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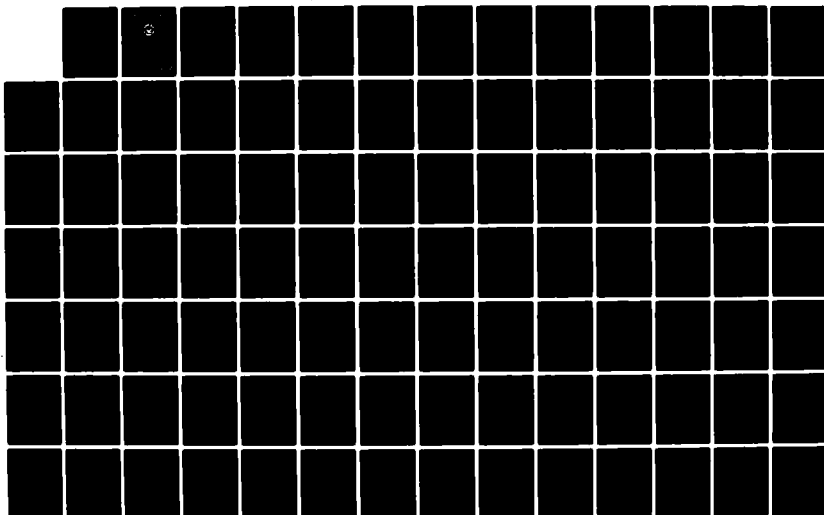
FACTORS INFLUENCING THE CAREER ORIENTATION OF JUNIOR
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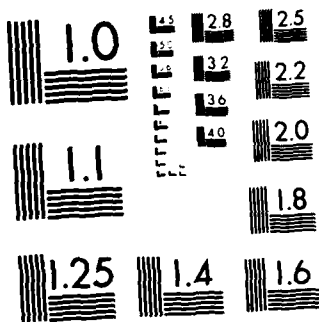
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NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

FACTORS INFLUENCING THE CAREER ORIENTATION
OF JUNIOR OFFICERS IN THE UNITED STATES NAVY

by

Wesley Henry Schmidt, Junior

December 1982

Thesis Advisor:

G. W. Thomas

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
	AD-A126631	
4. TITLE (and Subtitle)		5. TYPE OF REPORT & PERIOD COVERED
Factors Influencing the Career Orientation of Junior Officers in the United States Navy		Master's Thesis; December 1982
6. PERFORMING ORG. REPORT NUMBER		
7. AUTHOR(s)		8. CONTRACT OR GRANT NUMBER(s)
Wesley Henry Schmidt, Junior		
9. PERFORMING ORGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
Naval Postgraduate School Monterey, California 93940		
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE
Naval Postgraduate School Monterey, California 93940		December 1982
13. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES
		136
		14. 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)		
Manpower Models Retention Naval Officer Retention Junior Officers		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		
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#20 - ABSTRACT - (CONTINUED)

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S/N 0102-014-6601

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Factors Influencing the Career Orientation
of Junior Officers in the United States Navy

by

Wesley Henry Schmidt, Junior
Lieutenant Commander, United States Navy
B.S., United States Naval Academy, 1972

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL

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ABSTRACT

This thesis develops and tests a working model to analyze the career orientation of the junior military officer. In particular, the influence of Navy personnel policies on junior officer career orientation is explored. There are 5 variable categories in this model. The model shows that the variables which measure the individual's overall satisfaction with Navy life are the most influential. The model explains over 40% of the variance in the career orientation among junior officers with more than two and less than ten years of active duty. For two specific subsets of these officers, 60% of the variance in career orientation is explained. Additionally, several conclusions are developed regarding the influence of commission source, perception of alternative job opportunities, an officer's position within his period of obligated service, and his satisfaction regarding the intrinsic and extrinsic aspects of his military job on the career orientation behavior of junior officers in the United States Navy. Knowledge of the relative influence of the variables in this model will provide manpower planners with information needed to evaluate the success of personnel policies designed to increase junior officer retention.

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I. INTRODUCTORY MATERIAL

A. INTRODUCTION

Manpower issues in the all-volunteer military have assumed an importance in defense planning and budgeting that was unforeseen just ten years ago. Between 1970 and 1980 the number of personnel in the United States Armed Forces serving on active duty decreased by 33%, but the budget outlays for the military personnel payroll increased from \$23 billion to \$30 billion per year, an increase of 33% [Bureau of the Census, 1981, Table 533]. In addition the budget outlays for the military retirement system increased by 325% in the same period of time [Office of Actuary, 1981, Table 534]. The costs involved in the training of a surface warfare qualified lieutenant run close to \$250,000 and the government's investment in the training of a qualified naval aviator has been estimated to be well over \$500,000 [Koehler, 1980]. Because of the growing cost and complexity of the weapons systems being introduced into the fleet, the officers who man and manage these systems must receive additional training to be effective supervisors of the operators and maintenance personnel. The cost of "post-commissioning" officer training, conducted prior to the officer's ever reporting for duty in an operational environment has increased fivefold in the past ten years [U.S. House of Representatives, 1981].

Navy manpower planners expected that, because of the "draft free" environment, future naval officers would be

accessed as "sincere," as opposed to "draft-induced," volunteers and that a larger percentage of them would be inclined to remain on active duty for a twenty year, or longer, career [Derr, 1980]. With a larger proportion of the accessions predicted to remain for a career, it was assumed that fewer individuals would have to be taken in at the entry level to maintain the upward flow of junior officers required to fill the middle grade officer ranks. Officer manpower accession policies were changed to take advantage of officer continuation rates which were projected to be much higher in the future than the continuation rates for junior officers experienced in the pre-AVF Navy [Eggleson, 1981]. Sharp reductions were made in the numbers of junior officer accessions from manpower pools such as the Officers Candidate School and the Reserve Officer Candidate Program [La Fleure, 1982]. These programs had traditionally been used to fill the short falls in the required numbers of junior officers produced by the Naval Academy and the Reserve Officer Training Corps scholarship programs.

Although the Navy has continued to attract more than enough volunteers to fill the quotas set by manpower planners, the continuation rate for junior officers has not increased to the expected higher levels [Eggleson, 1981]. Young Americans in the "post-draft" AVF era have confounded Navy policy makers and manpower planners by continuing to behave much like their predecessors, leaving the officer corps at about the same historical rates [Murphy, 1982].

The officer manpower problems facing the Navy will require the development of broad strategies for the future as well as specific solutions for the problems of today. To analyze the adequacy of both current and future officer management policies requires that better insight be gained into which factors influence the way that junior officers make decisions about their navy careers. A deeper understanding of this career decision making process would contribute to a better general understanding of the manpower problems confronting the Navy. This information would be very helpful in identifying areas for future policy initiatives to improve junior officer continuation rates.

B. BACKGROUND

One result of the failure by the Navy to retain a greater proportion of its junior officer input was the development of severe, and somewhat unexpected, shortages in several naval officer warfare communities by the 1978-1979 time frame [Hanson, 1979]. Even in 1982, with fairly competitive pay levels and high levels of civilian unemployment, the Navy is retaining only the minimum ranks in the future [Op-136D2a Briefing, 1982]. Well over half of the junior officers in the Navy who reached the end of their obligated service in 1981-1982 have left the Navy [OP-136D2a, 1982]. In the private sector the effects of organizational turbulence caused by high rates of employee turnover can be somewhat mitigated by the use of lateral entrants from the available job market. In the

military, however, the use of lateral entrants is restricted and the process of developing a replacement for each officer who resigns is a very expensive and time consuming process. Because of the "agricultural" nature of obtaining personnel for the Navy's rank structure (entry into the organization is usually allowed only at the lowest rank and officers "grow" within the system), the number of junior officers who continue in the Navy for a 20 year career has very serious implications for future manning levels within the rank structure.

Studies of the junior officer retention problem have been initiated in recent years by the Navy Department, but most of these studies were designed to determine the programs required to address low junior officer continuation rates in specific warfare communities like the aviation officer [Kleinman and Zuhoski, 1980] and surface warfare officer community groups [Holzback, 1979]. The Navy's effort at studying the factors influencing the career choice process of junior officers has been largely "reactive" in nature, with awareness of shortages of middle grade officers due to low junior officer continuation rates being followed by an intensive search for palliative solutions which are quick, attainable, and economical. The consequences of this bandaid approach to the problem of low junior officer continuation rates has been that no clear picture of possible global factors which may influence the general career orientation of junior officers in the Navy has

been made available to Navy manpower planners. Efforts to quantify the factors which influence continuation rates within the Navy have mostly focused on the enlisted force because of the ease with which enlisted personnel can be divided for study into "leavers" and "stayers."

Although basic theories of labor supply and motivation are the same for officers and enlisted personnel, the higher education levels, the greater amounts of human capital investment, and the different civilian employment opportunities expected by Naval Officers suggest that there may be different sets of factors which affect continuation within the officer community in general and also within specific officer specialty groups. The enlisted person signs an enlistment contract for a specific period of service. Due to the contractual nature of this agreement between enlistees and the government, enlistees know the exact date upon which they will be released from the Navy. On the other hand, an officer holds a commission and serves "at the pleasure of the President" for an indefinite period. The decision involved in resigning one's commission--terminating a career in the Navy--especially for those holding a regular commission, is presumed to be quite different from the enlisted person's decision to not continue in the Navy.

Under normal circumstances, to leave the service prior to retirement eligibility, defined as completion of twenty or more years of active service, an officer holding a regular

commission must submit a letter of resignation through the chain of command, stating his reasons for requesting separation from the service. This is presumed to be a much different decision process than that of the enlisted person, who must commit a conscious, positive act (the signing of a new contract) to remain in the service. By doing nothing, the enlisted person allows the enlistment period to expire and the enlistee automatically leaves the service. In contrast, by doing nothing the officer automatically continues in the service as an officer.

A review of the content of officer resignation requests pending in 1982 showed that most letters of resignation give family separation as the primary reason for desiring to leave the Navy, with a desire to pursue a career in the private sector, and inadequate compensation as the other major factors which have influenced the career decisions [White, 1982]. The top five categories of reasons given by junior officers in letters of resignations are shown in Table 1. They are grouped according to the number of times the categories were mentioned in letters of resignation submitted in FY 1982.

Data about why officers choose to leave the service are gathered in a much more specific form from the confidential Officer Separation Questionnaires. Each officer who leaves the Navy is requested to fill out one of these questionnaires and mail it directly to OP-136 for analysis. The questionnaire

TABLE 1

Major Reasons for Resignations
(As given in Letters of Resignation)

1. Too Much Family Separation--Caused by deployments or an unreasonable work schedule.
2. Pursue a Career in Private Industry--Either one more lucrative or more challenging.
3. Inadequate Compensation--Felt pay in general inadequate or pay for work performed was not sufficient compensation.
4. Lack of Personal Time Off--Caused by crisis management or excessive working hours.
5. Lack of Organizational Responsiveness to Personal/Career Needs/Desires--Failed to get desired/required duty assignments due to "needs of the Navy."

Source: LT K.A. White, USN, NMPC-213c, 1982.

asks the officer to mark, on a scale of 1 (extremely important) to 5 (not true or of no importance), the amount of influence which each of thirty listed factors may have had on his or her decision to leave the service. There is also a space at the top of the form for the officer to make additional comments as desired about why he or she is leaving the Navy.

Tables 2 and 3 each provide a list of the top ten factors which junior officers listed as significantly influencing their decision to leave the Navy. The two tables provide a comparison of the reasons for resigning given on exit surveys by officers who left the service in 1979 (before the military compensation increases of 1981) and in 1982, after the increased pay tables had been implemented. It is interesting

TABLE 2

Results of 1979 Exit Surveys*
(Listed in order of mentioned as most important)

1. Family separation.
2. Inadequate pay and allowances (tie for second place).
Too much crisis management.
3. Long or extended deployments.
4. Navy impinging upon personal life.
5. Possible erosion of benefits.
6. Unable to plan or control a career.
7. Suppressed initiative, creativity or professional stimulation.
8. Billet/task dissatisfaction.
9. Insufficient managerial/leadership qualities of superiors.

*Note: Data from NAVPERS 1920/3 (Rev. 4-79) in use from
Apr 79 to Oct 80.

Source: OP-136D2a

that in 1982 "inadequate pay and allowances" ranked 17th, having fallen from the number two reason in 1979, as a factor in the career decision process for junior naval officers leaving the service.

C. CURRENT PROBLEMS

Department of Defense sponsored studies on why people join or avoid military service have contributed to our understanding

TABLE 3

Results of 1982 Exit Surveys**
(Listed in order of mentioned as most important)

1. Too much family separation.
2. Too much crisis management.
3. Demands of the Navy impinging upon personal life.
4. Job dissatisfaction.
5. Suppressed initiative, creativity, or professional stimulation.
6. Insufficient managerial/leadership qualities of superiors.
7. Lack of recognition for accomplishments/self-respect.
8. Poor utilization of abilities, skills or education.
9. Unable to sufficiently plan and/or control career.
10. Long hours and work pressure.

**Note: Data from OPNAV 1910 (7-80) in use from Oct 80.

Source: OP-136D2a

of both positive and negative attitudes by young Americans toward military service. Unfortunately, they are like most marketing studies done by large institutions in that they focus too much on what incentive packages "sell" the Navy best. Policy choices made on this level of research may have helped to foster the notion that military service is just another occupation [Stephens, 1982, p. 482]. Recent studies of junior officer retention have also taken a distinctly

"economic" approach, seeking to provide Navy manpower planners and policy makers with easy answers to the hard questions about retention policies. These studies provide a "solution" to the problems of low junior officer continuation rates by calculating the minimum amount of pay or bonus money necessary to retain the desired numbers of junior officers in the Navy. Because money is a tangible factor, and one which can be quantified, military manpower managers are presented with the cost of retaining people "on the margin." The studies are not really studies of retention factors, but of what amount of pecuniary incentive is required to overcome the negative valence of other factors that come into play during the career choice process. The development of almost chronic shortages of junior officers in the Navy since 1975, in spite of relatively significant compensation increases, has served to demonstrate how very little is really known about the factors influencing the career orientation of the junior naval officer.

D. PURPOSE

Each service must deal with the junior officer manpower problem within a framework of compensation and personnel management programs mandated largely by the Congress. Is it reasonable, therefore, to assume that simply addressing the pecuniary aspects of the officer retention picture is the most effective, as well as the least expensive, technique for improving continuation rates? New management techniques, on both the micro and macro scales, for adjusting career patterns,

and changing officer promotion and distribution policies may be much more viable as officer community management tools. The Navy personnel management system may need to develop options which will allow it the flexibility to deal more effectively with junior officer aspirations and expectations, especially at the critical time during which the junior officer is making a career choice. This may, or may not, be at the time of completion of minimum service requirement (MSR), a traditional division point between the career and non-career officer. Historically, when an officer remained on active duty past his minimum obligation requirement he could be considered to be a career officer. Studies have indicated that the junior officer will make a career decision as early as the third year of active duty [Cook, 1982; Shenk, 1970].

Major officer manpower questions are whether the junior officers in each skill group (designator community) are different enough in expectations and attitudes from each other so that the retention effort should be approached from a community specific standpoint, at what point in time the junior officer is most likely to make his career decision, and what factors seem to most influence his decision about career orientation.

This thesis studies the factors which influence the career-decision making process of junior officers in the Navy. Individual factors, and specific combinations of factors, determined to be most influential in the career decision process of the

junior officers in operationally oriented (i.e., pilots, surface warfare officers, submarine officers) designator groups are investigated to determine which are most influential predictors of career orientation. If these factors can be determined, policy makers may be able to use the information as a management tool to develop policies designed to influence junior officers to remain in the service. Additionally, the specific timing of the career decision process for junior officers is studied to determine if there is an identifiable term of tenure during which the junior officer makes his career orientation decision. The findings of this thesis should contribute to the understanding by Navy personnel managers and policy makers of the factors which influence the career choice of the junior officer. By understanding what patterns of variables influence the junior officer as he moves through his career-decision process, various policies can be developed to increase retention in the junior officer communities.

II. REVIEW OF LITERATURE AND THEORY

A. GENERAL TURNOVER RESEARCH

More than a dozen articles have been published over the past 25 years which have reviewed and/or summarized work in the field of job turnover [cf. Steers & Mowday, 1981; Mobley, Griffith, Hand & Meglino, 1979]. Researchers have demonstrated that, although there is a clear relationship between job turnover rates and the aggregate level of economic activity, levels of employment, and the numbers (or rates) of job vacancies [Armknrecht & Early, 1972; Forrest, Cumming & Johnson, 1974; Price, 1977; Woodward, 1975-1976], such information contributes little to understanding the turnover decision of the individual [Mobley, Griffith, Hand & Meglino, 1979].

Potter, Steers, Mowday & Boulian (1979) found a moderate and consistent relationship between job satisfaction and the propensity to remain with an organization based upon research done by Brayfiels & Crockett (1955), Herzberg, Mauser, Peterson & Capwell (1957), Vroom (1964), and Porter & Steers (1973). This relationship, however, usually accounts for less than 16% of the variance in job turnover rates [Locke, 1975; Porter & Steers, 1973]. Smith, Kendall & Hulin (1969) used a job descriptive index to develop five aspects of job satisfaction they considered to be highly predictive of job turnover. These aspects were (1) supervisors, (2) co-workers, (3) work, (4) pay, and (5) promotion. Farris (1971) also found consistent

relationships between these individual components of job satisfaction and the propensity to remain with an organization.

Other factors which have been offered as explanations for turnover have involved constructs of organizational commitment [Porter, Crampon & Smith, 1976; Porter, Steers, Mowday & Boulian, 1974; Steers, 1977], organizational attachment [Koch & Steers, 1978], role attachment [Graen, 1975; Graces & Ginsburg, 1977], behavioral intentions [Kraut, 1975; Mobley, 1977; Newman, 1974; Fishbein, 1967], the actual, or perceived, existence of alternative job opportunities [Mobley, et al., 1979], and various demographic factors, such as age, tenure, sex, family size, etc., as discussed by Steers & Mowday (1981). Some evidence also exists that stated intention to remain with the organization, a component of commitment, is strongly and inversely related to turnover [Hutchison & Lefferts, 1972; Kraut, 1970]. Muchinsky and Tuttle (1979) used several categories of predictors in a study of job turnover. The four factor categories which predicted turnover propensity most consistently were biodata information, personal factors, attitudinal factors, and work related factors.

Building on the work of Lawler (1970), Hoiberg and Barry (1972) found that attrition was significantly correlated with expectations and perceptions, concluding that when expectations were markedly different from the actual experience dissatisfaction will build, contributing to attrition. Hoiberg and Barry found evidence, requiring more research, suggesting a

strong link exists between the individual's perception, and evaluation, of available alternatives relative to his present job situation and the turnover decision. In addition, Mobley, et al., (1979) identified the existence of alternative job prospects, the intention to look for another job, and the intention to actually change jobs as important elements in the actual turnover process.

There is also some evidence of the development of an increasing difference between the value systems held by younger and older Americans [Bell, 1975; Miner, 1971 & 1974; Taylor & Thompson, 1976; Yankelovich, 1974], with younger workers holding fewer of the traditional work values. Stahl, McNichols, and Manley (1980) found that junior officers and senior officers were significantly different in their attitudes toward career intent, job satisfaction, perceived prestige, individual rights, technical competence, and occupational versus institutional attitudes. Emerging cultural trends may include a changing definition of success. "Self-realization" and "fulfillment" values, as opposed to simply the traditional pecuniary or aggrandizement values, may be an important part of the measures of success held by younger workers [Korman, Greenhouse & Baldin, 1977]. These personal values, generally neglected by many researchers as specific ingredients in the job motivation equation, have been more recently included in research as a component of job attitudes [Brown, 1976; Connors & Becker, 1975; Herzberg, 1974; Mankoff, 1974]. At least two

recent studies have specifically included the relationships between the employee's personal value system, job attitudes, and the organizational reward system with the turnover process. These studies concluded that large organizations, such as the United States Navy, must be more creative in developing and implementing new fundamental career development policies [Ronen, 1978; Derr, 1979].

B. MILITARY RETENTION RESEARCH

Fitzgerald (1964) demonstrated that the method used by the Navy in the early 1960's for determining the reasons behind junior officer resignations was not accurate or valid [Hewitt, 1980] and suggested the application of utility theory to develop a model for predicting which junior officers were likely to resign. Fawcett and Skelton (1965) compared retention between naval officers, then at 8.8%, and Pacific Telephone and Telegraph executives with less than ten years of service with their respective organizations. They studied the factors of salary structure, retirement, fringe benefits, promotion opportunity and specialization, prestige, job satisfaction, security, and education. The prime factor which predicted resignations by naval officers, and which was not present for the PTT executives, was the long period of time spent at sea and the associated additional costs of maintaining a household while at sea. They recommended increased pay (both basic pay and sea pay), increased fringe benefits, better medical benefits, and efforts to increase time spent with families while in homeport as initiatives to increase retention.

Harsh (1965) conducted a study for the Chief of Naval Operations to explore the factors of personal background and Navy experience which might be related to officer retention. He was also tasked to evaluate the possible effectiveness of various fringe benefits and officer management policies in encouraging longer active duty careers. The results of his study were proposals for an immediate increase of 20% in Base Pay, a compensation package equal to that enjoyed by the Civil Service, government scholarships of \$1,000 per dependent child per college year, sea and shore specialization, improved BOQ/Navy Housing, and 4-6 years of homeport continuity. The study also recommended the revision of selection criteria for officer candidates, having found that retention was related to the seeking of responsibility, advanced education, job security, challenge and risk, as well as wanting to serve one's country, belong to a high principled group, have respect of co-workers, and receive fair treatment.

The Secretary of the Navy's Task Force on Navy/Marine Corps Personnel Retention (1964-1965) identified officer promotion opportunities, officer distribution and management, officer education and training, living conditions afloat and ashore, dependent medical care, pay, and perceived erosion of fringe benefits as having a negative effect on officer retention. Apgar (1956) reported that the major reason, given in open ended interviews by junior officers, for leaving the service was poor leadership on the part of the immediate supervisor and

superior officers of middle ranks. Job dissatisfaction (caused by make-work activities and "paper pushing") was the second most cited cause of leaving the military. The study concluded that pay was not a significant factor in the junior officer career decision process but that the loss of "fringe-benefits," once considered a most favorable aspect of military service and perceived by the resigning junior officers to be almost non-existent, was found to be a major underlying factor in the decision to leave. Githens (1966), in a major study of commissioned Naval Officers found that those factors dealing with personal growth or the content of the work itself were the major factors influencing the career orientation of the junior officer. Factors involving the context of the work (travel, work schedule, pay, retirement, social prestige) rather than the work itself (full use of abilities, feelings of accomplishment, success through ability alone, consistent and intelligent personnel policies) were less important in the prediction of career motivation among junior officers. What turned out to be most significant, however, was the degree to which the junior officer perceived that the desired job content factors were actually obtainable. These findings were supported and expanded upon in a study by Newman, Abrahams, and Githens (1972) which explored the values of the junior officer, and the relationship between career values and retention. The researchers found significant differences between high and low tenure officers in both the importance attached to career variables and the perception of obtainability of career variables.

The two tenure groups differed in respect to perceptions of job context, use of abilities, satisfactory home life, and belief that they could succeed in the military on their ability alone.

Job dissatisfaction, separation from family and limitations on the opportunity for both promotion and increased responsibility were found by Sherk (1970) and Derr (1979) to be significant in influencing junior officers to make the decision to leave the service. In addition, it was found that those indicating an attitude, either favorable or unfavorable, toward military life upon entry to the officer corps were unlikely to change their attitudes. For those officers who had entered the military undecided upon a career, this includes a majority of the junior officers, the greatest changes in attitude about their commitment to a career took place within their first three years of commissioned service. The results of the study were that career orientation appeared to be influenced by source of commission, grade point average in college, and perceived utility of the work done during the first two tours. Culclasure (1971), in a University of Michigan study which affirmed the importance of early career experiences in determining career orientation, also found that officers who feel that their skills have been properly utilized are more likely to become career committed than those with negative views regarding utilization of their skill potential.

Proctor, Lassiter & Sayars (1976), in a study of junior naval officer retention, approached the problem by studying

"stayers" rather than the "leavers." They developed a model to predict junior officer retention which used two major factors as predictor values. These factors were values for Officer Job Proficiency, determined by averaging grade values on an individual's Officer Fitness Report Forms, and measures of "Organizational Climate." The measures of Organizational Climate were determined by asking junior naval officers to fill out a forty question "organizational climate audit," evaluating their command's organizational image and systems of upward influence-downward involvement, mutual support, encouragement of initiatives, rewards, and recognition. They found that the intrinsic characteristics of the immediate job environment had the most influence on the junior officer career decision process and that extrinsic factors were of secondary importance. Young officers who like their immediate organizational environment, and whom the organization believes are performing well, have a greater probability of remaining with their organization than those who perceive the immediate organizational climate to be negative.

Robertson and Ross (1979) studied unrestricted line officers from five commissioning sources and found that type of assignment, college education major and commission source were all strongly associated with officer retention. This work was followed by research using source of commission [Holzback, 1979b] and first two tours of duty as predictors of junior officer retention [Weitzman & Robertson, 1979].

Weitzman and Robertson developed a "Source-to-Assignment" matrix which would allow manpower planners to easily determine retention outcomes for various assignment patterns of newly commissioned officers. The information from the matrix was designed to be used as the basis for future officer allocation systems and provide manpower planners with retention probabilities for different junior officer communities based upon the junior officers' first two duty stations. Derr (1980), in a study made as part of the Organizational Effectiveness Research Program for the Office of Naval Research, found that (1) Poor career benefits, (2) Family separations, (3) Loss of esteem for the Commanding Officer's role, (4) Perceived "greener pastures," (5) Poor working conditions, and (6) Money were the six major factors associated with the junior officer's decision to resign.

Otto Grusky (1979), in his study of comparing the level of military commitment of the officers in the Royal Air Force and the United States Air Force, found that amount of education and level of military commitment were inversely related. He was also able to differentiate between the "manager" type officer and the "heroic" type officer using the "institutional-occupational" model hypothesized by Moskos (1977). Grusky's research was supported by the later findings of an empirical study [Stahl, McNichols & Manley, 1980] of the Moskos "Institutional-Occupational" Model, concluding that the model was not a zero-sum relationship as suggested by Janowitz (1977).

There were, however, a very large number of officers who fell into either the "manager-hero" category or the "hero-manager" category along the continuum between the purely occupational ("manager") type officer and the purely institutional ("heroic") type officer. This research was important because it validated the hypothesis that it is possible to be both highly committed to the military as an institution, and to its time-honored norms and values of self-sacrifice, while at the same time being concerned for personal technical expertise, financial security, and the rights of the individual.

More recently studies have tended to be community specific and directed at predicting the response by junior officers to specific levels of pay or amounts of bonus money as a factor to keep them from resigning. Two studies involving aviators, Navy Pilot Attrition [Kleinman, & Zuhoski, 1980] and Career vs Non-career Naval Aviators [Rickus, & Ambler, 1958], found that pay was a major factor related to the decision to resign from the Navy. The studies included projections and recommendations for increasing the rate of junior officer retention by increasing incentives in several forms. The studies were specifically commissioned to develop a Navy approach to the immediate problem of junior officer shortages in this specific officer group. These studies deal only with a highly trained community, members of which possess skills that are directly transferable to the civilian economy and which are much in demand. The findings of these studies may not, therefore,

be valid for the population of junior officers in general. Holzback (1979) studied junior Surface Warfare Officers and determined that intrinsic aspects of the officers billet were the best predictors of his career orientation and a study of why mid-grade Surface Warfare Officers were resigning [Hewitt, 1980] reported that family separation was the major reason for the decision by these individuals to resign. Other factors in the resignation decision process of junior Surface Warfare Officers were lack of job satisfaction, lack of recognition for outstanding performance, crisis management and the perception of declining leadership/managerial ability of superior officers. Noteworthy is the fact that neither of these two studies concluded that low pay alone was a significant factor, but that insufficient levels of compensation aggravated already marginal retention situations.

C. TURNOVER MODELS

When compared to the research into identification of the individual variables which are important factors in the turnover decision, research which includes the testing of models of the turnover process has lagged far behind [Arnold & Feldman, 1981]. A number of researchers [Forrest, et al., 1977; Locke, 1976; Mobley, 1977; Porter & Steers, 1973; Price, 1977] have advocated the advancement of the research effort from simple bivariate correlations to formulation and evaluation of more complex multivariate conceptual models of the turnover process [Mobley, Griffiths, Hand & Meglino, 1979].

Most of the models of the turnover process which have been developed, deal explicitly or implicitly, with the variables cited by researchers as being major factors in the turnover decision process. They differ, however, in their posited causal ordering. One of the first turnover models [Mobley, Horner, Hollingsworth, 1978], illustrated in Figure 1, posited a sequence for predicting the interrelationships of the factors involved in the process as follows:

1. Individual Differences, Job Satisfaction, and Probability of finding alternative employment (simultaneously).
2. Thinking of quitting.
3. Intention to Search.
4. Intention to Leave.
5. Turnover.

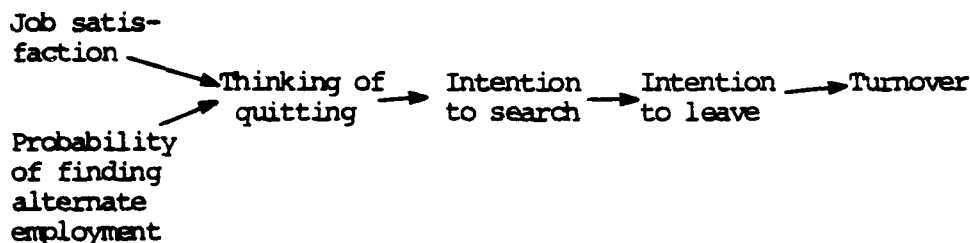


Figure 1. Mobley, et al., Model (1978)

In evaluating the Mobely, et al, model (1978), Miller, Katering & Hulin (1979) found that they could collapse the seven variable groups that Mobely et al., studied, into four much more general constructs as follows:

1. Withdrawal behavior (turnover).
2. Withdrawal cognition (intention to quit, intention to search, thinking of quitting).
3. Job satisfaction.
4. Career mobility (age, tenure, probability of finding an acceptable alternative).

In doing so they developed a more general model of the turnover process illustrated in Figure 2.

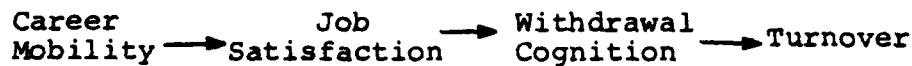


Figure 2. Miller Katering Hulin (1979) Model

Following further research and evaluation of the Mobley, et al., (1978) model, Mobley, Griffen, Hand, and Meglino (1979) proposed a new model, illustrated in Figure 3, posited upon individual values. Because they theorized that the relationship between unemployment levels and turnover rates, already well established [Ammknecht & Early, 1972; Price, 1977; Woodward, 1975-1976] added little to the understanding of the individual turnover decision, economic and market conditions and job expectations were used as intervening factors between the individual's affective responses to his job situation and the individual's intention to both search for a new job and quit his present position. By using these variables as intervening variables, they have attempted to develop a "linking mechanism" that would give more consideration to individual

perceptions, and evaluation of available alternatives relative to the individual's present position, than had been provided in their previous model.

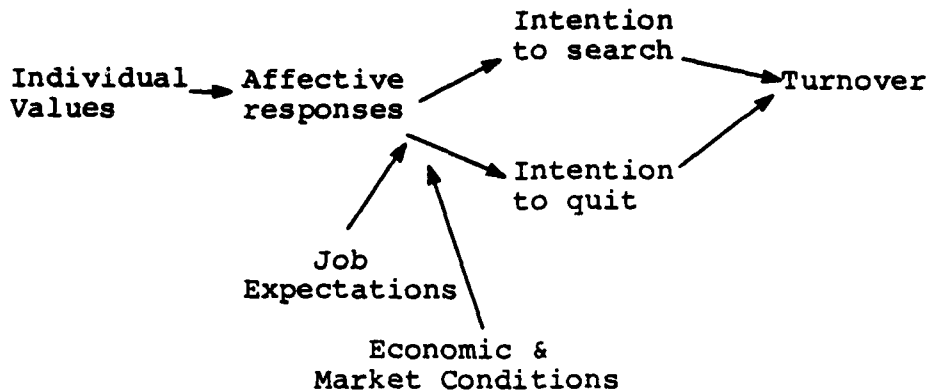


Figure 3. Mobley, et al., Model (1979)

Building on this work, Steers & Mowday (1981) developed a model, shown in Figure 4, posited upon job expectations and individual values. Alternative job opportunities, economic and market conditions and the individual variance variables were posited to be exogenous factors influencing job expectations and personal values, but not actually be a part of the turnover prediction equation. Additionally, this model uses intention to leave and disregards the intention to search variable.

In their model of the turnover process, Arnold & Feldman (1982) first summarized the interrelationships of key variables in the turnover literature. Consistent with previous

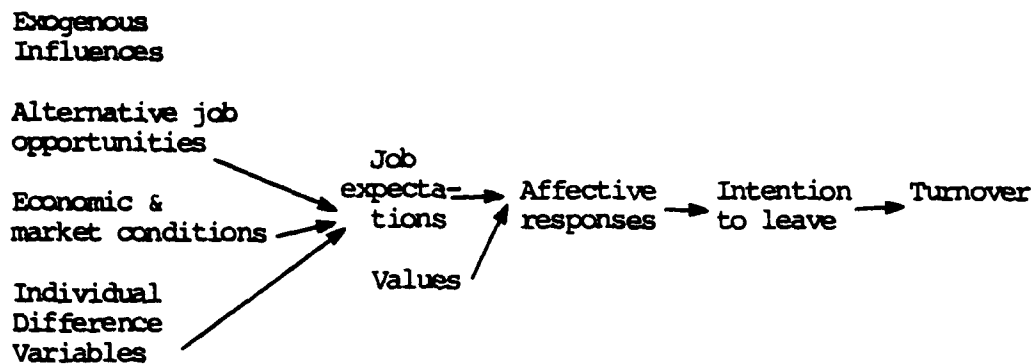


Figure 4. Steers & Mowday Model (1981)

conceptualizations of the turnover process, they first hypothesized a model of turnover as shown in Figure 5. Their posited model includes perceptions of job security and intention to search for alternatives directly in the turnover equation. The perceived presence of alternatives is assumed to intervene in the equation before the effect of the individual's intention to leave present position.

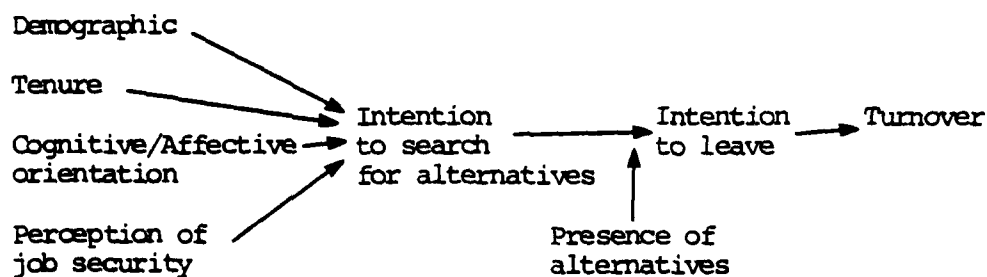


Figure 5. 1st Arnold & Feldman Model

Following data analysis, however, the model was revised to its final form as shown in Figure 6. Arnold and Feldman

found that turnover behavior was more strongly related to intentions to search for alternatives than intention to change position when factored in with a combination of age, organizational commitment, and job satisfaction. In addition, their experiment determined that tenure, intention to search for another job and perception of job security were the major factors directly influencing the turnover process.

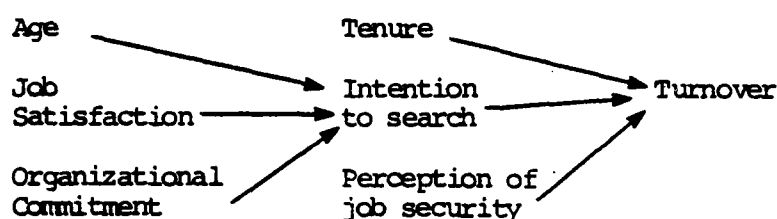


Figure 6. Final Arnold & Feldman Model

Most turnover related research has concentrated on adding to understanding of the factors which differentiate between leavers and stayers in organizations. These factors have been included in various models that attempt to predict when individuals will leave and which individuals will remain with a particular organization. Very little research has been conducted which attempts to discern the dynamic temporal aspects of the career orientation decision of low and medium tenure individuals. The model hypothesized in this thesis is applied to homogeneous groups of junior officers in distinct length of service cells to control for the effects of tenure. It

is proposed that the changes in the relative importance of the variables included in the model for each tenure cell will help to understand the progression of the junior officer's career orientation development process.

III. RESEARCH OBJECTIVES AND METHODOLOGY

A. RESEARCH OBJECTIVES

The major objectives of this study were to develop and test a model which could be used to explain the career orientation of junior officers and, using the model, to study the influences of policy variables in the career orientation of the junior officer. Major questions of interest included:

How do the factors affecting career orientation vary at different longitudinal decision points?

How important is the role of net expectations in the career orientation decision process?

What difference, if any, does commission source make and, if significant, at what point does commission source cease to be a factor in the career decision process?

How does career orientation change with the individual's approach to completion of minimum service requirement?

What role does the individual's family circumstances, especially the level of the spouse's income, play in the career orientation process?

How important are the intrinsic and extrinsic factors of working conditions to the decision to remain in the service?

A total of five groups of junior officers in two different categories were studied. The categories were those still within their period of initial obligation, and officers who were serving past the expiration of their initial service obligation. The officers within these categories were then grouped according to number of years of active duty and length of remaining obligated service.

Because recent research has indicated that officers are influenced strongly by their first two operational tours [Weitzman & Robinson, 1979], two groups of officers who were still within the period of their minimum service requirement (MSR), but with enough time in the service to have actually reached an operational environment were studied. These two groups were one group of individuals with three years of active duty and more than one year, but less than three years, of remaining obligated service, and another group having between four and six years of active service and who were within their last year of obligated service. A third group of officers, all of whom had completed their period of MSR, and who had more than seven but less than ten years of active duty, were included in the data analysis to provide a contrast and further test the model. In addition, in order to keep the sample as homogeneous as possible, only officers in the operational designator community, as defined in the section on sample stratification, were included in the study.

B. METHODOLOGY

1. Model of Turnover Process

This thesis applies the research techniques of multivariate analysis of the determinants of job turnover to develop and test a model to explain the career orientation of the junior officer. A conceptual model of the process of career orientation, initially posited as shown in Figure 7, was tested using the responses made by naval officers to the 1978

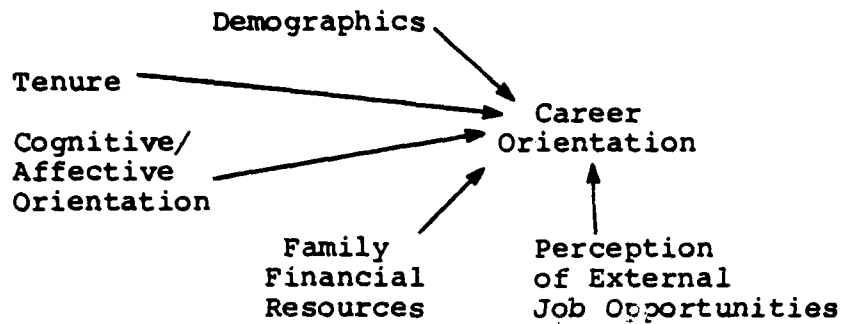


Figure 7. Hypothesized Model of Career Orientation Process

"Survey of Officers" and Enlisted Personnel in the Department of Defense," administered by the Rand Corporation. The variables used in the model to predict career orientation are groups in the following factor categories:

1. Demographic--Biographical information which allows the respondent to be placed in various groups for analysis.
2. Tenure--Variables which provide information about the respondent's length of service and obligated service remaining with the Navy.
3. Cognitive/Affective Orientation--A category of variables designed to assess the individual's perception of, and feelings regarding, his job and the Navy.
4. Family Financial Resources--Variables used to measure the financial situation of the family with respect to others in the military and individuals in civilian job situations.
5. Perception of External Job Opportunities--The respondent's assessment of alternatives to his current career situation and his perception of his civilian wage level if he were to leave the Navy.

The construct measuring career orientation is the individual's intentions regarding a Navy career derived from the response

to a question about the number of anticipated years of active duty prior to leaving the service. The behavior under investigation is not simply the number of years of anticipated service, but how many years the officer anticipates serving beyond the completion of his minimum service requirement (MSR). A value for career orientation was determined by subtracting current length of service and years remaining on the initial obligation from anticipated years of service upon leaving the Navy.

C. DATA BASE

The data base used in this study was generated from the RAND Corporation's 1978 survey of officer and enlisted personnel in the Department of Defense. The survey, Documentation for which can be found in The User's Manual and Guidebook [Doering, et al., 1981], was sponsored by the Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs & Logistics), and conducted by the RAND Corporation for the Department of Defense as part of a major manpower, mobilization, and readiness research program. The survey, designed to focus on the military population as it existed in 1978, was administered to personnel in four questionnaire variants, developed in two alternative forms to target specific military populations. Forms one and two were administered to enlisted personnel and forms three and four were administered to officers. The Survey was issued worldwide in January 1979 to men and women in all four military services and data collection was completed

in June 1979. The results of this survey contain information to support research in a variety of manpower issue areas such as retirement, pay, promotion, retention and attitudinal factors of military personnel toward their environment.

Forms one and three, usually referred to as the "Economic" variants of the survey, asked military personnel questions concerning economic issues, perceptions of civilian employment opportunity, preference for various retention programs, and retirement options. Divided into the ten subject areas listed in Table 4, these forms were essentially "economic and labor force" questionnaires oriented to providing comprehensive information on military family income, civilian labor force participation of household members, opinions concerning military compensation, and career decision making factors. Forms two and four, commonly referred to as the "Quality of Life" variants of the survey, dealt with various aspects of military life. They covered specific personnel policies, requesting opinions about rotation experience, prior military service of family members, promotions, organizational climate, personnel morale, job characteristics, working hours, ability to perform combat mission, racial climate, military training and work effectiveness. Because of the significant amount of emphasis placed on gathering information about the career decision making factors in the design of the survey questions in Form three, and the requirement for the respondent to make specific comparisons between perceptions of respondent's actual military and alternative civilian occupational situation,

Form three was selected as the basic data base for the analysis in this thesis.

TABLE 4

Ten Major Subject Areas of Form Three
(with examples of information for each section)

Military Background--Service paygrade, duty station, commission source.

Career Intent--Probed respondent's career orientation by asking expected years of service and expected paygrade when leaving the service.

Military Work Experience--Requested current and entry designators, and inquired about working hours and schedule.

Individual Characteristics--Requested demographic information such as sex, age, educational level of attainment, and family responsibilities.

Current Housing Arrangements--Collected data on home ownership and satisfaction with housing arrangements.

Military Compensation and Benefits--Requested valuation of military medical services, commissary and exchange privileges as well as base pay, quarters allowance and tax advantage perceptions.

Military Retirement System--Requested information on preference for various alternative military retirement systems.

Civilian Labor Force Experience--Asked for experience of both military member and spouse in civilian work environment.

Family Resources--Used to determine level of household debts, assets, and income from various sources.

Civilian Job Search--Asked the respondent for civilian labor market expectations and potential civilian earnings.

Source: User's Manual and Guidebook [Doering, et al., 1981].

1. Survey Sample

The basic sample stratification variable for the survey was branch of service. The officer sample within each service was further stratified, as shown in Table 5, by pay-grade and sex. Three factors which constrained the DOD sample design formulated for the survey were: (1) the need for a statistically significant number of usable responses from each stratification cell, (2) the expected response rate of sampled individuals, and (3) budget limitations. Based on these constraints the sample design for form three required that at least 500 completed, usable questionnaires from each officer cell group, a total of 2500 usable officer responses from each service, be returned for processing.

TABLE 5

Sample Stratification for Officer Personnel

Sample Cell Number	Sex	Grade	Needed Responses
1	Male	O-1, O-2	500
2	Male	O-3	500
3	Male	O-4	500
4	Male	O-5, O-6	500
5	Female	O-1 to O-6	500
Total			2500

Source: User's Manual and Guidebook [Doering, et al., 1981].

Over thirty eight hundred Form Three survey questionnaires were originally fielded to Naval Officers and 2822 completed, usable questionnaires were returned. This is a raw response rate of only 74.1%, but the 2822 returned questionnaires represented 112.9% of the sample cell size requirement of 2500 responses needed from Navy officers. The DOD-wide response rate for Form Three, although not as good, was 101.4% of sample size requirement. Valid inferences, for both the military population in general and for the population of naval officers in particular, may, therefore, be drawn from the results of statistical manipulation of this data base. Table 6 shows the rates of response for naval officers to form three.

TABLE 6

Form Three Response Rate
(for Naval Officers)

Number of Fielded and Returned Questionnaires		Number of Required and Returned Questionnaires	
Fielded	3,806	Required	2,500
Returned	2,822	Returned	2,822
% of Fielded	74.1	% of Required	112.9

Source: User's Manual and Guidebook [Doering, et al, 1981].

2. Stratification of Sample

This thesis studied the process of career orientation of junior officers with between two and ten years of active

duty as commissioned officers in the Navy. Officers with less than two years of active service were excluded because a majority of the respondents were still in a training environment or were relatively new to their operational billet environment. The lack of operational experience on the part of these officers, and their closeness to the time of commissioning, tended to prevent these officers from being able to make a meaningful comparison between their military job situation and a comparable civilian situation. In general they had, at best, a marginal experience base from which to draw the required comparisons. The officers having completed over ten years of active service at the time of the survey were over 90% oriented toward a twenty year career. In addition, because of the small numbers of minorities (less than 5% of sample size) and women officers holding operational designators who were available in the survey sample, only caucasian males were included in this study.

Also excluded from this study were all officers in the medical, legal and religious specialty communities. Because these individuals have been exposed to extensive educational and training experiences outside the military environment, and because they possess recognized professional civilian skills, or callings, they tend to have a strong sense of identification with civilian professional organizations which provide them with much different frames of reference from which to evaluate their military situation. This professional

identification with organizations outside of the military and the ease with which they can transfer their skills to civilian employment makes their expectation of obtaining suitable civilian employment in a specific occupational field and their anticipated levels of civilian income significantly different from the "age-earnings" profile expectations of their contemporaries of similar rank in the other military occupational groups. These professional groups should, themselves, be the subjects of future research to analyze the factors influencing the orientation of their members toward a military career.

Approximately seven hundred junior officers remained in the sample under study after the members of those groups already cited were excluded. These officers were then combined into three major occupational specialty groups according to the general functions of their respective occupational communities. The major groupings are operational, supportive, and supply/logistical as defined below:

Operational Communities: The "Front Line" groups like Pilots, Surface Warfare Officers and Special Warfare Officers.

Support Communities: Those in the "second rank" who are in supporting roles, directly or indirectly, for the Operating forces. These include General Unrestricted Line Officers, officers involved in the training and administration of reserves, Engineering Duty and Civil Engineering Corps Officers.

Supply/Logistics Community: Involved in the roles of financial management and supply of the Navy includes all officers in the Navy Supply Corps.

This approach made possible the combination of officer designator communities into homogeneous groups of statistically significant size. It will also facilitate comparison of the results of this research work with future research conducted into the career orientation of junior officers, both in other occupational groups and across services. Table 7 shows the organization of the various designators into specific community groups. Appendix C contains a complete listing of all the naval officer classification codes (designator numbers) and the official long title of each officer designator community in the Operational Designator Group.

TABLE 7
Officer Designator Groupings

<u>Operational</u>	<u>Support</u>	<u>Supply/Logistics</u>
1110-SWO	1100-URL	3100-Supply
1120-SUBS	XXX7-TARS	6500-LDO's
1130-SPEC WFR	1400-EDO (SHIP)	
1140-SPEC OPS	1500-AERO EDO	
1310-PILOTS	1600-CRPTO/INTEL	
1320-NFO	1650-PAO	
6000-OPS LDO's	1800-WEATHER	
	5100-CEC	
	6300-Support LDO's	

(See Appendix C for explanation of the abbreviations.)

The Statistical Package for the Social Sciences
(SPSS) was used in all statistical analyses performed during

this study [Nie, Hull, Jenkins, Steinbrenner, Bent, 1975]. The statistical weights were removed from the 1978 Department of Defense survey data and the raw data cases were collected into a file containing only those officers with operational designators. Statistical analysis of the unweighted data in this file was conducted utilizing the Naval Postgraduate School's IBM 3033 computer. Preliminary SPSS crosstabulation, condescriptive, and one-way analysis of variance procedures were performed on the sample of officers remaining in the study to obtain cell sample sizes as well as descriptive statistics for the subject cells.

D. VARIABLE SELECTION

This section describes how the responses to various questions from the data base survey were combined to form a compact and relatively independent set of variables for construction of the factor categories used in the model. The survey contained ninety-six questions, the responses to which provide the data base used to construct and test the hypothesized career orientation model. Thirty-six questions were selected to be the original candidate variables to be included in the model. Factor analysis was performed to explore how the candidate variables would cluster and to reduce the number of variables to be considered. The number of variables was reduced to twenty-five as combination patterns became apparent. The question responses, or the combination of question responses, used as variables in the model, and their measurement are

grouped by major category for explanation. The number in parentheses following a term corresponds to the question number on the Rand Survey. The actual question asked and the coding method used by the Rand Corporation are reproduced in Appendix A. The Statistical Package for the Social Sciences (SPSS) program used to combine the questions into variable constructs is reproduced in Appendix B.

1. Demographic

The variables in this category are biodemographic. They allow the respondents to be grouped for further analysis into homogeneous categories. The selected variables include commission source (Q5), designator (CURRMOSX), sex (Q30), age (Q31), years of education (Q41), marital status (Q35), and number of dependents (Q44). Marital status and number of dependents were further combined into one variable which measured family size. It has been hypothesized that as an officer's family size increases, his freedom to change careers becomes more restricted. The position in the "family life cycle" influences the response by military personnel to the occupationally related aspects of military life, such as rotation policy, and work schedule [Doering & Hutzler, 1982, p. 93].

2. Tenure Variables

Tenure, consistently found to be negatively related to turnover and suggested as one of the single best predictors of propensity to turnover is measured by the officer's pay-grade (Q4), length of active duty service (Q11), and length

TABLE 8
Demographic Variables

Commission Source
Designator
Sex
Age
Years of Education
Marital Status
Number of Dependents

of obligated service remaining (Q7). Advances in paygrade mean increased responsibilities and prestige (intrinsic satisfaction) for the junior officer and increases in pay and allowances (extrinsic satisfaction). Length of active duty service is considered as a separate variable in this model, rather than in combination with biodemographic variables, because tenure in an organization is characteristic of an individual-organization relationship rather than just an individual demographic factor. Obligated service has been included because of the marked differences found by researchers in the attitude toward a military career which occur during the first three years of service. The element of time seems to be a major factor, and it is assumed that the closer the officer moves to the end of his obligated service the more his intentions toward a career will reflect what his actual career behavior really will be.

TABLE 9

Tenure Related Variables

Paygrade

Length of Active Duty Service

Length of Obligated Service Remaining

3. Cognitive/Affective Variables

This category consists of a set of seven variables designed to assess the individual's perception of, and feelings regarding, his billet and his relationship with the Navy. The respondent's opinion as to future military retirement plans (Q95B) and whether or not his pay will keep up with inflation (Q95C) were combined into a measure of opinion about his future military pecuniary situation. Satisfaction with the intrinsic aspects of the officer's military job was measured by averaging the responses to five questions which clustered together in the factor analysis conducted on the larger set of variables. Questions about the opportunity for interesting and challenging work (Q93E), quality of co-workers (Q93I) and supervisors (Q93A), chance for promotions (Q93G) and ability to have a say in the direction of one's career (Q93B) were combined into the measure of intrinsic satisfaction with the military job. Satisfaction with the extrinsic aspects of the officer's military job environment was measured by averaging the responses of five other questions which clustered during

factor analysis. This variable is designed to measure the individuals relative satisfaction with job location (Q10,Q93M), work schedule (Q93J), opportunity for training (Q93H), and equipment used on the job (Q93L). A measure of perception of family related security factors was obtained by averaging the responses to questions about the officer's relative perception of the quality of retirement plans (Q93C), medical benefits (Q93D), job security (Q93K), and whether or not the respondent felt his family would be better off if he were to leave the military (Q95D). These items clustered during factor analysis and the responses were positively correlated with family size. Relative satisfaction with these variables appears to depend on the respondent's marital status and number of dependents. The extent to which met expectations influences the career orientation process is measured from a question about the extent to which Navy life had been close to expectations upon entry (Q95A), and finally, a measure of overall satisfaction with military life (Q96) was included to provide a significant single measure of orientation toward his career environment in the Navy.

4. Family Income Factors

The level of spouse gross civilian wage (Q81) was included because other research, reviewed in Chapter I, has shown that this is becoming an increasingly important factor in the career decision process. The growing numbers of working wives indicates that considerations over the potential loss of the non-military spouse's income may become a major factor in the

TABLE 10

Cognitive/Affective Variables

Opinion of Future Retirement Plans
Feeling that Pay will keep up with inflation
Feelings about Medical Benefits
Opportunity for Interesting & Challenging Work
Quality of Co-workers
Quality of Supervisors
Chances for Promotion
Ability to have a say in planning career
Satisfaction with Job Location
Satisfaction with Work Schedule
Opportunities for Training
Quality of Equipment Used on the Job
Whether or not Family would be better off with
respondent in civilian job

willingness for officers to transfer from one duty station to the next. Approximately 30% of the junior officers in this study reported that their wives worked in 1978 and contributed an average of 16% to the total family income level. As the spouse's income becomes a major portion of the total family income the officer may resist the efforts of the assignment process to move him to "career enhancing" duty stations and ultimately decide to leave the service rather than give up a very substantial contribution by the spouse to the family

income. In addition, increasing incidents, and levels, of spouse incomes may give the officer more flexibility in making his career decision, knowing that, upon his leaving the service, the family would still have some form of income. Total Family Income (Q84) was also used as a measure of pecuniary influences.

TABLE 11

Family Income Factors

Total Family Income

Spouse Gross Civilian Wage

5. Perceived External Job Opportunities

It is felt that a strong indicator of probability or intention to search for another position can be gained from the perception of an external alternative to military service. Mobley (1977) and Arnold and Fishmen (1982) used intention to quit, or turnover, as a key cognitive variable in the prediction process. The intention to leave question was inferred from the responses to questions about intended years of service (Q12). Questions about the existence of alternative positions, assessed by requesting if the officer had had a job offer during the year preceeding the survey (Q88), the perception held by the officer of a comparison of his present level of overall compensation (Q94), and expected level of

civilian income (Q90) if the officer had left the Navy were also included in this factor category.

TABLE 12

External Job Opportunity Variables

Job Offer during Preceding 12 Months

Comparison of Civilian and Military Compensation

Expected Level of Civilian Gross Wages if Leaving
the Military

6. Career Orientation

A construct measuring career orientation was used as the dependent variable in this study. Each respondent was asked to indicate the number of years of service he or she anticipated serving before leaving the Navy. The officer's current length of service, in years, and number of years of obligated service remaining were then subtracted from values for anticipated length of service entered on the survey, to determine his measure of career orientation. Those with a zero orientation had no obligation remaining and intended to serve only the amount of service that they had already. Multivariate regression analysis was then performed to explore the predictive ability of the hypothesized model using the Rand data base.

IV. DATA ANALYSIS

The general model used in the data analysis consisted of the following candidate variables in each group:

Demographic: Sex, race, source of commission, designator (Military Occupational Specialty Code), years of education, marital status, family size, and age.

Tenure: Number of years of obligated service remaining, and number of years of active military service.

Cognitive/Affective Orientation to Current Position: Measure of relative satisfaction with the intrinsic and extrinsic aspects of current military job situation, feelings about the relative adequacy of family related benefits and job security factors, opinions about the future of military compensation and retirement programs, whether or not military life had been about as expected, and overall satisfaction with military life.

Family Income Variables: Level of spouse civilian income.

Perception of External Alternatives: Expected civilian earnings should the respondent have left the military at the time of the survey, whether or not respondent had received a civilian job offer within the past year, the differential between expected civilian income and current level of military income, and feeling about the relative levels of overall military and civilian compensation.

The dependent variable in the model is a measure of career orientation. Career orientation is a construct which measures how many years of active service the officer is anticipating serving after completion of his minimum active duty requirement. It is determined according to the following formula:

$$CO = (ALOS - CLOS - OBREM)$$

CO is career orientation, ALOS is anticipated number of years of active service, CLOS is current number of years of active service completed, and OBREM is the number of years of remaining obligated service.

The number of years of obligated service remaining and length of active military service were used as control variables during the testing of the model. Because only male caucasians in the operational designator group were studied in this thesis, sex, race, and designator group are also considered to be control variables in this study. These variables have been included in the general form of the model to make the model as complete as possible and to allow for further comparison studies by designator group, race, and sex, both across service and within each service. Pay grade was removed as a candidate variable because of multi-collinearity between pay grade and length of service. Total family income was found to be an insignificant factor on the trial runs of the model and was removed.

Data analysis was conducted on a group of more than 600 naval officers with active duty length of service of between two and ten years. This group, when cases with missing values were eliminated, consisted of 510 male caucasian officers in the operational designator community group. The cases in the data set were combined into four different groups and labeled for ease of identification and reference. The groups were

designated Group One, Group Two, Group Three, and Group Four according to the following criteria:

Group One--Officers in the data set with length of service between two and ten years. This group provided a large data set against which to test the model.

Group Two--Officers in their third year of active duty having more than one, but less than three, years of obligated service remaining.

Group Three--Officers with four, five or six years of active service who were within one year of the end of their initial service obligation.

Group Four--Officers with seven, eight, or nine years of active service who were serving beyond completion of their initial obligated service.

This grouping allowed the model to capture the factors influencing the career orientation of homogeneous groups of junior naval officers spanning an interval of from three to nine years of active duty. This grouping also provided a cross sectional type of data base to investigate how career orientation behavior, and the factors influencing it, may change as large groups of officers move toward completion of their minimum service requirement. Following the discussion of the results of data analysis of Group One, which included officers with terms of service covering from two to ten years of active duty, the next three groups discussed controlled for the tenure variable by selecting only the officers in specific cells. Groups Two, Three, and Four were studied according to their length of service and their number of years remaining until completion of obligated service requirement. Table 13 shows the distribution of officers in the data set by length of

service and by remaining obligated service. The cells studied are delineated in heavy outlining.

TABLE 13
Data Set Cell Sample Size
Obligated Service Remaining
(in years)

LOS*	None	<1 yr	1-2 yrs	2-3 yrs	3-4 yrs	4-5 yrs	>5 yrs
2	0	0	2	9	28	21	1
3	1	4	25	26	20	2	1
4	2	16	19	17	4	0	0
5	11	30	15	4	2	1	0
6	10	16	8	8	2	1	0
7	29	4	7	9	2	0	0
8	28	6	7	6	3	0	1
9	17	2	10	7	3	1	0
10	45	5	4	5	2	0	0
Tot	144	83	97	91	66	26	3

*LOS--length of service

A. GROUP ONE RESULTS

This group of officers had a mean career orientation value, defined as the number of years the officer intends to serve past the end of his minimum service requirement, of 5.7 and a mean length of service of 5.7 years of active duty. The average age was 27.5 years and mean level of education was 16.3 years of completed schooling. 69% of these officers were married with a mean of 2.0 dependents per family. Commissioning

source was relatively evenly divided between graduates of the Naval Academy (28%), Aviation Officer Candidate School (23%), the Reserve Officer Training Corps program (27%), and Officer Candidate School (15%), with the remaining 6% of the sample receiving commissions through other means (direct appointment, interservice transfers, etc.). This mix reflects the de-emphasis of Officer Candidate School as a commission source for line officers in the operational designator categories which took place in the mid-1970's, following the introduction of the all-volunteer force.

The mean response of the officers in this group to the statement that "military life was just about what they expected," on a scale of 1 (strongly disagree) to 5 (strongly agree), was 2.5. They were neither satisfied nor dissatisfied with Navy life overall, giving as a group, a mean response of 3.9 on a scale from 1 (very dissatisfied) to 7 (very satisfied). The complete mean response values for each variable in the model is provided in Appendix D.

The correlations among the variables in the model for this group are reported in Table 14. The five variables having the strongest zero order relationship to career orientation (measured as the number of years the officer intends to serve past the end of his minimum service requirement) are overall satisfaction with military service ($r = .50$), satisfaction with intrinsic aspects of his job ($r = .36$), age ($r = .32$), whether military life was as expected ($r = -.19$), and ROTC as the commissioning

program ($r = -.17$). In addition, Table 14 shows that, of the sources on commission in the model, graduates of the Reserve Officer Candidate program have, in general, the most negative, and graduates of Officer Candidate School have, in general, the most positive, zero order correlation with career orientation. Also, satisfaction with the intrinsic aspects of the job situation is more highly correlated with career orientation than is satisfaction with the extrinsic aspects of the officers' navy jobs. This finding indicates that satisfaction with job content factors is more important to junior officers in this group, than is satisfaction with the extrinsic (job context) factors, supporting the findings, previously discussed, of Githens (1956).

Agreement with whether or not military life had been about what was expected is negatively correlated with career orientation, suggesting that those who had a more correct prior expectation of what life would be like in the Navy have a higher career orientation. This finding is consistent with the results of research conducted by Hoiberg and Barry (1972) into the role of met expectations and their influence on retention. The very slight negative correlation ($r = -.01$) between career orientation (CO) and expectations about the comparisons between military and civilian overall compensation had the officer left the service at the time of the survey (Q94) indicates that the level of career orientation may not be influenced as much by the level of immediate compensation

expected if transitioning to the civilian job market as much as by expectations of higher future levels of compensation than can be expected in the course of a military career. The positive correlation between family size ($r = .174$) and career orientation indicates that as family size increases so does career orientation.

The results of stepwise multiple regression analysis performed to test the overall model are summarized in Table 15. The final full equation has a significant multiple correlation with career orientation ($R = .60$) and an adjusted r squared of .35 ($F(8, 517) = 36.34, p < .0001$). Within this equation five variables contribute significantly to increasing the value of the coefficient of determination. These variables are satisfaction with military life ($B = 1.88, r$ squared change = .25), future expectations about the military pay and retirement systems ($B = 1.97, r$ squared change = .03), satisfaction with the intrinsic aspects of the military job situation ($B = 2.1, r$ squared change = .03), ROTC as a source of commission ($B = -2.1, r$ squared change = .02), and relative measures of family related benefits ($B = 1.3, r$ squared change = .01). All eight of the variables entering this equation are significant to the .05 level.

Overall satisfaction with military life, satisfaction with the intrinsic aspects of the job situation, and future expectations about the military pay and retirement systems have a significant influence on the career orientation of the junior

TABLE 14

Correlation Matrix LOS 2-10 Years

	1	2	3	4	5	6	7	8	9	10
1 CO	1.0									
2 ACAD	-.01	1.0								
3 OCS	.12	-.26	1.0							
4 ROTC	-.19	-.39	-.25	1.0						
5 AOC	.10	-.35	-.23	-.33	1.0					
6 PAYDIF	.02	.11	-.10	.01	-.06	1.0				
7 SEARN	-.06	.06	.04	-.04	-.02	.01	1.0			
8 Q95A	.19	.02	-.03	.08	-.04	.02	-.69	1.0		
9 FUEXP	.17	-.03	.00	-.04	.03	.04	.01	-.05	1.0	
10 LOS	.17	-.09	-.04	-.14	.16	.04	.03	-.15	.18	1.0
11 SHIP	-.08	.06	.14	.14	-.31	.02	.02	.11	-.02	-.2
12 AGE	.21	-.19	.10	-.18	.27	-.04	.03	-.16	.19	.87
13 FAMILY	.17	-.04	.01	-.12	.11	.01	.05	-.11	.17	.44
14 EDUCIN	.06	.01	.02	-.04	.07	.12	.06	.06	.10	.19
15 JOB OFR	.01	.06	-.04	-.01	-.01	.25	.09	-.04	.16	.12
16 SEC	.17	-.03	.14	.05	-.10	-.30	.01	-.04	-.23	-.16
17 INT	.36	.03	.11	-.05	-.03	-.11	.01	-.27	-.13	.05
18 EXT	.14	.04	.10	.00	-.09	-.13	.02	-.20	-.15	-.06
19 COMPR	-.01	.02	-.07	.04	-.06	.39	-.08	.11	.22	.05
20 SATISF	.50	-.01	.10	-.07	-.01	-.07	-.02	-.41	-.01	.08

TABLE 14 (CONTINUED)

	11	12	13	14	15	16	17	18	19	20
1 CO										
2 ACAD										
3 OCS										
4 ROTC										
5 AOC										
6 PAYDIF										
7 SEARN										
8 Q95A										
9 FUEXP										
10 LOS										
11 SHIP	1.0									
12 AGE	-.24	1.0								
13 FAMILY	-.08	.43	1.0							
14 EDUCIN	-.09	.24	.10	1.0						
15 JOB OFR	-.10	.12	.05	.12	1.0					
16 SEC	.10	-.12	-.11	-.10	-.22	1.0				
17 INT	-.01	.08	.08	-.02	-.20	.33	1.0			
18 EXT	-.04	-.04	.01	-.04	-.13	.4	.49	1.0		
19 COMPR	.08	-.02	.06	.09	.15	-.45	-.11	-.17	1.0	
20 SATISF	-.13	.12	.10	-.03	-.09	.12	.46	.34	-.07	1.0

TABLE 15

Regression Equation for LOS 2--10 Years

Variables Entering the Equation	B (Coefficient)	Change in R^2
Satisfaction with military life	1.88	.25
Future Pay/Retirement expectations	1.97	.03
Satisfaction with intrinsic aspects	2.10	.03
ROTC as commissioning source	-2.08	.02
Family Benefits/Security	1.3	.01
Age	.24	.01
Extrinsic satisfaction with Navy	-1.39	.01
Spouse Earnings	- .13	.01
(Constant)	-20.26	

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	8	9296.2	1162.03
Residual	517	16532.17	31.98

F = 36.34

Significance of F = .000

Multiple R	R^2	Adjusted R^2
.60	.36	.35

officer. Interesting items in this equation are the negative regression coefficients for Reserve Officer Training Corps Officers, and level of spouse civilian earnings. ROTC Officers had both an overall negative linear correlation coefficient with career orientation in the matrix in Table 14, and a negative regression coefficient in this equation. This negative coefficient indicates that ROTC officers expect to serve fewer years upon completion of their minimum obligated service period, than the officers of the other commissioning programs. The negative regression coefficient for the level of the spouse's gross civilian income can be interpreted as reducing the measure of a married officer's career orientation by about one year for each \$8,000 earned annually by the spouse. This could have significant effects on the career orientation of married junior officers in general, as the percentage of working military wives increases and as the spouse's percentage of contribution to the total level of family income becomes significant. Over 30% of the married officers responding to the survey reported some level of spouse civilian earnings and this source of income contributed an average of 16% to the married officer's total family income. The increasing trend of higher levels of education for women and the propensity of married women to enter the work force in growing numbers means that more and more of them will become the holders of more responsible and challenging jobs. The decision process involved in giving up these jobs to follow the husband to a new homeport may become a major factor in the career decision

by the military family in the future and can not be avoided as an issue for those involved in all phases of manpower planning and distribution analysis.

The measures of expectations about the future of the military pay and retirement systems (FUEXP) and the measure of perception of the relative quality of family oriented benefits (SEC) which appear in the regression equation indicate that officers, especially junior officers, need significant reassurances that the government intends to protect their future financial situation by providing adequate pay levels which will keep up with inflation, and provide stability in the retirement system. Also of interest is the regression coefficient for relative satisfaction with the extrinsic aspects of the military job ($B = -1.39$), showing that dissatisfaction with the extrinsic aspects of the military job situation will not exert as much influence on career orientation as satisfaction with the intrinsic aspects but that it still has a significant effect.

B. GROUP TWO RESULTS

Group Two consisted of officers with three years of active duty and more than one, but less than three, years to completion of obligated service. This group indicated a mean career orientation of 6.4 years and a mean age of 24.8 years. This group was composed of 50% Reserve Officer Training Corps graduates, 19% Naval Academy graduates, 14% Officer Candidate School Graduates, and 17% Aviation Officer Candidates. The

mean reported level of education was 16.1 years and 48% were married with a mean of 1.1 dependents per married officer. 75% were assigned to shipboard duty and 30% reported being approached with a civilian job offer in the 12 months preceding the survey. These officers reported a negative value for the differential between civilian pay and military compensation which indicates that they feel, as a group, that they were being paid more in the way of overall compensation in the military than they would have received had they taken a civilian job at the time the survey was administered. A complete listing of the mean response values for the variables in the model for Group Two is provided in Appendix D.

The correlation matrix for the variables in the model for Group Two is shown in Table 16. The variables having the highest zero order correlations with measures of career orientation are level of education ($r = .50$), source of commission being Aviation Officer Candidate Program ($r = .41$) or the Reserve Officer Training Corps program ($r = -.37$), being stationed aboard ship ($r = -.37$), Age ($r = .31$), expectations about the future of the military retirement and compensation systems ($r = -.26$), and marital status and size of family ($r = .25$). The negative linear correlation for ROTC graduates is much stronger in this cell ($r = -.37$) than for the total (Group One) sample ($r = -.17$).

The model was run using stepwise multiple regression techniques and the results summarized in Table 17. The final

TABLE 16

Group Two Correlations

	1	2	3	4	5	6	7	8	9	10
1 ACAD	1.0									
2 OCS	-.19	1.0								
3 ROTC	-.49	-.39	1.0							
4 AOC	-.22	-.18	-.46	1.0						
5 PAYDIF	.10	-.16	-.23	-.27	1.0					
6 CIV	-.13	.03	.09	-.01	.85	1.0				
7 SEARN	-.14	.37	-.24	.13	-.07	-.07	1.0			
8 Q95A	-.18	.06	.24	-.18	.02	-.07	-.13	1.0		
9 FUEXP	-.07	.01	.11	-.07	.28	.35	.03	-.16	1.0	
10 SHIP	.06	.23	.22	-.56	.17	-.07	.05	.24	.01	1.0
11 AGE	-.12	-.04	-.23	.46	-.17	-.23	.06	.01	-.02	-.25
12 FAMILY	-.11	.10	-.18	.26	-.21	-.19	.22	-.06	.04	-.15
13 EDUCIN	-.04	.01	-.15	.23	.17	.29	-.07	.01	.17	-.37
14 JOB QFR	-.01	-.14	-.17	-.09	.38	.35	-.21	.01	.36	.00
15 SEC	-.01	.14	-.18	.12	-.50	-.39	.13	-.11	-.20	-.10
16 INT	.12	.05	-.21	.10	-.43	-.26	-.08	-.12	-.31	-.03
17 EXT	.22	.12	-.32	.08	-.11	-.04	-.12	-.30	-.27	.01
18 COMPR	-.03	-.07	.41	-.45	.67	.57	-.06	.10	.24	.24
19 SATISF	.11	.11	-.25	.12	-.14	.05	-.01	-.50	.01	-.21
20 CO	.06	.02	-.37	.41	.00	.03	-.06	.07	.26	-.37

TABLE 16 (CONTINUED)

	11	12	13	14	15	16	17	18	19	20
1 ACAD										
2 OCS										
3 ROTC										
4 AOC										
5 PAYDIF										
6 CIV										
7 SEARN										
8 Q95A										
9 FUEXP										
10 SHIP										
11 AGE	1.0									
12 FAMILY	.63	1.0								
13 EDUCIN	.58	.41	1.0							
14 JOB OFR	-.17	-.19	.09	1.0						
15 SEC	.33	.05	-.04	-.40	1.0					
16 INT	.21	.20	-.09	.36	.53	1.0				
17 EXT	.23	.09	.05	.22	.40	.62	1.0			
18 COMPR	-.38	-.15	-.01	.49	-.59	-.25	-.18	1.0		
19 SATISF	.24	.41	.13	-.23	.07	.40	.43	-.08	1.0	
20 CO	.31	.25	.50	.16	.03	.06	-.12	-.11	.11	1.0

TABLE 17

Regression Equation for Group Two

Variables Entering the Equation	B (Coefficient)	R ² Change
Education (years)	7.41	.25
Source of Commission--AOC	5.82	.09
Expectations about future Military pay and Retirement Systems	3.86	.05
Source of Commission--ROTC	-4.72	.04
Military Life about as expected	1.77	.05
Constant	-134.35	

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	5	1523.08	304.62
Residual	40	1660.8	41.52
F = 7.34 Significance of F = .0001			

Multiple R = .69 R² = .48 Adjusted R² = .413

equation has a significant multiple correlation with career orientation ($R = .692$) and an adjusted r squared = .41 ($F(5, 39) = 7.2, p < .0001$). Years of education, Source of commission, the future of military pay and retirement benefits and how closely the expectations of military life matched the reality of military life were the variables entered in this equation. This equation again shows that ROTC graduates are less career oriented than the control group, those who received their commissions through other sources, and, due to the very small value for the correlation coefficient, Naval Academy graduates. The Aviation Officer Candidate graduates have a significant positive regression coefficient which can be interpreted as meaning that they are more career oriented than Naval Academy Graduates and the control group. The uncertainty surrounding the future of the military retirement system and as to the course that military pay and benefits will take (indicated by the large value for the regression coefficient, $B = -3.9$) exerts a negative influence on the individuals in this group. Education (Q41) level has a large coefficient and contributes the most significant amount to the explanation of the career orientation of this group of junior officers, and whether or not military life was as expected upon entering the military also exerts a positive influence on career orientation.

C. GROUP THREE RESULTS

This group of officers consisted of officers who are within one year of the end of their obligation service period and who

have between four and six years of active duty. This group indicated a mean career orientation of 2.8 years, and had a mean age of 26.9 years. The group was 40% ROTC graduates, 22% Naval Academy graduates, 19% Officer Candidate School graduates, 17% Aviation Officer Candidate School graduates, and 2% received their commissions from other sources. 48% of the group were assigned to ships and 38% had been offered a civilian job within the twelve months preceeding the survey. They reported a mean level of satisfaction of 3.34 (on a seven point scale from 1 (very dissatisfied) to 7 (very satisfied) and a value of expectations of military life coinciding with reality of 2.7 (on a 5 point scale with 1 for expectations being close to the reality and 5 expectations and reality of military life being widely divergent). 57% of this group was married with a mean of 1.9 dependents. A complete listing of the mean response values for Group Three is provided in Appendix D.

The correlation matrix for this group is shown in Table 18. The variables with the highest zero order correlations with career orientation are overall satisfaction with military life ($r = .61$), relative satisfaction with family security/benefits ($r = .41$), extrinsic ($r = .41$) and the extrinsic ($r = .41$) aspects of the military job, and whether or not the individual had received a civilian job offer within the preceeding twelve months ($r = -.30$). It is interesting to note that for this sample source of commission was not significantly

correlated (at the zero order level) with career orientation, and that the perceived pay differential between military pay and expected civilian wages, expected civilian earnings, spouse's civilian earnings, and comparison of civilian versus military compensation are all negatively correlated.

The model was run using stepwise multiple regression techniques and the results summarized in Table 19. The final equation has a significant multiple correlation with career orientation ($R = .71$) and an adjusted r squared of .47 ($F(3,49) = 16.5, p < .001$). Only three variables entered the equation, overall satisfaction with military life ($B = 1.9$), perception of quality of family related benefits ($B = 2.4$), and future expectations about the military pay and retirement systems ($B = -2.6$). An analysis of variance was performed on career orientation and length of service which showed that there were significant differences in career orientation by length of service. Further exploration of the career orientation for this group was conducted by forming two cells from the original Group Three. The first cell was formed using officers with four and five years of active service. This group was labeled Group Three (A) and another group consisting of officers with five and six years of active service was formed and labeled Group Three (B).

1. Group Three (A) Results

This group, with between 4 and 5 years of active service, indicated a mean career orientation of 2.5 years, and a

TABLE 18

Correlation Matrix for Group Three

	1	2	3	4	5	6	7	8	9	10
1 ACAD	1.0									
2 OCS	-.25	1.0								
3 ROTC	-.44	-.40	1.0							
4 AOC	-.24	-.22	-.38	1.0						
5 LOS	.26	-.28	-.18	.17	1.0					
6 PAYDIF	.05	-.17	.05	-.03	-.07	1.0				
7 CIV	.01	-.18	-.21	.36	.17	.93	1.0			
8 SEARN	.16	-.06	.03	-.14	-.15	.15	.16	1.0		
9 Q95A	.10	.05	.04	-.18	-.14	-.01	-.19	-.29	1.0	
10 FUEXP	.13	-.20	-.02	.03	.16	.04	.07	-.18	-.12	1.0
11 SHIP	-.14	.26	.22	-.36	-.47	.01	-.19	.29	.08	-.30
12 AGE	-.19	.25	-.35	.40	.40	-.19	.19	-.20	-.14	-.07
13 FAMILY	.05	.00	-.06	.00	.11	.27	.40	.05	.01	.12
14 EDUCIN	.00	.23	-.11	-.08	-.22	.14	.13	.06	.00	.02
15 JOB OFR	.21	-.13	-.30	.24	.11	.30	.30	-.05	-.89	.18
16 SEC	.11	-.02	.14	-.18	-.16	-.45	-.63	.07	.01	-.32
17 INT	-.1	.04	.16	-.04	-.04	-.07	-.10	.00	-.24	-.14
18 EXT	.17	.09	-.06	-.10	-.01	-.33	-.30	.09	-.21	-.05
19 Q94	-.07	-.09	.13	-.06	.06	.58	.43	-.08	-.18	.19
20 Q96	.01	.00	-.02	.10	-.05	-.22	-.01	.21	-.38	.04
21 CO	-.02	.01	-.05	.09	.05	-.26	-.12	-.04	-.11	.20

TABLE 18 (CONTINUED)

	11	12	13	14	15	16	17	18	19	20	21
1 ACAD											
2 OCS											
3 ROTC											
4 AOC											
5 LOS											
6 PAYDIF											
7 CIV											
8 SEARN											
9 Q95A											
10 FUEXP											
11 SHIP	1.0										
12 AGE	-.36	1.0									
13 FAMILY	.03	.01	1.0								
14 EDUCIN	.09	.16	.23	1.0							
15 JOB OFR	-.31	-.04	.14	-.01	1.0						
16 SEC	.21	-.07	-.15	-.05	-.32	1.0					
17 INT	.06	.12	.07	.15	-.38	.35	1.0				
18 EXT	.02	.09	-.14	.03	-.25	.43	.56	1.0			
19 Q94	-.05	-.10	.18	-.06	.18	-.41	-.02	-.21	1.0		
20 Q96	-.04	.20	-.05	-.09	-.30	.32	.57	.60	-.08	1.0	
21 CO	.00	.20	.11	.04	-.30	.41	.41	.41	-.03	.61	1.0

TABLE 19

Regression Equation for Group Three

Variables Entering into the Equation	B (Constant)	R ² Change
Overall satisfaction with military life	1.90	.37
Family related benefits/ security	2.42	.05
Future expectations about Pay/Retirement	2.56	.08
Constant	-21.0	

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	752.8	250.92
Residual	49	745.53	15.22

F = 16.49 Significance of F = .0000

Multiple R = .71 R² = .50 Adjusted R² = .47

mean age of 26.7 years. The group is 19% Naval Academy, 21% Officer Candidate School, 45% Reserve Officer Candidate School, and 15% Aviation Officer Candidate School graduates. These officers have a mean of 16.3 years of education and 57% are stationed aboard ships. Just over 40% of the group reported the offer of a civilian job. 57% reported being married, with a mean of 1.8 dependents per married officer. They reported a general overall satisfaction measure of 3.4 (on a 7 point scale) and a measure of met expectations of 2.9 on a 5 point scale. A complete listing of the mean response values for each variable in the model is provided in Appendix D.

The correlation matrix for this equation is reported in Table 20. The five variables with the highest zero order correlation with career orientation are all positive, as in Group Three. These variables are satisfaction with military life ($r = .61$), satisfaction with the intrinsic aspects of military job ($r = .46$), satisfaction with the extrinsic aspects of the military job ($r = .46$), satisfaction with the family security/benefits factors ($r = .38$), and level of education ($r = .27$). The correlation matrix is reproduced in Table 20 and shows a shift in the zero order correlations for some of the variables. Whether or not military life was close to what was expected, and source of commission (Naval Academy graduates have a positive correlation of $r = .15$ versus $r = -.02$ for Group Three in general), for example. The correlation between civilian minus military pay differential is less than half of what it was for the LOS4-6 group and the

correlation between perceived levels of civilian earnings and career orientation has become almost insignificant ($r = -.03$) with this cell. The correlation between spouse civilian earnings and career orientation is also dropped in correlation coefficient (from $r = -.04$ to $r = -.01$) and the difference between military and civilian earnings has changed from $r = -.12$ to $r = -.03$.

The equation produced by the model for those officers in LOS cell four and five is summarized in Table 21 and has a significant multiple correlation with career orientation of .82 and an adjusted r squared of .62 ($F(6,33) = 11.5, p < .001$). Overall satisfaction with military life is still the major influencing factor in career orientation, and source of commission does not enter the equation at all. It would appear that even though there exists a slight negative correlation between source of commission and career orientation in three of the four categories in the model, it is not a significant influence on the career orientation when the junior officer is within his last year of obligated service. Level of education, whether or not military life was found to be about what was expected, and perception of the differences between levels of compensation between the military and civilian job situations have entered the equation and appear to exert significant influences on the career orientation of this group.

TABLE 20
Correlation Matrix for Group Three (A)

	1	2	3	4	5	6	7	8	9	10
1 ACAD	1.0									
2 OCS	-0.25	1.0								
3 ROTC	-0.43	-.46	1.0							
4 AOC	-.20	-.21	-.37	1.0						
5 LOS	.36	-.36	-.12	.19	1.0					
6 PAYDIF	.06	-.05	.02	-.04	.00	1.0				
7 CIF	.10	-.21	-.18	.43	.20	.91	1.0			
8 SEARN	.18	-.08	.02	-.14	-.01	.19	.27	1.0		
9 Q95A	.10	.05	.02	-.21	.11	-.07	-.27	-.37	1.0	
10 FUEXP	.17	-.30	.02	.11	.13	.09	.11	-.12	-.17	1.0
11 Q8	-.12	.23	.16	-.36	-.46	-.00	-.16	.24	.05	-.20
12 Q31	-.17	.22	-.37	.45	.29	.02	.26	-.16	-.10	-.03
13 FAMILY	.09	-.00	.00	-.10	.00	.20	.30	.08	-.06	.12
14 Q41	-.08	.16	-.27	.28	-.11	.02	.19	.03	-.09	-.13
15 Q88	.26	-.11	-.30	.26	.34	.22	.30	-.05	-.09	.14
16 SEC	.15	-.02	.09	-.29	-.13	-.43	-.54	.04	-.05	-.33
17 INT	-.16	.06	.10	-.03	-.13	.00	.01	.01	-.36	-.10
18 EXT	.14	.06	-.14	-.03	-.05	-.10	-.00	.10	-.24	-.02
19 Q94	-.05	.06	.12	-.17	-.16	.57	.45	-.03	-.12	.21
20 Q96	.10	-.09	-.14	.19	-.05	-.08	.25	.25	-.44	.07
21 CO	.14	-.06	-.03	-.02	-.05	-.11	-.03	-.01	-.16	.25

TABLE 20 (CONTINUED)

	11	12	13	14	15	16	17	18	19	20	21
1 ACAD											
2 OCS											
3 ROTC											
4 AOC											
5 LOS											
6 PAYDIF											
7 CIF											
8 SEARN											
9 Q95A											
10 FUEXP											
11 Q8	1.0										
12 Q31	-.41	1.0									
13 FAMILY	.15	-.21	1.0								
14 Q41	-.11	.50	.22	1.0							
15 Q88	-.34	.08	.07	-.07	1.0						
16 SEC	.12	-.21	-.09	.02	-.26	1.0					
17 INT	-.03	.09	.08	.22	-.37	.23	1.0				
18 EXT	-.08	.00	-.00	.06	-.11	.29	.57	1.0			
19 Q94	.07	-.09	.17	.03	.10	-.39	.03	-.09	1.0		
20 Q96	-.17	.06	-.02	.11	-.24	.20	.61	.54	.00	1.0	
21 CD	.00	-.08	.14	.27	-.23	.38	.46	.45	.07	.60	1.0

TABLE 21

Regression Equation for Group Three (A)

Variables Entering the Equation	B (Coefficient)	R Change
Satisfaction with Military Life	2.02	.37
Family Related Benefits/ Security	3.42	.07
Future Expectations about Pay/Retirement	3.48	.11
Education Level	2.34	.07
Military about as Expected	1.02	.03
Civilian vs Military Compensation	.80	.03
Constant	-72.43	

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	6	723.0	120.5
Residual	33	345.3	10.5

F = 11.517 Significance of F = .000

Multiple R = .823 R Squared = .68

Adjusted R Squared = .62

2. Group Three (B) Results

The model was applied to the officers in Group Three (B) which is composed of officers within their last year of obligated service and having 5 or 6 years of active duty experience. This group of officers indicated a mean career orientation of 2.7 years and a mean age of 27.2 years. The mean level of education was 16.1 years and 34% were stationed aboard ships. 46% reported receiving a civilian job offer during the year preceeding the survey, and 61% were married with a mean of 1.9 dependents per family. This group was 30% Naval Academy, 11% Officer Candidate School, 36% ROTC and 20% Aviation Officer Candidate School graduates. They reported a value of 2.7 for the variable measuring how closely military life met prior expectations, and a value of 3.3 for overall satisfaction with military life. A complete listing of the mean response values for each variable in the model is presented in Appendix D.

The correlation matrix for this group is reproduced in Table 22. The Naval Academy Graduates display the same correlation coefficient ($r = -.02$) as for the overall Group Three ($R = -.02$) correlations, but ROTC graduates display a significantly more negative correlation coefficient ($r = -.12$) than when compared to the general Group Three response ($r = -.05$). The five variables with the highest zero order correlations with career orientation in this group are satisfaction with military life ($r = .69$), satisfaction with extrinsic aspects of military job environment ($r = .50$),

relative satisfaction with the family related benefits and family security factors ($r = .47$), satisfaction with the intrinsic aspects of military job situation ($r = .44$), and the perceived difference between civilian and military levels of compensation ($r = -.42$). The increase in the last correlation coefficient is striking when compared to its value in the other Group Three matrices. It is most negative for the officers in this group.

The equation produced by the model for the officers in Group Three (B) is summarized in Table 23. It has a very significant multiple correlation with career orientation ($R = .86$) and an adjusted r squared value of .69 ($F (7.31) = 12.9, p < .001$). The value for the goodness of fit for this equation was the highest achieved by the model, in general double the value attained by the model for the other groupings of individuals. It is significantly higher than the mean correlations attained in the turnover literature reviewed in Chapter II. This figure indicates that almost 70% of the variance in the career orientation value of the junior officers in this group is explained by the predictor variables included in the regression equation. In addition to a change in the order in which the variables entered the equation, two variables were added and one was dropped. The variable that was removed from the equation was the variable measuring the closeness with which expectations about military life matched expectations. This may indicate that

TABLE 22

Correlation Matrix for Group Three (B)

	1	2	3	4	5	6	7	8	9	10
1 ACAD	1.0									
2 OCS	-.22	1.0								
3 ROTC	-.49	-.26	1.0							
4 ACC	-.33	-.17	-.39	1.0						
5 LOS	-.00	.02	-.10	.04	1.0					
6 PAYDIF	.06	-.25	.12	-.12	-.08	1.0				
7 CIV	-.06	-.16	-.14	.24	.04	.95	1.0			
8 SEARN	.24	-.01	-.09	-.13	-.19	.25	.24	1.0		
9 Q95A	.11	-.03	.10	-.19	-.28	.03	-.23	-.22	1.0	
10 FUEXP	.10	-.08	-.11	.00	.07	-.04	.03	-.20	-.04	1.0
11 Q8	.02	.18	.11	-.26	-.16	.09	-.02	.33	.05	-.24
12 Q31	-.39	.31	-.19	.43	.28	-.25	.05	-.19	-.25	.08
13 FAMILY	.04	.07	-.04	-.09	.14	.28	.38	.00	.13	.10
14 Q41	.05	.20	-.03	-.16	-.20	.12	-.13	-.00	.04	.13
15 Q88	.15	-.18	-.21	.15	-.21	.30	.20	.02	-.11	.21
16 SEC	.18	-.09	.06	-.10	-.07	-.44	-.60	-.03	-.01	-.28
17 INT	-.08	-.00	.22	-.06	.08	-.13	-.12	-.08	-.18	-.12
18 EXT	.21	-.03	-.01	-.07	.03	-.40	-.29	.19	-.29	-.02
19 Q94	-.05	-.14	.19	-.12	.24	.55	.44	-.06	-.18	.12
20 Q96	.02	.02	-.06	.10	-.00	-.30	-.00	.15	-.34	.05
21 CO	-.02	.04	-.11	.15	.12	-.42	-.16	-.18	-.09	.17

TABLE 22 (CONTINUED)

	11	12	13	14	15	16	17	18	19	20	21
1 ACAD											
2 OCS											
3 ROTC											
4 AOC											
5 LOS											
6 PAYDIF											
7 CIV											
8 SEARN											
9 Q95A											
10 FUEXP											
11 Q8	1.0										
12 Q31	-.22	1.0									
13 FAMILY	.10	.09	1.0								
14 Q41	.09	.05	.25	1.0							
15 Q88	-.21	-.12	-.01	-.01	1.0						
16 SEC	.06	.06	-.13	-.00	-.24	1.0					
17 INT	.00	.13	-.00	.08	-.44	.38	1.0				
18 EXT	-.04	.12	-.23	.06	-.32	.48	.56	1.0			
19 Q94	-.04	-.10	.23	-.27	.17	-.37	.03	-.20	1.0		
20 Q96	-.05	.23	-.08	.03	-.27	.31	.55	.72	-.07	1.0	
21 CO	-.06	.29	.11	-.08	-.33	.47	.44	.50	-.15	.68	1.0

TABLE 23

Regression Equation for Group Three (B)

Variables Entering the Equation	B (Coefficient)	R Change
Satisfaction with Military Life	2.23	.47
Spouse Civilian Earnings	-.45	.09
Family Related Benefits/ Security	1.82	.06
Family Size	1.26	.04
Education Level	-1.74	.03
Future Expectations About Pay/Retirement	1.66	.03
Civilian vs Military Compensation	-.77	.03
Constant	12.97	

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	7	761.94	108.85
Residual	31	261.30	8.43

F = 12.91 Significance of F = .000

Multiple R = .863 R Squared = .75 Adjusted R Squared = .69

by the time an officer reaches the five or six year of service point in his military life cycle the "met expectations" measure may not be relevant to the career orientation process. With five to six years of active service behind him, even if the military was not as he expected, other factors, such as overall satisfaction, satisfaction with progress in chosen warfare specialty, family size, and other family considerations, come into play as he nears the end of his obligated service period. The "met expectations" of military life factor may have already played a major role in the career orientation of those who are somewhat more junior than this group of officers, with those who were unpleasantly surprised by the reality of military life having become committed to leaving the service at an early stage in their career. The role of the "met expectations" factors deserves much more careful and indepth research than provided by this thesis.

Spouse civilian earnings, marital status and family size enter the equation for the only time in this study, one as a negative influence (level of spouse civilian earnings, $B = -.45$) and the other as a positive influence (family size: $B = 1.26$). These two factors indicate that as the officer's family size increases the more inclined that he will be to remain in the service, but that as the level of his wife's income rises it could offset the advantages of his "large family" benefits of remaining in the Navy. It is interesting to note that all of the variables in the equation for Group

Three (B) are related to future expectations of the status of military pay, benefits, and retirement system or have to do with some financial aspect of the family security. The findings of this research indicate that the family plays a major role in determining the career orientation of the junior officer when he is at, or near, the end of his obligated service and is confronted with a decision to continue with, or to leave, the service. Also notable by their absence, is the lack of any of the variables dealing with the content or the context of the military job as compared to the civilian job situation.

These officers seem to be making their decisions about career orientation based upon what they feel will be best for their families and what will happen to military pay, benefits and the retirement system in the future. Military compensation appears to be such a major influencing factor that the comparison between military and civilian overall compensation is negative across the whole spectrum for officers in this cell. Even the most career oriented officers seem, in general, to believe that civilian jobs will provide a much higher level of overall compensation than the military, and that their families would be better off if they were to take a civilian job. This sort of attitude has major policy implications for maintaining the correct mix of junior officers in the Naval Service. Just the perception on the part of the junior officers that the government will fail to provide adequate levels of compensation could result in the exit of

many talented and highly qualified officers. The recent battles in the Congress over the levels of military pay required to retain the desired quantities of junior officers, the subsequent pay increases, and the increased retention figures which have resulted, will provide a good test in the coming years of this factor in the equation.

D. GROUP FOUR RESULTS

The officers in this group reported no obligated service remaining and a length of active service between seven and nine years. This group was examined to provide a contrast with those officers who were still within the period of their initial obligation, and by definition could not leave, or "turnover," at will. The officers in this group, having completed the minimum service obligation, are much more free to leave. Group Four officers reported a mean career orientation value of 8.3, a mean age of 29.8, and 23% were stationed aboard ships. 80% were married and reported a mean of 2.3 dependents per family. The group was 33% Naval Academy, 17% Officer Candidate School, 23% Reserve Officer Training Corps, and 24% Aviation Officer Candidate School graduates. The mean level of overall satisfaction with military life, on a scale of 1 (very dissatisfied) to 7 (very satisfied) was 4.2 and the mean reported feeling about military life being about what was expected was 2.2 on a scale of 1 (very close) to 5 (not close at all). A complete listing of the mean

response values for all the variables in the model for this group is provided in Appendix D.

The correlation matrix, shown in Table 24, shows the variables with the highest zero order correlation with career orientation to be overall satisfaction with military life ($r = .50$), satisfaction with the intrinsic aspects of the military job environment ($r = .32$), perception of the adequacy of the family/family security related benefits ($r = .32$), future expectations about military pay and the retirement system ($r = .24$), and source of commission being the Aviation Officer Candidate program ($r = .23$). Again the Reserve Officer Training Corps graduate has a moderate, but consistently negative, correlation ($r = -.12$) with career orientation, as do level of spouse civilian earnings ($r = -.10$), perceived pay differentail between military and civilian wages ($r = -.17$), and whether military life was about what was expected ($r = -.16$). It is interesting to note that satisfaction with the intrinsic aspects of the military job environment has the lowest zero order correlation with career orientation of any of the groups on which the model was tested.

The equation resulting from this group is summarized in Table 25, and again shows that the major factor is overall satisfaction with military life. This equation did not account for as much of the variance in career orientation as the other groups and it may be because those officers have many other variables influencing their career orientation decision.

TABLE 24
Correlation Matrix for Group Four

	1	2	3	4	5	6	7	8	9	10
1 ACAD	1.0									
2 OCS	-.32	1.0								
3 ROTC	-.38	-.24	1.0							
4 AOC	-.39	-.25	-.30	1.0						
5 LOS	-.31	.01	.12	.20	1.0					
6 PAYDIF	.23	-.16	.03	-.12	.08	1.0				
7 CIV	.11	.07	-.13	-.04	.16	.74	1.0			
8 SEARN	.20	.02	-.18	-.06	-.25	.08	.06	1.0		
9 Q95A	.14	.08	-.12	-.09	-.11	.06	.15	.06	1.0	
10 FUEXP	-.14	.09	-.03	.04	.01	.05	.19	-.02	-.06	1.0
11 Q8	.02	.08	.01	-.08	.24	.07	-.02	-.06	-.04	-.07
12 Q31	-.46	.15	-.04	.36	.56	-.08	.00	-.17	-.04	.09
13 FAMILY	-.13	-.00	.10	.03	.15	-.07	-.04	-.06	-.02	.14
14 Q41	.07	-.19	.05	.14	-.04	.13	.21	.09	.24	.03
15 Q88	.18	-.04	-.10	-.07	-.11	.21	.15	.05	.08	.07
16 SEC	-.01	.22	-.08	.00	-.18	-.18	-.17	.07	.16	-.09
17 INT	.07	.13	-.05	-.14	-.04	-.07	-.03	-.10	-.12	-.15
18 EXT	.11	.08	-.04	-.16	-.25	-.01	.04	.11	.03	-.06
19 Q94	-.01	-.07	.10	-.07	.20	.45	.54	-.20	.02	.15
20 Q96	-.05	-.00	.08	.01	-.01	-.23	-.27	-.02	-.34	.00
21 CO	-.08	.07	-.12	.22	.01	-.16	-.04	-.09	-.15	.23

TABLE 24 (CONTINUED)

	11	12	13	14	15	16	17	18	19	20	21
1 ACAD											
2 OCS											
3 ROTC											
4 AOC											
5 LOS											
6 PAYDIF											
7 CIV											
8 SEARN											
9 Q95A											
10 FUEXF											
11 Q8	1.0										
12 Q31	.09	1.0									
13 FAMILY	.03	.22	1.0								
14 Q41	-.11	.16	.03	1.0							
15 Q88	-.10	.01	.02	.01	1.0						
16 Sec	-.00	-.02	-.11	.13	-.10	1.0					
17 INT	.16	-.13	-.10	.11	-.41	.30	1.0				
18 EXT	-.05	-.18	.04	.15	-.11	.23	.45	1.0			
19 Q94	.06	.08	-.07	.03	.08	-.51	-.12	-.11	1.0		
20 Q96	.02	.12	-.08	-.09	-.18	.16	.35	.22	-.24	1.0	
21 CO	.12	.01	.04	-.06	-.05	.31	.32	.04	-.13	.49	1.0

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FACTORS INFLUENCING THE CAREER ORIENTATION OF JUNIOR
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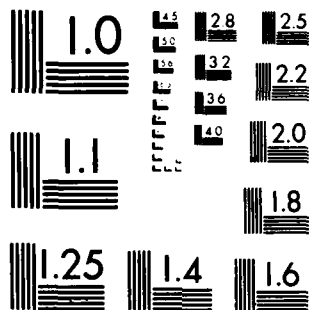
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TABLE 25

Regression Equation for Group Four

Variables Entering the Equation	B (Coefficient)	R Change
Satisfaction with Military Life	1.91	.26
Future Expectations About Pay/Retirement	2.55	.06
Family Related Benfits/ Security	2.06	.07
Source of Commission: Aviation Officer Candidate	3.97	.04
Satisfaction with Intrinsic Aspects	2.35	.03
Constant	-23.0	

Analysis of Variances

	DF	Sum of Squares	Mean Square
Regression	5	1477.12	295.42
Residual	60	1868.75	31.15

F = 9.49 Significance of F = .000

Multiple R = .664 R Squared = .44 Adjusted R Squared = .40

The sample of officers may have to be investigated on a designator by designator basis to discern the different influences for career orientation within this group. Aviation Officer Candidates are very strongly motivated to continue their careers in the group of officers. The model indicates that they will spend a mean of almost 4 more years in the Navy than the other groups. Another major factor is the concern with the future of the military retirement system and the feeling that military wages will, or will not, keep up with inflation. These officers are at the point where they must make their decision, if they are seriously contemplating it, to leave the service. The model indicates that their feelings about the stability of the retirement system, which has exercised a significant, and proven positive influence on the career intentions of mid-grade officers throughout the past twenty years, will play a significant role in determining the career behavior of these officers. The more uncertainty surrounding the system, the less the effect of its "pull" on mid-grade officers to "stick it out," with the result being that more of these junior officers may decide to leave the Navy [Howell, 1980]. It is interesting to note that 42% of the officers in this group were indicating less than 20 years of active service anticipated when they finally left the military service. The conclusion may be that this factor is still very important in the career decision process of those officers who have seven through ten years

of active service behind them. Because they have remained on active duty past their MSR, they may be relatively satisfied with the military job content they are experiencing, or they may perceive, as indicated by the positive value for the regression coefficient, that job content in the civilian market is not much different from that of the military environment. These officers are all in the middle trimester of their twenty year careers, having moved out of the junior officer ranks and into the ranks of the middle managers. They have mastered their warfare specialty and acquired the skills, on the micro level, that have prepared them for assuming greater responsibilities in the management arena of the middle and senior grade Naval officer. The Navy, by presenting these officers with new horizons and increasing levels of challenge, may be keeping these officers from considering the content of their jobs to be unsatisfactory, explaining their relative satisfaction with the intrinsic aspects of their military job situation.

E. SUMMARY

The model explains the variance in the measure of career orientation of the junior naval officer fairly well. The most powerful model which Arnold and Friedman (1981) were able to construct had a final multiple correlation of only .44, and a coefficient of determination (r^2) of .2, explaining about 20% of the variance in intention to turnover or leave an organization. This model has much higher

explanatory power than is usually found in the current literature about turnover and intention to leave an organization, in general explaining about 40% of the variance in the career orientation of the officers included in the study. The model accounts for the most variance in the career orientation of junior naval officers in Groups Three (A) and (B), with a value for the coefficient of determination of .62 for Group Three (A) and .69 for Group (B). The ease with which information can be obtained to measure the variables in the model makes it a good candidate for extensive applications in explaining the career orientation of junior officers. Most of the final variables in the model can be obtained from personnel records or a few single item measures which the officer can quickly and easily provide. Even the complex constructs, such as satisfaction with intrinsic and extrinsic aspects of the military job situation, or perception of relative quality of family related benefits, can be easily simplified into single item responses to keep the data collection effort as brief and simplified as possible. As pointed out by Arnold & Feldman (1982), the validity of single item self-report items, once determined, can be held constant, and used to great advantage in a low cost method for obtaining valid and useful information regarding the career orientation behavior of junior officers in the Navy.

V. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

This thesis developed and tested a working model to analyze the career orientation of the junior military officer. In addition, the influence of Navy personnel policies on junior officer career orientation, reflected in the results of application of the model to the various groups of naval officers under study, has been explored. The model shows that the variables which measure the individual's general feelings towards his job and organization (cognitive/affective orientation to career environment), in particular his overall satisfaction with Navy life, are the most influential factors in determining the career orientation of the junior officer. The variables entering the equation for each group in this study are summarized in Table 26.

The final form of the model is presented in Table 27 and utilizes seventeen of the original twenty two candidate variables. In general, the model explained over 40% of the variance in the career orientation among junior officers with more than two and less than ten years of active duty. For two specific subsets of these officers, 60% of the variance in career orientation was explained. Additionally, several conclusions were developed regarding the influence of commission source, perception of alternative job opportunities, an officer's position within his period of obligated service, and his

TABLE 26

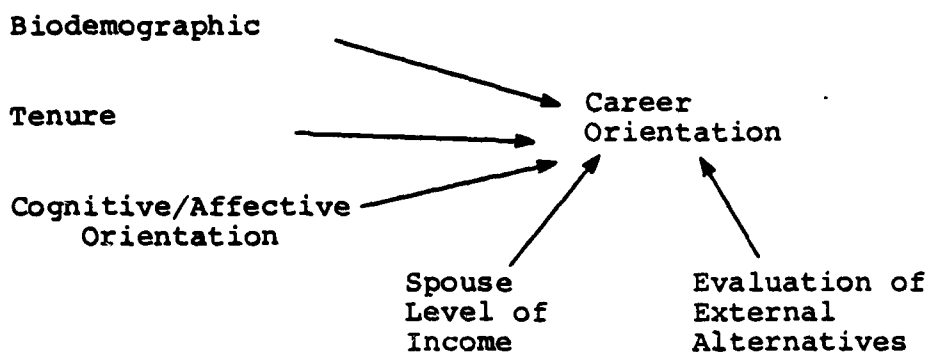
Summary of Variables in Model

<u>Variables</u>	<u>Group Number</u>					
	1	2	3	3A	3B	4
<u>Biodemographic Variables</u>						
Age	X					
Marital Status					X	
Number of Dependents					X	
Education		X		X	X	
Source of Commission	X	X				X
<u>Tenure Variables</u>						
Length of Active Service						
Obligated Service Remaining						
						(Controlled for in the model)
<u>Feelings Toward Organization</u>						
Overall Satisfaction	X		X	X	X	X
Met Expectations		X	X			
Future Pay/Retirement Expectations	X	X	X	X	X	X
Job Content Satisfaction	X					X
Job Context Satisfaction	X					
Family Related Benefits	X		X	X	X	X
<u>Family Income Factors</u>						
Level of Spouse Earnings	X				X	
<u>Perceptions of Alternatives</u>						
Comparison of Military & Civilian Compensation				X	X	

satisfaction regarding the intrinsic and extrinsic aspects of his military job on the career orientation behavior of junior officers in the United States Navy.

TABLE 27

Final Career Orientation Model



1. Biodemographic Variables

Age, education, and family size were all positively correlated with increasing measures of career orientation with two minor exceptions. Source of commission, however, was found to play a greater role in influencing the career orientation of the junior officer than was first assumed in the construction of the model. The influence of source of commission on career orientation does change with the individual's relative position within the "obligated service remaining-length of current active duty" matrix, but the pattern of the shift is not clear and should be the object of further exploratory research.

The Reserve Officer Training Corps graduates in all groups had consistent, and significant, negative correlations with career orientation when their behavior was compared to that of the control group. The control group was officers who had received their commissions from sources other than the Naval Academy, Officer Candidate School, Aviation Officer Candidate School, or the Reserve Officer Training Corps Program. This pattern was true for all cells and all groups, with Reserve Officer Training Corps graduates having their most negative relationship between source of commission and career orientation for Group Three officers. The reasons for this consistent negative influence on the career orientation of graduates of the Reserve Officer Training Corps programs should be a subject of further study by the Navy. Further exploratory analysis of the career orientation of the ROTC graduates revealed that over 70% of these junior officers were dissatisfied with the intrinsic aspects of their military jobs and felt a civilian job would be much more challenging and interesting.

In contrast, officers who are graduates of the Aviation Officer Candidate Program had the most consistently positive career orientation of the commission sources studied in this thesis. Over 75% of the junior officers in this community felt that their military jobs were much more challenging, and interesting than those available in the civilian job market. The reasons for the significant difference between the

career orientation of the officers from these two commissioning sources is another area in which further research should be conducted.

2. Military Pay and Retirement Systems

A major negative influence on the career orientation of the junior officers in this study was the belief that military pay and benefits would not keep up with inflation and that the retirement system would not be as good in the future as it was for those retiring in 1979. Over 90% of the officers in this study felt that their pay and benefits would not be increased to compensate for inflation, and over 80% felt that the military retirement system would not be as good in the future as it was when the survey was administered. The variable construct for measurement of junior officer future expectations about the military pay and retirement systems entered the regression equation for every group as a negative influence on career orientation.

3. Met Expectations

The "met expectations" factor (Was military life about as expected?) was demonstrated to be a major influence on the career orientation behavior of junior officers. The more closely the junior officer felt that his prior expectations about military life matched the reality of his military environment, the more career oriented the junior officer appeared to be. The linear correlation between "met expectations" and career orientation was the smallest, however, for Group Three (B), those officers with 5 or 6 years of active

duty and who were within their last year of obligated service. These officers, who are approaching the turnover decision point, may be more strongly influenced by family, fringe benefit, and job satisfaction factors which may mask, or change, the effects of met expectations on the career decision. One explanation for this low correlation is that, for an officer approaching the career decision point, the question of met expectations is not as important as some researchers believe [Hoiberg & Barry, 1978], as long as the officer is more satisfied with his current overall situation and future career prospects than he is disappointed over the lack of military life to measure up to his prior expectations.

4. Spouse Gross Civilian Earnings

Spouse civilian earnings was found to be a negative influence on the career orientation of the officers in this study. It was a factor which entered in the regression equations of both Group One, and Group Two (B), having a negative regression coefficient each time. The level of spouse civilian income also had a consistent negative zero order correlation with the measure of career orientation for all the groups studied. This factor is one of growing importance to the military manpower planner. Almost one third of the wives of the junior officers in this study were working and they contributed an average of 16% to the family's total income. As this percentage becomes more of a factor in the career decision process, some flexibility in the Navy's requirement for

officers to change geographical location as often as is currently required, will be necessary.

5. Available Job Alternatives

The factors which appear to be least important, entering the regression equation with the least consistency, were variables from the group measuring the perception of the existence of external alternatives. Two of these variables were, however, consistently related to career orientation: (1) The comparison between perceived levels of military and civilian compensation, and (2) whether or not the individual had been offered a civilian job during the preceeding twelve months. The factor of an actual job offer may provide the officer with a source of information about the relative desirability of his current situation versus an alternative one in the civilian job market. The officer who has received a serious job offer, even though he may not be seeking alternative employment, is in a better position to evaluate the relative merits of both his current military and potential civilian job environments. His evaluation of the alternatives will help to shape his attitude toward his career in the Navy. This study found moderate, but consistent evidence, that the offer of a civilian job offer is positively related to the career orientation of officers who are more than one year from completion of obligated service. This study also found that officers who were within their last year of obligated service are much more satisfied with the military,

evaluating it in a much more favorable light, than were the groups of officers who had more than one year remaining to serve on their obligation.

6. Influence of the First Three Years of Service

The officers in their third year of service with between one and three years remaining to complete their minimum service requirement reported the most lowest mean level of satisfaction with military life overall, the lowest career orientation value, the lowest level of satisfaction with both the intrinsic and the extrinsic aspects of the military job situation, and the least favorable expectations about the future of the military pay and retirement systems of all the groups studied. The correlation coefficient between ROTC as a commission source and career orientation for the officers in their third year of service had the largest negative value of any officer cell studied ($r = -.47$). Additionally, they had the lowest correlation between career orientation and the extrinsic and intrinsic job satisfaction measures of any other group studied. Because of the very significant negative mean values, relative to the other groups of officers in the study, reported across the board by these officers, this group deserves further careful study in the future. One future study should use the model to study similar groups of junior officers in the other three services to explore the factors influencing their career orientation in the third year of active duty and compare the findings with the results of this study.

B. RECOMMENDATIONS

The following recommendations are drawn from reviewing the conclusions reached by this thesis. They are based upon interpretations of the analysis conducted in Chapter IV.

Recommendation 1: Continue the study of the application of this model to evaluate the career orientation behavior of junior officers. This should be done across service, on a service specific basis, as was done in this thesis, and on a military occupational specialty basis. The model needs to be refined and replacement measures for some of the constructs utilized need to be developed. In particular, further study should be conducted to determine what factors most influence the measure of an officer's overall satisfaction with military life. This factor accounted for the largest portion of the explanatory power of the model's equations for each group investigated and if the components of "overall satisfaction" could be determine they would significantly improve the model's explanatory power.

Recommendation 2: Source of commission was found to be a very influential factor in the career orientation behavior of the junior officers in this study. The results of this study indicate that officers receiving commissions through the Reserve Officer Training Corps program have a significantly lower career orientation than any other source of commission. More research is required to pinpoint the source, or sources, for this very negative career orientation by ROTC

graduates, perhaps through an in-depth review of the Reserve Officer Training Corps program's goals and its ability to fulfill those goals.

Recommendation 3: Remove the question of military compensation levels from the debate over the annual Federal budget. Establish a commission that would have the power to set the amount of the pay raise in accordance with an established policy, based upon the recommendations of the Secretary of Defense, the Service Secretaries, and the Office of Management and Budget. Compensation policies could then be reviewed on a quadriennial basis, at which time the Congress would express its will as to the desired levels of compensation to be paid to the military over the subsequent four years. The constant bickering in the Legislative bodies of the government over the pecuniary aspects of military compensation has a detrimental effect on the career orientation of the junior officer.

Recommendation 4: Resolve the questions about the military retirement system to provide a measure of stability of expectations for the officer trying to decide about a career in the Navy. The constant debate about the future of this program has injected a great deal of uncertainty into what should be a very positive career influencing factor.

Recommendation 5: A program of gathering information on the attitudes of the members of the military services on a periodic, and recurring basis should be established. This information should be added to the existing data base to

provide military manpower analysts with an expanded information base from which to explore the effects of the personnel policies on service people from one survey to the next. A survey similar to the 1979 Department of Defense Survey of Officers and Enlisted Personnel, administered by the Rand Corporation, should be conducted in 1983. This would permit analysis of the effects of the personnel policies of the intervening four years on the career orientation of junior officers in the all-volunteer armed forces.

APPENDIX A

SURVEY QUESTIONS FOR VARIABLES IN MODELS

Survey Question Number	Question	Answer Scale
------------------------------	----------	-----------------

- 5 Through which officer procurement program did you obtain your commission?

Academy graduate (USNA, USMA, USAFA) -----	1
Limited Duty Officer Program -----	2
Officer Candidate School -----	3
ROTC (regular) -----	4
ROTC (Scholarship) -----	5
Aviation Officer Candidate or Aviation Cadet ----	6
Warrant Officer Program -----	7
Direct Appointment from civilian status -----	8
Reserve Officer Candidate -----	9
Platoon Leaders Course/WOC (USMC) -----	10
Health Professional Scholarship Program -----	11
Medical Specialist Program -----	12
Other -----	13

(Missing responses were coded -1)

- 6 Officers coming on their first tour of active duty sometimes incur an initial service commitment. Are you presently serving within your INITIAL SERVICE OBLIGATION as a commissioned officer?

Does not apply, I did not have an initial service obligation -----	7
Yes, I am serving within my INITIAL OBLIGATION --	1
No, I am serving within the FIRST YEAR AFTER MY INITIAL OBLIGATION -----	2
No, I am serving MORE THAN ONE YEAR BEYOND MY INITIAL OBLIGATION -----	3

(Missing values were coded -1)

- | | |
|--|---|
| Does not apply, I do not have a service obligation ----- | 7 |
| Less than one year ----- | 1 |
| At least 1 year but less than 2 years ----- | 2 |
| At least 2 years but less than 3 years ----- | 3 |
| At least 3 years but less than 4 years ----- | 4 |
| At least 4 years but less than 5 years ----- | 5 |
| 5 years or more ----- | 6 |

8 Are you currently assigned to a ship?

Yes ----- 1
No ----- 0

10 How do you feel about your current location?
Please mark the number which shows your opinion
on the line below. For example, people who are
Very Satisfied with their location would mark 7.
People who are Very dissatisfied with their
location would mark 1. Other people may have
opinions somewhere between 1 and 7.

Very Dissatisfied Very Satisfied
1.....2.....3.....4.....5.....6.....7

11 To the nearest year and month, how long have you been on active duty? If you had a break in service, count current time and time in the previous tours. Count time spent at a military academy and prior enlisted service.

Enter years and months ----|----|----| |----|----|

(Out of range values--Over 40 years--were coded -4)

- 12 When you finally leave the military, how many total years of service do you expect to have?

#Years -----|_|_

112

- 21 Suppose that your chances of being appointed to the next higher paygrade were reduced 50% because of reduced manpower requirements. How likely would you be to remain in the service if you knew that your promotion opportunity was reduced?

No chance (0 in 10) -----	0
Very slight possibility (1 in 10) -----	1
Slight possibility (2 in 10) -----	2
Some possibility (3 in 10) -----	3
Fair possibility (4 in 10) -----	4
Fairly good possibility (5 in 10) -----	5
Good possibility (6 in 10) -----	6
Probable (7 in 10) -----	7
Very probable (8 in 10) -----	8
Almost certain (9 in 10) -----	9
Certain (10 in 10) -----	10
Don't know -----	

(Missing values were coded -1)

- 30 Are you male or female?

Male -----	1
Female -----	2

(Missing values were coded -1)

- 31 How old were you on your last birthday?

Enter age LAST BIRTHDAY -----|_|_|

(Missing responses were coded -1)

- 35 What is your marital status NOW?

Married -----	1
Widowed -----	2
Divorced -----	3
Separated -----	4
Single, never married -----	5

This question was recoded to capture only officers who were either single, never married, or married, as follows:

Single, never married -----	0
Married -----	1

(All others, and missing values were coded -1)

- 60 What is the amount of your MONTHLY Basic Allowance for Quarters (BAQ)? BAQ is a cash payment for housing. If you don't know the exact amount, please give your best estimate.

Enter BAQ -----\$|_|_|_|_|

I do not receive a BAQ ----- -4

(Missing responses were coded -1)

- 61 What is the amount of your MONTHLY Basic Allowance for Subsistence? BAS is a cash payment for food. If you don't know the exact amount, please give your best estimate.

Enter BAS -----\$|_|_|_|_|

I do not receive a BAS ----- -4

- 64 How much do you currently receive EACH MONTH, before taxes and other deductions, from special monthly pays and allowances (such as Jump Pay, Sea Pay, Submarine Pay, Flight Pay, COLA)

Enter total amount -----\$|_|_|_|_|

- 81 Altogether in 1978, what was the total amount, before taxes and other deductions, that YOUR SPOUSE earned from a civilian or his or her own business?

None ----- -4

Enter civilian earnings of spouse -\$|_|_|_|_|

- 84 What was your family's TOTAL INCOME, before taxes and other deductions, from ALL military and civilian sources for all of last year--1978?

Enter TOTAL family income -----\$|_|_|_|_|

- 88 In the past 12 months, did you receive any job offers for a civilian job which you could take if you leave the service?

No ----- 0

Yes ----- 1

- 90 If you left the service right NOW, how much per year would you expect to earn PER YEAR in wages and salary if you took a full-time civilian job? DO NOT INCLUDE FRINGE BENEFITS.

Expected ANNUAL earnings -----\$|_|_|_|_|

I don't know what I can earn in civilian life --- -4

- 93 If you were to leave the service NOW and take a civilian job, how do you think that job would compare with your present military job in regard to the following work conditions?

Civilian job would be A LOT BETTER	Civilian job would be SLIGHTLY BETTER	About the SAME in a civilian and military job	Civilian job would be SLIGHTLY WORSE	Civilian job would be a LOT WORSE
---	--	--	---	--

1-----2-----3-----4-----5

Work Conditions

- a. The immediate supervisors -----1 2 3 4 5
- b. Having a say in what happens to me -----1 2 3 4 5
- c. The retirement benefits -----1 2 3 4 5
- d. The medical benefits -----1 2 3 4 5
- e. The chance for interesting/challenging work -----1 2 3 4 5
- f. The wages and salaries -----1 2 3 4 5
- g. The chance for promotion -----1 2 3 4 5
- h. The opportunities for training -----1 2 3 4 5
- i. The people I work with -----1 2 3 4 5
- j. The work schedule and hours of work -----1 2 3 4 5
- k. The job security -----1 2 3 4 5
- l. The equipment I would use on the job -----1 2 3 4 5
- m. The location of the job -----1 2 3 4 5

- 94 Suppose you left the service NOW. How do you think the total military compensation you are receiving NOW (pay and benefits) would compare with the total compensation (pay and benefits) you would receive in a civilian job?

A lot more in the military ----- 1
A little more in the military ----- 2
About the same in a military or a civilian job -- 3
A little more in civilian life ----- 4
A lot more in civilian life ----- 5
I have no idea what I could earn in civilian
life ----- -4

95 How much do you agree or disagree with each of the following statements about military life?

Strongly	Agree	Neither agree	Disagree	Strongly
Agree		nor disagree		Disagree
1-----	2-----	3-----	4-----	5-----

A. Life in the military is about what I
expected it to be ----- 1 2 3 4 5

B. Military personnel in the future will
not have as good retirement benefits
as I have now ----- 1 2 3 4 5

C. My military pay and benefits will not
keep up with inflation ----- 1 2 3 4 5

D. My family would be better off if I
took a civilian job ----- 1 2 3 4 5

96 Now, taking all things together, how satisfied or dissatisfied are you with the military as a way of life? (Mark the number which shows your opinion.)

Very		Very		
Satisfied		Dissatisfied		
1-----	2-----	3-----	4-----	5-----

APPENDIX B

NAVAL OFFICER DESIGNATOR CODES

Unrestricted Line

- 110X Line Officer
- 111X Line officer qualified in Surface Warfare
- 112X Line officer qualified in Submarine Warfare
- 113X Line officer qualified in Special Warfare
- 114X Line officer qualified in Special Operations
- 116X Line officer in training for Surface Warfare qualification
- 117X Line officer in training for Submarine Warfare qualification
- 118X Line officer in training for Special Warfare qualification
- 119X Line officer in training for Special Operations qualification
- 130X Line officer in the aviation community whose rating as a pilot or Naval Flight Officer has been removed
- 131X Line officer qualified for duty involving flying as a pilot
- 132X Line officer qualified for duty involving flying as a Naval Flight Officer
- 137X Line officer in training for duty involving flying as a Naval Flight Officer
- 139X Line officer in training for duty involving flying as a pilot

Restricted Line

- 14XX Engineering Duty officers (Ship and Ordnance)
- 15XX Aeronautical Engineering Duty officers
- 16XX Special Duty officers

Staff Corps

51XX Civil Engineer Corps officers

310X Supply Corps officers

APPENDIX C

MEAN RESPONSE TO VARIABLES FOR GROUPS STUDIED

Group 1: Mean Responses to Variables

	Mean	Cases	Label
CO	6.74	502	CAREER ORIENT NUMBER
ACAD	0.28	526	ACADEMY GRADUATE
OCS	0.14	526	OCS & ROC PROGRAMS
ROTC	0.27	526	ROTC*SCHOLARSHIP & CONTRACT
AOC	0.22	526	AOCS & AVCAD PROGRAMS
PAYDIF	1.26	526	CIVPAY MINUS MILPAY
SEARN	2.06	526	SPOUSE CIV EARNINGS
Q95A	2.50	523	MIL LIFE AS EXPECTED
FUEXP	4.20	523	FUTURE EXPECTATIONS
LOS	5.69	526	YEARS OF SERVICE
Q8	0.40	522	CURRENTLY ASSIGNED TO SHIP
Q31	27.54	523	AGE LAST BIRTHDAY
FAMILY	1.29	526	NUMBER OF DEPENDENTS IF MARRIED
Q41	16.30	525	YOUR EDUCATION NOW
Q88	0.35	522	CIVILIAN JOB OFFERS
SEC	2.85	520	FAMILY SECURITY FACTOR
INT	2.50	520	INTRINSIC FACTOR
EXT	2.43	520	EXTRINSIC FACTOR
Q94	3.68	513	CIV VS MIL COMPENSATION
Q96	3.90	524	SATISFACTION W-MILITARY LIFE

N OF CASES = 526

Group 2: Mean Responses to Variables

	Mean	Cases	Label
ACAD	0.19	52	ACADEMY GRADUATE
OCS	0.13	52	OCS & ROC PROGRAMS
ROTC	0.50	52	ROTC*SCHOLARSHIP & CONTRACT
AOC	0.17	52	AOCS & AVCAD PROGRAMS
LOS	3.00	52	YEARS OF SERVICE
PAYDIF	-0.22	52	CIVPAY MINUS MILPAY
CIV	16.57	47	Q90 DIV BY 1000
SEARN	1.65	52	SPOUSE CIV EARNINGS
Q95A	2.98	51	MIL LIFE AS EXPECTED
FUEXP	4.20	51	FUTURE EXPECTATIONS
Q8	0.75	52	CURRENTLY ASSIGNED TO SHIP
Q31	24.82	52	AGE LAST BIRTHDAY
FAMILY	0.73	52	NUMBER OF DEPENDENTS IF MARRIED
Q41	16.13	52	YOUR EDUCATION NOW
Q88	0.30	52	CIVILIAN JOB OFFERS
SEC	2.76	51	FAMILY SECURITY FACTOR
INT	2.25	51	INTRINSIC FACTOR
EXT	2.32	51	EXTRINSIC FACTOR
Q94	3.73	49	CIV VS MIL COMPENSATION
Q96	3.17	52	SATISFACTION W-MILITARY LIFE
CO	5.35	51	CAREER ORIENT NUMBER

N OF CASES = 52

Group 3: Mean Responses to Variables

	Mean	Cases	Label
ACAD	0.21	64	ACADEMY GRADUATE
OCS	0.18	64	OCS & ROC PROGRAMS
ROTC	0.40	64	ROTC*SCHOLARSHIP & CONTRACT
AOC	0.17	64	AOCS & AVCAD PROGRAMS
LOS	5.00	64	YEARS OF SERVICE
PAYDIF	-0.72	64	CIVPAY MINUS MILPAY
CIV	21.81	56	Q90 DIV BY 1000
SEARN	1.12	64	SPOUSE CIV EARNINGS
Q95A	2.71	64	MIL LIFE AS EXPECTED
FUEXP	4.09	64	FUTURE EXPECTATIONS
Q8	0.48	64	CURRENTLY ASSIGNED TO SHIP
Q31	26.93	64	AGE LAST BIRTHDAY
FAMILY	1.09	64	NUMBER OF DEPENDENTS IF MARRIED
Q41	16.21	64	YOUR EDUCATION NOW
Q88	0.38	63	CIVILIAN JOB OFFERS
SEC	2.92	63	FAMILY SECURITY FACTOR
INT	2.40	63	INTRINSIC FACTOR
EXT	2.38	63	EXTRINSIC FACTOR
Q94	3.38	63	CIV VS MIL COMPENSATION
Q96	3.34	64	SATISFACTION W-MILITARY LIFE
CO	2.77	61	CAREER ORIENT NUMBER

N OF CASES = 64

Group 3A: Mean Responses to Variables

	Mean	Cases	Label
ACAD	0.19	47	ACADEMY GRADUATE
OCS	0.21	47	OCS & ROC PROGRAMS
ROTC	0.44	47	ROTC&SCHOLARSHIP & CONTRACT
AOC	0.14	47	AOCS & AVCAD PROGRAMS
LOS	4.63	47	YEARS OF SERVICE
PAYDIF	-0.26	47	CIVPAY MINUS MILPAY
CIV	21.38	42	Q90 DIV BY 1000
SEARN	1.44	47	SPOUSE CIV EARNINGS
Q95A	2.87	47	MIL LIFE AS EXPECTED
FUEXP	4.05	47	FUTURE EXPECTATIONS
Q8	0.57	47	CURRENTLY ASSIGNED TO SHIP
Q31	26.66	47	AGE LAST BIRTHDAY
FAMILY	1.00	47	NUMBER OF DEPENDENTS IF MARRIED
Q41	16.31	47	YOUR EDUCATION NOW
Q88	0.40	47	CIVILIAN JOB OFFERS
SEC	2.98	46	FAMILY SECURITY FACTOR
INT	2.38	46	INTRINSIC FACTOR
EXT	2.37	46	EXTRINSIC FACTOR
Q94	3.25	47	CIV VS MIL COMPENSATION
Q96	3.36	47	SATISFACTION W-MILITARY LIFE
CO	2.48	45	CAREER ORIENT NUMBER

N OF CASES = 47

Group 3B: Mean Responses to Variables

	Mean	Cases	Label
ACAD	0.29	47	ACADEMY GRADUATE
OCS	0.10	47	OCS & ROC PROGRAMS
ROTC	0.36	47	ROTC*SCHOLARSHIP & CONTRACT
AOC	0.21	47	AOCS & AVCAD PROGRAMS
LOS	5.36	47	YEARS OF SERVICE
PAYDIF	-0.85	47	CIVPAY MINUS MILPAY
CIV	22.64	41	Q90 DIV BY 1000
SEARN	0.99	47	SPOUSE CIV EARNINGS
Q95A	2.72	47	MIL LIFE AS EXPECTED
FUEXP	4.14	47	FUTURE EXPECTATIONS
Q8	0.34	47	CURRENTLY ASSIGNED TO SHIP
Q31	27.21	47	AGE LAST BIRTHDAY
FAMILY	1.12	47	NUMBER OF DEPENDENTS IF MARRIED
Q41	16.14	47	YOUR EDUCATION NOW
Q88	0.45	46	CIVILIAN JOB OFFERS
SEC	2.85	46	FAMILY SECURITY FACTOR
INT	2.36	46	INTRINSIC FACTOR
EXT	2.37	46	EXTRINSIC FACTOR
Q94	3.32	46	CIV VS MIL COMPENSATION
Q96	3.29	47	SATISFACTION W-MILITARY LIFE
CO	2.73	45	CAREER ORIENT NUMBER

Group 4: Mean Responses to Variables

	Mean	Cases	Label
ACAD	0.33	75	ACADEMY GRADUATE
OCS	0.17	75	OCS & ROC PROGRAMS
ROTC	0.22	75	ROTC*SCHOLARSHIP & CONTRACT
AOC	0.24	75	AOCS & AVCAD PROGRAMS
LOS	7.82	75	YEARS OF SERVICE
PAYDIF	1.27	75	CIVPAY MINUS MILPAY
CIV	24.64	71	Q90 DIV BY 1000
SEARN	2.67	75	SPOUSE CIV EARNINGS
Q95A	2.17	75	MIL LIFE AS EXPECTED
FUEXP	4.14	75	FUTURE EXPECTATIONS
Q8	0.22	75	CURRENTLY ASSIGNED TO SHIP
Q31	29.82	75	AGE LAST BIRTHDAY
FAMILY	1.62	75	NUMBER OF DEPENDENTS IF MARRIED
Q41	16.39	74	YOUR EDUCATION NOW
Q88	0.50	75	CIVILIAN JOB OFFERS
SEC	2.80	75	FAMILY SECURITY FACTOR
INT	2.53	75	INTRINSIC FACTOR
EXT	2.48	75	EXTRINSIC FACTOR
Q94	3.57	73	CIV VS MIL COMPENSATION
Q96	4.24	75	SATISFACTION W-MILITARY LIFE
CO	8.34	70	CAREER ORIENT NUMBER

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