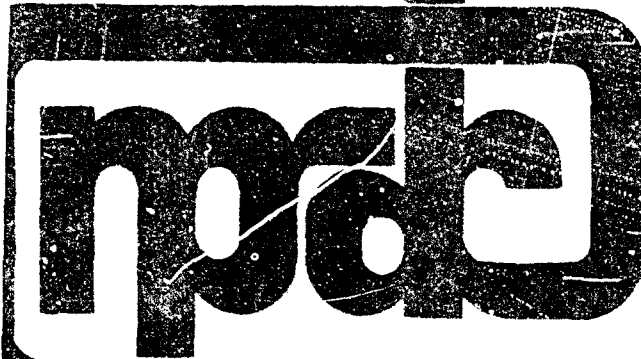


AD A013226



NAVY PERSONNEL RESEARCH AND DEVELOPMENT CENTER SAN DIEGO CALIFORNIA 92152

B

NPRDC TR 76-5

AUGUST 1975

**HUMAN RESOURCES MANAGEMENT AND
NONJUDICIAL PUNISHMENT RATES ON NAVY SHIPS**

Kent S. Crawford
Edmund D. Thomas

D D C

10 21 1975

q

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.

ACCESS-OR FOR	
NTIS	White Section ☒
DOE	Red Section ☐
UNANNOUNCED	
IDENTIFICATION	
DATE	
LA	
SPECIAL	

NPRDC TR 76-5

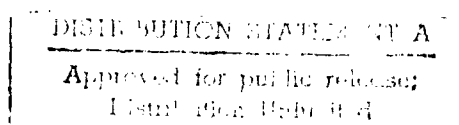
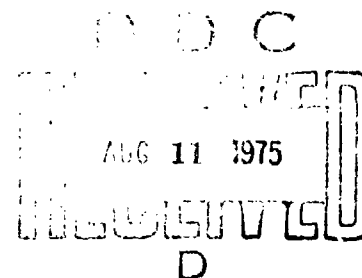
August 1975

HUMAN RESOURCE MANAGEMENT AND NONJUDICIAL
PUNISHMENT RATES ON NAVY SHIPS

Kent S. Crawford
Edmund D. Thomas

Reviewed by
Richard C. Sorenson

Approved by
James J. Regan
Technical Director



Navy Personnel Research and Development Center
San Diego, California 92152

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. TITLE (and Subtitle) HUMAN RESOURCE MANAGEMENT AND NONJUDICIAL PUNISHMENT RATES ON NAVY SHIPS		2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. AUTHOR(s) Kent S. Crawford Edmund D. Thomas		5. PERFORMING ORGANIZATION NAME AND ADDRESS Navy Personnel Research and Development Center San Diego, California 92152	
6. CONTRACT OR GRANT NUMBER(s)		7. REPORT DATE Aug 1975	
8. PERFORMING ORGANIZATION NAME AND ADDRESS Navy Personnel Research and Development Center San Diego, California 92152		9. NUMBER OF PAGES 53	
10. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		11. SECURITY CLASS. (of this report) UNCLASSIFIED	
12. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		13. DECLASSIFICATION/DOWNGRADING SCHEDULE	
14. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		15. SUPPLEMENTARY NOTES	
16. KEY WORDS (Continue on reverse side if necessary and identify by block number) -Nonjudicial Punishment Disciplinary Rates Human Resource Management Survey Survey of Organizations Organizational Performance		17. ABSTRACT (Continue on reverse side if necessary and identify by block number) At the core of the Navy Human Goals Plan is the process of Human Resource Management (HRM) which is designed to assist commands in improving assessed organizational weaknesses. Diagnosis of a Navy unit's organizational state of affairs is accomplished by administration of the HRM Survey. The purpose of this study was to investigate the relationship between indices of the HRM Survey and rates of nonjudicial punishment (NJP) on Navy ships. It was hypothesized that the more effective the human resource management system within a ship, the lower the NJP rate. (cont. on p 14/1313)	

DD FORM 1 JAN 73 1473A EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

20. ABSTRACT (continued)¹

Aggregated NJP statistics for two 6-month reporting periods were obtained for 41 ships from 3 type commands. NJP data were then standardized to the number of NJPs per 100 enlisted men per month. HRM Survey data were aggregated for each ship to generate overall mean scores for 16 indices.

All correlations between HRM Survey indices and NJP rates were in the predicted direction, i.e., the better the organizational conditions, the lower the NJP rates. Comparisons of extreme groups on the HRM Survey indices revealed that the NJP rates among the high-scoring ships were about half the magnitude of the low-scoring ships.

The findings strongly suggest that NJP rates are related to the type of human resource management system present within a ship.

14753

FOREWORD

This research was performed in support of the Navy Human Goals Program. The report is part of a larger effort which is attempting to determine the impact of the Navy Human Resource Management Program on several criteria of organizational effectiveness.

PNCS D. Perkins and PNCS R. Glenn, of the Navy Personnel Research and Development Center, helped in gathering the nonjudicial punishment data. Their assistance is gratefully acknowledged. Mr. Jack Drexler, Institute of Social Research, University of Michigan, also provided valuable input to this project.

J. J. Clarkin
Commanding Officer

SUMMARY

Background and Purpose

The Navy Human Goals Plan emphasizes the importance of leadership and sound management in improving both the manpower and overall mission effectiveness of naval units. At the core of this program is the Human Resource Management (HRM) process, which is designed to assist commands in improving assessed organizational weaknesses within the unit. The unit's organizational "state of affairs" is diagnosed by administration of the HRM Survey.

Previous research suggests that several dimensions of the survey are related to rates of reenlistment among naval personnel. However, evaluation of the Navy's HRM Survey against other personnel and mission-oriented criteria must be conducted to (1) determine the diagnostic power of this instrument, and (2) identify specific organizational indices that relate to such criteria. The purpose of the present study was to investigate the relationship between indices of the HRM Survey and rates of nonjudicial punishment (NJP) on Navy ships. It was hypothesized that the more effective the human resource management system within a ship, the lower the NJP rate.

Approach

Aggregated NJP statistics for two 6-month reporting periods were obtained for 41 ships from 3 type commands. NJP data were then standardized to the number of NJPs per 100 enlisted men per month. HRM Survey data were aggregated for each ship to generate overall mean scores on 16 indices. The survey data were matched with the appropriate NJP reporting period.

The HRM Survey indices were correlated with the NJP rates using ships as the units of analysis. NJP rates were compared for extreme groups on the HRM Survey and potential moderator variables were examined.

Findings

All correlations between HRM Survey indices and NJP rates were in the predicted direction, i.e., the better the organizational conditions, the lower the rates of NJP (page 13). Comparisons of extreme groups on the HRM Survey indices revealed that the NJP rates among the high-scoring ships were about half the magnitude of the low-scoring ships (page 19).

Consistent differences in organizational conditions were found across the three type commands. Moreover, allowance size and proportion of first-term enlisted personnel did not moderate the obtained relationships (pages 19, 21, and 24). Overall, the findings strongly suggest that NJP rates are related to the type of human resource management system present within a ship.

CONTENTS

	Page
BACKGROUND	1
Navy Human Resource Management Survey	1
Criteria of Organizational Performance	2
Disciplinary Offenses: Nonjudicial Punishment	3
PURPOSE	5
PROCEDURES	5
Independent Variables: HRM Survey	5
Dependent Variables: Nonjudicial Punishment (NJP) Rate	8
Sample	8
Methodology	9
Data Analysis	12
RESULTS AND DISCUSSION	13
Relationship Between NJP Rates and HRM Survey Data	13
Extreme Groups Breakouts	16
Allowance Size	19
Proportion of First-term Enlisted Personnel	19
Type Command	21
CONCLUSIONS AND RECOMMENDATIONS	24
REFERENCES	27
APPENDIX A - Human Resource Management	A-0
APPENDIX B - Navy Human Resource Management Survey	B-0
APPENDIX C - Index Intercorrelations	C-0
DISTRIBUTION LIST	29

PRECEDING PAGE BLANK NOT FILMED

TABLES

	Page
1. Distribution of Ships by Ship Type and Fleet	9
2. Breakout of Number of Respondents to Human Resource Management Survey by Type Command	10
3. Correlations Between Nonjudicial Punishment Rates for Two 6-Month Reporting Periods by Type Command (July-December 1973; January-June 1974)	11
4. Correlations Between Nonjudicial Punishment (NJP) Rates and Human Resource Management (HRM) Survey Indices for Two NJP Reporting Periods	14
5. Rank Ordering of Correlations Between Nonjudicial Punishment (NJP) Rates and Human Resource Management (HRM) Survey Indices for 41 Navy Ships	15
6. Comparison of Mean Nonjudicial Punishment (NJP) Rates Per 100 Enlisted Men for Ships with Low, Average, and High Index Scores on the Human Resource Management Survey	17
7. Distribution of Sample by Size of Enlisted Allowance	20
8. Comparison of Mean Nonjudicial Punishments Per 100 Enlisted Personnel for Ships with "High" and "Low" Allowances	20
9. Correlation Between Nonjudicial Punishment (NJP) Rates and Proportion of First-term Enlisted Personnel by Type Command	21
10. Analysis of Variance Summary Table for Nonjudicial Punishment (NJP) Rates with Main Effect for Type Command	22
11. Analysis of Variance Summary Table for Indices of the Human Resource Management Survey with Main Effect for Type Command	23
12. Correlations Between Nonjudicial Punishment (NJP) Rates and Human Resource Management (HRM) Survey Indices by Type Command	25

HUMAN RESOURCE MANAGEMENT AND NONJUDICIAL
PUNISHMENT RATES ON NAVY SHIPS

BACKGROUND

The Navy has traditionally emphasized the more hardware oriented aspects of its resources. However, the recent Navy Human Goals Plan (OPNAVINST 5300.6; OPNAVINST 5300.6a) represents an attempt to "ensure 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."

At the core of the Human Goals Plan is a Human Resource Management Program which provides consultant services and leadership/management assistance to Navy commands. These efforts parallel organizational development and management (OD&M) programs used in civilian settings. The program utilizes the Human Resource Management (HRM) Survey to determine how well the human organization within a particular command is functioning. Because this report focuses primarily on the HRM Survey and its relationship to one facet of command performance, it is necessary to discuss both the historical development of the survey as well as studies relevant to the theoretical work on which it is based.

Navy Human Resource Management Survey

The HRM Survey is essentially an outgrowth of the Survey of Organizations (SOO) (Taylor and Bowers, 1972) developed by the University of Michigan's Institute for Social Research. The SOO items were constructed to assess various facets of organizational behaviors and were based on Likert's (1961, 1967) metatheory of organizational behavior. Likert theorized that job satisfaction and performance are the result of organizational climate and leadership behaviors. The construct of organizational climate is seen as a multidimensional phenomenon and perhaps can be most clearly understood in terms of Taguiri and Litwin's (1968) definition:

Climate is a relatively enduring quality of the internal environment of an organization that (a) is experienced by its members, (b) influences their behavior, and (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the organization. (p. 27)

From the standpoint of Likert's theory, organizational climate and leadership are viewed as causal variables, while job satisfaction and performance are resultant variables. Peer leadership and emergent processes (work group behavior) are theorized to be intervening variables. Taylor and Bowers (1972) and Franklin (1973, 1974) presented initial evidence supporting the postulated causal flow sequence of Likert's model.

However, systematic verification of the causal hypothesis requires additional research.

While the theoretical and developmental work on the SOO was based on civilian data, it has also been administered to Navy populations as part of a study to assess the impact of changing work/life values and preferences on Navy managerial methods. In a summary of the findings of the first 2 years of the study, Bowers and Bachman (1974) concluded that Likert's model is reasonably applicable and valid for both Navy and civilian organizations. Likewise, Franklin (1974), in assessing the causal flow model, obtained results comparable to the earlier analyses based on civilian data. The strongest difference between the civilian and Navy samples was that peer leadership appeared to be a more critical link to group processes within the Navy. Also, Drexler and Bowers (1973) reported that organizational conditions, as measured by the SOO, accounted for significant proportions of the variance in reenlistment rates. Using ships and air squadrons as the basic units of analyses, they found positive correlations between all survey dimensions and actual reenlistment rates for those commands.

The Navy HRM Survey was patterned after the SOO. Modifications were made as follows: (1) many items from the SOO were adapted for use with Navy personnel through changes in terminology (e.g., organization was termed command), (2) additional items were generated from earlier efforts by Navy specialists in command development programs, and (3) items specific to contemporary social areas and programs were added as diagnostic aids for directing subsequent efforts within a command. Because of the large overlap in questions between the two surveys, research findings from the SOO should be applicable to the current HRM Survey. Navy-based studies must be conducted to demonstrate the comparability of the two instruments. However, the considerable body of research on both the construct and predictive validity of the SOO appears to support the likelihood that similar results will be found with the Navy HRM Survey.

More specific delineation of the Navy survey is given in the Procedures Section. Of special importance to the present report are the postulated relationships between the various survey indices and potential criteria of organizational effectiveness/performance.

Criteria of Organizational Performance

Campbell, Bownas, Peterson and Dunnette (1974), in a review of the measurement of organizational effectiveness, stated that the criteria of effectiveness chosen and measured are influenced by the specific theory of effectiveness one adopts. The authors point out that overall system effectiveness is best assessed not by one criterion but rather by multiple components.

Likert and Bowers (1969) postulated that criteria or end-result variables "are the dependent variables that reflect the results achieved

by that organization" (p. 586). In a civilian organization, such system outcomes include volume, efficiency, and quality of work. Other criteria such as attendance, development (growth), and human costs (accidents, health, conflict, disciplinary actions, etc.) are theorized by Likert and Bowers to be subordinate criteria in that they are antecedent to and thus affect the primary outcomes. Taylor and Bowers (1972) state that future research with the SQO, or in this case the HRM Survey, should determine the concurrent and predictive validity of the instrument using criteria that are considered to be both important and relevant measures of effectiveness within the system being studied. For the Navy, such criteria include measures of performance during refresher training, reenlistment rates, reports of command inspections, disciplinary rates, etc.

Disciplinary Offenses: Nonjudicial Punishment

In the present report the area of disciplinary offenses is evaluated as a measure of potential system effectiveness. Like the larger American society of which the Navy is a subsystem, the Navy has also recently experienced a substantial increase in antisocial behaviors. A recent Chief of Naval Operations Fact Book (Good Order and Discipline, 1974) reported that such disciplinary indices as absenteeism, nonjudicial punishments, courts-martial, and administrative discharges are on the increase. The cost of such delinquent behavior to the Navy in terms of administrative expenses, lost working time, and disruption of cohesive work group activities is substantial.

A large number of these disciplinary offenses are subsumed in the rate of nonjudicial punishment (NJP) under Article 15 of the Uniform Code of Military Justice (UCMJ). Article 15 is applicable whenever a minor offense is committed. The overwhelming majority of these cases are handled within the command and punishments (limited by the UCMJ) are awarded by the commanding officer.

While NJP violations are usually associated with minor infractions, they are nonetheless a measure of both disciplinary problems and conflict within a command. One problem does arise when NJP rates are used as indicators of the number of disciplinary offenses on a ship. There is some latitude within which the command may elect to officially be aware of or handle such offenses. The commanding officer may decide to have the executive officer deal with many personnel problems without resorting to the formal NJP session. Likewise, lower level supervisors may choose to use "curbstone justice" rather than formally place a man on report.

In either of these cases, the results are lower NJP rates for the command since disciplinary offenses are not reported on the official NJP records. Whether such unofficial and less formal procedures are the result of more effective leadership styles remains an empirical question. Nonetheless, disciplinary offenses that are reported in NJP

statistics can be considered as having significant impact upon the command in which they occurred.

Borman and Dunnette (1974) provide evidence as to the importance of NJP data. They attempted to select components for an index which would reflect the overall status of personnel on board a ship. Using a policy-capturing methodology, the authors had Navy officers assess various components for inclusion in this global index. One measure that emerged was the NJP rate for a ship. Recommendations from Borman and Dunnette's research are under evaluation by this Center. However, their initial results suggest that NJP rates are considered an important measure of the overall status of personnel conditions on board Navy ships.

As previously mentioned, Likert and Bowers (1969) considered disciplinary actions to be a potential outcome measure (subordinate criterion). Hence, such disciplinary actions should be related to the type of organizational practices within a command. Campbell et al. (1974) present several studies relevant to the issue of conflict/cohesion of work groups within an organization. However, little formalized effort has been directed toward relating organizational behaviors to disciplinary rates.

One recent Navy study does point to a possible relationship between Navy NJP rates and leadership styles. Thomas, Thomas, and Ward (1974) reported that nonoffenders (those personnel who had not committed NJP offenses) viewed their supervisor as being more supportive and interested in them than did NJP offenders. While the study could not establish any causal relationships, it does suggest that this facet of organizational behavior (supervisory supportiveness) may be an important factor influencing rates of NJP.

Attempts to relate disciplinary actions to organizational conditions come from a recognition that environmental/situational factors are an important determinant of both social and antisocial behaviors (Bandura, 1969; Bowers, 1973; Mischel, 1973). On Navy ships, in particular, one could argue for the added importance of environmental factors in the person/environment interaction. Ships often operate as independent units and in this sense represent closed social systems. One could therefore expect that such factors as organizational climate and other environmental conditions would be even more critical in the Navy than in civilian organizations. Moreover, a study presently underway is investigating the relationship between the physical/organizational environment on Navy ships and several outcome variables such as health problems and work performance. Preliminary results indicate that situational factors in conjunction with the person/environment interaction may be the major contributors to the satisfaction and effectiveness of personnel on Navy ships (Sells, James, Jones, and Gunderson, 1974).

Thus, there appears to be a growing need for more thorough and broadly based investigations of potential situational factors that affect performance within Navy units. The present study focuses on only one domain of the environment--the organizational conditions on board Navy ships as

measured by the HRM Survey. It is recognized that the survey taps only a portion of the potential measures of organizational structure. Campbell et al. (1974) have pointed out the limitations and strengths of the SOO as well as other varied approaches used to measure organizational conditions. Nonetheless, the theoretical framework upon which the HRM Survey is based has firm empirical support. As such, it should provide a relatively good measure of many of the organizational characteristics that contribute to the effectiveness of operating Navy units.

PURPOSE

The purpose of the present study was to investigate the relationship between perceptions of organizational conditions, as measured by the HRM Survey, and NJP rates on Navy ships. The report is part of a larger effort which attempts to determine the impact of the Navy HRM program on several criteria of organizational effectiveness. Utilizing Likert's (1961, 1967) theoretical model and related work (Likert and Bowers, 1969; Taylor and Bowers, 1972), it was hypothesized that NJP rates would be negatively related to the indices of the HRM Survey. In other words, the more effective the human resource management system within a ship, the lower the NJP rate for that ship. Because the present effort focused on concurrent relationships, one must also add the converse prediction (i.e., the lower the NJP rate, the more effective the human management system on a ship). Since this report is based on Likert's model, interpretations are formulated on the thesis that the causal flow is mainly from the organization to the output variables.

PROCEDURES

Most of the data used in this study were obtained through the operational HRM program underway in the fleet. Appendix A describes the Navy's HRM effort as well as NAVPERSRANDCEN's system for conducting research in support of HRM.

Independent Variables: HRM Survey

As previously mentioned, the HRM Survey is an outgrowth of the SOO. Various forms of the HRM Survey were used in late 1973 and 1974. However, based on a working-level conference in 1974 and data provided from a report by Drexler (1974), the revised survey, as shown in Appendix B, is now in operational use.

Although the commands included in the present study did not receive the revised survey, virtually identical questions appeared on the earlier forms. Thus, for this study, items from these earlier forms were re-structured to correspond to the survey indices now in use. Two indices (Decision Making Practices and Lower Level Influence) contain new items and could not be used in the present investigation. The survey also contains items which tap specific problem areas (Training, Equal

Opportunity, Drug Abuse, Alcoholism Prevention, and Community Interrelationships). These problem-oriented indices were not investigated in the present effort since most contained new, previously untested, items.

The "core" indices were formed by summing individual item responses on a given index and then dividing the total by the number of items used. Since all responses to the survey are on a five-point Likert scale, both the question and index values range from 1 (to a very little extent) to 5 (to a very great extent). The satisfaction items are similarly scaled from 1 (very dissatisfied) to 5 (very satisfied). Drexler (1974) reported that alpha reliability coefficients for most of the revised indices have magnitudes of from .70 to .80. Somewhat higher reliabilities are reported for the 500 indices (Taylor and Bowers, 1972), although these coefficients were based on aggregate or group data whereas Drexler used individual level data. Because aggregating data reduces error variance, one would expect higher coefficients from such data sets. Thus, the lower reliabilities for the HRM Survey may be the result of the manner of computation. More precise reliability data will be available in the future as data accumulate from administration of the current survey.

Definitions of the HRM Survey indices and their respective items are given below:

1. Command Climate

a. Communications Flow (Questions 1-3). Command leadership understands the work and problems of the command. Information flows freely through the chain of command, from the work groups to a listening and responsive leadership and to the work groups concerning plans and problems facing the command.

b. Decision Making (Questions 4-6). Information is widely based within the command and decisions are made at those levels where the most adequate information is available. Supervisors seek out information before making decisions.

c. Motivation (Questions 7-9). The command motivates personnel to contribute their best efforts through rewards for good performance and through career enhancing duties.

d. Human Resource Emphasis (Questions 10-13). The command shows concern for human resources in the way it organizes its personnel to achieve its mission. Personnel within the command perceive that the organization and assignment of work sensibly consider the human element.

e. Lower Level Influence (Questions 14-15). Lowest level supervisors and nonsupervisory personnel have the opportunity to influence what goes on in their department.

2. Supervisory Leadership

a. Supervisory Support (Questions 16-19). Leaders behave in a way which increases the work group member's feelings of worth and dignity.

b. Supervisory Teamwork (Questions 20-21). Supervisors encourage subordinates to develop close, cooperative working relationships with those who work for them.

c. Supervisory Goal Emphasis (Questions 22-23). High standards of performance are set, maintained and encouraged by supervisors.

d. Supervisory Work Facilitation (Questions 24-26). Supervisors help those who work for them to improve performance. Subordinates and supervisors work together to solve problems which hinder task completion and performance.

3. Peer Leadership

a. Peer Support (Questions 27-29). Work group members behave toward each other in a manner which enhances each member's feelings of personal worth.

b. Peer Teamwork (Questions 30-33). The behavior of work group members encourages the development of close, cooperative working relationships. Work group members maintain and encourage high standards of performance.

c. Peer Work Facilitation (Questions 34-35). Work group members help each other improve performance. The work group works together to solve problems which hinder performance and task completion.

d. Peer Problem Solving (Questions 36-38). Work group members work well in solving problems.

4. Work Group Processes

a. Work Group Coordination (Questions 39-42). Work group members plan, coordinate, and support each other effectively.

b. Work Group Readiness (Questions 43-45). The work group is able to adapt to emergency situations and meet its mission.

c. Work Group Discipline (Questions 46-47). Work group members maintain Navy standards of etiquette and discipline.

5. Outcome Measures

a. Satisfaction (Questions 48-54). Personnel within the command are satisfied with their supervisors, the command, other work group members, their job and their present and future progress in the Navy.

b. Integration of Men and Mission (Questions 55-56). The command is seen as effective in getting people to meet the command's objectives as well as meeting individual needs.

Dependent Variable: Nonjudicial Punishment (NJP) Rate

The dependent variable for this investigation was the NJP rate for a given ship. All Navy units (ships, commands) submit a semiannual report listing the number of nonjudicial punishments imposed over the previous 6-month period. This report (Navy Judge Advocate General, NAVJAG, 5800/9A) is submitted in July and January of each year. It should be noted that the report does not list the number of personnel involved in NJPs but rather the total number of NJPs. Thus, if an individual receives multiple NJPs during the reporting period, each NJP will be included in the total reported.

At the time the study was initiated, unit-level data were available from only three type commands¹--Cruiser-Destroyer Force, Pacific Fleet; Amphibious Force, Pacific Fleet; and Cruiser-Destroyer Force, Atlantic Fleet. Information for other type commands (Service Force, Mine Force, and Air Force) was either not available or had been assimilated into aggregate reports which did not maintain unit-level identity.

Data were obtained for two 6-month reporting periods: (1) a January 1974 report (covering the period 1 July 1973 to 30 December 1973) and (2) a July 1974 report (covering the period 1 January 1974 to 30 June 1974).

Sample

Initially, all surface ships contained in the HRM data base maintained by NAVPERSRANDCEN were considered for inclusion in the study. However, because criterion data (NJP rates) were available for only three type commands, the final sample consisted of 41 ships from two fleets. A breakdown of the ships by type and fleet appears in Table 1.

There is considerable variability among ship types in terms of size and specified mission. However, these ships cannot be described as a random sample of all Navy surface ships because of the restrictions cited above. There is no representation from either extremely small ships (Minesweepers) or large ships (Attack Aircraft Carriers). Likewise, the sample contains no Service Force Ships.

¹In early 1975, Cruiser-Destroyer Force, Amphibious Force, and Service Force were combined into one command, Surface Force, in both the Atlantic and Pacific Fleets. Because the ships in the sample were organizationally a part of the previous system when the HRM/NJP data were gathered, the original type command referents are used in this report.

TABLE 1

Distribution of Ships by
Ship Type and Fleet

Type of Ship		Number of Ships in Sample		
		Atlantic	Pacific	Total
DE	Escort Ship	1	7	8
DD	Destroyer	6	2	8
DDG	Guided Missile Destroyer	3	4	7
DLG	Guided Missile Frigate	2	3	5
LST	Tank Landing Ship	-	3	3
LPH	Amphibious Assault Ship	-	2	2
LPD	Amphibious Transport Dock	-	2	2
LKA	Amphibious Cargo Ship	-	2	2
LSD	Dock Landing Ship	-	2	2
LCC	Amphibious Command Ship	-	1	1
DEG	Guided Missile Escort Ship	1	-	1
Total		13	28	41

To the extent that the ships were randomly selected to go through the HRM process operationalized under the Navy Human Goals Plan, the ships included in this study are probably representative of the three type commands. However, there are no empirical data available to determine representativeness of the sampled "HRM" ships since such factors as time availability and deployment schedules may influence whether a ship is scheduled for the survey.

Ship personnel were surveyed during the time frame from December 1973 to October 1974. Distributions of the number of survey respondents by type command are presented in Table 2.

Methodology

Although data were obtained from individual respondents within a ship, the present effort focused on the ship as the unit of analysis. Thus, data were aggregated for personnel on each ship in order to generate an overall mean score for each of the indices comprising the independent

TABLE 2

Breakout of Number of Respondents to Human
Resource Management Survey by Type Command

Type Command	Number of Ships	Number of Survey Respondents
Amphibious Force Pacific Fleet	12	3695
Cruiser-Destroyer Force Pacific Fleet	16	3455
Cruiser-Destroyer Force Atlantic Fleet	13	2746

Total	41	9896

variables. The result was that each ship had 16 scores representing mean values for the indices of the HRM Survey.

The NAVJAG 5800/9A reports provided only data on the number of NJPs imposed over a 6-month period. Because the ships used in the study varied considerably in terms of the number of men assigned to them, the NJP data were transformed to a common-based scale which took this factor into account. Since enlisted personnel are primarily the ones involved in NJPs, the enlisted allowance was obtained for each ship. This allowance was then used to generate a standard NJP rate--the mean number of NJPs per month per 100 enlisted personnel (based on a given 6-month reporting period).

It should be noted that the number of enlisted personnel on a ship varies from month to month. Also, the actual on-board count is usually slightly lower than the ship allowance. Because historical monthly on-board counts were not available for all ships, it was felt that the allowance figures provided the best estimates available. The resultant NJP rates probably tend to be slightly lower than the actual NJP rates. However, this error should be relatively constant across ships and therefore should not affect the obtained relationships.

As mentioned earlier, the purpose of this study was to determine the relationship between NJP rates and HRM Survey data using ships as the units of analysis. The design was essentially one of establishing concurrent validity. However, the determination of what constitutes concurrent events in terms of both the survey and NJP rates is not intuitively obvious. Drexler and Bowers (1973) reported that most respondents to the SOO (on which the HRM Survey is based) use a frame of

reference of from 6 to 12 or more months prior to the date of the survey in arriving at their responses. Their findings, based on reenlistment rates, support the contention that the criterion data should be measured prior to the time of the survey. Also, since the HRM Survey was administered to different ships during different months, the data must necessarily be adjusted so that for each ship the criterion corresponds to approximately the same number of months prior to the survey.

This problem can be further confounded by systematic changes in the criterion over time (viz., changes occurring Navywide). For example, if NJP rates are increasing, it would not be appropriate to use NJP rates for an earlier period for one ship and a later NJP reporting period for another ship. Finally, because different reporting periods must be used depending upon the date of surveying, the researcher must be concerned with the stability of the criterion information across reporting periods.

For the present effort the stability of the data was assessed prior to initiating the actual study. Table 3 presents correlations between NJP rates across the two reporting periods. Considering the large number of variables that may affect NJPs over time (deployment schedules, changes of commanding officers, etc.), the data appear to be reasonably

TABLE 3

Correlations Between Nonjudicial Punishment Rates for
Two 6-Month Reporting Periods by Type Command
(July-December 1973; January-June 1974)

Type Command	Number of Ships	<u>r</u>
Amphibious Force Pacific Fleet	11	.76**
Cruiser-Destroyer Force Pacific Fleet	12	.57
Cruiser-Destroyer Force Atlantic Fleet	13	.68**
All Ships Combined	36 ^a	.76**

^aData for both reporting periods were not available for five ships.

**p < .01

stable. Ships generally have stable rates of disciplinary problems over periods of time.

In terms of matching the HRM Survey data with the appropriate reporting period, the following procedure (referred to as "relativizing") was used:

1. For all ships ($N = 25$) that were surveyed from May 1974 to October 1974, the July 1974 NJP report covering the first 6 months of calendar year 1974 was used as the criterion base.
2. For all ships ($N = 16$) surveyed between December 1973 and April 1974, the January 1974 NJP report covering the last 6 months of 1973 was used as the criterion base.

These break points were chosen in order to have the NJP reporting period fall as close as possible to the 6-month period before the survey. The results were that, for the 41 ships combined, the NJP reports covered an average time frame which began approximately 8 months and ended about 3 months before the survey. For discussion purposes, this time frame is referred to as time t .

For those ships surveyed between May and October 1974, the January 1974 report was also used to generate a second criterion variable. For these ships ($N = 22$ with 3 having missing data), the January report provided an average time frame which began approximately 14 months and ended approximately 9 months prior to the survey. This earlier time frame is referred to as $t-1$ in the context of this report. Time $t-1$ was used in order to examine if there were any differences in the obtained relationships that might be a function of the amount of time between the NJP reporting period and administration of the HRM Survey.

Finally, it should be noted that the NJP rates had increased slightly over the two reporting periods. For those ships where comparisons were possible, the NJP rate per 100 men/month during the last half of 1973 was 3.72 as compared to a rate of 4.06 for the first half of 1974. Because of this slight increase, the NJP rates within each reporting period were transformed to standard scores. However, the nonstandardized NJP rates were also analyzed since they enabled more meaningful interpretation and presentation of the data. (It was later determined that use of the standardized vs. nonstandardized scores had very little effect upon the findings.)

In summation, the ships had either one or two obtained NJP rates, in both standardized and nonstandardized format. These rates represented two reporting periods--one from 3 to 8 months prior to surveying--the other, representing a 9 to 14 month period prior to the survey.

Data Analysis

Pearson product moment correlations were computed between the HRM Survey indices and the NJP rate for both the total sample and the

different type commands. Descriptive statistics were compiled in order to contrast extreme groups (upper and lower 27 percent) on the independent variable (Feldt, 1961).

Because several factors could serve to moderate the obtained relationships, several ancillary statistical techniques were also employed, including analysis of variance, tests for the significance of difference between means (t tests), and rank-order correlations. The reader is referred to a standard statistics text (see McNemar, 1969; Myers, 1972) for more detailed descriptions of the above statistical procedures and their interpretations.

RESULTS AND DISCUSSION

Relationship Between NJP Rates and HRM Survey Data

Table 4 presents the results of the correlational analyses involving the HRM Survey indices and NJP rates at times t and $t-1$.

For the time period $t-1$, none of the correlation coefficients were significant. However, all of the relationships were in the predicted direction (the higher the HRM indices, the lower the rate of NJPs).

Correlations using the NJP rate for the closer time frame (time t) demonstrated a similar and even more encouraging picture. Again, there was a negative correlation between each mean index value and the NJP rate. However, using this closer time frame, 13 of the 16 correlations were significant at or beyond the .05 level. The authors realize that, given the small sample size and large number of predictor variables, an argument could be made for using more stringent levels of significance. However, given the fact that the index scores represent mean scores for ships and are thus based on inputs from almost 10,000 individuals, the results provide strong evidence in support of the hypothesized relationship between the number of disciplinary actions on a ship and the functioning of its human organization.

A rank-difference correlation was computed between the survey-NJP coefficients for times t and $t-1$. This correlation, $Rho = .567$, was significant at the .05 level, $t(14) = 2.58$. This suggests that the rank ordering of the coefficients was relatively stable over the two time periods. However, the failure to find significant correlations for the period $t-1$ seems to indicate that survey respondents are using a time frame of less than 9 to 14 months prior to the survey. The data are not precise enough to determine the optimal time frame for relating HRM Survey data to NJP rates and further research is needed.

Table 5 represents the rank ordering of HRM Survey-NJP correlation coefficients for time t . As can be seen, seven of the indices are significant at the .01 level while six are significant at the .05 level. It is interesting to note that the strongest negative relationship was

TABLE 4

Correlations Between Nonjudicial Punishment (NJP)
Rates and Human Resource Management (HRM) Survey
Indices for Two NJP Reporting Periods

HRM Survey Index	Monthly NJP Rate Per 100 Enlisted Men	
	Time t ($N=41$ Ships)	Time $t-1$ ($N=25$ Ships)
	r	r
A. COMMAND CLIMATE		
1. Communications Flow	-.47**	-.24
2. Decision Making	-- ^a	-- ^a
3. Motivation	-.35*	-.26
4. Human Resource Emphasis	-.27	-.18
5. Lower Level Influence	-- ^a	---- ^a
B. SUPERVISORY LEADERSHIP		
1. Supervisory Support	-.50**	-.32
2. Supervisory Teamwork	-.46**	-.29
3. Supervisory Goal Emphasis	-.29	-.14
4. Supervisory Work Facilitation	-.39*	-.17
C. PEER LEADERSHIP		
1. Peer Support	-.37*	-.20
2. Peer Teamwork	-.47**	-.27
3. Peer Work Facilitation	-.42**	-.33
4. Peer Problem Solving	-.44**	-.33
D. WORK GROUP PROCESSES		
1. Work Group Coordination	-.45**	-.21
2. Work Group Readiness	-.35*	-.26
3. Work Group Discipline	-.28	-.16
E. OUTCOME MEASURES		
1. Satisfaction	-.40*	-.26
2. Integration of Men and Mission	-.37*	-.30

^aData are not presently available for these indices.

* $p < .05$

** $p < .01$

TABLE 5

Rank Ordering of Correlations Between Nonjudicial Punishment
(NJP) Rates and Human Resource Management (HRM)
Survey Indices for 41 Navy Ships

HRM Survey Index	Monthly NJP Rate Per 100 Enlisted Men
	<u>r</u>
1. Supervisory Support	-.500
2. Communications Flow	-.472
3. Peer Teamwork	-.466
4. Supervisory Teamwork	-.462 $p < .01$
5. Work Group Coordination	-.446
6. Peer Problem Solving	-.444
7. Peer Work Facilitation	-.424
8. Satisfaction	-.398
9. Supervisory Work Facilitation	-.388
10. Integration of Men and Mission	-.371
11. Peer Support	-.366 $p < .05$
12. Motivation	-.348
13. Work Group Readiness	-.347
14. Supervisory Goal Emphasis	-.293
15. Work Group Discipline	-.284
16. Human Resource Emphasis	-.267

found between Supervisory Support and NJP rates. This is in accord with Thomas, Thomas, and Ward (1974) who reported that supervisory support was a critical variable in distinguishing between NJP offenders and nonoffenders. Supervisory behaviors which serve to increase the subordinate's feeling of personal worth seem to be related to lower NJP rates.

It also appears that perceptions of cooperative behaviors, including Supervisory Teamwork, Peer Teamwork, Supervisory Work Facilitation, Peer Work Facilitation, and Work Group Coordination, are strongly related to NJP rates aboard a ship. Given that many NJP offenses involve confrontation and conflicts between peers and/or between a subordinate and his supervisor, it is understandable that these indices should show high correlations. No attempt has been made to discuss the relative ranking of the different indices. However, it should be noted that high index intercorrelations could explain in large part why these particular survey indices correlate higher than others with the criterion variable (a copy of the index intercorrelations computed at the ship level appears as Appendix C).

Given the large number of predictors and the small sample size, multivariate analyses were not considered. Future efforts should attempt to determine the proportion of the total NJP variance accounted for by the survey indices in combination. The present data, nonetheless, indicate that the dimensions tapped by the HRM Survey do contribute significantly to the predictable variance associated with NJP rates on Navy ships.

Extreme Groups Breakouts

In order to provide a clearer description of the relationships between the HRM Survey indices and NJP rates, extreme group comparisons were made. Ships were first divided into three groups on every HRM Survey index based on their mean scores. The result was that for each index, ships were classified as being in one of three possible subgroups: (1) low (bottom 27 percent), (2) middle (middle 46 percent), or (3) high (top 27 percent). Mean NJP rates were then computed for each subgroup. Actual NJP rates (rather than standardized scores) were used. Correlational analyses using these nonstandardized scores yielded results virtually identical with those reported in the previous section. Thus, the actual NJP rates seemed more appropriate and meaningful for the extreme groups breakouts.

The resultant breakouts based on this type of analysis are presented in Table 6. For every index, the mean NJP rate varied consistently across groups. The high-grouped ships on the survey indices consistently had the lowest mean NJP rates, the middle group had the next lowest NJP rates, while the low-grouped units had the highest NJP rates. Specific differences between the subgroup means must be interpreted with caution since the magnitude of the subgroup standard deviations varied considerably on different indices. However, for most of the indices, the low-grouped

TABLE 6

Comparison of Mean Nonjudicial Punishment (NJP) Rates Per
100 Enlisted Men for Ships with Low, Average, and High
Index Scores on the Human Resource Management Survey^a

HRM Index	Range	No. of Ships	Mean NJP Rate Per Month	Standard Deviation
A. COMMAND CLIMATE				
1. Communications Flow	2.40-2.58	11	4.81	2.40
	2.59-2.76	19	4.15	1.44
	2.77-3.02	11	2.46	1.15
2. Motivation	2.22-2.41	11	4.84	2.27
	2.42-2.65	20	3.62	1.29
	2.66-3.01	10	3.31	2.18
3. Human Resource Emphasis	1.83-2.16	10	4.50	2.58
	2.17-2.54	20	4.09	1.50
	2.55-3.11	11	2.90	1.52
B. SUPERVISORY LEADERSHIP				
1. Supervisory Support	3.11-3.26	11	5.13	1.86
	3.27-3.42	19	3.85	1.81
	3.43-3.67	11	2.64	1.16
2. Supervisory Teamwork	2.74-2.93	11	5.23	1.92
	2.94-3.08	19	3.57	1.79
	3.09-3.45	11	3.03	1.30
3. Supervisory Goal Emphasis	3.30-3.40	11	4.39	1.30
	3.41-3.57	21	3.88	2.04
	3.58-3.85	9	2.03	2.03
4. Supervisory Work Facilitation	2.69-2.78	11	4.92	2.15
	2.79-2.92	19	3.78	1.78
	2.93-3.16	11	2.98	1.27

^aThe sample was split into three groups on every index: (1) upper 27% (N=11), (2) middle 46% (N=19), and (3) lower 27% (N=11). When ships at the cutting points between groups had identical survey scores, they were included in the middle group. Therefore, the number of ships in the subgroups may vary on different indices.

(Table continued on next page)

TABLE 6 (Continued)

HRM Index	Range	No. of Ships	Mean NJP Rate Per Month	Standard Deviation
C. PEER LEADERSHIP				
1. Peer Support	3.32-3.46	10	4.47	1.68
	3.46-3.55	21	4.65	2.07
	3.56-3.74	10	2.89	1.33
2. Peer Teamwork	2.61-2.77	11	4.91	2.20
	2.78-2.98	22	3.70	1.67
	2.99-3.19	8	2.93	1.41
3. Peer Work Facilitation	2.46-2.52	9	4.46	2.43
	2.53-2.71	23	3.91	1.84
	2.72-2.89	9	3.18	1.21
4. Peer Problem Solving	2.74-2.91	11	4.67	2.12
	2.92-3.07	20	3.66	2.02
	3.08-3.30	10	3.41	.98
D. WORK GROUP PROCESSES				
1. Work Group Coordination	2.74-2.95	10	4.52	1.55
	2.96-3.15	20	4.09	2.12
	3.16-3.37	11	2.88	1.32
2. Work Group Readiness	3.14-3.34	10	4.61	1.40
	3.35-3.53	20	4.04	2.16
	3.54-3.85	11	2.99	1.34
3. Work Group Discipline	2.64-2.88	11	4.31	1.34
	2.89-3.10	20	4.22	2.15
	3.11-3.27	10	2.78	1.37
E. OUTCOME MEASURES				
1. Satisfaction	2.74-2.86	11	5.30	1.84
	2.87-3.08	20	3.65	1.71
	3.09-3.57	10	2.73	1.29
2. Integration of Men and Mission	2.16-2.35	11	4.83	2.27
	2.36-2.62	19	3.73	1.34
	2.63-3.10	11	3.16	2.02

ships had NJP rates that were almost twice as great as those of the high-grouped ships. For example, consider two ships which both have an enlisted allowance of 300 men. If one ship fell in the high group on the Supervisory Support index, it would hypothetically report 48 NJPs during a 6-month reporting period. For a ship in the low group on this same index, it would hypothetically report 92 NJPs for that same reporting period, which is nearly twice the former rate.

The results from the extreme groups breakouts (1) substantiate the earlier reported negative correlations between HRM index scores and NJP rates, and (2) provide a meaningful representation of how the observed relationships translate to actual ship comparisons. These findings also point out that differences in NJP rates for high and low scoring ships on the HRM Survey are large enough to warrant attention in terms of administrative costs and reduced manpower effectiveness.

Allowance Size

One factor that could potentially moderate the observed relationships is allowance size. Thus, it could be hypothesized that ships with larger or smaller compliments of enlisted personnel might have unique conditions that affect NJP rates. To investigate this possibility, the ships were ranked in order of the size of their enlisted allowance. The resultant distribution of ships and their mean allowances are presented in Table 7.

The ships were then divided into two groups ("high" and "low") based on the size of their allowance. Mean NJP rates were computed for each group using the nonstandardized time t data. Table 8 compares the obtained results for the two groups. No significant difference was found between the mean NJP rate for the two groups. Hence, at least for the present sample, the size of the enlisted population was not an important variable in determining the rate of NJPs per 100 enlisted personnel.

Proportion of First-term Enlisted Personnel

A second factor that was investigated as a possible source of variation in NJP rates as well as a moderator of the correlational findings was the proportion of first-term enlisted personnel on the ships. Bowers and Bachman (1974) found that the organizational practices a Navy man experiences (and reports on the HRM Survey) are partly a function of his age, the average age of the members of his work group (seniority), and the level of his workgroup within the organization. The lower a person is in the chain of command, the poorer the perceived organizational conditions. If one combines this finding with the fact that first-term enlisted personnel are the ones who are primarily involved in NJPs, a potential explanation for the earlier reported correlations emerges (i.e., the greater the proportion of first-term enlisted men on a ship, the higher the NJP rate and the lower the mean HRM indices). In order to explore this hypothesis, the proportion of first-term to total enlisted personnel (as reported on the HRM Survey) was computed for all units.

TABLE 7
Distribution of Sample by Size
of Enlisted Allowance

Group A			Group B		
Type	N	Average Allowance ^a	Type	N	Average Allowance ^a
LCC	1	736	LSD	2	300
LPN	2	530	DD	6	275
LPD	2	413	DEG	1	251
DLG	5	371	DE	8	238
LKA	2	346	LST	3	211
DDG	7	318	DD	2	179
Total	19	Mean=389	Total	22	Mean=245

^aAllowances can vary slightly with a given type of ship because of such factors as added equipment, technical sophistication, etc.

TABLE 8
Comparison of Mean Nonjudicial Punishments
Per 100 Enlisted Personnel for Ships
With "High" and "Low" Allowances

	Mean	Standard Deviation	t
A (N = 19)	3.55	1.79	1.01 (n.s.)
B (N = 22)	4.14	1.95	

These proportions ranged from .54 to .75, with a mean of .64 and a standard deviation of .06. Table 9 presents correlations between NJP rates and the proportion of first-term enlisted personnel by type of ship. These correlations failed to attain significance either within or across type commands. A modest (but nonsignificant) relationship of .19 was obtained across all ships. These results indicate that the proportion of first-term enlisted personnel was not a potent moderator variable in the present investigation.

Type Command

A final moderator variable that was investigated was type command. While this effort has primarily focused on ships as individual units and closed systems, they are also part of larger systems (type commands, fleet commands, all Navy commands). In this sense, they represent open systems that must interface with other Navy organizations. One part of the larger social system is the ship's type command. Although the sample of units used in this study were all surface ships, three different type commands were represented—Amphibious Force, Pacific Fleet (PHIBPAC), Cruiser-Destroyer Force, Pacific Fleet (CRUESPAC), and Cruiser-Destroyer Force, Atlantic Fleet (CRUDESANT).

At the time the data were collected, the type commands were distinct organizational subunits within the Navy system. It is not within the

TABLE 9

Correlation Between Nonjudicial Punishment
(NJP) Rates and Proportion of First-term
Enlisted Personnel by Type Command

Type Command	Number of Ships	Proportion First-term Personnel	Correlation Between NJP Rate and Proportion of First-termers
Amphibious Force Pacific Fleet	12	.67	.11
Cruiser-Destroyer Force Pacific Fleet	16	.66	-.02
Cruiser-Destroyer Force Atlantic Fleet	13	.59	.06
Total/Average	41	.64	.19

scope of this paper to explore organizational and policy differences across type commands. However, the potential for variation exists.

A second and perhaps more critical variable concerns the mission of the ships. While the two Cruiser-Destroyer Type Commands have similar missions, the Amphibious Force ships are required to perform quite different functions. To the extent that operational and organizational conditions vary across the type commands, one might expect that such differences could affect both NJP rates and perceived organizational conditions at the ship level. Because fleet (Pacific and Atlantic) was confounded with type command for Atlantic ships, no comparisons could be made between the two fleets.

NJP rates were computed within type command and comparisons were made using analysis of variance. The results, presented in Table 10, show that the NJP rate varied significantly across the type commands with the difference mainly attributable to higher NJP rate for PHIBPAC ships. Because of the significant differences noted between the NJP rates, mean scores for each of the HRM indices were computed by type command. Analysis of variance was then used to test differences across type commands. The results of this analysis appear in Table 11. Significant differences between type commands were found on four of the indices (Supervisory Support, Peer Support, Peer Teamwork, and Work Group Coordination). However, the most noteworthy finding in the table is the consistent ordering of the HRM Survey index means. On all 16 indices, the CRUDESANT ships were higher than the other two type commands. Likewise, on 15 of the 16 indices, the CRUDESANT ships were higher than PHIBPAC ships.

TABLE 10

Analysis of Variance Summary Table for Nonjudicial Punishment
(NJP) Rates With Main Effect for Type Command

Type Command	Number of Ships	Mean NJP Rate	Standard Deviation	(df=2,38)
Amphibious-Force Pacific Fleet	12	5.31	2.22	
Cruiser-Destroyer Force Pacific Fleet	16	3.23	1.25	6.28**
Cruiser-Destroyer Force Atlantic Fleet	13	3.34	1.54	

**p < .01

TABLE 11

Analysis of Variance Summary Table for Indices of the Human Resource
Management Survey with Main Effect for Type Command

HRM Survey Index	Mean for Amphibious Force Pacific Fleet (N=12 Ships)	Mean for Cruiser- Destroyer Force Pacific Fleet (N=16 Ships)	Mean for Cruiser- Destroyer Force Atlantic Fleet (N=13 Ships)	F (df=2,38)
A. COMMAND CLIMATE				
1. Communications Flow	2.60	2.69	2.74	3.17
2. Motivation	2.50	2.51	2.64	2.44
3. Human Resource Emphasis	2.37	2.34	2.49	1.05
B. SUPERVISORY LEADERSHIP				
1. Supervisory Support	3.28	3.36	3.41	4.42*
2. Supervisory Teamwork	2.95	3.03	3.09	2.71
3. Supervisory Goal Emphasis	3.46	3.49	3.55	1.78
4. Supervisory Work Facilitation	2.84	2.87	2.90	1.05
C. PEER LEADERSHIP				
1. Peer Support	3.45	3.50	3.56	5.23**
2. Peer Teamwork	2.79	2.87	2.95	4.76*
3. Peer Work Facilitation	2.60	2.62	2.67	1.04
4. Peer Problem Solving	2.93	3.01	3.04	2.88
D. WORK GROUP PROCESSES				
1. Work Group Coordination	2.98	3.05	3.12	3.67*
2. Work Group Discipline	3.40	3.47	3.51	1.69
3. Work Group Readiness	2.95	2.96	3.05	1.64
E. OUTCOME MEASURES				
1. Satisfaction	2.95	2.98	3.08	2.03
2. Integration of Men and Mission	2.43	2.49	2.60	1.93

*p < .05

**p < .01

The results from Table 11 suggest that type command is a critical variable when focusing on the organizational conditions of Navy ships. Whether the consistent differences between the two Cruiser-Destroyer Forces are the result of the different fleets or the different type commands cannot be determined. Bowers and Bachman (1974) reported differences between service/support vessels and other surface units on the SOO indices with service/support ships yielding the lower scores. Their sample included only two amphibious ships which did not appear to differ in profile from the Cruiser-Destroyer ships. It is not the purpose of this report to explore in any greater depth possible explanations for the obtained differences (i.e., such factors as different missions, deployment schedules, assignment of personnel, age of ships, age of personnel, etc.). What is critical is the finding that type command is related to both NJP rates and to organizational conditions.

To further explore the effect of type command as a moderator variable, correlational analyses were run for ships within each type command. Although the sample sizes were small, it was of interest to determine whether the overall negative relationships between NJP rates and HRM indices would hold up within a given type command.

As shown in Table 12, very few of the correlations attained significance. Nonetheless, within each type command, there were consistent negative relationships between HRM Survey indices and NJP rates. In fact, all correlations were in the expected direction. Certain variations in relationships did appear across type commands. For example, the strongest correlation with NJP rates for PHIBPAC ships involved Peer Work Facilitation, while Supervisory Support and Human Resource Emphasis emerged, respectively, as the most negatively correlated indices for CRUDESPEC and CRUDESANT ships. However, there was no evidence of any systematic moderating effect emerging for type command. Larger sample sizes will obviously have to be used in order to determine whether different indices are related to NJP rates for different type ships. Overall, the present results suggest that organizational perceptions, as measured by the HRM Survey, are negatively related to NJP rates both across and within type commands.

CONCLUSIONS AND RECOMMENDATIONS

The findings strongly suggest that NJP rates are related to the type of human resource management system present within a ship. Caution should be used in generalizing these results to other Navy ships since the sample was restricted to destroyer and amphibious-type units. However, the finding of negative relationships within each of the specific type commands indicates that similar results could be expected across other types of Navy units.

A note seems in order concerning NJP rates. A central tenet of this report has been that a low NJP rate is a positive outcome for a

TABLE 12

Correlations Between Nonjudicial Punishment (NJP)
Rates and Human Resource Management (HRM)
Survey Indices by Type Command

HRM Survey Index	Monthly NJP Rate Per 100 Enlisted Men		
	Amphibious Force Pacific Fleet (N=12 Ships)	Cruiser-Destroyer Force, Pacific Fleet (N=16 Ships)	Cruiser-Destroyer Force, Atlantic Fleet (N=13 Ships)
	<u>r</u>	<u>r</u>	<u>r</u>
A. COMMAND CLIMATE			
1. Communications Flow	-.41	-.35	-.48
2. Decision Making ^a	-	-	-
3. Motivation	-.38	-.18	-.53*
4. Human Resource Emphasis	-.21	-.03	-.64**
5. Lower Level Emphasis ^a	-	-	-
B. SUPERVISORY LEADERSHIP			
1. Supervisory Support	-.46	-.68**	-.11
2. Supervisory Teamwork	-.42	-.48*	-.33
3. Supervisory Goal Emphasis	-.23	-.27	-.28
4. Supervisory Work Facilitation	-.59*	-.32	-.29
C. PEER LEADERSHIP			
1. Peer Support	-.36	-.15	-.11
2. Peer Teamwork	-.39	-.34	-.41
3. Peer Work Facilitation	-.68**	-.35	-.31
4. Peer Problem Solving	-.50	-.41	-.14
D. WORK GROUP PROCESSES			
1. Work Group Coordination	-.35	-.38	-.40
2. Work Group Readiness	-.23	-.32	-.29
3. Work Group Discipline	-.25	-.39	-.24
E. OUTCOME MEASURES			
1. Satisfaction	-.39	-.42	-.44
2. Integration of Men and Mission	-.23	-.16	-.57*

^aData are not presently available for these indices.

*p < .05

**p < .01

Navy ship. One might argue that a "certain" number of NJPs is a necessary if not desirable method of maintaining good order and discipline. One could even hypothesize that ships with high NJP rates represent taut commands in that they are adhering to Navy regulations and policies. If this hypothesis is true, then interpretation of the obtained results would be somewhat confusing.

While it is difficult to determine the optimum or minimum number of NJPs necessary for a smoothly functioning ship, one can shift the focus and look at criterion variables which should clearly reflect positive outcomes for a ship. Drexler and Bowers (1973) reported that good organizational conditions (as measured by the SOO) are positively related to rates of reenlistment. Also, preliminary results from another study underway at this Center indicate that the HRM indices are positively related to the performance of the ship during refresher training. Thus in both studies (one using a people-oriented measure and the other, a mission-oriented criterion), higher HRM index scores were related to more positive performance outcomes. If one extends these findings to the present effort, it would appear that ships which have higher scores on the HRM Survey would concomitantly have "better" NJP rates. Hence, the conclusion that low NJP rates are the outcome of good management practices seems more realistic than the possibility that low NJP rates are a consequence of a lax system of discipline.

In conclusion, it appears that the dimensions of the organization measured by the HRM Survey make significant contributions to the variance of NJP rates on Navy ships. Lower NJP rates were consistently found among those commands in which the human organizational system was perceived to be most effective. It is recommended that future research expand the data base to include air and subsurface units as well as shore commands. Such efforts could provide more definitive results regarding which HRM Survey indices are most strongly related to NJP rates and the possible moderating effects of different types of commands. The results of such an investigation would more clearly identify for HRM consultants and their consumers, commanding officers, those organizational practices most critical to NJP rates.

Attempts must also be made to determine the relationships between various unit performance variables (e.g., NJPs, reenlistments, advancements, ship exercise scores, etc.). Even without such integration, the present study provides substantial evidence regarding the importance of human resource management on Navy ships.

REFERENCES

- Bandura, A. Principals of behavior modification. New York: Holt, Rinehart & Winston, 1969.
- Borman, W. D., & Dunnette, M. D. Selection of components to comprise a Naval Personnel Status Index (NPSI) and a strategy for investigating their relative importance. Minneapolis: Personnel Decisions, Inc., March 1974.
- Bowers, D. G., & Backman, J. G. Military manpower and modern values. Ann Arbor: Institute for Social Research, Technical Report, October 1974.
- Bowers, K. S. Situationism in psychology: An analysis and a critique. Psychology Review, 1973, 80(5), 307-335.
- Campbell, J. P., Bownas, D. A., Peterson, N. G., & Dunnette, M. D. The measurement of organizational effectiveness: A review of relevant research and opinion. San Diego: Navy Personnel Research and Development Center, July 1974. (TR 75-1)
- Drexler, J. A. The Human Resource Management Survey: An item analysis. Ann Arbor: Institute for Social Research, Technical Report, July 1974.
- Drexler, J. A., & Bowers, D. G. Navy retention rates and human resources management. Ann Arbor: Institute for Social Research, Technical Report, May 1973.
- Feldt, L. S. The use of extreme groups to test for the presence of a relationship. Psychometrika, 1961, 26, 307-316.
- Franklin, J. L. A path analytic approach to describing causal relationships among social-psychological variables in multi-level organizations. Ann Arbor: Institute for Social Research, 1973.
- Franklin, J. L. Hierarchical differences in Navy functioning. Ann Arbor: Institute for Social Research, Technical Report, February 1974.
- Good order and discipline facts book. Washington, D. C.: Bureau of Naval Personnel, October 1974.
- Likert, R. L. New patterns of management. New York: McGraw-Hill, 1961.
- Likert, R. L. The human organization: Its management and value. New York: McGraw-Hill, 1967.
- Likert, R. L., & Bowers, D. G. Organizational theory and human resource accounting. American Psychologist, 1969, 24(6), 585-592.

- McNemar, Q. Psychological statistics. New York: Wiley, 1969.
- Mischel, W. Toward a cognitive social learning reconceptualization of personality. Psychological Review, 1973, 30(4), 252-283.
- Myers, J. L. Fundamentals of experimental design. Boston: Allyn and Bacon, 1972.
- OPNAVINST 5300.6. Navy Human Goals Plan. Washington, D. C.: Chief of Naval Operations, 6 August 1973.
- OPNAVINST 5300.6a. Navy Human Goals Plan. Washington, D. C.: Chief of Naval Operations, 13 December 1973.
- Sells, S. B., James, L. R., Jones, A. P., & Gunderson, E. K. Men in social systems: Results of a three-year multiorganizational study. Fort Worth: Institute of Behavioral Research, October 1974. (IBR 74-28)
- Taguiri, R., & Litwin, G. H. (Eds.) Organizational climate. Boston: Harvard University Press, 1968.
- Taylor, J. C., & Bowers, D. G. Survey of organizations: A machine-scored standardized questionnaire instrument. Ann Arbor: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, 1972.
- Thomas, P. J., Thomas, E. D., & Ward, S. W. Perceptions of discrimination in nonjudicial punishment. San Diego: Navy Personnel Research and Development Center, June 1974. (TR 74-22)

APPENDIX A
HUMAN RESOURCE MANAGEMENT

HUMAN RESOURCE MANAGEMENT

The Navy HRM Process

Human Resource Management (HRM), as implemented in the Navy, is essentially a leadership-oriented program designed to promote increased effectiveness at both the individual and unit-performance level. The process itself may be viewed as a series of interrelated and overlapping elements, each described below.

The program is supported by the Fleet Commander in Chiefs (CINCs) and implemented through Human Resource Management Centers (HRMCs) and Detachments (HRMDs) throughout the world. Basic elements of the HRM process include:

1. Scheduling of the Human Resource Availability (HRAV) period and administration of the HRM Survey. Scheduling a ship or unit to participate in the Human Resource Availability (HRAV) period is, in large part, affected by its operational missions, deployment schedule, and related responsibilities. Once a ship/unit has been scheduled to participate, initial contacts are made by the HRMC/D consultants with the commanding officer and necessary background information is provided.

Later, the HRM Survey is administered to members throughout the chain of command under anonymous conditions. With some large units, sampling techniques are employed, although in most cases the entire available complement completes the survey. Responses are electronically scanned and processed, and detailed tabulations are generated to provide feedback to the commanding officer. Typical elements of this feedback report include statistics for the entire crew, specific departments, racial/ethnic groups, etc. In addition, the report identifies specific weaknesses and strengths within the unit as perceived by the respondents.

2. Feedback from Survey and the HRAV. Survey feedback is an important element of the HRAV--a 5-day dedicated period designed to assist the command in developing a Command Action Plan (CAP). The CAP essentially provides a framework through which the command attempts to correct or strengthen perceived weaknesses through affirmative policies and programs. In addition, HRMC/D consultant teams may conduct a series of workshops using techniques of survey-guided development to supplement feedback from the actual survey. Near the end of the HRAV, this information is integrated with the survey-feedback results to provide the basis for developing the CAP.

3. Command Action Plan (CAP). The CAP is designed to provide a working-level guideline on how the command will attempt to focus upon and improve those organizational practices considered most important by the command. The CAP is essentially a statement of objectives to be attained, including the techniques that will be used to attain these objectives.

4. Followups and Resurveying. Followup visits are made by the HRMC/D teams between 6 and 9 months after the HRAV. The purpose of this visit is to determine specific problems and/or progress made with the CAP. In some instances, or as requested, the HRM Survey is also readministered to members of the command or a random sample of the command. Where resurveys are conducted, a second feedback report is generated and, where possible, results are compared to those in the original administration. This followup is not a second HRAV, however, and is of an optional nature. Formal followup visits are scheduled for a given unit on an interval of approximately 18-24 months after the HRAV.

The NAVPERSRANDCEN Research System

The research system developed by NAVPERSRANDCEN has been designed to evaluate the effectiveness of the HRM program, while, at the same time, attempting to protect the confidentiality of information from each specific unit. Figure 1 presents the system used to "sanitize" specific unit response data and maintain confidentiality of information.

As can be seen, HRM Survey data from each unit are handled at three data processing centers. Information is transmitted to this Center in two forms: (1) a 166-character record for each respondent to the HRM Survey within the unit, and (2) a letter of transmittal indicating the specific Unit Identification Codes (UICs) of units involved in HRM for a given time period. Once the letter of transmittal and magnetic tapes are compared to assure accuracy of transmission, all UICs are converted into pseudo-UICs, which are essentially randomly generated numbers. At this point, the original magnetic tapes are demagnetized and returned to the processing centers. A translation table containing actual UICs/pseudo-UICs is maintained in the safes of the Commanding Officer, NAVPERSRANDCEN and the statistical programmer performing analyses of these data. No other member of the Research Center has access to this conversion table.

All research comparing survey response data with external indices of performance requires conversion from actual to pseudo-UICs. This is again conducted using the specially developed translation table. Thus, all comparisons and analyses are conducted by the research staff without information regarding which specific unit(s) are involved.

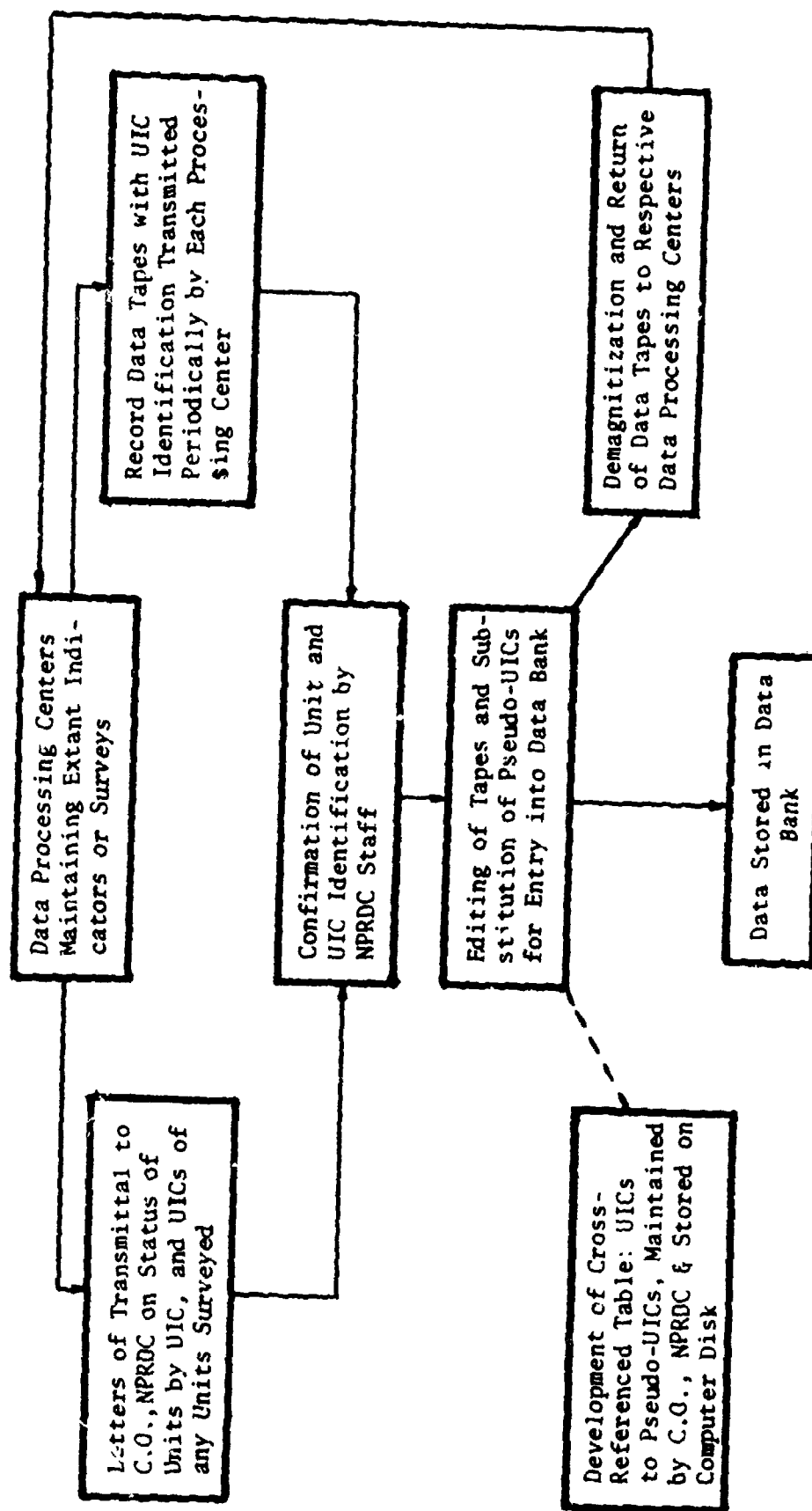


Fig. 1. System used to maintain confidentiality of Human Resource Management Survey information.

APPENDIX B
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

1. All questions can be answered by filling in appropriate spaces on the answer sheet. If you do not find the exact answer that fits your case, use the one that is closest to it.
2. 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 ?

To a very little extent ☐ ☐ ☐	To a little extent ☐ ☐ ☐	To some extent ☐ ☐ ☐	To a great extent ☐ ☐ ☐	To a very great extent ☐ ☐ ☐
ANSWER				

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 supervisor" 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 do.
6. Below are examples for filling in side 1 of the answer sheet.

Example A: 11. PAY GRADE:

E	Enlisted		Officer		Warrant		GS		Wage Grade	
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

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

E	☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I
	☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R
	☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z
T	☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I
	☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R
	☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z
R	☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I
	☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R
	☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z

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.
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 ?
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 ?
11. 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.
14. In general, how much influence do lowest level supervisors (supervisors of non-supervisory personnel) have on what goes on in your department ?
15. In general, how much influence do non-supervisory personnel have on what goes on in your department ?
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 ?
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.
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 ?
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 ?
24. To what extent does your supervisor help you to improve your performance ?
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 ?
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 ?
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 ?

33. To what extent do people in your work group maintain high standards of performance ?
34. To what extent do members in your work group help you find ways to improve your performance ?
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 ?
36. To what extent do members of your work group offer each other new ideas for solving job related problems ?
37. Members of my work group take the responsibility for resolving disagreements and working out acceptable solutions.
38. To what extent do people in your work group exchange opinions and ideas ?
39. To what extent does your work group plan together and coordinate its efforts ?
40. To what extent do you have confidence and trust in the members of your work group ?
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 ?
43. To what extent has your work group been adequately trained to handle emergency situations ?
44. My work group performs well under pressure or in emergency situations.
45. My work group can meet day to day mission requirements well.
46. The members of my work group reflect Navy standards of military courtesy, appearance and grooming.
47. 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.

Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Fairly Satisfied	Very Satisfied
☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐

48. All in all, how satisfied are you with the people in your work group ?
49. All in all, how satisfied are you with your supervisor ?
50. All in all, how satisfied are you with your job ?
51. All in all, how satisfied are you with this command, compared to most others ?
52. All in all, how satisfied do you feel with the progress you have made in the Navy, up to now ?
53. How satisfied do you feel with your chance for getting ahead in the Navy in the future ?

54. Does your assigned work give you pride and feelings of self-worth ?
55. To what extent is your command effective in getting you to meet its needs and contribute to its effectiveness ?
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.
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.
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.
63. In my chain of command there is a willingness to talk about racial issues.
64. To what extent does this command ensure that you have 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.

72. In this command work assignments are fairly made.
73. People in this command discourage favoritism.
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.
77. To what extent would you feel free to talk to your supervisor about an alcohol problem in your work group ?
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 ?
82. Do members of your work group care about the image they project when ashore in this area ?
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 ?

APPENDIX C
INDEX INTERCORRELATIONS

Intercorrelations Among Indices of the Human Resource Management
Survey Computed at the Ship Level (N=41 Units)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Mean	Standard Deviation
1. Communications Flow	--	79	72	60	66	55	72	48	74	69	69	85	66	53	80	79	2.68	.14
2. Motivation	--	--	91	42	50	36	51	31	56	62	43	67	48	30	90	93	2.55	.19
3. Human Resource Emphasis	--	--	--	34	46	35	47	20	47	53	32	60	50	30	86	93	2.39	.29
4. Supervisory Support	--	--	--	--	79	68	79	54	62	51	65	61	55	34	58	40	3.35	.13
5. Supervisory Teamwork	--	--	--	--	--	85	83	63	75	62	67	70	62	42	64	52	3.03	.15
6. Supervisory Goal Emphasis	--	--	--	--	--	--	75	67	61	44	61	61	55	48	48	40	3.50	.13
7. Supervisory Work Facilitation	--	--	--	--	--	--	--	56	72	65	71	74	64	45	70	50	2.87	.12
8. Peer Support	--	--	--	--	--	--	--	72	61	80	72	50	49	41	32	32	3.51	.10
9. Peer Teamwork	--	--	--	--	--	--	--	--	83	85	88	78	61	67	58	58	2.87	.14
10. Peer Work Facilitation	--	--	--	--	--	--	--	--	--	83	85	59	50	74	60	60	2.63	.11
11. Peer Problem Solving	--	--	--	--	--	--	--	--	--	--	88	68	62	61	48	48	3.00	.13
12. Work Group Coordination	--	--	--	--	--	--	--	--	--	--	--	76	65	78	70	70	3.05	.13
13. Work Group Readiness	--	--	--	--	--	--	--	--	--	--	--	--	--	56	60	60	3.46	.16
14. Work Group Discipline	--	--	--	--	--	--	--	--	--	--	--	--	--	--	39	39	2.99	.15
15. Satisfaction	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	91	3.00	.18
16. Integration of Men and Mission	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.50	.23

DISTRIBUTION LIST

Office of Assistant Secretary of Defense (M&RA), Washington, D. C.
Assistant Secretary of the Navy (Manpower & Reserve Affairs) (2)
Assistant Secretary of the Navy (Research & Development)
Chief of Naval Operations (OP-007) (OP-008) (OP-01P) (5) (OP-39) (OP-59)
(OP-098T) (OP-099) (OP-103B) (OP-964) (OP-987) (OP-987P10) (OP-992E)
Chief of Naval Personnel (Pers-0d) (Pers-1) (Pers-10c) (Pers-2) (Pers-523)
(Pers-65) (10) (Pers-8)
Chief of Naval Research (Code 450) (4)
Chief of Naval Research (Code 452) (2)
Chief of Naval Research (Code 458) (2)
Chief of Naval Material (NMAT 0344) (NMAT 035)
Chief of Naval Technical Training
Chief of Naval Technical Training (Code 016)
Chief of Naval Technical Training (Code N45)
Chief of Naval Education & Training (CNET N-5)
Chief of Naval Education & Training Support
Chief of Bureau of Medicine and Surgery (NM&S-713)
Navy Judge Advocate General (JAG-02) (JAG-06)
Commandant of the Marine Corps (A01) (A01B) (NPS)
Commandant, U. S. Coast Guard (G-P-1/62)
Commander in Chief, U. S. Atlantic Fleet
Commander in Chief, U. S. Pacific Fleet
Commander Second Fleet
Commander Third Fleet
Commander Sixth Fleet
Commander Seventh Fleet
Commander Submarine Force, U. S. Atlantic Fleet
Commander Submarine Force, U. S. Pacific Fleet
Commander Surface Force, U. S. Atlantic Fleet
Commander Surface Force, U. S. Pacific Fleet
Commander Air Force, U. S. Atlantic Fleet
Commander Air Force, U. S. Pacific Fleet
Commander Mine Force, U. S. Atlantic Fleet
Commander Mine Force, U. S. Pacific Fleet
Commander Training Command, U. S. Atlantic Fleet (Code N3A)
Commander Training Command, U. S. Pacific Fleet
Commander, Navy Recruiting Command (00)
Commander, Naval Training Center, Great Lakes
Commander, Naval Training Center, Orlando
Commander, Naval Training Center, San Diego
Commander, Naval Electronics Laboratory Center, San Diego (2)
Commanding Officer, Manpower & Material Analysis Center, Atlantic
Commanding Officer, Manpower & Material Analysis Center, Pacific
Commanding Officer, Naval Health Research Center
Commanding Officer, Naval Aerospace Medical Institute, Naval Aerospace
& Regional Medical Center (2)
Commanding Officer, Naval Submarine Medical Center (2)
Commanding Officer, Naval Medical Research Institute, National Naval
Medical Center

Commanding Officer, Human Resource Management School (20)
 Commanding Officer, Naval Training Equipment Center
 Commanding Officer, Naval Education & Training Program Development Center (2)
 Commanding Officer, Naval Development & Training Center (Code 0120)
 Commanding Officer, Naval Education & Training Support Center, Pacific
 Commanding Officer, Human Resource Management Center, London
 Commanding Officer, Human Resource Management Center, Norfolk
 Commanding Officer, Human Resource Management Center, Pearl Harbor
 Commanding Officer, Human Resource Management Center, San Diego
 Commanding Officer, Human Resource Management Center, Washington, D. C.
 Commanding Officer, Fleet Combat Direction Systems Training Center, Pacific
 (Code 03A)
 Officer in Charge, Human Resource Management Detachment, Alameda
 Officer in Charge, Human Resource Management Detachment, Athens
 Officer in Charge, Human Resource Management Detachment, Charleston
 Officer in Charge, Human Resource Management Detachment, Guam
 Officer in Charge, Human Resource Management Detachment, Jacksonville
 Officer in Charge, Human Resource Management Detachment, Naples
 Officer in Charge, Human Resource Management Detachment, Rota
 Officer in Charge, Human Resource Management Detachment, Subic Bay
 Officer in Charge, Human Resource Management Detachment, Yokosuka
 Center for Naval Analyses
 Superintendent, U. S. Naval Academy
 Superintendent, U. S. Military Academy
 Superintendent, U. S. Air Force Academy
 Superintendent, U. S. Coast Guard Academy
 Superintendent, Naval Postgraduate School
 Superintendent, Naval Postgraduate School (OR/AS Department)
 Navy War College
 Human Goals Office, Naval Education & Training Center, Newport
 Technical Training Division, AF Human Resource Laboratory, Lowry AFB
 Flying Training Division, AF Human Resources Laboratory, Williams AFB
 Advanced Systems Division, AF Human Resources Laboratory, Wright-
 Patterson AFB
 Technical Library, AF Human Resources Laboratory (AFSC) Lackland AFB
 Personnel Research Division, Air Force Human Resources
 Laboratory (AFSC) Lackland AFB (2)
 Occupational and Manpower Research Division, Air Force Human Resources
 Laboratory (AFSC), Lackland AFB
 Assistant Director, Life Science, AF Office of Scientific Research,
 Arlington, VA
 Headquarters, U. S. Air Force (AFMPC/DPMYAR), Randolph AFB
 Human Resources Development Division, U. S. Army Personnel & Administration
 Combat Developments Activity
 Army Research Institute for Behavioral & Social Sciences
 Center for Naval Research
 National Research Council, Division of Anthropology & Psychology
 National Science Foundation
 Science & Technology Division, Library of Congress
 Director, Defense Documentation Center (Attn: DDC TC) (12)