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AN ANALYSIS OF FACTORS AFFECTING THE RETENTION PLANS OF JUNIOR MALE U.S. ARMY OFFICERS: EVIDENCE FROM THE 1999 DOD SURVEY OF ACTIVE DUTY PERSONNEL

by

Umit Gencer

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This thesis investigates the factors that influence the retention intentions of 680 junior male Army officers who are serving within their initial obligated service. To estimate the models, data for this thesis were drawn from responses to the *1999 DoD Survey of Active Duty Personnel*. The survey includes data on retention intentions of service members. Past research has shown that a member's intention is a good predictor of retention behavior. Logistic regression analysis is used to identify demographic, tenure, economic, and cognitive characteristics that significantly affect the intention to stay or to quit the military and to assess their relative importance. The SAS software package is used to analyze the data.

The model developed for this thesis is successful in identifying several factors influencing the retention intentions of junior male Army officers. Eight of the seventeen variables included in the model have a significant impact upon retention. Officers' decision to remain on active duty were significantly influenced by the *demographic characteristics* of family status and race; the *tenure characteristics* of military rank (O3) and military life expectation; the *economic characteristics* of the probability of finding a good civilian job, and the *cognitive characteristics* of satisfaction with military intrinsic values, military career advancement opportunities, and military deployment and economic life.

A quadrant analysis of the satisfaction variables is used to indicate areas for improvement in order to raise the military's overall level of job satisfaction. High impact candidate areas for improvement were identified: *workload, personal time, and enjoyment* satisfaction. These are excellent candidates for immediate attention since they have a considerable impact on overall satisfaction with military life and have substantial room for improvement.

Finally, this thesis recommends areas for further related research and future policy.

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ABSTRACT

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I. INTRODUCTION

A. BACKGROUND

The overriding objective of the United States Army is to train and retain quality personnel, both officer and enlisted, to achieve a more effective fighting force. Unfortunately, the US Army has recently been facing critical recruiting and retention problems due to the ever-changing factors in the civil and military worlds. For example, since the economy of the late 1990s performed remarkably well and unemployment remained low, recruiters struggled to attract new personnel. Another complicating factor for the All-Volunteer Force (AVF) has been the ever-increasing number of young adults seeking a college degree instead of a military career, a trend that further reduced the military's recruiting market. Paradoxically, while the military's requirement for highly educated personnel has increased in direct proportion to the increase in war-fighting technology, the number of college-educated recruits has diminished. Consequently, recruiting young men and women has become harder than ever before. Owing to these factors, the Army has missed its recruiting goal and military personnel planners believe that manning the "career force" beyond the first-term in a robust economy has worsened military retention and entry-level recruiting.

When confronting the cause of their manpower retention problems, military personnel experts have scrutinized internal factors such as leadership, operational tempo, and work hours as well as external factors, such as the military–civilian pay ratio and unemployment rate for long-term solutions to the career force-manning problem. [Ref. 24]

These experts have focused primarily on the issues of retention and turnover because each issue has monetary and non-monetary implications for the military services. From a monetary perspective, turnover is expensive. Recruiting, classifying, and training replacements cost money. From a non-monetary perspective, excessive turnover also results in lost experience, lower productivity, and reduced readiness. Since the military does not often allow lateral entry, a decline in retention rates could create a shortage of experienced personnel. These shortages could reduce the overall capability of the

military, which would lead to a reduced pace of operations. [Ref. 13] Thus sustaining the Army at the current levels of operational capability depends on the Army's ability to recruit and to retain qualified personnel.

Past research shows that many factors, including demographic characteristics, job satisfaction, family situation, and job alternatives, affect turnover rates. Manpower planners in the services have experimented with many different incentives to improve overall retention. Monetary compensation incentives, quality of life improvements, and expanded promotion opportunities are among these incentives. Although pecuniary factors are quite important for one's stay/leave decision in the military, research shows that many service members stay in the military due to their taste for national service, training, camaraderie, and other non-monetary aspects. These factors should not be underestimated.

Retention decisions are different for officers than they are for enlisted members. For enlisted personnel, these decisions are based on specific interests within an individual's military career. Enlisted personnel join the service of choice for a contracted period of time, from two years for some Army occupational specialties to as many as six years for Navy and Air Force specialties. Once the contracted service requirement is fulfilled, the enlisted member makes one of three choices: (1) extend or reenlist for another specific period of obligated service, (2) leave the active force and join one of the reserve forces, or (3) leave the service altogether. [Ref. 27]

For officers, the situation is different in some respects. Upon entry into service, new ensigns or second lieutenants also agree to remain on active duty for a specific period of time. However, once they reach their End of Obligated Service (EOS), officers can continue to serve on active duty without incurring another contracted period of obligated service. The ability to remain on active duty depends on the type of commission. Officers with regular commissions can continue indefinitely as long as they are promoted. Officers with reserve commissions must apply to be "augmented" into the regular officer corps, or apply for extensions. If an Army captain with a reserve commission is extended and is selected for promotion to major, then he or she is automatically "augmented" and receives a regular commission as a major. [Ref. 27]

This thesis primarily focuses on the retention intentions of junior Army officers who are serving within their initial obligated service requirement. These officers are of critical importance because they supervise, manage, and train enlisted soldiers on a daily basis. The performance of these officers ultimately affects the readiness and capabilities of all Army units.

In order to retain trained and qualified personnel in the service, manpower planners design surveys to identify the significant factors that affect the individual's decision to remain on active duty. Using these surveys results, the manpower planners project future retention levels and plan for shortfalls in critical occupational specialties.

B. PURPOSE

The purpose of this thesis is to develop a model that will identify the major factors affecting the retention of junior Army officers and will suggest a policy to reduce personnel costs and increase effectiveness. Retention, in this study, is defined as the individual officer's intention to remain on active duty after completing his or her initial obligation. The term "initial obligation" refers to the contractual period of service that an individual officer incurs. The length of this initial obligated service varies between three to seven years, depending on one's occupational specialty and/or on the commissioning source.

This thesis uses responses to the *1999 DoD Survey of Active Duty Personnel* [Ref. 36] to estimate the models. The survey includes data on reenlistment intentions of service members. Past research has shown that a member's intentions are a good predictor of reenlistment behavior. Multivariate regression analysis is used to identify the factors that significantly affect the intention to reenlist and to assess their relative importance. The Statistical Analyze Software (SAS) package is used to analyze the data.

Specifically, this research answers these questions:

1. What factors affect the career intentions of junior Army officers who are within their initial period of obligated service?

2. What is the relative importance of these factors in explaining the intention to remain on active duty?

3. How do these factors differ among Military Occupational Specialty (MOS) groups?

4. What policies may be effective for the Army to examine the retention of junior officers?

II. REVIEW OF LITERATURE

A. REENLISTMENT INTENTION AND ACTUAL BEHAVIOR

The desire to predict human behavior accurately has always been an important priority in the fields of psychology, economics, and statistical analysis. The capability of understanding human behavior is a powerful tool. This tool proves to be very useful to large organizations and companies, which rely on feedback from employees in order to improve manpower policies. [Ref. 23] Just like these companies, the United States Army relies on information obtained from its current enlistees and officer corps to understand what factors cause these individuals to remain in or depart from the service.

Naturally, trying to predict the probability that an individual member will leave the service upon completion of his or her existing contract is difficult and such predictions are not always accurate. Sampling a representative portion of Army personnel through the use of a survey that asks about intentions can simplify and perfect the task. Members usually have a definite opinion of the military and know whether they would like to reenlist or not reenlist long before their contracts end.

Various studies have been conducted comparing the intentions of individuals to stay with their actual retention behavior. The question arises as to whether "intention" is a casual variable that affects all other variables leading to the individual's decision to remain on the job or to quit. As a result, attempting to capture people's intentions that reflect their aggregate feelings about their jobs is difficult. For example, when surveys are conducted, the individuals may be answering the "intent to remain on the job" question with a recent incident in mind—one that might skew their otherwise neutral opinion of their level of satisfaction. Despite the possible existence of this type of bias, Rearden revealed in her study that apparently the day-to-day occurrences at work do not noticeably affect an individual's intention to remain at the job or quit. [Ref. 23]

In this respect, according to Doering and Grissmer, currently the most effective approach to studying retention is to survey individuals systematically about their reenlistment intentions at various times prior to the actual decision. If the survey that measures intentions also contains information about possible reasons for the decision, either for or against reenlistment, and if the intentions and behavior can be related with some degree of confidence, a policy-relevant analysis can be conducted. [Ref. 6]

According to Aizen and Fishbein [Ref.1], an individual's intention is generally the immediate and most accurate determinant of behavior, but certain conditions must exist:

> a. There must be a correspondence between the measure of intention and the measure of behavior as to target (i.e. the job), the action (i.e. reenlist or leave), the time (i.e. at the end of current enlistment term), and the context (i.e. military).
>
> b. Intentions change over time. The longer the time interval, the less accurate is the prediction of behavior from intention. In other words, the closer to the decision point, the more accurate is the intention as a predictor of behavior.
>
> c. Aggregate intentions are much more stable than individual intentions over time, because incidents that hit individuals—such as injuries, illness, pregnancy, money losses, etc.—are likely to balance out at the aggregate level. Predictions of behavior from intentions at the aggregate level are therefore often remarkably accurate.

Also, according to another study completed by Mobley, Horner, and Hollingsworth [Ref. 16], employees' intentions to remain on the job or to quit do affect their actual behavior. This study shows that job dissatisfaction affects intentions to quit and intentions to search for a new job. Both of these intentions then affect the individual's actual behavior. Mobley's conclusion supports the idea that intention is a powerful factor when deciding to stay or to leave an organization.

Similarly, a study conducted by Szoc and Seboda [Ref. 25] sampled military members using a survey similar to *The 1999 DoD Survey* and the results of the survey were paired with subsequent behavior data. Items in the survey were classified as follows:

- demographic characteristics,
- family considerations,
- housing,
- transportation,
- work conditions,
- financial information,
- satisfaction with Navy life,
- factors associated with the retention decision.

In order to ascertain the retention behavior of the individuals in the study, the authors used the Enlisted Personnel System Tracking File, which is maintained by Naval Military Personnel Command (NMPC). The findings revealed that the intention variable is a very powerful one: the model that included intentions enhanced the predictive quality of the model. The non-intentions model predicted reenlistment behavior accurately 66 percent of the time, whereas the intentions model predicted reenlistment behavior correctly 73 percent of the time. This study concluded that intentions do accurately predict retention behavior.

Other findings on the intention and behavior issue from the study of Szoc and Seboda include:

- Many more respondents stayed than had intended to do so.
- Those intending to leave were most likely to change their minds, and those who were undecided tended to stay.
- Most of those who left had intended to do so. For the group that stayed, almost half had not indicated this as their original intention.
- Of those who clearly intended to stay, only one-fourth changed their minds. [Ref. 25]

Royle and Robertson show that stated intent to remain on active duty is a superior predictor of actual retention when compared to indirect measures of job satisfaction such as pay, the work itself, or the organization. Stated intent is superior because it is a composite of the specific satisfiers important to each individual. Intent to remain in an

organization may be useful as a criterion, substituting for actual retention information because of the strong relationship between the two variables. However, because the intent to remain and actual retention are not perfectly correlated, results from surveys using intent should be validated using actual retention data. Even if satisfaction with the job itself and satisfaction with the organization are highly related to intent to remain, other factors such as the external job market can have an overriding effect on the subsequent, actual decision. [Ref. 24]

Another analysis that examines the link between intentions and actual behavior is a Naval Postgraduate thesis by Anne-Marie Rearden. In her study, she explores whether reenlistment intentions can help to predict actual reenlistment behavior. She constructs multivariate models consisting of demographic, reenlistment intentions, and job satisfaction variables. The results show that reenlistment behavior is influenced by race, age, pay grade, marital status, enlistment period, and the level of satisfaction with the military in general. The results also shows that the most powerful predictor of reenlistment behavior is the reenlistment intention variable. [Ref. 23]

This thesis uses data from the *1999 DoD Survey of Active Duty Personnel* to develop an econometric model to predict Army junior officer reenlistment behavior. Due to the relatively recent fielding of the survey, this thesis is unable to test the validity of intention stated on a survey as a predictor of actual retention behavior. The research cited above supports the use of an econometric model based on intentions as an accurate predictor of individual retention behavior. However, the results of the econometric model should be confirmed when actual turnover behavior information becomes available. Did the member reenlist or did he leave the military service? Does his or her actual behavior match his or her intentions? The validation of a model designed to predict reenlistment intentions can only occur when follow-on data is used to compare the members' intentions with their actual behavior.

B. TURNOVER THEORY

Turnover can be classified by its controllability, its measurement, and its effect on an organization, and may be categorized as either "functional or dysfunctional." Functional turnover, so called because its organizational benefits outweigh its costs, can

occur when an unproductive worker resigns or is fired. Beyers, et al., summarize functional turnover: "A certain level of turnover promotes innovation, improved adaptation to technology, savings in wages and seniority pay, and other benefits to an organization." [Ref. 4] Dysfunctional turnover, which occurs when costs are higher than benefits, can occur when excessive recruiting, selection, and training costs result from a high degree of turnover. Turnover is also classified as voluntary or involuntary. If an individual resigns, it is voluntary. Involuntary turnover occurs when an individual is fired. Most organizations, including the military, are interested in the causes of voluntary turnover, since it frequently is also dysfunctional. This thesis addresses voluntary turnover.

Experts often assume that voluntary turnover stems from an employee's dissatisfaction with a job. However, Lensing demonstrated this assumption is not necessarily true, since people may voluntarily resign when work schedules interfere with family commitments or because they desire to return to school. A better job offer might also persuade workers to resign, even if they are not dissatisfied with their current jobs. [Ref.14] However, most research has shown that a strong relationship between job satisfaction and turnover exists.

Job satisfaction refers to an individual's general attitude toward his or her job. A person with a high level of job satisfaction holds positive attitudes toward the job while a person who is dissatisfied with his or her job holds negative attitudes toward the job. A study by Porter and Steers uncovered an inverse relationship between job satisfaction and turnover. They concluded that expressed "intention to leave" might represent the next logical step after experienced dissatisfaction. [Ref. 22]

Locke (1976) reported consistent and significant, but not especially high correlations between job satisfaction and turnover, as did Mobley (1977), who found a significant and consistent relationship between job satisfaction and turnover. According to Mobley, one of the primary consequences of job dissatisfaction is that it stimulates thoughts of quitting, leading the worker to evaluate the expected prospects of a search, the intention to search, the search, the evaluation of alternatives, the intention to quit, and finally the withdrawal decision and behavior. Mobley evaluated a simplified heuristics

model of the withdrawal decision process and found that intention to quit was the immediate precursor of actual withdrawal behavior. [Ref. 15]

Muchinsky determined that the magnitude of the satisfaction-turnover correlation, on average, is approximately -.40, indicating that the more people dislike their jobs, the more likely they are to quit. This relationship is influenced by several factors, including the availability of other work. [Ref. 21]

Another important consideration in examining turnover is the extent of loyalty or commitment that an employee has to his employer. Organizational commitment is the degree of a person's identification with and involvement in an organization. The distinguishing features of commitment are "(1) a strong belief in and acceptance of the organization's goals and values; (2) willingness to exert effort for the organization and (3) a desire to maintain membership in the organization." [Ref 21]

Mowday and et al. studied commitment extensively by looking at the bonds between employees and their organizations. These bonds are established in an exchange between the individual and the organization. If an organization provides what an individual seeks—that which fulfill needs or desires—then organizational commitment is strengthened. Strong bonds are important from the organization's perspective because stronger bonds result in lower employee absenteeism and turnover, which in turn reduce costs and raise productivity. [Ref. 19]

Although job satisfaction and organizational commitment are the most widely cited causes of turnover, many others factors have been studied. Researchers frequently use models to conceptualize these causes and to provide a framework in which to examine the turnover process.

Mobley's turnover model is probably the most representative model of the current turnover research. Mobley's work was, in the words of Muchinsky,

> A major step forward in thinking of the process from job satisfaction to turnover instead of repeatedly accessing the direct relationship between dissatisfaction and turnover. [Ref. 20]

Mobley proposed the first version of this model in 1977 when he noted:

> The relationship between job satisfaction and turnover is significant and consistent, but not particularly strong. A more complete understanding of the psychology of the withdrawal decision process requires investigation beyond the replication of satisfaction-turnover relationship. [Ref. 15]

His paper generated much research. Since 1977, Mobley and many others have tested the variations of the model in an effort to explain turnover. Mobley's model differed from previous work in the proposal of intermediate steps between job satisfaction and the decision to quit. His turnover model, tested in 1978 by Mobley and et al., is shown in Figure 1. Specifically, this model suggests that dissatisfaction leads to thoughts of quitting. These thoughts lead to "rational evaluation" of the expected utility of search and of the cost of quitting. If there is a perceived chance of finding an alternative, the next step would be "intent to search." Intent to search then leads to "actual search." Alternatives are then evaluated and compared to the current job. If the comparison favors the alternative, "intent to quit" is stimulated, followed by "quitting." This model was tested with a sample of 203 hospital employees. Self-reported intention to quit was an important influence on turnover.

Mobley found that the single significant regression coefficient with turnover was "intention to quit" and that the effect of job dissatisfaction was on "thinking of quitting" and "intentions" rather than on "turnover" itself. [Ref. 16]

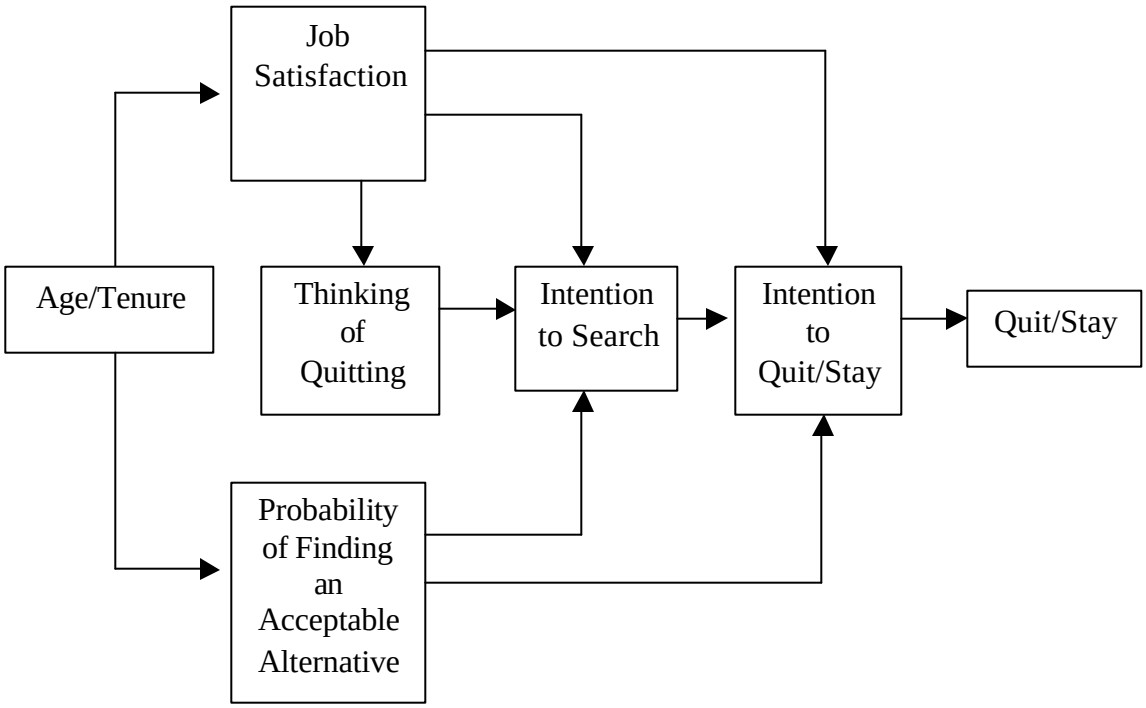

Figure 1. Mobley and et al. Turnover Model, "After [Ref.16]"

Several other conceptual models have been tested. These models are similar to Mobley's in that they evaluate an individual's present position that creates dissatisfaction and leads to a search for another job. This dissatisfaction and job search result in intentions to quit. Intentions to quit will ultimately lead to a decision to quit for those individuals who also perceive a favorable labor market with alternative jobs providing more benefits than their current job.

C. MILITARY TURNOVER RESEARCH

Research on turnover in the military has been separated from research concerned with turnover in the private sector owing to several unique characteristics of the withdrawal process in the military. First, every member of the military must make an explicit decision to remain or to leave at some point during his or her tenure. Generally, civilian employees are not expected to make such a specific decision (especially if they decide to stay). Also, because military employment is based on contracts, the decision to

leave the military comes at a single, predictable point in time. In the private sector an employee may intend to quit but be uncertain about when. Reenlistment in the military also means an obligation to remain for a fixed term. Consequently, the decision to reenlist carries greater commitment than does the decision to remain on the job in the private sector. [Ref. 13]

Also, military occupations have many unique features that are not frequently experienced in the civilian world. Probably more than most occupations, the military employees' families are affected by the worker's employment. For example, military members are subject to frequent moves, which can be very disruptive to family life. Children's education and social development can be affected, spouses' employment may be disrupted and extended family and friendships are broken. Other aspects of military life that may affect employment decisions include the requirement to be away from home frequently, living in the field, long working hours and weekend work with no direct effect on take-home pay, danger, military discipline and loss of constitutional rights, and the requirement to lay down one's life should the situation demand it. [Ref. 10] All of these factors potentially influence the military personnel's decisions to quit or to stay. For such reasons researchers should study military turnover behavior separately from private sector turnover behavior.

In 1985 Hayden conducted a study using the *1978 DoD Survey of Officers and Enlisted Personnel* [Ref. 33] to determine factors influencing the career decisions of Army officers with one through three years of service. The officers were divided into three occupational groups: combat arms, combat support, and combat service support. Using regression models and discriminant analysis with "expected years of service" as the dependent variable, Hayden found that overall satisfaction with military life was the most important factor influencing retention. Beyond this, the different occupational groups had different specific factors affecting retention, but most were based on comparing military to civilian life. [Ref. 9]

Theilmann (1990) analyzed Marine Corps officer separation behavior for officers in their initial period of obligated service. For this study Theilmann used information contained in the *1985 DoD Survey of Officer and Enlisted Personnel* [Ref. 34] matched

with subsequent retention data obtained from the Defense Manpower Data Center (DMDC). Regarding the leave or stay decisions, Theilmann analyzed the effect of intrinsic and extrinsic job satisfaction factors, satisfaction with benefits, current location, and community attitudes. He concluded that

> The factors that most strongly influence male junior officers to remain on active duty beyond their initial service obligation are their commissioning source, marital/dependent status, military occupational specialty and intrinsic and extrinsic job satisfaction factors. [Ref. 27]

Dudley and Hoyle conducted a study to find what types of rewards Army and Marine Corps officers valued and how these awards affected retention. In this study, 92 Army and 119 Marine Corps officers, in the ranks O-1 through O-4, were given a list of 41 rewards. Using a one-to-five scale, he asked the officers to rank the expected probability and importance of receiving such rewards during their careers. He also asked them to rank the influence of each award on their decision to stay in or leave the service. The results for the Army were similar to those of the Marine Corps. They found that while extrinsic factors (financial security, job security, pay, promotion, and fringe benefits) were important to the officers, intrinsic factors (trusted by subordinates and superiors, interesting job, respected by superiors, responsibility and authority, pride in self, supportive atmosphere, accomplishments, etc.) were considered much more important. Dudley and Hoyle also found that the factors the officers considered most important were also most important in determining career intentions. In addition, the expected probability of receiving these rewards was highly correlated with the officers' career intentions. [Ref. 7]

Vranken and et al. addressed a major Army issue: deployment and its effects on the immediate family. Of the spouses surveyed, 80% had children and 50% of the sample had been married less than two years. It was noted that the spouses' attitudes toward the Army and their husbands' careers changed once the husbands were deployed.[1] Their feelings toward the Army shifted from a very positive attitude to a more neutral tone. Thirty-one percent of the wives felt that the family separation had affected their

[1] Only male Army officers were included.

marriages negatively. [Ref. 28] This could possibly result in a trade off between divorce and staying.

Junior officers today place more of a priority on preserving the family unit in their decision to stay or to leave the military. To boomer officers, (born between 1943 and 1960) taking care of families entailed constructing state-of-the art day care facilities for kids and building large PXs (post exchanges) for the spouses. To Generation Xers, (born between 1960 and 1980) taking care of families entailed giving officers time to nurture relationships with children and spouses. [Ref. 31] Armstrong (2000), in studying changing demographics and the impact on officer retention, discovered that improving family support programs was an important step in modifying career progression plans for officers. She recommended that the military should consider adopting family support programs that had been implemented by other armed forces, such as the Royal Australian Armed Forces, and/or implement a dual-track career progression program that allowed officers to choose the options that provide a better balance between career and family without sacrificing certain career success. [Ref. 2]

Johnston conducted another study on turnover of junior Army officers. He used the *1985 DoD Survey of Officer and Enlisted Personnel* [Ref. 34] and included various explanatory variables, such as personal characteristics (age, tenure, education, number of dependents), occupational characteristics (pay grade, military occupational specialty, time spent overseas), expectations concerning alternative employment (probability of better job offers, searched for work in last year), and satisfaction with the service. Johnston found that intentions to remain in the service are more strongly related to actual turnover behavior of junior Army officers in the short term than in the long term. [Ref. 10]

Lakhani conducted a retention cost-benefit analysis of U.S. Army junior officers. He hypothesized that a junior Army officer's decision to stay or to leave the service can consist of three major considerations. The first consideration consists of monetary aspects such as pay, allowances, and retirement benefits. The second consideration consists of non-pecuniary benefits such as career commitment and satisfaction. The last consideration is comprised of various attributes that are difficult to measure, such as taste

for Army life and the potential effects of satisfaction with family life on job satisfaction. Together these three factors form a utility maximization function, which suggests that a junior Army officer will stay in the service if the net benefit derived by these attributes exceeds the net benefit available from alternative civilian employment. [Ref. 12]

Zinner (1997) studied the factors affecting the retention of male junior Marine Corps officers who were serving within their initial period of obligated service. Zinner used a broad social science approach, which combined organizational and individual behavioral factors to model the turnover decision. Data for this study were drawn from a matched file of responses to the *1992 DoD Survey of Officers and Enlisted Personnel and Their Spouses* [Ref. 35] with 1996 follow-up retention information from the Defense Manpower Data Center's Master loss file. The factors that significantly influenced the sample members' decisions to remain on active duty included:

- commissioning source,
- occupational specialty,
- deployment to Operation Dessert Shield/Storm,
- satisfaction with various intrinsic aspects of life in the Marine Corps,
- concerns with the force draw down,
- whether or not the officer had searched for civilian employment in the last twelve months,
- whether or not the officer believed that the skills he had acquired in the Marine Corps would be transferable to the civilian market,
- the influence on the career decision of the officer's spouse.[Ref. 32]

In reviewing these studies, a myriad of factors obviously contribute to the career decisions of Army junior officers. In addition to those cited, there are, undoubtedly, many other factors that have been overlooked and still others that have not been identified yet. However, all relevant factors fall into one of only three broad categories: personal, intrinsic, and extrinsic factors. Organizing this thesis on the basis of these categories will simplify the approach of determining which factors are most influential and may also help to reveal other potentially influential factors that have not yet been specifically

considered. Table 1 summarizes the major findings of turnover research presented in this chapter.

Table 1. A Summary of Major Findings in Turnover Research

REENLISTMENT INTENTION AND ACTUAL BEHAVIOR	
AUTHOR	**FINDING**
Aizen and Fishbein (1980)	Individual intention is generally the immediate and most accurate determinant of behavior, assuming there is a correspondence between the measure of intention and the measure of behavior as to target (i.e. the job), the action (i.e. reenlist or leave), the time (i.e. at the end of current enlistment term), and the context (i.e. military).
Royle and Robertson (1980)	Satisfaction with the specific job and satisfaction with the organization are highly related to intent to remain on the job, and subsequently related to their actual decision.
Szoc and Seboda (1984)	The intention variable enhances the predictive quality of the model.
Doering and Grissmer (1985)	If the survey measuring intentions also contains information about possible reasons for the decision, a policy-relevant analysis can be conducted.
Rearden (1988)	The most powerful predictor of reenlistment behavior is the reenlistment intention variable.

Table 1. A Summary of Major Findings in Turnover Research (Continued)

TURNOVER THEORY	
AUTHOR	**FINDING**
Porter and Steers (1973)	There is an inverse relationship between job satisfaction and turnover.
Mobley (1977)	Dissatisfaction leads to thinking of quitting, intention to search, intention to leave, and actual turnover.
Mowday (1982)	Strong linkages with the organization result in lower employee absenteeism and turnover, which in turn lead to reduced costs and higher productivity.
Lensing (1984)	A voluntary resignation can happen when work schedules interfere with family commitments or a better job offer is accepted.
Muchinsky (2000)	The satisfaction-turnover correlation is -.40 indicating the more a person dislikes his or her job, the more likely he or she is to quit.
MILITARY RESEARCH	
AUTHOR	**FINDING**
Dudley and Hoyle (1979)	Intrinsic factors (trusted by subordinates and superiors, interesting job, respected by superiors, responsibility and authority, pride in self, supportive atmosphere, accomplishments, etc.) were considered much more important than extrinsic factors (financial security, job security, pay, promotion, and fringe benefits).
Vranken (1984)	Spouses' attitudes toward the Army influence career decisions of military members.
Hayden (1985)	Overall satisfaction with military life is the most important factor influencing retention.
Johnston (1988)	Intentions to remain in the service are more strongly related to actual behavior of junior Army officers in the short term than in the long term.

Table 1. A Summary of Major Findings in Turnover Research (Continued)

MILITARY RESEARCH	
AUTHOR	**FINDING**
Lempe (1989)	The decision to reenlist carries greater commitment than does the decision to remain on the job in the private sector due to the unique features of military occupations such as being away from home frequently, living in the field or military discipline.
Theilmann (1990)	Commissioning source, marital/dependent status, military occupational specialty, and intrinsic and extrinsic job satisfaction factors influence junior Marine officer turnover.
Zinner (1997)	Commissioning source, occupational specialty, deployment to Operation Desert Shield/Storm, concerns with the force draw down, and officer's spouse factors influence significantly member's decision to stay on active duty.
Armstrong (2000)	Improving family support programs is an important step in modifying career progression plans for officers.

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III. MODEL DEVELOPMENT

A. DATA COLLECTION

The most effective method with which to obtain information on planned retention is simply to ask individuals their intentions. Three general methods exist for querying a person: questionnaire, oral, or observational. [Ref. 29] In this research, using observational methods is impossible. Oral interviews also present limitations. While it would be desirable to interview each junior Army officer, such a method is not practical. Cost and time constraints preclude use of this reliable technique.

However, questionnaires offer many advantages. The most obvious is cost. Moser and Kalton indicate the expense of printing questionnaires and distributing them to large numbers of people is considerable less than that of interviewing similar numbers of people. [Ref. 18] Also, Berdie and Anderson point out that researchers conducting personal interviews frequently have trouble contacting people not in their office during normal hours. Questionnaires delivered to their homes or offices allow respondents to complete the survey at their leisure, thus improving the response rate. [Ref 3]

A questionnaire format was used as the most practical means of data collection for the series of surveys of military personnel begun in 1978. Goode and Hatt [Ref. 8] observed that the use of questionnaires in research is based on one basic, underlying assumption: the respondent will give truthful answers. An important additional issue for this survey questionnaire is how accurately actual retention is measured by an individual's stated intentions.

B. SURVEY DESCRIPTION

The data used in this thesis were drawn primarily from the *1999 DoD Survey of Active Duty Personnel.* [Ref. 36] The Defense Manpower Data Center (DMDC) conducted this survey to assess perceptions of military life issues, at the request of the Office of the Deputy Assistant Secretary of Defense for Personnel Support, Families, and Education.

The *1999 DoD Survey of Active Duty Personnel* survey contains 112 questions (some with multiple items). A copy of the survey is attached in the Appendix. The survey's items can be grouped broadly into several categories: assignment information, career information, military life, programs and services, family information, economic issues, and background information. These categories are described in Table 2.

Table 2. Survey Categories

Assignment Information	Questions on hours worked, permanent duty station (PDS), satisfaction with characteristics of the PDS, permanent change of station moves, and time away from the PDS for military duties.
Career Information	Questions on career intent, reasons for joining, obligation and retention, satisfaction with occupational specialty, and satisfaction with aspects of military service.
Military Life	Questions on importance of military activities, thoughts of leaving the military, civilian vs. military opportunities, and overall satisfaction.
Programs and Services	Questions on the availability and use of on-base and off-base services, facilities, and programs.
Family Information	Questions on marital status, spouse occupation and education, dependents, childcare arrangements, and military health care.
Economic Issues	Questions on non-military income, total monthly income and expenses, savings and debt, service and retirement benefits.
Background	Information on gender, race/ethnic status, education, duty status, Service, pay grade, and time served.

The population from which the survey members were sampled consisted of active duty officers and enlisted personnel from the Army, Navy, Marine Corps, Air Force, and Coast Guard who were stationed in the United States or overseas in May 1999. Initially, 66,040 active duty members were targeted. However, only 33,189 individuals from all four military services returned usable surveys. The (weighted) response rate was 51%, which is typical for large-scale surveys of DoD military personnel. [Ref. 36] The survey

was designed to aid in examining enlistment and retention decisions, career orientation, and policies affecting military members and their families. The sample design was stratified by service, gender, pay grade group, location and marital status. When considering only Army active duty officers, the sample size (prior to any data cleaning) was 5,931, of which 79% were male. Table 3 depicts the survey stratification for all officers by service and sex.

Table 3. Gender and Branch of Service

1999 ACTIVE DUTY OFFICER SAMPLE ALLOCATION						
Gender	**Total**	**Army**	**Navy**	**Marine Corps**	**Air Force**	**Coast Guard**
Male	13,235	4,688	2,518	2,156	3,287	586
Female	2,758	1,243	431	164	825	95
Total	15,993	5,931	2,949	2,320	4,112	681

N= 31986

C. MODEL DATA DESCRIPTION

Since the focus of the research is junior Army officers with pay grade between O-1 and O-3, a sub-sample of 1,169 active duty junior Army officers who are within their initial period of obligated service was selected from the survey for use in this thesis. These company-grade officers (pay grades between O-1 and O-3) represent the majority of the officers who would be within their initial period of obligated service. Many warrant officers and majors (O-4) and above have already completed their initial obligation. Table 4 displays the distribution of company-grade officers.

Table 4. Company-Grade Officers Pay Grade Distribution

Pay Grade	**Female**		**Male**	
	Frequency	**Percent**	**Frequency**	**Percent**
O-1	60	26.66	246	26.06
O-2	103	45.78	457	48.41
O-3	62	27.56	241	25.53

n= 1169

The term " initial obligation" represents the contractual period of service required by a particular commissioning program plus any further obligation incurred due to some form of follow-on training (such as flight school). For example, West Point Military Academy graduates have a five-year commitment, Army Reserve Officer Training Corps graduates have a four-year obligation and Officer Candidate School graduates face a three-year obligation.

Officers with no obligated service were deleted from the sample, due to the fact that they are essentially "careerists" who have already made committal stay/leave decisions. The factors influencing their retention are likely to be different from the factors influencing those within obligated service.

The sample used in this study was narrowed further by deleting junior female active duty officers from the model. Female officers account for 19.25% of the sample of junior Army officers within their obligated service. This percentage is similar to the proportion of women junior officers in the Army as a whole (16.77% in FY 1999). [Ref. 37]

Extensive preliminary analyses showed the existence of important behavior differences between males and females. Women have markedly different reenlistment patterns, given the differential occurrence and impact of factors, such as marriage and childbearing, spouse conflict, migration and physical ability. Thus, separate models should be undertaken to explain female and male retention intentions. This thesis is limited to an analysis of male officers' retention due to the sample size considerations.

The majority of the sample respondents, 54.41%, are single with no dependents. This precluded including family related questions that would have restricted the number of cases for analysis to married members and/or those with dependents, which is not the purpose of this study.

Respondents who did not provide valid responses for items essential to the analysis were eliminated from the data set. The final sample for analysis contained 680 male junior Army officers. Table 5 displays the distribution of male junior Army officers by pay grade for our final sample for analysis.

Table 5. Male Junior Officers Pay Grade Distribution for Thesis Analysis

Pay Grade	Frequency	Percent
O-1	120	17.65
O-2	378	55.59
O-3	182	26.76

n= 680

Table 6 describes the Military Occupational Specialties (MOS) of the sample. These are categorized as combat, combat support, and combat service support branch. Combat arms comprise the biggest category with 51.18%.

Table 6. MOS Categories

OFFICER OCCUPATION AREAS		PERCENT
Combat	Include *Tactical Operation Officers* such as Infantry, Armor, and Artillery.	51.18
Combat Support	Include Officers from *Intelligence, Engineering* and *Maintenance,* and *Health Care*.	31.47
Combat Service Support	Include Officers from *Supply and Procurement, Administration Service,* and *Scientific Research*.	16.91

n= 680

The 1999 DoD Survey of Active Duty Personnel asks, "Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?" Available responses are categorized from "very likely" to "very unlikely." The response to this questionnaire item represents the behavior of interest, and it is used as the dependent variable for the multivariate retention model estimated in this thesis. Frequencies for responses to this question are shown in Table 7.

Table 7. *The 1999 DoD Survey of Active Duty Personnel*, Frequencies for Responses to the question, "How likely is it that you would choose to stay on active duty?"

Responses	Frequency	Percent
Very Likely	99	14.56
Likely	134	19.71
Neither Likely/Unlikely	132	19.41
Unlikely	147	21.62
Very Unlikely	168	24.71

n= 680

As can be seen in Table 7, 14.56% of the male Army officers responding to the survey indicated that they were very likely to stay on active duty at the end of their initial obligated service, while 24.71% indicated that their chance of staying on active duty was "very unlikely." The rest of the respondents were approximately evenly distributed among the choices ranging from likely to unlikely.

The majority of respondents categorized their race/ethnic group as White (82.95%), while only 4.85%, 3.53%, and 8.97% of the respondents categorized themselves as Black, Hispanic, and other race,[2] respectively. Black and Hispanic officers are under-represented in this sample relative to the active Army officer corps as a whole where Blacks and Hispanics accounted for 11.5%, and 4.4% of the total, respectively, in 1999. [Ref. 37] In this respect, White and other race were over-represented where White and other race accounted for 77.68%, and 6.36% of the total, respectively, in 1999. (However, there is no clear explanation for this uneven distribution.) Table 8 displays the distribution of male junior Army officers in the whole Army and is our final sample in this thesis.

[2] The "other race" category represents American Indians, Alaskan Natives, and Asian/Pacific Islanders.

Table 8. Male Junior Officers Pay Grade Distribution in the Whole Army and in Thesis Sample, "After [Ref. 37]"

Race/Ethnicity	Pay Grade between O-1 and O-3 in the Whole Army		Pay Grade between O-1 and O-3 in the Thesis Sample	
	Frequency	Percent	Frequency	Percent
White	30,132	77.68	562	82.65
Black	4,471	11.52	33	4.85
Hispanics	1,718	4.42	24	3.53
Other	2,466	6.36	61	8.97
Total	38,787	100.00*	680	100.00*

Table 9 displays responses to a question about how much the respondents would agree or disagree that they could find a good civilian job easily if they left the military now. As Table 9 shows, the majority of male junior officers (56.18%) believe that they could find a better job in the private sector if they left the military.

Table 9. *The 1999 DoD Survey of Active Duty Personnel*, Frequencies for Responses to the question, "How much do you agree/disagree with the statement? It would be easy for me to get a good civilian job if I left the military now."

Responses	Frequency	Percent
Strongly Agree	382	56.18
Agree	199	29.26
Neither Agree/Disagree	68	10.00
Disagree	24	3.53
Strongly Disagree	7	1.03

n= 680

The 1999 DoD Survey of Active Duty Personnel asks the respondents to asses satisfaction with a series of specific job facets. Table 10 displays mean and standard deviation distribution of responses to the question of, "How satisfied are you with each of

* Percent is not 100 due to rounding error

the following?" The respondents are mostly satisfied with job security by 3.83 mean value.

Table 10. *The 1999 DoD Survey of Active Duty Personnel*, Mean and Standard Deviation Distribution of Responses to the question, "How satisfied are you with each of the following?"

Satisfaction Variables	Mean	Standard Deviation
Basic Pay	2.95	1.17
Special and Incentive Pay	2.66	1.20
Reenlistment Bonus/ Continuation Pay Program	2.11	1.01
Housing Allowance	2.97	1.19
Medical Care for You	3.07	1.20
Dental Care for You	3.28	1.12
Retirement Pay	2.43	1.12
Cost of Living Adjustments (COLA) to Retirement Pay	2.59	0.98
Other Retirement Benefits (Medical Care and Use of Base Services)	2.72	1.11
Pace of Your Promotions	3.48	0.91
Chances for Future Advancement	3.61	0.88
Training and Professional Development	3.25	1.07
Type of Assignment Received	3.33	1.08
Deployments	2.82	1.03
Other Military Duties That Take You Away from Permanent Duty Station	2.93	0.92
Availability of Equipment, Parts, and Resources	2.28	1.03
Level of Manning in Your Unit	2.21	1.02
Your Unit's Morale	2.86	1.15
Your Personal Workload	2.93	1.05
Amount of Personal/Family Time You Have	2.54	1.14
Off-Duty Educational Opportunities	2.64	1.08
Quality of Leadership	3.12	1.10
Military Values, Lifestyle, and Tradition	3.42	1.03
Value Coding: 1= Very Dissatisfied; 2= Dissatisfied; 3=Neither Satisfied/Dissatisfied; 4= Satisfied; 5= Very Satisfied		

Table 10. *The 1999 DoD Survey of Active Duty Personnel*, Mean and Standard Deviation Distribution of Responses to the question, "How satisfied are you with each of the following?" (Continued)

Satisfaction Variables	Mean	Standard Deviation
Amount of Enjoyment from Your Job	3.12	1.15
Frequency of PCS Moves	3.15	0.88
Job Security	3.83	0.76
Value Coding: 1= Very Dissatisfied; 2= Dissatisfied; 3=Neither Satisfied/Dissatisfied; 4= Satisfied; 5= Very Satisfied		

n= 680

D. HYPOTHESIZED RETENTION MODEL

A conceptual model of the retention process for this thesis, based on the literature review, was formulated and is shown in Figure 2. Most models of retention intentions have included many of the same variables, but they have differed in their categorization of those variables and in their posited causal order. The theoretical model used in this thesis is a function of four categories of explanatory variables: demographic (such as gender and race), tenure (such as pay grade), economic (such as probability of finding a good civilian job) and cognitive (such as satisfaction). The model used throughout the analysis is presented here in general form.

Intention of Retention = f (Demographic, Tenure, Economic, Cognitive)

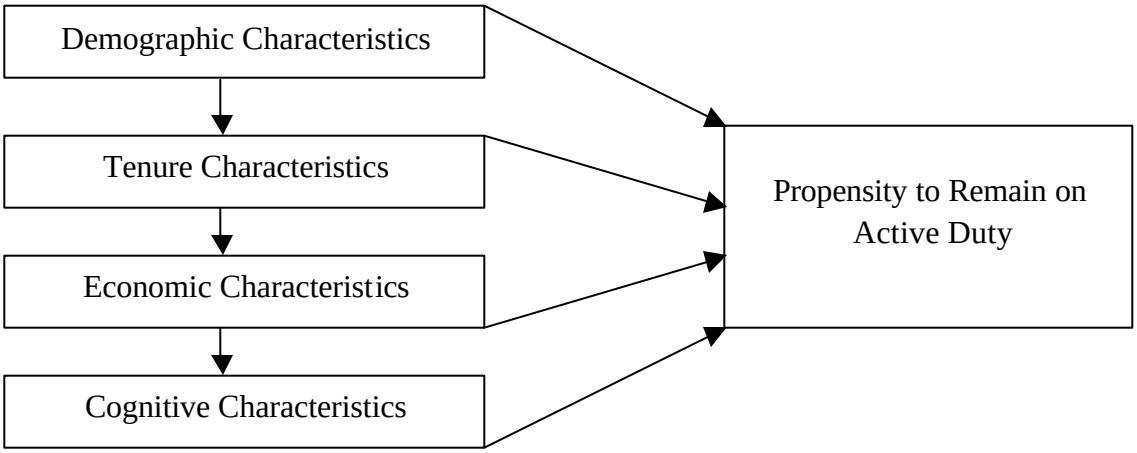

Figure 2. The Hypothesized Retention Model

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IV. MODEL ESTIMATION

A. DEPENDENT VARIABLE AND MODEL SPECIFICATION

An analysis of junior male Army officers' retention is based on the ability to define the critical factors affecting career decisions. Retention is defined as a male junior officer's decision to stay in the Army. Alternatively, the officer may choose to leave the service. Therefore, the retention outcome is modeled with a dichotomous dependent variable, which takes the value of "1" if the officer intends to stay and a value of "0" if the intention is to leave.

For the dependent variable of this thesis, stayers were identified as those survey respondents who answered the question of "How likely is it that you would choose to stay on active duty?" as "very likely or likely." Leavers are the respondents who replied as "unlikely or very unlikely." Undecided officers who replied as "neither likely nor unlikely" were omitted from the sample because their intentions are unclear and they could mislead the results and the recommendations for future policies.

While there are several estimation techniques that are appropriate for analyzing a dichotomous dependent variable, this thesis uses logistic regression due to the fact that the cumulative distribution of retention intention is often described well by S-shape patterns. (See Figure 3)

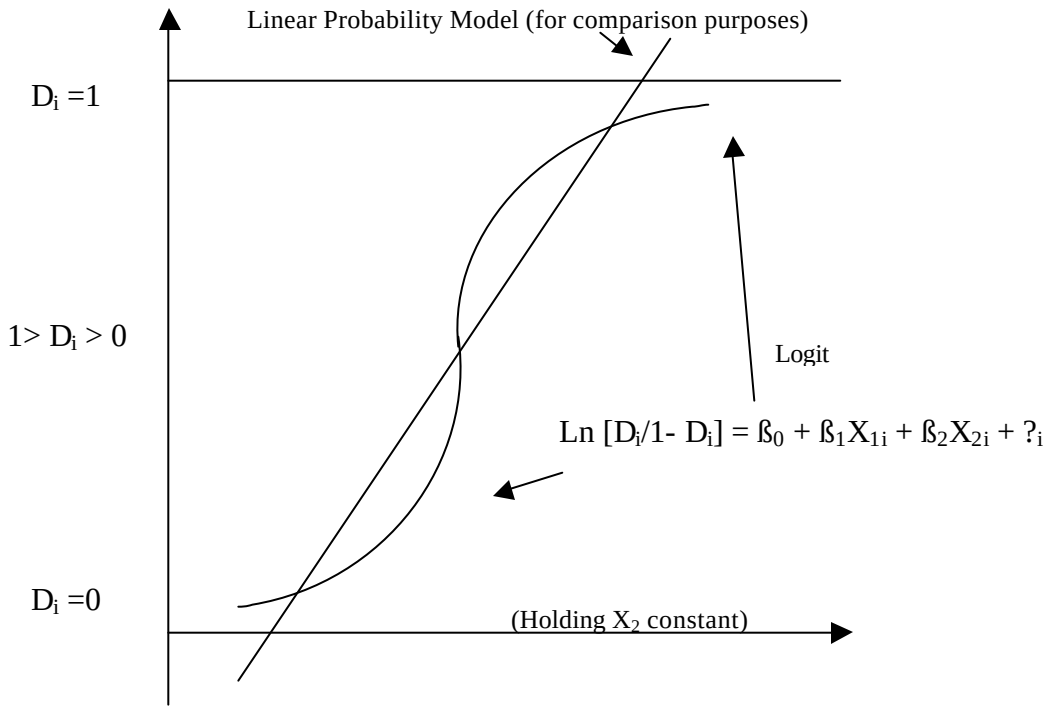

Figure 3. Comparison of Binomial Logit Model and Linear Probability Model, "From [Ref. 26]"

In nature, not all things are linear. The following explains some problems in using the Linear Probability model (LPM):

1. The error term is not normally distributed.
2. The error term is inherently heteroskedastic.
3. R^2 (adjusted coefficient of determination) is not an accurate measure of overall fit.
4. D_i is not bounded by 0 and 1. [Ref. 26]

The logit model uses the maximum likelihood estimating technique that is especially useful for equations that are nonlinear in the coefficients. The maximum likelihood estimation is inherently different from the Ordinary Least Square (OLS) technique in that it chooses coefficient estimates that maximize the likelihood of the

sample data set being observed. [Ref. 26] Also, the logit model is consistent, unbiased and has minimum variance for large samples. For these reasons, the logit model was selected to evaluate the relationships between a set of explanatory variables and a binary choice dependent variable for this thesis.

The cumulative logistic function for the logistic regression model is as follows:

$$\mathbf{P_i\ (staying\ in\ the\ military) = 1/\ 1+ e^{-(X_0 + ßX + e_i)}}$$ [Ref.26]

P_i is the probability that a junior male Army officer will stay in the military. The "e" is the base of the natural algorithm. The X is the vector of X_is, the values of the explanatory variables, for individual i; ß is the vector of $ß_j$s, the parameter values of the model; and e_i is the ith stochastic error term.

B. EXPLANATORY VARIABLE DEFINITIONS AND HYPOTHESIZED RELATIONSHIPS

Independent variables that were expected to affect the retention intention were chosen based on the literature review discussed in Chapter II. Individual variable definitions and their expected signs are discussed below:

1. Demographic Characteristics

a. Race/ Ethnic Group

Race/Ethnic group is coded as a set of dummy variables, categorized as Black, Hispanic, and Other (American Indian, Alaskan Native, and Asian/Pacific Islander). Black, Hispanic, and Other account for 4.85%, 3.53%, and 8.97% of the data sample, respectively. Since Black and Hispanic have similar retention behavior and small size in this data set, their observations are combined to form a grouped dichotomous Race/Ethnicity variable. Membership in these groups was hypothesized to have a positive relationship with the retention intention relative to the category of white. This was based on the assumption that minorities have traditionally experienced higher civilian unemployment rates than whites, and thus have fewer civilian employment alternatives. Previous studies have also concluded that minorities are more likely to be retained than whites. [Ref. 23]

b. Family Status

The family status of army officer is coded as a set of dummy variables: "single with no dependent" (SND), "single with dependent" (SWD), "married with no dependent" (MND), and "married with dependent" (MWD). However, SWD is omitted from the data set because of its small size (1%). It is expected that MND and MWD are more likely to stay in the military than SND, the base case, because the opportunity costs associated with leaving active duty and finding employment with similar pay and benefits would be greater for those officers supporting their dependents.

2. Tenure Characteristics

a. Military Rank (Pay Grade)

The rank of each junior Army officer at the time of the survey is coded as a dummy variable for each rank; O1, O2, and O3, with O1 as the base case. O1, O2, and O3 comprise 17.65%, 55.59%, and 26.76% of the data sample, respectively. Human capital theory suggests that as an individual experiences wage increases (a function of rank in the military) he or she is less likely to quit the current job because quitting becomes more costly (in terms of lost pay) associated with job changes and longer periods over which to recoup those losses. [Ref. 13] This theory might not fit the military for two reasons. Firstly, for senior officers, the more experience you have in the military, the more you enhance your civilian marketability. The civilian sector seeks experienced military personnel for their managerial job vacancies because of experienced officers' high leadership and management skills. Secondly, O1 officers are within their first two years of service and they have not yet experienced military life. Their retention intentions are not based upon their military life experience but mostly on their assumptions about military life. Thus, it is natural to expect higher retention intentions from an O1 than an O2 or an O3. As a result, the sign of military rank is hypothesized as uncertain because of these two offsetting tendencies.

b. Military Occupational Specialty

The Military Occupational Specialties (MOS) are categorized as COMBAT, COMBATSUPPORT, and COMBATSERVICESUPPORT group. COMBAT represents *tactical operation officers* such as infantry, armor and artillery. COMBATSUPPORT includes officers from *intelligence, engineering* and *maintenance*, and *health care*. And COMBATSERVICESUPPORT contains officers from *supply and procurement*, a*dministration service* and *scientific research*. Since the majority of the survey respondents (51.19%) are in the COMBAT group category, it serves as the base case.

It was expected that officers serving in the COMBATSUPPORT and COMBATSERVICESUPPORT group would be less likely to remain on active duty than the COMBAT group because the skills acquired in these MOS groups are more easily transferable to the civilian marketplace.

c. Life Expectations (LIFEXP)

The variable LIFEXP was generated from a survey question that measures the degree to which life in the military is what the member expected. Officers were asked to respond to the question, "In general, has your life been better or worse than you expected when you first entered the military?" response values range from one, indicating "much worse" to a value of five, indicating "much better." It is estimated that the more an officer's expectations about military life are met, the more likely he is to stay in the military.

d. Matched Military Occupation (MATCHOCC)

The variable MATCHOCC was generated from the survey question that asked officers, "Did you receive the military occupation of your choice?" It is hypothesized that if an officer receives his choice of military occupation or a related one, he would be more likely to stay in the military based on the assumption that he is satisfied with his occupation.

e. Remaining Time in Initial Obligated Service (RTIME)

As discussed in Chapter III, officers have a contractual period of service required by a particular commissioning program plus any further obligation incurred due to some form of follow-on training (such as flight school). Response values range from one, indicating "3 years or more" to a value of six, indicating "less than 3 months." It is estimated that the less time an officer has in initial obligated service, the more he would be concerned about his future and the more he would like to stay in the military due to experience in this occupation. The correlation of pay grade (coded 1,2, and 3 for O1, O2, and O3, respectively) with RTIME is –0.1761.

3. Economic Characteristics

a. Probability of Finding a Good Civilian Job (PROBJOB)

Studies by economists and psychologists alike have found that the perceived chance of finding an alternative job affects quit behavior. [Ref. 13] This variable measures the officer's impression of his likelihood of finding a better job in the civilian sector if he leaves the job now. This variable ranges from a one "strongly disagree" to five "strongly agree." As the perceived chance of finding a better civilian job rises, retention intention is likely to fall. Therefore, a negative relationship with retention intention is hypothesized for this variable.

b. Transferability of Military Experience and Training to Civilian Job (CIVTRANS)

The variable CIVTRANS was generated from the survey question about the degree to which military experience and training can be directly transferred to a civilian job. Response values range from one, "Strongly disagree" to a value of five, "Strongly agree." It is expected that those officers who think that their experience and training are transferable would be more likely to plan to leave the military.

4. Cognitive Characteristics and Factor Analysis

Due to the large number of candidate cognitive/job satisfaction variables (see Table 9), factor analysis was used to reduce the number of variables that are measuring similar attributes among related groups of variables.

Factor analysis is a technique used to determine whether or not underlying patterns of relationships exist among a group of variables, so that the data may be reduced to a smaller set of a common factors or components that may be taken as source variables accounting for the observed interrelations in the data. [Ref. 27] The number of factors actually chosen for each category of questions is based on:

- those factors with Eigenvalues greater than or equal to one,
- those factors that seemed to represent logical groups of variables. [Ref. 30]

In an effort to reduce the number of independent variables in the model, the nineteen "satisfaction with military life" variables were combined and reduced to four principal components. Once the factors were extracted, they were rotated using the varimax rotation technique to derive more easily interpretable variables. Table 11 displays the factors and the related satisfaction variables.

Table 11. Factor Analysis of Job Satisfaction Variables

Component Factors and Related Satisfaction Variables	**FACTOR LOADINGS**			
Satisfaction with Military Intrinsic Values				
Unit's Morale	**0.705**	0.058	0.152	0.013
Enjoyment from Job	**0.630**	0.262	0.159	0.134
Personal Workload	**0.622**	0.042	0.287	0.096
Quality of Leadership	**0.488**	0.339	0.116	0.116
Personal/Family Time	**0.486**	0.015	0.387	0.134
Military Values	**0.435**	0.334	0.095	0.125
Level of Manning in Unit	**0.428**	-0.037	0.222	0.131
Type of Assignments	**0.405**	0.356	0.240	0.122
Satisfaction with Military Career Advancement Opportunities				
Chances of Future Advancement	0.091	**0.766**	0.169	0.068
Pace of Promotions	0.053	**0.625**	0.294	0.073
Training and Professional Development	0.427	**0.451**	0.115	0.161
Job Security	0.062	**0.400**	0.031	0.076

Table 11. Factor Analysis of Job Satisfaction Variables (Continued)

Component Factors and Related Satisfaction Variables	**FACTOR LOADINGS**			
Satisfaction with Military Job Deployment and Economic Life				
Other Military Duties	0.246	0.114	**0.623**	0.040
Deployments	0.248	0.125	**0.584**	0.050
Basic Pay	0.085	0.229	**0.341**	0.122
Frequency of PCS Moves	0.157	0.212	**0.324**	0.103
Retirement Pay	0.144	0.125	**0.317**	0.241
Satisfaction with Military Health Services				
Medical Care	0.203	0.139	0.150	**0.797**
Dental Care	0.116	0.157	0.124	**0.773**

a. Satisfaction with Military Intrinsic Values (Factor1)

The variables that "loaded" most heavily on FACTOR1 were responses to those survey questions that measured the officer's satisfaction with various intrinsic values such as *unit's morale, personal workload, enjoyment from job, personal and family time, quality of leadership, level of manning in unit, military values, and type of assignments.* It was hypothesized that an increase in satisfaction with military intrinsic values would lead to an increased likelihood of retention.

b. Satisfaction with Military Career Advancement Opportunities (Factor2)

Satisfaction variables such as *job security, advancement opportunities, pace of promotion, and training* form FACTOR2. It is estimated that one who is more satisfied with career advancement opportunities will more likely stay in the military.

c. Satisfaction with Military Job Deployment and Economic Life (Factor3)

The variables that weighed most heavily on this category were satisfaction with *frequency of PCS moves (Permanent Change of Station), other military duties,*

deployments, basic pay and *retirement pay*. It is estimated that the more the officer is satisfied with this area, the greater the chances he will remain in the military.

d. Satisfaction with Military Health Services (Factor4)

Factor4 consisted of satisfaction variables with *medical and dental care*. An officer's satisfaction with military health services is hypothesized to have a positive relationship with retention intention.

Table 12 provides a summary of the model explanatory variables and their hypothesized relationship with retention intention.

Table 12. Explanatory Variable and Expected Signs

Variable	**Expected Sign**
Demographic Characteristics	
Race/Ethnic Group (Black/Hispanic, and Other)	+ (compared to White)
Family Status (MND, MWD)	+ (compared to SND)
Economic Characteristics	
Probability of Finding a Good Civilian Job (PROBJOB)	-
Transferability of Military Experience and Training to Civilian Job (CIVTRANS)	-
Tenure Characteristics	
Military Rank (O2, O3)	Uncertain (compared to O1)
Military Occupational Specialty (Combatsupport, Combatservicesupport)	- (compared to Combat)
Life Expectations (LIFEXP)	+
Matched Military Occupation (MATCHOCC)	+
Remaining Time in Initial Obligated Service (RTIME)	+
Cognitive Characteristics	
Satisfaction with Military Intrinsic Values (FACTOR1)	+
Satisfaction with Military Career Advancement Opportunities (FACTOR2)	+
Satisfaction with Military Job Deployment and Economic Life (FACTOR3)	+
Satisfaction with Military Health Services (FACTOR1)	+

C. MODEL RESULTS

1. Discussion of Estimated Coefficients

a. Are the Hypotheses Verified?

The signs of the coefficients of all the explanatory variables, except for FACTOR4, are in my hypothesized direction. Since FACTOR4 is not significantly different from zero, it does not have impact on explaining the retention intention. Also, it can be concluded that the model equation is supported by the sound theory and the explanatory variables are chosen correctly. Table 13 displays the parameter estimates and associated probability values for the model.

Table 13. Logistic Regression Results for Junior Male Army Officers

Variable	Parameter Estimate	Probability Value
O2	-0.2917	0.3439
O3**	-0.9107	0.0106
BLACK/ HISP	0.1385	0.7139
OTHR*	0.6977	0.0582
MWD**	0.7129	0.0167
MND	0.1042	0.6757
RTIME	0.0288	0.8371
COMBATSUPPORT	-0.0618	0.8179
COMBATSERVICESUPPORT	-0.3777	0.2251
CIVTRANS	-0.0898	0.3945
PROBJOB***	-0.5962	<.0001
LIFEXP***	0.3951	0.0016
MATCHOCC	-0.0625	0.8037
FACTOR1***	0.9284	<.0001
FACTOR2***	0.5038	0.0004
FACTOR3***	0.5589	0.0002
FACTOR4	-0.0897	0.4721

*** = Significant at one percent; ** = Significant at five percent;
* = Significant at ten percent.

b. Interpretation of the Meaning Significance and Magnitude of the Estimated Coefficients

PROBJOB, LIFEXP, FACTOR1, FACTOR2, and FACTOR3 are all significant at the one percent significance level, while O3 and MWD are significant at the five percent significance level. OTHR is significant at the ten percent significance level. The rest of the explanatory variables are not significant at any of the usual level of significance. Significance and magnitude of estimated coefficients can be seen in Table 13. The binomial logit model was used to analyze the retention intention of junior male Army officers in pay grades O1 to O3. The behavioral assumption underlying this retention theory is that an officer has preferences between two alternatives: stay or leave. The logistic regression model relates the participation decision of the ith officer Yi to a "k" dimensioned vector of the individual characteristics of the Army officer. The relative contributions of the individual determinants of retention may be calculated in this non-linear multivariate model by calculating the partial effects of each variable. The estimated logistic regression coefficients do not provide direct interpretation due to the non-linear nature of the coefficients. [Ref. 11] In logit regression, the change in Y from one unit change in X_1 depends not only on $\beta 1$ but also the values of X_2, X_3 and the other explanatory variables.

The partial effects of explanatory variables on the dependent variable is calculated by measuring the impact of a one-unit change in each independent variable on the retention probability of a referent junior male Army officer. Using the mean value for the continuous variables and zero for the dummy variables, the referent or "base case" male junior Army officer in this sample is single without dependents, white, combatant in pay grade O1 with "7 months to less than 1 year" initial obligated service. He believes that he could easily find a good civilian job, and he disagrees that his experience and military training are transferable to civilian job. He thinks that life has been about what he expected when he first entered the military, and he received the military occupation of his choice. Values used for his level of satisfaction with military intrinsic values, military career advancement opportunities, military job deployment and economic life, and military health services were all at the mean levels for the sample. Table 14 summarizes

the characteristics of the "base case" junior male Army officer. The meanings of variables in this table are defined in Section B of this chapter.

Table 14. Characteristics of the Base Case Individual

Variable	Base Case
Race/Ethnic Group (White, Black/Hispanic, and Other)	White
Family Status (SND, MND, and MWD)	Single with no dependents
Military Rank (O1, O2, and O3)	O1
Military Occupational Specialty (Combat, Combatsupport, and Combatservicesupport)	Combat
Life Expectations (LIFEXP)	About as expected
Matched Military Occupation (MATCHOCC)	Yes
Remaining Time in Initial Obligated Service (RTIME)	7 months to less than a year
Probability of Finding a Good Civilian Job (PROBJOB)	Agree
Transferability of Military Experience and Training to Civilian Job (CIVTRANS)	Disagree

c. Interpretation of the Partial Effects

The calculated partial effects of the logistic regression model are presented in Table 15.

Table 15. Partial Effects of Significant Explanatory Variables

Variable	Partial Effects
O3**	-0.20640
OTHR*	0.17074
MWD**	0.17423
PROBJOB***	-0.14144
*** = Significant at one percent; ** = Significant at five percent; * = Significant at ten percent.	

Table 15. Partial Effects of Significant Explanatory Variables (Continued)

Variable	Partial Effects
LIFEXP***	0.09835
FACTOR1***	0.22216
FACTOR2***	0.12486
FACTOR3***	0.13808
*** = Significant at one percent; ** = Significant at five percent; * = Significant at ten percent.	

Interpretation of the partial effects is as follows:

O3

The military rank variable, O3, is significant at the five percent significance level and is negatively signed. An O3 male Army officer has 20.6% less retention intention than an O1 male Army officer, ceteris paribus.

OTHR

The "other race" variable is significant at the ten percent significance level and it is positively signed. An Army officer of American Indian, Alaskan Native, or Asian/Pacific Islander origin has a 17% higher retention intention than a white male Army officer, ceteris paribus.

MWD

The variable, married with dependents, is significant at the five percent significance level and is positively signed. A married junior male Army officer with dependents has a 17.4% higher retention intention than a single officer with no dependents, ceteris paribus.

PROBJOB

The probability of a finding a good civilian job variable is significant at the one percent significance level and is negatively signed. A one-unit increase in the probability of finding a good civilian job, given the base characteristics, yields a 14.1% decrease in the retention intention for male Army officers, ceteris paribus.

LIFEXP

Officers' expectation for life when they first entered the military is significant at the one percent significance level and is positively signed. A one-unit increase in the expectations of male Army officers for military life results in 9.8% increase in intention to continue the military career, ceteris paribus.

FACTOR1, FACTOR2, FACTOR3

Three of the factor analysis variables, satisfaction with military intrinsic values, military career advancement opportunities, and military deployment and economic life are all significant at the one percent significance level and are positively signed. A one standard deviation increase from the average component score for these factors results in a 22.2%, 12.5%, and 13.8% increase in retention intentions of Army officers, respectively.

D. GOODNESS OF FIT

The ultimate goal in any multivariate regression model is to find explanatory variables that are theoretically sound and relevant for meaningful policy interpretation. In this model, seven of the seventeen variables have a significant impact upon retention.

First, in order to measure the goodness-of-fit, a Global Null Hypothesis was tested. The test (-2 Log L) has a Chi-Square distribution with the null hypothesis that all regression coefficients in the model are zero. The junior male Army officer retention model produced a -2 Log L Chi-Square score of 182.7976 with 17 degrees of freedom and a probability value of <0.0001. Based on this, the null hypothesis that the coefficients of all of the explanatory variables in the model are zero was rejected. It is concluded that the explanatory variables as a group are statistically significant in explaining the dependent variable.

Another measure for goodness-of-fit of logistic regression models is R^2_p (the percentage of correctly predicted observations in the sample). The model's R^2_p (Number of observations predicted correctly/ Total Observations) is 72.7 with the probability cut-point of 0.58. Thus, it can be concluded that 72.7% of the observations in the data set are

classified correctly as stayers or leavers when using this model. The generalized coefficients of determination for general binomial models, R^2 and Max R^2 [Ref. 5], are 0.28 and 0.38, respectively for this model. These are relatively low values for these statistics, but typical for models of individual level retention.

The degree of multicollinearity present is another goodness-of-fit measure applied to multivariate regression models. Multicollinearity exists when an explanatory variable is linearly related to one or more of the other explanatory variables. [Ref. 26] A sufficiently strong linear functional relationship between two or more explanatory variables can make the coefficient estimates unstable. In order to detect multicolllinearity in this model, simple correlation coefficients between the explanatory variable were examined. Pay grade, length of service, and age variables were found to be highly correlated. The year of service (YOS) variable has the correlation coefficient of 0.67 with the age variable (RAGE_M). Another measure of the severity of multicollinearity is the variance inflation factor (VIF). The variance inflation factor (VIF) is a method of detecting the severity of multicollinearity by looking at the extent to which a given explanatory variable can be explained by all other explanatory variables in the equation. [Ref. 26] The VIF of the age variable (2.070) was found to be greater than the VIF of the model (1.407). As a result of these tests, the age and length of service variables were omitted from the model and the pay grade variables were retained.

Furthermore, in order to reduce the number of collinear variables measuring similar satisfaction attributes among related groups of variables, factor analysis was used and nineteen "satisfaction with military life" variables were combined and reduced to four uncorrelated principal components (See cognitive characteristics and factor analysis for this procedure in Section B of this chapter).

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V. QUADRANT ANALYSIS

The purpose of "Quadrant Analysis" is to determine which employee satisfaction variables need improvement in order to raise an organization's overall level of job satisfaction. The analysis involves determining the importance of each employee satisfaction facet to overall job satisfaction and an organization's current performance in each facet. Two metrics are used for each employee satisfaction facet:

1. Importance Metric

A measure of the importance of each employee satisfaction variable (*Pay, medical care, dental care, retirement, promotion, advancement, training, assignment, deployment, other duty, manning, morale, workload, personal time, leadership, military values, enjoyment*) to overall military job satisfaction. These variable correlations with overall military job satisfaction are used to determine the degree to which each variable is related to overall job satisfaction. A value of "0" indicates no correlation, and a value of "1" indicates perfect correlation. Variables with correlations closer to "1" are considered to have higher importance. Table 16 displays the importance metric.

2. Performance Metric

This metric indicates how well the military performs in each facet of satisfaction with the military. For each of the 19 satisfaction variables, the percent of respondents who indicated satisfaction with that variable is determined. This performance metric is constructed by recoding responses as, "very satisfied and satisfied=1" and "dissatisfied and very dissatisfied =0." The closer the percent is to 100, the better the military is performing. Table 16 displays the performance metric.

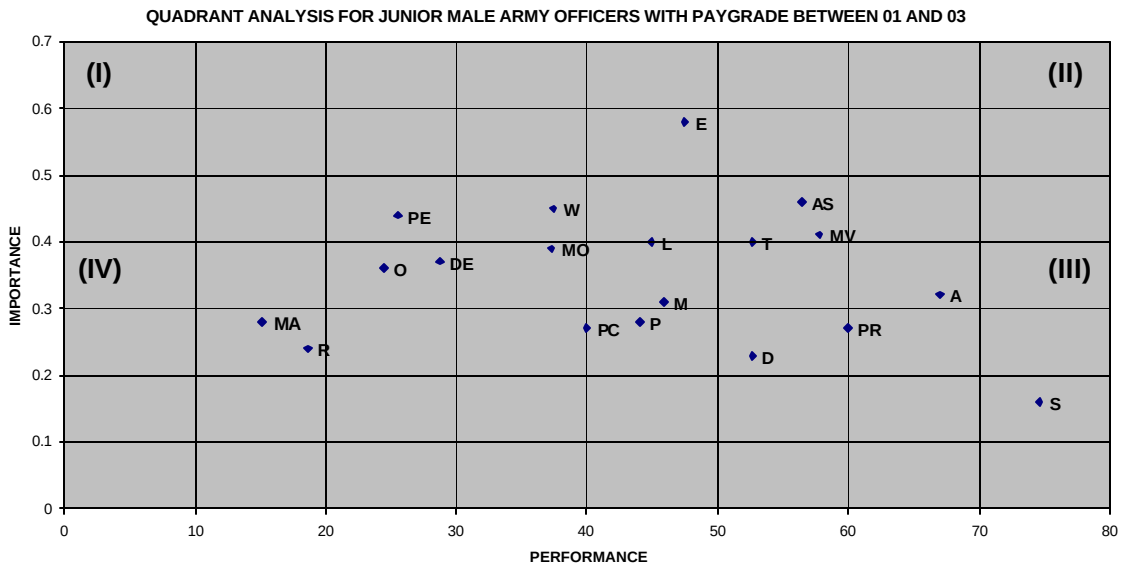
Before plotting the data in the graph, the plot was partitioned into quadrants. The initial placement of the lines to form the quadrants of equal size is somewhat arbitrary and should be thought of only as a starting place. The lines can be moved up or down, or left or right to include more or fewer items in each quadrant, as specific offices or programs see appropriate. For this thesis, the cutting lines for performance and importance are 50% and 40%, respectively.

Table 16. Quadrant Analysis Variables

Satisfaction Variable	Labels	Frequency		Performance	Importance
		Satisfied	Dissatisfied		
PAY	**P**	241	306	44.06	0.28
MEDICARE	**M**	251	296	45.89	0.31
DENTAL CARE	**D**	288	259	52.65	0.23
RETIREMENT	**R**	102	445	18.65	0.24
PROMOTION	**PR**	328	219	59.96	0.27
ADVANCEMENT	**A**	367	180	67.09	0.32
TRAINING	**T**	288	259	52.65	0.40
ASSIGNMENT	**AS**	309	238	56.49	0.46
DEPLOYMENT	**DE**	157	390	28.70	0.37
OTHER DUTY	**O**	134	413	24.50	0.36
MANNING	**MA**	83	464	15.17	0.28
MORALE	**MO**	204	343	37.29	0.39
WORKLOAD	**W**	205	342	37.48	0.45
PERSONAL TIME	**PE**	140	407	25.59	0.44
LEADERSHIP	**L**	246	301	44.97	0.40
MILITARY VALUES	**MV**	316	231	57.77	0.41
ENJOYMENT	**E**	260	287	47.53	0.58
PCS	**PC**	219	328	40.04	0.27
SECURITY	**S**	408	139	74.59	0.16
PERFORMANCE: Percentage of satisfied members **IMPORTANCE :** Correlation with overall satisfaction variable					

n=547

Quadrant analysis results are presented in Figure 5. The interpretation of the results follows:



LABELS: RETIREMENT=**R**, MANNING=**MA**, PROMOTION=**PR**, PERSONAL TIME=**PE**, OTHERDUTY=**O**, DEPLOYMENT=**DE**, TRAINING=**T**, WORKLOAD=**W**, ASSIGNMENT=**AS**, SECURITY=**S**, ADVANCEMENT=**A**, MORALE=**MO**, PCS=**PC,** PAY= **P,** MEDICARE=**M,** LEADERSHIP=**L,** DENTALCARE =**D,** MILITARY VALUES=**MV,** ENJOYMENT=**E**

Figure 4. Quadrant Analysis for Junior Army Male Officers

a. QUADRANT I: Critical Improvement Areas (high importance, low performance)

In the *workload, personal time, enjoyment* satisfaction areas, the military is not performing as well as it could be, but these have a considerable impact on overall satisfaction with military life. These areas are excellent candidates for immediate attention.

b. QUADRANT II: Maintain Current Level Areas (high importance, high performance)

In the *assignment, military values,* and *training* satisfaction areas, the military is performing well and these are important to overall military job satisfaction. The military should continue current practices and allocate resources for these items so that member satisfaction does not decline and negatively affect overall military job satisfaction.

c. QUADRANT III: Lower Return to Improvement (low importance, high performance)

In the *dental care, promotion, security,* and *advancement* areas, the military is performing well, but, while important to overall military job satisfaction, these facets do not have as great an impact as some other variables. Generally, additional resources should be devoted to these areas, only if these are low cost improvements.

d. QUADRANT IV: Lower Return to Investment (low importance, low performance)

In the *manning, other duty, retirement, deployment, morale, leadership, medical care, pay,* and *PCS* areas, the military is not performing as well as it could, but these are also not considered to have a critical impact on overall job satisfaction. There is a lower return on the investment in these variables, but, given resources, improvement could be sought.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS AND RECOMMENDATIONS

This thesis investigates the factors that influence the retention intentions of 680 junior male Army officers who are serving within their initial obligated service. Data for this thesis were drawn from responses to the *1999 DoD Survey of Active Duty Personnel* [Ref. 36] to estimate the models. The survey includes data on the retention intentions of service members. Past research has shown that a member's intention is a good predictor of retention behavior. Logistic regression analysis is used to identify demographic, tenure, economic and cognitive characteristics that significantly affect the intention to stay or to quit the military and to assess their relative importance. The SAS software package is used to analyze the data.

The model developed is successful in identifying several factors influencing the retention intentions of junior male Army officers. Eight of the seventeen variables included in the model have a significant impact upon retention. The factors found to influence officers' decision to remain on active duty include: among the *demographic characteristics*, family status and race; from the *tenure characteristics*, military rank (O3) and military life expectation; from *economic characteristics*, probability of finding a good civilian job, and from the *cognitive characteristics*, satisfaction with military intrinsic values, military career advancement opportunities, and military deployment and economic life.

These statistically significant explanatory variables can be valuable to Army manpower planners. For example, based on an analysis of model partial effects, a married male junior Army officer who has dependents is 17.4% more likely to stay in the military than is a single officer with no dependents, perhaps due to the greater opportunity costs associated with leaving the military and finding employment with similar pay and benefits for those officers supporting their dependents. Thus, it is recommended that the Army continue its emphasis on family-oriented programs. Improvements in areas such as care for dependents and family services not only impact the morale and readiness of its personnel but also influence retention.

An Army officer of American Indian, Alaskan Native, or Asian/Pacific Islander origin has a 17% higher retention intention than a white male Army officer. This result suggests that, using retention as the only measure of effectiveness, more advertising dollars might be spent to recruit members of this group.

An O3 male Army officer is 20.6% less likely to remain in the military at the end of his obligated service than is current O1 officer. Experience in military makes these officers attractive to civilian sector and increases their marketability. However, O3s are also more valuable to Army than O1s because of their high supervising, management and training abilities over enlisted soldiers. These results dictate that the Army should put emphasis on career orientations of O3s rather than O1s who just signed their contracts and supposedly are content with military life.

Officers' expectations for life when they first entered the military are also shown to be a significant influence on intentions. This result indicates that recruiters and advertisers should display military life as it is, rather than making exaggerations and misleading young individuals with illusions. If the expectations of an individual are not met after entering the service, he is more likely to quit at the end of contracted service, incurring high training costs to the military. Demonstrating military life accurately to young potential military joiners may decrease the number of accessions, but the Army could retain more officers whose expectations are met. (9.8% in this study)

The perception of external employment opportunities is also important and significant in the retention decision process for junior male Army officers. Officers who strongly agree that they can find a good civilian job are 14.1% less likely to remain on active duty. Although the Army has little or no control over the chance of finding a good civilian job alternative, policy maker should remain aware of how this factor affects retention, and how it can vary over time. However, using career counselors effectively for those people nearing their initial obligated service may have a positive effect on retention. The counselor could inform the officers about what they can realistically expect to earn in civilian jobs and then emphasize the advantages the Army can offer over civilian opportunities.

Satisfaction with military intrinsic values, military career advancement opportunities, and military job deployment and economic life yield 22.2%, 12.5%, and

13.8% increase in retention likelihood of junior male Army officers, respectively. Although these component factors give an idea about how these satisfaction variables affect the retention intentions of male Army officers. Separating the effects of individual facets of satisfaction is difficult. A quadrant analysis of the satisfaction variables indicates target areas for improvement in order to raise the military's overall level of job satisfaction. It is concluded that the areas of strength for the Army are *assignment, military values,* and *training.* In these satisfaction areas, the military is performing well and these are important to overall military job satisfaction. The *workload, personal time, enjoyment* satisfaction areas are problematic areas of the Army and need immediate attention. Improvements in the *manning, other duty, retirement, deployment, morale, leadership, medical care, pay,* and *PCS* areas are not considered to have a substantial impact on overall job satisfaction due to the lower return on investment in these variables.

Finally, the Army should not expect additional resources devoted to the *dental care, promotion, security,* and *advancement* areas to have as great an impact as they would if expended on other areas.

B. FUTURE RESEARCH

The inadequate number of women and minorities in this thesis made it difficult to analyze the factors that may have affected the retention intentions of these important groups. Future surveys should attempt to assure sufficient sample size of these groups to conduct appropriate retention analysis.

This thesis used data from the *1999 DoD Survey of Active Duty Personnel* to develop an econometric model to predict junior male Army officer retention intention. Due to the relatively recent fielding of the survey, this thesis was unable to test the validity of intention as a predictor of actual retention behavior. However, the results of the econometric model should be confirmed when actual turnover behavior information becomes available. Did the member stay or did he leave the military service? Does his actual behavior match his intentions? The validation of a model designed to predict retention intentions can only occur when follow-on data are used to compare the members' intentions with their actual behavior.

This thesis also focused on the distinction among combat, combat support, and combat service support groups. These are very broad groupings. Future research should examine the differences in retention intentions by military occupational specialties (MOS).

Since O3s' retention intentions differ from O1s', future research should analyze O3s separately and identify the factors influencing the retention intentions of these officers who are of critical importance to the Army.

Army officer retention intentions are very sensitive to intrinsic, career advancement, and job deployment aspects. The more dissatisfied a junior male Army officer is with these aspects, the less likely he will be to stay in the Army. Further research should be done to define how effort should be expended in order to maintain each of these satisfaction variables at high levels.

APPENDIX

1999 SURVEY of ACTIVE DUTY PERSONNEL

DMDC Survey No.99-0001

DEFENSE MANPOWER DATA CENTER ATTN:
SURVEY PROCESSING CENTER DATA RECOGNITION
CORPORATION 5900 BAKER ROAD
MINNETONKA, MN 55345-5967

ASSIGNMENT INFORMATION

M9901 (O013/E013)

1. During the past 12 months, how many hours per week did you usually work?

1. O 40 hours or less
2. O 41-50 hours
3. O 51-60 hours
4. O 61-70 hours
5. O 71-80 hours
6. O 81 hours or more

M9902

2. During your last full workweek, how many hours did you work?

1. O 40 hours or less
2. O 41-50 hours
3. O 51-60 hours
4. O 61-70 hours
5. O 71-80 hours
6. O 81 hours or more

M9903A-M9903P/ Coding Note 36

3. When you have had to work more hours than usual during the past 12 months, what were the primary reasons? (MARK ALL THAT APPLY.)

A. O Not applicable
B. O Mission critical requirements
C. O Mission preparation/training/maintenance
D. O Tasked with additional duties (e.g., special projects)
E. O Unit was getting ready for deployment
F. O Manning not sufficient for workload (i.e., not enough authorizations/billets)
G. O Unit was under-manned (i.e., authorizations/billets not filled)
H. O Part of unit was deployed
I. O Demanding supervisor
J. O Problems involving subordinates
K. O High workload
L. O Poor planning or lack of planning
M. O Others were not carrying their workload
N. O Inspections and inspection preparation
O. O Equipment failure and repairs
P. O None of the above

M9904* (O002/E002)

4. Are you currently assigned to ship or shore duty?

1. O Ship
2. O Shore
60. O Does not apply, I do not have a ship/shore rotation

In this survey, "permanent duty station" is considered your permanent post, base, port, or other duty location, such as, a recruiting station.

M9905* (Comment)

5. Where is your permanent duty station located?

1. O In one of the 50 States or the District of Columbia
2. O In American Samoa, Guam, U.S. Virgin Islands or Puerto Rico
3. O Overseas

M9906* / Coding Note 1

6. Are you currently on a deployment that will keep you away from home for at least 30 consecutive days?

1. O Yes
2. O No → Go to Question 8 M9906SK

M9907*

7. Where are you currently deployed?

1. O In one of the 50 States or the District of Columbia
2. O In American Samoa, Guam, U.S. Virgin Islands or Puerto Rico
3. O Overseas
4. O Afloat at sea

M9908 (O014/E014)

8. Where do you live at your permanent duty station?

1. O Aboard ship
2. O Barracks/dorm (including BEQ or BOQ)
3. O Geographic bachelor's barracks
4. O Military family housing, on base
5. O Military family housing, off base
6. O Civilian housing that I own or pay mortgage on
7. O Military or civilian housing that I rent, off base
8. O Other

M9909A-M9909I (O015/E015)

9. How satisfied are you with the following characteristics of your current residence and community at your permanent duty station?

	5 Very dissatisfied	4 Dissatisfied	3 Neither satisfied nor dissatisfied	2 Satisfied	1 Very satisfied
a. Cost of residence	O	O	O	O	O
b. Quality and condition of residence	O	O	O	O	O
c. Amount of livable space in residence	O	O	O	O	O
d. Privacy of residence	O	O	O	O	O
e. Quality of housing in the area where you live	O	O	O	O	O
f. Safety of the area where you live	O	O	O	O	O
g. Distance to workplace	O	O	O	O	O
h. Distance to shopping areas	O	O	O	O	O
i. Distance to recreation areas	O	O	O	O	O

M9910A-M9910R/ Coding Note 36

10. Why did you choose your current residence at your permanent duty station? (MARK ALL THAT APPLY.)

A___ O I had no choice in my residence
B___ O Best value for the money
C___ O Safety and security
D___ O Close to workplace
E___ O Close to base facilities, services or programs
F___ O Spouse's choice
G___ O Better schools
H___ O Fewer rules
I___ O Privacy
J___ O Wanted to live in a specific area or community
K___ O Available right away
L___ O Military housing was unavailable
M___ O Civilian housing was unavailable
N___ O Better than available military housing (on base or off base)
O___ O Better than available civilian housing
P___ O Wanted military neighbors
Q___ O Wanted civilian neighbors
R___ O Other

M9911

11. If your cost to live in civilian or military housing at your permanent duty station were the same, where would you prefer to live?

1. O Military housing, on base
2. O Military operated housing, off base
3. O Civilian housing

M9912 (O018/E018) / Coding Note 2

12. During your active duty career, how many permanent changes of station (PCSs) have you made? (INCLUDE PCS FOR A REMOTE OR UNACCOMPANIED TOUR.)

61. O Does not apply, I have not yet received my first assignment →Go to Question 14 M9912SK

1. O 1	6. O 6
2. O 2	7. O 7
3. O 3	8. O 8
4. O 4	9. O 9
5. O 5	10. O 10 or more

M9913A-M9913Z (O012/E012)

13. For your most recent PCS move, were any of the following a problem? (ANSWER EVEN IF THIS IS YOUR FIRST ASSIGNMENT.)

	1---- Serious problem	2---- Somewhat of a problem	3---- Slight problem	4---- Not a problem	-6---- Does not apply
a. Change in PCS orders (report date or destination)	O	O	O	O	O
b. Hours and location of offices providing PCS assistance	O	O	O	O	O
c. Waiting for permanent housing to become available	O	O	O	O	O
d. Selling or renting out your former residence	O	O	O	O	O
e. Purchasing or renting your current residence	O	O	O	O	O
f. Amount of time to prepare for move	O	O	O	O	O
g. Shipping/storing household goods	O	O	O	O	O
h. TAD/TDY en route	O	O	O	O	O
i. Temporary lodging expenses	O	O	O	O	O
j. Costs related to security deposit(s)	O	O	O	O	O
k. Cost of moving pets	O	O	O	O	O
l. Cost of moving vehicles	O	O	O	O	O
m. Costs of setting up new residence (e.g., curtains, carpeting, painting).	O	O	O	O	O
n. Settling damage claims	O	O	O	O	O
o. Non-reimbursed transportation costs incurred during the move	O	O	O	O	O
p. Timeliness of reimbursements	O	O	O	O	O
q. Accuracy of reimbursements	O	O	O	O	O
r. Time off at destination to complete move	O	O	O	O	O
s. Change in cost of living	O	O	O	O	O
t. Loss or decrease of spouse income	O	O	O	O	O
u. Spouse employment	O	O	O	O	O
v. Transferability of entitlements (e.g., Supplemental Security Income)	O	O	O	O	O
w. Obtaining special education services	O	O	O	O	O
x. Spouse/dependents changing schools	O	O	O	O	O
y. Transferability of college credits	O	O	O	O	O
z. Availability of childcare	O	O	O	O	O

In this survey, the definition of "military duties" includes deployments, TADs/TDYs, training, military education, time at sea, and field exercises/alerts.

M9914 / Coding Note 3

14. In the past 12 months, have you been away from your permanent duty station overnight because of your military duties?

1. O Yes
2. O No → Go to Question 19 M9914SK

M9915

15. In the past 12 months, how many separate times were you away from your permanent duty station for at least one night because of your military duties?

1. O 1-2 times
2. O 3-4 times
3. O 5-6 times
4. O 7-8 times
5. O 9-10 times
6. O 11-12 times
7. O 13 times or more

M9916A - M9916I*

16. During the past 12 months, how long were you away from your permanent duty station for the following military duties? (ADD UP ALL NIGHTS AWAY FROM YOUR PERMANENT DUTY STATION; ASSIGN EACH NIGHT TO ONLY ONE TYPE OF MILITARY DUTY.)

	6---- 10 months to 12 months	5---- 7 months to less than 10 months	4---- 5 months to less than 7 months	3---- 3 months to less than 5 months	2---- 1 month to less than 3 months	1---- Less than 1 month	0---- None
a. Peacekeeping or other contingency operation	O	O	O	O	O	O	O
b. Foreign humanitarian assistance mission	O	O	O	O	O	O	O
c. Unit training at combat training centers	O	O	O	O	O	O	O
d. Counter drug operation	O	O	O	O	O	O	O
e. Domestic disaster or civil emergency	O	O	O	O	O	O	O
f. Time at sea for scheduled deployments (other than for the above)	O	O	O	O	O	O	O
g. Other time at sea (other than for the above)	O	O	O	O	O	O	O
h. Joint training/field exercises/alerts (other than for the above)	O	O	O	O	O	O	O
i. Military education (other than for the above)	O	O	O	O	O	O	O
j. Other TADs/TDYs	O	O	O	O	O	O	O

M9917* (O080/E081)

17. In the past 12 months, what was the total length of time you were away from your permanent duty station because of your military duties? (ADD UP ALL NIGHTS AWAY FROM YOUR PERMANENT DUTY STATION.)

1. O Less than 1 month
2. O 1 month to less than 3 months
3. O 3 months to less than 5 months
4. O 5 months to less than 7 months
5. O 7 months to less than 10 months
6. O 10 months to 12 months

M9918A-M9918T (O078/E079)/ Coding Note 4

18. During the past 12 months, have any of the following been a concern while you were away? (MARK ALL THAT APPLY.)

A. O Managing expenses and bills
B. O Household repairs, yard work, car maintenance
C. O Storage or security of personal belongings
D. O Pet care
E. O Interruption of off duty education
F. O Loss of part-time job
G. O Your ability to communicate with family
H. O Safety of your family in their community
I. O Spouse's job demands or education demands
J. O Childcare arrangements
K. O Eldercare
L. O Child's/children's education
M. O Serious health or emotional problems of spouse, child, parent, sibling, or elderly family member
N. O Divorce or marital problems
O. O Birth or adoption of a child
P. O Your or your spouse's pregnancy
Q. O Death of a family member
R. O Major financial hardship or bankruptcy within your family
S. O Major home repair or replacement due to casualty, theft, fire or severe weather (e.g., hurricane, flood, earthquake, tornado)
T. O Other (specify):

M9918SP / Coding Note 4

M9919

19. How many days over the past 12 months have you been detailed for work outside the scope of your primary duties (e.g., "augmentee" assignments, maintenance tasks, installation support, support tasking, and wing ready teams)?

0. O None
1. O 1-10 days
2. O 11-20 days
3. O 21-30 days
4. O 31-40 days
5. O 41-50 days
6. O 51-60 days
7. O More than 60 days

M9920A-M9926C

20. How prepared do you believe your unit is to perform its mission with regard to…?

	5---- Very poorly prepared	4---- Poorly prepared	3---- Neither well nor poorly prepared	2---- Well prepared	1---- Very well prepared
a. Manning level	O	O	O	O	O
b. Training	O	O	O	O	O
c. Parts and equipment	O	O	O	O	O

M9921

21. Suppose you will be in the military for the next 12 months. What is the total length of time that you would expect to be away from your permanent duty station because of your military duties?

62. O I would not expect to be away from my permanent duty station in the next 12 months
1. O Less than 1 month
2. O 1 month to less than 3 months
3. O 3 months to less than 5 months
4. O 5 months to less than 7 months
5. O 7 months to less than 10 months
6. O 10 months to 12 months

CAREER INFORMATION

M9922

22. What were your career intentions when you first entered active duty?

1. O I intended to remain on active duty until I was eligible for retirement
2. O I intended to complete my obligation and then leave active duty
3. O I was not sure if I would stay on active duty or leave

M9923A-M9923U/ Coding Note 36

23. Think back to when you first entered active duty. Which of the following best describe the primary reasons why you joined? (MARK ALL THAT APPLY.)

O A. Trouble in college or break from school
O B. Get away from family, personal situation, or home town
O C. Time to figure out what you wanted to do
O D. Test yourself physically or mentally
O E. Challenging or interesting work
O F. Always wanted to be in the military
O G. Military tradition in your family
O H. Parents' encouragement
O I. Desire to serve your country
O J. Image portrayed by military personnel
O K. Few or no civilian job opportunities
O L. Pay and allowance(s)
O M. Retirement pay and benefits
O N. Security and stability of the job
O O. Opportunity to work in a specific occupation
O P. Training in skills useful for civilian employment
O Q. Family benefits
O R. Travel and new experiences
O S. Money for college, college repayment, education benefits and opportunities
O T. Personal growth and maturity
O U. Other

M9924

24. Of all your reasons listed in Question 23, which is the most important reason why you joined?

1	2	3	4	5	6	7	8	9	10	11	12
A	B	C	D	E	F	G	H	I	J	K	L
M	N	O	P	Q	R	S	T	U			
13	14	15	16	17	18	19	20	21			

M9925

25. …and which is the next most important reason why you joined?

1	2	3	4	5	6	7	8	9	10	11	12
A	B	C	D	E	F	G	H	I	J	K	L
M	N	O	P	Q	R	S	T	U	O None		
13	14	15	16	17	18	19	20	21	0		

M9926 / Coding Note 5

26. When you first entered active duty service, did you have a preference for a military occupation?

1 O Yes
2 O No → Go to Question 28 M9926SK

M9927

27. Did you receive the military occupation of your choice?

1. O Yes
2. O No, but I received a related occupation
3. O No, I received an occupation unrelated to my choice

M9928

28. How satisfied are you now with the military occupation you received when you first entered active duty?

1. O Very satisfied
2. O Satisfied
3. O Neither satisfied nor dissatisfied
4. O Dissatisfied
5. O Very dissatisfied

M9929* (O004/E004)/ Coding Note 6

29. In which term of service are you serving now? (DO NOT COUNT EXTENSIONS AS SEPARATE TERMS OF ENLISTMENT.) M9929SK

1. O I am on indefinite status → Go to Question 32
2. O I am an officer serving an obligation
3. O 1st enlistment
4. O 2nd or later enlistment

M9930* (E005)

30. How much time remains in your current enlistment term or service obligation?

1. O Less than 3 months
2. O 3 months to less than 7 months
3. O 7 months to less than 1 year
4. O 1 year to less than 2 years
5. O 2 years to less than 3 years
6. O 3 years or more

M9931

31. How likely is it that you would be allowed to stay on active duty service at the end of your current term or service obligation?

1. O Very likely
2. O Likely
3. O Neither likely nor unlikely
4. O Unlikely
5. O Very unlikely

M9932 (E027)

32. Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?

1. O Very likely
2. O Likely
3. O Neither likely nor unlikely
4. O Unlikely
5. O Very unlikely

M9933 (O028)

33. If you stay on active duty, when would you expect your next promotion to a higher grade?

1. O Less than 3 months
2. O 3 months to less than 7 months
3. O 7 months to less than 1 year
4. O 1 year to less than 2 years
5. O 2 years or more

63. O Does not apply, I do not expect a promotion
64. O Does not apply, I have no opportunities for promotion

M9934 (O030/E028)

34. Does your spouse, girlfriend, or boyfriend think you should stay on or leave active duty?

1. O Strongly favors staying
2. O Somewhat favors staying
3. O Has no opinion one way or the other
4. O Somewhat favors leaving
5. O Strongly favors leaving

65. O Does not apply, I don't have a spouse or girlfriend/boyfriend

M9935

35. If you could stay on active duty as long as you want, how likely is it that you would choose to serve in the military for at least 20 years?

1. O Very likely
2. O Likely
3. O Neither likely nor unlikely
4. O Unlikely
5. O Very unlikely

66. O Does not apply, I have 20 or more years of service

M9936* (O023/E023)/ Coding Note 7

36. When you finally leave active duty, how many total years of service do you expect to have?

		YEARS
0	0	
1	1	*For example, if you expect*
2	2	*to leave after completing*
3	3	*6 years of service, enter*
4	4	*"06" in the boxes and fill*
	5	*in the corresponding*
	6	*circles. To indicate less*
	7	*than 1 year, enter "00."*
	8	
	9	

M9937

37. If you were to leave active duty in the next 12 months, what would be your primary activity?

1 O Attend college or university
2 O Work for civilian company or organization
3 O Work in a civilian government job (local, state, or federal)
4 O Manage or work in family business
5 O Self-employed in your own business or profession
6 O A homemaker/housewife/househusband
7 O Go into full-time retirement
8 O None of the above

M9938 (O025/E025)

38. When you leave active duty, how likely is it that you will join a National Guard or Reserve unit?

1. O Very likely
2. O Likely
3. O Neither likely nor unlikely
4. O Unlikely
5. O Very unlikely

67. O Does not apply, I am a member of a National Guard or Reserve unit
68. O Does not apply, retiring or otherwise ineligible

M9939A-M9939KK (O136/E137)

39. How satisfied are you with each of the following?

		1 Very satisfied	2 Satisfied	3 Neither satisfied nor dissatisfied	4 Dissatisfied	5 Very dissatisfied	6 Does not apply
A.	Basic pay	O	O	O	O	O	
B.	Special and incentive pay	O	O	O	O	O	O
C.	Reenlistment bonus or continuation pay program	O	O	O	O	O	O
D.	Housing allowance	O	O	O	O	O	O
E.	SEPRATS/ COMRATS, subsistence allowance	O	O	O	O	O	O
F.	Military housing	O	O	O	O	O	O
G.	Medical care for you	O	O	O	O	O	
H.	Dental care for you	O	O	O	O	O	
I.	Retirement pay you would get	O	O	O	O	O	
J.	Cost of living adjustments (COLA) to retirement pay	O	O	O	O	O	
K.	Other retirement benefits such as medical care and use of base services	O	O	O	O	O	
L.	Pace of your promotions	O	O	O	O	O	
M.	Chances for future advancement	O	O	O	O	O	
N.	Training and professional development	O	O	O	O	O	
O.	Type of assignments received	O	O	O	O	O	
P.	Deployments	O	O	O	O	O	
Q.	Other military duties that take you away from permanent duty station	O	O	O	O	O	
R.	Availability of equipment, parts, and resources	O	O	O	O	O	
S.	Level of manning in your unit	O	O	O	O	O	
T.	Your unit's morale	O	O	O	O	O	
U.	Your personal workload	O	O	O	O	O	
V.	Amount of personal/ family time you have	O	O	O	O	O	
W.	Off duty educational opportunities	O	O	O	O	O	
X.	Quality of leadership	O	O	O	O	O	
Y.	Military values, lifestyle, and tradition	O	O	O	O	O	
Z.	Amount of enjoyment from your job	O	O	O	O	O	
AA.	Frequency of PCS moves	O	O	O	O	O	
BB.	Job security	O	O	O	O	O	
CC.	Location or station of choice, homeporting	O	O	O	O	O	O
DD.	Co-location with your military spouse	O	O	O	O	O	O
EE.	Medical care for your family	O	O	O	O	O	O
FF.	Dental care your family	O	O	O	O	O	O
GG.	Youth activities on base	O	O	O	O	O	O
HH.	Schools for your children	O	O	O	O	O	O
II.	Spouse employment and career opportunities	O	O	O	O	O	O
JJ.	Military family support programs	O	O	O	O	O	O
KK.	Acceptable and affordable childcare	O	O	O	O	O	O

M9940

40. Even if you have no plans to stay, of all the factors listed in Question 39, which is the most important factor for staying or considering staying on active duty?

A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**
1	2	3	4	5	6	7	8	9	10	11	12	13
N	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
14	15	16	17	18	19	20	21	22	23	24	25	26
AA	**BB**	**CC**	**DD**	**EE**	**FF**	**GG**	**HH**	**II**	**JJ**	**KK**		
27	28	29	30	31	32	33	34	35	36	37		

M9941

41. …and which is the next most important factor for staying or considering staying on active duty?

A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	
1	2	3	4	5	6	7	8	9	10	11	12	13	
N	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**	
14	15	16	17	18	19	20	21	22	23	24	25	26	
AA	**BB**	**CC**	**DD**	**EE**	**FF**	**GG**	**HH**	**II**	**JJ**	**KK**		**0**	**None**
27	28	29	30	31	32	33	34	35	36	37		0	

M9942

42. Even if you have no plans to leave, of all the factors listed in Question 39, which is the most important factor for leaving or considering leaving active duty?

A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**
1	2	3	4	5	6	7	8	9	10	11	12	13
N	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
14	15	16	17	18	19	20	21	22	23	24	25	26
AA	**BB**	**CC**	**DD**	**EE**	**FF**	**GG**	**HH**	**II**	**JJ**	**KK**		
27	28	29	30	31	32	33	34	35	36	37		

M9943

43. ...and which is the next most important factor for leaving or considering leaving active duty?

A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	
1	2	3	4	5	6	7	8	9	10	11	12	13	
N	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**	
14	15	16	17	18	19	20	21	22	23	24	25	26	
AA	**BB**	**CC**	**DD**	**EE**	**FF**	**GG**	**HH**	**II**	**JJ**	**KK**			**O None**
27	28	29	30	31	32	33	34	35	36	37			0

MILITARY LIFE

M9944A-M9944K

44. How important should the following factors be in determining total military compensation, including pay, benefits, and allowances?

	1---- Very important	2---- Important	3---- Moderately important	4---- Somewhat important	5---- Not important	6---- Does not apply
a. Job difficulty	O	O	O	O	O	
b. Job performance	O	O	O	O	O	
c. Danger	O	O	O	O	O	
d. Time spent away from home	O	O	O	O	O	
e. Number of hours worked	O	O	O	O	O	
f. Level of responsibility	O	O	O	O	O	
g. Amount of education/training	O	O	O	O	O	
h. Years of experience	O	O	O	O	O	
i. Amount civilian employer would pay for this type of work	O	O	O	O	O	O
j. Amount needed to provide for family	O	O	O	O	O	
k. Cost of living	O	O	O	O	O	

M9945A-M9945J (O129/E130)

45. How much do you agree or disagree with the following statements?

	1---- Strongly agree	2---- Agree	3---- Neither agree nor disagree	4---- Disagree	5---- Strongly disagree
a. During the past 12 months, the missions I was involved with were important to the national interest	O	O	O	O	O
b. During the past 12 months, most or all of the military duties I performed improved or maintained unit or individual readiness	O	O	O	O	O
c. I would find it rewarding to deploy on a peacekeeping/peacemaking operation (e.g., Bosnia)	O	O	O	O	O
d. I would find it rewarding to deploy on an overseas humaritarian relief effort (e.g., foreign disaster relief such as Nicaragua)	O	O	O	O	O
e. Very little of my experience and training can be directly transferred to a civilian job	O	O	O	O	O
f. It would be easy for me to get a good civilian job if I left the military now	O	O	O	O	O
g. I have a pretty good idea of the kinds of jobs I could get as a civilian	O	O	O	O	O
h. I have a pretty good idea of what pay I could get as a civilian	O	O	O	O	O
i. The benefits available to military personnel and their families have eroded over the past few years	O	O	O	O	O
j. If asked today, I would encourage others to join the military	O	O	O	O	O

M9946

46. In general, has your life been better or worse than you expected when you first entered the military?

1. O Much better
2. O Somewhat better
3. O About what you expected
4. O Somewhat worse
5. O Much worse

99. O Don't remember

M9947

47. In general, has your work been better or worse than you expected when you first entered the military?

1. O Much better
2. O Somewhat better
3. O About what you expected
4. O Somewhat worse
5. O Much worse

99. O Don't remember

M9948A-M9948K/ Coding Note 36

48. During the past 6 months, have you done any of the following to explore the possibility of leaving the military? (MARK ALL THAT APPLY.)

A. O Thought seriously about leaving the military
B. O Wondered what life might be like as a civilian
C. O Discussed leaving and/or civilian opportunities with family members or friends
D. O Talked about leaving with your immediate supervisor
E. O Gathered information on education programs or colleges
F. O Gathered information about civilian job options (e.g., read newspaper ads, attended a job fair)
G. O Attended a program that helps people prepare for civilian employment
H. O Prepared a resume
I. O Applied for a job
J. O Interviewed for a job
K. O None of the above

M9949A-M9949J (O094/E095 O100/E100)

49. How do your opportunities in the military compare to opportunities you would have in the civilian world?

	1---- Much better as a civilian	2---- Somewhat better as a civilian	3---- No difference	4---- Somewhat better in the military	5---- Much better in the military	99---- Don't know
a. Promotion opportunities	O	O	O	O	O	O
b. Amount of personal/family time	O	O	O	O	O	O
c. Hours worked per week	O	O	O	O	O	O
d. Vacation time	O	O	O	O	O	O
e. Education and training opportunities	O	O	O	O	O	O
f. Total compensation (pay, bonuses, allowances)	O	O	O	O	O	O
g. Health care benefits	O	O	O	O	O	O
h. Retirement benefits	O	O	O	O	O	O
i. Sense of accomplishment/pride	O	O	O	O	O	O
j. General quality of life	O	O	O	O	O	O

M9950A-M9950M

50. How much do you agree or disagree with the following statements?

	1---- Strongly agree	2---- Agree	3---- Neither agree nor disagree	4---- Disagree	5---- Strongly disagree
a. Most of my friends belong to the military community	O	O	O	O	O
b. The military community is there for me when I need it	O	O	O	O	O
c. I have a lot in common with the civilian community	O	O	O	O	O
d. Members of the military community sometimes turn to me for help or support	O	O	O	O	O
e. Living on base helps active duty members and their families make ends meet	O	O	O	O	O
f. I talk up my Service to my friends as a great organization to be a part of	O	O	O	O	O
g. There is not much to be gained for me by sticking with a military career	O	O	O	O	O
h. I am proud to be a member of my Service	O	O	O	O	O
i. I find that my values and the values of my Service are very similar	O	O	O	O	O
j. Being a member of my Service inspires me to do the best job I can	O	O	O	O	O
k. I would turn down another job for more pay in order to remain in my Service	O	O	O	O	O
l. My Service's evaluation/ selection system is effective in promoting its best members	O	O	O	O	O
m. If I stay in the Service, I will be promoted as high as my ability and effort warrant	O	O	O	O	O

M9951 (O137/E138)

51. Now, taking all things together, how satisfied are you with the military way of life?

1. O Very satisfied
2. O Satisfied
3. O Neither satisfied nor dissatisfied
4. O Dissatisfied
5. O Very dissatisfied

PROGRAMS AND SERVICES

MA952A01-MA952A13 MA952B01-MA952B13/ MU952A01-MU952A13 MU952B01-MU952B13 (O192/E102)

52. On average during a month, how often do you use the following on base programs, facilities, or services and civilian off base programs, facilities, or services?

For each of these 13 items, mark one response in column A and one response in column B.	A. On base Program, Facility or Service (69)								B. Civilian Offbase Program, Facility or Service (70)							
	Not available	0 times	1-5 times	6-10 times	11-15 times	16-20 times	21-25 times	26 times or more	Not available	0 times	1-5 times	6-10 times	11-15 times	16-20 times	21-25 times	26 times or more
1. Fitness Center/Gym	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
2. Library services	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3. Outdoor recreation areas (e.g., campgrounds, picnic areas, beach, stables)	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
4. Outdoor recreation equipment rental	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5. Recreation center (e.g., recreation room, music/TV, game room/amusement machines)	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6. Golf course	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7. Bowling center	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
8. Recreation lodging/hotel or resorts	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9. Clubs/dance/night clubs	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
10. Commissary/supermarket/grocery store	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
11. Main exchange/department store	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
12. Social activities for service members (e.g., trips, special events, tournaments)	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
13. Auto, crafts and hobby shops	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M9953A-M9953D*

53. During the past 12 months, have you used any of the following programs and services? (MARK ONE ANSWER IN EACH ROW.)

	1 Yes	2 No
a. Adult continuing education/counseling	O	O
b. Tuition assistance programs for college/higher education	O	O
c. Technical/vocational programs	O	O
d. Basic skills education	O	O

FAMILY INFORMATION

SRMARST* (O044/E045) / Coding Note 8 / Coding Note 9

54. What is your marital status?

1. O Now married
2. O Separated
3. O Divorced → Go to Question 57 M9954SKA
4. O Widowed → Go to Question 57
5. O Never married → Go to Question 58

M9955A-M9955P* (O045/E046) / Coding Note 10 M9954SKB

55. Is your spouse currently: (MARK ALL THAT APPLY.)

A. O Serving on active duty (not a member of the National Guard or Reserve)
B. O Member of the National Guard or Reserve in a full-time active duty program (AGR, TAR, AR)
C. O Other type of National Guard or Reserve member (e.g., drilling unit, IMA, IRR, military technician)
D. O Working in a Federal civilian job (full-time)
E. O Working in a Federal civilian job (part-time)
F. O Working in a civilian job on base (full-time)
G. O Working in a civilian job on base (part-time)
H. O Working in a civilian job off base (full-time)
I. O Working in a civilian job off base (part-time)
J. O Managing or working in family business
K. O Self-employed in his/her own business or profession
L. O Unemployed and looking for work
M. O In school
N. O Homemaker/housewife/househusband
O. O Retired
P. O Other (specify):

M9955SP / Coding Note 10

PREDUC/PREDUCA-PREDUCH/PREDHI*/Coding Note 11

56. What is the highest degree or level of school that your spouse has completed? (MARK THE ONE ANSWER THAT DESCRIBES THE HIGHEST GRADE OR DEGREE THAT YOUR SPOUSE HAS COMPLETED.)

A. O 11th grade or less
B. O 12 years of school, no diploma
C. O High school graduate – high school diploma or the equivalent (e.g., GED)
D. O Some college credit, but less than 1 year
E. O 1 or more years of college, but no degree
F. O Associate degree (e.g., AA, AS)
G. O Bachelor's degree (e.g., BA, AB, BS)
H. O Master's, doctoral degree, or professional school degree (e.g., MA/MS/PhD/MD/JD/DVM)

M9957* (O054/E055)

57. How many times have you been divorced?

0. O None
1. O 1
2. O 2
3. O 3 or more

For questions in this section, the definition of "child or children" or "other legal dependents" includes anyone in your family, except your spouse, who has or is eligible to have a Uniformed Services identification card (military ID card) or is eligible for military health care benefits and is enrolled in the Defense Enrollment Eligibility Reporting System (DEERS).

M9958 / Coding Note 12

58. Do you have a child, children or other legal dependents based on the definition above?

1. O Yes
2. O No → Go to Question 73 M9958SK

M9959A-M9959G* (O058/E059)

59. How many children or other legal dependents do you have in each age group? (MARK ONE ANSWER IN EACH ROW.)

	Age	None (0)	1	2	3	4	5 or more
a.	Under 1 year old	O	O	O	O	O	O
b.	1 year to under 2 years old	O	O	O	O	O	O
c.	2-5 years old	O	O	O	O	O	O
d.	6-13 years old	O	O	O	O	O	O
e.	14-22 years old	O	O	O	O	O	O
f.	23-64 years old	O	O	O	O	O	O
g.	65 years old or older	O	O	O	O	O	O

M9960A-M9960G* (O059/E060)

60. How many children or other legal dependents do you have in each of the following age groups who live on a regular basis with you at your permanent duty station? (MARK ONE ANSWER IN EACH ROW.)

	Age	None (0)	1	2	3	4	5 or more
a.	Under 1 year old	O	O	O	O	O	O
b.	1 year to under 2 years old	O	O	O	O	O	O
c.	2-5 years old	O	O	O	O	O	O
d.	6-13 years old	O	O	O	O	O	O
e.	14-22 years old	O	O	O	O	O	O
f.	23-64 years old	O	O	O	O	O	O
g.	65 years old or older	O	O	O	O	O	O

M9961A-M9961G*

61. How many children or other legal dependents do you have in each of the following age groups who live on a regular basis at a different location than your permanent duty station? (MARK ONE ANSWER IN EACH ROW.)

	Age	None (0)	1	2	3	4	5 or more
a.	Under 1 year old	O	O	O	O	O	O
b.	1 year to under 2 years old	O	O	O	O	O	O
c.	2-5 years old	O	O	O	O	O	O
d.	6-13 years old	O	O	O	O	O	O
e.	14-22 years old	O	O	O	O	O	O
f.	23-64 years old	O	O	O	O	O	O
g.	65 years old or older	O	O	O	O	O	O

M9962A-M9962R (O068/E069) / Coding Note 13

62. During the past 12 months, have you routinely used any of the following childcare arrangements? (MARK ALL THAT APPLY.)

A. O Not applicable, I have not used any of the following childcare arrangements → Go to Question 68 M9962ASK
B. O Child's other parent or stepparent
C. O Child's brother or sister (aged 15 or older)
D. O Child's brother or sister (under the age of 15)
E. O Child's grandparent
F. O Other relative
G. O Friend or neighbor
H. O Sitter, nanny, or au pair
I. O Preschool (on base)
J. O Preschool (off base)
K. O "Child Development Center" (on base)
L. O Childcare center/day care center (off base)
M. O "Family Childcare Home" (on base)
N. O Childcare provider in a home setting (off base)
O. O "School-Age Care Program" (on base)
P. O After-school program (off base)
Q. O Federally supported Head Start program
R. O None of the above

M9963

63. How many of your children routinely use the childcare arrangements marked in Question 62?

1. O 1
2. O 2
3. O 3
4. O 4
5. O 5 or more

M9964A / Coding Note 14 M9964B* (O070/E070) / Coding Note 15

64. What is the total amount that you spent last month on childcare arrangements for all of your children?

A. O Does not apply, I spent no money on childcare arrangements last month M9964ASK

B. MONTHLY CHILDCARE EXPENSE

$ [ ][ ][ ][ ] . 0 0

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Write your monthly expense in the boxes, then fill in the corresponding circles. For example, if you spent $100 last month, you would enter "0100."

M9965 / Coding Note 16

65. During the past 12 months, was there any change in your childcare arrangements for your child or children?

1. O Yes
2. O No → Go to Question 68 M9965SK

M9966A-M9966M

66. For what reasons did the childcare arrangements change? (MARK ALL THAT APPLY.)

A. O Beginning, ending, or changes in a child's school enrollment
B. O Beginning, ending, or changes in military assignment
C. O Beginning, ending, or changes in spouse's school enrollment
D. O Cost
E. O Availability or hours of care provider
F. O Reliability of care provider
G. O Quality of care provided
H. O Care provider's location or accessibility
I. O Never had any regular arrangement
J. O Child outgrew arrangement
K. O No longer eligible for assistance
L. O Arrangement no longer available
M. O Other (specify): M9966SP / Coding Note 17

M9967

67. During the past 12 months, did you lose any time from your military duties (work, school, or training) due to a change in childcare arrangements?

1. O Yes
2. O No

M9968 / Coding Note 18

68. Do you have a child or children enrolled in school?

1. O Yes
2. O No → Go to Question 73 M9968SK

M9969* (O068/E069 O072/E073) / Coding Note 19

69. What type of school does your youngest school-age child attend?

1. O College or university → Go to Question 73
2. O Public school off base M9969SK
3. O Public school on base
4. O DoD school for dependents
5. O A religion-affiliated school
6. O A private day school, not religion-affiliated
7. O A private boarding school
8. O Home school
9. O Other (specify): M9969SP / Coding Note 20

M9970* / Coding Note 21

70. About how many hours per week does your child usually spend in school? (If you have more than one child, answer for the youngest school-age child.)

HOURS PER WEEK

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

Write the number of hours in the boxes, then fill in the corresponding circles.

M9971A-M9971G

71. For the type of school you marked in Question 69, please rate the following.

-6---- **NA/DK = Not applicable or don't know**
5---- **E = Fail**
4---- **D = Poor**
3---- **C = Satisfactory**
2---- **B = Good**
1---- **A = Excellent**

a. Overall academic program	O	O	O	O	O	O
b. Support services provided by the school	O	O	O	O	O	O
c. Special education programs	O	O	O	O	O	O
d. Physical plant (building, school grounds, heating/cooling, food service, etc.)	O	O	O	O	O	O
e. Availability of extracurricular activities	O	O	O	O	O	O
f. Safety of school	O	O	O	O	O	O
g. Overall quality of the school	O	O	O	O	O	O

M9972A-M9972F

72. Have you participated in, or been involved with, the following activities related to your child's or children's education? (MARK ALL THAT APPLY.)

A. O Attending conferences or meetings with teachers regarding the school
B. O Working with teachers to promote achievement
C. O Collaborating on educational opportunities for students, parents, and teachers
D. O Planning and implementing curricular and extra-curricular activities
E. O Participating in decision making and problem solving to promote learning
F. O None of the above

M9973* (O074/E075)

73. Do you have a child, spouse, or other legal dependent enrolled in the Exceptional Family Member Program (EFMP) or the Coast Guard Special Needs Program?

1. O Yes
2. O No

M9974 (O076/E077) / Coding Note 22

74. Do you have caregiver responsibilities for an elderly family member (shopping, home maintenance, transportation, checking on them by phone, finances, arrangements for care, etc.)? (This includes persons who live with you or live somewhere else.)

1. O Yes
2. O No → Go to Question 77 M9974SK

M9975

75. How many elderly family members do you have caregiver responsibilities for?

1. O One
2. O Two
3. O Three or more

M9976

76. During the past 12 months, did you lose any time from your military duties due to eldercare responsibilities?

1. O Yes
2. O No

M9977A-M9977H / Coding Note 23

77. How satisfied or dissatisfied are you with each of the following aspects of military health care for your family?

H. O Does not apply, I do not have any family members eligible to receive military health care.
→ Go to Question 78 M9977HSK

5---- **Very dissatisfied**
4---- **Dissatisfied**
3---- **Neither satisfied nor dissatisfied**
2---- **Satisfied**
1---- **Very satisfied**

a. My out-of-pocket cost for care	O	O	O	O	O
b. Skill of physicians and other medical providers	O	O	O	O	O
c. Availability of specialists	O	O	O	O	O
d. Ability to get appointments	O	O	O	O	O
e. Waiting time in the clinic	O	O	O	O	O
f. Overall quality of care	O	O	O	O	O
g. Administrative requirements (claims, paperwork, approvals, etc.)	O	O	O	O	O

M9978 (O105/E106) / Coding Note 24

78. In the last month, did you perform any non-military volunteer work?

1. O Yes → Go to Question 80 M9978SK
2. O No

M9979A-M9979F

79. What were your reasons for not volunteering? (MARK ALL THAT APPLY.)

A. O I was not asked to perform volunteer work
B. O I did not have time for volunteer work
C. O I did not have access to childcare so I could perform volunteer work
D. O I am not interested in volunteer work
E. O I did not have transportation
F. O None of the above

M9980

80. How is your general outlook about your life?

1. O Very optimistic
2. O Optimistic
3. O Neither optimistic nor pessimistic
4. O Pessimistic
5. O Very pessimistic

M9981 / Coding Note 25

81. Are you accompanied by family members (spouse, child, or other legal dependents) at your permanent duty station?

1. O Yes → Go to Question 83 M9981SK
2. O No

M9982A-M9982L*

82. Why didn't your family members accompany you to your permanent duty station? (MARK ALL THAT APPLY.)

A. O Does not apply, I have no family members
B. O Legal separation or divorce from spouse
C. O Temporarily unaccompanied (family members will join me later)
D. O Permanently unaccompanied because it was required for the authorization/billet
E. O Permanently unaccompanied because family members were not command sponsored (overseas tour)
F. O Permanently unaccompanied because household goods move was not authorized with PCS orders
G. O Spouse's career
H. O Spouse's education
I. O Child's/children's education
J. O Health or illness of family member
K. O Eldercare responsibilities
L. O Other (specify):

M9982SP /Coding Note 26

M9983* (O017/E017)

83. During your active duty career, how many times did your family members move to a new location because of your permanent change of station (PCS)?

0. O None
1. O 1
2. O 2
3. O 3
4. O 4
5. O 5
6. O 6
7. O 7
8. O 8
9. O 9
10. O 10 or more

M9984A-M9984I*/ Coding Note 36

84. Have any of your relatives ever served on active military duty? (MARK ALL THAT APPLY.)

A. O Parent or guardian
B. O Spouse
C. O Brother or sister
D. O Son or daughter
E. O Grandparent
F. O Uncle or aunt
G. O Cousin
H. O Other close relative
I. O None of my relatives have served on active duty

ECONOMIC ISSUES

The questions in this section address economic issues in the lives of military members and their families. The information will be used to better understand the economic and financial concerns of military members and their families. Although people will have different views on what is or is not personal, many people will consider some of the questions very personal. Please continue with the survey even if there are some questions that you want to skip.

M9985 / Coding Note 27

85. During your off-duty time, do you currently hold a second job or work at your own business?

1. O Yes
2. O No → Go to Question 87 M9985SK

M9986* (O107/E108) / Coding Note 28

86. On average, how many hours a week do you spend working at a civilian job or working at your own business during your off-duty hours?

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

HOURS PER WEEK

For example, if you worked 8 hours, enter "08" in the boxes and fill in the Corresponding circles.

M9987A-M9987L (O117/E118) / Coding Note 36

87. During the past 12 months, did you (and your spouse) receive any income or financial support from the following sources? (MARK ALL THAT APPLY.)

A. O A second job
B. O Alimony
C. O Child support
D. O Supplemental Security Income (SSI)
E. O Unemployment or Worker's compensation
F. O State-funded childcare assistance
G. O Women, Infants, and Children (WIC)
H. O Food Stamp Program
I. O Head Start Program
J. O Aid to Families with Dependent Children (AFDC)
K. O Medicaid
L. O Other (specify):

M9987SP / Coding Note 29

M9988

88. What is your total monthly gross (before-tax) household income from all sources? (Please include your military earnings, your earnings from a second job, your spouse's earnings, and income or financial support from any other source.)

1. O $ 1-1,000
2. O $ 1,001-2,000
3. O $ 2,001-3,000
4. O $ 3,001-4,000
5. O $ 4,001-5,000
6. O $ 5,001-6,000
7. O $ 6,001-7,000
8. O $ 7,001-8,000
9. O $ 8,001-9,000
10. O $ 9,001-10,000
11. O $ 10,001 and above

M9989

89. Roughly, what is the total amount of savings you (and your spouse) have? (Please include funds in bank accounts, IRAs, money market accounts, Certificates of Deposit (CDs), Savings Bonds, mutual funds, stocks and/or bonds.)

0. O $ 0
1. O $ 1-1,000
2. O $ 1,001-2,500
3. O $ 2,501-5,000
4. O $ 5,001-7,500
5. O $ 7,501-10,000
6. O $ 10,001-12,500
7. O $ 12,501-15,000
8. O $ 15,001-17,500
9. O $ 17,501-20,000
10. O $ 20,001-50,000
11. O $ 50,001-100,000
12. O $ 100,001 and above

M9990 (M061/E062)

90. Do you (or your spouse) pay child support?

1. O Yes, I pay child support
2. O Yes, my spouse pays child support
3. O Yes, both my spouse and I pay child support
4. O No

M9991

91. What is the total amount you (and your spouse) paid last month for rent or mortgage?

0. O $ 0
1. O $ 1-400
2. O $ 401-800
3. O $ 801-1,200
4. O $ 1,201-1,600
5. O $ 1,601-2,000
6. O $ 2,001 and above

M9992

92. What is the total amount you (and your spouse) paid last month for all loans and leases on cars, trucks, or motorcycles?

0. O $ 0
1. O $ 1-250
2. O $ 251-500
3. O $ 501-750
4. O $ 751-1,000
5. O $ 1,001-1,250
6. O $ 1,251-1,500
7. O $ 1,501 and above

M9993

93. What is the amount of payments that you (and your spouse) made last month to cover personal unsecured debt? (Include all credit cards, debt consolidation loans, AAFES loans, NEXCOM loans, student loans, and other personal loans; exclude home mortgage and car loans)

0. O $ 0
1. O $ 1-150
2. O $ 151-300
3. O $ 301-450
4. O $ 451-600
5. O $ 601-750
6. O $ 751-900
7. O $ 901-1,050
8. O $ 1,051 and above

M9994

94. After the last payment was made on personal unsecured debt, what was the total amount you (and your spouse) still owed? (Include all credit cards, debt consolidation loans, AAFES loans, NEXCOM loans, student loans, and other personal loans; exclude home mortgage and car loans)

0. O $ 0
1. O $ 1-1,000
2. O $ 1,001-2,500
3. O $ 2,501-5,000
4. O $ 5,001-7,500
5. O $ 7,501-10,000
6. O $ 10,001-12,500
7. O $ 12,501-15,000
8. O $ 15,001-17,500
9. O $ 17,501-20,000
10. O $ 20,001 and above

M9995

95. Which of the following best describes the financial condition of you (and your spouse)?

1. O Very comfortable and secure
2. O Able to make ends meet without much difficulty
3. O Occasionally have some difficulty making ends meet
4. O Tough to make ends meet but keeping your head above water
5. O In over your head

M9996A-M9996O/ Coding Note 36

96. In the past 12 months, did any of the following happen to you (and your spouse)? (MARK ALL THAT APPLY.)

A. O Bounced two or more checks
B. O Received a letter of indebtedness (e.g., a letter from a lender to your commanding officer that payment is late)
C. O Had your wages garnished
D. O Fell behind in paying your rent or mortgage
E. O Fell behind in paying your credit card, AAFES, or NEXCOM account
F. O Was pressured to pay bills by stores, creditors, or bill collectors
G. O Had a bill collector contact your unit leader
H. O Pawned or sold valuables to make ends meet
I. O Borrowed money from friends or relatives to help you with a financial difficulty
J. O Borrowed money through an Emergency Loan Assistance Program or a Service Aid Society
K. O Had your utilities (telephone, cable, water, heat or electricity) shut off
L. O Had a car, household appliances, or furniture repossessed
M. O Was unable to afford needed medical care
N. O Went bankrupt (declared personal bankruptcy)
O. O None of the above

A Thrift Savings Plan (TSP) is a tax-deferred retirement savings plan like a 401(k) plan.

- **Employees may deposit a portion of their pay (typically up to 5 or 10 percent) before taxes into a long-term fund to provide savings for retirement.**
- **Employers may match none, some, or all of their employees' contributions.**
- **A wide range of investment options is generally available, including funds that follow the stock and bond markets.**
- **TSP funds may be taken to another employer or rolled over into other qualified retirement savings plans.**
- **Funds may begin to be withdrawn at around age 59½—earlier withdrawals are usually penalized.**

M9997A-M9997C

97. If this type of plan were made available to you, how likely would you be to participate in each of the following situations?

	5 Very unlikely	4 Unlikely	3 Neither likely nor unlikely	2 Likely	1 Very likely
a. If there were no government matching	O	O	O	O	O
b. If the government matched your contribution up to 5% of pay	O	O	O	O	O
c. If you could invest any reenlistment or continuation bonus into the fund tax-deferred	O	O	O	O	O

M9998

98. Which, if any, of the following is your main concern about the military retirement system?

-6. O Does not apply, I have no concerns
1. O No pension benefits are earned unless you serve at least 20 years
2. O No ability to save toward retirement with a 401(k) or other retirement savings program
3. O The government does not match any money you put away for retirement
4. O You cannot transfer your retirement benefits to another employer
5. O Other

M9999

99. Currently, military personnel do not qualify for retirement benefits unless they serve for at least 20 years. If the system were changed so that you became eligible after at least 10 years of service for a deferred pension payable at age 62, how much influence would this have on your willingness to stay in the military until at least the 10-year point?

71. O Does not apply, I have already served 10 years
72. O Does not apply, I already intend to stay
1. O Little or no influence
2. O Some influence
3. O Moderate influence
4. O Strong influence

M99100

100. Congress is considering a proposal to modify the retirement pay formula for those who entered the service on or after August 1, 1986 to the same formula that applied to those who entered before that date. Assuming the retirement pay formula were changed, how much influence would this have on your willingness to stay in the military?

71. O This would not affect me since I entered the service before August 1, 1986
72. O Does not apply, I already intend to stay
1. O Little or no influence
2. O Some influence
3. O Moderate influence
4. O Strong influence

BACKGROUND INFORMATION

SRSEX* (O032/E033)

101. Are you:

1. O Male
2. O Female

SRESL

102. Is English a second language for you?

1. O Yes
2. O No

SRHISP* (O036/E037)

103. Are you Spanish/Hispanic/Latino? (MARK "No" IF NOT SPANISH/HISPANIC/LATINO.)

1. O No, not Spanish/Hispanic/Latino
2. O Yes, Mexican, Mexican American, Chicano
3. O Yes, Puerto Rican
4. O Yes, Cuban
5. O Yes, other Spanish/Hispanic/Latino

SRRACEA-SRRACEF* (O035/E036) / Coding Note 30

104. What is your race? (MARK ONE OR MORE RACES TO INDICATE WHAT YOU CONSIDER YOURSELF TO BE.)

A. O White
B. O Black or African-American
C. O American Indian or Alaska Native
D. O Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
E. O Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)
F. O Some other race (specify):

SRRACESP /Coding Note 30

M99105* / M99105A-M99105H* / M99105HI* (O038/E039) / Coding Note 31

105. At the time you first came on active duty, how much education had you completed? (MARK THE ONE ANSWER THAT DESCRIBES THE HIGHEST GRADE OR DEGREE THAT YOU HAD COMPLETED.)

A. O 11th grade or less
B. O 12 years of school, no diploma
C. O High school graduate – high school diploma or the equivalent (e.g., GED)
D. O Some college credit, but less than 1 year
E. O 1 or more years of college, but no degree
F. O Associate degree (e.g., AA, AS)
G. O Bachelor's degree (e.g., BA, AB, BS)
H. O Master's, doctoral degree, or professional school degree (e.g., MA/MS/PhD/MD/JD/DVM)

SRED*/SREDA-SREDH* /SREDHI* (O039/E040) / Coding Note 32

106. What is the highest degree or level of school that you have completed? (MARK THE ONE ANSWER THAT DESCRIBES THE HIGHEST GRADE OR DEGREE THAT YOU HAVE COMPLETED.)

A. O 11th grade or less
B. O 12 years of school, no diploma
C. O High school graduate – high school diploma or the equivalent (e.g., GED)
D. O Some college credit, but less than 1 year
E. O 1 or more years of college, but no degree
F. O Associate degree (e.g., AA, AS)
G. O Bachelor's degree (e.g., BA, AB, BS)
H. O Master's, doctoral degree, or professional school degree (e.g., MA/MS/PhD/MD/JD/DVM)

M99107* / Coding Note 33

107. Are you currently serving on active duty and/or in the Guard/Reserve?

1. O Yes, serving on active duty (not a member of the Guard/Reserve)
2. O Yes, a member of the Guard/Reserve in a full-time active duty program (AGR, TAR, AR)
3. O Yes, other type of Guard/Reserve member (e.g., drilling unit, IMA, IRR, military technician)
4. O No →Go to Question 110 M99107SK

SRSVC* (Comment)

108. In what Service are you?

1. O Army
2. O Navy
3. O Marine Corps
4. O Air Force
5. O Coast Guard

SRGRADE* (O003/E003)

109. What is your current paygrade?

1. O	E-1	10. O	W-1	15. O	O-1
2. O	E-2	11. O	W-2	16. O	O-2
3. O	E-3	12. O	W-3	17. O	O-3
4. O	E-4	13. O	W-4	18. O	O-4
5. O	E-5	14. O	W-5	19. O	O-5
6. O	E-6			20. O	O-6 or above
7. O	E-7				
8. O	E-8				
9. O	E-9				

M99110* / Coding Note 34

110. How many years of active duty service have you completed?

0	0
1	1
2	2
3	3
4	4
5	5
	6
	7
	8
	9

YEARS

For example, if you have completed 3 years of service, you would enter "03." To indicate less than 1 year, enter "00."

SRDATEMM* / SRDATEDD* / SRDATEYY* / SRDATE / Coding Note 35

111. What date did you complete this survey?

DATE

MONTH	DAY		YEAR
O January			O 1999
O February			O 2000
O March	0	0	
O April	1	1	
O May	2	2	
O June	3	3	
O July		4	
O August		5	
O September		6	
O October		7	
O November		8	
O December		9	
1-12	01-31		1999 & 2000

COMMENTS

COMMENT / Coding Note 37

112. If you have comments or concerns that you were not able to express in answering this survey, please write them in the space provided. If your comments relate to specific questions on this survey, please make a note of the question number beside your comment.

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