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Understanding Attitudes About The Military Way of Life:

Analysis of Longitudinal Data from the 1985 and 1992 DoD Surveys of Officers and Enlisted Personnel and Military Spouse

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A longitudinal data analysis of the *1985 and 1992 Surveys of Officers and Enlisted Personnel and Their Spouses* was used to assess the perceptions and attitudes of respondents about various aspects of military life over time. The seven-year time span between the surveys represented a unique period in military history with the occurrence of such events as Operations Desert Shield/Storm, the extensive military drawdown, and the changing role of the military (e.g., peace keeping). The general research approach was to investigate the outcome variables in relationship to a broad range of predictors. Major findings of this study were: a) the attitudes and opinions of active-duty military members remained stable at the aggregate level from 1985 to 1992; b) active-duty military members in 1992 had much lower expectations of their chosen careers than did the active-duty military members surveyed in 1985; c) expected total years of service was the best predictor of officers' career intentions; and d) family readiness for deployment increased from 1985 to 1992.

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1. EXECUTIVE SUMMARY

1.1 Background and Purpose

This report describes the analysis of longitudinal data on 5,924 active-duty Service members who responded to both the *1985 and 1992 DoD Surveys of Officers and Enlisted Personnel.* The overall objective was to learn how the period of time that included Operations Desert Shield/Storm and the military drawdown affected careerists' attitudes and perceptions. Because Service members' attitudes and perceptions have implications for military readiness, this longitudinal analysis addresses a topic of major concern to manpower policy-makers.

1.2 Measures and Predictors of Attitudes and Perceptions

Three outcome measures were developed from the survey data for both years: satisfaction with military life--personal (work-related), institutional (policy-driven) and overall; career intentions; and family readiness for member deployment (insurance, written wills, power-of-attorney). These measures covered both attitudinal and readiness factors. Three classes of variables for predicting the outcome measures were examined in both 1985 and 1992: (1) demographic, including background and personnel information from the survey and military records; (2) environmental, including opinions about living conditions, moving, and community conditions; and (3) attitudinal, including concerns with family matters, career planning, and unit morale and readiness.

1.3 Research Methods

The general research approach was to investigate the outcome variables in relation to a broad range of predictors. Because of the volume of longitudinal data, an approach was used that afforded both sufficient breadth and depth of understanding. The major predictors were categorized into three sets of variables based on subject domain. The analyses then identified the major predictors of each outcome variable within each predictor set. Finally, the analyses investigated variable set effects without emphasizing the individual variables.

In terms of statistics, the use of t-tests and correlations provided an assessment of aggregate change on each outcome measure, as well as the extent to which individual ratings on each outcome varied over time. Simultaneous multiple regression models provided the means to highlight the major predictors of each outcome measure from within the respective sets of predictor variables. Finally, hierarchical regressions allowed evaluation of the impact of the concurrent (1992) relations while controlling for the longitudinal effects (1985).

1.4 Major Results

Overall, the attitudes and opinions of active-duty members remained stable at the aggregate level from 1985 to 1992. Among predictors, a notable change occurred in expectations of military life. Active-duty members had much lower expectations of their chosen careers in 1992 versus 1985. There were also few strong predictors of the outcomes from 1985. This finding may reflect the 7-year period between survey administrations. The results for each outcome are briefly summarized in the following sections.

1.4.1 Satisfaction with Military Life

Satisfaction with military life did not change significantly from 1985 to 1992; personal satisfaction was higher than institutional and overall satisfaction. Members were neither satisfied nor dissatisfied with military life overall, as well as the policy-driven aspects of military life as measured by institutional satisfaction. From 1985, higher unit morale related most to personal satisfaction, while greater satisfaction with family income related most to institutional and overall satisfaction. From 1992, greater uncertainty about the future and high stress levels related to lower levels of satisfaction for all three satisfaction measures. Similarly, members whose expectations about military life were not fulfilled also expressed lower levels of satisfaction with military life. For all satisfaction measures, higher pay grade minimally related to increased satisfaction.

1.4.2 Career Intentions

Enlisted members' career intentions did not change significantly from 1985 to 1992[1]. The number of times moved was a major predictor of enlisted career intentions over time. In both 1985 and 1992, more permanent change of station (PCS) moves related negatively to career intentions. In 1992, larger differences between current and ultimately expected pay grade related positively, and concerns about force reduction related negatively to career intentions for enlisted members. Expected total years of service best predicted officers' career intentions.

1.4.3 Family Readiness

In general, family readiness for deployment increased from 1985 to 1992. In both years, Army members were more likely to have insurance policies, written wills, and powers-of-attorney compared to members in other Service branches. Not surprisingly, married members in 1992 had the highest levels of family preparedness (80% of officers and 70% of enlisted members were married).

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[1] In 1985 there was no officer career intentions measure. Therefore, change on this outcome measure could not be assessed.

1.5 Implications

Careerists apparently perceived drawdown policies through 1992 as fair, even if unpleasant. Such policies did not lead to diminished satisfaction with military life. Members' personal satisfaction with their military jobs and with co-workers remained remarkably high and stable from 1985 to 1992. Unit morale in 1992 was similar to that in 1985, when the careerists surveyed were 7 years younger and no drawdown was in sight. On average, career intentions of enlisted members did not change noticeably over the period. Family readiness for deployment increased, probably due to Operations Desert Shield/Storm (ODS/S) and the aging of the members. All in all, this study found little evidence that careerists became disgruntled (as reflected in their survey responses) with military life from 1985 to 1992, despite the drawdown, ODS/S, and other changes with the all-volunteer force.

2. BACKGROUND TO THE DoD SURVEYS

The current data originated from surveys that continued research initiated in 1969 with a series of small-scale surveys administered at approximately 2-year intervals. In 1978, the survey sample was expanded to include the active-duty personnel in all Service branches. The expanded scope of the surveys was continued in 1985 and again in 1992 with the latest series--the *1992 Department of Defense Surveys of Officers and Enlisted Personnel and Their Spouses* (hereafter referred to as the *1992 DoD Active Component Surveys.) The 1992 DoD Active Component Surveys* were the largest ongoing surveys that obtained information on the characteristics, attitudes, and opinions of military members and their spouses. The survey results provided statistical estimates for the military as a whole and for each of the Service branches individually.

Each 1992 survey instrument was constructed around core questions comparable to those from previous surveys of DoD personnel, particularly the *1985 DoD Active Component Surveys.* The questionnaires focused on attitudes, experiences, and demographic characteristics of members and spouses. *The 1992 DoD Active Component Surveys,* like their predecessors, were designed to provide timely, policy-sensitive information about the military life cycle. They could also be used to examine the following issues: the impact of military policies on the family, the individual, and the individual's career intentions; factors affecting readiness; and differences in attitudes, experiences, and career intentions among various subpopulations. The *1992 DoD Active Component Surveys* added questions about the following domains: experiences during Operations Desert Shield/Desert Storm; the effects of downsizing; and issues related to compensation, dual-military families, single parenting, and family well-being.

Separate survey instruments were developed for officers and enlisted personnel. While the two instruments overlapped in content and structure, the terminology sometimes differed, as did some items specific to officers or enlisted personnel, particularly those concerning career intentions. The Officer Survey and the Enlisted Survey had nine sections: military information (i.e., basic data), present and past locations, career intentions, individual and family characteristics, dependents, military compensation, benefits and programs, civilian labor force experience, family resources, and military life.

The survey instrument for the *1992 Department of Defense Survey of Military Spouses* covered many of the same areas as the surveys for officer and enlisted personnel, but the organization and focus of the questions differed. The *1992 Department of Defense Survey of Military Spouses* questionnaire had eight sections: the military way of life, family military experience, Operations Desert Shield/Storm, family programs and services, spouse's demographic background, dependents, spouse's work experience, and attitudes towards the military way of life.

The member and spouse surveys covered some of the same subject areas. For these areas, more sophisticated comparisons of the responses from both individuals in the military family couple were conducted. Although many questions in the 1992 surveys were new, a subset of

questions from the 1985 survey also remained, thereby providing data for a longitudinal analysis of responses across time.

From these surveys, several datasets were developed for analysis: a member dataset (including both officer and enlisted personnel items), a spouse dataset, a couples dataset, and a longitudinal dataset. The datasets are briefly described below.

Member Dataset. The 1992 officer and enlisted personnel surveys contained similar items, with format or content differences for some survey items. This dataset had a total of 59,930 members (27,684 officer and 32,246 enlisted).

Spouse Dataset. The 1992 surveys of spouses of military personnel contained some overlapping items from the member surveys, but also collected information specific to the perspective of spouses of military personnel. This dataset consisted of results from 24,169 completed spouse surveys.

Couples Dataset. Including both military members and their spouses in the survey sample allowed member and spouse responses to be linked to show member-spouse discrepancies on common items and to combine member and spouse data to describe the couple as the unit of analysis. After "cleaning" the dataset to ensure that each couple represented a married member and spouse, the dataset contained a total of 18,422 couples.

Longitudinal Dataset. The *1992 DoD Active Component Surveys* were designed to collect information from an overlapping subset of the sample who were also respondents in the 1985 survey, thereby yielding a longitudinal dataset. Since the 1992 surveys contained some questions from earlier surveys, and since the sample population included a panel component of respondents who participated in the 1985 member survey, results could also be used to study experiences and attitudes over time. A total of 11,999 members took part in both the 1985 and 1992 survey samples. Of these, 5,924 provided data at both periods to comprise the longitudinal sample of current interest.

The present task involved secondary analysis of three domains/areas: MWR services and family programs, couples, and longitudinal analyses. The first report--findings about member and spouse use and satisfaction with MWR services and family programs--used separate member and spouse datasets. The second report--findings about military couples--conducted analyses using the couples data. This report (the third in the series) presents results from a longitudinal analysis of member responses from the 1985 and 1992 subsamples of overlapping cases[1].

The sampling plan, questionnaire design, survey administration, and response rates were described in the *Weighting Report for the 1992 DoD Active Components Survey of Officers and Enlisted Personnel and Their Spouses*. Appendix A, Background to the 1992 Surveys: Survey Design and Administration, contains a more detailed summary of these issues.

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[1] This report is one of three documents to be published in 1996.

Active Duty Military Master and Loss File. About 60,000 or 56 percent of this subpopulation responded in 1992. All of the longitudinal sample members had at least 4 months of service on 30 September 1984, a requirement for eligibility in the 1985 surveys (*DMDC 1985 DoD Survey of Officer and Enlisted Personnel User's Manual and Codebook*, p. 2-10).

Of the 11,999 longitudinal sample members, 5,924 responded to both the 1985 and 1992 surveys. Responses were statistically weighted to account for the probabilities of selection in both 1985 and 1992. Nonresponse adjustments were made to these responses as well. The weighting and adjustment classes included: (1) Service, military personnel category, and gender; (2) pay grade and race; and (3) marital status.

Since only half of the longitudinal sample responded in both 1985 and 1992, there was a question of whether or not the results could reasonably be generalized beyond the respondents themselves (Menard, 1991). Nonetheless, they were still useful in describing "conscientious" careerists--long-time members who responded to both surveys. These members were a good focus for manpower policy development during the drawdown and other military transitions.

The supposition that the longitudinal respondents were conscientious careerists was supported by their pay grade distributions in 1985 and 1992, particularly with respect to enlisted personnel. Figure 3.1 shows the percent difference in each pay grade (i.e., distributions) between the longitudinal sample and entire force for 1985. Positive differences indicated that the sample percentage exceeded the population percentages of members in a particular pay grade. Approximately 77 percent of the sampled enlisted personnel were E5 and above, versus 42.6 percent of the force in these pay grades. This difference is illustrated by the distributions that were near or above the x-axis for E5 and above.

For officers, 76.6 percent of those sampled were O3 or above, versus 71.3 percent of officers in the entire force with a pay grade of O3 or above (see Figure 3.1). Here, the difference distributions for higher officer pay grades were above the x-axis and, therefore, illustrated the larger percentage of sample officers in these respective pay grades.

The 1992 difference in pay grade distribution for the longitudinal respondents and the entire force presented a more extreme pattern. Figure 3.2 shows these results. Specifically, 98.1 percent of the sampled enlisted personnel had a pay grade of E5 or greater. Only 46.8 percent of the enlisted members in the 1992 force were in these pay grades. Nearly all of the sampled officers (97.3 percent) were O3 or above compared to the 76.7 percent of officers in these pay grades in 1992.

The profiles shown in Figures 3.1 and 3.2 reinforce the notion that the longitudinal sample consisted mainly of long-time career members. In 1985, the sample was disproportionately higher in overall pay grade as compared to the entire force, and by 1992 these respondents had 7 more years of military service.

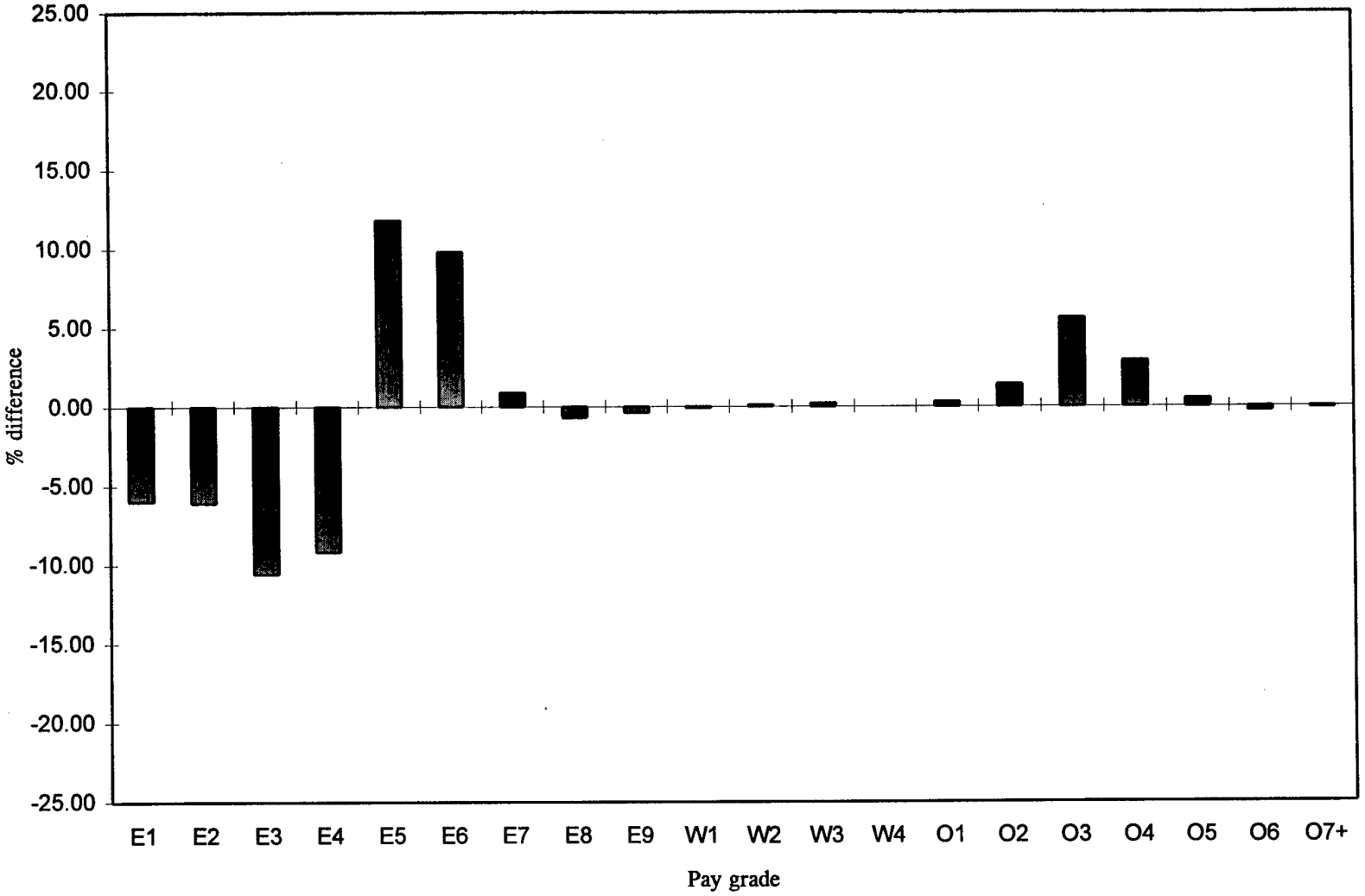

Figure 3.1. Difference between 1985 force and sample pay grade distributions

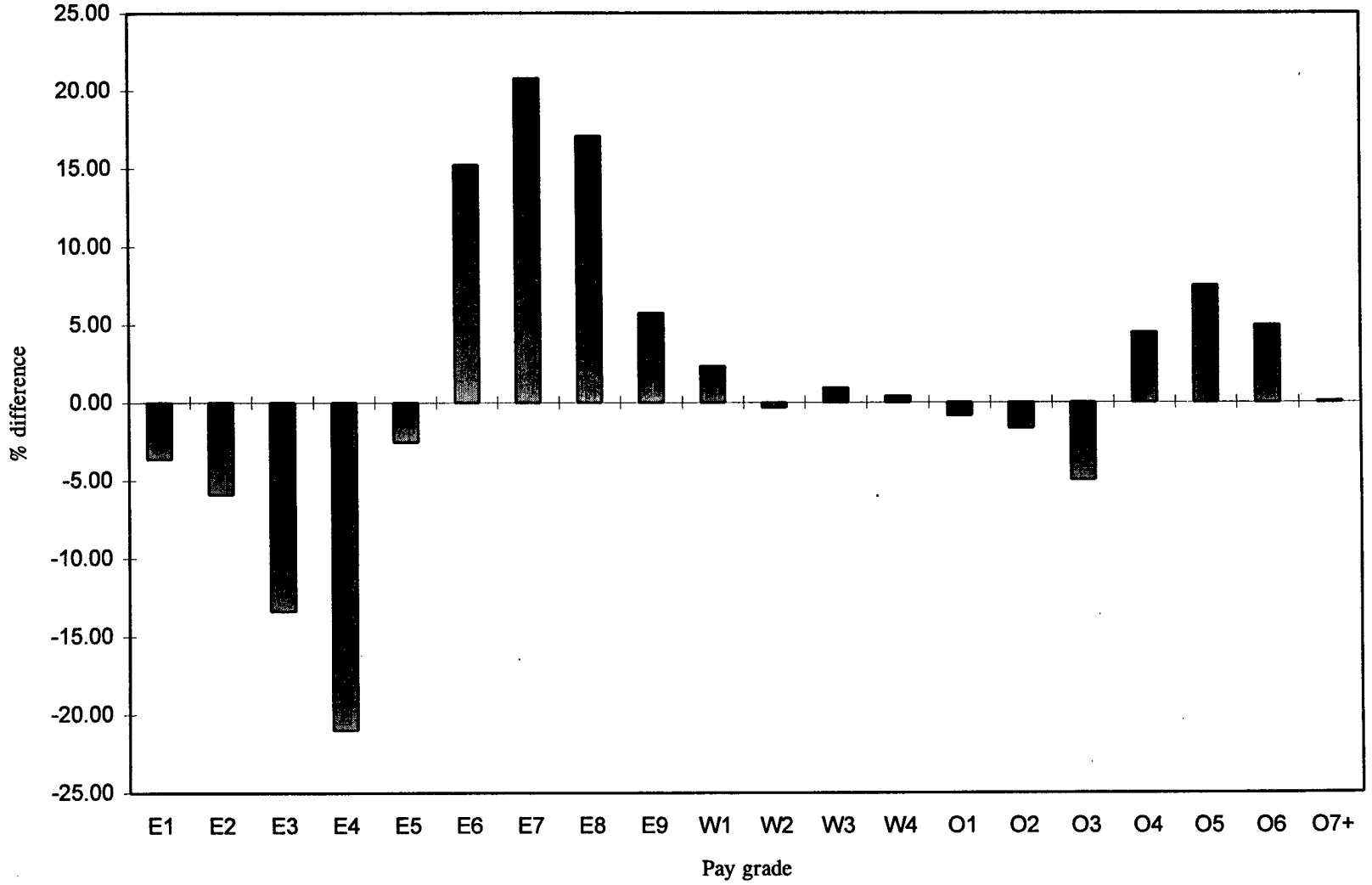

Figure 3.2. Difference between 1992 force and sample distributions

3.3 Summary

The longitudinal data analyses investigated the responses of active-duty officers and enlisted military personnel to both the *1985 and 1992 DoD Active Component Surveys.* The results provided information on changes in perceptions of military life and career expectations. Factors that could have accounted for differences in these perceptions and expectations, such as pay grade, PCS move problems, number of times moved, and perceived morale, were investigated. The results may assist policy-makers in developing manpower policies and programs that maintain the satisfaction and commitment of officer and enlisted careerists. Furthermore, these results provide insight about the attitudes and opinions of military personnel during a time of unprecedented military change.

4. RESEARCH METHODS

4.1 Data Preparation

The general approach included the use of factor analysis, reliability assessment, and item assessment. This approach resulted in composite variables and the elimination of items with poor measurement properties. In this way, the data were organized in a more manageable and useful way than it would have been with all the individual items.

First, the analyses focused mainly on those survey items that appeared on both the 1985 and 1992 surveys. However, some items from the 1992 survey only were retained because of their topical importance, such as those related to Operations Desert Shield/Storm and the military drawdown.

Factor analyses were conducted on large groups of items within the same subject label in the survey. These analyses helped to discern whether or not the survey items were measuring substantively different dimensions. If so, the items pertaining to the distinct dimensions were used to form composite variables. Details of the factor analytic procedure and analyses results are provided in Appendix B.

Smaller groups of items (six or fewer) addressing the same subject matter were subjected to reliability assessment only. Cronbach's alpha was used to determine if these items appeared to be measuring a single dimension.[1] Those items regarded as measuring a single dimension were converted to composite variables.

Finally, individual items that were not factor analyzed or submitted to reliability assessment were evaluated in terms of their measurement properties. Specifically, they were evaluated based on their frequency distributions, as well as their conceptual/intuitive relationship to the outcome variables. Individual items were discarded if they did not possess adequate variability across all response options or did not have any intuitive relevance for investigating the outcome variables.

4.2 Outcome Measures

Outcome variables were satisfaction with military life, career intentions, and family readiness, and referred to the variables as measured in 1992 only. Satisfaction with military life, family readiness, and career intentions as measured by the 1985 survey were used as predictors. The items from which the outcome measures are derived are listed in Table 4.1.

Satisfaction with Military Life. According to current understanding and practice in satisfaction research (e.g., Cranny, Smith, & Stone, 1992), satisfaction with military life was

[1] Cronbach's alpha is an estimate of a composite's reliability based on the internal consistency of the items.

Table 4.1
Items from which outcome measures are derived

Outcome Measures	Component Item Pool
Satisfaction with military life (15 items for officers and enlisted personnel)	Satisfaction with issues associated with military way of life (14 items)*
	Overall satisfaction with military way of life (1 item)
Career intention - enlisted (4 items)	How likely to reenlist (1 item) How likely if guaranteed choice of location (1 item) How likely if guaranteed promotion (1 item) How likely if retrained (1 item)
Career intention - officer (1 item)	Given a choice, would you change your career field, leave the military, or remain in your current job (1 item)
Family readiness (3 items for officer and enlisted personnel)	Life insurance (1 item) Current written will (1 item) Power-of-attorney (1 item)

*Personal freedom
Acquaintances/friendships
Work group/co-workers
Assignment stability
Pay and allowances
Environment for families
Frequency of moves
Retirement benefits
Opportunity to serve one'[s country
Satisfaction with current job
Promotion opportunities
Job training/in-service education
Job security
Working/environmental conditions

defined as a multifaceted construct. Factor analysis of the satisfaction items (see Table 4.1 and Appendix B) produced two factors: personal satisfaction and institutional satisfaction. A single item addressing overall satisfaction with military life failed to load significantly on either of these factors. It was decided to use this item as a separate global satisfaction measure. The other 14 items were more successful in the factor analysis and loaded significantly on at least one of the factors. Composite measures for the two factors, i.e., personal satisfaction and institutional satisfaction, were constructed by summing responses to these individual items. Thus, the two measures of the factors and the separate measure which would not load provided these distinct measures covering different aspects of satisfaction with military life.

Personal satisfaction dealt with work-related aspects of military life (e.g., relationships with co-workers). Institutional satisfaction pertained to policy-driven aspects of military life (e.g., moves). Overall satisfaction related to the general level of satisfaction or dissatisfaction with military life.

Career Intentions. Different questions were used to define the career intentions for officers and enlisted personnel. (This difference was important to consider in comparing results for the two groups.) For enlisted personnel, career intentions measured the extent to which members were inclined to reenlist in general, and to reenlist if given their choice of location, promotion, or retraining. Members indicating a 70 percent or greater chance of reenlisting for all four items were considered the most likely to reenlist. Conversely, members indicating less than a 70 percent chance of reenlisting on all items were considered less likely to reenlist.

For officers, only a single item was used to measure career intentions. This survey question asked officers what their career choice would be if they could, in the next month retire, retrain in a new field, return to a previous field, or remain in their current job. Those indicating they would remain in their current job were considered the highest in career intentions, whereas those indicating they would retire or leave the military had the lowest career intentions.

Family Readiness. Family readiness was the extent to which members' families were prepared for their deployment or other extended absence. This composite consisted of three questions about ownership of life insurance, a written will, and power-of-attorney. It was constructed by counting the number of items the member possessed. Respondents with all three were considered higher in family readiness.

4.3 Predictor Variables

The predictor variables were categorized into three sets according to subject domain: demographics, attitudinal, and environmental.

Demographics included background and personnel information. Standard demographics included gender, race, and age. Military demographics included pay grade, occupation, and Service branch. With few exceptions, this category of predictors represented variables that either

remain relatively stable or change according to prescribed military rules and regulations over the tenure of a military career.

Environmental variables included reactions to and opinions about aspects of the members' immediate environment, living conditions, and circumstances pertaining to their surroundings. Additionally, factual measures about the environment, such as assignment location, fell within this set. Examples of environmental variables included opinions about medical care in one's current location, problems with neighborhood crime, and satisfaction with available shopping outlets (e.g., exchange and commissary services).

Attitudinal variables included opinions regarding various aspects of military life, family situations, and other issues not involving the members' immediate location or environment. Examples of attitudinal variables included spousal career agreement, concerns over force reductions, and perceptions of unit readiness. As a group, the attitudinal variables represented more personally referent measures than those in the environmental variable set.

Each variable set had a 1985 and 1992 version. Typically, the 1992 variable sets contained their counterparts from the 1985 variable sets. The reverse was not true because of the greater scope and length of the 1992 survey. Therefore, 1992 versions of these sets included more variables addressing a wider array of issues (except for demographics). For demographic variables, both the 1985 and 1992 categories were highly correlated.

4.4 Background Information on Variables

Appendix C provides detailed information on all outcome and predictor variables. Included are the variable definitions and response options, the variable type (i.e., scale or index), and the reliability estimate, if applicable.

4.5 Methodological Limitation

A major methodological limitation arose because of a lack of standardization between the 1985 and 1992 surveys. Word changes and item order switches can potentially change the intended meaning of seemingly comparable items. Thus, caution was taken when assuming that similarly phrased items across years were identical measures.

If the goal of analysis is to assess variables over time, survey standardization is necessary. To the extent that survey differences occur, differences across any one variable could be attributed to artificial differences introduced by the measurement instrument. Appendix D describes the standardization problems encountered and how they were handled. This issue strongly affects the nature of the research questions and data analytic approach as described in the next chapter.

5. ANALYTIC OVERVIEW

This section presents the sample design and data weighting approach, research questions, and analytic strategies.

5.1 Sample Selection and Weighting

In 1992, a random longitudinal sample of 11,999 members was selected. This sample included members who were serving in the military in 1985, and had been part of the 1985 survey sample. The response patterns of these 11,999 members are provided in Table 5.1.

This analysis considered only those members who responded to both the 1985 and 1992 surveys--the panel component composed of 5,924 members. Because of the restriction to the panel component, the results generalized mainly to senior military personnel regarded as "conscientious careerists", i.e., long-term members who responded to both the 1985 and 1992 surveys.

The 1985 sample was selected using a stratified simple random sampling design. As a result, the probability of any member selected for inclusion in the sample varied according to his or her strata as determined by Service and other demographic characteristics. The responses were weighted to adjust for sampling probability, as well as nonresponse rates, and post-stratified to represent the population counts of the select strata. The Data Weighting Report (Westat, 1993) provides a detailed account of the sample selection and data weighting procedures.

5.2 Research Questions

General research questions were posed in order to guide the analyses. They are listed and described briefly below.

5.2.1 Changes in Outcome Measures

- *What is the direction and degree of change in satisfaction with military life, career intentions, and family readiness for officers and enlisted personnel from 1985 to 1992?*

- *What is the direction and degree of change on environmental and attitudinal factors for officers and enlisted personnel from 1985 to 1992?*

This first phase of the analysis focused on aggregate patterns of change over time. The major issue was whether members as a group had changed from 1985 to 1992 on the outcome variables, as well as the environmental and attitudinal variables.

5.2.2 Predictors of Outcome Measures

- *What 1985 demographic, environmental, and attitudinal variables predict satisfaction with military life, career intentions, and family readiness?*

- *What 1992 demographic, environmental, and attitudinal variables predict satisfaction with military life, career intentions, and family readiness?*

- *Do 1992 environmental and attitudinal variable sets continue to predict these outcome measures once the effects of their counterpart 1985 variable set have been controlled for?*

The second phase of the analysis identified those 1985 and 1992 factors from each variable set, respectively, that best predicted satisfaction with military life, career intentions, and family readiness in 1992. The best predictors ($p < .01$) then defined the respective variable sets in judging effects by predictor category. Hence, this phase sought to highlight the most significant variable within each set, as well as the most significant variable set, for predicting the outcomes.

5.3 Analytic Strategies

This section describes the analytic strategies followed throughout the investigation. Overall, the analytic approach was adopted to provide a careful, but broad, analysis of long-term relationships for military careerists.

Paired t-tests were used to address the research question about aggregate change patterns from 1985 to 1992. Cross-year Pearson correlations are also provided; however, correlations over this 7-year period should be interpreted cautiously. Ordinary least squares (OLS) regression was also used extensively throughout the analyses. Predictor variables measured on a discrete scale of measurement were dummy-coded (Cohen & Cohen, 1983). Dummy-coded variables included: Service, gender, race, marital status, occupation, and location. Both simultaneous and hierarchical regression models were used.

These analytical approaches, paired t-tests and regression modeling allowed for a robust test of the research questions.

5.3.1 Variable Sets

As noted in Section 4, the dependent variables were categorized into three sets: demographics, attitudinal, and environmental. This approach was adopted because of the volume of variables for consideration even after considerable reduction during data preparation. Across all variable sets, 79 variables were investigated as potential predictors of the outcome variables (see column 1 in Table 5.2). The large number of predictors presented a practical constraint on

conducting and interpreting multivariate data analyses. Variable sets were used to address this issue.

A related point was the issue of significance testing and the overall probability of erroneously concluding that a relationship existed when, in fact, it did not (i.e., type I error). The likelihood of committing a type I error increased with the number of variables available in the analysis. For example, the second column of Table 5.2 shows the total coefficients to estimate across all outcome-predictor relationships. At the traditional .05 alpha level, 24 of the possible coefficients across all variable sets could have been significant by chance alone. Hence, treating variables in sets helped to alleviate this problem because there were only 6 variable sets, not 79 individual variables.

Overall, the use of variable sets enhanced understanding of the effects of demographic, environmental, or attitudinal factors on members' satisfaction with military life, career intentions, and family readiness. The broad class of predictor variables most influential in understanding the outcomes was highlighted, as well as the major predictors within sets. Without highly specific *a priori* questions to address, this type of analysis provided the greatest breadth of exploration without overly capitalizing on chance occurrences and interpreting erroneous findings.

Table 5.1

Response patterns of selected members in 1992

When Responded	Number	Percent
Both in 1985 and 1992	5,924	49.4
Only in 1992	1,843	15.3
Only in 1985 or in neither	4,232	35.3

Table 5.2

Synopsis of predictor-set coefficients across six outcome measures: 1985 and 1992

Predictor Sets	Number of Variables	Number of Possible Coefficients
1985 Demographic	14	84
1985 Attitudinal	10	60
1985 Environmental	11	66
1985 Totals	**35**	**210**
1992 Demographic	9	54
1992 Attitudinal	19	114
1992 Environmental	16	96
1992 Totals	**44**	**264**
1985 & 1992 Totals	**79**	**474**

Note: At $\alpha = .05$ expect 24 significant coefficients by chance; at $\alpha = .01$ expect 5 significant coefficients by chance.

5.3.2 Simultaneous Regressions: Main Effect Modeling

The regression analyses considered only the main effects of predictors and not the interaction. The results describe the average effects of each predictor on each outcome variable. The fact that no variable interactions were investigated should not be construed to mean that interaction effects do not exist. They were not investigated for two reasons. First, the large number of variables meant that a comprehensive look at interactions significantly increased the number of significance test and relationships to evaluate. For example, the 11 demographic variables from 1985 would have increased to 55 predictors if two-way interactions alone were considered. Second, investigating only main effects represented a compromise between breadth and depth of analysis. Using main effects allowed the incorporation of many more variables for investigation. Using interactions would have necessitated a large reduction in the number of variables as a matter of practicality.

5.3.3 Hierarchical Regression

Hierarchical regression models were investigated. In these models, a 1985 variable set was entered into a regression first in order to "control" for its effects on the outcome under consideration. Next, the counterpart 1992 variable set was entered. Significant hierarchical prediction would show that the 1992 variable sets contributed to predicting outcomes above and beyond that of the 1985 sets. This analysis was logical in that it was prudent to control for prior effects before interpreting concurrent effects on outcome variables. In each hierarchical regression analysis, the variable sets contained only those predictor variables that were significant ($p < .01$) in the simultaneous regressions.

5.4 Significance Testing

Because of the large sample sizes and numerous variables used in the study, many of the statistical tests reached statistical significance, but lacked practical relevance. Thus, steps were needed to avoid misinterpretation of such results. First, only the major predictors from each variable set (as judged by the largest Beta weight) were interpreted. Other significant variables in the regressions were reported without comment or interpretation. Second, effect size estimates were calculated and used to judge practical relevance. Effect size estimates provided a way to evaluate the strength of a relationship. The stronger the relationship, the more meaningful it is assumed to be.

5.5 Standard Error Estimation

The results reported in section 6 are based on analyses using SAS. However, when typical statistical packages such as SAS and SPSSx are used to analyze survey data collected under a complex sample design, their estimates of sampling error are not strictly appropriate. Thus, WESVARPC and WESREG (Westat's proprietary programs) were used to compute the

appropriate replicated sampling errors of statistics under complex survey designs. However, the programs do not currently produce standardized coefficient estimates (Beta weights) needed to determine the major predictors within each variable set. Fortunately, the SAS and WESVARPC/WESREG results are nearly the same. Hence, the more familiar SAS results were used. The WESREG results for all simultaneous regressions reported in section 6 are provided in Appendix E.

6. RESULTS

This section presents the major findings from the longitudinal analyses. Section 6.2 describes the aggregate change patterns from 1985 to 1992 on environmental and attitudinal variables. The remaining results of the longitudinal analysis are organized around the outcome variables: satisfaction with military life (Section 6.3), career intentions (Section 6.4), and family readiness (Section 6.5).

For each outcome variable, the following information is reported: (1) change in the outcome variable from 1985 to 1992; (2) 1985 demographic, environmental, and attitudinal predictors of the outcome; (3) 1992 demographic, environmental, and attitudinal predictors of the outcome; and (4) hierarchical prediction effects on the outcomes. This last category includes an examination of the 1992 predictor sets that remain significant after controlling for the effects of 1985 predictor sets on the outcome variables.

6.1 Overview of Results

Table 6.1 is an overview of the major predictor(s) within each variable set by each outcome variable. This table gives the total variance accounted for from the full regression models, ***but only lists the predictor with the highest observed beta weight.*** For example, the 1985 demographics (i.e., all demographic variables in the 1985 variable set) explained 3 percent of the variance in personal satisfaction, with pay grade contributing the most to this 3 percent.

Several points are readily apparent in Table 6.1. First, the attitudinal variables generally explained the most variance across all the outcomes; demographic variables explained the least. Second, the 1992 variables were more predictive of the outcomes than the 1985 variables. For example, the demographic variables were most useful with respect to family readiness where the 1992 demographics explained 9 percent of the outcome variance. This percent of variance accounted for was substantially lower than the 34 percent of personal satisfaction accounted for by the 1992 attitudinal variables. All major variable relations and patterns are described in greater detail below.

6.2 Change and Stability Between 1985 and 1992

Stability was the norm across all Service members in terms of their responses to the same questions over a 7-year period[1]. There were 15 sets of comparable items in the analytic

[1] This section does not address aggregate change patterns in the focal outcome variables.

Table 6.1

Major predictor and variance accounted for in each outcome

Variable set/major predictor*	Percent variance accounted for PS	IS	OS	FR	CI_e	CI_o
1985 Demographics						
Pay grade	3	3	2		7	4
Service (Navy)				6		
1992 Demographics						
Pay grade	4	3	2			
Service (Navy)				9[a]	3	
Service (Air Force)						2
Married				9[a]		
1985 Environmental						
Problems adjusting to location	4[a]					
Feelings about environment		7	4			
PCS move costs				2		
Number of times moved	4[a]				10	1
1992 Environmental						
Sources of stress	18	28	19[a]			
Uncertainty about career			19[a]			
ODS/S length of deployment				5		
Number of times moved					13	
Looked for civilian job						7
1985 Attitudinal						
Unit morale	9					
Family income		12	9			
Spousal career agreement				2		1
1992 Attitudinal						
Unit morale	34[a]					
Expectation of military life	34[a]	30	31			
Spousal influence on career				9		
Pay grade difference					32	
Expected years of service						18

Note: Underlined values indicate that a positive relationship between major predictor and outcome variable was observed. PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer).

[a] More than one major predictor with identical Beta weights.

*Only predictors with the highest beta weights are displayed.

longitudinal dataset (see Table 6.2)[2]. For these items, the effect size estimates on mean comparisons showed that number of times moved and arrangements for dependents increased. Both of these relationships were not surprising among an adult sample that has aged 7 years. The latter finding showed that members were more confident that child-care arrangements were workable, particularly in the event of deployment.

Table 6.2 also shows that expectations of military life declined significantly. Hence, despite remaining in the service for 7 additional years, members did not feel that their expectations from military life were met.

Interestingly, there was some indication that the disappointment in expectations about military life was not offset by an increased interest in the civilian job market. Table 6.2 shows that members were less likely to believe they would be better off in a civilian job. However, the effect size for this relationship was slightly below the benchmark for a small effect (+/- .20; see Cohen, 1977).

Other than these changes (discussed in the previous paragraphs), the responses from 1985 to 1992 remained the same for all predictor variables. Generally, the attitudes and opinions did not vary among active-duty military members. Specifically, eight variables did not change over the 7 years, as assessed by effect sizes:

- Unit morale as perceived by the members--despite the drawdown.
- Spousal agreement about careers--despite ODS/S and increased military presence in smaller peacekeeping missions.
- Feelings about the military living environment(s), including crime in one's location, domestic violence, quality and availability of medical care, costs of PCS moves, and adjusting to new locations or assignments.

6.3 Satisfaction with Military Life

The first outcome variable dealt with satisfaction with military life. This variable was defined in terms of personal, institutional, and overall satisfaction.

6.3.1 Change in Satisfaction with Military Life from 1985 to 1992

Table 6.3 shows that personal satisfaction increased slightly over time (from a mean of 22.09 to 22.40), but the corresponding effect size for this difference (0.14) was very small

[2] Three of these 15 items, concerns with family support centers, religious services, and legal services, declined over the period. However, this decline probably occurred because these items were scaled in an attempt to make them comparable across questionnaires (see Appendix C). Hence, differences with respect to these items were not interpreted.

Table 6.2

Mean comparisons of predictor variables across years

Predictor variables	N	1985 Mean	1992 Mean	Mean Difference	$S.E._d$	t	r	ES
Number of times moved	5755	4.51	6.43	1.92	0.035	54.86*	.72	0.72
Spousal career agreement	3600	6.49	6.54	0.05	0.035	1.43	.30	0.02
Unit morale	5410	1.96	1.88	-0.08	0.012	-6.67*	.19	-0.09
Feelings about medical care	5924	0.60	0.50	-0.10	0.019	-5.26*	.22	-0.07
Problems adjusting to location	5924	1.34	1.38	0.04	0.033	1.21	.32	0.02
PCS move costs	5924	1.67	1.70	0.03	0.029	1.03	.32	0.01
Domestic violence	5924	0.27	0.35	0.08	0.017	4.71*	.18	0.06
Crime in location	5924	1.36	1.56	0.20	0.038	5.26*	.24	0.07
Feelings about environment	5924	1.10	1.14	0.04	0.027	1.48	.27	0.02
Dependent arrangements	2673	7.54	8.40	0.86	0.042	20.48*	.24	0.40
Expectations of military life	5740	3.53	2.46	-1.07	0.024	-44.58*	-.30	-0.59
Better off in civilian job	5714	3.44	3.01	-0.43	0.034	-12.65*	-.29	-0.17
Family support centers	5348	2.10	1.78	-0.32	0.037	-8.65*	.08	-0.12
Religious services	5219	3.52	1.61	-1.91	0.037	-51.62*	.17	-0.68
Legal services	5201	3.32	2.20	-1.12	0.041	-27.32*	.08	-0.39

Note: $S.E._d$ = standard error of mean difference; ES = effect size; r = Pearson correlation.

* $p<.05$.

(Cohen, 1977). Therefore, the difference in personal satisfaction was not meaningful. The strong positive correlation between personal satisfaction in 1985 and 1992 showed that the level of personal satisfaction remained relatively stable. Furthermore, the high mean values on personal satisfaction indicated that members were satisfied with the aspects of military life defining personal satisfaction, such as their job, relationships with co-workers, work conditions, and the opportunity to serve their country.

Table 6.3 shows that institutional satisfaction did not change over time (from a mean of 15.91 to 15.86). However, institutional satisfaction in 1985 and 1992 correlated only moderately. These results suggest that members as a group were somewhat indifferent to the institutional concerns of their career, such as pay, location mobility, assignment stability, and family environment. But individually, members were less consistent in regards to institutional satisfaction from 1985 to 1992.

The results for overall satisfaction paralleled those for institutional satisfaction. Overall satisfaction was statistically different across years (from a mean of 5.00 to 4.87). However, the minuscule effect size for this difference (.06) implied that it was not meaningful. As with institutional satisfaction, the members as a group were moderately satisfied overall with their military life style in 1985 and 1992.

In general, members' satisfaction with military life did not change much over this 7-year period. Members reported high personal satisfaction and moderate institutional and overall satisfaction. They enjoyed the personal aspects of their jobs, but were neither satisfied nor dissatisfied with the institutional and overall aspects of the military life style and career.

6.3.2 Predictors of Satisfaction with Military Life from 1985

This phase of the analysis identified 1985 demographic, environmental, and attitudinal predictors of each measure of satisfaction with military life. Overall, demographic characteristics were not important predictors of satisfaction with military life. Table 6.4 shows that the 1985 demographics explained only a very small proportion of variance (2-3%) of each satisfaction measure. Hence, background characteristics were not useful indicators of satisfaction with military life.

As shown in Table 6.4, pay grade was the most influential demographic predictor of each satisfaction measure. The positive relation between pay grade and satisfaction with military life indicated that higher pay grades related to higher levels of personal, institutional, and overall satisfaction. This finding was tempered by the generally low level of prediction for all demographics.

Table 6.5 shows results for the environmental predictors. This set of variables was slightly better at predicting satisfaction with military life than the demographics, explaining 4 to 7 percent of the variance across the three measures of satisfaction.

Table 6.3

Mean comparisons of outcome measures across years

Outcome Measures	N	1985 Mean	1992 Mean	Mean Difference	$S.E._d$	t	r	ES
Personal satisfaction	5581	22.09	22.40	0.31	0.030	10.33*	.80	0.14
Institutional satisfaction	5447	15.91	15.86	-0.05	0.055	-0.91	.40	-0.01
Overall satisfaction	5736	5.00	4.87	-0.13	0.029	-4.48*	.30	-0.06
Family readiness	5628	1.64	2.09	0.45	0.016	28.13*	.31	0.37
Career intentions (enlisted)	4282	2.11	1.89	-0.22	0.032	-6.88*	-.04	-0.11

Note: Career intentions for officers not available for 1985. $S.E._d$ = standard error of mean difference; ES = effect size, r = Pearson correlation; PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer).
*p<.05.

Table 6.4

1985 demographic predictors of outcomes

	1992 Outcomes					
1985 Demographics	PS	IS	OS	FR	CI_e	CI_o
Navy			0.04	-0.20	0.08	
Marine Corps	0.07	0.03	0.06	-0.06		
Air Force	0.04	0.05	0.05	-0.18	0.04	-0.11
Pay grade	0.17	0.15	0.12	0.08	-0.17	0.15
Black		0.04		-0.04		
Hispanic		0.06				
Other						
Married				0.12		
Males		-0.04				
Dependents					-0.12	
Exec/prof/tech job					-0.06	
Military job						
Admin. spt. & svcs. job					-0.10	
Production/operation jobs						
Adjusted R^2	0.03	0.03	0.02	0.06	0.07	0.04

Note: Tabled values are Beta weights for significant (p<.05) variables.
PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer); Exec/prof/tech = executive, professional, technical; Admin. spt &svcs. job = administrative support and services.

Environmental variables did not predict either overall satisfaction or personal satisfaction with much success, accounting for only 4 percent of the variance, respectively. For institutional satisfaction, the environmental variables explained 7 percent of the variance; the major predictor was feelings about location. This negative relationship suggests that greater concerns about one's location related to reduced satisfaction with the institutional aspects of the military (see Table 6.5).

Table 6.6 shows that attitudinal variables explained 9-12 percent of the variance in the measures of satisfaction with military life. Unit morale was the major predictor of personal satisfaction, with higher perceived unit morale related to higher personal satisfaction with military life. For both institutional and overall satisfaction, family income was the major predictor. Members who were more satisfied with their total family income also reported higher institutional and overall satisfaction.

6.3.3 Predictors of Satisfaction with Military Life from 1992

This phase of the analysis identified 1992 demographic, environmental, and attitudinal predictors of each measure of satisfaction with military life. The findings for 1992 demographic variables paralleled those for the 1985 demographics. In fact, demographic variables in 1992 explained only between 2-4 percent of the variance in the satisfaction measures (see Table 6.7). For each of these measures, the key demographic predictor was, once again, pay grade. Members in higher pay grades reported higher levels of satisfaction.

The 1992 environmental variables significantly related to satisfaction with military life. As shown in Table 6.8, they explained 18 percent, 28 percent, and 19 percent of the variance in personal, institutional, and overall satisfaction, respectively.

Within the 1992 environmental variable set, both sources of stress and uncertainty about the future related most to satisfaction levels.[3] Across all satisfaction measures, members with high levels of stress, as well as greater uncertainty about their military futures, generally expressed lower overall, personal, and institutional satisfaction.

The 1992 attitudinal variables were the best predictors of satisfaction with military life (see Table 6.9). They explained one-third or more of the variance in each of the satisfaction measures.

Table 6.9 shows the significant attitudinal predictors for each satisfaction measure. Expectation of military life was the major predictor of all three measures of satisfaction. The more members felt military life was not meeting their expectations, the less satisfied they were. Unit morale and readiness related strongly to personal satisfaction as well. Higher levels of perceived unit moral and readiness related to higher levels of personal satisfaction.

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[3] Neither of these variables were available from 1985.

Table 6.5

1985 environmental predictors of outcomes

	1992 Outcomes					
1985 Environmental	PS	IS	OS	FR	CI_e	CI_o
CONUS	0.04			-0.05		
Problems adjusting to location	-0.10	-0.08	-0.05			
PCS move costs	0.05			0.08		
Feelings about medical care	-0.07	-0.08	-0.04			
Feelings about environment		-0.10	-0.09			
Domestic violence		0.04	0.04			
Crime in location	-0.03	-0.05	-0.05			
Number of times moved	0.10	0.04	0.07	0.06	-0.30	0.11
Deployment	-0.09	-0.07	-0.07	-0.05		
Civilian job offers		0.08	0.05	-0.05		
Looked for civilian job	0.04	0.04	0.05			
Adjusted R^2	0.04	0.07	0.04	0.02	0.10	0.01

Note: Tabled values are Beta weights for significant ($p<.05$) variables.

PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer).

Table 6.6

1985 attitudinal predictors of outcomes

	1992 Outcomes					
1985 Attitudinal	PS	IS	OS	FR	CI_e	CI_o
Unit morale	0.15	0.09	0.11			
Family income	0.09	0.21	0.15			
Expectations of military life	0.11	0.08	0.12			
Better off in civilian job		-0.09	-0.04			
Spousal career agreement	0.06		0.06	0.11		0.10
Dependent arrangements	0.07	0.08				
Good civilian job						
Family support centers (importance)				0.06		
Religious services (importance)				0.05		
Legal services (importance)						
Adjusted R^2	0.09	0.12	0.09	0.02	0.00	0.01

Note: Tabled values are Beta weights for significant ($p<.05$) variables.

PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer).

Table 6.7

1992 demographic predictors of outcomes

	1992 Outcomes					
1992 Demographics	PS	IS	OS	FR	CI_e	CI_o
Navy			0.04	-0.20	0.13	
Marine Corps	0.07	0.03	0.06	-0.07	0.06	
Air Force		0.04	0.04	-0.19	0.08	-0.12
Pay grade	0.17	0.17	0.14	0.09	0.12	0.07
Black		0.05		-0.04		
Hispanic		0.07			0.04	
Other						
Married	0.06			0.20		
Males		-0.04				
Adjusted R^2	0.04	0.03	0.02	0.09	0.03	0.02

Note: Tabled values are Beta weights for significant ($p<.05$) variables.

PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer).

Table 6.8

1992 environmental predictors of outcomes

	1992 Outcomes					
1992 Environmental	PS	IS	OS	FR	CI_e	CI_o
CONUS	0.07		0.05	-0.06		
ODS/S length deployment		-0.05		0.12		
Number of times moved	0.08		0.04	0.08	-0.21	
Problems adjusting to location	-0.05	-0.10		0.07		
PCS move costs		-0.09				
Feelings about medical care	-0.08	-0.10	-0.10		-0.04	
Feeling about environment	-0.10	-0.14	-0.15			
Domestic violence				0.05		
Crime in location	-0.04	-0.03				
Hobby and craft shops						
Shopping opportunities	0.14	0.09	0.14		0.12	0.16
Recreation facilities	0.09	0.05	0.03	-0.03	0.06	
Uncertainty about career	-0.16	-0.20	-0.16	-0.04	0.17	
Sources of stress	-0.17	-0.17	-0.16	0.05		
Civilian job offers		0.05	0.03	-0.07		
Looked for civilian job	0.09	0.07	0.15		0.15	-0.23
Adjusted R^2	0.18	0.28	0.19	0.05	0.13	0.07

Note: Tabled values are Beta weights for significant ($p<.05$) variables.

PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer).

Table 6.9

1992 attitudinal predictors of outcomes

	1992 Outcomes					
1992 Attitudinal	PS	IS	OS	FR	CI_e	CI_o
Expected years of service	0.11		0.14	0.07	0.14	0.29
Expected ultimate pay grade	0.08	0.10	0.05	0.08	0.26	-0.13
Spousal career agreement	0.11	0.09	0.05	0.06		
Spousal influence on career		0.07	0.06	0.14		-0.09
Health benefits vs. civilian	0.06	0.17	0.12		0.07	
Involuntary separation			0.06		0.08	
Finding good civilian job	0.05					
Unit morale	0.21	0.13				-0.10
Unit readiness	0.20	0.04	0.15			
Worries about family		-0.11	-0.06	0.05	0.08	
Dependent arrangements				0.11		
Force reductions	-0.04	0.09			-0.24	0.11
Expectations of military life	-0.22	-0.21	-0.26			
Better off in civilian job	0.05	0.16	0.17	-0.06	0.04	-0.20
Family support center (importance)					0.07	
Religious services (importance)				0.04		0.07
Legal services (importance)		-0.06		0.07		
Pay grade difference			0.05	-0.06	0.29	-0.19
Response during ODS/S				0.13	-0.04	-0.11
R^2	0.34	0.30	0.31	0.09	0.32	0.18

Note: Tabled values are Beta weights for significant ($p<.05$) variables.

PS = personal satisfaction; IS = institutional satisfaction; OS = overall satisfaction; FR = family readiness; CI_e = career intentions (enlisted); CI_o = career intentions (officer).

6.3.4 Hierarchical Prediction of Satisfaction with Military Life

Two sets of hierarchical relations were examined. The first set explored the increase in prediction of 1992 outcomes from adding demographic, environmental, and attitudinal variable sets from 1985, independently, to the 1985 version of each outcome variable. For example, personal satisfaction in 1985 correlated with personal satisfaction in 1992[4]. Adding the 1985 demographic variables (as a set) to personal satisfaction in 1985 did not increase the predictability of personal satisfaction in 1992.

In fact, for all three measures of satisfaction, neither the demographic (see Table 6.10), environmental (see Table 6.11), nor attitudinal (see Table 6.12) variables sets from 1985 increased the prediction of 1992 satisfaction measures at a noteworthy level. In most instances, prior satisfaction with military life was the best predictor of satisfaction with military life in 1992.

As Tables 6.10 through 6.12 show, the increase in explained variance from adding demographic, environmental, and attitudinal variables to prior satisfaction never exceeded 3 percent. For example, in Table 6.10 personal satisfaction in 1985 (Set A) explained 64 percent of the variance in personal satisfaction in 1992. Upon adding demographics in 1985 (Set B) to the equation, no change occurred in the explained variance. Hence, demographics did not aid in explaining personal satisfaction once prior personal satisfaction was taken into account. As noted, a similar finding occurred with the environmental and attitudinal variables.

The second set of hierarchical regressions examined the increase in prediction from adding environmental, and attitudinal variable sets from 1992, independently, to the prior 1985 predictors (comprised of the comparable variable set as well as the 1985 measure of satisfaction).[5] In general, both environmental and attitudinal variable sets in 1992 added to the prediction of satisfaction with military life beyond that of the 1985 variables.

Adding the 1992 environmental variables (see Table 6.13) increased the explained variance by 18 percent and 14 percent for institutional and overall satisfaction, respectively, but only by 2 percent for personal satisfaction. Adding the 1992 attitudinal variables (see Table 6.14) increased the explained variance by 4 percent, 17 percent, and 22 percent for personal, institutional, and overall satisfaction, respectively.

These hierarchical prediction results illustrate two points about satisfaction with military life and its predictors. First, prior personal satisfaction was a strong predictor of subsequent personal satisfaction. Institutional and overall satisfaction accounted for only 16 percent and 9 percent of their 1992 counterparts, respectively. Second, the demographic, environmental, and attitudinal variables predicted satisfaction better in the short time frame, but not in the

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[4] Recall that all outcomes were defined as measured in 1992. Hence, personal satisfaction in 1992 was the outcome of interest, whereas personal satisfaction in 1985 served as an additional predictor.

[5] The 1992 demographics were not used in the second hierarchical analyses because they were essentially collinear (i.e., highly correlated) with the 1985 demographics and, therefore, created statistical estimation problems in the regressions.

Table 6.10

Hierarchical effects of 1985 demographic set

1992 Outcome	Set B	K_B	Set A	K_A	R^2_B	R^2_A	ΔR^2
Personal satisfaction (N = 5637)	PS85, D85	4	PS85	1	0.64	0.64	0.00
Institutional satisfaction (N = 5647)	IS85, D85	7	IS85	1	0.17	0.16	0.01*
Overall satisfaction (N = 5774)	OS85, D85	5	OS85	1	0.10	0.09	0.01*
Family readiness (N = 5684)	FR85, D85	7	FR85	1	0.13	0.10	0.03*
Career intentions (enlisted) (N = 4285)	CI_e85, D85	7	CI_e85	1	0.07	0.00	0.07*

Note: D85 = 1985 demographic variable set; PS85 = 1985 personal satisfaction; IS85 = 1985 institutional satisfaction; OS85 = 1985 overall satisfaction; FR85 = 1985 family readiness; CI_e = 1985 enlisted career CI_o = 1985 career intentions (officer); $R^2_A = R^2$ at step A; $R^2_B = R^2$ at step B; K_i = degrees of freedom for step i.

*p<.05.

Table 6.11

Hierarchical effects of 1985 environmental set

1992 Outcome	Set B	K_B	Set A	K_A	R^2_B	R^2_A	ΔR^2
Personal satisfaction (N = 5569)	PS85, E85	9	PS85	1	0.65	0.64	0.01*
Institutional satisfaction (N = 5569)	IS85, E85	10	IS85	1	0.17	0.16	0.01*
Overall satisfaction (N = 5569)	OS85, E85	10	OS85	1	0.11	0.09	0.02*
Family readiness (N = 5569)	FR85, E85	6	FR85	1	0.10	0.10	0.01*
Career intentions (enlisted) (N = 4285)	CI_e85, E85	3	CI_e85	1	0.09	0.00	0.09*

Note: E85 = 1985 environmental variable set; PS85 = 1985 personal satisfaction; IS85 = 1985 institutional satisfaction; OS85 = 1985 overall satisfaction; FR85 = 1985 family readiness; CI_e = 1985 enlisted career CI_o = 1985 career intentions (officer); $R^2_A = R^2$ at step A; $R^2_B = R^2$ at step B; K_i = degrees of freedom for step i.

*p<.05.

Table 6.12

Hierarchical effects of 1985 attitudinal set

1992 Outcome	Set B	K_B	Set A	K_A	R^2_B	R^2_A	ΔR^2
Personal satisfaction (N = 3445)	PS85, A85	6	PS85	1	0.65	0.64	0.01*
Institutional satisfaction (N = 3445)	IS85, A85	6	IS85	1	0.18	0.16	0.02*
Overall satisfaction (N = 4121)	OS85, A85	6	OS85	1	0.12	0.09	0.03*
Family readiness (N = 4121)	FR85, A85	4	FR85	1	0.11	0.10	0.01*
Career intentions (enlisted) (N = 4285)	CI_e85, A85	1	CI_e85	1	0.00	0.00	0.00

Note: A85 = 1985 attitudinal variable set; PS85 = 1985 personal satisfaction; IS85 = 1985 institutional satisfaction; OS85 = 1985 overall satisfaction; FR85 = 1985 family readiness; CI_e = 1985 enlisted career CI_o = 1985 career intentions (officer); $R^2_A = R^2$ at step A; $R^2_B = R^2$ at step B; K_i = degrees of freedom for step i.

*p<.05.

Table 6.13

Hierarchical effects of 1992 environmental set

1992 Outcome	Set B	K_B	Set A	K_A	R^2_B	R^2_A	ΔR^2
Personal satisfaction (N = 5569)	PS85, E85, E92	20	PS85, E85	9	0.66	0.65	0.02*
Institutional satisfaction (N = 5569)	IS85, E85, E92	22	IS85, E85	10	0.35	0.17	0.18*
Overall satisfaction (N = 5569)	OS85, E85, E92	20	OS85, E85	10	0.24	0.11	0.14*
Family readiness (N = 5569)	FR85, E85, E92	15	FR85, E85	6	0.13	0.10	0.03*
Career intentions (enlisted) (N = 4285)	CI_e85, E85, E92	9	CI_e85, E85	3	0.17	0.10	0.07*
Career intentions (officer) (N = 1639)	E85, E92	3	E85	1	0.08	0.01	0.07*

Note: E85 = 1985 environmental variable set; PS85 = 1985 personal satisfaction; IS85 = 1985 institutional satisfaction; OS85 = 1985 overall satisfaction; FR85 = 1985 family readiness; $CI_{(e)}$ = 1985 enlisted career CI_o = 1985 career intentions (officer); $R^2_A = R^2$ at step A; $R^2_B = R^2$ at step B; K_i = degrees of freedom for step i.

*p<.05.

Table 6.14

Hierarchical effects of 1992 attitudinal set

1992 Outcome	Set B	K_B	Set A	K_A	R^2_B	R^2_A	ΔR^2
Personal satisfaction (N = 3445)	PS85, A85, A92	16	PS85, A85	6	0.69	0.65	0.04*
Institutional satisfaction (N = 3445)	IS85, A85, A92	17	IS85, A85	6	0.35	0.18	0.17*
Overall satisfaction (N = 4121)	OS85, A85, A92	17	OS85, A85	6	0.34	0.12	0.22*
Family readiness (N = 4121)	FR85, A85, A92	15	FR85, A85	4	0.17	0.11	0.06*
Career intentions (enlisted) (N = 4285)	CI_e85, A85, A92	11	CI_e85, A85	1	0.32	0.00	0.32*
Career intentions (officers) (N = 1639)	A85, A92	10	A85	1	0.20	0.01	0.19*

Note: A85 = 1985 attitudinal variable set; PS85 = 1985 personal satisfaction; IS85 = 1985 institutional satisfaction; OS85 = 1985 overall satisfaction; FR85 = 1985 family readiness; $CI_{(e)}$ = 1985 enlisted career CI_o = 1985 career intentions (officer); $R^2_A = R^2$ at step A; $R^2_B = R^2$ at step B; K_i = degrees of freedom for step i.

*p<.05.

longitudinal framework of 7 years. The addition of the 1985 variable sets did not increase prediction of the 1992 outcomes, whereas the addition of the 1992 variables to prior influences did. Thus, upon controlling for prior 1995 environmental and attitudinal influences, the 1992 variables continued to relate to satisfaction with military life.

6.3.5 Summary: Satisfaction with Military Life

- Personal, institutional, and overall satisfaction for military personnel did not change significantly from 1985 to 1992. Personal satisfaction was higher than either institutional or overall satisfaction.

- Demographic variables failed to substantially predict satisfaction with military life.

- The environmental variables from 1992 successfully predicted satisfaction with military life to a moderate degree. For all three satisfaction measures, greater uncertainty about the future and high stress levels related to lower levels of satisfaction. Environmental variables were not predictive of satisfaction with military life in 1985.

- The attitudinal variables from 1985 and 1992 were somewhat more successful in predicting satisfaction with military life than were the environmental variables. In 1985, higher unit morale related most to personal and overall satisfaction, while greater satisfaction with family income related most to institutional satisfaction. In 1992, disappointment in expectations about military life contributed most to reduced personal, institutional, and overall satisfaction.

- The addition of the 1992 environmental and attitudinal variable sets to their 1985 analogs substantially increased the predictions of institutional and overall satisfaction.

6.4 Career Intentions

The second outcome variable analyzed was career intentions. Enlisted members indicated their career intentions in general and according to conditional circumstances, for example, if they were guaranteed a promotion. Officers were asked to indicate their career intentions if they were allowed to decide among several options in the "next month" (see Research Methods section for details). This difference is important when comparing the officer and enlisted results.

6.4.1 Change in Career Intentions from 1985 to 1992

Career intentions decreased slightly for enlisted personnel from 1985 to 1992[6]. However, the corresponding effect size for this mean difference was small, suggesting that this difference is not meaningful (see Table 6.3).

6.4.2 Predictors of Career Intentions from 1985

Demographic variables did not predict career intentions with much success. As Table 6.4 shows, they explained 7 percent of the variance in enlisted career intentions, and 4 percent of the variance in officer career intentions. The major demographic predictor, pay grade, had opposite effects for enlisted members and officers. For enlisted members, higher pay grades related to lower inclinations towards reenlisting. For officers, higher pay grades related to higher intentions to remain in the service. The 7 percent of explained variance in enlisted career intentions represented the strongest relationship among the demographics in 1985 across all outcome variables.

The environmental variables explained 10 percent of the variance in career intentions for enlisted members. As shown in Table 6.5, number of times moved was the only statistically significant environmental predictor of enlisted members' career intentions. It related negatively with career intentions, indicating that the more enlisted members moved, the lower their inclinations were to reenlist. For officers, the environmental variables did not predict career intentions meaningfully.

Surprisingly, no relationships between attitudinal variables and career intentions for enlisted members or officers were found (see Table 6.6). Among the attitudes assessed in this investigation, none seemed to predict career intentions over the 7-year period.

6.4.3 Predictors of Career Intentions from 1992

The 1992 demographic variables did not predict career intentions for enlisted members or officers. In both instances, 3 percent or less of the variance in career intentions was explained (see Table 6.7).

As shown in Table 6.8, environmental variables in 1992 accounted for 13 percent of the variance in career intentions for enlisted members and 7 percent of the variance in career intentions for officers. For enlisted members, number of times moved was the most significant predictor. This negative relationship indicated that the more location changes enlisted members experienced, the lower their intentions to reenlist. Other important predictors were uncertainty

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[6] The career intentions measure for officers was available only in 1992. Therefore, change could not be assessed. However, the regressions to follow were still conducted, except that a 1985 measure of career intentions for officers was not available for assessing hierarchical prediction.

about the future and looking for a civilian job. High levels of uncertainty about the future and an active civilian job search related to higher inclinations to reenlist. This latter relationship is counterintuitive and suggests that enlisted members were concerned about their futures (e.g., admitting concern and actively exploring the civilian job market) although they did not intend to leave the service. For officers, the major predictor of career intentions was civilian job search activity. Officers who were actively searching for civilian employment had lower intentions of remaining in the military.

Table 6.9 shows that attitudinal variables accounted for 32 percent of the variance in enlisted career intentions. The major predictors were pay grade difference[7], expected pay grade, and concerns about force reductions. For the two pay-grade variables, enlisted members desiring to reach a higher pay grade reported stronger inclinations to reenlist. Greater concern over impending force reductions related to lower inclinations to reenlist.

For officers' career intentions, attitudinal variables accounted for 18 percent of the variance (see Table 6.9). The major predictor was expected years of service. Officers expecting longer years of service were more inclined to remain in the service.

6.4.4 Hierarchical Prediction of Career Intentions

Career intentions for enlisted personnel did not correlate between 1985 and 1992. When adding the environmental and attitudinal sets in 1992, the incremental amount of explained variance for career intentions was significant. The 1992 environmental variables increased explained variance in career intentions by 7 percent beyond environmental variables in 1985 for both enlisted members and officers (see Table 6.13).

Table 6.14 shows the hierarchical prediction results for attitudinal variables. The 1992 attitudinal variables increased the variance accounted for in career intentions by 32 percent for enlisted members and 19 percent for officers.

6.4.5 Summary: Career Intentions

- Career intentions of enlisted members did not change in the aggregate significantly from 1985 to 1992.
- Environmental variables from 1985 and 1992 predicted enlisted members' career intentions quite well, but did not predict officers' career intentions. For enlisted members, number of times moved was the major (negative) predictor in both years.

[7] This variable reflected the discrepancy, or difference, between a member's desired final pay grade and current pay grade.

- The 1985 attitudinal variables did not predict either enlisted or officer career intentions. However, the 1992 attitudinal variables predicted enlisted career intentions quite well. For enlisted members, differences between expected and current pay grade related positively, but expected pay related negatively to career intentions. For officers, the best attitudinal predictor was expected years of service.

- The 1992 environmental and attitudinal variable sets added substantially to the 1985 variables for predicting career intentions in 1992.

6.5 Family Readiness

The final outcome variable was family readiness. Given Operations Desert Shield/Storm and increased use of military personnel in peacekeeping roles, military members were very concerned about preparing their families for deployment.

6.5.1 Change in Family Readiness from 1985 to 1992

The overall level of family readiness increased from 1985 to 1992 (see Table 6.3). Furthermore, the corresponding effect size (.37) was moderate, indicating a meaningful change. Military families in 1992 were much more likely to have life insurance policies, written wills, and a power-of-attorney than they were in 1985.

6.5.2 Predictors of Family Readiness from 1985

As with the other outcomes, the 1985 demographic set affected family readiness only slightly. Table 6.4 shows that the demographics accounted for 6 percent of the variance in family readiness. The major predictors were the Service branches; Army members ranked higher in family readiness compared to each of the other services.

Neither environmental nor attitudinal variables from 1985 predicted family readiness. Tables 6.5 and 6.6 show that environmental and attitudinal variables accounted for only 2 percent, respectively, of the variance in family readiness.

6.5.3 Predictors of Family Readiness from 1992

The 1992 demographics explained 9 percent of the variance in family readiness, and marriage was the major predictor. Married members indicated higher family preparedness, as might be expected. Army members were also higher in family readiness in comparison to the other Service branches (see Table 6.7).

As in 1985, the 1992 environmental and attitudinal variables contributed very little to the explained variance in family readiness. Although this variable set contained more potential predictors, the environmental variables accounted for only 5 percent of variance in family readiness (see Table 6.8). The attitudinal variables accounted for 9 percent of the variance in family readiness (see Table 6.9). Among attitudinal variables, spousal career influence was the most influential predictor. Increased spousal influence on a member's career related to higher levels of family readiness.

6.5.4 Hierarchical Prediction of Family Readiness

For the most part, none of the 1985 variable sets added to the prediction of 1992 family readiness beyond previous levels of family readiness (see Tables 6.10, 6.11, and 6.12). The largest increase in explained variance was only 3 percent for the demographic variables.

Similarly, neither environmental nor attitudinal variables in 1992 significantly added prediction in family readiness (see Tables 6.13 and 6.14, respectively). The 1992 environmental variable set accounted for only a 3-percent increment in explained variance beyond that due to the 1985 environmental and family readiness variables. The 1992 attitudinal variable set accounted for a 6 percent increase in explained variance.

6.5.5 Summary: Family Readiness

- The level of family readiness increased greatly from 1985 to 1992.
- The 1992 demographic variables moderately predicted family readiness. Service branch and marital status were the major predictors.
- The 1985 and 1992 environmental and attitudinal variables did not predict family readiness very well.

7. SUMMARY

7.1 Purpose and Longitudinal Data

This longitudinal analysis reported on the characteristics and attitudes of a sample of long-term active-duty military members over a 7-year period using the 1985 and 1992 DoD Active Component Surveys. The sample was randomly selected in 1992 from active-duty members who were also sampled for the 1985 survey. Only half of this longitudinal sample, of whom a quarter were officers, responded to both the 1992 and 1985 DoD surveys. Despite this mediocre response rate, the respondents represented "conscientious", long-term careerists whose satisfaction with military life and career intentions remained consistent despite unprecedented changes and events in recent U.S. military history, such as Operations Desert Shield/Storm and the extensive military drawdown.

7.2 Aggregate Change in Outcome Variables

Change across three focal outcome variables was assessed. The outcomes were satisfaction with military life (composed of personal, institutional, and overall satisfaction), career intentions (officers and enlisted members versions), and family readiness.

- Satisfaction with military life--particularly personal satisfaction (work-related), but also institutional (policy-related) and overall satisfaction--did not change over the 7-year period. The level of personal satisfaction in both years exceeded that for either overall or institutional satisfaction.

- Career intentions of enlisted respondents declined slightly, but the difference had no practical relevance. All respondents were 7 years closer to retirement. The career intentions for officers were available only in the 1992 survey. Therefore, changes could not be assessed.

- Family readiness for member deployment (that is, having life insurance, a written will, and/or power of attorney) increased greatly. This finding was expected of members with 7 more years of seniority and who served during Operations Desert Shield/Storm.

7.3 Aggregate Change in Predictor Variables

Aggregate change patterns were also investigated across the predictor variables available in both years. Overall, little change occurred on the attitudinal and environment measures. Some noteworthy changes include the following:

- Expectations of military life decreased dramatically. Apparently, active members did not feel their career expectations of 7 or more years ago were being adequately fulfilled.

- There was a decrease in the number of members who felt that their life situation would be much better if they were to take a civilian position.

- Members with dependents indicated greater confidence in making care arrangements for their dependents in the event of the member's deployment.

7.4 Major Predictors of the Outcome Variables

For each outcome, the variables that provided the greatest level of prediction were identified. The potential predictors were classified and analyzed according to three variable sets: demographics, environmental, and attitudinal variables. There was a 1985 and 1992 version for each set. The key findings from this phase of the analysis follow:

- Pay grade in both 1985 and 1992 related slightly, but positively to all facets of satisfaction and family readiness; however, demographics as a variable set did not predict the outcome variables with much success.

- In 1985 and 1992, the number of times the member moved related negatively to enlisted members' career intentions. This result suggests that frequent moving is burdensome to enlisted members.

- In 1992, members with higher levels (more sources) of stress from the environment (e.g., moving, personal safety, etc.) related to lower personal, institutional, and overall satisfaction with military life.

- Expectations of military life related negatively to all facets of satisfaction. This major predictor of satisfaction showed that unfulfilled expectations of a military career may negatively affect attitudes toward that chosen career.

- Unit morale was positively related to all facets of satisfaction. In fact, morale was a major predictor of personal satisfaction in 1985 and 1992.

- The larger the difference between current and ultimately expected pay grade in 1992, the higher were the enlisted members' career intentions. This finding suggests that junior enlisted members hoped to stay in service much longer.

7.5 Implications

What do these results imply if they can be attributed to the characteristics and attitudes of conscientious careerists from 1985 to 1992? The drawdown policies and military changes through 1992 apparently were perceived as fair, even if unpleasant and unsettling. They did not lead to diminished satisfaction with military life. In particular, members' satisfaction with the personal aspects of military life, such as their jobs and relationships with coworkers, remained remarkably high over the 7-year period. Indeed, unit morale in 1992 was similar to the 1985 level when the careerists were 7 years younger and no drawdown was in sight. For some members, approaching retirement as well as the drawdown affected career intentions. Although career intentions varied for individuals over the period, on average they did not change noticeably.

In conclusion, this study found no evidence that conscientious careerists became disgruntled with military life because of major changes in the force, particularly the drawdown.

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APPENDIX A

BACKGROUND TO THE *1992 ACTIVE COMPONENTS SURVEYS*: SURVEY DESIGN AND ADMINISTRATION

APPENDIX A

BACKGROUND TO THE *1992 DoD ACTIVE COMPONENT SURVEYS*: SURVEY DESIGN AND ADMINISTRATION

Appendix A contains background information on the survey design and administration of the *1992 DoD Active Component Surveys*.

A.1 Sample Design – Officers and Enlisted

The sample frame for the *1992 DoD Active Component Surveys* consisted of officers and enlisted personnel serving on active duty who had completed 4 or more months of service at the time of sample selection. The total survey sample of 96,830 members consisted of four separate samples:

(1) **Longitudinal sample.** The longitudinal sample consisted of 11,999 military personnel who had participated in the *1985 Department of Defense Surveys of Officers and Enlisted Personnel*, and were still in the military in 1992. These members were selected using simple random sampling.

(2) **Enlisted recruiter sample.** A sample of 1,000 recruiters per Service, identified as recruiters through their occupational codes, was selected. In order to be eligible for the recruiter sample, personnel had to have been in the military for 4 months or longer, and could not have been selected for the 1985 surveys.

(3) **Member sample.** This sample consisted of a stratified probability sample, stratified by Service, of active-duty officers and enlisted personnel with 4 or more months of service, stationed either in the U.S. (CONUS) or overseas (OCONUS), who were not selected for the 1985 surveys and were not identified as recruiters. Approximately 5,000 members were drawn from each of the 16 cells defined by Service, officer/enlisted status, and sex. Some cells did not contain 5,000 members, resulting in a total of 75,346 members selected, rather than the 80,000 (5,000 members x 16 cells) projected.

(4) **Active Guard/Reserve or Training and Administrative Reserve (AGR/TAR) sample.** This sample was similar to that used in the *1986 Reserve Components Survey*, and was drawn from the Reserve Components Common Personnel Data System (RCCPDS). It was a stratified random sample consisting of approximately 500 Reserve full-time support AGR/TAR members from each of the 14 cells defined by Reserve Component and officer/enlisted status. As with the member sample, some cells were too small to contribute 500 members to the sample. As a result, this sample yielded 5,484 AGR/TAR members, as opposed to the 7,000 (500 members x 14 cells) originally planned.

A.2 Sample Design – Spouses

The sample for the *1992 Survey of Military Spouses* consisted of a census of spouses of officers and enlisted personnel selected to participate in the *1992 DoD Active Component Surveys*. After the member was selected, his or her Social Security number was matched to the Defense Enrollment Eligibility Reporting System (DEERS) file marital status variable. DEERS contained information concerning eligibility for military medical benefits. DEERS provided the most current and most frequently updated information on marital status. If DEERS indicated a member was married, the member's spouse was selected for the *1992 Survey of Military Spouses*. Since the spouse sample was designed to be a census of spouses of selected officers and enlisted personnel, the number of spouses in each of the four samples was determined by the number of married military members in each. Each selected spouse was assigned to one of the four spouse samples, based on the relevant sample of the member to whom he or she was married. This assignment was used in constructing weights for the final datasets. The four samples are summarized below.

(1) **Longitudinal sample.** This sample consisted of military personnel still in the military who participated in the *1985 DoD Active Component Surveys*. A total of 10,202 spouses were assigned to this sample.

(2) **Enlisted recruiter sample.** Enlisted recruiters were enlisted personnel identified as recruiters through their occupational codes who had been in the military for 4 months or longer and had not been selected for the 1985 surveys. A total of 3,448 spouses were assigned to this sample.

(3) **Member sample.** This was a sample, stratified by Service, of active-duty officers and enlisted personnel with 4 or more months of service, stationed either in the U.S. (CONUS) or overseas (OCONUS), who were not selected for the 1985 surveys and were not identified as recruiters. A total of 46,511 spouses were assigned to this sample.

(4) **Active Guard/Reserve or Training Administration of Reserves (AGR/TAR) sample.** This was a simple random sample of Reserve full-time support AGR/TAR members from each of the 14 cells defined by Reserve Component and officer/enlisted status, similar to that used in the *1986 DoD Reserve Components Survey*, and drawn from the RCCPDS. A total of 4,482 spouses were assigned to the AGR/TAR sample.

A.3 Questionnaire Design

The data requirements for the *1992 DoD Active Component Surveys* reflect interest in family issues, experiences during Operations Desert Shield and Desert Storm, and other issues related to personnel management. The initial design team included representatives from each of the active Services, representatives from the Office of the Assistant Secretary of Defense (Force Management and Personnel) (OASD (FM&P)), and researchers familiar with previous Department of Defense surveys, particularly the *1985 DoD Active Component Surveys*. After the general content of the questionnaires was agreed upon, the Defense Manpower Data Center (DMDC) prepared draft questionnaires, paying particular attention to the issue of comparability with the *1985 DoD Active Component Surveys*. The draft questionnaires were reviewed by the initial design team and were pretested September 17-18, 1991, at an Army post and an Air Force base in San Antonio, Texas.

Questionnaire Contents - Members. Separate survey instruments were developed for officers and enlisted personnel: the *1992 Survey of Officers* and the *1992 Survey of Enlisted Personnel.* The two instruments are nearly identical, differing mainly in terminology and in some items specific to officers or enlisted personnel. There are nine sections to the officer survey and the enlisted survey:

I. **Military Information.** This section collects basic data on Service, pay grade, years of service remaining, and deployment for Operations Desert Shield/Desert Storm.

II. **Present and Past Locations.** This section includes questions on time in present duty assignment, details about the respondent's last Permanent Change of Station (PCS) move, and perceptions about their current permanent location.

III. **Career Intent (Reenlistment/Career Intent in the Enlisted Survey).** The purpose of this section is to determine the respondent's intention to remain in the military. It asks about expected final years of service and pay grade, plans after leaving the military, promotion expectations, probability of remaining in the military, and spouse attitude.

IV. **Individual and Family Characteristics.** Questions in this section focus on basic demographics, such as age, racial/ethnic background, education, marital status, and spouse characteristics.

V. **Dependents.** Like Section IV, this section asks basic demographic questions, focusing on children and other dependents.

VI. **Military Compensation, Benefits, and Programs.** This section asks about benefits received by the respondent, and perceived importance of various services and programs.

VII. **Civilian Labor Force Experience.** This part is composed of two subsections. The first subsection, Your Own Experience, asks about paid and volunteer work performed by the respondent during his/her off-duty hours, and intent to look for a civilian job. The second subsection, Your Spouse's Experience, asks about the respondent's spouse's employment status.

VIII. **Family Resources.** This section focuses on non-employment income, and total debts and assets.

IX. **Military Life.** The final section asks about the respondent's attitudes toward and satisfaction with the military, and demands placed on the respondent by his/her military job.

Questionnaire Contents - Spouses. The survey instrument for the *1992 Survey of Military Spouses* covers many of the same content areas as do those developed for officers and enlisted personnel. However, the organization and focus of the questions for the *1992 Survey of Military Spouses* differs from both the *1992 Survey of Officers* and the *1992 Survey of Enlisted Personnel* survey instruments. There are eight sections in the *1992 Survey of Military Spouses* questionnaire:

I. **The Military Way of Life.** This section collects information and opinions about military life, including current location, family separation due to spouse responsibilities, and problems associated with moving due to permanent changes in station.

II. **Family Military Experience.** This section asks about the spouse's military history and measures the spouse's support of the member's military service.

III. **Operations Desert Shield/Desert Storm.** Questions in this section focus on the effect of Operations Desert Shield/Desert Storm on the spouse and family. The section asks what experiences the spouse had with support programs, supportiveness of family, friends, and the military, and what problems resulted from the member's participation in Operations Desert Shield/Desert Storm.

IV. **Family Programs and Services.** This section asks questions about specific family programs and services, including the spouse's experiences upon arriving at the member's current assignment, use and importance of specific programs, and use of day care services, if applicable.

V. **Background.** This section asks basic demographic questions, such as gender, age, race/ethnic background, and education.

VI. **Dependents.** This section asks further demographic questions, focusing on children and other dependents.

VII. **Work Experience.** Questions in this section focus on the spouse's work status, the interaction between the spouse's job and the member's military responsibilities, and volunteer work performed by the spouse.

VIII. **Military Way of Life.** The final section asks about the respondent's attitudes toward and satisfaction with the military, and demands placed on the respondent by his or her spouse's military job.

A.4 Survey Administration

Members. The total sample of 96,827 members was first aggregated by unit.[1] Any unit with more than one member selected for the *1992 DoD Active Component Surveys* was sent a pre-notification letter, advising the unit commander of the survey, and requesting that a point-of-contact (POC) be appointed to receive and distribute the surveys. Initial survey mailing occurred in May 1992. Where only one member from a unit was selected to participate in the survey, the member was sent the survey package directly. This resulted in survey packages being sent to 10,973 units and 6,567 individuals, for a total of 17,540 duty locations.

Nonresponding units were sent three follow-up letters in June 1992. The first letter notified the POC of the nonresponding unit that DMDC had not received the survey checklist. The second letter told the POC that the roster of survey participants had not been received, and the third letter was a notification that the surveys had not been returned to DMDC. A second wave of questionnaires was mailed out directly to nonrespondents at their unit address, without going through the POC, in August 1992. Data collection was closed October 16, 1992.

Spouses. Matching the sampled member with DEERS data resulted in a sample of 64,652 spouses.[2] Selected spouses were then mailed a survey package to their homes in April 1992. The member's unit was also sent a roster of sampled members. The unit point-of-contact (POC) indicated each member's marital status. If the POC indicated that the member was not married, the spouse was removed from the sample. If the POC indicated that the member was married, nonresponding spouses were sent a follow-up questionnaire to the member's home address.

A.5 Response Rates

Members. The initial sample selected for the *1992 DoD Active Component Surveys* consisted of 40,812 officers and 56,015 enlisted personnel, for a total of 96,827 members. According to information provided on the rosters by POCs, a total of 6,440 individuals (2,160 officers and 4,280 enlisted) who had been selected for the sample had separated from the military by the time the survey was administered. This reduced the number of eligible members to 90,387 members (38,652 officers and 51,739 enlisted).

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[1] Three members were lost from the sample between sampling and survey administration.

[2] Nine spouses were lost from the sample between sampling and survey administration.

When data collection closed in October 1992, a total of 59,930 completed surveys (27,684 officers and 32,246 enlisted) had been received. Response rates were calculated based on the number of completed returns and the number of eligible members. This resulted in adjusted response rates of 71.6 percent for officers, 62.3 percent for enlisted personnel, and 66.3 percent overall. Response rates by sex were 66.6 percent for males and 65.9 percent for females. Response rates for the Services, in descending order, were: Air Force (72.2%); Navy (71.0%); Army (62.9%); and Marine Corps (62.4%). These response rates, while generally lower than those obtained in the *1985 DoD Active Component Surveys*, do attest to the generally high level of participation achieved and, therefore, the quality of the data collected.

Spouses. The initial sample selected for the *1992 Survey of Military Spouses* consisted of 64,652 spouses. A total of 4,703 individuals were spouses of members who had been selected for the sample but had separated from the military by the time the survey was administered. This reduced the number of eligible spouses to 59,949 individuals.

When data collection closed in October 1992 a total of 24,165 completed surveys by spouses had been received. Response rates were calculated based on the number of completed returns and the number of eligible spouses. This resulted in a 40.3 percent response rate, with response rates of 51.1 percent for spouses of officers, and 31.6 percent for spouses of enlisted personnel. Response rates by sex were 51.0 percent for female spouses and 21.3 percent for male spouses. Response rates for the Services, in descending order, were: Navy (43.9%); Air Force (42.6%); Marine Corps (40.5%); and Army (34.9%).

APPENDIX B

DATA PREPARATION AND VARIABLE CREATION

APPENDIX B

DATA PREPARATION AND VARIABLE CREATION

This appendix describes details concerning the data preparation and composite creation work. The specifications for conducting factor analyses, reliability analysis, and item assessment are provided. Refer to Appendix C for the actual operation definitions and the scale construction process for the analytic variables.

B.1 Rationale

The data preparation process served three important purposes in this analysis. First, it indirectly helped maintain the integrity of statistical testing by eliminating some items and using items that measure the same construct to form composite variables. As previously noted in the report, the type I error rate (finding a statistically significant relationship when none exists) increases with each additional variable used for analytic comparisons. Thus, from a measurement perspective, this process helped to control error rates.

Second, composite creation enhanced the psychometric properties of variables. Single-item scales were often deficient in representing a complex construct. Further, composite variables could be assessed for internal consistency reliability, whereas a single item could not. Thus, composite creation helped ensure that variables had sound psychometric properties.

Third, data preparation reduced the number of variables to a manageable number. This reduction was even more significant because the longitudinal dataset contained variables from two survey administrations. If each item had been considered to represent a single variable, there would have been far too many variables to utilize and evaluate. To avoid this problem, items were dropped if they lacked theoretical interest, as judged by the principal researchers.

B.2 Composite Creation

As noted, one mode of reducing the number of variables was to combine items into composite variables where appropriate. Composites refer to variables formed by combining the responses to two or more separate survey items.

The composite creation process used the following guidelines. Those items addressing the same survey topic (e.g., military way of life) provided the starting point for composite formulation. If numerous items were involved, these items were factor analyzed. This occurred, however, only if the group of items were thought to measure two or more distinct subtopics (also called dimensions, constructs, or latent variables). Those groups of items judged to be measuring the same domain were not factor analyzed.

Factor analysis helped confirm or deny the original judgment that a group of items assessed multiple dimensions despite falling under the same global survey topic. If a cluster of items measured multiple topics, the items were assessed for internal consistency reliability (see B.2.3). The same process was followed with those items that measured only a single topic. The following section describes the specifications for conducting the factor analyses.

B.2.1 Factor Analysis

As noted, large clusters of items were factor analyzed. The goal of the factor analysis was to determine the underlying dimensionality behind the cluster of items.

The factor analyses consisted of four steps. These overlapping steps included: (1) selecting an analytic model; (2) selecting a factor extraction method; (3) extracting the ideal number of factors; and (4) rotating the factor solution to an interpretable position.

1. Model Selection: A common-factors model approach was utilized, as opposed to a principal components model. This approach assumed that responses on the items were a function of the common factors (i.e., constructs) and an item-specific variance component. Unlike principal components, common-factor models assume that common factors alone did not cause all of the item variances. Hence, the item communalities (the amount of item variance due to the constructs) were less than unity and had to be estimated. The squared multiple correlations of each item provided the initial estimates and were regarded as a lower-bound estimate of the true communalities (Gorsuch, 1983).

2. Factor Extraction: The second step involved determining the factor extraction procedure. The maximum-likelihood (ML) factor extraction procedure was used. ML produced an initial factor structure based on initial model specifications, which included the number of factors to extract and type of factor model. Then, ML proceeded iteratively, adjusting this initial model until the difference between the observed data and predicted data (i.e., the data as reflecting the model specifications) converged on some preset criteria. One major advantage of the ML procedure was that it provided quantitative guidelines to help evaluate the quality of the final solution.

3. Determining Number of Factors to Rotate: The "eigenvalue greater than 1" rule was used to initially extract factors. As the name implies, the number of retained factors equaled the number of items with eigenvalues greater than 1. However, this procedure has been criticized for leading to over-factoring (Gorsuch, 1983). Therefore, scree plots were also utilized to help determine the appropriate number of factors to retain. These plots displayed a natural break around the appropriate number of factors to retain.

4. Rotation of Factor Solution: The Harris-Kaiser (HK) ortho-oblique method was used to rotate the initial factor structure to an interpretable final solution. The HK rotation method took an orthogonal solution and rotated the factors to an oblique solution. In this sense, the virtues of orthogonal and oblique solutions were combined. Orthogonal solutions maximized the variance accounted for by extracting uncorrelated factors. Conversely, oblique solutions allowed factors to correlate and most often provided a more realistic set of assumptions. The Harris-Kaiser approach allowed for the variance explained to be maximized, while also encompassing the realistic assumption that factors were correlated.

The final factor solutions and loadings are presented in Tables B.1 through B.4. These tables correspond to factor analyses conducted on items covering the following survey topics: satisfaction with military life; PCS move problems; feelings about location; and problems with location. Column 1 of each table contains the resulting factors; column 2 contains the corresponding items. As shown, each topic broke down into two subtopics. For each factor, only those items retained for the actual scale are included in the tables. Those items that did not significantly load (roughly above .4) or "switched" factors across years were dropped from consideration. Finally, Columns 3 and 4 depict the factor loadings for the retained items for both 1985 and 1992.

B.2.2 Reliability Assessment

In conjunction with factor analytic work, measurement reliability was assessed. Reliability analyses occurred with the factors produced by the factor analysis and those groupings of items deemed too small to be subjected to factor analysis, but thought to represent a single construct (e.g., sources of stress). Cronbach's coefficient alpha was used to assess internal consistency reliability. Generally, the alpha value of .70 served as the criteria for regarding a scale as reliable. In some instances, scale with alphas below this level were kept. This usually occurred when the same scale possessed a satisfactory coefficient alpha in one year and less than optimal estimate in the other year.

Achieving adequate reliability was important. Scales with low reliability were limited in their relationships with other variables. These limited relationships most probably reflect the underlying nature of the variable relationships or the poor measurement properties of the variables. Composite variables with substantially low reliabilities were not utilized in this investigation.

B.3 Item Assessment

Each item was independently evaluated. Items that lacked face validity (i.e., no theoretical relationship with the outcomes of question) were not included in the analyses. Items without variability across response categories were similarly excluded from consideration. In general, items with 90 percent or greater of the responses falling in a single response code were classified

as lacking response variability. However, this criterion was flexible and depended on other factors, such as face validity, and whether or not the item was considered for a composite.

B.4 Conclusion

The result of the data reduction and composite variable formulation process was a smaller number of variables all judged to have good psychometric properties (i.e., response variability and reliability) and to be theoretically related to the outcomes under focus. The operational definitions of these variables are provided in Appendix C.

Table B.1

Factor structure and item loadings: satisfaction with military life

Factor	Items	Loadings[a]	
		1985	1992
Personal			
	Satisfaction with job	64	60
	Coworkers	63	70
	Work conditions	55	49
	Friendships	46	62
	Serve country	45	40
	Personal freedom	41	47
Institutional			
	Moves	58	47
	Pay	53	63
	Assignment stability	52	41
	Family environment	45	41
	Retirement benefits	39	62

Note: [a]Decimal points were omitted.

Table B.2

Factor structure and item loadings: PCS move problems

Factor	Items	Loadings[a]	
		1985	1992
Costs			
	Temporary lodging expenses	67	66
	Cost of new residence	63	71
	Move/transportation costs	58	52
	High cost of living	55	60
	Finding permanent housing	48	52
Adjustment			
	Spouse adjustment	61	59
	Child adjustment	55	45
	Self adjustment	54	38
	Spouse and dependent education	53	57
	Spouse and dependent employment	49	48

Note: [a]Decimal points were omitted.

Table B.3

Factor structure and item loadings: location concerns

Factor	Items	Loadings[a]	
		1985	1992
Medical Care			
	Quality for spouse and dependents	84	83
	Quality for member	84	82
	Availability for dependents	81	81
	Availability for member	79	71
Employment/Housing			
	Civilian employment for spouse and dependen	74	68
	Federal employment for spouse and dependent	67	60
	Availability of civilian housing	49	51

Note: [a]Decimal points were omitted.

Table B.4

Factor structure and item loadings: location problems

Factor	Items	Loadings[a]	
		1985	1992
	Spouse abuse	86	88
	Other family violence	79	78
	Child abuse	76	81
Crime			
	Drug use	68	74
	Crime	67	74
	Juvenile delinquency	57	50
	Alcohol abuse	51	52
	Rape	49	48
	Racial tension	37	44

Note: [a]Decimal points were omitted.

APPENDIX C

OPERATIONAL DEFINITIONS FOR ANALYSIS VARIABLES

APPENDIX C

OPERATIONAL DEFINITIONS FOR ANALYSIS VARIABLES[1]

This appendix describes the major predictor variables utilized in the longitudinal analysis. Operational definitions and response ranges for each variable are provided. The variables are classified according to the variable set (i.e., demographic, attitudinal, or environmental) to which they belong as described in Chapter 4 of the text.

C.1 Demographics

Demographic variables provided background information describing each military member.

Service. This variable classified members by their active-duty service in the Army, Navy, Air Force, or Marine Corps. For analysis purposes, the service variable was dummy-coded with Army members serving as the reference group.

Pay Grade. The pay grade variable classified members by rank and whether they were officers (O), warrant officers (W), or enlisted members (E). Classifications included O1 through O7 or above, W1 through W5, and E1 through E9. During the analysis, the pay grades were collapsed into four ordinal categories: E1-E4; E5-E9; W1-W5/O1-O3; and O4 and above.

Race/Ethnicity. Race/ethnicity was measured using a four-level classification: white, black, Hispanic, and other. This variable was dummy-coded during analyses. Whites served as the reference group.

Marital Status. Marital status was measured by a variable with the following classifications: married (first time), remarried, widowed, divorced, separated, and single (never married). This variable was recoded to a married-not married dichotomy and subsequently dummy-coded for analysis purposes.

Gender. This variable categorized females and males, and was dummy-coded during analyses. Males served as the reference group.

Occupation. This variable was recoded to include the following occupation groupings: (1) military operations; (2) executive, managerial, professional, and technical jobs; (3) administrative support and service; (4) production and operations; and (5) others (see Lockman, 1992, for more on these military

[1] Operational definitions for the outcome variables are provided in Section 4.

occupation groupings). This variable was dummy-coded, and the "others" classification served as the reference group.

Dependents. This variable included a count of each member's dependents. This variable ranged from 0 to 10 or more.

Although the preceding list included all demographic variables in the demographic sets for this analysis, it is not a definitive list of demographic variables. Other possibilities available from either the survey responses or the personnel records of members were excluded from consideration. These other variables included household composition, status, education, age, and years in service.

C.2 Environmental Variables

Variables that assessed responses concerning the member's work, home, and surrounding location were defined as environmental variables. Specifically, these variables dealt with particular aspects of the member's environment, such as the availability of medical services, PCS move costs, importance of shopping and recreation facilities, and whether the member served in the continental U.S. or abroad.

Assignment Location. This variable measured the assignment location of military members. While the code contained the exact location, the variable was recoded to distinguish those serving in the continental United States from those abroad. The recoded location variable was dummy-coded for analytic purposes. Those serving in the continental U.S. served as the reference group.

Adjustment to Location. This additive scale measured the presence of non-monetary problems of adjusting to PCS moves, such as finding employment, ensuring educational opportunities, or general family adjustment to a new location. Responses ranged from 0 to 9, corresponding to the absence of adjustment problems to severe adjustment difficulties.

Costs in Moving. The additive scale measured the presence of monetary problems associated with PCS moves. Responses ranged from 0 to 5, corresponding to the absence of monetary problems to extensive problems with moving costs.

Quality of Medical Care. This additive scale measured feelings about one's location regarding the availability and quality of medical care for both member and family. Responses ranged from 0 to 4, corresponding to the absence of negative feelings to extreme negative regard for the medical care provided.

Feelings about Environment. This additive scale measured feelings about one's location regarding many environmental factors such as climate, cost of living, housing availability and quality, and employment opportunities. Given the breadth of this factor, it functioned as an indicator of dislike for a particular location. Responses ranged from 0 to 6, corresponding to no dislike to extreme dislike for one's current environment.

Domestic Violence. This additive scale measured perceptions of problems with domestic violence in one's location. Responses ranged from 0 to 3, corresponding to no expressed problem to many perceived problems with domestic violence.

Crime. This additive scale measured problems with one's location in terms of area crime. Responses ranged from 0 to 6, indicating no expressed problems to many expressed problems with crime.

Number of Times Moved. This variable was an index of the number of times members had moved in their military career. Responses were expressed in intervals of 1 to 10, for 0 moves to 10 or more moves.

Obstacles to Responding. This additive scale assessed the extent to which members reported obstacles to responding to a change in work schedule, base recall, or unit deployment. This variable did not differentiate the type of problem(s) encountered. It was composed of recoded responses to items that indicated a problem or no problem with each situation noted. Responses ranged from 3 to 6, corresponding to no expressed problem to problems in responding for all situations noted above.

Civilian Job Offers. This variable represented whether or not military members received any recent job offers in the civilian sector. This variable was coded as 1 for yes and 2 for no.

Civilian Job Search. This variable represented whether or not military members had actively looked for civilian employment recently. This variable was coded as 1 for yes and 2 for no.

Length of Deployment During ODS/S. This variable measured the member's length of tour (in months) during Operations Desert Storm/Shield. Recoded response ranged from 1 to 3 and corresponded to not deployed, deployed fewer than 6 months, or deployed more than 6 months.

Recreation Facilities. This additive scale measured the importance members attached to the recreation and leisure facilities available to Service members and their families. It included references to recreational outlets such as bowling centers and golf courses. Responses ranged from 0 to 4, indicating the absence of perceived importance to very important.

Shopping Opportunities. This additive scale measured the importance members attached to shopping and convenience stores (e.g., commissary and main exchange) available to Service members and their families. Responses ranged from 0 to 4, indicating the absence of perceived importance to very important.

Hobby and Craft Shops. This additive scale measured the importance members attached to the hobby support and rental agencies available to Service members and their families. It included references to places such as the auto body shop, arts and crafts center, and photo hobby shop. Responses ranged from 0 to 7, indicating the absence of perceived importance to very important.

Uncertainty about Future. This additive scale measured acknowledged uncertainty regarding one's military career in terms of various aspects such as experience, congressional action, and senior leadership. Responses ranged from 0 to 7, indicating no acknowledged uncertainty to high levels of uncertainty.

Sources of Stress. This summated scale assessed the extent to which members felt stress from aspects of a military career such as moving, job situation, and personal safety. Higher responses on this scale indicated greater stress levels across these conditions.

C.3 Attitudinal Variables

Included under attitudinal variables were variables that assessed military members' perceptions and feelings about various aspects not directly linked to environmental and/or location concerns. These variables pertained to factors related to the military career and way of life. Examples in this category included spousal career support, force reduction concerns, perceived unit morale, military life expectations, and expected total years of service.

Expected Years of Total Service. This variable measured the total number of years each member expected to have completed when they eventually leave or retire from the military. Responses ranged from 0 to 40 years of expected Service.

Expected Ultimate Pay Grade. This variable measured the final pay grade each member expected to have achieved when they eventually leave or retire from the military. The structure of this variable paralleled that for pay grade (described previously under demographics). However, this variable was not recoded during analyses.

Spousal Career Agreement. This summated scale assessed the degree to which married members felt that each spouse supported the career of the other spouse. Higher response categories on this variable indicated greater degrees of spousal career support.

Spouse Influence on Stay in Military. This variable measured the extent to which a spouse influenced the member's decision to stay or leave the military. Valid responses ranged from 1 to 4 and corresponded to not married; married with no influence; married with a little influence; or married with a great deal of influence.

Health Benefits Versus Civilian. This variable measured how members regarded the quality of military health benefits in comparison to the health benefits provided by civilian employers. Responses included worst than most, about the same, and better than most of the benefits provided in the civilian sector, corresponding to a 1 to 3 response range.

Expect Involuntary Separation. This variable measured whether members expected to be involuntarily separated from the military due to the drawdown. Responses included no, don't know, and yes.

Ease of Finding Civilian Job. This variable measured the perceived chance of finding a civilian job if the member were to leave the service. Higher response categories indicated more certainty of finding a civilian job.

Sufficiency of Current Income. This scale measured how members felt about their total family income. Higher scores on this variable indicated that members were more satisfied with their family income.

Unit Morale. This scale measured the member's perception of unit morale at their current location. Responses to this variable were recoded to indicate low, medium, and high levels of perceived morale.

Unit Readiness. This scale assessed the perceived overall unit readiness in terms of the member's confidence in their unit and the unit's military readiness. High scores on this variable indicated greater perceived unit readiness.

Worries About Family. This additive scale assessed members' concerns about their families on several factors such as community safety, health care, and housing. Responses on this variable ranged from 0 to 5, indicating the absence of worries to extremely worried.

Management of Child-care Arrangements. This scale assessed whether members felt child-care arrangements could be managed in the event of

deployment or emergency evacuation. High scores on this variable indicated that members felt that child-care arrangements were more workable.

Concerns with Force Reductions. This scale measured the extent to which members were concerned about force reductions and how such reductions affect their financial and employment outlook. High scores on this scale indicated less concern with the implications of force reductions.

Expectations of Military Life. This scale assessed the extent to which members agreed or disagreed that their expectations of military life had been met or exceeded. High responses indicated that military life expectations were being met.

Better in Civilian Job. This scale assessed the extent to which members felt they and their families would benefit from working in the civilian job sector. High scores on this scale indicated the member did not think civilian employment would improve his/her family situation.

Importance of Family Support Centers. This scale assessed the perceived importance of family support centers for use by military families. Scores on this scale ranged from no experience (1) with this service to very important (6).

Importance of Religious Services. This scale assessed the perceived importance of religious services for use by military families. Scores on this scale ranged from no experience (1) with this service to very important (6).

Importance of Legal Services. This scale assessed the perceived importance of legal services for use by military families. Scores on this scale ranged from no experience (1) with this service to very important (6).

Pay Grade Differences. This index indicated the discrepancy between current and expected military pay grade. Those with greater discrepancies were further from their pay grade goals.

ODS/S Response Problems. This index assessed whether members had problems responding to Operations Desert Shield/Storm. Responses ranged from 1 to 3 and corresponded to not deployed, no problems, and problems. This variable did not differentiate the types of problems encountered.

C.4 Additional Variable Information

Table C.1 provides reliability information on the variables used in this analysis. As shown, the majority of the variables had above-standard internal consistency reliabilities (if applicable). Table C.1 also lists the variable type as either a scale or an index.

Table C.1
Background information on analytic variables

Variable Description	Variable Type	Coefficient α (if applicable)
Outcomes		
Personal satisfaction (1985)	scale	0.66
Personal satisfaction (1992)	scale	0.78
Institutional satisfaction (1985)	scale	0.69
Institutional satisfaction (1982)	scale	0.73
Overall satisfaction (1985)	scale	-----
Overall satisfaction (1992)	scale	-----
Family readiness (1985)	index	n/a
Family readiness (1992)	index	n/a
Enlisted career intentions (1985)	scale	n/a
Enlisted career intentions (1992)	scale	n/a
Officer career intention	scale	-----
Demographics		
Service	index	n/a
Pay grade (1985 and 1992)	scale	-----
Status (1985 and 1992)	index	n/a
Race (1985 and 1992)	index	n/a
Marital status (1985 and 1992)	index	n/a
Gender (1985 and 1992)	index	n/a
Occupation (1985 and 1992)	index	n/a
Dependents (1985)	index	-----
Environmental		
Assignment location (1985 and 1992)	index	n/a
Problems adjusting to location (1985)	scale	0.80
Problems adjusting to location (1992)	scale	0.81
Costs in moving (1985)	scale	0.79
Costs in moving (1992)	scale	0.79
Feelings about medical care (1985)	scale	0.90
Feelings about medical care (1992)	scale	0.89
Environmental/location concerns (1985)	scale	0.67
Environmental/location concerns (1992)	scale	0.72
Domestic violence (1985)	scale	0.94
Domestic violence (1992)	scale	0.96
Crime in location (1985)	scale	0.88
Crime in location (1992)	scale	0.91
Number of times moved (1985 and 1992)	index	n/a

Table C.1
Background information on analytic variables, continued

Variable Description	Variable Type	Coefficient α (if applicable)
Environmental (continued)		
Obstacles to responding (1985)	scale	0.78
Civilian job offers (1985 and 1992)	index	n/a
Civilian job search (1985 and 1992)	index	n/a
Length of deployment during ODS/S (1992)	index	-----
Recreation facilities (1992)	scale	0.76
Shopping opportunities (1992)	scale	0.75
Hobby and craft shops (1992)	scale	0.90
Uncertainty (1992)	scale	0.50
Sources of stress (1992)	scale	0.73
Attitudinal		
Expected years of total service (1992)	scale	n/a
Expected ultimate pay grade (1992)	scale	n/a
Spousal career agreement (1985)	scale	0.83
Spousal career agreement (1992)	scale	0.88
Spouse influence on stay in military (1992)	scale	-----
Health benefits versus civilian (1992)	scale	n/a
Expect involuntary separation (1992)	scale	n/a
Ease of finding civilian job (1985 and 1992)	scale	n/a
Family income (1985)	scale	n/a
Unit morale (1985 and 1992)	scale	-----
Unit readiness (1992)	scale	0.81
Worries about family (1992)	scale	0.86
Dependent arrangement (1985)	scale	0.79
Dependent arrangement (1992)	scale	0.86
Concerns with force reductions (1992)	scale	0.87
Expectations of military life (1985 and 1992)	scale	-----
Better off in civilian job (1985 and 1992)	scale	-----
Importance of family support centers (1985 and 1992)	scale	-----
Importance of religious services (1985 and 1992)	scale	-----
Importance of legal services (1985 and 1992)	scale	-----
Difference in actual and expected pay grade (1985)	scale	n/a
ODS/S response problems (1992)	scale	n/a

Note: n/a is not applicable; ----- is based on single item.

APPENDIX D

ISSUES WITH SURVEY COMPARABILITY

APPENDIX D

ISSUES WITH SURVEY COMPARABILITY

Survey comparability is necessary when an objective of the investigation is to assess changes in variables over time. To the extent that survey differences occur, changes across any one variable can be attributed to artificial differences introduced by the measurement instrument. As a general rule, survey incomparability should be minimized in longitudinal studies. This, however, was not always the case between the 1985 and 1992 DoD Active Component Surveys.

Item Comparisons. While the same nine global topics were covered in the same order in both the 1985 and 1992 surveys, the number of items per topic differed. Table D.1 shows the number of questions by topics, with major differences indicated in boldface. As shown, the major differences in 1992 were fewer items on military information and career intentions, but more items on the following topics: military pay, benefits, and programs; dependents; and attitudes about military life. There were over 25 percent more items in the 1992 survey.

Question Comparisons. A comparison of questionnaire items in the 1985 and 1992 surveys (Synectics, 1994) identified three classes of questions: (1) those unique to each survey, (2) those identical to both surveys, and (3) those of similar content but different construction. Unique questions preclude comparisons across years, whereas identical items allow for these comparisons. In both cases, the applicability of the questions is a straightforward determination in longitudinal analyses that assess change. The use of questions similar in content but different in construction, however, is problematic and clearly illustrates the issue of survey incomparability. For these surveys, this class of questions includes six variations as described below:

1. Questions and responses different

Example: 1985 - Highest grade or college year
1992 - Highest grade or academic degree

2. Questions alike, but subquestions slightly different

Example: 1985/1992 - Feelings about where you live now
Subquestions:
1985 - Quality of schools available to you and/or your spouse
1992 - Quality of schools available to you and/or your spouse
1992 - Quality of schools available for your children

3. Questions slightly different, but response sets the same

Example: 1985 - Is the housing you live in now...
1992 - At your permanent post, base, ship or duty station, what type of housing do you live in?

4. Questions and responses slightly different

Example: 1985 - Have you ever been divorced since coming on active duty?
No (Go to Q...),
1 time, 2 times, 3 or more times

1992 - How many times have you been divorced while on active duty?
One, two, three, four, five or more

5. One question in 1985 became two questions in 1992

Example: During 1984-1991, did you or your spouse receive any income from the following sources?

1985 - 12 responses
1992 - 5 responses related to unearned income
1992 - 7 responses related to other outside income

6. Same questions and responses but different codes

Example: 1985-1992 - If your spouse is in the military, are you presently assigned to the same base or geographic location as your spouse?

1985	1992	Response
-5	1	Does not apply, I do not have a spouse
-6	2	Does not apply, my spouse is not in ...
1	3	Yes
2	4	No, but I expect my spouse to be ...
3	5	No, but I expect to be assigned to ...
4	6	No, we were unable to get assigned ...
5	7	No, for other reasons

During the present analysis, every attempt was made to utilize variables with reasonably similar, but not identical, properties across survey administrations. Each of the above situations were encountered. Most often, some recoding of response options was required. Slight word changes in question stems across similar items from different surveys were carefully scrutinized as well.

As a final note, lack of standardization across surveys often arises for various legitimate reasons, such as changes in the sample itself over time, the effect of events and policy changes, new information and hypotheses, and new item and survey technologies.

Table D.1

Number of questions by topic in 1985 and 1992 DoD survey questionnaires

Topics	1985		1992	
	Officer	Enlisted	Officer	Enlisted
Military Information	12	11	6	6
Location	14	14	16	16
Career Intention	18	18	9	10
Individual and family characteristics	32	30	26	26
Dependents	11	11	25	25
Military Pay, Benefits, and Programs	12	11	22	22
Civilian labor force experience	10	10	12	12
Family resources	7	7	9	9
Military Life	5	5	13	13
Total items (495)	121	117	138	139

Note: Boldface type indicates major differences.

APPENDIX E

SIMULTANEOUS REGRESSION RESULTS USING WESREG

APPENDIX E

SIMULTANEOUS REGRESSION RESULTS USING WESREG

This appendix contains the results from the simultaneous regressions using WESREG. As noted previously, WESREG accounts for complex sampling schemes in computing standard error estimates. (Because the substantive interpretations did not vary between SAS and WESREG results, the more familiar SAS results were reported in the body of the report.) Also, note that the WESREG program does not compute Beta weights. The values reported in the following tables are the unstandardized regression coefficients.

Table E.1

1985 demographic predictors of outcomes

	1992 Outcomes					
1985 Demographics	PS	IS	OS	FR	CI_e	CI_o
Navy				-0.31	0.32	
Marine Corps	1.15	0.51	0.41	-0.20	0.23	
Air Force		0.41		-0.29	0.15	-0.15
Pay grade	0.69	0.64	0.23	0.06	-0.45	0.15
Black		0.42				
Hispanic		0.90				
Other						
Married				0.20		
Males		-0.40				
Dependents					-0.13	
Exec/prof/tech job						
Military						
Admin. spt. & svcs. job						
Production & operation jobs						
R^2	0.04	0.03	0.02	0.07	0.07	0.05

Note: Tabled values are regression coefficients for significant ($p<.05$) variables.

PS=personal satisfaction; IS=institutional satisfaction; OS=overall satisfaction; FR=family readiness; CI_e=career intentions (enlisted); CI_o=career intentions (officer); Exec/prof/tech job=executive, professional, technical; Admin. spt. & svcs.=administrative support and services.

Table E.2

1985 environmental predictors of outcomes

	1992 Outcomes					
1985 Environmental	PS	IS	OS	FR	CI_e	CI_o
CONUS						
Problems adjusting to location	-0.20	-0.15				
PCS move costs	0.11			0.03		
Feelings about medical care	-0.20	-0.22				
Feelings about environment		-0.27	-0.10			
Domestic violence						
Crime						
Number of times moved	0.15		0.04		-0.17	0.02
Deployment	-0.29	-0.19	-0.10	-0.04		
Civilian job offers		0.52		-0.08		
Looked for civilian job		0.42	0.23			
R^2	0.04	0.07	0.04	0.02	0.10	0.02

Note: Tabled values are regression coefficients for significant ($p<.05$) variables.

PS=personal satisfaction; IS=institutional satisfaction; OS=overall satisfaction; FR=family readiness; CI_e=career intentions (enlisted); CI_o=career intentions (officer).

Table E.3

1985 attitudinal predictors of outcomes

	1992 Outcomes					
1985 Attitudinal	PS	IS	OS	FR	CI_e	CI_o
Unit morale	1.07	0.50	0.38			
Family income		0.72	0.18			
Expectations of military life	0.47	0.34	0.23			
Better off in civilian job		-0.26				
Spousal career agreement				0.04		0.04
Dependent arrangements	0.15					
Good civilian job	0.07			0.01		
Family support centers (importance)						
Religious services (importance)						
Legal services (importance)						
R^2	0.12	0.15	0.11	0.03		0.03

Note: Tabled values are regression coefficients for significant ($p<.05$) variables.

PS=personal satisfaction; IS=institutional satisfaction; OS=overall satisfaction; FR=family readiness; CI_e=career intentions (enlisted); CI_o=career intentions (officer).

Table E.4

1992 demographic predictors of outcomes

	1992 Outcomes					
1992 Demographics	PS	IS	OS	FR	CI_e	CI_o
Navy				-0.33	0.32	
Marine Corps	1.19	0.56	0.42	-0.21	0.25	
Air Force		0.40		-0.32	0.24	-0.17
Pay grade	0.85	0.75	0.30	0.08	0.79	
Black		0.49		-0.10		
Hispanic		0.94				
Other						
Married	0.51			0.40		
Males		-0.49	-0.15			
R^2	0.04	0.03	0.03	0.09	0.02	0.02

Note: Tabled values are regression coefficients for significant ($p<.05$) variables.

PS=personal satisfaction; IS=institutional satisfaction; OS=overall satisfaction; FR=family readiness; CI_e=career intentions (enlisted); CI_o=career intentions (officer).

Table E.5

1992 environmental predictors of outcomes

	1992 Outcomes					
1992 Environmental	PS	IS	OS	FR	CI_e	CI_o
CONUS	0.58		0.18	-0.09		
ODS/S length deployment		-0.21		0.10		
Number of times moved	0.11		0.03	0.02	-0.10	
Problems adjusting to location	-0.13	-0.20		0.03		
PCS move costs		-0.21				
Feelings about medical care	-0.31	-0.35	-0.15		-0.06	
Feeling about environment	-0.29	-0.36	-0.15			
Domestic violence				0.06		
Crime		-0.10				
Hobby and craft shops						
Shopping opportunities	0.34	0.19	0.16			
Recreation facilities	0.25	0.16				
Uncertainty about career	-0.43	-0.50	-0.17		0.14	-0.04
Sources of stress	-0.13	-0.11	-0.04	0.01		
Civilian job offers		0.38		-0.15		
Looked for civilian job	0.90	0.70	0.62		0.48	-0.28
R^2	0.18	0.28	0.19	0.05	0.11	0.08

Note: Tabled values are regression coefficients for significant ($p<.05$) variables.

PS=personal satisfaction; IS=institutional satisfaction; OS=overall satisfaction; FR=family readiness; CI_e=career intentions (enlisted); CI_o=career intentions (officer).

Table E.6

1992 attitudinal predictors of outcomes

	1992 Outcomes					
1992 Attitudinal	PS	IS	OS	FR	CI_e	CI_o
Expected years of service	0.07		0.03		0.08	
Expected ultimate pay grade		0.06		0.01	-0.27	
Spousal career agreement	0.24	0.17	0.06			
Spouse influence						
Health benefits vs. civilian		0.68	0.16		0.17	
Involuntary separation						
Finding good civilian job	0.10					
Unit morale	0.96	0.52	0.38			
Unit readiness	0.68		0.15		0.08	
Worries about family		-0.29	-0.06			0.06
Dependent arrangements				0.05		
Force reductions	-0.95	0.06			-0.04	
Expectations of military life	0.48	-0.75	-0.40			
Better off in civilian job		0.80	0.36			-0.09
Family support center (importance)						
Religious services (importance)						
Legal services (importance)	-0.19					
Pay grade difference			0.06		0.43	-0.08
Response during ODS/S				0.16		
R^2	0.37	0.36	0.37	0.05	0.27	0.14

Note: Tabled values are regression coefficients for significant ($p<.05$) variables.

PS=personal satisfaction; IS=institutional satisfaction; OS=overall satisfaction; FR=family readiness; CI_e=career intentions (enlisted); CI_o=career intentions (officer).

1992 Department of Defense
Survey of Enlisted Personnel

The Department of Defense is conducting a survey of military personnel from the Army, Navy, Marine Corps and Air Force. You have been selected to participate in this important survey. Please read the instructions before you begin the survey.

PRIVACY NOTICE

AUTHORITY: 10 U.S.C. 136

PRINCIPAL PURPOSE OR PURPOSES: Information collected in this survey is used to sample attitudes and/or discern perceptions of social problems observed by service members and to support additional manpower research activities. This information will assist in the formulation of policies which may be needed to improve the working environment.

ROUTINE USES: None

DISCLOSURE: Voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that the data will be complete and representative. Your survey instrument will be treated as confidential. All identifiable information will be used only by persons engaged in, and for the purposes of, the survey. Only group statistics will be reported.

OFFICE USE ONLY
- ○ PND
- ○ NR
- ○ R
- ○ NE

INSTRUCTIONS FOR COMPLETING THE SURVEY

- **Please use a No. 2 pencil.**

- **Make heavy black marks that fill the circle for your answer.**
- **Please do not make stray marks of any kind.**

INCORRECT MARKS ○ ⊗ ✓ ○ **CORRECT MARK** ○ ○ ● ○

- **Sometimes you will be asked to "Mark ALL that apply." When this instruction appears you may mark more than one answer.**

Example:

If you attended (or are now attending) college, what kind of school was/is it? Mark ALL that apply.

- ○ Does not apply, do/did not attend college
- ○ Vocational, trade, business, or other career training school
- ● Junior or community college (two-year)
- ● Four-year college or university
- ○ Graduate or professional school
- ○ Specialized Service Career School
- ○ Professional Military Education Institution
- ○ Other

If your answer is "junior or community college (two-year)" and "four-year college or university," then mark two circles clearly.

- **Sometimes you will be asked to "Mark One." When this instruction appears mark the answer that best applies.**

Example:

What is your pay grade? Mark One.

○ E1	○ E5	○ E9
○ E2	● E6	
○ E3	○ E7	
○ E4	○ E8	

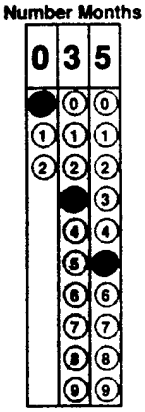
- **If your answer is E6, then just mark one circle as shown above.**

- **If you are asked to give numbers for your answer, please record as shown below.**

Example:

As of today, how many months have you been assigned to your present post, base, ship or duty station?

If your answer is 35 months . . .



- **Write the numbers in the boxes, making sure the last number is always placed in the right-hand box.**
- **Fill in the unused boxes with zeros.**
- **Then, mark the matching circle below each box.**

- **Answers to some of the questions will be on a SEVEN-POINT SCALE.**

Example:

How would you describe the morale of military personnel at your current location? Mark One.

MORALE IS VERY LOW — ① — ② — ③ — ④ — ⑤ — ⑥ — ⑦ — **MORALE IS VERY HIGH**

- **If your answer is "MORALE IS VERY LOW," you would mark the circle for number 1.**
- **If your answer is "MORALE IS VERY HIGH," you would mark the circle for number 7.**
- **If your opinion is somewhere inbetween, you would mark the circle for number 2 or 3 or 4 or 5 or 6.**

- **Sometimes you will be asked to mark one answer for each item.**

Example:

THE NEXT QUESTION IS ABOUT YOUR FEELINGS ABOUT THE PERMANENT LOCATION WHERE YOU LIVE. If you live on base, answer for that base. If you live off-base, answer for that community.

LOCATION CHARACTERISTICS

Mark each item as:	**Excellent**	**Good**	**Fair**	**Poor**	**Very Poor**	**Does Not Apply**	**Don't Know**
Climate	○	○	○	●	○	○	○
Distance to population centers	○	●	○	○	○	○	○
Family's ability to handle cost of living	○	○	●	○	○	○	○
Availability of military housing	○	○	○	○	●	○	○
Quality of military housing	○	○	○	○	○	○	●

USE NO. 2 PENCIL ONLY

I MILITARY INFORMATION

1. In what Service are you? Mark One.
- ○ Army
- ○ Navy
- ○ Marine Corps
- ○ Air Force

2. Are you currently assigned to a ship as your permanent duty station? Mark One.
- ○ Yes
- ○ No

3. What is your pay grade? Mark One.
- ○ E1
- ○ E2
- ○ E3
- ○ E4
- ○ E5
- ○ E6
- ○ E7
- ○ E8
- ○ E9

4. In which enlistment period are you serving? If you received an EXTENSION to your current enlistment period, do not count this as a new enlistment period. Mark One.
- ○ 1st
- ○ 2nd
- ○ 3rd
- ○ 4th
- ○ 5th or more

5. How soon will you complete your current enlistment INCLUDING ANY EXTENSIONS YOU HAVE NOW? Mark One.
- ○ Less than 3 months
- ○ 3 months but less than 6 months
- ○ 6 months but less than 9 months
- ○ 9 months but less than 12 months
- ○ 1 year but less than 2 years
- ○ 2 years but less than 3 years
- ○ At least 3 years or more

6. Were you deployed for Operation Desert Shield/Desert Storm? Mark One.
- ○ No
- ○ Yes, for less than 3 months
- ○ Yes, for 3 months or more but less than 6 months
- ○ Yes, for 6 months or more but less than 9 months
- ○ Yes, for 9 months or more

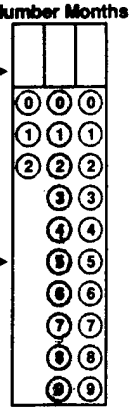
II PRESENT AND PAST LOCATIONS

7. As of today, how many months have you been assigned to your present permanent post, base, ship or duty station? Please include any extensions you may have had.

○ Less than one month

Number Months

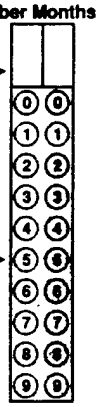
- **Record the number of months in the boxes.**
- **(For example, if your answer is 35 months, enter 035.)**
- **Mark the matching circle below each box.**



8. How much longer do you expect to be at your present permanent post, base, ship or duty station?
- ○ Does not apply, I do not have a specified tour length.
- ○ Less than one month
- ○ Not sure

Number Months

- **Record the number of months in the boxes.**
- **Mark the matching circle below *each* box.**

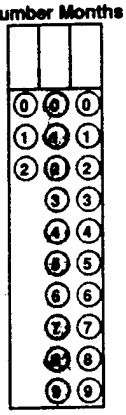


9. If you had the option of extending your tour at your present permanent post, base, ship or duty station, how much longer would you stay there? Mark One.
- ○ Does not apply, I do not have a specified tour length.
- ○ I would not extend my current tour
- ○ Stay 3 months beyond my tour
- ○ Stay 6 months beyond my tour
- ○ Stay 12 months beyond my tour
- ○ Stay 18 months beyond my tour
- ○ Stay 24 or more months beyond my tour

USE NO. 2 PENCIL ONLY

10. In all the time you have been on active duty, how many *months* have you spent *at an overseas location*? NAVY AND MARINE CORPS PERSONNEL: Please count total time assigned both ashore and to ships homeported at overseas locations, including extended TDYs and schools.

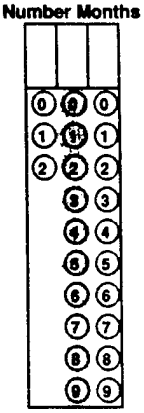
Number Months



○ No time at an overseas location

11. FOR NAVY AND MARINE CORPS PERSONNEL ONLY: In all the time you have been on active duty, how many *months* have you been on *sea duty*?

Number Months



○ No time on sea duty

12. THINK ABOUT YOUR PCS MOVE TO YOUR CURRENT *PERMANENT* POST, BASE, SHIP OR DUTY STATION. Answer even if this is your first assignment.

For each item below, mark if it was:	Serious Problem	Somewhat of a Problem	Slight Problem	Not a Problem	Does Not Apply	Don't Know
Adjusting to a higher cost of living	○	○	○	○	○	○
Temporary lodging expenses	○	○	○	○	○	○
Costs of setting up new residence, e.g., curtains, carpeting, paint	○	○	○	○	○	○
Costs of selling/moving from old residence	○	○	○	○	○	○
Transportation costs incurred during the move	○	○	○	○	○	○
Finding off-duty employment for yourself	○	○	○	○	○	○
Finding civilian employment for your spouse or dependents	○	○	○	○	○	○
Continuing your education	○	○	○	○	○	○
Continuing spouse/dependent education	○	○	○	○	○	○
Transferability of college credits	○	○	○	○	○	○
Finding permanent housing	○	○	○	○	○	○
Finding shopping areas, recreational facilities, etc.	○	○	○	○	○	○
Finding dependent dental care	○	○	○	○	○	○
Finding dependent medical care	○	○	○	○	○	○
Finding child care	○	○	○	○	○	○
Military treatment of dual-Service couples	○	○	○	○	○	○
Children adjusting to new environment	○	○	○	○	○	○
Spouse adjusting to new environment	○	○	○	○	○	○
Adjusting yourself to new environment	○	○	○	○	○	○

13. At your permanent post, base, ship or duty station, what type of housing do you live in?

- ○ Base/government housing (include BEQ, BOQ, MOQ, Transient Personnel Billeting, Barracks)
- ○ Leased by the military for Service families
- ○ Owned or being bought by you or someone in your household
- ○ Rented for cash
- ○ Owned by someone else and let without payment of cash rent
- ○ Live on-board a Navy ship
- ○ Navy lodge

14. If you are presently deployed/TDY, what kind of housing do you live in?

- ○ Does not apply, I am not deployed/TDY
- ○ Base/government housing (include BEQ, BOQ, MOQ, Transient Personnel Billeting, Barracks)
- ○ Leased by the military for Service families
- ○ Owned or being bought by you or someone in your household
- ○ Rented for cash
- ○ Owned by someone else and let without payment of cash rent
- ○ Live on-board a Navy ship
- ○ Navy lodge

USE NO. 2 PENCIL ONLY

15. THE NEXT QUESTION IS ABOUT YOUR FEELINGS ABOUT THE PERMANENT LOCATION WHERE YOU LIVE. If you live on base, answer for that base. If you live off-base, answer for that community.

Please mark each item below as:

LOCATION CHARACTERISTICS	Excellent	Good	Fair	Poor	Very Poor	Does Not Apply	Don't Know
Climate	○	○	○	○	○	○	○
Distance to population centers	○	○	○	○	○	○	○
Family's ability to handle cost of living	○	○	○	○	○	○	○
Availability of military housing	○	○	○	○	○	○	○
Quality of military housing	○	○	○	○	○	○	○
Availability of civilian housing	○	○	○	○	○	○	○
Quality of civilian housing	○	○	○	○	○	○	○
Affordability of civilian housing	○	○	○	○	○	○	○
Attitudes of local residents toward military members and families	○	○	○	○	○	○	○
Availability of Federal employment for spouse or dependents	○	○	○	○	○	○	○
Availability of other civilian employment for self, spouse or dependents	○	○	○	○	○	○	○
Quality of schools for dependents	○	○	○	○	○	○	○
Availability of medical care for you	○	○	○	○	○	○	○
Quality of medical care for you	○	○	○	○	○	○	○
Availability of medical care for spouse or dependents	○	○	○	○	○	○	○
Quality of medical care for spouse or dependents	○	○	○	○	○	○	○
Availability of a good house of worship	○	○	○	○	○	○	○

16. HOW MUCH OF A PROBLEM IS EACH OF THE FOLLOWING AT THE LOCATION WHERE YOU PERMANENTLY LIVE? If you live on-base, answer for the base. If you live off-base, answer for that community. If you live onboard ship, answer for your ship. If you live in an on-station operational location, answer for that location.

For each item below, mark if it is:	Serious Problem	Somewhat of a Problem	Slight Problem	Not a Problem	Don't Know
Drug use	○	○	○	○	○
Alcohol use	○	○	○	○	○
Crime	○	○	○	○	○
Racial tension	○	○	○	○	○
Child abuse	○	○	○	○	○
Spouse abuse	○	○	○	○	○
Other family violence	○	○	○	○	○
Juvenile delinquency	○	○	○	○	○
Rape	○	○	○	○	○
Gang activity	○	○	○	○	○
Pornography	○	○	○	○	○

17. In all the time you've been on active duty, how many times did *your spouse/dependents move* to a new location because of your permanent change of station (PCS)?

○ Does not apply, I don't have any spouse/dependents

○ 0
○ 1
○ 2
○ 3
○ 4
○ 5
○ 6
○ 7
○ 8
○ 9
○ 10 or more

18. In all the time you have been on active duty, how many times did *you move* to a new location because of your permanent change of station (PCS)? Do not count permanent change of assignment (PCA).

○ 0
○ 1
○ 2
○ 3
○ 4
○ 5
○ 6
○ 7
○ 8
○ 9
○ 10 or more

USE NO. 2 PENCIL ONLY

19. If your spouse is in the military, are you presently assigned to the same permanent base or geographic location as your spouse?

- ○ Does not apply, I do not have a spouse (GO TO Q21)
- ○ Does not apply, my spouse is not in the military (GO TO Q21)
- ○ Yes
- ○ No, but I expect my spouse will be assigned to this location soon
- ○ No, but I expect to be assigned to my spouse's location soon
- ○ No, we were unable to get assigned to the same location
- ○ No, for other reasons

20. If future assignments require long separations from your spouse, what will you do?

- ○ Does not apply, I already plan to leave the Service
- ○ Does not apply, my spouse already plans to leave the Service
- ○ I will accept them
- ○ I will leave the Service
- ○ My spouse will leave the Service

21. Listed below are some reasons why military members sometimes find it difficult to *respond very quickly* to a recall/alert or to a change in work schedule. Have you experienced any of these within the past 12 months? Mark ALL that apply.

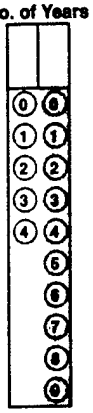
- ○ Does not apply, I have not had recall/alert or change in work schedule
- ○ Does not apply, have not had problems
- ○ Dependent care considerations
- ○ Personal health problems other than pregnancy
- ○ Pregnancy
- ○ Family health problem
- ○ Second job
- ○ Transportation arrangements
- ○ Difficult to reach by telephone during off-duty hours
- ○ Distance to duty station
- ○ Attending school during off-duty hours
- ○ Other reason

22. If you were deployed for Operation Desert Shield/Desert Storm, what kinds of problems did you have responding?

- ○ Does not apply, I was not deployed
- ○ Dependent care considerations
- ○ Personal health problems other than pregnancy
- ○ Pregnancy
- ○ Family health problem
- ○ Second job
- ○ Attending school during off-duty hours
- ○ Other problem
- ○ Does not apply, I had no problems

III REENLISTMENT/CAREER INTENT

23. When you finally leave the military, how many *total* years of service do you expect to have?



24. When you finally leave the military, what pay grade do you think you will have? Mark One.

Enlisted Grades		Warrant Grades	Officer Grades	
○ E1	○ E6	○ W1	○ O1	○ O5
○ E2	○ E7	○ W2	○ O2	○ O6
○ E3	○ E8	○ W3	○ O3	○ O7 or above
○ E4	○ E9	○ W4	○ O4	
○ E5		○ W5		

25. When you finally leave the military, do you plan to join a National Guard or Reserve unit? Mark One.

- ○ Does not apply, I am already a member
- ○ Definitely yes
- ○ Probably yes
- ○ Don't know/Not sure
- ○ Probably no
- ○ Definitely no
- ○ Does not apply, I am not eligible to join

26. If you had the freedom to select another career field or leave the Service next month, which of the following would you choose? Mark One.

- ○ Select a totally new military specialty/occupation
- ○ Leave the Service
- ○ Remain in Service in current career field
- ○ Return to a previous military specialty/occupation

27. How likely are you to reenlist at the end of your current term of service? Assume that all special pays which you currently receive are still available. Mark One.

- ◯ Does not apply, I plan to retire
- ◯ Does not apply, I plan to leave the Service

- ◯ (0 in 10) No chance
- ◯ (1 in 10) Very slight possibility
- ◯ (2 in 10) Slight possibility
- ◯ (3 in 10) Some possibility
- ◯ (4 in 10) Fair possibility
- ◯ (5 in 10) Fairly good possibility
- ◯ (6 in 10) Good possibility
- ◯ (7 in 10) Probable
- ◯ (8 in 10) Very probable
- ◯ (9 in 10) Almost sure
- ◯ (10 in 10) Certain

- ◯ Don't know

28. How much influence does your spouse have on your decision about reenlisting at the end of your current term of service?

- ◯ Does not apply, I am not married (GO TO Q30)
- ◯ A good deal of influence
- ◯ A little influence
- ◯ No influence

29. Has your spouse's support for your decision about reenlisting changed in the past year?

- ◯ Yes, increased
- ◯ Yes, decreased
- ◯ No, has not changed

30. If you were *guaranteed a choice of location* for your next tour, how likely would you be to reenlist at the end of your current term? Assume that all special pays which you currently receive are still available. Mark One.

- ◯ Does not apply, I plan to retire
- ◯ Does not apply, I plan to leave the Service

- ◯ (0 in 10) No chance
- ◯ (1 in 10) Very slight possibility
- ◯ (2 in 10) Slight possibility
- ◯ (3 in 10) Some possibility
- ◯ (4 in 10) Fair possibility
- ◯ (5 in 10) Fairly good possibility
- ◯ (6 in 10) Good possibility
- ◯ (7 in 10) Probable
- ◯ (8 in 10) Very probable
- ◯ (9 in 10) Almost sure
- ◯ (10 in 10) Certain

- ◯ Don't know

31. If you were *guaranteed a promotion* to the next higher pay grade, how likely would you be to reenlist at the end of your current term? Assume that all special pays which you currently receive are still available. Mark One.

- ◯ Does not apply, I plan to retire
- ◯ Does not apply, I plan to leave the Service
- ◯ Does not apply, I do not expect any more promotions

- ◯ (0 in 10) No chance
- ◯ (1 in 10) Very slight possibility
- ◯ (2 in 10) Slight possibility
- ◯ (3 in 10) Some possibility
- ◯ (4 in 10) Fair possibility
- ◯ (5 in 10) Fairly good possibility
- ◯ (6 in 10) Good possibility
- ◯ (7 in 10) Probable
- ◯ (8 in 10) Very probable
- ◯ (9 in 10) Almost sure
- ◯ (10 in 10) Certain

- ◯ Don't know

32. If you were *guaranteed retraining in a skill with better career opportunities than your current one*, how likely would you be to reenlist at the end of your current term? Assume that all special pays which you currently receive are still available. Mark One.

- ◯ Does not apply, I do not wish to retrain into another skill
- ◯ Does not apply, I plan to retire
- ◯ Does not apply, I plan to leave the Service

- ◯ (0 in 10) No chance
- ◯ (1 in 10) Very slight possibility
- ◯ (2 in 10) Slight possibility
- ◯ (3 in 10) Some possibility
- ◯ (4 in 10) Fair possibility
- ◯ (5 in 10) Fairly good possibility
- ◯ (6 in 10) Good possibility
- ◯ (7 in 10) Probable
- ◯ (8 in 10) Very probable
- ◯ (9 in 10) Almost sure
- ◯ (10 in 10) Certain

- ◯ Don't know

USE NO. 2 PENCIL ONLY

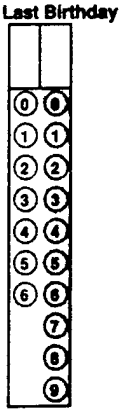
IV. INDIVIDUAL AND FAMILY CHARACTERISTICS

33. Are you male or female?

- ○ Male
- ○ Female

34. How old were you on your last birthday?

Age Last Birthday



35. Where were you born?

- ○ In the United States
- ○ Outside the United States to military parents
- ○ Outside the United States to non-military parents

36. Are you:

- ○ American Indian/Alaskan Native
- ○ Black/Negro/African-American
- ○ Oriental/Asian/Chinese/Japanese/Korean/Filipino/Pacific Islander
- ○ White/Caucasian
- ○ Other (specify):

_____

37. Are you of Spanish/Hispanic origin or descent?

- ○ No (not Spanish/Hispanic)
- ○ Yes, Mexican/Mexican-American/Chicano
- ○ Yes, Puerto Rican
- ○ Yes, Cuban
- ○ Yes, Central or South American
- ○ Yes, other Spanish/Hispanic

38. Are you currently pregnant?

- ○ Does not apply
- ○ Yes
- ○ No

39. When you FIRST ENTERED ACTIVE SERVICE, what was the *highest* school grade or academic degree that you had? DO NOT INCLUDE DEGREES FROM TECHNICAL/TRADE OR VOCATIONAL SCHOOLS. Mark One.

- ○ Less than 12 years of school (no diploma)
- ○ GED or other high school equivalency certificate
- ○ High school diploma
- ○ Some college, but did not graduate
- ○ 2-year college degree
- ○ 4-year college degree (BA/BS)
- ○ Some graduate school
- ○ Master's degree (MA/MS)
- ○ Doctoral degree (PhD/MD/LLB)
- ○ Other degree not listed above

40. AS OF TODAY, what is the *highest* school grade or academic degree that you have? DO NOT INCLUDE DEGREES FROM TECHNICAL/TRADE OR VOCATIONAL SCHOOLS. Mark One.

- ○ Less than 12 years of school (no diploma)
- ○ GED or other high school equivalency certificate
- ○ High school diploma
- ○ Some college, but did not graduate
- ○ 2-year college degree
- ○ 4-year college degree (BA/BS)
- ○ Some graduate school
- ○ Master's degree (MA/MS)
- ○ Doctoral degree (PhD/MD/LLB)
- ○ Other degree not listed above

41. If you attended (or are now attending) college, what kind of school was/is it? Mark ALL that apply.

- ○ Does not apply, I do/did not attend college
- ○ Vocational/trade/business, or other career training school
- ○ Junior or community college (2-year)
- ○ Four-year college or university
- ○ Graduate/professional school
- ○ Specialized Service Career School or Professional Military Education Institution
- ○ Other

42. During 1991, did you attend a civilian school?

- ○ No, was not interested in attending
- ○ No, could not get tuition assistance for the program I wanted
- ○ No, due to conflict with work schedule
- ○ No, for personal reasons
- ○ Yes, attended at own expense
- ○ Yes, attended at Service expense
- ○ Yes, attended partially at Service expense, partially at own expense

USE NO. 2 PENCIL ONLY

43. Which of the following Educational Assistance Programs are you eligible to receive benefits under? Mark ALL that apply.

- ○ The Montgomery GI Bill (MGIB)
- ○ The Veterans Educational Assistance Program (VEAP)
- ○ Vietnam Era GI Bill (converted to MGIB)
- ○ Educational Assistance Test Program (EATP)
- ○ I am not eligible under any of these programs
- ○ I don't know if I am eligible under any of these programs

44. What is the highest grade or year of regular school or college that your MOTHER (or FEMALE GUARDIAN) and FATHER (or MALE GUARDIAN) have completed and gotten credit for? Mark your best estimate.

	MOTHER	FATHER
ELEMENTARY GRADES		
1st		
2nd	○	○
3rd		
4th	○	○
5th		
6th	○	○
7th		
8th	○	○
HIGH SCHOOL GRADES		
9th		
10th	○	○
11th		
12th (include GED)	○	○
COLLEGE (YRS OF CREDIT)		
1		
2	○	○
3		
4	○	○
5		
6	○	○
7		
8 or more	○	○
Don't know/unsure		

45. What is your *current* marital status? Mark only one answer.

- ○ Married for the first time
- ○ Remarried
- ○ Separated
- ○ Widowed (GO TO Q52)
- ○ Divorced (GO TO Q52)
- ○ Never Married (GO TO Q59)

46. Is your spouse currently serving on active duty in the Armed Forces or in the Reserve/Guard?

- ○ No
- ○ Yes, in a Reserve/Guard Component

Yes, on active duty in the:

- ○ Army
- ○ Navy
- ○ Marine Corps
- ○ Air Force

47. Is your spouse currently living with you at your present permanent post, base or duty station?

- ○ Yes
- ○ No

48. Is your spouse currently living on or near a military base?

- ○ Yes
- ○ No

49. When were you and your current spouse married?

Year

19 ⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

50. How well do you and your current spouse agree upon *his/her* career plans?

- ○ Very well
- ○ Well
- ○ Fairly well
- ○ Not well at all

51. How well do you and your current spouse agree on *your* career plans?

- ○ Very well
- ○ Well
- ○ Fairly well
- ○ Not well at all

52. How many times have you been married? (Include your present marriage).

- ○ One
- ○ Two
- ○ Three
- ○ Four
- ○ Five or more

53. Did any of these marriages end in divorce?

- ○ Yes
- ○ No (GO TO Q59)

54. Did any of these divorces occur while on active duty?

- ○ Yes
- ○ No (GO TO Q59)

55. How many times have you been divorced while on active duty?

- ○ One
- ○ Two
- ○ Three
- ○ Four
- ○ Five or more

56. Did the court consider your retirement pay to be part of any divorce settlement? Mark ALL that apply.

- ○ Yes, child support payments
- ○ Yes, alimony payments
- ○ Yes, community property payments
- ○ No, my spouse received other property to offset interest in retirement
- ○ No, it's all payable to me

57. To what extent has any divorce settlement influenced your decision to stay in the military until retirement?

- ○ Very great extent
- ○ Great extent
- ○ Moderate extent
- ○ Slight extent
- ○ Not at all

58. To what extent do you feel that your serving in the military contributed to any divorce?

- ○ Very great extent
- ○ Great extent
- ○ Moderate extent
- ○ Slight extent
- ○ Not at all

V. DEPENDENTS

59. How many dependents do you have in each age group? ***Do not*** **include yourself or your spouse.** For the purpose of this question, a dependent is anyone related to you by blood, marriage, or adoption, and who depends on you for over half their support.

○ Does not apply, I have no dependents (GO TO Q77)

	Number of Dependents					
Age of dependent	None	1	2	3	4	5 or more
Under 1 year	○	○	○	○	○	○
1 year to under 2 years	○	○	○	○	○	○
2-5 years	○	○	○	○	○	○
6-13 years	○	○	○	○	○	○
14-22 years	○	○	○	○	○	○
23-64 years	○	○	○	○	○	○
65 years or over	○	○	○	○	○	○

60. How many dependents in Question 59 do you have in each of the following age groups who ***currently live with you*** **at your permanent post, base or duty station?** Do not include yourself or your spouse.

	Number of Dependents					
Age of dependent	None	1	2	3	4	5 or more
Under 1 year	○	○	○	○	○	○
1 year to under 2 years	○	○	○	○	○	○
2-5 years	○	○	○	○	○	○
6-13 years	○	○	○	○	○	○
14-22 years	○	○	○	○	○	○
23-64 years	○	○	○	○	○	○
65 years or over	○	○	○	○	○	○

61. If you have dependent children in Question 59 who ***do not*** **currently live with you at your permanent post, base or duty station, with whom do these dependents live?** Mark ALL that apply.

○ Does not apply (GO TO Q63)

- ○ Spouse
- ○ Ex-spouse
- ○ Grandmother
- ○ Grandfather
- ○ Other relative
- ○ Friend
- ○ School
- ○ Other (specify): _____

62. Do you give child support to the person(s) your children live with?

- ○ Yes
- ○ No

63. How many of your dependent children have you adopted?

- ○ None
- ○ One
- ○ Two
- ○ Three
- ○ Four or more

64. If you are a single-parent or a military member married to a military member, do you have a military family care plan?

- ○ Does not apply
- ○ Yes
- ○ No

65. Are arrangements for your dependent children realistically workable for each of the following situations? Mark one category for each item.

○ Not applicable, my children do not live with me.

	Yes	Probably	No
Short-term emergency situation such as a mobility exercise	○	○	○
Long-term situation such as a unit deployment	○	○	○
Evacuation due to conflict or wartime situation	○	○	○

66. Who took care of your dependent children during your longest TDY/deployment in the past 12 months? Mark ALL that apply.

- ○ Does not apply, have not been on TDY or deployed (GO TO Q68)
- ○ Does not apply, my children did not live with me at the time (GO TO Q68)
- ○ Child took care of his/herself
- ○ Spouse or ex-spouse
- ○ Immediate family member (e.g. grandparent, brother or sister)
- ○ Other family member
- ○ Friend or neighbor
- ○ Public or private agency
- ○ Other person(s) (specify): _____

USE NO. 2 PENCIL ONLY

67. How satisfied are you with the care your child(ren) received in your absence?

- ○ Very satisfied
- ○ Satisfied
- ○ Neither satisfied nor dissatisfied
- ○ Dissatisfied
- ○ Very dissatisfied

IF YOU HAVE NO CHILDREN UNDER AGE 15 WHO USUALLY LIVE WITH YOU OR DO NOT USUALLY USE CHILD CARE SERVICES, GO TO Q73.

68. During the last month, who usually took care of your youngest or only child while you and/or your spouse worked, looked for work, or was in school? Mark the arrangement in which the child spent the most hours.

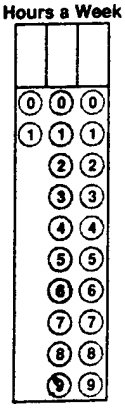
- ○ My spouse or I did
- ○ Child's brother/sister over age 15
- ○ Child's brother/sister under age 15
- ○ Child's grandparent
- ○ Other relative of child
- ○ Child cares for self
- ○ Nonrelative
- ○ Child was in school or day care

69. Where was your youngest or only child *usually* cared for under this arrangement? Mark One.

	On Base	Off Base
Child was in nursery or preschool	○	○
Child was in elementary or secondary school	○	○
Child Development Center/Day Care Center	○	○
Child's home	○	○
Licensed family day care home	○	○
Other private home (not licensed)	○	○
Other place	○	○

70. How many hours a week was your youngest or only child usually cared for under this arrangement?

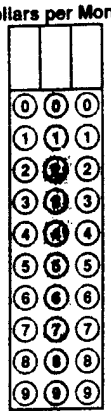
Hours a Week



71. How much did you pay for child care during the last month for your youngest or only child?

Dollars per Month

$



72. What was the one most important reason for choosing the type of child care arrangement used?

- ○ Prefer family
- ○ Cost
- ○ Convenient hours
- ○ Convenient location
- ○ Quality
- ○ Availability
- ○ Trust in caregiver
- ○ Other (specify): _____

73. Do any of your children attend a Department of Defense school?

- ○ No (GO TO Q75)
- ○ Yes, attending an overseas school
- ○ Yes, attending a CONUS Section VI school
- ○ Don't know (GO TO Q75)

74. If yes, how satisfied are you with the quality of education your child(ren) receive in the DoD school?

- ○ Very satisfied
- ○ Satisfied
- ○ Neither satisfied nor dissatisfied
- ○ Dissatisfied
- ○ Very dissatisfied

75. Are any of your dependents physically, emotionally, or intellectually handicapped requiring specialized treatment or care?

- ○ No
- ○ Yes, temporarily
- ○ Yes, permanently

76. Are any of your dependents elderly (over 65 years old)?

- ○ No
- ○ Yes

77. Do you have elderly relatives for whom you have responsibility even if they are not your legal dependent(s)?

- ○ No
- ○ Yes

78. Are you currently in the process of adopting a child?

- ○ No
- ○ Yes

79. **Here is a list of feelings or worries some military members have about their family (spouse, children, parents) when they are away on assignment, TDY or deployment. How often did or would you worry about each of the following when you are away?**

○ Does not apply, I do not have any family (GO TO Q82)

	Very Seldom or Never	Seldom	Sometimes	Often	Very Often or Always	Does Not Apply
[redacted]						
Your family's ability to get car or household repairs done	○	○	○	○	○	○
[redacted]						
Your child(ren)'s health and well-being	○	○	○	○	○	○
Your family's safety in [redacted]						

80. **How well did or would your spouse take care of the following in your absence?**

○ Does not apply, I do not have a spouse

	Very Well	Well	Neither Well nor Poorly	Poorly	Very Poorly	Does Not Apply	Don't Know
[redacted]							
Family member's health	○	○	○	○	○	○	○
[redacted]							
Housing	○	○	○	○	○	○	○
[redacted]							
Evacuation of family members	○	○	○	○	○	○	○

81. ***In the past year*, how many months were you completely separated from your spouse or dependents because of your military assignment?** Include TDYs, remotes, deployments, schools, etc.

○ Does not apply, I do not have a spouse or dependents

○ None
○ Less than 1 month
○ 1 month
○ 2 months
○ 3 months
○ 4 months
○ 5 months
○ 6 months
○ 7 months
○ 8 months
○ 9 months
○ 10 months
○ 11 months
○ 12 months

82. **In your *total military career*, how many months were you completely separated from your spouse or dependents because of your military assignments?** Include TDY, remotes, deployment, schools, etc.

○ Does not apply, no spouse or dependents during military career

○ None
○ Less than 3 months
○ 3-4 months
○ 5-6 months
○ More than 6 months but less than 1 year
○ 1-2 years
○ 3-4 years
○ Over 4 years

83. **Did the government pay for your spouse/dependents to accompany you to your present permanent post, base, or duty station?**

○ Does not apply, I have no spouse/dependents
○ Yes
○ No

USE NO. 2 PENCIL ONLY

VI. MILITARY COMPENSATION, BENEFITS, AND PROGRAMS

EVERYONE SHOULD ANSWER THIS SECTION

84. Do you receive a MONTHLY Basic Allowance for Quarters (BAQ)? (BAQ is a payment for housing.)
- ○ Does not apply, I live in base/government housing
- ○ Yes, partial BAQ
- ○ Yes, full BAQ
- ○ No

85. Do you receive a Basic Allowance for Subsistence (BAS) or Separate Rations? (These are payments for food.)
- ○ Yes
- ○ No

86. What is the amount of the MONTHLY Federal Tax Advantage of your combined Quarters and Food Allowances (BAS or Separate Rations and BAQ)? If you are uncertain of the exact amount, please give your best estimate.
- ○ I do not receive BAS or Separate Rations and BAQ.
- ○ I never heard of the Federal Tax Advantage.
- ○ I don't know the amount of the Federal Tax Advantage.

MONTHLY FEDERAL TAX ADVANTAGE $ ○○○

87. Which of the following special monthly pays or allowances do you *currently* receive? Mark ALL that apply.
- ○ I don't receive *ANY* special monthly pays.
- ○ Jump Pay
- ○ Sea Pay
- ○ Submarine Pay
- ○ Flight Pay
- ○ Foreign Duty Pay
- ○ Overseas Cost of Living Allowance
- ○ Variable Housing Allowance
- ○ Overseas Housing Allowance
- ○ Selective Reenlistment Bonus (SRB)
- ○ Overseas Tour Extension Incentive Pay
- ○ Deployment Related Allowances
- ○ Other Special Pays or Allowances

88. As an alternative to CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) for your dependents would you join a prepaid local health maintenance organization (HMO)? Assume you would be required to pay a total monthly fee of $20.
- ○ Does not apply, I have no dependents
- ○ Yes
- ○ No
- ○ Don't know

89. Do you personally have any current health coverage from any civilian health insurance or health maintenance organization (HMO)? Mark ALL that apply.
- ○ No
- ○ Yes, through my current/former civilian employer
- ○ Yes, through my spouse's current/former civilian employer
- ○ Yes, purchased separately
- ○ Yes, through other (specify): _____

90. In the past year, what portion of *your spouse's and/or dependent's* health care was received from each of the following sources? Include prescription drugs as well as visits to physicians and other health care professionals for check-ups/treatment.

○ Does not apply, I have no spouse or dependents.

	PERCENT					
	None	1-20	21-40	41-60	61-80	81-100
From military hospital/medical facility/PRIMUS/NAVCARE	○	○	○	○	○	○
Through CHAMPUS (include CHAMPUS REFORM INITIATIVE PROGRAM)	○	○	○	○	○	○
Through civilian plan/HMO	○	○	○	○	○	○
Purchased directly	○	○	○	○	○	○
Through other (specify): _____	○	○	○	○	○	○

USE NO. 2 PENCIL ONLY

91. In the past year, what portion of *your* health care was received from each of the following sources? Include prescription drugs as well as visits to physicians and other health care professionals for check-ups/treatment.

	PERCENT					
	None	1-20	21-40	41-60	61-80	81-100
From military hospital medical facility/PRIMUS/NAVCARE	○	○	○	○	○	○
Through CHAMPUS (include CHAMPUS REFORM INITIATIVE PROGRAM)	○	○	○	○	○	○
Through civilian plan/HMO	○	○	○	○	○	○
Purchased directly	○	○	○	○	○	○
Through other (specify): _____	○	○	○	○	○	○

92. How much did you spend on health care services and products (for you and your family) last year? Include CHAMPUS deductibles, civilian insurance premiums, drugs, etc. Do not include dental care.

- ○ Less than $100
- ○ $101 - $200
- ○ $201 - $300
- ○ $301 - $500
- ○ $501 - $800
- ○ $801 - $1,000
- ○ More than $1,000

93. Are you currently enrolled in the Delta Dental Program or some other dental benefits program? Mark ALL that apply.

- ○ No
- ○ Yes, the Delta Dental Program
- ○ Yes, my spouse's civilian dental program
- ○ Yes, other private dental insurance

94. How much did you spend for dental treatment (for you and your family) last year? (Include Delta Dental Program and civilian premiums as well as direct payments for treatment.)

- ○ Less than $100
- ○ $101 - $200
- ○ $201 - $300
- ○ $301 - $500
- ○ $501 - $800
- ○ $801 - $1,000
- ○ More than $1,000

95. Comparing your job level to a comparable civilian position, do you feel your health (including dental) benefits are:

- ○ Better than most
- ○ About the same
- ○ Worse than most
- ○ Don't know

96. Do you have Life Insurance?

- ○ No
- ○ Yes, SGLI
- ○ Yes, SGLI and other policy or policies
- ○ Yes, a policy or policies other than SGLI
- ○ Don't know

97. Do you have a current written will?

- ○ Yes
- ○ No
- ○ Don't know

98. Does *anyone* currently hold your power-of-attorney?

- ○ Yes, my spouse
- ○ Yes, someone other than my spouse
- ○ No
- ○ Don't know

99. Do you plan to elect the Survivor Benefit Plan upon retirement? Mark One.

- ○ Uncertain, am not aware of the plan at all
- ○ Uncertain, am aware of the plan but want to study it
- ○ Uncertain, do not understand the plan clearly
- ○ No, I plan to leave the Service before retirement
- ○ No, no survivors
- ○ No, can get better coverage elsewhere
- ○ No, too expensive
- ○ Yes, will only elect minimum coverage
- ○ Yes, will elect more than minimum coverage but less than full
- ○ Yes, will elect full coverage

100. How valuable is the current retirement system to you?

- ○ Very valuable
- ○ Moderately valuable
- ○ Of some value
- ○ Of no value

101. Comparing your job level to a comparable civilian position, do you feel the military retirement system is:

- ○ Better than most
- ○ About the same
- ○ Worse than most
- ○ Don't know

102. What is your estimate of the total annual value of your pay and allowances and benefits? (Pay, allowances, medical, exchange, commissary, retirement, etc.):

- ○ Less than $20,000
- ○ $20,001 - $30,000
- ○ $30,001 - $40,000
- ○ $40,001 - $50,000
- ○ $50,001 - $60,000
- ○ $60,001 - $70,000
- ○ More than $70,000
- ○ Don't know

USE NO. 2 PENCIL ONLY

103. For each program or service listed below, please mark (a) whether you have ever used it at your present permanent location and (b) how important its availability is to you.

	A) Used the Service/Program		B) Importance				
	Yes	No	Very Important	Important	Neither Important nor Unimportant	Un-important	Very Un-Important
Bowling centers	○	○	○	○	○	○	○
Golf courses	○	○	○	○	○	○	○
Marinas	○	○	○	○	○	○	○
Stables	○	○	○	○	○	○	○
Fitness centers	○	○	○	○	○	○	○
Youth activities	○	○	○	○	○	○	○
Libraries	○	○	○	○	○	○	○
Arts and crafts center	○	○	○	○	○	○	○
Tours and tickets	○	○	○	○	○	○	○
Recreation gear issue	○	○	○	○	○	○	○
Main exchange	○	○	○	○	○	○	○
7-Day Store/Shoppette	○	○	○	○	○	○	○
Clubs	○	○	○	○	○	○	○
Temporary lodging facilities (e.g., Navy lodge, transient billeting)	○	○	○	○	○	○	○
Cabins, cottages and cabanas	○	○	○	○	○	○	○
Laundry/dry cleaning	○	○	○	○	○	○	○
Photo hobby shop	○	○	○	○	○	○	○
Auto repair centers	○	○	○	○	○	○	○
Auto hobby shop	○	○	○	○	○	○	○
Rentals/equipment	○	○	○	○	○	○	○
Animal care clinics	○	○	○	○	○	○	○
Auto/truck rental	○	○	○	○	○	○	○
Commissary	○	○	○	○	○	○	○

104. Did you vote in the last local election? In the last Presidential election?

Last local election

- ○ Yes, in person at the polls
- ○ Yes, by absentee ballot
- ○ No

Last Presidential election

- ○ Yes, in person at the polls
- ○ Yes, by absentee ballot
- ○ No

USE NO. 2 PENCIL ONLY

105. For each family program or service listed below, please mark (a) whether you have ever used it at your present permanent duty location and (b) your level of satisfaction if you have used it.

	A) Used the Service/Program		B) Satisfaction				
	Yes	No	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dis-satisfied	Very Dis-satisfied
Family Support Center/Family Readiness Group/Civilian/Army Community Service	○	○	○	○	○	○	○
Individual counseling/therapy	○	○	○	○	○	○	○
Marriage and family counseling/therapy/enrichment	○	○	○	○	○	○	○
Services to individuals or families concerning military separation/deployment	○	○	○	○	○	○	○
Chaplain services/religious opportunities	○	○	○	○	○	○	○
Parent education	○	○	○	○	○	○	○
Youth/adolescent programs	○	○	○	○	○	○	○
Child care services	○	○	○	○	○	○	○
Financial counseling	○	○	○	○	○	○	○
Single-parent programs	○	○	○	○	○	○	○
Pre-marital programs	○	○	○	○	○	○	○
Services for families with special needs (e.g. handicapped, gifted)	○	○	○	○	○	○	○
Crisis referral services	○	○	○	○	○	○	○
Spouse employment services	○	○	○	○	○	○	○
Spouse/child abuse services	○	○	○	○	○	○	○
Alcohol treatment/drug abuse programs	○	○	○	○	○	○	○
Rape counseling services	○	○	○	○	○	○	○
Legal assistance	○	○	○	○	○	○	○
Relocation assistance services	○	○	○	○	○	○	○
Information and referral services	○	○	○	○	○	○	○
Stress management programs	○	○	○	○	○	○	○
Suicide prevention programs	○	○	○	○	○	○	○
Transition assistance/pre-retirement/separation from military	○	○	○	○	○	○	○
Housing Office services	○	○	○	○	○	○	○

USE NO. 2 PENCIL ONLY

VII CIVILIAN LABOR FORCE EXPERIENCE

A. YOUR OWN EXPERIENCE

106. In the last month, how many hours did you perform volunteer work for an on- or off-base activity? Mark one in each column.

No. of Hours	On-base	Off-base
Did not perform volunteer work	○	○
Less than 5 hours	○	○
5 to 10 hours	○	○
More than 10 hours	○	○

107. What would increase your interest/ability to volunteer?
Mark ALL that apply.

- ○ Parking privileges
- ○ Volunteering with a friend
- ○ More volunteer assignments of interest
- ○ Reimbursement of expenses
- ○ Child care
- ○ More recognition for volunteer assignments
- ○ Opportunity for useful training for the future
- ○ Better leadership of volunteers
- ○ Better organization of volunteers
- ○ Other (specify):

_____

- ○ Nothing would increase interest/ability

108. During 1991, how many hours a week did you spend *on the average* working at a civilian job or at your own business *during your off-duty hours*?

○ None (GO TO Q111).

AVERAGE NUMBER HOURS PER WEEK

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

109. Altogether in 1991, what was the total amount that you earned before taxes and other deductions, for *working during your off-duty hours*?

Amount

$

1991 OFF-DUTY EARNINGS

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

○ $100,000 or more

110. How much did each of the following contribute to your having a second job or your own business?

Mark each item as:	No Contribution	Minor Contribution	Moderate Contribution	Major Contribution
Needed additional income to meet basic expenses	○	○	○	○
Nice to have extra income to use now	○	○	○	○
Saving extra income for future needs	○	○	○	○
Independence	○	○	○	○
Self-esteem	○	○	○	○
Enjoyment of work itself	○	○	○	○
To gain experience for a non-military second career	○	○	○	○
Other (specify):	○	○	○	○

_____

111. In the past 12 months, have you received any job offers for a civilian job which you could take if you leave the Service?
- ○ Yes
- ○ No

112. Have you actively looked for civilian employment within the past 12 months?
- ○ Yes
- ○ No

113. Do you expect to be involuntarily separated within the next 12 months during force reductions?
- ○ Yes
- ○ No
- ○ Don't know

114. If you were to leave the Service NOW and tried to find a civilian job, how likely would you be to find a *good civilian job*? Mark One.
- ○ (0 to 10) No chance
- ○ (1 in 10) Very slight possibility
- ○ (2 in 10) Slight possibility
- ○ (3 in 10) Some possibility
- ○ (4 in 10) Fair possibility
- ○ (5 in 10) Fairly good possibility
- ○ (6 in 10) Good possibility
- ○ (7 in 10) Probable
- ○ (8 in 10) Very probable
- ○ (9 in 10) Almost sure
- ○ (10 in 10) Certain

- ○ Don't know

115. How concerned are you about the following as a result of the current talk about force reductions in the military strength?

	Very Greatly Concerned	Greatly Concerned	Moderately Concerned	Somewhat Concerned	Not At All Concerned
Your long-term opportunities in the military	○	○	○	○	○
The kind of work you plan to go into if you leave the military	○	○	○	○	○
Whether you will be able to get a civilian job quickly if needed	○	○	○	○	○
The financial burden on you and/or your family should you have to leave the military unexpectedly	○	○	○	○	○
Ability to adjust to civilian life	○	○	○	○	○

B. YOUR SPOUSE'S EXPERIENCE. IF NOT MARRIED, GO TO Q118

116. Is your SPOUSE currently: Mark ALL that apply.
- ○ Full-time in the Armed Forces
- ○ In Reserve or National Guard
- ○ Working full-time in Federal civilian job
- ○ Working full-time in other civilian job
- ○ Working part-time in Federal civilian job
- ○ Working part-time in other civilian job
- ○ Self-employed in his or her own business
- ○ With a job, but not at work because of TEMPORARY illness, vacation, strike, etc.
- ○ Unpaid worker (volunteer or in family business)
- ○ Unemployed, laid off, or looking for work
- ○ Not looking for work but would like to work
- ○ In school
- ○ Retired
- ○ A homemaker
- ○ Other

117. To what extent does your spouse's job interfere with your military job?
- ○ Does not apply, spouse not employed

- ○ Completely
- ○ A great deal
- ○ Somewhat
- ○ Very little
- ○ Not at all

118. During 1991, did *you or your spouse* receive any income from the following sources? Mark 'YES' or 'NO' for each item.

RECEIVE Yes	RECEIVE No	INCOME SOURCE
[redacted]		
○	○	Supplemental Security Income
○	○	[redacted]
○	○	WIC (food program for women, infants, and children)
○	○	[redacted]

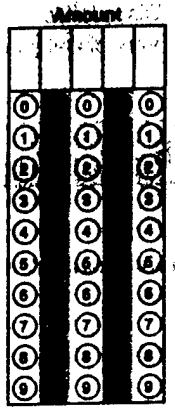
119. During 1991, how much did you and/or your spouse receive from the income sources listed in Q118? Do not include earnings from wages or salaries in this question. Give your best estimate.

○ No income from sources in Q118.

Amount

$

AMOUNT



○ $100,000 or more

120. During 1991, did you or your spouse receive any income from the following sources? Mark 'YES' or 'NO' for each item.

RECEIVE Yes	RECEIVE No	INCOME SOURCE
○	○	[redacted]
○	○	Stocks, Bonds or Other Investments
○	○	[redacted]
○	○	Pensions from Federal, State or Local Government
○	○	[redacted]
○	○	Social Security or Railroad Retirement
○	○	[redacted]

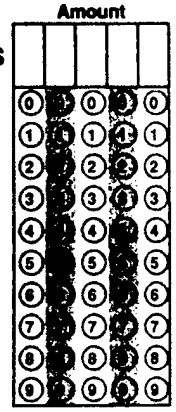
121. During 1991, how much did you or your spouse receive from the income sources listed in Q120? Do not include earnings from wages or salaries in this question. Give your best estimate.

○ No income from sources in Q120.

Amount

$

AMOUNT



○ $100,000 or more

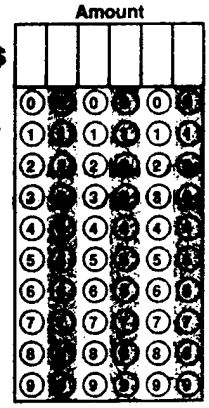
122. As of today, what is your estimate of your mortgage debt? (Include all properties and any second mortgages or home equity loans).

○ Does not apply, I do not own any property.

Amount

$

AMOUNT



○ $1,000,000 or more

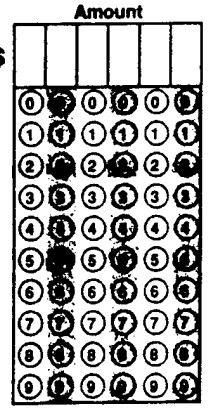
123. As of today, what is your estimate of the value of your current properties?

○ Does not apply, I do not own any property.

Amount

$

AMOUNT



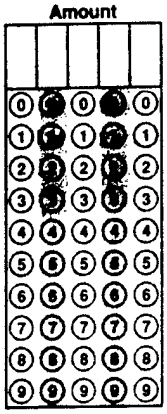
○ $1,000,000 or more

124. As of today, what is your estimate of the total amount of any other outstanding debts? *Exclude* any mortgages shown in Q122.

Amount

$

AMOUNT



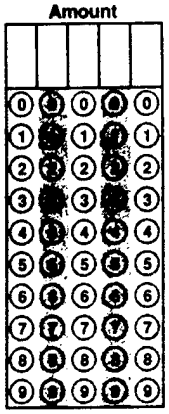
○ $100,000 or more

125. As of today, what is your estimate of the total amount of your assets? *Exclude* your current property counted in Q123.

Amount

$

AMOUNT



○ $100,000 or more

126. Overall how do you feel about your/your family income; that is all the money that comes to you and other members of your family living with you?

○ Very satisfied
○ Satisfied
○ Neither satisfied nor dissatisfied
○ Dissatisfied
○ Very dissatisfied

IX MILITARY LIFE

127. How would you describe the morale of military personnel at your current location? If you are currently assigned to a ship, indicate the morale of personnel on board ship. Mark One.

MORALE IS VERY LOW — 1 — 2 — 3 — 4 — 5 — 6 — 7 — MORALE IS VERY HIGH

128. In the event of combat, how would you describe your *confidence* in your unit members? Mark One.

○ Does not apply, not in combat or combat support unit (GO TO Q130)

VERY LOW — 1 — 2 — 3 — 4 — 5 — 6 — 7 — VERY HIGH

129. How would you describe your unit's readiness for combat? Mark One.

VERY LOW — 1 — 2 — 3 — 4 — 5 — 6 — 7 — VERY HIGH

USE NO. 2 PENCIL ONLY

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

Mark each item as:	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Does Not Apply
Life in the military is about what I expected it to be	○	○	○	○	○	○
My family could be better off if I took a civilian job	○	○	○	○	○	○
Members of my family were well prepared by my Service for the requirements and demands of my job	○	○	○	○	○	○
Military personnel in the future will not have as good retirement benefits as I have now	○	○	○	○	○	○
My military pay and benefits will not keep up with inflation	○	○	○	○	○	○
Skills attained in my job are helpful in securing a good civilian job	○	○	○	○	○	○
My current job assignment is important work	○	○	○	○	○	○
My current job assignment is challenging work	○	○	○	○	○	○
My promotion opportunity is better than it would have been without this assignment	○	○	○	○	○	○
I receive good support from my chain-of-command	○	○	○	○	○	○
I receive good support from my supervisors	○	○	○	○	○	○

131. On the average, what is the total number of hours per week you work at your military job?

- ○ 40 hours or less
- ○ 41 - 50 hours
- ○ 51 - 60 hours
- ○ 61 - 80 hours
- ○ More than 80 hours

132. What percent of your work hours are spent on duty-related tasks?

- ○ Less than 20 percent
- ○ 21 - 40 percent
- ○ 41 - 60 percent
- ○ 61 - 80 percent
- ○ 81 - 100 percent

133. During the past year have the demands of your military job prevented you from taking annual leave?

- ○ Yes
- ○ No

134. In general, how satisfied are you with your current job?

- ○ Very satisfied
- ○ Satisfied
- ○ Neither satisfied nor dissatisfied
- ○ Dissatisfied
- ○ Very dissatisfied

135. In the last year, how much stress has each of these factors caused you?

	A Great Deal	Fair Amount	Some	Little	None
Separation from family	○	○	○	○	○
PCS move	○	○	○	○	○
Job situation	○	○	○	○	○
Family situation	○	○	○	○	○
Personal safety	○	○	○	○	○
Health	○	○	○	○	○

136. What are the primary sources of any uncertainty you have right now about what you could expect from a military career? Mark ALL that apply.

- ○ My lack of experience in the military
- ○ My career goals are unclear
- ○ Unclear promotion and assignment criteria
- ○ Changes in military manpower needs
- ○ Possible Congressional actions (budget, RIFS, etc.)
- ○ Uncertainty about senior leadership
- ○ Personal safety
- ○ Other
- ○ Not applicable, I do not have any uncertainty

USE NO. 2 PENCIL ONLY

137. Below is a list of issues associated with the military way of life. Considering current policies, please indicate your level of satisfaction/dissatisfaction with each issue.

For each item, mark if you are:	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
Personal freedom					
Acquaintances/friendships	O	O	O	O	O
Assignment stability	O	O	O	O	O
Pay and allowances					
Environment for families	O	O	O	O	O
Frequency of moves					
Retirement benefits	O	O	O	O	O
Opportunity to serve one's country					
Satisfaction with current job	O	O	O	O	O
Promotion opportunities					
Job training/in-service education	O	O	O	O	O
Job security					
Working/environmental conditions	O	O	O	O	O

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

- O Very dissatisfied
- O Dissatisfied
- O Somewhat dissatisfied
- O Neither dissatisfied nor satisfied
- O Somewhat satisfied
- O Satisfied
- O Very satisfied

139. We're interested in any comments or recommendations you would like to make, whether or not the topic was covered in this survey. Do you have any comments?

- O Yes - Use the comment sheet on the next page
- O No

THANK YOU VERY MUCH FOR ANSWERING THIS SURVEY. PLEASE SEAL THE SURVEY IN THE ENVELOPE PROVIDED.

USE NO. 2 PENCIL ONLY

COMMENT SHEET FOR ENLISTED PERSONNEL

Please provide us with any comments you may have regarding military policies or military life in general in the space below. Before commenting, please fill in one bubble in each section.

Service:

○ Army ○ Air Force

○ Navy ○ Marines

Thank you for completing this survey!
Please seal the survey in the envelope provided.

Blank