes were expected to respond in the most favorable manner; those subordinates of supervisors who supported all of the policy changes were expected to be the least concerned with the speed of implementation and as a result should have shown the least favorable mean score.

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## II. METHOD

### A. Questionnaire Items

The specific questions asked in the questionnaire employed for this study (Appendix A) were highly similar to those asked in various sections of the NPS 71-1 survey. The present survey was composed of two parts: a section of background questions and a section of attitudinal questions.

The first part of the questionnaire (questions 1-21) inquires into the person's background, present status, and plans. The second part (questions 22 - 47) is composed of three basic types of attitudinal questions:

1. The first set asked the person whether he feels that changes in policy in each of eight areas has improved Navy life. These eight areas were determined through content analyses to obtain a small number of mutually exclusive general factors.

2. The second group asked the men their perceptions of specific elements in Navy life. They were asked, whether they agreed with statements that suggested that various changes had taken place in Navy life.

3. The third group included more global types of questions; these questions assessed general opinion of Z-grams, the implementation of Z-grams, and the effect of Z-grams.

### B. Description of Sample

The sample used in this study is a subsample of the original NPS 71-1 sample, which was a randomly chosen sample of the Navy male population. Prior to the mailing of NPS 71-1, this sample was randomly divided into two groups. One group were asked to identify themselves on their answer sheets by using either their File Numbers (officers) or their Military Service Numbers (enlisted). The sample for this study was selected from the identifiable returns.

Although there were a total of 8440 identified returns in the NPS 71-1 study (see Table 1), only 4365 questionnaires were mailed in the present study. This loss of nearly 50% of the original sample occurred in the formation of the rosters that were mailed out with this study. The attenuation results from the loss of half of the computer tapes on which the NPS 71-1 data were stored. The men whose data were lost consequently could not be identified for this study. Further individuals were lost from this sample because a valid address could not be found for them. This could have been caused by a number of reasons: they no longer were on active duty in the Navy, no activity addresses were found for them on the tapes, they may have had an unlocatable address, etc.



TABLE 1

## SURVEY SAMPLE, RETURNS AND RESPONSE RATES

	NUMBER OF QUESTIONNAIRES MAILED	NO. OF QUESTIONNAIRES RETURNED BY POST OFFICE OR COMMANDS	MAX. NO. OF QUESTIONNAIRES ADMINISTERED	NO. OF RETURNS RECEIVED	RETURN RATE	PROPORTION OF NPS 71-1 SAMPLE	NO. OF RETS. RECD. AFTER CUT-OFF <sup>2</sup>
NPS 71-1 IDENTIFIABLE SAMPLE							
OFFICER	6500	327	6173	3147	.51	--	--
ENLISTED	16250	1470	14780	5293	.36	--	--
TOTAL	22750	1797	20953	8440	.41	--	--
Z-GRAM FOLLOW-UP SAMPLE							
OFFICER	1725	316	1409	1274	.92	.21	26
ENLISTED	2640	636	2004	1583	.80	.11	41
TOTAL	4365	952	3413	2857	.85	.14	67

<sup>1</sup> THIS SAMPLE WAS DRAWN FROM THE NPS 71-1 IDENTIFIABLE RETURNS.

<sup>2</sup> INFORMATION NOT AVAILABLE FOR NPS 71-1 STUDY.

### C. Data Collection

Current duty stations were requested to administer the survey materials to the individuals who were indicated on an enclosed roster. If an individual was not available, the command was requested to indicate the reason that they were unable to deliver a questionnaire to that person (e.g., TDY, on leave, reassigned). Included in the package were the appropriate number of cover letters to the respondents (stressing the importance of answering the questionnaire), questionnaires, standard optical scanning answer sheets, and envelopes in which the individuals were to enclose their answer sheets. The respondents were asked to return the completed answer sheets in the sealed envelopes to their commands. The commands were requested to return a package containing these envelopes and the rosters to the Naval Personnel Research and Development Laboratory.

The questionnaire packages were mailed to the commands on February 15, 1973. Those answer sheets received after March 15, 1973 were not processed.

A total of 2857 answer sheets were returned (see Table 1). This number represents 14% of the identifiable sample administered the NPS 71-1 study. This very low percentage is due to a combination of three factors. First, 15% of those administered this present survey failed to respond. Second, there was a small (41%) return rate to the NPS 71-1 survey. Third, there was, as previously described, nearly a 50% loss of individuals in the formation of the mailing labels for this study. It is estimated that had all the identifiable respondents of NPS 71-1 been mailed this present survey, the percentage of the original sample who would have returned the questionnaire for the second survey would have been 33%.

### D. Coding of Data

The manner in which the response alternatives for each question were scored is described in Appendix B. All responses that indicated more positive attitudes toward the Navy or the policy changes, were coded with higher numerical scores. Those responses that showed negative attitudes toward the Navy or the policy changes were coded with lower scores. For example, one question asked whether petty officers have less authority. A response indicating agreement that they have less authority was scored as "1"; a response indicating disagreement with the statement that they have less authority was coded as "3"; a response indicating that the respondent did not know was coded as "2".

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### III. RESULTS

#### A. Areas of Policy Change

Data, presented in Table 2, depict the intercorrelation for the officers for the eight policy change areas and for the general Z-gram opinion question. Among the eight policy change areas, there were only three intercorrelations (regulations - leave and liberty; regulations - personal services; and regulations - family services) that were not significant. With more than 1000 degrees of freedom, an  $r$  of only .081 is needed for significance at the .01 level. The intercorrelation between family services and personal services was .423 ( $p < .01$ ); between family services and personal services it was .235 ( $p < .01$ ); and between job development and retention programs it was equal to .326 ( $p < .01$ ).

The intercorrelations for the enlisted sample for the eight areas and for the general Z-gram opinion are shown in Table 3. Small, but again significant intercorrelations ( $p < .01$ ) were found for all correlations among the eight items except for the correlation between personal services and regulations. The intercorrelation between personal services and living conditions was found to be significant ( $r = .215$ ,  $p < .01$ ). Significant intercorrelations were also found between family services and personal services ( $r = .355$ ,  $p < .01$ ) and between job development and retention ( $r = .325$ ,  $p < .01$ ).

In the effort to discern the areas of policy change that contribute most strongly to the overall opinion on Z-grams, a stepwise multiple linear regression analysis was performed. This analysis matched each of the eight general areas of policy change (i.e., regulations, leave and liberty, personal services, equal rights opportunities, retention programs, living and housing conditions, family services, job and career development) against the criterion variable (i.e., "general opinion of Z-grams" - question 46). The regression analysis indicates the degree to which each question (the particular area of policy change) contributes to predicting the overall criterion. The value of the statistic ( $F$ ) that is provided tells whether the increase in  $r^2$  provided by the addition of each item in the multiple correlation is significant. The analysis, then, provides information that not only lists, in descending order, the most important factors in predicting the general Z-gram opinion, but also indicates how relatively important each of these factors is in this prediction.

Table 4 presents data for the eight independent variables and the criterion for both the officers and enlisted men. For the officers, it can be seen that the perceptions of the regulation changes account for slightly over 16% of the variance of the responses to the question on the general perception of Z-grams. The addition to the

TABLE 2

INTERCORRELATIONS FOR THE EIGHT POLICY CHANGE AREA QUESTIONS AND FOR THE Z-GRAM QUESTION  
(OFFICERS)

AREA	REGULATIONS	LEAVE & LIBERTY	PERSONAL SERVICES	EQUAL RIGHTS OPPORTUNITIES	RETENTION PROGRAMS	LIVING & HOUSING CONDITIONS	FAMILY SERVICES	JOB & CAREER DEVELOPMENT	Z-GRAM OPINION
REGULATIONS	1.000	.066	.045	.183	.116	.101	.019	.160	.401
LEAVE & LIBERTY		1.000	.157	.133	.191	.204	.139	.227	.085
PERSONAL SERVICES			1.000	.163	.187	.281	.423	.206	.144
EQUAL RIGHTS OPPORTUNITIES				1.000	.191	.111	.172	.185	.207
RETENTION PROGRAMS					1.000	.235	.261	.326	.217
LIVING & HOUSING CONDITIONS						1.000	.360	.302	.137
FAMILY SERVICES							1.000	.303	.085
JOB & CAREER DEVELOPMENT								1.000	.224
Z-GRAM OPINION									1.000



TABLE 4

Summary of Regression Analysis of the Eight Policy  
Change Questions to the Z-gram Opinion Question

Area	OFFICER				ENLISTED			
	R <sup>2</sup>	Increase in R <sup>2</sup>	F	Area	R <sup>2</sup>	Increase in R <sup>2</sup>	F	F
Regulations	.1608	.1608	230.375*	Regulations	.1350	.1350	226.567*	
Retention	.1904	.0296	43.902*	Equal Rts.	.1564	.0214	36.768*	
Job Devel.	.2032	.0128	19.293*	Job Devel.	.1625	.0062	10.716*	
Equal Rts.	.2123	.0091	13.812*	Fam. Serv.	.1642	.0017	2.902	
Pers. Serv.	.2171	.0048	7.274*	Pers. Serv.	.1667	.0024	4.232*	
Fam. Serv.	.2181	.0010	1.537	Retention	.1676	.0009	1.610	
Liv. Cond.	.2186	.0006	.854	Leave & Lib	.1681	.0005	.903	
Leave	.2187	.0001	.091	Liv. Cond.	.1683	.0002	.313	

\*p&lt;.01

analysis of the opinions on retention, programs, job and career development, equal rights opportunities, and personal services contributed smaller, but still significant amounts of variance. The addition of each of the other three areas of change did not significantly increase  $r^2$ .

For the enlisted sample, a similar multiple regression analysis was performed. Opinions about regulation changes again contributed the most in the formation of an overall opinion of Z-grams. The questions on equal rights, job and career development, and personal services when added were also found to significantly increase  $r^2$ . The other four areas of change did not add any significant increase to the prediction of the criterion.

## B. The Effect of Factors on Perceptions of Navy Life

Three-way analyses of variance were utilized to assess the effects of various factors on perceptions of different aspects of Navy life. There were five factors investigated in this study: officer-enlisted status, years of active service, extent of supervisor's support, location of assignment (sea-shore), and race. Ten three-way analyses were performed, using selected combinations of three of the five factors in each analysis.

An analysis of variance permits the examination of not only the significance of variation across levels of each specific variable, but also the ways in which the variables interact. First, the analysis tests the main effects. A significant mean square for one of the variables (e.g., A) indicates, according to Edwards (1963), that the means of each level for the factor, "averaged over the levels of B and C differ significantly, [p. 188]". An interaction (e.g. A X B) that is not significant implies that the A effect (the differences between levels of A) is independent of B. If the interaction (e.g. A X C) is significant, the levels of A are not independent of the levels of C. "In other words, a statement about the A effect must be qualified by the particular level of C involved, or equivalently, a statement about the C effect must be qualified by the particular level of A involved, [Edwards, 1963, p. 188]."

### 1. Analysis of the Effects of Officer-Enlisted Status, Years of Active Service and Extent of Supervisor's Support

Six analyses of variance tested singly and in combination the effect of officer-enlisted status, years of active service, and extent of supervisor's support. The dependent variables were responses to six questions which asked: whether the Navy was perceived as having more discipline problems (question 38), whether petty officers had less authority (question 36), whether junior officers had less authority



(question 40), whether senior officers had less authority (question 43), the general opinion of Z-grams (question 46), and the opinion of the speed of the policy change (question 45).

a. Discipline Problems. Significant main effects were found for two of the factors (years of active service and supervisor's support). The analysis is summarized in Table 5. Mean values for each subgroup are presented in Table 6. Those persons with the least service (2-4 years) were found to have the most favorable attitudes toward the results of the policy changes; those with the most service (20 years or more) were found to have the most negative attitudes toward the ramifications of the policy changes. As expected, the persons whose supervisors were judged as supporting only some of the policy changes had the least favorable attitude toward the policy changes. The subordinates of supervisors who were perceived as supporting all or most of the policy changes, had the most positive attitude to the question on discipline. The value of  $w^2$ , a test of the amount of variance accounted for (Hays, 1963), was less than 5% for all main effects.

b. Petty Officer Authority. Significant main effects on the petty officer question were found for two factors (officer-enlisted status, extent of supervisor's support). The analysis of variance is summarized in Table 7. Mean scores are presented in Table 8. As predicted, more favorable attitudes toward the Navy were found for the officer sample than for the enlisted men. More positive attitudes toward Navy life were exhibited by those whose supervisors supported all of the policy changes than by those whose supervisors supported only some of the policy changes.

c. Junior Officer Authority. For the data on junior officer authority, significant main effects were found for the factors of years of active service, and extent of supervisor's support. A summary of the analysis is presented in Table 9. Means are shown in Table 10. The most favorable attitudes regarding the junior officer authority question (the least agreement with the question) were found for those persons with 4-6 years of active service; the least favorable attitude was shown by those with 12-20 years of service. As in the previous analysis, those persons with supervisors who supported all of the changes reported the most positive attitude toward the results of the changes while those whose supervisors supported only some of the changes had the most negative attitude scores.

d. Senior Officer Authority. For the third analysis, perceptions of senior officer authority, significant main effects were found for the factors of: officer-enlisted status, and years of active service. The analysis is presented in Table 11. Mean subscores are presented in Table 12. Officers, as expected, had more negative scores than did enlisted men. Those persons with the least active service

TABLE 5

Summary of Analysis of Variance for "Discipline Problems"<sup>a</sup>  
for Officer-Enlisted Status, Years of Active Service,  
and Level of Supervisor's Support

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A (Officer-Enlisted)	1	.560	.814	
B (Active Service)	4	6.379	9.284***	.24%
C (Supervisor's Support)	2	2.978	4.334*	1.21%
AXB	4	1.301	1.894	
AXC	2	.124	.181	
BXC	8	.637	.928	
AXBXC	8	.205	.299	
Error	2677	.687		

<sup>a</sup>The item, "there are more discipline problems" was scored as follows: agreement=1, disagreement=3, don't know= 2.

\*p<.05

\*\*p<.01

\*\*\*p<.001

TABLE 6

Mean Scores for "Discipline Problems"<sup>a</sup> by Officer-Enlisted Status,  
Years of Active Service and Supervisor's Support

	Officer			Enlisted			Totals
	Level of Supervisor's Support			Level of Supervisor's Support			
	Some	Most	All	Some	Most	All	
Years of Active Service							
2-4	1.00	1.40	1.67	1.64	1.90	1.84	1.82
4-6	1.65	1.61	1.55	1.71	1.71	1.58	1.62
6-12	1.32	1.44	1.53	1.58	1.60	1.57	1.53
12-20	1.38	1.46	1.60	1.38	1.48	1.56	1.51
20 or more	1.39	1.52	1.47	1.18	1.36	1.45	1.45

Totals

Officer-Enlisted Status: Officer= 2.19; Enlisted= 2.51

Level of Support: Some= 1.48; Most= 1.56; All= 1.57

<sup>a</sup>The item, "there are more discipline problems" was scored as follows: agreement= 1, disagreement= 3, don't know= 2.

TABLE 7

Summary of Analysis of Variance for "Petty Officer Authority"<sup>a</sup>  
for Officer-Enlisted Status, Years of Active Service  
and Level of Supervisor's Support

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A (Officer-Enlisted)	1	40.659	45.336***	1.60%
B (Active Service)	4	1.036	1.155	
C (Supervisor's Support)	2	10.341	11.530	.76%
AXB	4	1.737	1.937	
AXC	2	.344	.383	
BXC	8	.414	.461	
AXBXC	8	.503	.561	
Error	2677	.897		

<sup>a</sup>The item, "petty officers have less authority" was scored as follows: agreement=1, disagreement=3, don't know=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001

TABLE 8

Mean Scores for "Petty Officer Authority"<sup>a</sup> by Officer-Enlisted Status, Years of Active Service and Level of Supervisor's Support

Years of Active Service	Officer			Enlisted			Totals
	Level of Supervisor's Support			Level of Supervisor's Support			
	Some	Most	All	Some	Most	All	
2-4	1.00	2.00	1.89	1.81	1.88	1.89	1.87
4-6	1.77	2.22	2.27	1.64	1.77	1.84	1.97
6-12	1.88	2.05	2.20	1.58	1.62	1.80	1.90
12-20	1.95	1.96	2.05	1.57	1.76	1.92	1.88
20 or more	1.65	2.09	2.11	1.73	1.80	1.85	2.00

Totals

Officer-Enlisted Status: Officer= 1.51; Enlisted= 1.59

Level of Support: Some= 1.70; Most= 1.88; All= 2.01

<sup>a</sup>The item, "petty officers have less authority" was scored as follows: agreement= 1, disagreement= 3, don't know= 2.

TABLE 9

Summary of Analysis of Variance for "Junior Officer Authority"<sup>a</sup>  
for Officer-Enlisted Status, Years of Active Service  
and Level of Supervisor's Support

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A. (Officer-Enlisted)	1	.304	.404	
B (Active Service)	4	2.235	2.966*	.41%
C (Supervisor's Support)	2	4.955	6.577***	.29%
AXB	4	.882	1.171	
AXC	2	.392	.521	
BXC	8	.457	.606	
AXBXC	8	.591	.784	
Error	2677	.753		

<sup>a</sup>The item, "junior officers have less authority" was scored as follows: agreement=1, disagreement=3, don't know=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001

TABLE 10

Mean Scores for "Junior Officer Authority"<sup>a</sup> by Officer-Enlisted Status, Years of Active Service and Level of Supervisor's Support

Years of Active Service	Officer			Enlisted			Totals
	Level of Supervisor's Support			Level of Supervisor's Support			
	Some	Most	All	Some	Most	All	
2-4	1.00	2.800	2.33	2.12	2.28	2.19	2.22
4-6	2.06	2.34	2.45	2.36	2.26	2.26	2.32
6-12	2.05	2.18	2.25	2.21	2.18	2.30	2.22
12-20	1.88	2.11	2.14	1.99	2.17	2.24	2.14
20 or more	2.12	2.12	2.27	1.91	2.18	2.18	2.20
Totals							

Officer-Enlisted Status: Officer= 2.07; Enlisted= 1.75

Level of Support: Some= 2.07; Most= 2.20; All= 2.24

<sup>a</sup>The item, "junior officer have less authority" was scored as follows: agreement= 1, disagreement= 3, don't know= 2.

TABLE 11

Summary of Analysis of Variance for "Senior Officer Authority"<sup>a</sup>  
for Officer-Enlisted Status, Years of Active Service  
and Level of Supervisor's Support

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A (Officer-Enlisted)	1	39.339	59.826***	2.09%
B (Active Services)	4	7.767	11.812***	1.54%
C (Supervisor's Support)	2	1.463	2.226	
AXB	4	1.463	2.224	
AXC	2	1.080	1.642	
BXC	8	.437	.665	
AXBXC	8	.543	.826	
Error	2677	.658		

<sup>a</sup>The item, "senior officers have less authority," was scored as follows: agreement=1, disagreement=3, don't know=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001



TABLE 12

Mean Scores for "Senior Officer Authority"<sup>a</sup> by Officer-Enlisted Status, Years of Active Service and Level of Supervisor's Support

	Officer			Enlisted			Totals
	Level of Supervisor's Support			Level of Supervisor's Support			
	Some	Most	All	Some	Most	All	
2-4	3.00	2.10	2.57	2.58	2.58	2.70	2.67
4-6	2.71	2.56	2.40	2.54	2.59	2.51	2.53
6-12	1.95	2.24	2.28	2.42	2.38	2.44	2.32
12-20	1.93	2.06	2.21	2.42	2.49	2.50	2.34
20 or more	1.92	2.05	2.13	2.36	2.36	2.35	2.16
Totals							
Officer-Enlisted Status: Officer= 2.20; Enlisted= 2.20							
Level of Support: Some= 2.37; Most= 2.38; All= 2.36							

<sup>a</sup>The item, "senior officers have less authority," was scored as follows: agreement= 1, disagreement= 3, don't know= 2.

(2-4 years) had the most favorable attitudes regarding the ramifications of the changes, those with the most service (20 years or more) had the least favorable attitudes.

e. General Opinion of Z-grams. In the analysis of the general opinion of Z-grams, significant main effects were found for years of active service, and extent of supervisor's support. Data summarizing the analysis of variance are listed in Table 13. Subgroup means are presented in Table 14. Those with the least service (2-6 years) had the most favorable general opinion; persons with the most service (20 years or more) had the least favorable opinion. Individuals whose supervisors supported only some of the policy changes reported the least favorable attitudes toward Z-grams.

A three way interaction was found for this question. For those persons whose supervisors supported all the policy changes, no differences were found between officers and enlisted men at each level of years of service. For those persons whose supervisors supported most of the policy changes, differences were not found between officers and enlisted men at three of the five levels of years of service. Differences between the officer and enlisted sample were found for those with either 2-4 years or 6-12 years experience. At these two levels, enlisted men showed less favorable opinions of Z-grams than did officers. For those persons who perceived their supervisors as supporting only some of the policy changes, differences were not found between officers and enlisted men at three of the levels of years of service. Differences between officers and enlisted men were observed for those with 6-12 years and 12-20 years of experience. Officers with 6-12 years of experience were found to have less favorable attitudes to Z-grams than did enlisted men with the same experience. However, officers with 12-20 years of experience showed a more favorable attitude than did the enlisted men.

f. Speed of Personnel Policy Changes. For the second dependent variable, opinion of the speed at which the policy changes are taking place, main effects were again found to be significant for years of active service and extent of supervisor's support. As expected, persons whose supervisors supported only some of the policy changes expressed the most favorable attitude regarding the speed of changes; while the persons whose supervisors supported all the changes had the least favorable attitudes toward the speed of the changes. Those with the least active service (2-4 years) exhibited the most favorable attitude toward the speed of the changes; those with the most service (20 years or more) showed the least favorable attitude toward the changes. A significant interaction was found between officer-enlisted status and years service. Officers with 2-4 years of active service showed a relatively more negative attitude (mean = 1.70) than would

TABLE 13

Summary of Analysis of Variance for "General Opinion of Z-grams"<sup>a</sup> for Officer-Enlisted Status, Years of Active Service and Level of Supervisor's Support

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A (Officer-Enlisted)	1	.763	.945	
B (Active Service)	4	10.452	12.936 <sup>***</sup>	1.72%
C (Supervisor's Support)	2	4.421	5.472 <sup>**</sup>	.32
AXB	4	.208	.258	
AXC	2	.338	.419	
BXC	8	1.179	1.459	
AXBXC	8	1.658	2.052 <sup>*</sup>	.30%
Error	2677	.808		

<sup>a</sup>The item, "general opinion of Z-grams" was scored as follows: good for the Navy=3, bad for the Navy=1, don't make any difference=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001

TABLE 14

Mean Scores for "General Opinion Z-grams"<sup>a</sup> by Officer-Enlisted Status, Years of Active Service and Level of Supervisor's Support

Years of Active Service	Officer			Enlisted			Totals
	Level of Supervisor's Support			Level of Supervisor's Support			
	Some	Most	All	Some	Most	All	
2-4	1.00	3.00	2.67	2.55	2.69	2.74	2.68
4-6	2.88	2.66	2.73	2.75	2.75	2.73	2.73
6-12	2.22	2.49	2.55	2.58	2.20	2.58	2.46
12-20	2.48	2.41	2.55	2.18	2.46	2.54	2.47
20 or more	2.39	2.44	2.36	2.27	2.27	2.25	2.35
Totals							
Officer-Enlisted Status: Officer= 2.49; Enlisted= 2.50							
Level of Support: Some= 2.42; Most= 2.48; All= 2.54							

<sup>a</sup>The item, "general Opinion of Z-grams" was scored as follows: good for the Navy= 3, bad for the Navy= 1, don't make a difference= 2.

TABLE 15

Summary of Analysis of Variance for "Opinion of the Speed of Personnel Policy Changes"<sup>a</sup> for Officer-Enlisted Status, Years of Active Service, and Level of Supervisor's Support

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A (Officer-Enlisted)	1	.249	.505	
B (Active Services)	4	43.141	87.558***	11.22%
C (Supervisor's Support)	2	1.522	3.088**	.14%
AXB	4	2.864	5.813***	.62%
AXC	2	.902	1.832	
BXC	8	.304	.617	
AXBXC	8	1.106	2.244**	.32%
Error	2677	.493		

<sup>a</sup>The item, "opinion of the speed at which personnel policy changes are taking place in the Navy" was scored as follows: too quickly=3, too slowly=1, at the right pace=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001

TABLE 16

Mean Scores for "Opinion of the Speed of Personnel Policy Changes"<sup>a</sup> by Officer-Enlisted Status, Years of Active Service and Level of Supervisor's Support

Years of Active Service	Officer			Enlisted			Totals
	Level of Supervisor's Support			Level of Supervisor's Support			
	Some	Most	All	Some	Most	All	
2-4	1.00	1.60	1.89	2.39	2.17	2.29	2.23
4-6	2.06	2.03	1.76	2.29	2.03	2.22	2.04
6-12	1.51	1.76	1.71	1.94	1.65	1.74	1.73
12-20	1.68	1.50	1.54	1.53	1.54	1.48	1.52
20 or more	1.58	1.55	1.41	1.46	1.34	1.28	1.42
Totals							

Officer-Enlisted Status: Officer= 1.60; Enlisted= 1.76

Level of Support: Some= 1.83; Most= 1.71; All= 1.64

<sup>a</sup>The item, "opinion of the speed at which personnel policy changes are taking place in the Navy" was scored as follows: too quickly= 3, too slowly= 1, at the right pace= 2.

have been expected from the main effects. Further, those officers with 12-20 years and 20 or more years of active service (mean = 1.54 and 1.46, respectively) exhibited more positive attitudes (mean = 1.54 and 1.46, respectively) than did enlisted men of comparable service (mean = 1.51 and 1.32, respectively).

A three-way interaction was also observed for this question. For the enlisted sample, differences were found between each level of supervisor's support over almost all levels of years of active service. Those persons whose supervisors supported only some of the policy changes had the most favorable scores over all levels of active service. Those individuals whose supervisors supported all of the policy changes had the next most positive attitudes for all but the last two levels (12-20 years and 20 years or more). Persons whose supervisors supported most of the policy changes had the lowest scores for all but the last two levels of active service. This last group had scores that were the same as the first group on the next to last level and the same as the second group on the last level. For the officers, differences were found between the levels of supervisor's support for only some of the levels of active service. Significantly more unfavorable responses were found for those persons whose supervisors supported only some of the policy changes and who had 2-4 years and 6-12 years active service. A more negative attitude was also observed for those whose supervisors supported most of the changes and who had 2-4 years and 12-20 years of active service.

On the question of speed of policy change, the factor of years of service accounted for more than 10% of the variance ( $\omega^2 = 11.39\%$ ). However the value of  $\omega^2$  for each of the other factors, on all six questions, was less than 5%.

## 2. Analysis of the Effects of Location of Duty Assignment, Officer-Enlisted Status, and Years of Active Service

The effects of the factors of duty assignment, officer-enlisted status, and years of active service were studied for questions 22 and 39 (opinion of changes in regulation and perception of an increase in the satisfaction with working conditions). Data summarizing the analyses of variance are found in Tables 17 and 19. Means for each subgroup are located in Tables 18 and 20.

a. Regulations. For the data for the first dependent variable, regulations, a significant main effect was found for the factor of years of active service. Those with the least active service (2-6 years) had the most favorable opinion of the changes that have resulted from the new regulations. Those individuals with the most active service, were the least favorable to the policy changes. A significant interaction was found between the factors of duty assignment and officer-enlisted status. It can be seen that officers, whether assigned to sea (mean = 2.23) or shore (mean = 2.28)



TABLE 17

Summary of Analysis of Variance for "Regulations"<sup>a</sup> for  
Location of Duty Assignment, Officer-Enlisted  
Status and Years of Active Service

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A Sea-Shore	1	.033	.043	
B Officer-Enlisted	1	.147	.189	
C Active Service	4	19.200	24.729***	3.27%
AXB	1	5.427	6.990**	.20%
AXC	4	.098	.126	
BXC	4	.449	.578	
AXBXC	4	1.553	2.001	
Error	2812	.776		

<sup>a</sup>The item, the perception of "regulations" on Navy life, was scored as follows: improved=3, not changed=2, gotten worse=1.

\*p<.05

\*\*p<.01

\*\*\*p<.001



TABLE 18

Mean Scores "Regulations"<sup>a</sup> by Location of Duty Assignment,  
Officer-Enlisted Status and Years of Active Service

	<u>Officer</u>		<u>Enlisted</u>		Totals
	Sea	Shore	Sea	Shore	
Years of Active Service					
2-4	2.10	2.91	2.61	2.54	2.58
4-6	2.43	2.67	2.68	2.61	2.61
6-12	2.33	2.38	2.39	2.36	2.37
12-20	2.21	2.23	2.28	2.25	2.25
20 or more	1.92	2.13	2.18	1.86	2.06
Totals					
		Officer= 2.27		Enlisted= 2.37	
		Sea= 2.15		Shore= 2.29	

<sup>a</sup>The item, the perception of "regulations" on Navy life, was scored as follows:  
Improved= 3, not changed= 2, gotten worse= 1.

TABLE 19

Summary of Analysis of Variance for "Satisfaction with Working Conditions" for Location of Duty Assignment, Officer-Enlisted Status and Years of Active Service

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A Sea-Shore	1	35.513	44.601***	1.5%
B Officer-Enlisted	1	.379	.476	
C Active Service	4	1.058	1.328	
AXB	1	.128	.160	
AXC	4	.775	.974	
BXC	4	1.790	2.248	
AXBXC	4	.848	1.065	
Error	2812	.796		

<sup>a</sup>The item, "individuals are more satisfied with their working conditions," was scored as follows: agreement=3, disagreement=1, don't know=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001

TABLE 20

Mean Scores "Satisfaction with Working Conditions"<sup>a</sup> by Location of Duty Assignment, Officer-Enlisted Status and Years of Active Service

Years of Active Service	<u>Officer</u>		<u>Enlisted</u>		Totals
	Sea	Shore	Sea	Shore	
2-4	1.60	2.36	1.63	1.89	1.74
4-6	1.85	2.13	1.73	1.95	1.91
6-12	1.67	2.01	1.80	1.94	1.90
12-20	1.70	1.90	1.75	2.07	2.90
20 or more	1.90	1.96	1.87	1.90	1.93
Totals					
		Officer= 1.91		Enlisted= 1.87	
		Sea= 1.74		Shore= 1.98	

<sup>a</sup>The item, "individual's are more satisfied with their working conditions," was scored as follows: agreement= 3, disagreement= 1, don't know= 2.

duty exhibited no difference in mean scores. Those enlisted men, however, stationed at sea (mean = 2.44) had a more favorable overall attitude to the regulations, than did enlisted men assigned to shore duty (mean = 2.31).

b. Satisfaction with Working Conditions. On the question of perception of an increase in satisfaction with working conditions, only one factor was significant: whether an individual was assigned to sea or to shore duty. Those persons on shore had more favorable attitudes to the question than did those at sea.

No values of  $\omega^2$  were found to account for more than 5% of the variance for any of the main effects or interactions.

### 3. Analysis of the Effects of Location of Duty Assignment, Race and Officer-Enlisted Status

These analyses studied the effects of duty assignment, race, and officer-enlisted status on questions 44 and 42 (perceptions of increases of freedom in an individual's personal life and of a decrease in performance and readiness). Data summarizing the analyses of variance are presented in Tables 21 and 23. Means for each subgroup are shown in Tables 22 and 24.

a. Personal Freedom. On the question of personal freedom, the only effect that proved to be significant was that of duty assignment. Individuals assigned to shore duty were found to have more favorable opinions of the results of the policy change, than did those on sea duty. A significant interaction was found between the factors of duty assignment and officer-enlisted status. It was found that officers, generally, whether on sea (mean = 2.60) or shore duty (mean = 2.60), had the same opinions. Enlisted men, however, had different opinions depending upon their assignment. Enlisted men on shore (mean = 2.65) had greater perceptions of increases in freedom than did enlisted men on sea duty (mean = 2.39).

b. Performance and Readiness. For the question of decreases in performance and readiness, significant main effects were found for all three factors. As expected, persons stationed at sea had more favorable opinions of the policy changes than did those on shore. Nonwhites also were found to have more favorable attitudes than did whites. Finally, as predicted, enlisted men had more positive opinion of the results of the policy changes than did officers.

No values of  $\omega^2$  accounted for more than 5% of the variance for any main effect or interaction.

TABLE 21

Summary of Analysis of Variance for "Personal Freedom"<sup>a</sup> for Location of Duty Assignment, Race and Officer-Enlisted Status

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A Sea-Shore	1	19.462	31.171***	.89%
B White-Nonwhite	1	0.000	0.000	
C Officer-Enlisted	1	1.453	2.327	
AXB	1	1.375	2.202	
AXC	1	8.189	13.117***	.42%
BXC	1	.042	.068	
AXBXC	1	.332	.532	
Error	2876	.624		

<sup>a</sup>The item, "there is now more freedom in an individual's personal life," was scored as follows: agreement=3, disagreement=1, don't know=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001

TABLE 22

Mean Scores for "Personal Freedom"<sup>a</sup> by Location of Duty Assignment, Race and Officer-Enlisted Status

	<u>Officer</u>		<u>Enlisted</u>		Totals
	White	Nonwhite	White	Nonwhite	
Sea	2.60	2.33	2.39	2.38	2.45
Shore	2.60	2.77	2.64	2.68	2.62

Totals

Officer= 2.60

Enlisted= 2.53

White= 2.56

Nonwhite= 2.55

<sup>a</sup>The item, "there is now more freedom in an individual's personal life" was scored as follows: agreement= 3, disagreement= 1, don't know= 2.

TABLE 23

Summary of Analysis of Variance for "Performance and Readiness"<sup>a</sup>  
for Location of Duty Assignment, Race and Officer-Enlisted Status

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u><math>\omega^2</math></u>
A Sea-Shore	1	3.697	4.449*	.12%
B White-Nonwhite	1	6.765	8.141**	.25%
C Officer-Enlisted	1	12.987	15.628***	.51%
AXB	1	.621	.747	
AXC	1	1.150	1.383	
BXC	1	.015	.019	
AXBXC	1	.005	.006	
Error	2826	.831		

<sup>a</sup>The item, "performance and readiness have decreased," was scored as follows: agreement=1, disagreement=3, don't know=2.

\*p<.05

\*\*p<.01

\*\*\*p<.001



TABLE 24

Mean Scores for "Performance and Readiness"<sup>a</sup> by Location of Duty Assignment, Race and Officer-Enlisted Status

	<u>Officer</u>		<u>Enlisted</u>		Totals
	White	Nonwhite	White	Nonwhite	
Sea	2.19	2.33	2.27	2.41	2.26
Shore	2.05	2.23	2.22	2.44	2.15

Totals

Officer= 2.09

Enlisted= 2.27

White= 2.17

Nonwhite= 2.41

<sup>a</sup>The item, "performance and readiness have decreased" was scored as follows: agreement= 1, disagreement= 3, don't know= 2.

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## IV. DISCUSSION

### A. Areas of Policy Change

It was predicted that the correlations among the eight items of policy change would be statistically significant. Although significant, almost all of these correlations were found to be very low. As expected, the most favorable attitudes were found for the least controversial areas of leave and liberty and personal services, while the least favorable attitudes were found for the most publicized areas of regulations and job and career development.

The regression analysis provides an indication of the significance of each area in predicting the overall criterion (the general Z-gram question). It was found for both the officer and enlisted samples that regulations was the most important of the eight areas in forming a general opinion of Z-grams.

### B. The Effect of Factors on Perceptions of Navy Life

#### 1. Officer - Enlisted Status

Although differences were found between the officer and enlisted samples, this does not appear to be as strong a factor as was hypothesized. Significant differences between the responses of the officers and enlisted men were found only on the questions of performance and readiness, petty officer authority, and senior officer authority. As predicted, for two of the three questions, enlisted men had more positive attitudes toward the policy changes than did officers. The one exception was the question on petty officer authority, on which enlisted men had a more negative attitude toward the results of the policy change. The importance of the differences in opinion between the two groups, at least for these data, seems to be less than expected.

#### 2. Years of Active Service

Because all of the participants in this study were selected from those who participated in the previous study, there were no men in the present sample with less than two years of active service. Consequently, possibly the most interesting group (those who were expected to have the most favorable opinion of the policy "changes") was not sampled. Nevertheless, even without this group, the results of the analyses generally supported the hypotheses. It was shown that those persons with the least active service tended to have the most favorable opinions of the policy changes. Those individuals

who have had the most active service seemed to have the least favorable opinion of the results of the policy changes. Differences between the arbitrarily defined levels of active service were found for the questions of: junior officer authority, senior officer authority, regulations, general Z-gram opinion, speed of change and discipline. It appears that individuals with larger amounts of service seem to be more resistant to change and more rigid in their appraisals than are those with lesser amounts of service. This may be caused by more favorable, more reinforced experiences in the past or it also may have resulted from different initial perceptions of the Navy by those who entered earlier.

### 3. Location of Duty Assignment (Sea-Shore)

Those persons assigned to sea duty appear to be generally more unhappy with their environment (and possibly the Navy) than those assigned to shore duty. This fact appears to have resulted in differences in responses for the two groups to the questions asked. Individuals stationed at sea appeared to be less favorable to the results of the policy changes than were those assigned duty on shore. Significant differences between sea-shore personnel were found in the questions of: personal freedom, performance and readiness, and satisfaction with working conditions. The only exception, in the relative favorableness of the groups' attitudes, was found on the question of performance and readiness. Those on sea duty, as predicted, had a more favorable opinion of performance and readiness. This was expected because this question is primarily an evaluation of their own work.

### 4. Race

The sample that was used contained very few (16) nonwhite officers: the nonwhite group, as a result, is composed almost exclusively of enlisted men. Differences between nonwhites and whites were found on the question of performance and readiness. As predicted, nonwhites perceived less of a decrease in performance and readiness than did whites. A number of the policy changes dealt specifically with improving opportunities for nonwhites. It is felt that nonwhites as a result, perceived the results of most of the policy changes, more positively than whites. It is interesting to note that increases in personal freedom were evaluated similarly by both groups.

### 5. Supervisor's Support

One of the more serious problems that have resulted from the policy changes has been the lack of total support for them. In many of the written comments received, it was noted that the degree of support and manner of interpretation of the policy changes were not

universal. Since the obeying of orders is an essential part of Navy life, it was expected that persons who perceived their immediate supervisors as not totally supporting the policy changes would have wanted the policies carried out more quickly. The question on the speed of change supported this hypothesis. Further, it was expected that those persons who perceived their supervisors as supporting only some of the policy changes, would have felt more uncertain about the effects of policy changes. Consequently they were predicted to have lower opinions of the results of the policy changes. This hypothesis was upheld. The only question for which no significant main effect was found was that of senior officer authority. The lack of relationships may be due to the small amount of contact personnel have with senior officers.

Generally, the effects of each of the factors studied was found to be independent of the other factors on each individual question. Although a certain number of interactions were found, no trends were readily apparent. The cause of the interactions seem to be due more to anomalies of one or more of the subgroups for a particular question than to consistent differences across all questions. In other words, the differences tend not to repeat themselves across questions, but instead are typical only of a given question.

Although many of the original predictions were upheld, the practical significance of the data is severely limited. The first problem to consider is the sample. Bias due to nonresponse is a factor that must be evaluated in all mail surveys. The importance of having a truly representative sample is less crucial for an analytic study of this type than it would have been if the study was intended to be purely descriptive. As one can see from the data presented in Table 1, the total returns of this sample represent only 14% of the original random sample. Another problem with this sample is that the persons who responded to this survey had to have responded to the original NPS 71-1 study. They consequently represent the respondents of a sample of respondents. Unfortunately, these two factors cast severe doubts on any representativeness of the sample. Because no other information is available on the representativeness of the attitudes expressed, one has to assume that the sample is not representative of the attitudes of the Navy population. As a consequence, the results are in no way necessarily generalizable to this desired population.

The second problem is of the relative importance of these specific variables. The analysis of variance was used to study the effects (both singly and in combination) of the selected, independent variables. The test of  $\omega^2$  for each of these significant variables, indicated the



proportion of the total variance that each factor was accounting for. This information provides an indication of how relatively important a factor is in determining responses to the questions.

Significant F tests demonstrated clearly that these factors were important variables. However, as can be seen from the data, the relative importance of these five factors is generally quite small. On only one occasion did the value of  $\omega^2$  for a particular independent variable indicate that more than 5% of the variance was being accounted for.

There are at least three possible explanations that can account for this low percentage. The first is the problem of the questions themselves. A most important aspect of any test or questionnaire is the certainty that all respondents are answering the same questions. The only way that an analysis can be proved is if all extraneous factors like this are removed ahead of time. The eight questions of policy change provide clear examples of this problem; they are, as discussed, composite questions. Persons answering the questions on the perceptions of regulations may be responding to any of a number of specific aspects. One person may be expressing an opinion on the regulations on hair length. Another person may be responding to the new regulations on the wearing of work and civilian clothing. Unfortunately, with this questionnaire, there really is no way of knowing the specific questions that they are replying to. The large percentage of variance that can not be accounted for, may be due to the generality of the questions.

A second possible explanation is that while the variables tested were significant, their relative importance is small. There may be other variables that are accounting for a large percentage of variance. A hypothetical example of this is that a person's responses may be determined by the geographical region in which he was raised.

Finally, a third factor is that the prediction of how a man will answer the question (reflecting his opinion of Navy life) may simply not be measurable as we know it. The factors entering into a person's decisions may not be determined to a very large extent by one single, or one small combination of factors. Instead, there may be quite a few unmeasurable variables that interact to form this opinion. If this is the case, it is moot whether information of this nature, if found, is really valuable.

## V. CONCLUSIONS AND RECOMMENDATIONS

Because of the problems in the questions, in the sample, and in the inconclusiveness of the data, it is not possible to draw any firm conclusions. It does seem that the term "Z-gram" has become synonymous with the controversial policies that are included in the topic regulations as measured here, (e.g., wearing work or civilian clothing, wearing beards and mustaches, timely forwarding of requests via the chain of command). Further, although only partially supported, it appears that the groups to which a person belongs may act upon the opinions of individuals in a predictable manner. Where this does occur, the effects of each group appear to be generally independent of the other groups.

It is believed that research along these lines may provide valuable information for the Navy in the future. If different groups react differently to policies, it should be possible to estimate the specific reaction of the groups to the policy changes. Navy managers in their consideration of new policies should evaluate fully these factors in both the development of policy and in its implementation.



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## REFERENCES

- Edwards, Allen L., Experimental design in psychological research. New York: Holt, Rinehart and Winston, 1963.
- Hays, William L., Statistics for psychologists. New York: Holt, Rinehart and Winston, 1963.
- Wilcove, Gerry L., Enlisted men's and officer's opinions of recent policy changes implemented through Z-grams (WSR 72-5). Washington: Naval Personnel Research and Development Laboratory, 1971.

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APPENDIX A

COPY OF SURVEY QUESTIONNAIRE

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DEPARTMENT OF THE NAVY  
NAVAL PERSONNEL RESEARCH AND DEVELOPMENT LABORATORY  
WASHINGTON NAVY YARD  
WASHINGTON, D. C. 20390

21 January 1973

MEMORANDUM FROM THE COMMANDING OFFICER, NAVAL PERSONNEL RESEARCH  
AND DEVELOPMENT LABORATORY

Subj: Attractiveness of Navy Life and Policy Changes

Encl: (1) Questionnaire on the Attractiveness of Navy Life and  
Policy Changes  
(2) Answer sheet  
(3) Blank envelope

1. The needs of Navy personnel cannot be fully learned except through direct communication with each of you. It is believed that a survey questionnaire is the most effective way to ensure that our plans are in line with your needs.
2. You have been chosen, along with other Navy personnel, to represent the needs and desires of many personnel throughout the Navy. It is thus very important that you answer this questionnaire promptly and sincerely. Please keep in mind that answers from you and other personnel like you will provide valuable information which may result in improved living and working conditions for all Navy personnel.
3. Although your social security number must appear on the answer sheet, it will be used for statistical control purposes only. No attempt will be made to associate your answers with your name and no information concerning your answers will be released.
4. Seal your completed answer sheet in the blank envelope provided and return it to your commanding officer (or his representative) within two days.
5. You have completed a questionnaire like this one in the past. We would appreciate your participation again, because your most recent opinions are especially important to us.
6. Should any questions arise regarding this study, please contact Dr. Wilcove at the Naval Personnel Research and Development Laboratory, Autovon 288-3559 or area code 202-433-3559. Thank you for your cooperation.

  
A. L. BLANKS





SECTION I

EVERYONE SHOULD COMPLETE THE FOLLOWING QUESTIONS (1-8)

1. INDICATE THE TYPE OF ACTIVITY TO WHICH YOU ARE ASSIGNED.

- A. Shore duty (other than shore based A/C Squadron or detachment)
- B. Shore based A/C Squadron or detachment

SEA DUTY:

- C. Carrier based A/C Squadron or detachment
- D. Aircraft carrier (other than carrier based A/C Squadron or detachment)
- E. Service Force ship
- F. Amphibious ship/craft
- G. Destroyer types
- H. Minecraft
- I. Cruiser
- J. Submarine, Diesel
- K. Submarine, Nuclear
- L. Afloat staff
- M. Tender
- N. Other sea duty

2. IF YOU ARE ON SHORE DUTY, INDICATE THE TYPE OF ACTIVITY TO WHICH YOU ARE ASSIGNED BY CHOOSING FROM B THROUGH T. IF YOU ARE ON SEA DUTY, CHOOSE A.

A. Sea Duty

SHORE DUTY

- |   |                                  |
|---|----------------------------------|
| B. Shore based A/C Squadron or Detachment | L. Communications Station/Unit   |
| C. Naval Station/Base                     | M. Naval Support Activity        |
| D. Naval Training Center                  | N. Navy Recruiting Station       |
| E. Naval Schools Command                  | O. Staff Ashore                  |
| F. Naval Reserve Training Center          | P. Naval Hospital/Medical Center |
| G. Amphibious Base                        | Q. Naval Ship Yard               |
| H. Naval Air Station                      | R. Naval Security Group Activity |
| I. Naval Auxiliary Air Station            | S. Naval Weapons Station/Center  |
| J. Naval Air Technical Training Center    | T. Other Shore Duty              |
| K. Construction Battalion Center          |                                  |

3. WHAT IS YOUR HIGHEST LEVEL OF EDUCATION?

- A. Less than high school graduate
- B. High school graduate or GED equivalency
- C. Some college or formal technical training beyond high school
- D. Associate degree
- E. Bachelor's degree
- F. Graduate hours but no graduate degree
- G. Master's degree
- H. Ph.D. or professional degree

4. WHICH OF THE FOLLOWING BEST DESCRIBES YOU?

- |                    |                 |                     |
|--------------------|-----------------|---------------------|
| A. American Indian | D. Malayan      | G. Cuban            |
| B. Black           | E. Oriental     | H. Spanish-American |
| C. Caucasian       | F. Puerto Rican |                     |

5. WHAT IS YOUR MARITAL STATUS?

- A. Single
- B. Married

6. WHAT IS YOUR SEX?

- A. Male
- B. Female

7. WHAT INFLUENCE DID THE DRAFT HAVE ON YOUR DECISION TO ENTER ACTIVE MILITARY SERVICE?

- A. Definitely would not have entered if no draft
- B. Probably would not have entered if no draft
- C. Probably would have entered even if no draft
- D. Definitely would have entered even if no draft
- E. Was not subject to draft
- F. Do not know

8. HOW MUCH ACTIVE NAVY SERVICE HAVE YOU COMPLETED?

- A. Less than one year
- B. One year but less than two
- C. Two years but less than three
- D. Three years but less than four
- E. Four years but less than five
- F. Five years but less than six
- G. Six years but less than nine
- H. Nine years but less than twelve
- I. Twelve years but less than sixteen
- J. Sixteen years but less than twenty
- K. Twenty or more years

ENLISTED PERSONNEL ONLY SHOULD ANSWER THE FOLLOWING QUESTIONS (9-14)

9-10. IF YOU ARE A PETTY OFFICER OR AN OFFICIALLY DESIGNATED STRIKER (QUALIFIED TO WEAR THE STRIKER RATING BADGE), WHAT IS YOUR GENERAL RATING? FOR EXAMPLE, IF YOUR RATING IS AB, FILL IN "A" OPPOSITE 9 ON THE ANSWER SHEET AND "B" OPPOSITE 10. IF YOU ARE NOT RATED, FILL IN "N" AND "R".

NR - Not rated/Not designated striker

AB	BU	GM	PH
AC	CE	HM	PI
AD	CM	HT	PM
AE	CS	IC	PN
AF	CT	IM	PR
AG	CU	JO	PT
AK	DK	LI	QM
AM	DM	LN	RM
AO	DP	ML	SD
AQ	DS	NM	SH
AS	DT	MN	SK
AT	EA	MR	SM
AV	EM	MT	ST
AW	EN	MU	SW
AX	EO	OM	TD
AZ	EQ	OS	TM
BM	ET	OT	UT
BR	EW	PC	YN
BT	FT		

11. WHAT IS YOUR PRESENT PAY GRADE?

A. E-1	D. E-4	G. E-7
B. E-2	E. E-5	H. E-8
C. E-3	F. E-6	I. E-9

12. WHAT IS YOUR PRESENT ENLISTMENT AND/OR EXTENSION STATUS?
- A. First enlistment
  - B. Extension of first enlistment
  - C. Second enlistment
  - D. Extension of second enlistment
  - E. Third or later enlistment or extension
13. WHAT ARE YOUR CURRENT SERVICE PLANS (OR RETIREMENT STATUS)?
- A. Eligible for retirement
  - B. Plan to remain in Navy at least until eligible for retirement
  - C. Plan to stay beyond present enlistment, but not until eligible for retirement
  - D. Undecided about my service plans
  - E. Plan to leave Navy as soon as I can
14. WHAT IS THE RANK OF YOUR IMMEDIATE SUPERVISOR?
- A. Petty Officer
  - B. Chief Petty Officer
  - C. Warrant Officer
  - D. ENS, LTJG, or LT
  - E. LCDR or above
  - F. A civilian

ENLISTED MEN SHOULD SKIP NOW TO QUESTION 22.

OFFICERS ONLY SHOULD ANSWER THE FOLLOWING QUESTIONS (15-21).

15. WHAT IS YOUR PRESENT GRADE?

- |                            |           |
|----------------------------|-----------|
| A. Captain                 | F. Ensign |
| B. Commander               | G. CWO4   |
| C. Lieutenant Commander    | H. CW03   |
| D. Lieutenant              | I. CW02   |
| E. Lieutenant Junior Grade | J. WO1    |

16. WHAT IS YOUR DESIGNATOR?

LINE

- A. 11XX Surface
- B. 11XX (Had Shore Duty Only)
- C. 112X Nuclear Submarine or 112X Diesel Submarine
- D. 131X Pilot, 132X Non-Pilot, or 13XX (Other than 131X or 132X)
- E. 14XX Engineering, 15XX Aero Engineering Duty, or 17XX Ordnance Engineering Duty
- F. 16XX Special Duty
- G. 18XX Special Duty

STAFF

- H. 210X Medical Corps, 220X Dental Corps, 230X Medical Service Corps, or 290X Nurse Corps
- I. 250X Judge Advocate General's Corps
- J. 310X Supply Corps
- K. 410X Chaplain Corps
- L. 510X Civil Engineering Corps

LDO

- M. All Limited Duty Officer Designators

WO

- N. All Warrant Officer Designators

17. ARE YOU PRESENTLY SERVING WITHIN YOUR INITIAL SERVICE OBLIGATION AS A COMMISSIONED OFFICER? (Initial service obligation here means the minimum active service required by your original source of commissioning (e.g., OCS, NROTC, etc.), plus any additional service obligation you may have acquired during this initial period as a result of submarine, nuclear power or flight training)

ALL LDOs AND WOs SHOULD SELECT CHOICE "A".

- A. Limited Duty Officer or Warrant Officer -- (Not Applicable)
- B. Yes
- C. No, I am serving within the first year after my initial obligation as described above
- D. No, I am serving more than one year beyond my initial obligation as described above

18. HOW MANY YEARS OF OBLIGATED SERVICE DO YOU HAVE REMAINING IN YOUR PRESENT OBLIGATION?

- A. None
- B. Less than one year
- C. One year but less than two
- D. Two years but less than three
- E. Three or more years

19. HAVE YOU EVER HAD OVERSEAS SHORE DUTY (OF ANY TYPE)?

- A. Yes
- B. No

20. WHAT IS THE RANK OF YOUR IMMEDIATE SUPERVISOR?

- A. Warrant Officer
- B. ENS, LTJG, or LT
- C. LCDR or above
- D. A civilian
- E. Not applicable



21. WHAT ARE YOUR CURRENT SERVICE PLANS (OR RETIREMENT STATUS)?

- A. Eligible for retirement
- B. Plan to remain in Navy at least until eligible for retirement
- C. Plan to stay beyond present obligation, but not until eligible for retirement
- D. Undecided about my service plans
- E. Plan to leave Navy as soon as I can

SECTION II

EVERYONE SHOULD ANSWER ALL THE REMAINING QUESTIONS IN THE SURVEY

POLICY CHANGES MAY BE SEEN AS TAKING PLACE IN VARIOUS AREAS DURING THE PAST TWO YEARS. IN YOUR OPINION, HAS NAVY LIFE IMPROVED, NOT CHANGED OR GOTTEN WORSE IN THE FOLLOWING AREAS AS A RESULT OF THESE CHANGES (Q22-29)?

- A. IMPROVED
- B. NOT CHANGED
- C. GOTTEN WORSE

22. REGULATIONS (Such as wearing work and civilian clothing, wearing beards and mustaches, timely forwarding of requests via the chain of command)

23. LEAVE AND LIBERTY (Such as more leave granted while deployed, a 30-day stay in port after being at sea in order to permit more leave, more free time during holidays, overnight liberty privileges)

24. PERSONAL SERVICES (Such as accepting of checks by exchanges, service clubs; lengthening of commissary hours, providing transportation from transient aircraft, making it easier to check in and out of ships and stations)
25. EQUAL RIGHTS' OPPORTUNITIES (Such as checking on equal rights' practices, correcting violations, making available commodities and services requested by minority groups)
26. RETENTION PROGRAMS (Such as setting up a Personal Affairs Division in BuPers, asking various grades for retention ideas, providing the opportunity for sea duty extension, honoring reenlistees)
27. LIVING AND HOUSING CONDITIONS (Such as providing better housing, lockers, wash facilities; providing beer vending machines in Bachelor Officer and Enlisted Quarters)
28. FAMILY SERVICES (Such as starting sponsor program for families arriving on PCS; instituting charter flights for dependents; improving commissaries, dispensaries, Family Service Centers)
29. JOB AND CAREER DEVELOPMENT (Such as increased responsibility, elimination of petty tasks, recognition of technical excellence, provision for professional and technical training)
30. IF YOU BELIEVE THERE HAVE BEEN IMPROVEMENTS IN NAVY LIFE DURING THE LAST YEAR OR TWO, WHAT DO YOU THINK IS THE MOST RESPONSIBLE?
  - A. For the most part, I have not noticed any improvements
  - B. Commanding officers of activities
  - C. Department of Defense regulations
  - D. Laws passed by Congress
  - E. Z-Grams
  - F. New personnel policies other than Z-Grams
  - G. The thinking of today's youth
  - H. Other factors

31. HOW DO YOU FEEL ABOUT NAVY LIFE?

- A. Very satisfied
- B. Moderately satisfied
- C. Neutral
- D. Moderately dissatisfied
- E. Very dissatisfied

32. HOW MUCH HAS NAVY LIFE CHANGED DURING THE LAST YEAR?

- A. Improved greatly
- B. Improved moderately
- C. Improved slightly
- D. Not changed
- E. Worsened slightly
- F. Worsened moderately
- G. Worsened greatly

33. TO WHAT EXTENT DOES THE COMMANDER OF YOUR ACTIVITY SUPPORT PERSONNEL POLICIES IMPLEMENTED THROUGH Z-GRAMS?

- A. Supports all policies
- B. Supports most policies
- C. Supports some but not others
- D. Supports hardly any
- E. Supports none
- F. Don't know

34. HOW WOULD YOU DESCRIBE YOUR IMMEDIATE SUPERVISOR'S SUPPORT OF THE PERSONNEL POLICIES INSTITUTED BY Z-GRAMS?

- A. Supports all policies
- B. Supports most policies
- C. Supports some but not others
- D. Supports hardly any
- E. Supports none

LOOKING BACK OVER THE PAST TWO YEARS, DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS (35 - 44)? IF YOU HAVE NOT BEEN IN THE NAVY FOR TWO YEARS, CONCENTRATE ON THE TIME IN WHICH YOU HAVE BEEN IN THE SERVICE.

- A. AGREE
- B. DISAGREE
- C. DON'T KNOW

- 35. MORALE HAS IMPROVED
- 36. PETTY OFFICERS HAVE LESS AUTHORITY
- 37. THE NAVY'S IMAGE IS MORE ATTRACTIVE TO POSSIBLE RECRUITS
- 38. THERE ARE MORE DISCIPLINE PROBLEMS
- 39. INDIVIDUALS ARE MORE SATISFIED WITH THEIR WORKING CONDITIONS
- 40. JUNIOR OFFICERS HAVE LESS AUTHORITY
- 41. THERE IS MORE EMPHASIS NOW ON A MAN'S PROFESSIONAL KNOWLEDGE AND SKILL THAN ON CHICKEN REGS
- 42. PERFORMANCE AND READINESS HAVE DECREASED
- 43. SENIOR OFFICERS HAVE LESS AUTHORITY
- 44. THERE IS NOW MORE FREEDOM IN AN INDIVIDUAL'S PERSONAL LIFE
- 45. WHAT IS YOUR OPINION OF THE SPEED AT WHICH PERSONNEL POLICY CHANGES ARE TAKING PLACE IN THE NAVY?
  - A. Too quickly
  - B. Too slowly
  - C. At the right pace

46. WHAT IS YOUR GENERAL OPINION OF Z-GRAMS?

- A. I don't know enough about Z-Grams to have an opinion
- B. They are good for the Navy
- C. They are bad for the Navy
- D. They don't make any difference

47. HAVE CHANGES MADE DURING THE LAST YEAR OR TWO AFFECTED YOUR SERVICE PLANS?

- A. I have not noticed any significant changes in Navy life
- B. No
- C. Yes, changes have had a positive effect on my service plans
- D. Yes, changes have had a negative effect on my service plans

PLEASE WRITE "OFFICER" OR "ENLISTED" AT THE TOP OF YOUR ANSWER SHEET DEPENDING ON YOUR STATUS.  
PLACE IT IN THE LEFTHAND CORNER. THIS IS EXTREMELY IMPORTANT.

THANK YOU FOR YOUR COOPERATION

APPENDIX B

CODING OF DATA

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CODING OF DATA

	Score
1. INDICATE THE TYPE OF ACTIVITY TO WHICH YOU ARE ASSIGNED.	
Sea Duty	1
Shore Duty	2
2. IF YOU ARE ON SHORE DUTY, INDICATE THE TYPE OF ACTIVITY TO WHICH YOU ARE ASSIGNED BY CHOOSING FROM B THROUGH T. IF YOU ARE ON SEA DUTY, CHOOSE A.	
Sea Duty	1
Shore Duty	2
3. WHAT IS YOUR HIGHEST LEVEL OF EDUCATION?	
Less than high school graduate	4
High school graduate or GED equivalency	3
Some college or formal technical training beyond high school	2
Associate degree	2
Bachelor's degree or higher	1
4. WHICH OF THE FOLLOWING BEST DESCRIBES YOU?	
Nonwhite	2
White	1
5. WHAT IS YOUR MARITAL STATUS?	
Single	1
Married	2
6. WHAT IS YOUR SEX?	
Male	1
Female	2



	Score
7. WHAT INFLUENCE DID THE DRAFT HAVE ON YOUR DECISION TO ENTER ACTIVE MILITARY SERVICE?	
Definitely would not have entered if no draft	1
Probably would not have entered if no draft	2
Probably would have entered even if no draft	3
Definitely would have entered even if no draft	4
Was not subject to draft	5
Do not know	0
8. HOW MUCH ACTIVE NAVY SERVICE HAVE YOU COMPLETED?	
Less than two years	0
Two years, but less than four	1
Four years, but less than six	2
Six years, but less than twelve	3
Twelve years, but less than twenty	4
More than twenty	5
9.- 10. Omitted from the analysis	
11. WHAT IS YOUR PRESENT PAY GRADE?	
E-1 through E-3	1
E-4 through E-6	2
E-7 through E-9	3
12. WHAT IS YOUR PRESENT ENLISTMENT AND/OR EXTENSION STATUS?	
First enlistment	1
Extension of first enlistment	2
Second enlistment	3
Extension of second enlistment	4
Third or later enlistment or extension	5
13. WHAT ARE YOUR CURRENT SERVICE PLANS (OR RETIREMENT STATUS)?	
Eligible for retirement	5
Plan to remain in Navy at least until eligible for retirement	4
Plan to stay beyond present enlistment, but not until eligible for retirement	3
Undecided about my service plans	2
Plan to leave Navy as soon as I can	1

	Score
14. WHAT IS THE RANK OF YOUR IMMEDIATE SUPERVISOR?	
Petty Officer	1
Chief Petty Officer	2
Warrant Officer	3
ENS, LTJG, or LT	4
LCDR or above	5
A civilian	0
15. WHAT IS YOUR PRESENT GRADE?	
CAPT, CDR, or LCDR	3
LT, LTJG, or ENS	2
CWO4, CWO3, CWO2,,or WO1	1
16. Omitted from the analysis	
17. ARE YOU PRESENTLY SERVING WITHIN YOUR INITIAL SERVICE OBLIGATION AS A COMMISSIONED OFFICER?	
Limited Duty Officer or Warrant Officer	0
Yes	1
No, I am serving within the first year after my initial obligation	2
No, I am serving more than one year beyond my initial obligation	3
18. HOW MANY YEARS OF OBLIGATED SERVICE DO YOU HAVE REMAINING IN YOUR PRESENT OBLIGATION?	
None	1
Less than one year	2
One year but less than two	3
Two years but less than three	4
Three or more years	5
19. HAVE YOU EVER HAD OVERSEAS SHORE DUTY (OF ANY TYPE)?	
Yes	1
No	2

	Score
20. WHAT IS THE RANK OF YOUR IMMEDIATE SUPERVISOR?	
Warrant Officer	1
ENS, LTJG, or LT	2
LCDR or above	3
A civilian	0
Not applicable	0
21. WHAT ARE YOUR CURRENT SERVICE PLANS (OR RETIREMENT STATUS)?	
Eligible for retirement	5
Plan to remain in Navy at least until eligible for retirement	4
Plan to stay beyond present obligation, but not until eligible for retirement	3
Undecided about my service plans	2
Plan to leave Navy as soon as I can	1

AREAS OF POLICY CHANGE

Area	Response		
	Improved	Not Changed	Gotten Worse
22. REGULATIONS	3	1	2
23. LEAVE AND LIBERTY	3	1	2
24. PERSONAL SERVICES	3	1	2
25. EQUAL RIGHTS' OPPORTUNITIES	3	1	2
26. RETENTION PROGRAMS	3	1	2
27. LIVING AND HOUSING CONDITIONS	3	1	2
28. FAMILY SERVICES	3	1	2
29. JOB AND CAREER DEVELOPMENT	3	1	2

	Score
30. IF YOU BELIEVE THERE HAVE BEEN IMPROVEMENTS IN NAVY LIFE DURING THE LAST YEAR OR TWO, WHAT DO YOU THINK IS THE MOST RESPONSIBLE?	
For the most part, I have not noticed any improvements	0
Commanding officers of activities	1
Department of Defense regulations	2
Laws passed by Congress	3
Z-grams	4
New personnel policies other than Z-grams	5
The thinking of today's youth	6
Other factors	7
31. HOW DO YOU FEEL ABOUT NAVY LIFE?	
Very satisfied	5
Moderately satisfied	4
Neutral	3
Moderately dissatisfied	2
Very dissatisfied	1
32. HOW MUCH HAS NAVY LIFE CHANGED DURING THE LAST YEAR?	
Improved greatly	5
Improved moderately	4
Improved slightly	4
Not changed	3
Worsened slightly	2
Worsened moderately	2
Worsened greatly	1
33. TO WHAT EXTENT DOES THE COMMANDER OF YOUR ACTIVITY SUPPORT PERSONNEL POLICY CHANGES IMPLEMENTED THROUGH Z-GRAMS?	
Supports all policies	5
Supports most policies	4
Supports some but not others	3
Supports hardly any	2
Supports none	2
Don't know	1

	Score
34. HOW WOULD YOU DESCRIBE YOUR IMMEDIATE SUPERVISOR'S SUPPORT OF THE PERSONNEL POLICIES INSTITUTED BY Z-GRAMS?	
Supports all policies	3
Supports most policies	2
Supports some but not others	1
Supports hardly any	1
Supports none	1

Statements	Responses		
	Agree	Disagree	Don't know
35. MORALE HAS IMPROVED	3	1	2
36. PETTY OFFICERS HAVE LESS AUTHORITY	1	3	2
37. THE NAVY'S IMAGE IS MORE ATTRACTIVE TO POSSIBLE RECRUITS	3	1	2
38. THERE ARE MORE DISCIPLINE PROBLEMS	1	3	2
39. INDIVIDUALS ARE MORE SATISFIED WITH THEIR WORKING CONDITIONS	3	1	2
40. JUNIOR OFFICERS HAVE LESS AUTHORITY	1	3	2
41. THERE IS MORE EMPHASIS NOW ON A MAN'S PROFESSIONAL KNOWLEDGE AND SKILL THAN ON CHICKEN REGS	3	1	2
42. PERFORMANCE AND READINESS HAVE DECREASED	1	3	2

Statements	Responses		
	Agree	Disagree	Don't know
43. SENIOR OFFICERS HAVE LESS AUTHORITY	1	3	2
44. THERE IS NOW MORE FREEDOM IN AN INDIVIDUAL'S PERSONAL LIFE	3	1	2
			Score
45. WHAT IS YOUR OPINION OF THE SPEED AT WHICH PERSONNEL POLICY CHANGES ARE TAKING PLACE IN THE NAVY?			
Too quickly			3
Too slowly			1
At the right pace			2
46. WHAT IS YOUR GENERAL OPINION OF Z-GRAMS?			
I don't know enough about Z-grams to have and opinion			0
They are good for the Navy			3
They are bad for the Navy			1
They don't make any difference			2
47. HAVE CHANGES MADE DURING THE LAST YEAR OR TWO AFFECTED YOUR SERVICE PLANS?			
I have not noticed any significant changes in Navy life			0
No			2
Yes, changes have had a positive effect on my service plans			3
Yes, changes have had a negative effect on my service plans			1

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13. ABSTRACT <p>This report dealt with perceptions of naval personnel to the recent policy changes. Specifically, it was asked: (a) what areas of policy change enter most into a general opinion of Z-grams, and (b) whether selected factors relate to the formation of a particular opinion toward either policy changes or their effects on Navy life.</p> <p>Results are based on responses of 1725 officers and 2640 enlisted men, i.e., those respondents to the NPS 71-1 survey having identification numbers and who could be re-contacted. Information gathered from them included: opinions of these policy changes, their effects on Navy life and background information.</p> <p>A number of item response differences existed among men of varying officer-enlisted status, years of active service, race, sea-shore duty assignment and perceived extent of supervisor's support of Z-grams. Generally more favorable attitudes were found for enlisted men, those with the least active service, nonwhites, those assigned to shore duty, and those whose supervisors supported all of the policy changes. The affect of each of these factors was found to be generally independent of the other factors for each specific question.</p> <p>The formation of firm conclusions about these findings is difficult due to many biasing factors, including the large amount of nonresponse in the sample, the generality of item phrasing, and the lack of complete support for hypotheses. However, for certain questions, the direction of responses of naval personnel, at least partially, may be predicted.</p>			

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