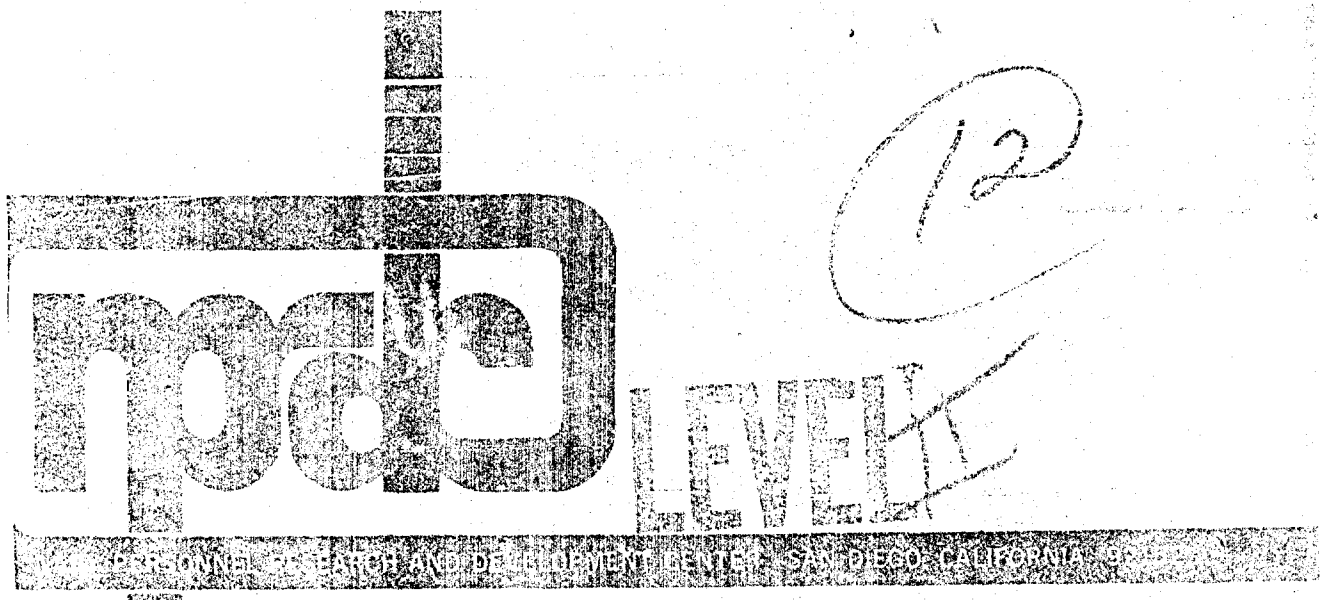

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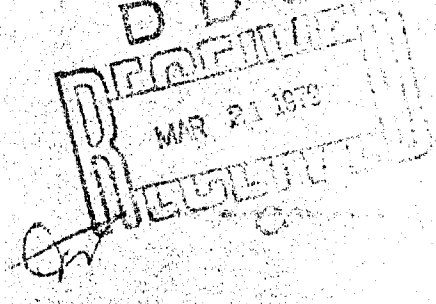
MARCH 1979

PERSONAL AND ORGANIZATIONAL DETERMINANTS OF ENLISTED ATTRITION



NPRDC TR 79-11

March 1979

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PERSONAL AND ORGANIZATIONAL DETERMINANTS OF ENLISTED ATTRITION

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REPORT DOCUMENTATION PAGE

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1. REPORT NUMBER: NPRDC-TR-79-11	2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle): PERSONAL AND ORGANIZATIONAL DETERMINANTS OF ENLISTED ATTRITION	5. TYPE OF REPORT & PERIOD COVERED: Final Report, 1 Nov 77 — 1 Feb 78
6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(s): Alan W. Lau	8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Navy Personnel Research and Development Center, San Diego, California 92152	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: 62763N, ZF55.521.021.03.01
11. CONTROLLING OFFICE NAME AND ADDRESS: Navy Personnel Research and Development Center, San Diego, California 92152	12. REPORT DATE: March 1979
	13. NUMBER OF PAGES: 77
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	15. SECURITY CLASS. (of this report): UNCLASSIFIED
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Navy enlisted attrition
Job Scope
Organizational climate
Expectations
Voluntary separation

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This study was conducted to determine the relative influence of various individual and organizational factors on first-term enlisted attrition. A longitudinal design was employed whereby a cohort of first-term recruits (both "A" school and apprentice school personnel) was tracked over a 12-month period. Results indicated that: (1) first-year attrition was significantly higher for experimental group personnel (who were eligible for voluntary separation) than for control group personnel, (2) attrition rates

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were higher for apprentice personnel than "A" school personnel, (3) separation decisions were related to preservice demographic characteristics, family and home problems, attitudes toward the Navy formed during recruit training, and in-service discrepancies between expectations and experiences, and (4) the work environment explained more variance in later separations and individual characteristics, more variance in early separations (i.e., within the first 6 months).

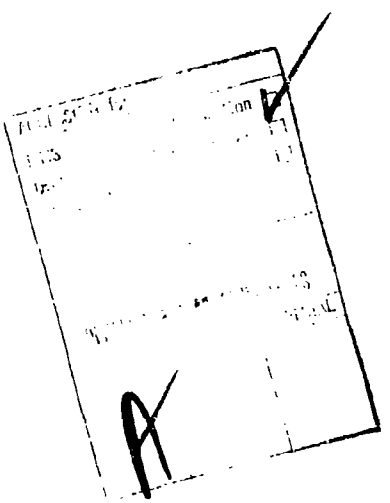
FOREWORD

This work was conducted within Exploratory Development Task Area ZF55.521.021.03.01, Motivation and Productivity Assessment. One of the objectives of this task area is the identification of variables which affect motivation and productivity. The objectives of this effort were to identify predictors of first-term enlisted attrition, to determine the relative influence of various individual and organizational factors on attrition over time, and to determine why Class "A" school personnel have lower attrition rates than apprentice school personnel. The results of this study are intended for use by Navy managers responsible for developing initiatives and experimental projects for countering attrition.

Appreciation is expressed to Dr. Sam Landau, Dr. Gary Kissler, Dr. Earl Jones, and Dr. Robert Penn for their helpful suggestions and recommendations.

A shorter preliminary version of this study was presented at the national meeting of the American Psychological Association in August 1977.

DONALD F. PARKER
Commanding Officer



SUMMARY

Problem

Attrition rates for first-term male enlisted personnel increased from 30 percent during 1971 to over 40 percent in 1977; and desertion rates, from 14 per 1000 in 1973 to 32 per 1000 in 1977. These increasing rates lead to increased recruiting and training costs and reduced organizational effectiveness, as well as a shortage of eligible career replacements.

Purpose

The purposes of this research were:

1. To identify personal and organizational factors that are predictive of first-term enlisted attrition and to determine the relative effect of preservice (e.g., ability and test scores) and in-service (e.g., expectations of the first duty assignment) variables.

2. To determine the impact of various individual and organizational factors over time.

3. To determine why Class "A" school personnel have lower attrition rates than apprentice school personnel.

Approach

Subjects included all male enlisted personnel (both "A" school and apprentice school personnel) entering the Navy in November 1976 (N = 4845). These personnel are participating in a long-range study to determine the effects of a voluntary release option on attrition. About half (N = 2322) were designated as experimental subjects--that is, they had an option to separate immediately from the Navy during the first 6 months of active duty or by giving the Navy 6 months' notice after that time. The remainder (N = 2523) were designated as control subjects.

Experimental and control personnel who completed recruit training were administered a Recruit Background Questionnaire (RBQ) designed to measure various personal and organizational variables. Experimental group personnel who chose to separate from the Navy completed an Exit Questionnaire (EQ). Finally, after experimental and control personnel had completed about 7 months' active duty, they completed a Fleet Questionnaire (FQ). Responses to these questionnaires were analyzed to determine differences between experimental and control subjects, and between those who attrite (attrites) and those who did not (nonattrites).

Results

Results during the first year of this study indicated that attrition was significantly higher for experimental personnel than for control group personnel. Attrition was also higher for general detail apprentice personnel than for Class "A" school personnel. The existence of a separation option itself, combined with the absence of a preventive counseling program designed to reduce attrition, strongly influenced separation in the experimental group. Separation decisions were related to preservice demographic

characteristics, family and home problems, attitudes toward the Navy formed during recruit training, and to in-service discrepancies between expectations and experiences. To some degree, the work environment explained more variance for later separation decisions, while individual characteristics explained more variance for early separation (i.e., separation within the first 6 months). Identification of the relative importance of individual and organizational factors, was limited by the fact that personnel were followed up for only 1 year.

Conclusions

1. Attrition appears to be a function of both preservice characteristics and in-service experiences.

2. Separation decisions appear to be affected by the interaction or congruence between the individual and the Navy organization.

3. Although apprentice and Class "A" school personnel separated for the same general reasons, the nature of the shipboard work environment may have a stronger influence on apprentice group attrition.

Recommendations

1. Procedures should be developed to provide entering recruits with realistic information about the Navy.

2. Entry Navy jobs should be restructured to meet the changing expectations of enlisted personnel.

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INTRODUCTION

Problem

With the establishment of the All-Volunteer Force (AVF) in 1973, the military services shifted from a conscription system to one that relied upon the enlistment of volunteers. As a consequence, military manpower planners face the problem of recruiting sufficient numbers of qualified personnel to man Navy ships and support systems without the pressure of the draft. Although recruiting quotas have largely been met, concern has recently shifted to attrition occurring prior to completion of the 4-year contractual active duty obligation. Attrition rates for first-term male enlisted personnel have increased from 30 percent during 1971 to over 40 percent during 1977; and desertion rates, from 14 per 1000 in 1973 to 32 per 1000 in 1977. These increasing rates lead to increased recruiting and training costs and reduced organizational effectiveness, as well as a shortage of eligible career replacements.

Background

Traditionally, research aimed at prediction of attrition has focused upon individual characteristics such as age, years of education, and ability test scores. This approach ignores the possibility that dynamic factors such as working conditions, organizational experiences, and supervisory practices may have more impact upon attrition than static personal or biographical characteristics. If the research to improve selection and retention of personnel is to be effective, more comprehensive research models, particularly interactive models, must be developed. A comprehensive theory of organizational attrition must address characteristics of: (1) individual enlistees (abilities, educational background, personality traits, needs, and expectations of Navy life), (2) job factors (feedback, autonomy, variety), and (3) larger work environment factors (organizational structure, perceived organizational climate). Attrition is a complex phenomenon that can be best examined with respect to interrelationships among these factors.[1]

Social scientists have traditionally debated the relative importance of individual characteristics and environmental properties as determinants of organizational behavior (Lichtman & Hunt, 1971; Bowers, 1973; Ekehammer, 1974). An overview of research concerning organizational behavior in general, and turnover in particular, will show that some researchers try to understand such behavior by focusing on personal characteristics; and others, by focusing on organizational characteristics. Increasing disenchantment with one-sided and normative approaches to attrition, however, has led to an interactive approach, which posits that employee capabilities, needs, preferences, and expectations are not necessarily static in nature; rather, they may be influenced by organizational experiences. Moreover, the current research trend is away from a univariate and static model of organizational behavior towards a model that specifies behavior as a function of both individual and environmental characteristics. As suggested by Schneider

[1]National economic conditions also influence attrition, but such factors are beyond the control of the naval organization and are not considered in this report.

(1976), for example, the properties of organizations, rather than the individual attributes of personnel, may be the important data in predicting, understanding, and controlling attrition.

A discussion of psychological constructs hypothesized to be related to enlisted attrition is provided in Appendix A. The purposes of this review were: (1) to discuss and develop a theoretical approach that may lead to a better understanding of attrition, and (2) to provide a rationale for understanding why specific constructs were included on questionnaires developed to study enlisted attrition. This review focused on individual and organizational characteristics hypothesized to be related to enlisted satisfaction and attrition. Nonmilitary factors such as problems at home, while important determinants of military attrition, were not reviewed.[2]

Based on the findings of this review, the conceptual model presented in Figure 1 was developed for use in understanding attrition. The need for such a model has been suggested by many investigators (Ronan, 1973; Goodstadt & Glickman, 1975; Sinaiko, 1977; Hand, Griffeth, & Mobley, 1977; Lau, 1978).

Purpose

The primary purposes of the present research project were:

1. To identify predictors of first-term enlisted attrition, and to determine the relative influence of various individual and organizational factors upon that attrition. An important unresolved issue is whether attrition is largely a self-selection process, determined primarily by a recruit's attitudes toward the Navy organization and way of life before entry into service, or whether attrition is more strongly influenced by his experiences after entering the Navy.

2. To determine whether the impact of various individual and organizational factors on attrition shifts as a function of time in the Navy. More specifically, whether the work environment accounts for more variance in later attrition decisions, and individual characteristics, for more variance in early attrition decisions.

3. To determine why personnel designated for Class "A" school have lower attrition rates than those assigned to apprentice training.

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[2]The reader is directed to several excellent recent reviews that have focused on military attrition (Goodstadt & Glickman, 1975; Sinaiko, 1977; Hand et al., 1977; Kissler, in press). The present literature review, however, is directed more toward studies abstracted from the non-military attrition literature.

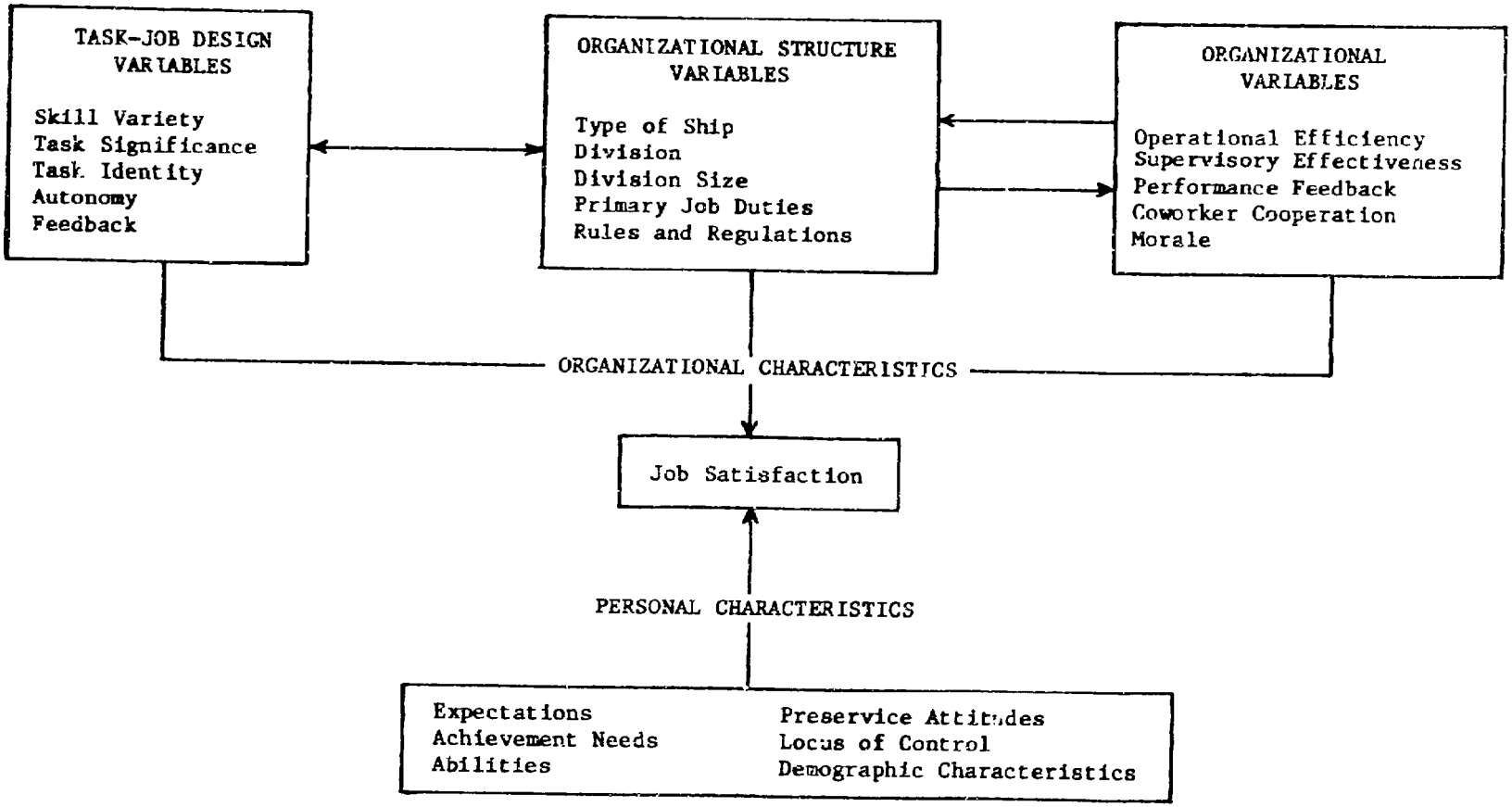

Figure 1. Principal classes of variables correlated with job satisfaction and turnover.

METHOD

Subjects

All enlisted male nonprior service (NPS) personnel entering the Navy in November 1976 (N = 4845) served as subjects in this study. This included both those who were slated to attend apprenticeship school, which is intended to prepare personnel for general detail (GENDET) Fleet assignments, and Class "A" school, which is designed to prepare them for higher-level tasks under an occupational rating.

It should be noted that these male November 1976 accessions are participating in a long-range study to determine the effects of a voluntary release option on attrition, performance, and disciplinary records. In the first report concerning this study (Guthrie, Lakota, & Matlock, 1978), subjects were all enlisted male NPS personnel entering the Navy in January and February 1976 and who were slated to attend apprenticeship school. Class "A" school personnel were not included. During the last week of apprenticeship training, the January accessions--designated as the experimental group--were told that they had been selected to participate in a program to study the effects of a voluntary release option. Under this program, experimental subjects could employ the option to be separated immediately during the period between completion of apprenticeship training and 181 days of active duty. After that time, they could request voluntary separation by giving the Navy 6 months' notice. The February accessions--the control group--had no such option. Two years after enlistment, 73 percent of the experimental group had attrited, compared to 48 percent of the control group. Further, 81 percent of the experimental group had received honorable separations, compared to 36 percent of the control group; and 2 percent had deserted, compared to 17 percent of the control group.

In the present study, about half of the November accessions (N = 2322) were designated as experimental subjects; and the others (N = 2523), as control subjects. As in the earlier phase, experimental subjects could choose to be separated immediately during the first 181 days of active duty or by giving the Navy 6 months' notice after that time. However, personnel attending Class "A" school were required to pay back the training time they had completed.

Measures

Recruit Background Questionnaire

The 131-item Recruit Background Questionnaire (RBQ) (Appendix B) was administered to all subjects who completed recruit training during January 1977. The RBQ was developed especially for this phase of the voluntary release program, and was designed to measure the constructs listed below.

1. Demographic characteristics (Items A-K). These items were included to obtain data on background, years of education, grades achieved, etc.

2. Preservice attitudes (Items 1-44). These items were included to assess subjects' preservice attitudes toward jobs, school, and the Navy. Item 17, which asked subjects whether they would use an option to get out of the Navy if one were provided, was included because it has been shown that expressed intent can be used to predict subsequent behavior (Kraut, 1975; Mobley, Hand, & Logan, 1977).

3. Expectations (Items 45-66). These items covered expectations of supervision, working conditions, recognition for good performance, the work itself, etc. during subjects' first duty assignment. Responses were to be made on a 5-point scale ranging from "definitely will not happen" to "certainly will happen." These items were developed based on results of studies conducted by Dunnette, Arvey, and Banas (1973) and Hoiberg and Berry (1976).

4. Organizational climate (Items 67-96). These items, which were selected from the Management Audit Survey (Ellison, Abe, Fox, & Coray, 1976), were included to obtain subjects' opinions on policies, practices, morale, and fairness at the Recruit Training Command (RTC) where they received recruit training. RTC climate perceptions were measured on 11 dimensions: fairness of management, delegation of authority, supervisory effectiveness, innovational climate, performance feedback, promotion opportunity, downward communication, upward communication, morale, coworker cooperation, and operational efficiency.

5. Achievement needs (Items 97-105). These items concerned high school experiences and were selected from an achievement motivation questionnaire developed by Hermans (1970).

6. Locus of control (Items 106-112). These items were a subset of Rotter's Internality-Externality (I-E) Locus of Control Scale (1966). They were selected because they were shown to be highly correlated with the total I-E score (Robinson & Shaver, 1973). Individuals who score on the internal end of the scale perceive themselves as having some control over events occurring in their lives; and those who score on the external end, as having little control.

7. General living conditions (part of organizational climate) (Items 113-120). These items, which were selected from a questionnaire designed by LaRocco, Pugh, and Gunderson (1977), were included to obtain subjects' perceptions of living conditions at the RTC.

Exit Questionnaire

Experimental subjects who elected to voluntarily separate from the Navy were required to complete an Exit Questionnaire (EQ) (Appendix C). The latter 108 items of this 155-item questionnaire concerned respondents' reactions to their first duty station. Thus, they were completed only by those experimental subjects who decided to leave the Navy after they had reported to their first duty station assignment. Psychological constructs addressed by the EQ are discussed below.

1. Aspects of Navy life (Items 1-25). Subjects were presented with a list of 25 aspects of Navy life and asked to select the five that

most influenced their decision to leave the Navy and to rank them in order of their importance. They were also asked to briefly describe their main reason for leaving.

2. Expectations (Items 26-47). These items covered the same topics as the expectation items in the RBQ. They were included to provide a measure of how well subjects' expectations of Navy life had been met.

3. Organizational climate (Items 48-92). These items were similar to those assessing organizational climate in the RBQ. However, they referred to the policies, practices, morale, and perceived fairness at subjects' first duty station rather than those at the RTC. Also, additional items were included to assess subjects' satisfaction with pay, training effectiveness, and planning and administrative policy.

4. Job characteristics (Items 93-145). Characteristics of the job performed by subjects at their first duty assignment were measured using a modified form of the Job Diagnostic Survey (JDS) described by Hackman and Oldham (1975). The JDS measures the following:

a. The scope of an existing job on each of five core dimensions--skill variety (SV), task identity (TI), task significance (TS), autonomy (A), and feedback (F). Using scores obtained on these five dimensions, a summary score that reflects the job's overall motivating potential--that is, its Motivating Potential Score (MPS)--can be generated:

$$\left(\frac{(SV + TI + TS)}{3}\right) \times A \times F = MPS$$

b. The current level of internal work motivation and satisfaction of employees on the job.

c. The level of growth need strength (GNS) of employees.

5. General living conditions (Items 146-155). These items were identical to those included in the RBQ, except that they were intended to obtain subjects' perceptions of living conditions at their first duty station rather than at the RTC.

Fleet Questionnaire

In May 1977, when experimental and control subjects still in the Navy had completed about 7 months' active duty, they were requested to complete an 80-item Fleet Questionnaire (FQ) (see Appendix D). This questionnaire was designed to provide a basis for comparing perceptions of Navy life held by experimental and control subjects, as well as attrites and nonattrites. Constructs this questionnaire had in common with the EQ are listed below.

1. Organizational structure and shipboard experience variables. Nine introductory items were included to obtain information on respondents' type of duty station, training background, primary job duties, intentions toward completing enlistment, deployment status, rating, group status (control vs. experimental), and perception of job performance.

2. Expectations. Eight items were included to provide a measure of how well subjects' expectations of Navy life had been met.

3. Organizational climate. Twenty items were included to assess respondents' perceptions of policies, practices, morale, and fairness at their first duty station.

4. Job characteristics. Ten items were included to assess the five core dimensions (skill variety, task identity, task significance, autonomy, and feedback).

5. General living conditions. Seven items were included to obtain subjects' perceptions of living conditions at their first duty station.

The Recruit Background Questionnaire (RBQ) was completed by 4310 personnel--2009 experimental subjects and 2311 control subjects. The Exit Questionnaire (EQ) was completed by the 636 experimental group attrites. Finally, the Fleet Questionnaire (FQ) was completed by 1288 personnel--619 experimental subjects and 669 control subjects.

RESULTS

During the first year of the study, 636 (27.4%) of the 2322 experimental subjects elected to separate from the Navy, compared to less than 10 percent of the 2523 control subjects. Table 1, which provides information concerning experimental group attrites, shows that attrition was considerably higher for those assigned to apprentice school than for those assigned to "A" school (38.3 vs. 23.8%). Also, over 73 percent of the attrited groups separated during the first 6 months; and over 65 percent, during school training.

Table 1

Attrition of Experimental Group Members During First Year

Item	Apprentice School		Class "A" School		Total	
	Number	Percent	Number	Percent	Number	Percent
Attrition Rate						
Attrites	222	38.3	414	23.8	636	27.4
Nonattrites	358	61.7	1328	76.2	1686	72.6
Total	580	100.0	1742	100.0	2322	100.0
Time of Attrition Within Attrited Groups						
Before 6 mos.	156	70.3	309	74.6	465	73.1
After 6 mos.	66	29.7	105	25.4	171	26.9
Total	222	100.0	414	100.0	636	100.0
Training Stage Within Attrited Groups						
During school training	121	54.5	294	71.0	415	65.3
After some fleet experience	101	45.5	120	29.0	221	34.7
Total	222	100.0	414	100.0	636	100.0

Predictors of Enlisted Attrition

Preservice Variables

The RBQ was the instrument used to measure preservice variables and RTC experiences. Thus, a number of analyses were conducted on RBQ items to identify predictors of attrition. These analyses included: (1) an item analysis, (2) a series of three stepwise multiple regression analyses based on individual item responses, and (3) regression analysis based on RBQ factor scores.

For the item analysis, the 2009 experimental subjects who completed the RBQ were divided into a key construction group (N = 1340) and a cross-validation group (N = 669). A computer program (KEYCON) was used to contrast the percentage of attrites and nonattrites within the two groups who endorsed each item alternative. The difference between percentages was used as an index of item effectiveness, and was used to compute biserial correlations for both groups. The overall validity of the RBQ for predicting attrition in the key construction and cross-validation groups was .324 and .314 respectively. The majority of the most valid RBQ items assessed respondents' background, career intentions, preservice attitudes, and expectations. Items assessing ability test scores, marital status, years of education, perceptions of RTC organizational climate, and general living conditions at the RTC contributed little toward prediction of attrition.

The first stepwise multiple regression analysis was performed using 50 items. It was based on individual responses to 48 items assessing demographic or attitudinal characteristics, and overall scores on the nine achievement need items and to the seven locus of control items. The multiple correlation (R) between these items and attrition was .351, which accounts for 12 percent of the variance in attrition. Items that directly assessed attitudes toward staying in the Navy were the most effective predictors of attrition. These included items on intentions to use an option to separate from the Navy if it were available, to reenlist, to make the Navy a career, and items on whether or not family problems would interfere with enlistment plans. Demographic items traditionally used to predict turnover were not strongly related to attrition, and generally did not enter into the equation. These items included those assessing ability test scores (r = -.03), size of home town (r = -.02), high school grades (r = .06), years of education (r = -.07), and number of times suspended or expelled from high school (r = .09). When a separate analysis was performed using these five items, the multiple correlation between them and attrition was only .112.

The second stepwise multiple analysis was conducted using responses to the 60 items dealing with expectations (N = 22), organizational climate at the RTC (N = 30), and general living conditions at the RTC (N = 8). The multiple correlation between these items and attrition was only .223, which accounts for relatively little of the variance in attrition.

The third multiple analysis was conducted using the 50 most valid items or scales from the preceding two analyses. Of these items, 27 assessed preservice attitudes; 18, expectations, organizational climate, or living conditions; and 3, demographic characteristics (ability test scores, high school grades, and years of education). The remaining two reflected the

overall response to the achievement and the locus of control items. The multiple correlation between these 50 items and attrition was .360, which accounts for 13 percent of the variance in attrition. The 20 items that contributed most to this correlation are listed in Table 2.[3] Since the results of these three multiple regression analyses were not cross-validated, they should be interpreted with some caution.

Finally, the 50 most valid RBQ items were subjected to a principal component factor analysis. Components with eigenvalues equal to or greater than 1.00 were rotated by the varimax procedure. The following five factors, which account for 81.4 percent of the total variance, were identified:

1. Expectations associated with the nature and content of Navy jobs at the first duty assignment (43.4%).

2. A nonmilitary factor related to home and family considerations that may interfere with completion of the first enlistment (12.6%).

3. Navy career and job benefits relative to civilian job benefits (11.5%).

4. Educational experiences and general ability (8.0%).

5. Achievement needs (5.9%).

The items contributing to these factors are shown in Table 3.

These five orthogonal factors were then used to calculate individual factor scores. A stepwise multiple regression analysis performed on these five factor scores yielded a multiple correlation of .306 between them and attrition. The simple correlations between factor scores and attrition were .07 for expectations, .23 for home/family considerations, .07 for Navy career/job benefits, .20 for educational experiences/ability, and .10 for achievement needs. This particular analysis maximizes psychological understanding of preservice and RTC experience variables related to attrition.

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[3]An attempt was made to determine if the RBQ was more effective in predicting attrition among some enlisted personnel subgroups. Separate multiple regressions were conducted using the same selected 50 RBQ items to predict attrition among nonhigh school graduates (N = 552) and high school graduates (N = 1457). The multiple correlation between RBQ items and attrition for nonhigh school graduates was .424 and the multiple correlation for high school graduates was .317. These results, while interesting and suggestive of a differential relationship, need to be cross-validated.

Table 2

Multiple Regression Summary Table
(Best Combination of Items)

	Item Entered	r	R	R^2
1.	If I had the option to get of the Navy any time I wanted to, I would use it.	.256	.256	.066
2.	If my family needed me back home, I would have to get out of the Navy.	.193	.278	.078
3.	I expect to see some of the world before I leave the Navy.	-.161	.294	.087
4.	The Navy offers me a chance for a career.	-.164	.305	.093
5.	Years of education.	-.074	.310	.096
6.	My chances for advancement encourage me to reenlist in the Navy.	-.186	.315	.099
7.	Shipmates will help each other to give their best efforts.	-.003	.320	.102
8.	Shipmates will be friendly and easy to talk to.	-.056	.323	.105
9.	Number of people (crowded-uncrowded).	-.070	.326	.107
10.	I could handle any problems at home and still stay in the Navy.	-.172	.329	.109
11.	My company commander usually makes a real effort to look for and reward new ideas and suggestions.	.019	.332	.110
12.	Before I joined the Navy, I had my own room and plenty of privacy.	.065	.335	.112
13.	I have already decided what my career is going to be.	-.084	.338	.114
14.	I could get a good civilian job any time I wanted to.	.052	.340	.115
15.	I cannot stand to do petty jobs like dishwashing and cleaning.	.028	.342	.117
16.	I would be happier in the Navy if I could stay close to home.	.146	.344	.118
17.	Needs for achievement.	-.101	.346	.120
18.	I almost always know what is expected from me in my job assignment.	-.064	.347	.121
19.	People in my company are strongly encouraged to develop new ways of doing things.	.029	.348	.121
20.	I do not mind waiting for what I want.	.116	.349	.122

Table 3

Summary of RBQ Items
(Varimax Rotation)

Factor	Loading
Factor I (Intrinsic Expectations)	
1. To get a feeling of accomplishment.	.70
2. To have adequate chances for advancement.	.66
3. To get recognition for good work.	.61
4. To have a significant and important job.	.57
5. To be treated fairly.	.55
6. To have a good and worthwhile experience.	.52
7. The Navy will have a real interest in the welfare and morale of me and my shipmates.	.50
8. People will be proud of the Navy.	.44
9. To feel motivated to contribute my best efforts to the Navy.	.44
10. Supervisors will be friendly and easy to talk to.	.40
Factor II (Home Considerations)	
1. If my family needed me back home, I would have to get out of the Navy.	.58
2. I would be happier in the Navy if I could stay close to home.	.49
3. I could handle any problems at home and still stay in the Navy.	-.46
4. I was very unhappy about leaving home for the first time.	.46
5. If I had the option to get out of the Navy any time I wanted to, I would use it.	.43
6. Nothing is more important to me than a pleasant home and family life.	.42
Factor III (Career/Job Benefits)	
1. My time in the Navy will give me a chance to become more mature and self-reliant.	.55
2. The Navy offers me a chance for a career.	.52
3. I expect my Navy job to be more interesting than jobs I could get back home.	.46
4. Navy job benefits (vacation, health care, and retirement) are better than I could get in a civilian job.	.45
Factor IV (Educational Experience)	
1. What were your grades in high school?	-.61
2. I liked school very much.	.54
3. Years of education.	.48
4. Ability test scores.	.45
Factor V (Achievement Needs)	
1. Needs for achievement.	.51
2. Even if things are not going my way, I keep trying until I succeed.	.47
3. The main goal in my life is to make the most of my abilities.	.43
4. What I want most in life is to have a challenging and exciting job.	.43

In summary, these three types of analyses consistently demonstrated that approximately 10 percent of the variance in attrition was accounted for by RBQ constructs. Although validity figures are consistent with those of previous attrition studies, predictive validities between RBQ constructs and attrition are not particularly impressive. Attrition appeared to be more a function of preservice attitudes and/or experiences in recruit training than of demographic characteristics, achievement needs, or perceptions of organizational climate at the RTC. However, it should be noted that, since the RBQ was administered after recruit training, there is no way of knowing whether these attitudes were held before training, resulted from RTC experiences, or both.

In-service Experiences

A number of analyses were conducted in an attempt to gain an understanding of how attrition was affected by post-RTC experiences. These analyses are described in the following paragraphs.

Expectations vs. Experiences. The purpose of the first analysis was to determine the degree to which the expectations of experimental group attrites and nonattrites had been met. For the attrites (N = 636), this was achieved by comparing their responses to the expectancy items in the Exit Questionnaire (EQ) with their responses to the expectancy items in the RBQ. Results are provided in Figure 2, which shows that, for virtually every item, there was a significant discrepancy ($p < .01$) between their expectations of their first job assignment and their actual experiences. The largest discrepancies appear among items related to employee utilization (e.g., recognition, feelings of accomplishment), and the content of the entry job itself. Attrites reported relatively less disillusionment with job context factors, such as supervisory/coworker relationships and working conditions.

As indicated previously, 619 experimental subjects completed the Fleet Questionnaire, which was administered after about 7 months of active duty. Thus, their responses to eight expectancy items in the FQ were compared with their responses to the eight identical items in the RBQ. (Other FQ expectancy items were not similar enough to those in the RBQ to allow direct comparison.) Results are also provided in Figure 2, which shows that there were significant discrepancies ($p < .01$) between expectations and experiences for seven of the eight items, the only exception being an item concerning shipmates will be friendly and easy to talk to.

While the discrepancies between expectations and experiences were relatively larger for attrites than for nonattrites, it is clear that both groups had very high and, perhaps, unrealistic expectations of Navy jobs, supervision, and rewards. These expectations were not confirmed for either group, resulting in feelings of disillusionment.

In a separate analysis of RBQ/EQ responses, the expectations and experiences of experimental subjects who separated in "A" or apprentice school (N = 415) were compared to those who separated after having some Fleet experience (N = 221). Although initial expectations for both groups were similar, those who separated after some Fleet experience reported significantly

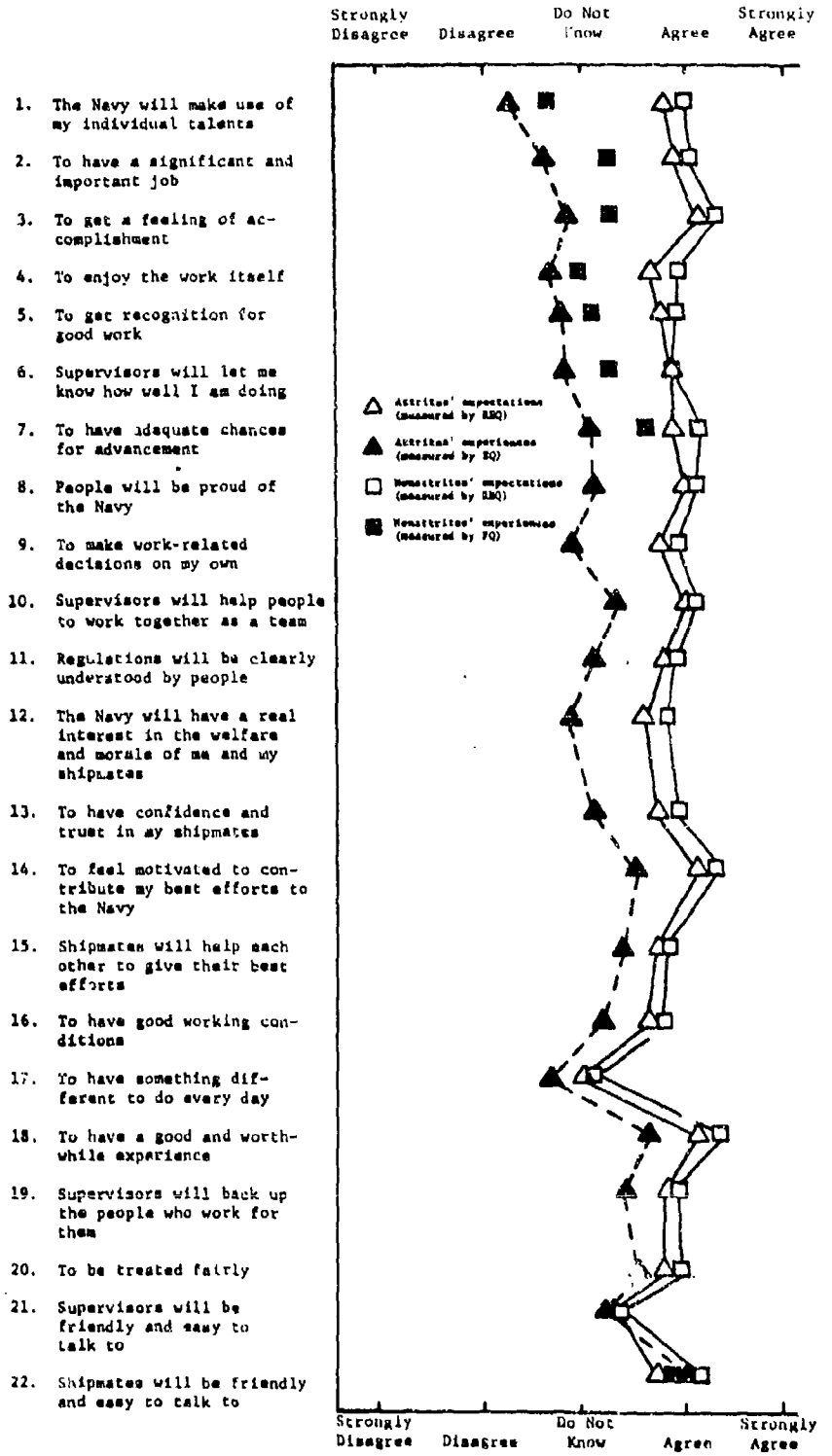

Figure 2. Discrepancies between expectations of first job assignment and experiences of experimental group attrites (N = 636) and nonattrites (N = 619).

lower ($p < .01$) met expectations and larger discrepancies than school attrites on 12 of 22 expectations items. The majority of these items related to the job itself, fairness of treatment, and use of individual talents on a significant and meaningful job. For a significant number of individuals, dissatisfaction was due to the job itself as on-the-job experience was gained.

Factors of Navy Life Influencing Attrition. On the EQ, experimental group members who elected to separate from the Navy (N = 636) were asked to identify the five aspects of Navy life that most influenced their separation decision, and to rank those five aspects in order of their importance. Table 4, which lists those aspects rated as most influential, shows that, overall, attrites were most influenced by family or personal problems, general dissatisfaction with Navy life, lack of freedom and independence, and dissatisfaction or lack of interest in the entry job. However, when responses of school attrites (N = 415) were compared with those of Fleet attrites (N = 221), it was found that Fleet attrites were less influenced by family or personal problems, and more influenced by dislike or lack of interest in Navy jobs, fairness, and living conditions. Thus, it may be anticipated that, the longer personnel remain in the Navy, environmental and/or job-related reasons for attrition will continue to increase in importance, and personal factors, to decrease.

Experimental group attrites were also asked to state the main reason for their decision to separate. Categorized examples of reasons given are provided in Appendix E.

Influence of Job Characteristics. Job characteristics were assessed on the EQ and the FQ by a condensed version of the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1975). On the EQ, this section was completed only by those who attrited after having some Fleet experience (N = 221).

Table 4 shows that 15 percent of the Fleet attrites rated dislike or lack of interest in their job as the primary reason for their attrition. An additional 13 percent rated this reason as the second most important factor influencing their separation decision. Table 5, which provides scores obtained on the JDS measures by a normative sample, experimental Fleet attrites, and experimental nonattrites (i.e., those who completed the FQ), sheds some light on the nature of these work variables. As shown, Fleet attrites were generally less satisfied with job scope dimensions and levels of satisfaction/motivation and growth need strength were lower than the normative sample and nonattrites. Work described as requiring minimal skill and as lacking in intrinsic worth (e.g., chipping paint, cleaning compartments, and performing mess duty), or as involving general deck force duties may lead to low satisfaction and internal work motivation, especially for apprentice school personnel who generally are assigned to lower-level shipboard tasks. When the effects of limited job scope and complexity on general satisfaction and internal motivation on Fleet attrites were examined, it was found that the Motivating Potential Score (MPS) correlated .34 with internal motivation and .50 with satisfaction ($p < .01$). To some degree, then, jobs perceived as lacking intrinsic value are associated with job dissatisfaction and lack of internal motivation.

Table 4

Aspects of Navy Life Most Influencing Attrition Decision of Experimental Group Members

Aspect	"A" School Attrites (N = 294)		Apprentice School Attrites (N = 121)		Fleet Attrites (N = 221)		Total	
	N	Percent	N	Percent	N	Percent	N	Percent
1. Family or personal problems back home.	70	24	31	26	31	15	132	21
2. Navy life as a whole.	58	20	19	16	35	16	112	18
3. Lack of freedom and independence.	33	11	16	13	24	12	73	11
4. Dislike or lack of interest in Navy job.	26	9	8	7	35	15	69	11
5. Chance of future success in the Navy.	10	3	4	3	12	6	26	4
6. Supervisors; peer group	15	5	5	4	13	6	33	5
7. Fairness (discipline, military justice, work assignments).	10	3	3	2	25	11	38	6
8. Training (difficulty, quality, on-the-job).	10	3	3	2	3	2	16	3
9. Living conditions.	8	3	3	2	20	8	31	5
10. Getting feedback, credit for good work, and counseling received.	4	2	4	3	8	4	16	3
11. Did not get a Class "A" school.	—	—	17	14	9	4	26	4
No response	50	17	8	7	6	1	64	10
Total	294	100	121	99	221	100	636	101

Note. Percentage totals do not always equal 100 because of rounding.

Table 5

Comparison of Job Diagnostic Survey Measures
for Normative Sample and Experimental Attrites and Nonattrites

JDS Measures	Normative Sample[a] (N = 658)		Experimental Subjects: Attrites (after fleet duty) (N = 221)		Experimental Subjects: Nonattrites (N = 619)	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
1. Job Scope on Core Dimensions:						
Skill Variety (SV)	4.49	1.67	2.71	1.46	4.09	1.88
Task Identity (TI)	4.87	1.43	4.08	1.25	4.86	1.47
Task Significance (TS)	5.49	1.29	4.16	1.46	5.17	1.60
Autonomy (A)	4.80	1.43	3.44	1.36	4.62	1.01
Feedback from Job (F)	4.98	1.41	3.75	1.16	4.75	1.53
Feedback from Agents (FA)	3.98	1.65	3.61	1.72	--	--
Dealing with Others (FO)	5.29	1.34	4.54	1.89	--	--
Motivating Potential Score (MPS)[b]	128.31	72.73	50.76	36.05	103.29	51.70
2. Level of Employee Satisfaction/Motivation:						
General Satisfaction	4.62	1.18	3.26	1.95	--	--
Internal Work Motivation	5.39	0.96	4.34	1.77	--	--
Specific Satisfactions						
Job Security[c]	--	--	3.40	1.56	--	--
Pay[c]	--	--	3.47	1.77	3.96	1.76
Social	5.42	0.92	4.59	1.49	--	--
Supervisory	5.28	1.27	3.65	1.72	--	--
Growth	4.82	1.32	3.04	1.58	4.26	1.89
3. Level of Growth Need Strength (GNS)	5.62	1.28	5.27	1.58	6.01	1.25

Note. Lower mean scores indicate less general satisfaction and internal work motivation.

[a]Normative civilian data from Hackman and Lawler (1975).

[b]$MPS = \left(\frac{(SV + TI + TS)}{3}\right) \times A \times F$

[c]These scales were recently added to the JDS and normative data were not available.

Since responses related to the nature of the work itself contributed to the separation decisions of Fleet attrites, it is hypothesized that they will continue to influence attrition rates for experimental subjects who have not attrited. To test this hypothesis, an analysis was made of experimental subjects' responses to an FQ item on intentions of completing enlistment. Table 6, which provides a complete breakdown of responses to this item, shows that 292 (47.2%) of the experimental subjects reported that they did intend to complete their first enlistment; and 85 (13.7%), that they did not. When JDS measures determined for members of these two groups were compared, significant differences ($p < .01$) were found on four of the five job core dimensions: skill variety, task identity, autonomy, and feedback. MPS scores were then computed for the two groups based on their core dimension scores. Results showed that the overall MPS score for experimental subjects who planned to complete their enlistment was 111.60, compared to 62.28 for those who did not ($p < .01$). While it is difficult to identify cause and effect relationships from these data, it is clear that those who do not intend to complete their enlistment report significantly lower job scope and internal motivation. These data are consistent with those indicating wide disparencies between expectations and experiences (Figure 2).

The Separation Option. Responses to the FQ item on intentions of completing enlistment were also used to determine whether the separation option itself had an effect on attrition. As shown in Table 6, a much higher percentage of control group subjects (who had no such option) than experimental group subjects reported that they definitely intended to complete their enlistment (70.0 vs. 47.2%). Also, a much higher percentage of Class "A" personnel than apprentice school personnel definitely planned to complete their enlistment (62.6 vs. 41.5%).

These findings indicate that attrition will be very high for experimental group apprentice personnel. These individuals not only have an option to separate but also are often assigned to a job that does not meet their initial expectations. Thus, there is reason to suspect their attrition rate will approach that reported by Guthrie et al. (1978) in the first phase of this study (i.e., 73% after 23 months). Since initial assignments of "A" school experimental subjects may afford more opportunities for extrinsic and instrinsic rewards, their attrition rate is likely to be lower than that for experimental group apprentice personnel. However, because of the separation option, it should be higher than that for control group "A" school personnel.

In summary, then, it appears that the existence of the voluntary separation option does influence attrition. Further comments supporting this conclusion appear in Appendix E.

Organizational Climate and General Living Conditions. Perceptions of organizational climate and general living conditions at the RTC were assessed by the RBQ; and perceptions of organizational climate and general living conditions at the first duty station, by the EQ (for attrites) and the FQ (for nonattrites).

Table 6

Responses to Fleet Questionnaire Item on Enlistment Intentions
(Experimental and Control Groups)

Item	School Assigned						Group Membership					
	Apprentice		Class "A"		Total		Experimental		Control		Total	
	N[a]	Percent	N[a]	Percent	N	Percent	N	Percent	N	Percent	N	Percent
Do you plan on completing your first enlistment?												
Definitely, yes	98	41.5	659	62.6	757	58.8	292	47.2	468	70.0	760	59.0
Probably	41	17.4	208	19.8	249	19.3	119	19.3	131	19.6	250	19.4
I don't know	34	14.4	83	7.9	117	9.1	89	14.3	28	4.2	117	9.1
Maybe not	11	4.7	39	3.7	50	3.9	34	5.5	17	2.5	51	4.0
No	52	22.0	63	6.0	115	8.9	85	13.7	25	3.7	110	8.5
Total	236	100.0	1052	100.0	1288	100.0	619	100.0	669	100.0	1288	100.0

[a]Includes both experimental and control subjects.

It is interesting to note that, for both groups, perceptions of organizational climate and living conditions were significantly lower for the first duty station than for the RTC. On the EQ, experimental attrites who had had some Fleet experience (N = 221) rated the shipboard environment significantly lower ($p < .01$) than the RTC environment on supervisory effectiveness, climate for innovation, morale, and delegation of authority. On the FQ, experimental nonattrites (N = 619) rated the shipboard environment significantly lower ($p < .01$) than the RTC environment on fairness of management, climate for innovation, morale, and operational efficiency.

A comparison of RBQ responses made by eventual experimental attrites and nonattrites showed very little difference in their perception of organizational climate and general living conditions at the RTC. The only exception was responses to the items concerning opportunity for promotion, which was more positively assessed by nonattrites. However, a comparison of EQ and FQ responses showed that the perceptions of attrites were significantly lower than those of nonattrites on 3 of the 11 Fleet organizational climate measures (i.e., supervisory effectiveness, coworker cooperation, and training effectiveness) and two Fleet living condition measures (i.e., crowdedness and privacy).

Although perceptions measured by the RBQ were not effective predictors of attrition, they were useful in understanding the longitudinal impact of organization-wide factors on personnel and in comparing perceptions of eventual attrites and nonattrites. It is hypothesized that measures of organizational climate aboard ship will exert a stronger influence on attrition over time. To illustrate, on the FQ, experimental subjects who indicated they planned to complete their enlistment (N = 292) had significantly higher ($p < .01$) perceptions of organizational climate measures than did those who indicated they did not plan to complete their enlistment (N = 85).

Organizational Structure Variables. Finally, the influence of a number of organizational structure variables on attrition was assessed. It was found that variables such as type of job and division to which assigned had an effect on separation decisions, as well as job scope perceptions. On the FQ, 121 (55.6%) of the 221 experimental subjects who attrited after having some Fleet experience were in deck or engineering divisions. Attrition was considerably lower in the other shipboard divisions. Also, 71.9 percent (N = 159) of these Fleet attrites described their initial job as involving lower-level tasks such as mess duty, chipping paint, and compartment cleaning, compared to only 20.3 percent (N = 126) of experimental subjects who responded to the FQ.

The type of job held also had a significant effect on JDS scores. For example, the average MPS score of experimental attrites who were assigned to deck force jobs was 43.62, compared to 69.03 for those who were assigned to higher-level clerical or mechanical jobs ($p < .01$).

Impact of Individual and Organizational Factors on Attrition Over Time

It was hypothesized that (1) the longer personnel remained in the Navy, the more influence that organizational factors would have on attrition, and (2) early attrition (i.e., that occurring within the first 6 months of active duty) would be more strongly related to preservice individual characteristics than to organizational factors.

To evaluate the relative influence of individual and organizational determinants, experimental group attrites were divided into two groups: those who attrited within the first 6 months (N = 465) and those who attrited after 6 months and before 1 year (N = 171) (see Table 1). A multiple regression analysis was then performed, using group identification as the dependent variable; and RBQ items, as independent variables. The multiple correlation obtained was .37, indicating that the RBQ items could be used to separate early from late attrites. Items concerning whether family problems would interfere with enlistment plans, ability test scores, and years of education contributed most to this correlation; those dealing with organizational factors measured at the RTC (e.g., perceptions of organizational climate) were relatively weak predictors of attrition overtime.

The reasons given for separation by experimental subjects who attrited after some Fleet experience tended to differ from those given by those who attrited while in school. Also, results showed that discrepancies between job-related expectations and experiences were larger for Fleet attrites than for school attrites. However, analyses based on RBQ items alone did not indicate that the relative importance of individual and organizational factors shifted as a function of time in service. Although overall results suggest an interaction between these factors and time, the present study was limited since it concerned only that attrition that occurred over a 1-year time period. A more adequate test of the hypothesis requires (1) a longer period of time, and (2) a continued focus on responses to FQ and EQ items. As indicated previously, the RBQ measured organizational climate perceptions at the RTC; and the EQ and FQ, at the first duty assignment. Thus, the latter are more relevant for measuring the effect of organizational climate on attrition and the relative effect of organizational and preservice individual characteristics upon future attrition.

A partial test of the shift over time of organizational and individual variables was made based on experimental subjects' responses to the FQ item concerning intention to complete enlistment (see Table 6). In this analysis, the dependent variable was their intention to complete enlistment, and the predictors were their:

1. Perceptions of organizational climate at first duty assignment (FQ).
2. Perceived entry job characteristics (FQ).
3. Navy experiences at first duty assignment (FQ).
4. Years of education (RBQ).
5. Ability scores (RBQ).
6. Other demographic characteristics (RBQ).

Results showed a multiple correlation of .52 between enlistment intentions and FQ items. The most effective predictors were items concerning (1) feelings of accomplishment (.38), (2) work enjoyment (.37), (3) division morale (.28), (4) downward communication (.18), (5) job autonomy (.24), and (6) skill variety (.22). RBQ items were not related to enlistment intentions. While these results suggest a shift between individual and organizational factors and attrition over time, the RBQ items and FQ items should be compared as to their ability to predict future attrition. At the time of this report, only 10 percent of experimental group subjects who completed both the RBQ and FQ had separated.[4]

Apprentice vs. Class "A" School Attrition

As shown in Table 1, during the first year of this study, 38.3 percent of apprentice school personnel attrited, compared to 23.8 percent of Class "A" school personnel. It was suspected that a combination of individual characteristics (e.g., years of education and ability test scores) and in-service factors associated with training and on-the-job experiences influenced these differential separation rates. However, as shown in Table 4, the aspects of Navy life that influenced separation decisions made during school training (N = 415) were similar for those assigned to apprentice and to "A" school. Thus, experimental personnel who decided to attrite after some Fleet experience (N = 221) were separated as to school attended, and a comparison was made of aspects influencing separation decisions of apprentice and "A" school graduates (101 and 120 respectively). Again, aspects influencing separation were similar for both groups.

An examination of responses of apprentice and "A" school attrites to RBQ items concerning expectations of the first job assignment (N = 22 items) showed that both groups had high expectations concerning that assignment. The overall average scores, based on a 5-point scale, for apprentice and "A" school attrites were 3.82 and 3.88 respectively. Next, as before, the Fleet attrites were then divided into apprentice and "A" school graduates, and their reported experiences (on the EQ) were compared. Although apprentice personnel tended to report that they had less significant jobs and that they enjoyed their work less than did "A" school personnel, group differences were not statistically significant. JDS scores for the two groups were also compared; results showed that apprentice personnel tended to report lower perceptions on job scope dimensions and had a lower overall MPS. Again, differences were not significant.

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[4]A recent study provided a direct test of the ability of FQ and RBQ items to predict attrition in the experimental group (Lau & Landau, 1978). Of 619 experimental members who completed the FQ, 96 (16%) had separated by the 18th month of the voluntary separation study. Results showed a multiple correlation of .51 between FQ items and attrition behavior. The best single predictor was enlistment intentions measured by the FQ (r = .48); other organizational factors such as climate perceptions, Navy experiences, and job complexity were significantly related to attrition behavior, while demographic RBQ characteristics were not. This recent study strongly supports the hypothesis that the relative importance of individual and organizational factors shifted as a function of time in service.

As indicated previously, results obtained by analyzing responses of apprentice and "A" school graduates to the EQ indicated that the nature of the work itself, and causes of separation decisions were similar for both groups. However, when responses of apprentice and "A" school personnel--from both experimental and control groups--to the FQ were examined, a different picture emerged. As shown in Table 7, the perceptions of apprentice personnel were significantly lower ($p < .01$) than those of "A" school personnel on 22 of the 31 variables listed. The largest discrepancies between the two groups were found in training effectiveness, growth satisfaction, and experiences associated with the entry job itself. Also, 44.6 percent of apprentice personnel reported that their job involved lower-level activities, compared to 16.2 percent of "A" school personnel. As noted earlier, these organizational climate and job perceptions were significantly correlated with intentions of completing the first enlistment.

It is hypothesized that organizational factors will continue to influence separation decisions throughout the first enlistment period. However, both experimental and control groups must be continually monitored to determine the causes of differential attrition rates.

Table 7

Fleet Questionnaire Responses by School Status

Item	School Assigned[a]			
	Apprentice (N = 236)		Class "A" (N = 1052)	
	$\bar{X}$	SD	$\bar{X}$	SD
Organizational Climate				
Fairness of management	2.77*	1.21	3.14	1.05
Supervisory effectiveness	3.24	1.18	3.42	1.03
Climate for innovation	2.76	1.13	2.92	1.02
Downward communication	3.29	1.15	3.48	1.05
Upward communication	3.02	1.22	3.15	1.09
Morale	2.36*	1.18	2.81	1.17
Coworker cooperation	2.93*	1.29	3.33	1.07
Training effectiveness	2.93*	1.35	3.55	1.04
Operational efficiency	3.16	1.14	3.31	0.97
Job Characteristics				
Skill variety	3.47*	1.89	4.41	1.85
Task identity	4.63	1.69	4.86	1.41
Task significance	4.91	1.71	5.25	1.57
Autonomy	4.41	1.81	4.63	1.58
Feedback from the job	4.45*	1.67	4.90	1.46
Motivating potential score	85.10*	39.72	109.81	41.81
Affective Responses				
Pay satisfaction	3.70	1.72	4.02	1.74
Growth satisfaction	3.67*	1.97	4.48	1.81
Growth need strength	5.77*	1.34	6.08	1.19
Navy Experiences				
People worked with	3.73*	1.19	4.00	0.90
Use of talents	2.30*	1.18	2.66	1.21
Chance for advancement	3.35*	1.18	3.66	1.00
Feeling of accomplishment	2.94*	1.30	3.36	1.18
Credit for good work	2.80*	1.23	3.25	1.11
Enjoy the work itself	2.61*	1.27	3.11	1.21
A significant job	2.85*	1.37	3.44	1.26
Feedback from supervisors	2.98*	1.28	3.36	1.16
Living Conditions				
Odor	2.49*	1.09	2.86	1.09
Noise	2.08*	1.27	2.46	1.35
Size	2.19*	1.26	2.51	1.33
Number of people	2.13*	1.29	2.53	1.33
Privacy	1.82*	1.18	2.14	1.29

[a]Includes both experimental and control group members.

*$p < .01$.

DISCUSSION AND CONCLUSIONS

Relative Impact of Individual and Organizational Factors on Attrition

The first objective was to determine the degree to which first-term enlisted attrition was the result of individual and organizational factors. Specific RBQ constructs related to voluntary separation included expectations associated with the nature of entry Navy jobs, a nonmilitary factor related to home problems that might interfere with completion of the first enlistment, Navy job benefits relative to civilian job benefits, educational experiences, and needs for achievement. Behavioral intentions to complete the first enlistment, however, were the most effective predictors of separation.

It was reported that expectations of the first job assignment as assessed by the RBQ were unrealistically high at the conclusion of recruit training. When faced with the reality of organizational conditions and policies, both attrites and nonattrites reported significantly lower perceived experiences than expectations. The largest discrepancies were found on job content factors related to employee utilization (such as recognition and feelings of accomplishment) and factors inherent to the entry job itself. Discrepancies were especially pronounced for personnel who separated after some on-the-job Fleet experience. The majority of Fleet attrites reported that their jobs had included lower-level tasks such as mess duty, chipping paint, and compartment cleaning. Since enlisted personnel are often motivated to join the Navy to receive job training, unconfirmed expectations associated with entry job duties appear to be related to job satisfaction and to separation decisions.

Analysis of JDS scores from the EQ indicated that the realities of the entry job sharply clashed with the expectations that separated personnel had regarding interesting and challenging work, and that job characteristics were significantly correlated with reported satisfaction and internal work motivation. Of particular importance was the finding of significant FQ differences on perceived job complexity between experimental group personnel still on active duty who intend to complete their first enlistment and those who did not. In a partial test of the relative influence of individual and organizational factors upon separation intentions, it was suggested that both job characteristics and unfulfilled expectations, as well as perceptions of the organizational climate of the first duty assignment, would influence future attrition decisions. Biographical haracteristics were not related to behavioral intentions.

In addition to significant decreases on the part of attrites to items measuring expectations, a variety of other longitudinal changes were reported. Fleet attrites reported significantly lower climate perceptions of supervisory effectiveness, climate for innovation, division morale, and delegation of authority, as well as lower scores on a number of general living conditions (e.g., privacy). It was concluded that these perceptions were useful in understanding the longitudinal impact of organization-wide factors upon attrition, and suggested human resource areas in need of management attention.

The factor that may have had the single most important effect upon attrition was the separation option itself. During the first year of the study, 27 percent of the experimental group elected to separate compared to less than 10 percent of the control group. Seventy percent of the control group still on active duty intended to complete their first enlistment, compared to only 47 percent of the experimental group. There is little question that the separation option itself when not combined with effective job and career counseling programs designed to control attrition among experimental group personnel will continue to result in high turnover. Given the combination of a job which offers minimal opportunities for psychological growth and satisfaction, the high unfulfilled expectations that enlisted personnel have regarding Navy life, and the existence of an option to separate, there is reason to expect that turnover will continue to be high for experimental group personnel.

Due to the complex nature of enlisted attrition, a wide variety of individual and organizational factors must be used to predict, understand, and control attrition. Although the nature of work itself as well as other organization-wide factors have a significant impact upon separation decisions, other important situational factors that influenced satisfaction and turnover included family or personal problems back home, perceived lack of freedom and/or fairness of the military justice system, and living conditions.

Impact of Individual and Organizational Factors on Attrition Over Time

The second objective was to determine whether the relative impact of individual and organizational determinants of attrition differed for personnel who separated during the first 180 days and those who separated after some on-the-job Fleet experience. It was hypothesized that the longer personnel remained in the Navy, the more important the work environment would become.

While it was possible to use RBQ responses to separate early from late attrites, organizational factors measured at the RTC were not strongly related to time of attrition. As measured by the EQ, however, there were some indications that reasons for separation differed for early versus late attrites, and larger discrepancies were found between expectations and organizational reality for later (Fleet) attrites. A partial test of the hypothesis that the relative influence of individual and organizational determinants would shift over time was based upon FQ responses from active duty experimental group personnel. This analysis indicated that organizational characteristics were significantly related to intentions of completing the first enlistment while biographical characteristics were not. It is likely that job and organization-wide factors will exert more influence in future Fleet separation decisions, but support for this hypothesis requires more than one year of time to elapse. Fleet Questionnaire and Exit Questionnaire responses collected at the first duty assignment, as well as relatively stable demographic and personality needs assessed by the RBQ, should be combined to predict attrition over the duration of the study.

Apprentice vs. Class "A" School Attrition

The third objective was to determine the reasons for differences in attrition rates for personnel attending Class "A" schools and those assigned to apprentice training. It was reported that apprentice personnel generally lack a high school education, are unlikely to qualify for "A" school training, and are more likely to be assigned to low-level entry jobs on-board ship.

Although attrition rates were considerably higher for apprentice personnel, there did not appear to be differences between initial expectations of the two groups, nor larger discrepancies between expectations and experiences. It was found, however, that apprentice personnel were often assigned to less challenging or more routine jobs in the deck force or engineering division when they reported to their first duty station. They tended to report somewhat lower JDS scores, but differences were generally not statistically significant. On the basis of Exit Questionnaire responses, it was concluded that both apprentice and Class "A" school personnel experience similar disillusionment with the nature of the naval environment and the work to be performed. An analysis of Fleet Questionnaire responses, on the other hand, disclosed a large number of significant differences which were related to school status. These differences included perceived climate and living conditions, job characteristics, and, for apprentice personnel, larger discrepancies between expectations and experiences.

Continued monitoring of both apprentice and Class "A" school personnel is needed to demonstrate why apprentice attrition rates are higher. There is, however, a variety of information suggesting that both groups have overly high expectations regarding competent supervision and an interesting job. These expectations influence the initial adjustment of personnel to their training and to their jobs. Since expectations are quite high, they appear to strain the adjustment of both groups when faced with the reality of organizational conditions. If new recruits are being assigned tasks so trivial that they are not challenged and are frustrated in terms of opportunities to use individual abilities, opportunities for advancement, and enjoyment of the work itself, sharp disenchantment, job dissatisfaction, and high rates of attrition will be the likely result regardless of school status.

RECOMMENDATIONS

Two general strategies to reduce turnover are proposed. The first involves providing the recruit with realistic information about the entry job. Findings were presented indicating that first-term enlisted personnel who join the Navy with inflated expectations are likely to separate. In the present study, both attrites and nonattrites experienced large discrepancies between expectations and experiences, particularly on intrinsic factors associated with the nature of Navy job duties and responsibilities. Therefore, it is strongly suggested that recruiting personnel provide recruits with a realistic picture and candid information about Navy life. They should be made aware of the fact that the early stages of their career may involve simple and tedious duties of prolonged work and mess cooking. They must understand that, because of the complexities inherent in any large organization and of the wide range of leadership capabilities of persons within that organization, they may encounter obstacles and frustrations. These organizational realities should be reemphasized during recruit training and before Fleet experience, particularly for apprentice school personnel. Career planning programs could be designed to help close the gap between naive expectations and the entry job assignment to improve the fit between individual beliefs and the organizational setting. These procedures might soften the "reality shock" that is often experienced by first-term enlisted personnel, and decrease disillusionment which may precipitate separation decisions.

The second strategy involves restructuring of jobs to meet the changing expectations of personnel, without decreasing performance. Findings of this study showed that many entry Navy jobs were perceived to be low on Motivating Potential Scores. As indicated by the psychological literature, such jobs are often associated with low internal motivation and satisfaction. Experimental studies designed to improve the motivation and productivity of enlisted personnel through job enrichment should be conducted. A set of specific implementation concepts to guide actual job changes might include forming natural work units, opening feedback channels, combining fractionalized tasks to form new and larger modules of work, and increasing responsibilities and controls formerly reserved for higher level personnel.

Not all Navy jobs can or should be enriched, and enrichment will not lead to high internal motivation and lower attrition among all entering personnel. Unrealistic expectations associated with the nature of Navy jobs, however, can either be modified through realistic job previews or fulfilled through job enrichment studies in controlled experimental settings. These procedures would match jobs and personnel, and enhance the congruence between personal characteristics of entering recruits and organizational characteristics. The effect upon these relationships of contingency variables such as rate (i.e., specific job functions), division, or type of ship should also be investigated. Organizational commitment could be increased by providing training experiences that lead to challenge and responsibility, and by placing personnel in meaningful entry job assignments where their personal goals can be met and their psychological needs satisfied. Where job enrichment procedures are not feasible, alternatives might include job mobility or experimental job rotation programs. These strategies, if feasible,

would appear to be particularly promising for enhancing job performance and lowering attrition among personnel assigned to apprentice training.

Specific proposals to reduce enlisted attrition are:

1. Introducing counseling programs for low satisfaction groups (e.g., personnel in the deck force or engineering divisions) to determine how the Navy could deter them from separating.

2. Using comprehensive and more effective personnel classification and placement systems designed to match individuals and jobs.

3. Using GS employees or contractors as alternative sources of manpower for certain jobs.

4. Providing more effective skill enhancement training or shorter tours for personnel assigned to apprentice school.

5. For personnel who separate because of legitimate personal problems, a short furlough combined with professional counseling.

Although this report has emphasized the importance of organizational factors upon separation decisions, programs designed to reduce attrition must incorporate a wide variety of strategies to reduce attrition rates. These include strategies designed to attract and identify qualified personnel, effective classification and assignment of personnel in order to match individuals and jobs, and more general programs designed to improve leadership, living conditions, and the quality of Navy life. No single intervention is likely to be effective, and a systemic approach that focuses on the multivariate nature of attrition is needed. To reduce attrition, the Navy may have to adapt to the changing orientations of recruits, and, to the degree possible, individualize entry jobs to accommodate those personnel with high expectations of challenge and supportive supervisory styles.

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APPENDIX A

INDIVIDUAL AND ORGANIZATIONAL CHARACTERISTICS HYPOTHESIZED AS RELATED TO ATTRITION

INDIVIDUAL AND ORGANIZATIONAL CHARACTERISTICS HYPOTHESIZED AS RELATED TO ATTRITION

Individual Characteristics

Biographical Data

In general, biographical data does relate to attrition and, when combined with ability test scores, are of value in improving prediction of military turnover (e.g., Plag & Goffman, 1967; Guinn, Johnson, & Kantor, 1975). Some biographical characteristics, however, are confounded with in-service experiences; for example, personnel who lack a high school education are unlikely to qualify for "A" school training and are more likely to be assigned to low-level jobs in the Fleet.

Schuh (1967), in reviewing a large number of studies relating job tenure to various predictors, found that job satisfaction and biographical data variables were most predictive of tenure. In a more recent review of the turnover literature, Ronan (1973) concluded that situational variables, such as supervision, job experiences, and expressed job satisfaction, were generally more effective predictors than biographical characteristics. Taylor and Weiss (1972) drew the same conclusions. Goodstadt and Glickman (1975), in a review of the current status of enlisted attrition, questioned the assumption that the individual enlistee is the primary cause of attrition, and emphasized that such factors as the organizational environment, leadership conditions, and the quality of work life often were not assessed.

Personal biographical data, however, provide relatively superficial descriptive information, and predictive validities of such data are often based upon the factoring of criterion-valid items developed by an empirical shotgun approach, largely devoid of both theory and generality (Owen, 1976). Since turnover is also a function of more proximal perceptions of job and organizational factors, future attrition research probably should focus more upon variables that directly influence the individual's organizational life.

Employee Expectations

Many studies have pointed to the importance of job satisfaction as a precursor of separation decisions; however, knowing that an employee is dissatisfied does not help us to understand why he is dissatisfied. Porter and Steers (1973) focus upon the concept of met expectations as an explanatory determinant of satisfaction and turnover. When expectations are not met substantially, propensity to leave an organization increases. Porter, Lawler, and Hackman (1975) emphasized that the new employee may experience a large discrepancy between expectations and organizational reality in the area of job duties. Most organizations do not attempt, through job enrichment, to bring job complexity and challenge up to the level of employee needs and expectations, or to bring expectations down to the level of the initial job assignment (Weitz, 1956; Wanous, 1973; Ilgen & Seely, 1974). Since expectations associated with a job are generally inflated, realistic job previews can lower employee expectations to a level more congruent with the nature of work and organizational practices and policies.

Dunnette, Arvey, and Banas (1973) found that separation was related to sharp discrepancies seen by employees between their actual job experiences and their expectations at the time they joined the organization. To some degree, this may have been created by unrealistic recruiting and recruiter practices. Hoiberg and Berry (1976) had Navy recruits rate their environment on ten psychological dimensions according to what they expected, what it was really like, and what they would like it to be. In comparing mean differences between expectations and experiences, mean discrepancies increased from very small values during recruit training to relatively large discrepancies at the first duty station. Expectations were also related to performance ratings. Facets of the job associated with intrinsic factors (e.g., a sense of accomplishment, job interest) were generally the major determinant of satisfaction levels. A number of other empirical and conceptual studies have emphasized the role of employee expectations and actual job duties in determining satisfaction and employee turnover (Berlew & Hall, 1966; Katzell, 1968; Livingston, 1969; Korman, 1971; Bray, Campbell, & Grant, 1974; Wiskoff, 1977; Wanous, 1977).

Personality Needs

Although personality inventories have generally demonstrated minimal relationships with attrition, two individual difference variables--need for achievement and internal-external locus of control--show some promise as additional predictors of attrition. Unfortunately, these variables have rarely been used in attrition studies.

Hermans (1970) reported significant correlations between need for achievement and performance. Steers (1975a) reported that both effort and job performance were increased for individuals high in need achievement when they were allowed feedback on task performance or when their performance was measured against clear standards. The same relationship was not found for employees low in need achievement. Steers (1975b) hypothesized that a positive relationship would be found between work attitudes and performance for high need achievers and that no such relationship would be found for low need achievers. Other studies have found that need for achievement moderated the job characteristic-job satisfaction relationship (Stone, Mowday, & Porter, 1977), job performance (Steers & Spencer, 1977), and turnover (Mowday, Stone, & Porter, 1976; Lau & Landau, 1978).

The locus of control scale was developed by Rotter (1966) to measure the extent to which individuals feel influential in their environment. The term "internal" is used to describe individuals who believe they have some control over their destiny and who perceive contingencies between actions and outcomes; and the term "external," to those who believe their destiny is controlled by extrinsic factors. Results of a number of studies conducted based on the scale have shown that it is a relatively stable predictor of behavior. For example, Sims and Szilagyi (1976) report that locus of control may be a key moderator of the job characteristic-job satisfaction relationship; Sims, Szilagyi, and McKemey (1976), that internal control employees have stronger expectancy and instrumentality perceptions; Broedling (1975), that internals are more strongly motivated to work, to perform better, and to perceive working hard as being instrumental in obtaining rewards than externals; and Runyon (1973) and Mitchell, Smyser,

and Weed (1975), that internals react differently to directive versus participatory supervisory styles than externals. Finally, Lau, Pavett, & Seybolt (1976) reported that internal-external locus of control was an important individual difference variable to be considered in understanding employee reactions to jobs and supervision.

Organizational Characteristics

Job Characteristics

Workers today, particularly young ones, are increasingly dissatisfied with jobs that have little instrinsic content value. They want interesting and challenging work and have higher job expectations. These evolving expectations often conflict with the demands, conditions, and rewards of organizations in terms of challenge and personal growth, power equalization, and intrinsic work rewards (Wild, 1969; Sheppard & Herrick, 1972; Rosow, 1974; Taylor & Thompson, 1976).

Until recently, understanding of how job characteristics relate to individual productivity, job satisfaction, and turnover has been hampered by the lack of a theoretical model for measuring job characteristics. The question of assessing job characteristics was first addressed by Turner and Lawrence (1965), who developed an operational measure of six attributes hypothesized to be related to employee satisfaction and turnover. Hackman and Lawler (1971) conceptualized the interaction between job characteristics and individual differences and outlined the characteristics of motivating jobs. Hackman and Oldham (1975, 1976) discussed the development of the Job Diagnostic Survey (JDS), which was derived from the previous research of Turner and Lawrence (1965) and Hackman and Lawler (1971). The JDS measures the following:

1. The scope of an existing job on each of five core dimensions--skill variety (SV), task identity (TI), task significance (TS), autonomy (A), and feedback (F). Using scores obtained on these five dimensions, a summary score can be generated that reflects a job's overall motivating potential; that is, its Motivating Potential Score (MPS):

$$\left(\frac{SV + TI + TS}{3}\right) \times A \times F = MPS$$

2. The current level of internal work motivation and satisfaction of employees on the job.

3. The level of growth need strength (GNS) of employees.

A number of empirical studies have investigated the relationship between job characteristics measured by the JDS and employee behavior. The majority of these studies have used some form of moderator variable of how employees respond to these job characteristics. A summary of field and laboratory studies that have tested an interactive theory of work design is provided in Table A-1, which shows that, in general, relationships between

Table A-1

Summary of Job Diagnostic Survey/Job Characteristic Studies

Researchers	Job Characteristic Instrument	Sample	Dependent Variable	Results
Brief and Aldag (1975)	Shortened Job Diagnostic Survey (JDS) measuring core dimensions of variety (V), task identity (TI), autonomy (A), and feedback (F)	Division of Corrections employees (N = 104)	Internal work motivation; general job satisfaction; job involvement	Significant, positive correlations between job dimensions and employee reactions. Higher order need strength moderated core dimension - satisfaction with work itself (SWI) relationships. Role of higher order needs found to be complex.
Dunham (1977)	JDS	Executives of a retail merchandising firm from 8 functional specialty groups (N = 784)	Job Satisfaction	In 5 of 8 specialty groups, employees responded more favorably to jobs high on scope. Moderating effect of specialty group not explained by group differences in climate perceptions or demographic variables.
Farr (1976)	Task characteristics on core dimensions (TI, F, V, A) manipulated in a simulated job environment with reward contingencies	College students (N = 90)	Intrinsic motivation; job satisfaction; productivity	Contingent reward systems combined with tasks designed to be high on the core dimensions appeared to be both extrinsically and intrinsically rewarding.
Hackman and Lawler (1971)	V, TI, A, F; dealing with others, and friendship opportunities	Telephone Company employees on 13 different jobs (N = 208)	Experienced work motivation, job involvement, general job satisfaction; performance ratings on quality and quantity produced and overall effectiveness; absenteeism	Generally significant relationships with level of intrinsic motivation, general job satisfaction, and job involvement. Core dimension-outcome relationships for high growth need strength (GNS) employees more strongly related to work quality (r = .23) than quantity (r = .07). No significant relationships with absenteeism. GNS moderated work characteristic - satisfaction relationships but not rated performance
Hackman and Oldham (1976)	JDS	658 employees working on 62 different jobs in seven organizations	General satisfaction, internal work motivation; absenteeism; summary measures of effectiveness as assessed by supervisory ratings	Core dimensions were significantly related to general satisfaction and internal work motivation. Motivation Potential Scores (MPS) had a median correlation with absenteeism of -.25 and .24 with performance effectiveness. Relationships were higher for employees high on GNS than for employees with low GNS.
Howard (Note 3)	Clerical Aptitude Test; JDS	Clerical employees in a bank in 11 job groups (N = 353)	Supervisory evaluations of job performance	Ability and internal motivation combined in an additive, not interactive manner, to predict performance. Ability correlated .18; enriched job characteristics and GNS measures increased the correlation to .30 ($p < .05$).
Lawler and Hall (1970)	Items and interviews covering degree of control; the job as a test of ability and challenge; responsibility for an entire piece of work	Scientists in 22 R and D laboratories (N = 291)	Self-rated effort and job performance; job involvement; intrinsic motivation and need satisfaction	Job description factors related more strongly to job satisfaction than to involvement or intrinsic motivation. Job characteristic-effort and performance correlations not reported.
Lawler, Hackman, and Kaufman (1974)	Slightly revised version of Hackman and Lawler (1971) questionnaire	Telephone Company employees (N = 17)	Job satisfaction; job involvement; intrinsic work motivation	No changes in work motivation, job involvement, or growth need satisfaction occurred as a result of job enrichment changes. Changes had a negative impact on interpersonal relationships.
Mowday, Stone & Porter (Note 9)	Job Scope (V,TI, A,F)	Machine operators (N = 64); technical personnel (N = 43)	Job satisfaction; turnover	Significant correlation of -.44 ($p < .01$) between turnover and need for achievement for complex jobs. Correlation for routine jobs was -.01.
Nemtroff and Ford (1977)	Overall Job Complexity Index based on JDS	Food processing site (N = 198)	Affective responses to job and work setting; absenteeism	Satisfaction was derived from congruent fits between the individual-job and individual-structure links and significantly influenced absenteeism.

Table A-1 (Continued)

Researchers	Job Characteristic Instrument	Sample	Dependent Variable	Results
Oldham, Hackman, and Pearce (1976)	JDS	Clerical jobs in a bank (N = 201)	Ratings of performance effectiveness; salary corrected for tenure; internal motivation	Employees who had strong growth needs and also were satisfied with the work context (e.g., pay, security, supervision) responded more positively to enriched jobs than employees with low GNS or those dissatisfied with work context. MPS-dependent variable correlations were all significant. Where growth needs were strong and work context satisfaction existed, the correlation of MPS and performance was .32 and with salary was .50.
Oldham (1976)	V, TI, A, F, and Task Significance (TS).	Clerical workers (N = 60)	Supervisory ratings of effort, quality, and quantity produced	Internal motivation significantly related to quality (r = .25), quantity (r = .22), work effort (r = .22). Relationships between core dimensions and supervisory ratings not reported. Co-worker/supervisory satisfaction and GNS moderated the internal motivation-performance relationship.
Steers and Spencer (1977)	Hackman and Lawler (1971) questionnaire	Managers in a manufacturing firm (N = 115)	Organizational commitment; supervisory ratings of overall performance	Core job dimensions significantly related to commitment but not to job performance ratings. Need for achievement moderated the job scope-performance relationship at the .10 level of significance.
Stone (1975)	Job scope (V, TI, A, F); optional and required interaction	Enlisted Naval personnel (N = 149)	Satisfaction with work itself (SWI)	Job scope-SWI correlated (r = .50). Scores on a Protestant Ethic (PE) scale did not moderate the job scope-SWI relationship.
Stone (1976)	Job Scope (V, TI, A, F)	A number of blue-collar jobs (N = 594)	Satisfaction with work itself (SWI)	Job scope-SWI correlated (r = .43). PE did not moderate the relationship.
Stone, Mowday, and Porter (1977)	Job Scope (V, TI, A, F)	Heterogeneous sample of employees from a manufacturing firm (N = 340)	Satisfaction with work itself (SWI)	Job scope - SWI correlated (r = .38). When SWI was predicted using both job scope and need for achievement, R was .50. Direction of achievement moderator inconsistent with other studies.
Sims and Szilagyi (1976)	Job Characteristic Inventory (V, TI, A, F)	Paramedical and support personnal at a medical center (N = 766)	Job satisfaction; supervisory ratings of performance; expectancies	Relationships with performance ranged from .12 for feedback to .20 with variety. Relationships between job characteristics and job satisfaction were generally higher. Self-actualization need strength moderated these relationships, while locus of control did not.
Umstot, Bell, and Mitchell (1976)	Modified JDS. Goal setting and job enrichment conditions varied in a simulated job environment	Experimental subjects (N = 42)	Job satisfaction; objective measures of job performance	MPS and productivity not related (r = -.16). MPS and job satisfaction significantly related (r = .71). Enrichment effected satisfaction but not work quantity. GNS did not moderate enrichment-satisfaction or performance relationships.
Wanous (1974)	Questionnaire paralleling Hackman and Lawler (1971) core dimensions of V, TI, A, F.	Telephone operators (N = 80)	Global job satisfaction, specific satisfaction; supervisory ratings of job behavior.	Significant relationships between job characteristics and global job satisfaction. Relationships were moderated by higher order need strength. Relationships with job behavior generally not significant.

job characteristics and satisfaction are positive. With respect to relationships with job performance, however, the results are more equivocal. Only one study (Mowday et al., 1976) examined the relationship between job characteristics and turnover. For high scope jobs, significant negative correlations were found between turnover and employees with high achievement needs.

Finally, a number of studies have considered why job design affects employee motivation (Herzberg, 1966; Lawler, 1969, 1973; Porter, Lawler, & Hackman, 1975; Locke, 1976; Schwab & Cummings, 1976; Hackman & Oldham, 1976; Sims, Szilagyi & McKemey, 1976). With the exception of Herzberg (1966), most theoretical formulations included in these studies have employed an expectancy theory perspective. Simply stated, results showed that job characteristics influence internal motivation and job performance when employees who work on enriched jobs see a relationship between performing well and feelings of growth, self-respect, and competence. Jobs will be motivating when they provide meaningful feedback and self-control, and test valued abilities.

Organizational Climate

Several major literature reviews of organizational climate have been conducted (Forehand & Gilmer, 1964; Campbell, Dunnette, Lawler, & Weick, 1970; Campbell, Bownas, Peterson, & Dunnette, 1974; James & Jones, 1974a; Hellriegel & Slocum, 1974; Payne & Pugh, 1976). Forehand and Gilmer (1964) define organizational climate as "a set of characteristics that (1) describe an organization and that distinguish the organization from other organizations, (2) are relatively enduring over time, and (3) influence the behavior of people in the organization" (p. 632). Utilization of employee perceptions of organization-wide characteristics (e.g., training effectiveness, performance feedback, coworker cooperation, supervisory effectiveness) can often be used to diagnose human resource management areas most in need of management attention. Most researchers utilize a perceptual approach for measuring organizational climate; that is, climate is measured indirectly via descriptions of various organizational procedures and characteristics provided by organizational members. Climate is generally conceptualized as a macro, descriptive, and organizationally-oriented construct (Schneider, 1975a).

Since the Forehand and Gilmer (1964) review, approximately 100 articles have appeared in the psychological literature focusing on conceptual or empirical issues associated with utilization of the construct (Lau, 1976). Organizational climate-employee behavior studies are summarized in Table A-2.

Organizational Structure

A considerable number of studies cited below addressed either (1) the direct impact of structural characteristics (e.g., organizational size, formalization of rules and routines, organizational level) upon employee attitudes and behaviors; or (2) the relative influence on employee behavior of structural and individual characteristics. Results of those studies are reviewed below.

A number of reviews have focused upon structural characteristics and their direct relationship to individual and organizational behavior.

Table A-2

Summary of Organizational Climate Studies

Researchers	Climate Instrument	Sample	Dependent Variables	Results
Downey, Hellriegel, and Slocum (1975)	Six factor analyzed scales (e.g., decision making, warmth, risk, rewards)	Managers (N=97)	Job satisfaction; job performance	Organizational climate interacted with individual personality in influencing job satisfaction and performance. Significant interactions reported for two of six climate factors.
Ellison et al. (Note 12)	Management Audit Survey (MAS)	U.S. Employment Service (265 offices)	Six systems performance criteria (e.g., output in relation to cost, percent of applicants placed)	Management practices assessed by MAS significantly related to USES productivity criteria. Operational efficiency, performance feedback, morale, satisfaction with pay, and work satisfaction scales most valid, correlating with five of six performance criteria
Farris (1969)	Six organizational factors (e.g., involvement in technical work, diversity of task activities)	Engineers (N=151)	Output (e.g., number of patents, technical reports, supervisory ratings)	Low but statistically significant correlations between organizational factors and performance. Relationships consistently stronger when performance was measured before organizational factors.
Frederiksen (1966)	Manipulations of climate conditions	Managers (N=260)	Job satisfaction; job performance	Innovative climates yielded higher and more predictable productivity. Consistent climates yielded more predictable productivity. Work methods depended upon climate perceptions.
Friedlander and Margulies (1969)	Halpin and Croft's OCDQ	Production Workers (N=95)	Job satisfaction	Organizational climate affected satisfaction as moderated by work values. Relationships varied by type of climate and job satisfaction measure.
Friedlander and Greenberg (1971)	Supportiveness of climate (new worker treatment, peer and supervisor support)	Hard core unemployed (N=478)	Job retention; work effectiveness; work behavior	Job performance and retention unrelated to attitudes, work motivation, previous work history, and biographical data. Sole correlate of work effectiveness and behavior was the degree of supportiveness perceived by workers. Tenure correlations not reported.
Gavin and Howe (1975)	Psychological climate (e.g., structure, hindrance, rewards, challenge)	Five firms-managerial level employees (N=1039)	General satisfaction; self-reported performance and expectancies; supervisory performance evaluations	Significant relationships between climate and expectancies; and job satisfaction (mdn r=.25). No significant relationships with self-reported performance. Only three of 18 correlations with supervisory evaluations significant. Mixed results found for climate as a moderator between motivation and outcome variables.
Gavin (1975a)	Work environment perceptions (e.g., structure, hindrance, rewards, challenge)	Domestic airline employees in both line (N=257) and staff jobs (N=214)	Mental health (e.g., interpersonal relations, job satisfaction); supervisory evaluations	Significant relationship between perceived work environment and measures of employee mental health criteria. Forty-four percent of climate-supervisory evaluation correlations were signicant beyond the .05 level.
Gavin and Greenhaus (1976)	Work environment perceptions (e.g., structure, hindrance, rewards, challenge)	Domestic airline employees in both line (N=257) and staff jobs (N=214)	Mental health (e.g., interpersonal relations, job satisfaction); supervisory evaluations	Organizational tenure moderated the relationship between work environment perceptions and outcome criteria only in the line organization.
James and Jones (1974b)	Psychological climate (e.g., conflict and ambiguity, job challenge workgroup cooperation)	Navy enlisted personnel (N=4315) assigned to 20 ships	Individual level criteria (intention to reenlist, promotion rate, overall job satisfaction)	Psychological climate correlated with intent to reenlist (r=.56), with promotion rate (r=.26), and satisfaction (r=.69).
Jones and James (in press)	Psychological climate (e.g., conflict and ambiguity, job challenge, workgroup cooperation)	Navy enlisted personnel (N=4315) assigned to 20 ships	Ship division level criteria (composite criterion for two subsamples)	Climate clusters correlated .41 and .39 with a composite criteria (e.g., quality of work, requests for transfers) for two subsamples

NOTE. A number of studies that relate climate variables to Navy reenlistment criteria are not cited (e.g., Drexler & Bowers, 1973).

Table A-2 (Continued)

Researchers	Climate Instrument	Sample	Dependent Variable	Results
Kaczka and Kirk (1968)	Dimensions of managerial climate (e.g., leadership style, cost emphasis)	Computer simulation	Performance of a model firm (e.g., profits, sales, group cohesion)	Performance was affected by organizational climate. In most cases, employee-centered climate yielded higher performance.
LaFollette and Sims (1975)	Litwin and Stringer's climate questionnaire and House and Rizzo's Organizational Practices Questionnaire (OPQ)	Medical Complex (N=997)	Job satisfaction; supervisory ratings of job performance	Significant relationship between climate and satisfaction scores. Relationships with performance ranged from .09 to .24 (mdn r=.10). Argument made that satisfaction and climate relate differently to performance.
Lawler, Hall, and Oldham (1974)	Bipolar adjective scales	Scientists in 21 R&D organizations (N=291)	Job satisfaction; rated technical performance, administrative performance, and overall job performance	Median correlation of .25 between climate and job performance. Median correlation of .47 between climate and job satisfaction.
Litwin and Stringer (1968)	Manipulations of climate conditions (authoritarian, democratic, achieving)	Experimental subjects (N=45)	Job satisfaction; job performance	Different styles of leadership created different climates and effects upon outcome measures. Achieving climate, for example, aroused achievement motivations and led to higher satisfaction and performance.
Lyon and Ivancevich (1974)	Halpin and Croft's OCDQ	Nurses (N=35); administrative personnel (N=199)	Job satisfaction	Climate dimensions were found to influence individual job satisfaction. Climate perceptions differed for nurses and administrators.
Pritchard and Karasick (1973)	Campbell and Pritchard questionnaire (e.g., autonomy, structure, rewards, supportiveness)	Managers (N=76)	Job satisfaction; job performance ratings	Climate strongly related to satisfaction (mdn r=.50). Only two of 11 climate dimensions related to performance. Regardless of individual personality characteristics (EPPS), highly supportive climates were associated with higher job satisfaction.
Schneider and Hall (1972)	Work climate (e.g., supervision effectiveness, work challenge, personal acceptance, autonomy)	Parish priests (N=171)	Job satisfaction	Moderately strong relationship between work climate and satisfaction.
Schneider and Snyder (1975)	Agency climate questionnaire	50 life insurance agencies (N=522)	Need satisfaction; job satisfaction; performance indices of agency effectiveness, and turnover	Employees agreed more on climate perceptions than on job satisfaction; satisfaction more strongly related to turnover than climate. Neither satisfaction or climate were strongly related to performance data.
Schneider (1975b)	Agency climate questionnaire	Life insurance agents (N=914)	Tenure; sales	Type of organization affected the relationship between the fit of new agent climate expectations/preferences to the agency or new agent success. Although correlations with criteria generally not significant, correlation of .17 reported for tenure in one organizational subgroup.
Waters, Roach, and Batlis (1974)	Selected scales from Halpin and Croft's *OCDQ*, Litwin and Stringer's scale, and House and Rizzo's OPQ	Employees in seven radio and TV stations (N=105)	Job satisfaction; self-reported effort and performance	None of the climate factor dimensions and very few of the 22 climate scales were related to self-ratings. Results may have been influenced by dependent variable ceiling effects.

Note. A number of studies that relate climate variables to Navy reenlistment criteria are not cited (e.g., Drexler & Bowers, 1973).

Porter and Lawler (1965) concluded that organizational level and subunit size had the strongest relationship to job attitudes, turnover, and job performance. The impact of structural organizational factors (as a main effect) had a stronger effect on job attitudes and turnover than on job performance. Campbell et al. (1974), which updated the earlier Porter and Lawler (1965) review, also concluded that size and hierarchical level had the strongest relationships with outcome measures. Additional organizational structure reviews have been conducted by James and Jones (1976) and Cummings and Berger (1976) with similar findings.

Herman and Hulin (1972) tested the relationship between structural and individual characteristics and dependent measures of job satisfaction. Results indicated that satisfaction was associated with structural variables more than individual characteristics (tenure, age, and education). Herman, Dunham, and Hulin (1975) reported that individual characteristics accounted for 9 percent of the variance associated with job satisfaction; structural characteristics (department and job level), 19 percent; and interaction effects, 6 percent. Several other studies have indicated that job satisfaction is more highly related to structural than individual characteristics (O'Reilly & Roberts, 1975; Newman, 1975; O'Reilly, 1977).

APPENDIX B

RECRUIT BACKGROUND QUESTIONNAIRE

RECRUIT BACKGROUND QUESTIONNAIRE

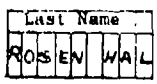
Under the authority of 5 USC 301, general information about you, your family, your home, and some of the things you may have done before you joined the Navy is requested in order to help the Navy in its recruitment of sailors. The information provided by you will not become a part of your official record. It will be used for research purposes only. (You are not required to provide this information.) Social Security Number is required only to identify individuals in the event of a follow-up questionnaire. There will be no adverse consequences should you elect not to provide the requested information or any part of it.

Directions

1. This questionnaire is not a test and there are no "right" answers to the questions. Your answers will be treated in confidence and will be used for research purposes only. This questionnaire will in no way affect your tour in the Navy.

2. Take your General Purpose OMR answer sheet and turn to the side marked with a large, blue "B" and "C." Turn the sheet so that the heavy dark lines are at the bottom of the page, facing you. Use a number 2 soft lead pencil. Print your name, last name first, in the boxes provided. If your last name is less than nine letters, leave a blank after your last name, then use your first name in the remaining boxes as shown in the example below:

EXAMPLE: Halbert Rosen



Below each box, blacken in the circle that matches the letter of your name entered in that box. Be sure to blacken each circle completely. If there are blank boxes, darken the empty circle below the blank box.

EXAMPLE: Right Wrong

3. Complete the following information blocks on your answer sheet:

   a. "Social Security No." Write in your Social Security number, and blacken in the appropriate circles.

   b. "Male-Female." Blacken in the appropriate circle.

   c. "Highest Grade Passed." In the bottom left corner, indicate the highest grade of formal school you have completed or passed.

4. Look at the SPECIAL CODES section of your answer sheet and darken the circle that matches your answer to each of the following questions. Note: On the answer sheets, items read across (Item A, Item B, etc., and the possible responses to each item read down (0, 1, 2, 3, etc.).

SPECIAL CODES

A. What is your Recruit Training Command?
   0. Orlando
   1. San Diego
   2. Great Lakes

B. Do you plan to attend a Class "A" school?
   0. Yes, I was guaranteed a Class "A" school
   1. Yes, if the option is available
   2. No, I do not plan to attend a Class "A" school, although I am eligible.
   3. No, I am not eligible for a Class "A" school

C. What is your current marital status?
   0. Single (never married)
   1. Married
   2. Divorced
   3. Separated
   4. Widowed

D. Are you a high school graduate?
   1. Yes, I have a diploma
   2. No, I did not finish high school
   3. I have a GED certificate or equivalent.

SPECIAL CODES (continued)

Answer questions "E" through "K" in the "SPECIAL CODES" section of your answer sheet.

E. What was the size of your home town?
   0. A farm or a small town (less than 5,000 people)
   1. A town (5,000 - 50,000 people)
   2. A city (50,000 - 250,000 people)
   3. A suburb of a large city
   4. A large city (more than 250,000 people)

F. Which area of the country are you from?
   0. North east
   1. South
   2. Midwest
   3. West

G. Have you taken trade school, correspondence, or other job-related courses of instruction?
   0. No, I have never taken such courses outside of high school
   1. Yes, I have taken one course, but I did not finish it
   2. Yes, I have finished one course
   3. Yes, I have finished several courses

H. What were your grades in high school?
   0. A's
   1. A's and B's
   2. B's
   3. B's and C's
   4. C's
   5. C's and D's
   6. D's or below

I. How many times were you suspended or expelled from school?
   0. Never
   1. Once
   2. Twice
   3. Three times
   4. More than three times

J. During your last two years of high school, how often were you sent to the office for disciplinary reasons?
   0. Never
   1. Seldom
   2. Often

K. What were you doing at the time you joined the Navy?
   0. Going to high school
   1. Going to trade school
   2. Going to college
   3. Working at a full-time job
   4. Working at odd jobs
   5. Neither going to school nor working

Turn your answer sheet over so that the large letter "A" is facing you. Your answers to the rest of the questions in the questionnaire must be recorded in Section A of the answer sheet. There must be no stray marks anywhere on the answer sheet. If you change an answer, completely erase the original mark.

6. Read each question carefully, then select the response that best applies to you. For each item, blacken the appropriate circle (A, B, C, D, or E) on the answer sheet.

SECTION ONE

Decide how well the statements below describe your background and feelings toward jobs, school, and the Navy. For each statement, mark your answer sheet using the following scale:

(A)	(B)	(C)	(D)	(E)
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

1. I would be happier in the Navy if I could stay close to home.
2. I will go back to school after I get out of the Navy.
3. I have already decided what my career is going to be.
4. I expect to see some of the world before I leave the Navy.

To answer questions 5 - 44, use the following scale:

(A) Strongly Disagree	(B) Disagree	(C) Don't Know	(D) Agree	(E) Strongly Agree

5. I would prefer on-the-job training to a Class "A" school.
6. I have always had trouble getting along with other people.
7. School never mattered very much to me.
8. When I am doing a job I don't like, it seems to last forever.
9. I plan to re-enlist in the Navy as soon as I am eligible.
10. I know what I want out of life.
11. I like to learn by doing, not in a classroom.
12. If I had my choice, I would like to be stationed on a ship overseas.
13. I can only take orders from people I respect.
14. I cannot stand to do petty jobs like dishwashing and cleaning.
15. Before I joined the Navy, I had my own room and plenty of privacy.
16. I was a leader both in school and in my community.
17. If I had the option to get out of the Navy any time I wanted to, I would use it.
18. I began smoking cigarettes at an early age.
19. I joined the Navy to get job training I can use when I get out.
20. I have always been able to handle my own problems.
21. I could get a good civilian job any time I wanted to.
22. Almost all of my friends went to college.
23. I need the freedom to control my own life.
24. The main goal in my life is to make the most of my abilities.
25. I liked school very much.
26. I do not expect to be higher than a third class petty officer when I leave the Navy.
27. Nothing is more important to me than a pleasant home and family life.
28. I joined the Navy to travel and have new experiences.
29. Even if things are not going my way, I keep trying until I succeed.
30. I cannot take criticism from other people.
31. I expect my Navy job to be more interesting than jobs I could get back home.
32. I do not mind waiting for what I want.
33. I could handle any problems at home and still stay in the Navy.
34. What I want most in life is to have a challenging and exciting job.
35. I have been an active member of youth groups such as the Scouts.
36. Navy job benefits (vacation, health care, and retirement) are better than I could get in a civilian job.
37. If my family needed me back home, I would have to get out of the Navy.
38. I do not like being told what to do.
39. I was very unhappy about leaving home for the first time.
40. When I was in high school, my parents let me be as independent as I wanted to be.
41. I'm the kind of person who is going to get ahead in the world.
42. If there were no VA benefits, I would not have joined the Navy.
43. The Navy offers me a chance for a career.
44. My time in the Navy will give me a chance to become more mature and self-reliant.

SECTION TWO

The following 22 questions ask what you think will happen on your first duty assignment. In each question, "your first duty assignment" means the first job you will be assigned to after all of your training is completed. To answer these questions, use the following scale:

A = Definitely will not happen

B = Probably will not happen

C = Don't know if this will happen

D = Probably will happen

E = Certainly will happen

A sample question is given below.

A. To do a great deal of work.

If, for example, you think that this certainly will happen, you would blacken the space lettered "E" on your answer sheet.

During my first duty assignment, I expect:

45. To feel motivated to contribute my best efforts to the Navy.
46. The Navy will have a real interest in the welfare and morale of me and my shipmates.
47. Supervisors will be friendly and easy to talk to.
48. Supervisors will help people to work together as a team.
49. Shipmates will be friendly and easy to talk to.
50. Shipmates will help each other to give their best efforts.
51. To have confidence and trust in my shipmates.
52. To have a good and worthwhile experience.
53. To have good working conditions.
54. To be treated fairly.
55. Regulations will be clearly understood by people.
56. People will be proud of the Navy.
57. The Navy will make use of my individual talents.
58. To have adequate chances for advancement.
59. To get a feeling of accomplishment.
60. To get recognition for good work.
61. Supervisors will let me know how well I am doing.
62. To make work-related decisions on my own.
63. Supervisors will back up the people who work for them.
64. To have something different to do every day.
65. To enjoy the work itself.
66. To have a significant and important job.

SECTION THREE

The following 30 questions ask your opinions on policies, practices, morale, and fairness at the Recruit Training Command (RTC). Use the following scale to answer questions 67-96.

(A)	(B)	(C)	(D)	(E)
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

During boot camp:

67. My company commander keeps me informed about the things I need to know.

68. My company commander does a good job of reviewing and following up on work done by my company.

69. The supervision I receive makes me want to work extra hard.

70. My chances for advancement in the Navy are not very good.

71. My company commander seriously considers suggestions by recruits and talks to us about our gripes.

72. Most people in my company believe they have a good future in the Navy.

73. Members of my company make a special effort to help each other to get the job done.

74. From what I have seen, the RTC is not very well informed about how the recruits feel about conditions in boot camp.

75. When my performance is discussed with me, I am usually told of ways to improve my performance.

76. People in my company are strongly encouraged to develop new ways of doing things.

77. Changes are often made in my job procedures and I am usually not told why.

78. Military justice is administered fairly throughout the RTC.

79. My chances for advancement encourage me to re-enlist in the Navy.

80. My company commander almost never seriously considers questions raised by recruits.

81. There is a high degree of job cooperation among members of my company.

82. The quality of work produced by my company is usually high.

83. Lines of authority and responsibility are usually made clear to members of my company.

84. There is an open and effective exchange of information and ideas among members of my company.

85. Members of my company are generally not treated fairly.

86. Good ideas from members of my company are usually sent up to the proper level for action.

87. Company commanders see that company members get all the credit we deserve for a good job.

88. I almost always know what is expected from me in my job assignments.

89. My company performs well under pressure.

90. I am very frequently given information about my job performance.

91. Job assignments are fairly made in the RTC.

92. My company commander usually does a good job of organizing and scheduling jobs.

93. My company quickly picks up new and better ways of doing things.

94. My company commander usually makes a real effort to look for and reward new ideas and suggestions.

95. Morale in my company is usually high.

96. Quite a bit of useful information is given to me about my job performance.

SECTION FOUR

The following 9 questions deal with the way you feel about your high school experiences. Use the following scale to answer questions 97-105.

(A)	(B)	(C)	(D)	(E)
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

During High School:

97. Teachers thought I was one of the hardest workers in my class.

98. When I worked, I made very high demands on myself.

99. I usually did much more than I set out to do.

100. The academic standards I set for myself were pretty low.

101. I liked work that required a lot of responsibility.

102. I liked doing hard work.

103. When doing something difficult, I usually saw it through.

104. I could work at something for a long time without getting tired.

105. I was very ambitious.

SECTION FIVE

The following 7 questions ask how you feel about different social situations. Use the following scale to answer questions 106-112.

(A)	(B)	(C)	(D)	(E)
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

106. You cannot be an effective leader without the right breaks.

107. Getting people to do the right thing depends on ability; luck has little or nothing to do with it.

108. Who gets to be boss often depends on who was lucky enough to be in the right place first.

109. Capable people who fail to become leaders have not taken advantage of their opportunities.

110. Most people don't realize how much accidental happenings control their lives.

111. Many times I feel that I have little influence over the things that happen to me.

112. If you are willing to work hard, you will always be successful.

SECTION SIX

For each of the conditions below, choose the letter which comes closest to describing your general living conditions in boot camp. Answer each question by darkening the appropriate circle on your answer sheet.

A sample question is given below.

COLOR

Unpleasant		Average		Pleasant
(a)	b	c	d	e

If, for example, you feel that the color is extremely unpleasant, you would darken the circle "A" on your answer sheet.

LIGHTING

113.	Too dim		Average		Too bright
	a	b	c	d	e

TEMPERATURE

114.	Hot		Average		Cold
	a	b	c	d	e

VENTILATION

115.	Poor		Average		Good
	a	b	c	d	e

CLEANLINESS

116.	Dirty		Average		Clean
	a	b	c	d	e

SIZE

117.	Cramped		Average		Roomy
	a	b	c	d	e

NUMBER OF PEOPLE

118.	Crowded		Average		Uncrowded
	a	b	c	d	e

PRIVACY

119.	None		Average		Plenty
	a	b	c	d	e

SAFETY

120.	Hazardous		Average		Safe
	a	b	c	d	e

APPENDIX C

EXIT QUESTIONNAIRE FORM

EXIT QUESTIONNAIRE FORM

To be completed by Service Member only

PRIVACY ACT

Under the authority of 5 USC 301, general information about you, your family, your home, and some of the things you may have done before you joined the Navy is requested in order to help the Navy in its recruitment of sailors. The information provided by you will not become a part of your official record. It will be used for research purposes only. (You are not required to provide this information.) There will be no adverse consequences should you elect not to provide the requested information or any part of it.

You have requested to be discharged from the Navy. If your request to leave the Navy was made within the first 181 days of active duty, remember that you will not be able to receive Veteran's benefits as a civilian. If you do not know about these benefits, you should ask at your personnel office.

In order to help in our efforts to provide a better life for Navy personnel, please fill out the attached questionnaire.

SEAL THE COMPLETED EXIT QUESTIONNAIRE IN THE ATTACHED ENVELOPE. YOU MUST DELIVER THIS SEALED ENVELOPE TO YOUR PERSONNEL OFFICE BEFORE YOUR DISCHARGE PAPERS WILL BE ISSUED TO YOU. THANK YOU FOR YOUR COOPERATION.

After you have completed the questionnaire, use the enclosed envelope to return it to:

Commanding Officer
Navy Personnel Research and Development Center
San Diego, CA 92152
Attn: Code 310AWL

1. Name_____
Last First Initial SSN

2. Rate_____

3. In the space provided below, please state, in your own words, the main reason for your decision to leave the Navy.

SECTION ONE

To fill out this section of the questionnaire, please choose the FIVE aspects of Navy life which MOST influenced your decision to leave the Navy. Once you have identified these five most important considerations, rank them in order from most to least important. Thus, the most important reason will have a 1 in the space preceding it, the second most important reason will have a 2 in the space preceding it, and so on, through number 5.

_____1. Your living conditions

_____2. Getting feedback on how you were doing

_____3. The difficulty of training

_____4. Getting credit for doing good work

_____5. The interest your superiors had in your morale

_____6. The friendliness and helpfulness of your superiors

_____7. Counseling you received when you had problems

_____8. The training you got that helped you to be a better sailor

_____9. The interest you had in your duties

_____10. Your feeling of doing worthwhile things

_____11. The sense the rules and regulations made to you

_____12. The clearness of what was expected of you

_____13. The clearness of the fact that the things you were learning would help you be a better sailor

_____14. The chances for future success in the Navy

_____15. The fairness with which military justice was carried out

_____16. The fairness with which work assignments were made

_____17. The fairness with which discipline was handed out

_____18. The people you worked with

_____19. Your superiors

_____20. Navy life as a whole

_____21. Family or personal problems back home

_____22. Lack of freedom and independence

_____23. Did not get a Class "A" school

_____24. Disliked my job in the Navy

_____25. Did not get any on-the-job training

SECTION TWO

While you have been in the Navy, certain things happened or did not happen to you. Describe your experiences using each of the following statements. Please answer questions 26-47 by using the following scale:

1	2	3	4	5
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

A sample question is given below.

__4__ A. Did a great deal of work.

If, for example, you agree with this statement, you would write the number "4" in the space provided.

During my Navy experience:

_____26. I felt motivated to contribute my best efforts to the Navy

_____27. The Navy had a real interest in the welfare and morale of me and my shipmates

_____28. I had supervisors who were friendly and easy to talk to

_____29. I had supervisors who helped people to work together as a team

_____30. I had shipmates who were friendly and easy to talk to

_____31. I had shipmates who helped each other to give their best efforts

_____32. I had confidence and trust in my shipmates

_____33. The Navy was a good and worthwhile experience

_____34. I had good working conditions

_____35. I was treated fairly

_____36. Navy regulations were clearly understood by people

_____37. People were proud of the Navy

_____38. The Navy made use of my individual talents

_____39. I had adequate chances for advancement

_____40. I got a feeling of accomplishment

_____41. I got recognition for good work

_____42. I made work-related decisions on my own

_____43. I had supervisors who backed up the people who worked for them

_____44. I had something different to do every day

_____45. I enjoyed the work itself

_____46. I had a significant and important job

_____47. I had supervisors who let me know how well I was doing

IF YOU HAVE NOT REACHED YOUR FIRST DUTY ASSIGNMENT, COMPLETE ONLY SECTIONS ONE AND TWO OF THIS QUESTIONNAIRE. IF YOU HAVE REACHED YOUR FIRST DUTY STATION AND HAVE DECIDED TO LEAVE THE NAVY, PLEASE COMPLETE SECTION THREE THROUGH SECTION FIVE.

1. Ship_____Home Port_____

2. Division_____How long have you been in your present division?_____months

3. Number of men in your division_____

4. In the space provided, please describe the primary job duties you perform:

_____

_____

_____

_____

SECTION THREE

The following 45 questions ask your opinions on policies, practices, morale, and fairness at your first duty station. Use the following scale to answer questions 48-92.

1	2	3	4	5
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

To help you answer some of the questions in this section, you should know what we mean by the following words:

a. IMMEDIATE SUPERVISOR - refers to the leading petty Officer to whom you reported directly and who usually gave you your work assignments and reviewed your work.

b. HIGHER LEVEL SUPERVISOR - refers to the Division Officer above your immediate supervisor

c. DEPARTMENT HEAD - refers to the officer who was the head of the several divisions that made up your Department

d. THIS COMMAND - refers to the ship or squadron to which were assigned.

During my first duty assignment:

_____48. Members of my Division were very willing to share information to help get the work done

_____49. For the work assigned to me, my pay-grade was satisfactory

_____50. My Division handled difficult projects quite well

_____51. My immediate supervisor kept me informed about the things I needed to know

_____52. I got the training I needed to do my jobs well

_____53. My immediate supervisor did a good job of reviewing and following up on work done by my Division

_____54. The supervision I received made me want to work extra hard

_____55. Compared to civilian pay for jobs like mine, my pay-grade was unsatisfactory

_____56. My supervisor seriously considered suggestions by subordinates and talked to us about our gripes

_____57. My Division Officer kept our Division well informed about what was going on

58. The chances for advancement for people in my rating were good.

59. Most people in my Division believe they have a good future in the Navy

60. Members of my Division made a special effort to help each other to get the work out

61. From what I have seen, the Command was not very well informed about how subordinates felt about conditions

62. When my work performance was discussed with me, I was usually told of ways to improve my performance

63. I was given the authority I needed to do my work well

64. People in my Division were strongly encouraged to develop new ways of doing things

65. Changes were often made in my work procedures, and I was usually not told why

66. My chances for advancement encouraged me to stay in the Navy

67. Higher level supervisors almost never seriously considered questions raised by subordinates

68. There was a high degree of work cooperation among members of my Division

69. It was worthwhile to work hard to get an advancement in this Command

70. Members of my Division had fairly complete freedom to plan and decide how they did their work

71. The quality of work produced by my Division was usually high

72. Lines of authority and responsibility were usually made clear to members of my Division

73. Quite a bit of wasted effort occurred in my Division because of poor planning

74. There was an open and effective exchange of information and ideas among members of my Division

75. My immediate supervisor knew enough about the work of the Division to solve problems that came up

76. Members of my Division were generally not treated fairly

77. Good ideas from members of my Division were generally sent up to the proper level for action

78. Discussions on new ideas and ways of doing things were quite often held in my Division

79. Because of poor planning, instructions were often changed after I started work on an assignment

80. Higher level supervisors saw that Division members got all the credit they deserved for a good job

81. Rules and procedures I had to follow in my Division helped me to do my work faster

82. Considering what it cost to live in this area, my pay was adequate

83. I almost always knew what results were expected from me in my work assignments

84. My Division performed well under pressure

85. I was very frequently given information about my job performance

86. My immediate supervisor usually did a good job of organizing and scheduling work

87. My Division often quickly picked up new and better ways of doing things

88. Given the opportunity to transfer to another Division, many of the people in my Division would have stayed

89. The on-the-job training given to members of my Division was generally not very good

90. My immediate supervisor usually made a real effort to look for and reward new ideas and suggestions

91. Morale in my Division was usually high

92. Quite a bit of useful information was given to me about my job performance

SECTION FOUR

This part of the questionnaire asks you to describe the job you had on your first duty station as objectively as you can. Please do not use this part of the questionnaire to show how much you liked or disliked your job. Questions about that will come later. Instead, try to make your descriptions as accurate and as objective as you possibly can.

A sample question is given below.

A. To what extent did your job require you to work with mechanical equipment?

1----------2----------3----------4----------5----------(6)----------7

Very little; the job required almost no contact with mechanical equipment of any kind	Moderately	Very much; the job required almost constant work with mechanical equipment

If, for example, your job required you to work with mechanical equipment a good deal of the time--but also required some paperwork--you would circle the number "6," as was done in the example above.

93. To what extent did your job require you to work closely with other people?

1----------2----------3----------4----------5----------6----------7

Very little; dealing with other people was not at all necessary in doing the job	Moderately; some dealing with others was necessary	Very much; dealing with other people was an absolutely essential and crucial part of doing the job

94. How much freedom was there in your job? That is, to what extent did your job permit you to decide on your own how to go about doing the work?

1----------2----------3----------4----------5----------6----------7

Very little; the job gave me almost no personal "say" about how and when the work was done	Moderate freedom; many things were standardized and not under my control, but I could make some decisions about the work	Very much; the job gave me almost complete responsibility for deciding how and when the work was done

95. To what extent did your job involve doing a "whole" and identifiable piece of work? That is, was the job a complete piece of work that had an obvious beginning and end? Or was it only a small part of the overall piece of work, which was finished by other people or by automatic machines?

1----------2----------3----------4----------5----------6----------7

My job was only a tiny part of the overall piece of work; the results of my activities could not be seen in the final product or service	My job was a moderate size "chunk" of the overall piece of work; my own contribution could be seen in the final outcome	My job involved doing the whole piece of work, from start to finish; the results of my activities were easily seen in the final product or service

96. How much <u>variety</u> was there in your job? That is, to what extent did the job require you to do many different things at work, using a variety of your skills and talents?

1----------2----------3----------4----------5----------6----------7

Very little; the job required me to do the same routine things over and over again	Moderate variety	Very much; the job required me to do many different things using a number of different skills and talents

97. In general, how <u>significant or important</u> was your job? That is, were the results of your work likely to significantly affect the lives or well-being of other people?

1----------2----------3----------4----------5----------6----------7

Not very significant; the outcomes of my work were <u>not</u> likely to have important effects on other people	Moderately significant	Highly significant; the outcomes of my work could affect other people in very important ways

98. To what extent did <u>supervisors or shipmates</u> let you know how well you were doing on your job?

1----------2----------3----------4----------5----------6----------7

Very little; people almost never let me know how well I was doing	Moderately; sometimes people gave me "feedback;" other times, they didn't	Very much; supervisors or shipmates provided me with almost constant "feedback" about how well I was doing

99. To what extent did <u>doing the job itself</u> provide you with information about your work performance? That is, did the actual work itself provide clues about how well you were doing--aside from any "feedback" shipmates or supervisors may have provided?

1----------2----------3----------4----------5----------6----------7

Very little; the job itself was set up so I could work forever without finding out how well I was doing	Moderately; sometimes doing the job provided "feedback" to me; sometimes it didn't	Very much; the job was set up so that I got almost constant "feedback" as I worked about how well I was doing

Listed below are a number of statements which could be used to describe a job. You are to indicate whether each statement was an accurate or an inaccurate description of your job. Once again, please try to be as objective as you can in deciding how accurately each statement described your job, regardless of whether you liked or disliked your job.

Write a number in the blank beside each statement, based on the following scale:

How accurate is the statement in describing your job?

1	2	3	4	5	6	7
Very Inaccurate	Mostly Inaccurate	Slightly Inaccurate	Uncertain	Slightly Accurate	Mostly Accurate	Very Accurate

_____100. The job required me to use a number of complex or high-level skills

_____101. The job required a lot of cooperative work with other people

_____102. The job was arranged so that I did not have the chance to do an entire piece of work from beginning to end

_____103. Just doing the work required by the job provided many chances for me to figure out how well I was doing

_____104. The job was quite simple and repetitive

_____105. The job could have been done adequately by a person working alone--without talking to or checking with other people

_____106. The supervisors and shipmates on this job almost never gave me any "feedback" about how well I was doing in my work

_____107. This job was one where a lot of other people could be affected by how well the work got done

_____108. The job denied me any chance to use my personal initiative or judgement in carrying out the work

_____109. Supervisors often let me know how well they thought I was performing the job

_____110. The job provided me the chance to completely finish the pieces of work I did

_____111. The job itself provided very few clues about whether or not I was performing well

_____112. The job gave me considerable opportunity for independence and freedom in how I did the work

_____113. The job itself was not very significant or important in the broader scheme of things

Now, please indicate how you personally felt about your job. Each of the statements below is something that a person might say about his or her job. You are to indicate your own, personal feelings about your job by marking how much you agree with each of the statements.

Write a number in the blank for each statement, based on this scale:

How much do you agree with this statement?

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly

_____114. My opinion of myself went up when I did this job well

_____115. Generally speaking, I was very satisfied with this job

_____116. I felt a great sense of personal satisfaction when I did this job well

_____117. I frequently thought of asking for a transfer

_____118. I felt bad when I performed poorly on this job

_____119. I was generally satisfied with the kind of work I did in this job

_____120. My own feelings generally were not affected much one way or the other by how well I did on this job

Now please indicate how satisfied you were with each aspect of your job listed below. Once again, write the appropriate number in the blank beside each statement.

Write a number in the blank for each statement, based on this scale:

How satisfied were you with this aspect of your job?

1	2	3	4	5	6	7
Extremely dis-satisfied	Dis-satisfied	Slightly Dis-satisfied	Neutral	Slightly satisfied	Satisfied	Extremely satisfied

_____121. The amount of job security I had

_____122. The amount of pay and fringe benefits I received

_____123. The amount of personal growth and advancement I got in doing my job

_____124. The people I talked to and worked with on my job

_____125. The degree of respect and fair treatment I received from my immediate supervisor

_____126. The feeling of worthwhile accomplishment I got from doing my job

_____127. The chance to get to know other people while on the job

_____128. The amount of support and guidance I received from my immediate supervisor

_____129. The degree to which I was fairly paid for what I contributed to the Navy

_____130. The amount of independent thought and action I could exercise in my job

_____131. How secure things looked for me in the future in the Navy

_____132. The chance to help other people while at work

_____133. The amount of challenge in my job

_____134. The overall quality of the supervision I received in my work

Listed below are a number of characteristics which could be present on any job. People differ about how much they would like to have each one present in their own jobs. We are interested in learning <u>how much you personally would like</u> to have each one present in your job

Using the scale below, please indicate the <u>degree</u> to which you <u>would like</u> to have each characteristic present in your job.

1	2	3	4	5	6	7
Would like having this only a moderate amount (or less)			Would like having this very much			<u>Must</u> have this

_____135. High respect and fair treatment from my supervisor

_____136. Stimulating and challenging work

_____137. Chances to exercise independent thought and action in my job

_____138. Great job security

_____139. Very friendly co-workers

_____140. Opportunities to learn new things from my work

_____141. High salary and good fringe benefits

_____142. Opportunities to be creative and imaginative in my work

_____143. Quick promotions

_____144. Opportunities for personal growth and advancement in my job

_____145. A sense of worthwhile accomplishment in my work

SECTION FIVE

For each of the conditions below, choose the letter which comes closest to describing your general living conditions at your first duty station. Answer each question by circling the appropriate number.

A sample question is given below.

A. COLOR

Unpleasant		Average		Pleasant
(a)	b	c	d	e

If, for example, you feel that the color was unpleasant, you would circle the letter "a."

146. ODOR

Unpleasant		Average		Pleasant
a	b	c	d	e

147. NOISE

Disturbing		Average		Not disturbing
a	b	c	d	e

148. VENTILATION

Poor		Average		Good
a	b	c	d	e

149. CLEANLINESS

Dirty		Average		Clean
a	b	c	d	e

150. SIZE

Cramped		Average		Roomy
a	b	c	d	e

151. NUMBER OF PEOPLE

Crowded		Average		Uncrowded
a	b	c	d	e

152. PRIVACY

None		Average		Plenty
a	b	c	d	e

153. SAFETY

Hazardous		Average		Safe
a	b	c	d	e

154. LIGHTING

Too dim		Average		Too bright
a	b	c	d	e

155. TEMPERATURE

Hot		Average		Cold
a	b	c	d	e

APPENDIX D

FLEET QUESTIONNAIRE

FLEET QUESTIONNAIRE

Based on information from this questionnaire, Navy management will be advised of the favorable and unfavorable aspects of Navy life. You have already provided information like this while you were in boot camp. Now that you have been on active duty for some time, you can provide more information. Your participation is important and is appreciated. Please return your completed questionnaire within a week after you receive it.

PRIVACY ACT STATEMENT

Authority for solicitation of this information is 5 USC 301. Information obtained will be used to evaluate the impact various Navy policies, regulations, and procedures have on Navy personnel. Your opinions as expressed in this questionnaire will not be made a part of your permanent record, not be used for any administrative actions concerning you. Participation is voluntary and no adverse consequences will result from non-participation.

1. Use the blue "OMR" answer sheet for all your answers.

   a. All answers must be completely blackened in with a soft lead pencil. Do NOT use ink.

      Example:

      RIGHT ● ○ ○ WRONG ○ ◌ ✕

   b. There must be no extra marks on the answer sheet. If you change an answer, completely erase your first mark.

   c. USE ONLY THE SIDE OF THE ANSWER SHEET MARKED "BC."

2. Complete the following information:

   a. LAST NAME: Print your last name in the boxes under "Last Name." Below each box, blacken in the circle that matches that letter of your name.

   b. SOCIAL SECURITY NUMBER: Print your social security number in the boxes under "Social Security No." Below each box blacken in the circle with the matching number.

   c. MALE OR FEMALE: Blacken the circle next to the appropriate sex.

   d. BIRTHDATE: Blacken in the circles next to the month and under the year of your birth.

4. SPECIAL CODES: Look at the box labelled "Special Codes." For each of the following questions, blacken in the circle in the appropriate letter column with the number in it that matches your answer.

Column A - Which of the following best describes your duty station?

0 = Air Squadron
1 = Amphibious Ship
2 = Carrier
3 = Destroyer/Cruiser
4 = Service Ship
5 = U.S. Shore Installation
6 = Overseas Shore Installation
7 = Submarine
8 = Tender

Column B - Choose the correct statement.

0 = I have never attended A-school.
1 = I dropped out of A-schoool.
2 = I am in A-school.
3 = I have graduated from A-school.

Column C - What work do you do most?

0 = Work in a rating
1 = Mess cooking
2 = Compartment cleaning
3 = Chipping paint & painting
4 = Other

Column D - Do you plan on completing your first enlistment?

0 = Definitely, yes
1 = Probably
2 = I don't know
3 = Maybe not
4 = No

Column E - Where are you stationed?

0 = I am on a ship (sub) that is deployed.
1 = I am on a ship (sub) that is seldom underway.
2 = I am on a ship (sub) that is in the yards.
3 = I am in a stateside shore installation.
4 = I am in a shore billet overseas.

Column F - Choose the correct statement.

0 = I am a petty officer.
1 = I am a designated striker.
2 = I am striking for a rating.
3 = I am not striking for a rating.

Column G - Are you in a special Navy program that will allow you to be discharged voluntarily before the end of your first enlistment?

0 = Yes
1 = No

Column H - How would you describe your job performance?

0 = Excellent
1 = Good
2 = Fair
3 = Poor

Columns I thru Q - If you are striking for a rating, or are rated, which rating is it?

COLUMN I	COLUMN J	COLUMN K	COLUMN L	COLUMN M	COLUMN N	COLUMN P	COLUMN Q
0 = AB	0 = AT	0 = CTA	0 = DT	0 = HM	0 = MM	0 = PC	0 = ST
1 = AC	1 = AW	1 = CTI	1 = EA	1 = HT	1 = MN	1 = PH	1 = SW
2 = AD	2 = AX	2 = CTM	2 = EM	2 = IC	2 = MR	2 = PM	2 = TD
3 = AE	3 = AZ	3 = CTO	3 = EN	3 = IM	3 = MS	3 = PN	3 = TM
4 = AG	4 = BM	4 = CTR	4 = EO	4 = IS	4 = MT	4 = PR	4 = UT
5 = AK	5 = BR	5 = CTT	5 = ET	5 = JO	5 = MU	5 = QM	5 = YN
6 = AM	6 = BT	6 = DK	6 = EW	6 = LI	6 = NC	6 = RM	
7 = AO	7 = BU	7 = DM	7 = FT	7 = LN	7 = OM	7 = SH	
8 = AQ	8 = CE	8 = DP	8 = GM	8 = MA	8 = OS	8 = SK	
9 = AS	9 = CM	9 = DS	9 = GS	9 = ML	9 = OT	9 = SM	

The following questions ask your opinions on policies, practices, morale, and fairness at your current duty station. Use the following scale to answer questions 1-44. Blacken in the circle under the letter that best matches your answer.

A	B	C	D	E
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

A sample question is given below.

A. I do a great deal of work.

If, for example, you AGREE with this statement, you would blacken in the circle under D on the answer sheet.

Begin with question 1 and USE THE "B" section of the answer sheet. Be sure the numbers on the answer sheet match the question.

SECTION ONE

1. I receive good counseling when I have problems.
2. Discipline is handed out with fairness.
3. The people I work with are friendly and easy to talk to.
4. The Navy makes use of my individual talents.
5. I have adequate chances for advancement.
6. I get a feeling of accomplishment.
7. I get credit for good work.
8. I enjoy most of the work I am assigned.
9. I have a significant and important job.
10. I have supervisors who let me know how well I am doing.
11. My immediate supervisor keeps me informed about things I need to know.
12. I have had or am getting the training to do my jobs well.
13. My supervisor does a good job of reviewing and following up on work done by my Division.
14. My supervisor pays attention to our suggestions.
15. Most people in my Division feel they have a good future in the Navy.
16. Members of my Division make a special effort to help each other get the work done.
17. My Command knows how we feel about general conditions.
18. People in my Division are strongly encouraged to develop new ways of doing things.
19. Changes are often made in my work procedures and I am usually not told why.
20. There is a high degree of work cooperation in my Division.

NOTE: Go to the top of the next column on the answer sheet to answer the next question, number 21. Be sure you are on side B.

21. The quality of work produced by my Division is usually high.
22. Members of my Division are generally treated fairly.
23. Good ideas from members of my Division are generally sent to the proper level for action.
24. The Command sees that people in my Division get all the credit they deserve for a good job.

A	B	C	D	E
Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree

25. I almost always know what results are expected from my work assignments.

26. My immediate supervisor usually does a good job of organizing and scheduling work.

27. My Division often quickly picks up new and better ways of doing things.

28. The on-the-job training given to members of my Division is generally very good.

29. My supervisor looks for and rewards new ideas and suggestions.

30. Morale in my Division is usually high.

31. In my job I must use a number of complex or high level skills.

32. I am left on my own to do my work.

33. Just by doing the work required by my job I can see how well I am doing.

34. My job is quite simple and repetitive.

35. Other people are affected by how well my job is done.

36. My job gives me the chance to use my personal judgment in carrying out the work.

37. My job gives me the chance to completely finish the pieces of work I do.

38. I would like to get more high school or college education on a part-time basis.

39. My job gives me the chance for independence and freedom in how I do my work.

40. My job is significant or important in the broader scheme of things.

NOTE: Go to the top of the next column on the answer sheet to answer the next question, number 41.

41. The amount of pay I receive is satisfactory.

42. The amount of fringe benefits I receive is satisfactory.

43. My work is stimulating and challenging.

44. It is important to me to have the chance to learn new things from my work.

45. It is important to me to have the chance for personal growth and advancement in my job.

46. It is important to me to have a feeling of worthwhile accomplishment in my work.

47. Problems at home are interfering with my life as a sailor.

48. My job itself gives me very few clues about whether or not I am performing well.

49. I would like to get more skills training for a Navy rating.

50. My recruiter promised me an "A" school.

51. I wanted to go to an "A" school when I entered the Navy.

52. I like (or would like) being deployed.

53. The striker board has been completely explained to me.

54. The quality of work performed by female enlisted personnel is high.

55. I would like to work with women in my rate.

56. I am bothered by the opinion civilians have of me as a military person.

57. My job is too physically demanding.

58. The men I work with are at least my social equals.

59. I do not like the Navy's custom of avoiding social relationship between officers and enlisted personnel.

60. I am accepted by the men I work with.

PLEASE TURN TO THE NEXT PAGE.

NOTE: Go to the top of the next column to answer the following questions. It is marked Section C.

1. As a person in the Navy, it is hard for me to meet civilians I would like to date.

2. I feel like I am really a part of the Navy.

3. My supervisor makes me feel that I am as important as the others in my Command.

4. I am given the same amount of responsibility as others in my rate.

5. I believe that Navy personnel are as strict with women as they are with men in matters of discipline.

SECTION TWO

For each of the conditions below, choose the letter which comes closest to describing your general living conditions at your present duty station. On the answer sheet answer each question by blackening in the circle under the appropriate letter.

6.	ODOR	A Unpleasant	B	C Average	D	E Pleasant
7.	NOISE	A Disturbing	B	C Average	D	E Not Disturbing
8.	VENTILATION	A Poor	B	C Average	D	E Good
9.	CLEANLINESS	A Dirty	B	C Average	D	E Clean
10.	SIZE	A Cramped	B	C Average	D	E Roomy
11.	NUMBER OF PEOPLE	A Crowded	B	C Average	D	E Uncrowded
12.	PRIVACY	A Non-	B	C Average	D	E Plenty

After you have answered all the questions, refold the answer sheet and the questionnaire ON THEIR ORIGINAL CREASES, place in the enclosed envelope and mail as soon as possible. In the event you have lost the return envelope, please mail the questionnaire and the answer sheet to the following address:

Commanding Officer
(Attn: Code 311JD)
Navy Personnel Research and Development Center
San Diego, CA 92152

Thank you very much.

APPENDIX E

REASONS GIVEN FOR SEPARATION DECISIONS

REASONS GIVEN FOR SEPARATION DECISIONS

Family or Personal Problems Back Home

"Because of my girlfriend. She's pregnant right now and I feel that I must be with her for now."

"I felt at the time that my family needed me more than the Navy."

"Mainly family problems. My wife couldn't adjust to the fact of having to move all the time."

"My father died and left me with a ranch to take care of."

Lack of Freedom and Independence

"There's not enough freedom, and the Navy thinks they own you, and you are like a robot doing what they say all the time."

"The fact that I feel I wasn't treated like a human being."

"I wanted to have more control over my life and make by own decisions."

"I cannot adjust to the military. I do not think it is one certain thing, just the military itself. I feel like a prisoner."

"I need my freedom. It's more important than anything you can offer."

Fairness (discipline, military justice, work assignments)

"I always lived in fear of disciplinary action for the slightest mistake."

"It's like going to prison for something you didn't do. No one listens. People always say ask someone else. Let's just say I've decided to be released from prison and become human again."

"There's a lot of injustice in my division, and there was nothing I could do about it. My outspoken ideas were not invited. I feel I could have stayed in another command."

Job-Person Mismatches

"The job I got in the Navy, Machinist's Mate, is not what I wanted."

"I wanted to do welding and carpentry, but the Navy gave me Boiler Technician."

"I came into the Navy thinking I was going to be a Communications Technician, and I wound up as a Sonar Technician, a rate in which I find little personal satisfaction or career interest."

"I wanted to become a Dental Technician, but the day I went to classification they said I was a Fireman Recruit, and gave me five choices I didn't want. My recruiter wasn't very truthful."

"The main reason I'm leaving the Navy is that I was cheated out of the Electronics Rating I was promised on my contract to join the Navy."

Dislike or Lack of Interest in Navy Jobs

"I'm not going to spend four years doing something I hate."

"Not getting the opportunity to use my skills as often as I thought was necessary. No sign of learning about the electronics of the equipment. This along with living conditions, attitudes of crew members, food, etc."

"The main reason I am leaving the Navy is that I am not doing what I want to do. Also I feel I am not doing my best due to the negative attitude of the environment. The negative attitude of the average sailor is what I am talking about."

"When I came into the Navy, I saw a chance of picking up a decent trade. Chipping paint for four years? This field was nothing more than doing various types of such jobs."

"The only tools I have had in my hands are sponges, paint brushes, and scrapers. I guess it wouldn't be half as bad, if I was treated like a person."

"The Navy people not caring how well the job was done, and not offering a helping hand. Tired of being a janitor."

Living Conditions

"Didn't like the hours, or conditions for working, and most of all the rules and regulations."

"I can't stand being out at sea."

"It is mainly the fact that I didn't want overseas duty nor to be on a ship away from home a great length of time."

conditions of working were very nasty and carried communicable diseases. Didn't join the Navy to work around sewer waste."

"The working hours are too long, conditions are dangerous; the lack of medical availability at sea."

"The fact that the submarine I was stationed aboard was in the yards, has been for three years, and morale of the crew is very low, which in turn swayed my decision to leave; also no feeling of accomplishment."

The Separation Option Itself

"I would have stayed in, except it was too easy to get out."

"I have been in for over six months, and will receive my VA benefits. There is very little personal reason for me to stay in. I came in to get the GI bill, and I will get it. I am going to college when I get out."

"Upon being notified I was under the pilot program to test voluntary separation, the desire to return to more peaceful surroundings, and start over again became overwhelming."

"The opportunity was put in front of me, otherwise I would not have. I feel this eligibility ruined my motivation."

"I have 185 days active service which gives me the VA benefits. That's what I wanted and have, thus there was no need for receiving training."

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