

2002 Quality of Life in the U. S. Marine Corps Study



Prepared for:

Commanding General
United States Marine Corps
MCCDC
Studies Management Branch (C453)
Studies and Analysis Division
MCB Quantico, Virginia 22134

Final Report

September 20, 2002

**Contract Number:
M00264-01-D-0002
Delivery Order: 0001**

Prepared By:

Decision Engineering Associates, LLC
17491 Jefferson Davis Highway
Dumfries, Virginia 22026

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NAVY POSITION, POLICY OR DECISION UNLESS SO DESIGNATED BY OTHER OFFICIAL
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ABSTRACT

This report for the 2002 Quality of Life in the United States Marine Corps Study is a description of the study effort and its survey of Marines to determine their perceptions of quality of life. This is the third study of its kind commissioned by the Marine Corps, the other two were conducted in 1993 and 1998.

The data for this study was collected by survey. Four groups of respondents were selected to participate in the survey:

1. Active Duty Marines
2. Independent Duty Marines
3. Family Members (Spouses)
4. Production Recruiters

Independent duty Marines were not previously studied separately. The Production Recruiter Study results are published in a separate report, and this was the first time the Marine Corps surveyed Marine families. The survey was conducted in February and March 2002. The survey was anonymous; neither names nor social security numbers were obtained from participants. Various analyses were performed on the survey results.

Research shows that people divide their lives into domains that can be evaluated separately. The eleven life domains of active duty Marines assessed in this study were the same ones used in the 1993 and 1998 studies and are listed below.

- | | |
|-----------------------------------|---|
| 1. Residence | 7. Relationship with Your Children |
| 2. Neighborhood | 8. Relationship with Other Relatives |
| 3. Leisure and Recreation | 9. Income and Standard of Living |
| 4. Health | 10. Military Job |
| 5. Friends and Friendship | 11. Yourself (perceptions of progress |
| 6. Marriage/Intimate Relationship | towards personal goals and development) |

Overall, the Marine Corps appears to be maintaining satisfaction levels within the ranges reported in 1993 and 1998 in the important domains. The Active Duty Marine group is satisfied with 10 of 11 domains. Only in the Income and Standard of Living domain did they indicate being somewhat dissatisfied, as they were in the past two studies. Independent duty Marines are also satisfied in 10 of 11 domains; the only domain in which they are somewhat dissatisfied is Leisure and Recreation. Spouses are satisfied in 9 of 10 domains. They are somewhat dissatisfied with the Separation domain.

All groups were somewhat satisfied with their lives as a whole. The Organizational Commitment results are impressive; the active duty Marine scores tend to equal those of 1998, which exceeded those of 1993. Independent duty Marines Organizational Commitment scored even higher. There is a direct relationship between satisfaction with Military Job and Personal Readiness for active duty and independent duty Marines. For active duty Marines, Personal Readiness has a direct influence on Retention. For family members, both spouse and children's quality of life influence Retention.

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FOREWORD

This study was funded by the Commanding General, Marine Corps Combat Development Command via the Marine Corps Studies System. The objective of this study was to assess the quality of life perceptions of active duty Marines and to compare those with the perceptions of Marines surveyed in previous studies. Additionally, family members of Marines were surveyed for the first time in order to gauge their perceptions. The quality of life perceptions of Production Recruiters are published in a separate report.

We would like to thank the study project officer, Ms. Kerry Lewis, as well as her action officers, Ms. Karen Reilly and Major Pete Baumgarten, of Headquarters, U.S. Marine Corps (MRE) for their professional assistance and guidance.

We would also like to commend Ms. Carol Lager of the Studies and Analysis Division for her support during this study effort.

Last, but not least, we are indebted to our team members, Dr. Joseph J. Bolmarcich of QUANTICS incorporated for the development of the analysis plan and execution of the analyses of the survey results, and to Dr. Theresa B. Ditton of Villanova University for the development of the survey instruments and assistance with the analyses. Their contributions to this study are significant, and are greatly appreciated.

John C. Short
President
Decision Engineering Associates, LLC

INTRODUCTION

This is the third systematic examination of the Quality of Life (QoL) in the United States Marine Corps. This study was nominated, approved, and funded as a FY-01 effort.

The Commandant of the Marine Corps, General James L. Jones, has clearly stated his view of the importance of quality of life. “When Marines are confident that the Corps’ first instinct is to work for their benefit, they can concentrate on mission accomplishment. When our families share this confidence, they will contribute to mission accomplishment by being supportive of our way of life and calling.” In order to earn the confidence of Marines and their families that the Marine Corps is sincere in its efforts to work for their benefit, the service has made a commitment over the last decade to studying their quality of life perceptions and satisfaction. The Marine Corps used the results of two previous studies to make informed decisions regarding quality of life programs and funding. The 2002 Quality of Life study determines, through trend analyses, how effective those decisions have been, and provides a measure of current quality of life perceptions and satisfaction for further program management refinement. This study also provides, for the first time, the unique perspective of family members (defined as Marine spouses) in regards to their families’ quality of life.

Chapter 1 provides the background for the study, to include information on the two previous quality of life studies. Also provided are conceptual definitions of quality of life, a brief discussion of the problem associated with efficiently and effectively focusing quality of life program efforts and funding, and the purpose, objective, and scope of the 2002 study.

Chapter 2 includes the study approach with several study team assumptions. The study methodology section includes the conceptual framework for the survey, and details of the survey sample. The study analysis plan is provided, as well as the plan for the collection and validation of survey instruments. The chapter concludes with information on survey administration support mechanisms.

The survey results are found in Chapter 3. These are listed separately for each of the three groups of respondents: Active Duty Marines, Independent Duty Marines (a sub-set of Active Duty Marines), and Family Members (spouses). The independent duty Marine population identified for analysis was further defined by Headquarters, U.S. Marine Corps as those Marines in assignments without military community support. Without military community support, for the purposes of this study, includes those Marines who indicated on the survey that they were not assigned to a base or station, and one hour or more away from the nearest military installation. The survey results of a fourth group studied, Production Recruiters, are published in a separate report.

The Active Duty Survey results include demographic and career data, analysis of each of the domains and Global QoL or life as a whole, and trend analysis within each of the domains and Global QoL using the results of the two previous studies. The

Independent Duty (without military community support) Survey results are also reported. The Family Member (Spouse) Survey results are provided, to include demographic data, and an analysis of that group's domains and Global QoL perceptions.

Chapter 4 contains an assessment of the relationship among domains and the impact of domain QoL perceptions on Global QoL using structural equation models. Use of the models enables one to determine how the perception of quality life varies among demographic groups.

Major study findings, to include those pertaining to the military outcomes of Personal Readiness and Retention, are included in Chapter 5. Also included are the study conclusions, recommendations for action, and recommendations for future QoL assessments.

EXECUTIVE SUMMARY

This final report of the 2002 Quality of Life in the U.S. Marine Corps Study is a description of Decision Engineering Associates' study efforts and survey of Marines and family members to determine their perceptions of quality of life (QoL). This report includes major findings and recommendations.

BACKGROUND

This is the third study of its kind the Marine Corps has conducted to assess the perceptions of quality of life of Marines. Comprehensive assessments of Marine QoL were also conducted in 1993 and 1998 by the Navy Personnel Research and Development Center (NPRDC). These studies illuminated the impact QoL perceptions have on performance, and the military outcomes of retention and readiness. The Marine Corps has made a concerted effort to address the issues identified in the previous studies and strives to improve the funding and programs to enhance the quality of life of Marines and their families. Periodic QoL reassessments enable the service to capture any effects resulting from changes in social-economic conditions, the demographics of Marines, or program investments.

As the 2002 quality of life barometer, this study gauged the current perceptions of Marines, to include Production Recruiters and, for the first time separately, Independent Duty Marines, in regards to the quality of their lives. Both of these groups include Marines assigned to locations without access to military community support. The Marine Corps policy, as stated in MCO P1700.27A, is that Marines and their families should expect the same level of access and availability to standardized support services and programs, regardless of where they are stationed throughout the Marine Corps. By studying Independent Duty Marines as a separate group, the Marine Corps has a baseline to evaluate the efficacy of programs to support this population. The first Production Recruiter QoL study was conducted in 1998; the results of the 2002 survey analysis are published separately.

In MCO 1754.6, published in 1999, the Marine Corps emphasized the important contributions of spouses to the mission accomplishment of the service, and established programs designed for family education and prevention services that are directly related to combat readiness. The concept is that self-sufficient families positively contribute to the military readiness of the service member. Accordingly, this study included the inaugural survey of Marine family members to determine their quality of life perceptions regarding various Marine Corps community service programs and other facets of military life, and find opportunities to improve combat readiness.

METHODOLOGY

The data for this study was collected via survey. The survey instrument used for active duty Marines was essentially the same one used in the prior studies, with minor

exceptions. The utility of using the same survey instrument was to make comparisons with previous survey results. Marine respondents evaluated their happiness, satisfaction, and expectations with 11 life domains. They also indicated satisfaction or happiness with their life as a whole or Global quality of life. The eleven domains in the 2002 Marine survey are shown in Figure ES-1.

| 2002 MARINE SURVEY LIFE DOMAINS | | | |
|---------------------------------|--------------------------------|-----|---|
| 1. | Residence | 7. | Relationships with Your Children |
| 2. | Neighborhood | 8. | Relationships with Other Relatives |
| 3. | Leisure and Recreation | 9. | Income/Standard of Living |
| 4. | Health | 10. | Military Job |
| 5. | Friends and Friendship | 11. | Yourself (perceptions of progress towards personal goals and development) |
| 6. | Marriage/Intimate Relationship | | |

Figure ES-1: Marine Survey Respondents Evaluated Their Happiness, Satisfaction, and Expectations With These Eleven Life Domains.

Family happiness, satisfaction, and expectations were measured in ten life domains, six of which were the same as measured for active duty Marines, four others were unique to the Family Member survey instrument. The Family Member survey instrument also included questions to measure Global quality of life. The ten family member life domains are identified in Figure ES-2.

| FAMILY MEMBER SURVEY LIFE DOMAINS | | | |
|-----------------------------------|--|-----|--|
| 1. | Residence | 6. | Separation |
| 2. | Relocation | 7. | Children Quality of Life |
| 3. | Leisure and Recreation | 8. | Pay and Benefits |
| 4. | Support Systems (satisfaction with MCCS programs and services) | 9. | Your Job/Professional Development |
| 5. | Health Care | 10. | Marine Corps Life and You (spouse retention desires) |

Figure ES-2: Six Of The Life Domains Measured In The Family Member Survey Instrument Were Also Measured In The Active Duty Survey; Four Domains Were Unique To This Survey.

The study team researched various theoretical approaches to quality of life to guide the development of the Family Member survey instrument and to make minor adjustments to the Active Duty survey. A discussion of these theories is presented to provide an understanding of how satisfaction is measured within the life domains.

Theoretical Approaches To Quality Of Life Research.

Spillover Theory. The Bottom-up Spillover Theory, established by quality of life researchers in the late 1970s and 1980s, was a theoretical approach that guided the development of the Marine Corps Quality of Life survey instrument. According to this theory, global life satisfaction is determined by global satisfaction with major life domains, such as satisfaction with Relationship with Your Children, Marriage, Personal Health, Residence, etc. Global satisfaction within a particular life domain (e.g.,

Residence) is determined by satisfaction with specific conditions/aspects making up that domain (e.g., appearance, safety, privacy, comfort). The effect related to those conditions/aspects spills over vertically to determine the various domain satisfactions, which in turn spill over vertically to the most super-ordinate domain (life as a whole or global), thus determining life satisfaction.

The strength of this approach is in the utility of the findings. Dissatisfaction within domains (e.g., Residence) can be identified and solutions can be created. This is of course quite important when the purpose of a study is to allocate funding to specific life domains. A limitation of this approach is that simply measuring satisfaction and happiness (subjective evaluations) and/or resources available (objective data) fails to take into account aspirations and comparison processes that address why and how dissatisfaction came about and future life satisfaction expectations.

Multiple Discrepancy Theory. In 1985, Alex C. Michalos put forth the Multiple Discrepancy Theory (MDT) framework, which has since been widely tested and is an accepted theory of individual satisfaction judgments (*Mallard, Lance, & Michalos, 1997*). It has been applied in diverse populations, including senior citizens (*Michalos, 1986*), government rehabilitation program clients (*Gauthier, 1987*), university staff members (*Michalos, 1980*) and most comprehensively in a global study of 18,032 college students from 39 countries (*Michalos, 1991*). It has been applied to investigate satisfaction with work, health, income, financial security, family relations, friendships, housing, area lived in, recreation, religion, transportation, government services, marriage, and education (*Michalos, 1991*). The Multiple Discrepancy Theory (*Michalos, 1985*) is a cognitive approach to evaluating quality of life which is based on the premise that satisfaction with life is a function of the seven perceived discrepancies between what one has and:

- ◆ what relevant others have;
- ◆ the best one has had in the past;
- ◆ what one expected to have three years ago;
- ◆ what one expects to have after five years;
- ◆ what one deserves;
- ◆ what one needs, and
- ◆ what one wants.

The general idea expressed by Multiple Discrepancy Theory is that people tend to try to maximize net satisfaction in life. Exactly which aspect of a person's situation will become the focus of their attention depends on the perceived relative expected net satisfaction attached to action directed to that aspect. For example if a person perceives greater expected net satisfaction connected to an action designed to alter objectively measurable conditions of one's life rather than to an action designed to alter one's own desires, one would tend to perform the former rather than the latter.

Thus, if it is likely to be more satisfying to earn more money relative to one's peers than to try to want fewer material goods, one would tend to pursue a course of action designed to earn more money. But if this prospect is hopeless or dissatisfying in some

way (e.g. they cannot find a job with the necessary medical benefits), then one would tend to focus on the more realistic course of action, such as trying to limit one's own desires (Michalos, 1985). Figure ES-3 illustrates the Multiple Discrepancy Theory framework.

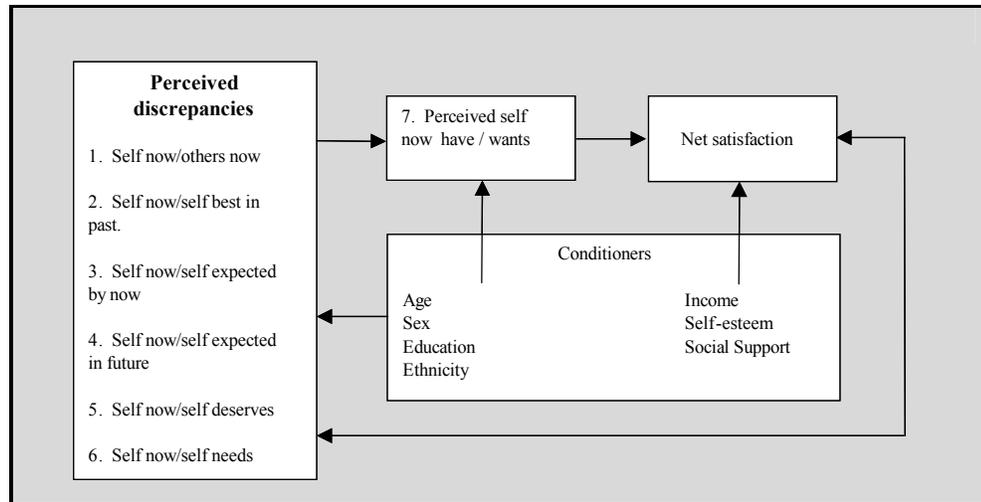


Figure ES-3: The Multiple Discrepancy Approach Is Designed To Illuminate The Psychological Processes Behind Judgments Of Satisfaction With Respect To Various Domains.

The multiple discrepancy approach is designed to illuminate the psychological processes behind judgments of satisfaction with respect to various domains. Satisfaction and happiness are not just a result of objective realities (e.g. the square footage of their house), but also are a result of how individuals think about their own and others wants, needs, status, etc (e.g., how big a civilian house is, what their house was like before their spouse joined the Marines, etc.).

Understanding the expectations at work, it can be determined whether or not the solution to the problem should involve modifying objective living conditions (e.g., provide better housing, more income, etc.) and/or managing expectations through education (e.g., programs that help Marine families and/or potential spouses to understand what to expect from life in the Marine Corps and to help them make internal adjustments).

The Multiple Discrepancy Theory approach was used to complement the spillover approach in both the Marine and the Family Member survey instruments. These approaches are frequently combined in quality of life research (Cohen, 2000, Lance, Mallard, & Michalos, 1995, Schulz, 1995). The inclusion of discrepancy questions allows for a more complete assessment of quality of life for Marines and Marine family members.

Issues in Assessing Quality of Life.

What are objective measures of quality of life?

Modern industrial societies have tended to equate standard of living with quality of life because increases in wealth allow people to buy greater well-being. For this reason indicators of the material aspects of life, such as income, expenditures, savings, and the production of goods and services tend to be relied on heavily when evaluating quality of life.

Objective indicators can often be gathered from official records; this method of collection does not require the involvement of the individual to whom the records relate.

Objective indicators can also be indicators that require a respondent to describe, without subjective evaluating, their living conditions. For example, when objectively evaluating residence one might ask a respondent about age of the house, number of rooms in the house, acreage of the yard, or number of people occupying the house (to compute person per room). While objective indicators are attractive because they are relatively easy to count, researchers agree they cannot be used as the ultimate criteria against which quality of life should be assessed (*Campbell, 1976; Cummins, 2000*). Over reliance on objective indicators would result in a limited picture of quality of life.

What are subjective measures of quality of life? In contrast to objective measures, subjective measures ask individuals to evaluate the circumstances of their lives. Subjective measures are thought to consist of affective, cognitive, and have/want components. The following subjective measures are typical of those used in quality of life studies, these include measures of:

- ◆ Happiness (affective component)
- ◆ Satisfaction (cognitive component)
- ◆ Expectations (have/want component)

Happiness And Satisfaction - Subjective well-being is often equated with avowed happiness, and can be defined as the degree to which an individual has an excess of positive over negative affect. Most frequently in the literature subjective well-being is merely measured with an evaluation of satisfaction (“how satisfied are you with your life as a whole?”). Happiness and satisfaction appear to be very similar constructs, but there are underlying differences. Happiness is an evaluation of one’s emotional experience, while satisfaction typically involves the comparison of one’s internal standards to the objective conditions of one’s life (*Michalos, 1980*).

Kerce (1995) pointed out that research indicates a given level of satisfaction can be associated with different affective states, meaning that happiness and satisfaction, while related, are separate dimensions of well-being that can vary independently. The 1993 Marine Quality of Life study results supported this research because the domains

respondents felt the most positive about were not necessarily those with which they were most satisfied (see Kerce, 1995, Table 79).

Expectations. As discussed above in the section on Multiple Discrepancy Theory, additional indicators of subjective well-being are the comparisons individuals make between internal standards and objective living conditions. *Michalos (1985, 1991)* proposes that these comparisons result in various discrepancies, which impact individuals' expectations. The most important discrepancy is between what one has and what one wants because the perceived gap between what one has and wants serves as a mediator or a go-between all other perceived gaps and net satisfaction.

Survey Administration

The 2002 survey was conducted in February and March 2002 and was designed to be anonymous. Neither names nor social security numbers were obtained from participants to encourage candid responses and to enhance the percentage of completed and returned survey instruments.

A representative sample of 4,803 active duty Marines assigned to bases and stations was randomly selected to participate in the survey. The family members selected to participate in the survey were also randomly selected and representative of those throughout the Marine Corps. The Independent Duty Marine population was defined by Headquarters, U.S. Marine Corps as those Marines in assignments without military community support. Without military community support, for purposes of this study, included those Marines who indicated on the survey they were not assigned to a base or station and were one hour away from the nearest military installation.

Surveys were administered on site to active duty Marines at 17 bases and stations. Surveys were mailed to 6,500 independent duty Marines and 8,000 family members. Figure ES-4 displays the representative survey sample size and response. At the end of the survey period, 4,698 active duty surveys were received from the on site administration group; 2,115 Independent Duty Marine surveys were received and processed, and 4,184 family member surveys were received and processed.

| REPRESENTATIVE SURVEY SAMPLE SIZE AND RESPONSE. | | | |
|--|--|---------------------------------------|----------------------------|
| Survey Population | Representative Survey Sample Population | Received and Processed Surveys | Response Percentage |
| *Active Duty Marines | 4,803 | 4,698 | 97.8% |
| Independent Duty Marines | 6,500 | 2,115 | 32.5% |
| Family Members | 8,000 | 4,184 | 52.3% |
| Note: *Surveys Administered On Site | | | |

Figure ES-4: A Total of 14,500 Quality Of Life Surveys Were Mailed And 4,698 Surveys Were Administered On Site At Bases And Stations.

To provide a comparison with the study results from the 1993 and 1998 studies, a balanced active duty Marine composite was formed using 2002 survey results from the base and station, independent duty, and production recruiter samples. Various analyses were performed on survey results. One analysis identified key drivers of domain and global quality of life satisfaction. The greatest opportunities for quality of life satisfaction will be realized by focusing improvement efforts on the key drivers, those aspects or attributes having the highest levels of combined influence on quality of life with the lowest satisfaction ratings. The significance of these drivers are discussed next in the Major Findings section.

MAJOR FINDINGS

Overall, the Marine Corps appears to be doing a good job of maintaining satisfaction levels within the ranges reported in the 1993 and 1998 QoL Reports in the important domains. The active duty Marine group is satisfied with 10 of 11 domains. Only in the Income and Standard of Living domain have they indicated being somewhat dissatisfied, as they were in the past two studies. Independent duty Marines without military community support are also satisfied in 10 of 11 domains; the only domain in which they are somewhat dissatisfied is the Leisure and Recreation domain. Spouses are satisfied in 9 of 10 domains and are somewhat dissatisfied with the Separation domain.

All groups are somewhat satisfied with their lives as a whole. The organizational commitment results are impressive: the active duty Marine scores tend to equal those of 1998, which exceeded those of 1993. Independent duty Marines' organizational commitment scored even higher. There is a direct relationship between satisfaction with Military Job and Personal Readiness for active duty and independent duty Marines. For active duty Marines, Personal Readiness has a direct influence on Retention. For independent duty Marines, the personality trait of Optimism influences both Personal Readiness and Retention. Both spouse and children's quality of life influence Marine Retention. The study's individual findings are listed below.

1. When examined as a whole, the top three drivers of Global QoL for active duty Marines are Self, Military Job, and Income, the same three found by *Kerce (1995)*. The satisfaction with Self alone accounts for almost 50% of the variance in the Global QoL assessment; it is the most highly satisfied domain, and has the highest expectancy value. The best targets for improvement of Global QoL satisfaction for this group of Marines come from the Military Job, Income, and Leisure and Recreation domains.
2. 2002 Organizational Commitment results tend to equal those of 1998, which exceeded those of 1993. It was noted in both prior studies that higher Global QoL scores are associated with high scores in Optimism and Organizational Commitment. For 2002, the same correlation was found; in addition, an association between self-esteem and Global QoL was determined. It is becoming clear that optimistic, committed Marines with high self-esteem also have a higher Global QoL.

3. The Job domain had a causal influence on Personal Readiness as redefined in this study to include only the indicators, provided in the 1993 study, which would most plausibly be impacted by Global QoL. The three dominant Job aspects which influenced Personal Readiness were Commitment to the Marine Corps, Frequency of Job Related Problems, and Perceived Adequacy of Training. As noted above, measures of Organizational Commitment are as high as they have been in almost ten years.
4. In five of six group structural equation models, there was a causal influence of Personal Readiness on Retention that imparted a substantial reduction in variance in Retention left unexplained in the 1993 and 1998 studies. Global QoL influences Retention both directly and through Personal Readiness. The influence of unknown factors has diminished in this 2002 QoL study, and the military outcomes are better explained as a result.
5. There has been a statistically significant decline in satisfaction with Leisure and Recreation for the E-2/E-3 pay grades. Perceptions of Marines in pay grades E-2/E-3 dropped to the somewhat dissatisfied range in 2002 from the neutral range in 1993 and 1998 in this domain. This finding coincides with the study determination that the number of hours Marines reported having worked has increased from that reported in the previous two studies, and the number of days worked increased since 1998. It is possible these increases are a result of the military response to the current world situation. Junior Marines, not completely assimilated into the military lifestyle, may not fully appreciate the sacrifices required in these situations.
6. Income and Standard of Living was the only domain in which the overall measurement fell into the somewhat dissatisfied range for Marines in the active duty composite group. The results of this domain, one of the key drivers of Global QoL, reflected neutral to somewhat satisfied perceptions from the E-6 pay grade and higher. The E-2/E-3 and E-4/E-5 pay grades reported neutral to somewhat dissatisfied results, the same as in the past two studies.
7. The Active Duty Marine composite Global QoL assessment, normalized to a seven-point scale from 1 (a completely negative response) to 7 (a completely positive response) was 4.49 in 1993, 4.62 in 1998, and 4.54 for 2002. Except for the E-2/E-3 and E-4/E-5 pay grades, measured active duty Marine Global QoL is in the somewhat satisfied range for the first time. The E-2/E-3 and E-4/E-5 pay grades remained in the neutral to somewhat satisfied range as in the past studies.
8. There are greater differences between Marine officers and enlisted Marines than simply the quantitative difference in the effect coefficients found in the structural equation models of the 1998 study. The Global QoL of Marine officers assigned to bases and stations is qualitatively different from those of enlisted Marines as there is no compelling influence of the Income domain. Personal relationships seem to be replacing the Income domain influence for these Marines.

9. When examined as a whole, the Marriage/Intimate Relationship domain has no compelling effect on the Global QoL of Marines. The 1993 study found the Marriage/Intimate Relationship domain to affect the Global QoL of all married Marines, but not that of single Marines. The 1998 study found that domain to affect the Global QoL of only married Marines without children. The 2002 study found the domain not to have a compelling effect on the Global QoL of any previously identified subgroup of Marines.
10. Independent duty Marines without military community support are somewhat satisfied with respect to life as a whole. The Independent Duty Marines without military community support Global QoL score was higher than that of base and station Marines. (4.85 versus 4.73).
11. The top two drivers of Global QoL for Independent Duty Marines without military community support, Self and Military Job, are the same found by *Kerce (1995)*. The best target for improvement of the Global QoL of this group of Marines is the domain Leisure and Recreation.
12. The overall satisfaction with Leisure and Recreation for independent duty Marines without military community support was in the somewhat dissatisfied range, a much lower score than their Base and Station counterparts. This was the only domain of eleven in which, overall, Independent Duty Marines without military community support results measured in the somewhat dissatisfied range.
13. There is a dramatic difference in the Organizational Commitment of independent duty Marines without military community support and that of base and station Marines. The average difference measured in Organizational Commitment for the various aspects is three-quarters of a point higher for Independent Duty Marines without military community support.
14. Given the scope of the initial Family Member survey, the best opportunities for improvement of spouse Global QoL, when all spouses are considered as a whole, appear to be satisfaction with Separation, Pay and Benefits of the Marine, and the spouse Job/Professional Development.
15. The impact of children's QoL on spouse Global QoL is substantial for those whose children reside with them. Children's QoL is the single largest influence of spouse QoL. Spouses with school aged children reported satisfaction levels in the somewhat satisfied range. These positive scores reflect spouses are pleased with the military environment for raising children.
16. Children's QoL has an independent influence on the families' desires to remain part of the Marine Corps, which is similar in strength to the influence of spouse QoL. This finding reinforces the adage that, while the Marine Corps recruits Marines, it retains families. It also emphasizes the importance of addressing quality of life issues for married Marines in terms of the family unit. Spouses are, in general satisfied with their children's QoL, and this is a positive influence on retention of the Marine.

17. Separation was the only domain in which spouses' satisfaction overall measured in the somewhat dissatisfied range. Separation has a direct impact on the families' desire to remain with the Marine Corps and on family QoL. It is clear that the ability of a family to adapt to being separated from the Marine is an important ingredient in the satisfaction and happiness of a Marine spouse and family as well as the retention of the Marine.
18. Marine pay and benefits are more of a concern to families of enlisted Marines than those of Marine officers. Overall family satisfaction with their financial situation depends on the percentage of income provided by the Marines' pay. The least satisfied spouses were those who depended completely on the Marine Corps for the family income. The most satisfied were families deriving at least 25% of their income from sources other than the Marines' pay.
19. Spouse jobs and professional development are very important in Marine families without children. For Marine officer spouses without children, the Job/Professional Development domain was the most influential to their overall quality of life. To a lesser extent, this domain also influences Global QoL for enlisted Marine spouses without children.
20. Relocation has the most impact on Marine officer families without children. This finding is related to the previous one (Finding 20). It is likely that frequent relocation hinders the Job/Professional Development opportunities for the spouses of Marine officers, and subsequently negatively impacts their satisfaction with this aspect of their military lives.
21. Leisure and Recreation have an almost equivalent impact on quality of life for all families. Because Leisure and Recreation activities are highly tangible, this is one domain in which the Marine Corps could have a direct and equivalent impact on family quality of life regardless of grade or parental status.

RECOMMENDATIONS

1. That maintenance of BEQs/BOQs be improved.

Although Residence is not a key driver of Global QoL in this study, satisfaction with BEQs/BOQs remains in the somewhat dissatisfied range, as it was in prior studies. The aspects of Attractiveness and Condition most strongly influenced satisfaction perceptions. Funding for Barracks Maintenance and Repair has remained relatively flat over the last several years, and that trend is projected to continue for FY 2003. An increase of funding would address both of these aspects. It is noted that funding in FY 2002 for Personnel Support Equipment (Barracks Furniture/Fixtures) increased approximately 23% over FY 2000, and is projected to increase again in FY 2003. These funding increases should help improve both the attractiveness and condition of the BEQs/BOQs. Another opportunity for improvement within this area that should be explored is the management of expectations versus reality regarding bachelor housing.

2. That improvement to leisure and recreation facilities and activities continue, as well as the opportunity to use them.

The Leisure and Recreation domain is a key driver of Global QoL for all Marines and their spouses. The domain aspects of Facilities Provided and Variety of Activities Available were identified as opportunities for improvement of satisfaction for these groups. For Marines on independent duty without military community support, it was the Amount of Time for leisure and recreation that caused them to be dissatisfied. Funding for Morale, Welfare, and Recreation Activities increased approximately 10% in FY 2002 from that expended in FY 2000, and is projected to increase another 7% in FY 2003.

3. That efforts continue to improve satisfaction with Marines' military jobs.

Military job is another key driver with great influence on Global QoL for active duty Marines. Marines in the pay grades E-6 and higher are somewhat satisfied to satisfied with their military jobs. Junior Marines were in the neutral range of satisfaction. Marines are working more hours and longer weeks than they have in past studies, but this may be due to military necessity. Continued emphasis on individual Marine personal growth and development, respect and fair treatment through established programs, and positive leadership aspects are recommended.

4. That the Family Member Employment Assistance Program (FMEAP) be invigorated.

The Family Member Employment Assistance Program has the lowest spouse satisfaction level of all the aspects in the Support Services domain. This program impacts all four key drivers of spouse Global QoL:

- 1) Separation is the most important driver of Global QoL for Marine spouses without children. If these spouses were able to find jobs providing a sense of self-fulfillment, separation hardships might be eased.
- 2) For spouses without children, Jobs and Professional Development are also very important. A base/station agency that provided placement services for these spouses, and seminars and workshops to contribute to their professional development would be appropriate.
- 3) Family satisfaction with Income and Standard of Living is based on the percentage that comes from sources other than the Marines' pay. Employment opportunities for family members should enhance perceptions of their financial situation.
- 4) Relocation has the most impact on the Global QoL of spouses of Marine officers without children. Assistance in finding a meaningful job at the next duty location could be effective in improving this population's satisfaction with relocation.

There is tremendous potential for improvement of spouse Global QoL with an enhanced Family Member Employment Assistance Program. It is noted the Marine Corps launched a family member employment pilot program which should address the dissatisfaction identified in this study.

5. That greater emphasis be placed on the Sponsorship Program.

Relocation is a key driver of spouse Global QoL. Study results project over half of Marine spouses are unfamiliar with the Sponsorship program which is designed to provide assistance to their families in conjunction with a permanent change of station relocation. The spouses least satisfied with Relocation are those who requested sponsors and were not provided one. Increased emphasis on this program from commanders, the Key Volunteer Network (KVN), and the Lifestyle Insights, Networking, Knowledge, and Skills (L.I.N.K.S.) Program should positively impact spouse satisfaction with relocation, especially for those married to junior Marines.

6. That improvements be made in the Key Volunteer Network (KVN).

The Key Volunteer Network was identified as an opportunity for improvement in the Support Service domain. Separation is a key driver for spouse and children's quality of life, and the families' desire to remain with the Marine Corps. Departure Predictability, Amount of Contact, and Deployment Support were aspects of the domain that had the lowest satisfaction measurements and provide some opportunities for improvement. Although the Key Volunteer Network doesn't control departure dates, it could, in coordination with the Lifestyle Insights, Networking, Knowledge, and Skills Program, become more involved in the education of spouses, particularly those of junior Marines, regarding the uncertainty of departure dates and thereby assist in the management of expectations regarding those dates. These programs can provide the most current information to spouses regarding departures through direct liaison with unit family readiness officers. The uncertainty of Departure Predictability is, unfortunately, a reality of military life. Additional methods of reducing this uncertainty can be explored. MCO P1700.27A provides for both pre-deployment and deployment support such as prevention services to families through the Family Team Building Program and the Key Volunteer Network. Opportunities should be sought to improve the perceptions of support during deployments, and increase the amount of contact a family has with their deployed Marine.

7. That current levels of childcare services be maintained or increased.

Overall, Marine spouses are somewhat satisfied with childcare services. Childcare is the dominant driver of children's quality of life. Children's quality of life has an independent influence on the families' desires to remain with the Marine Corps. In addition, children's quality of life is the single largest influence on spouse quality of life, which in turn impacts on the military outcome of Retention.

CHAPTER 1

BACKGROUND

The first Marine Corps Quality of Life (QoL) assessment began in 1993 with the landmark study conducted by Dr. Elyse W. Kerce at the Navy Personnel Research and Development Center (NPRDC). The study was founded on a survey which measured the subjective quality of life perceptions and satisfaction of active duty Marines in 11 life domains as well as Global quality of life. Global measurements involved the assessment of quality of life as a whole. Objective measures were also incorporated into the survey. The survey was administered on site to Marines at major installations, and mailed to selected participants at smaller bases and stations. The information obtained from the survey was then combined with additional objective information obtained from existing Marine Corps databases. This data was then analyzed in a number of areas including happiness and satisfaction in each of the life domains, Global quality of life, the effects of quality of life on military outcomes such as Performance and Retention, and the development of structural equation models to determine the relationship of the life domains with Global quality of life/military outcomes.

The resulting report, *Kerce (1995)*, yielded ten major findings, the most significant of which was the conclusion that perceived quality of life has real behavioral consequences and is essential to organizational effectiveness. The 1993 QoL study determined that unmarried Marines were seriously dissatisfied with bachelor quarters, and recommended that funding be made available to improve the attractiveness, comfort, and privacy of those quarters. Additionally, the 1993 study recommended that the Marine Corps conduct a comprehensive social inventory at regular intervals to capture any changes in demographics, and to examine the results of program interventions. The study suggested that three-year intervals would be appropriate for these quality of life assessments. The conclusions and recommendations of the 1993 study report provided the Marine Corps with an empirical basis for the strategic planning of its quality of life programs.

Drs. Michael A. White, Herbert G. Baker, and Donna G. Wolosin from the NPRDC conducted a second study in 1998. This study, *Quality of Life in the Marine Corps: A Comparison Between 1993 and 1998*, was commissioned using the same survey methodology as the 1993 study. *White, Baker and Wolosin (1999)* used subjective and objective indicators obtained from the 1998 survey only. No separate objective data were used based on the difficulty of collection and problems with the utility of the information obtained as pointed out by the 1993 study. To provide an accurate comparison with the results of the 1993 study, the 1998 survey instrument was very similar to the original survey, incorporating only minor changes recommended by Dr. Kerce. The previous surveys were administered primarily on site at the largest bases and stations. Marines at the small installations or on independent duty were surveyed by mail.

The 1998 study team was tasked to conduct the same analysis as was used in the 1993 study with the additional requirement of analyzing trends in quality of life since the 1993

survey. The resulting study, published in 1999, focused on two areas: a simple trend analysis of the 1993 and 1998 data and re-validation of Dr. Kerce's structural equation models. The 1998 study validated the conceptual framework established by Dr. Kerce, and confirmed that study's finding that perceptions of quality of life have behavioral consequences which impact on the Marine Corps' ability to perform its mission. The 1998 study concluded that investments in quality of life made by the Department of Defense and Marine Corps were successful because of an increase in satisfaction from the 1993 study. The Global QoL measure increased three percent, while the Military Job, Leisure and Recreation domain measures increased four percent. This rise in satisfaction was attributed to Marine Corps investments of over \$200 million to improve bachelor housing, voluntary education, and other quality of life programs following the release of the 1993 study report (Kerce, 1995).

The 1998 study structural equation model identified that, for unmarried Marines, the domains of Self, Military Job, and Residence had the strongest effect on Global quality of life, the same result as the 1993 study. For married Marines without children, Military Job, Income, and Marriage were the strongest influences on Global quality of life, also the same result as 1993. The domains of Self, Income, and Military Job were the strongest influences on the Global quality of life of married Marines with children in 1998, as they had been in 1993 as well. However, the 1998 study also identified trends within several of the life domains that required monitoring. In particular, the 1998 study pointed out that unmarried Marines were still seriously dissatisfied with residences in bachelor quarters, and recommended that funding to improve their privacy, space, and attractiveness be accelerated and increased.

As part of the 1998 study effort, a census survey was conducted for a critical Marine Corps sub-population, Production Recruiters. The resultant report, *Quality of Life in the Marine Corps Recruiting Command: A 1998 Comparison of Marine Corps Recruiters with their Garrison Counterparts*, (White, 1999), highlighted the distinct differences in quality of life perceptions and satisfaction of this sub-population in comparison with other active duty Marines.

What is Quality of Life?

Formal definitions of quality of life may be found in social science literature. There have been many studies and papers published in recent years which attempt to provide a comprehensive definition of quality of life. One such definition is that quality of life is a sense of well being. The 1993 study used that conceptual definition of quality of life, quoting Dalke and Rourke (1971) "...a person's sense of well being, his satisfaction or dissatisfaction with life, or his happiness or unhappiness." The 1993 study also quoted Rice (1984) "...the degree to which the experience of an individual's life satisfies that individual's wants and needs (both physical and psychological)." The 2002 study team used these conceptual definitions to guide the measurement of the quality of life construct. They imply that to accurately measure quality of life, satisfaction, happiness, the extent to which a person's physical and psychological needs are met, and how this compares to expectations need to be addressed.

Theoretical Approaches to Quality of Life Research

Spillover Theory. The Bottom-up Spillover Theory, established by quality of life researchers in the late 1970s and 1980s, was a theoretical approach that guided the development of the Marine Corps Quality of Life survey instrument. According to this theory, global life satisfaction is determined by global satisfaction with major life domains, such as satisfaction with Relationship with Your Children, Marriage, Personal Health, Residence, etc. Global satisfaction within a particular life domain (e.g., Residence) is determined by satisfaction with specific conditions/aspects making up that domain (e.g., appearance, safety, privacy, comfort). The effect related to those conditions/aspects spills over vertically to determine the various domain satisfactions, which in turn spill over vertically to the most super-ordinate domain (life as a whole or global), thus determining life satisfaction.

The strength of this approach is in the utility of the findings. Dissatisfaction within domains (e.g., Residence) can be identified and solutions can be created. This is of course quite important when the purpose of a study is to allocate funding to specific life domains. A limitation of this approach is that simply measuring satisfaction and happiness (subjective evaluations) and/or resources available (objective data) fails to take into account aspirations and comparison processes that address why and how dissatisfaction came about and future life satisfaction expectations.

Multiple Discrepancy Theory. In 1985, Alex C. Michalos put forth the Multiple Discrepancy Theory (MDT) framework, which has since been widely tested and is an accepted theory of individual satisfaction judgments (*Mallard, Lance, & Michalos, 1997*). It has been applied in diverse populations, including senior citizens (*Michalos, 1986*), government rehabilitation program clients (*Gauthier, 1987*), university staff members (*Michalos, 1980*) and most comprehensively in a global study of 18,032 college students from 39 countries (*Michalos, 1991*). It has been applied to investigate satisfaction with work, health, income, financial security, family relations, friendships, housing, area lived in, recreation, religion, transportation, government services, marriage, and education (*Michalos, 1991*). The Multiple Discrepancy Theory (*Michalos, 1985*) is a cognitive approach to evaluating quality of life which is based on the premise that satisfaction with life is a function of the seven perceived discrepancies between what one has and:

- ◆ what relevant others have;
- ◆ the best one has had in the past;
- ◆ what one expected to have three years ago;
- ◆ what one expects to have after five years;
- ◆ what one deserves;
- ◆ what one needs, and
- ◆ what one wants.

In addition, the Multiple Discrepancy Theory proposes: (a) perceived discrepancies as ultimately arising from objective discrepancies in an individual's life (e.g., different income levels), (b) the have-want discrepancy to be the most immediate determinant of

net satisfaction, (c) discrepancies, satisfaction and action are directly and indirectly affected by conditioners, such as age, sex, education, ethnicity, income, self-esteem and social support, and (d) the desire for satisfaction motivates people to act.

The general idea expressed by Multiple Discrepancy Theory is that people tend to try to maximize net satisfaction in life. Exactly which aspect of a person’s situation will become the focus of their attention depends on the perceived relative expected net satisfaction attached to action directed to that aspect. For example if a person perceives greater expected net satisfaction connected to an action designed to alter objectively measurable conditions of one’s life rather than to an action designed to alter one’s own desires, one would tend to perform the former rather than the latter.

Thus, if it is likely to be more satisfying to earn more money relative to one’s peers than to try to want fewer material goods, one would tend to pursue a course of action designed to earn more money. But if this prospect is hopeless or dissatisfying in some way (e.g. they cannot find a job with the necessary medical benefits), then one would tend to focus on the more realistic course of action, such as trying to limit one’s own desires (Michalos, 1985). Figure 1-1 illustrates the Multiple Discrepancy Theory framework.

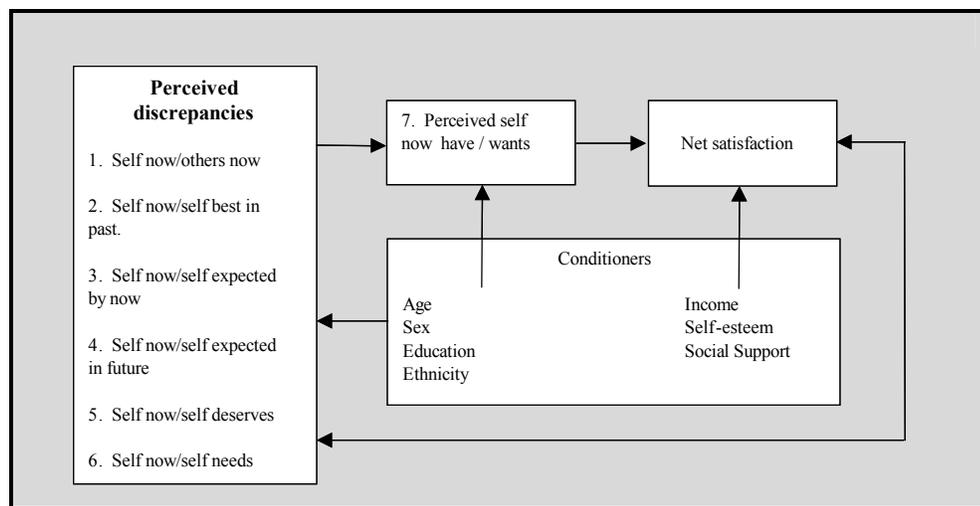


Figure 1-1: The Multiple Discrepancy Approach Is Designed To Illuminate The Psychological Processes Behind Judgments Of Satisfaction With Respect To Various Domains.

The multiple discrepancy approach is designed to illuminate the psychological processes behind judgments of satisfaction with respect to various domains. Satisfaction and happiness are not just a result of objective realities (e.g. the square footage of their house), but also are a result of how individuals think about their own and others wants, needs, status, etc (e.g., how big a civilian house is, what their house was like before their spouse joined the Marines, etc.,).

Understanding the expectations at work, it can be determined whether or not the solution to the problem should involve modifying objective living conditions (e.g., provide better housing, more income, etc.) and/or managing expectations through

education (e.g., programs that help Marine families and/or potential spouses to understand what to expect from life in the Marine Corps and to help them make internal adjustments).

If one were to measure quality of life only using the Multiple Discrepancy Theory framework the results would be limited. When using Multiple Discrepancy Theory respondents are not asked about specific criteria (e.g., privacy, appearance, and space) related to particular domains (residence), therefore the data collected does not allow for specific recommendations about objective improvements.

The Multiple Discrepancy Theory approach was used to complement the spillover approach in both the Marine and the Family Member survey instruments. These approaches are frequently combined in quality of life research (*Cohen, 2000, Lance, Mallard, & Michalos, 1995, Schulz, 1995*). The inclusion of discrepancy questions allows for a more complete assessment of quality of life for Marines and Marine family members.

This addition is also useful for the structural equation modeling analysis. Human psychological processes are complex and involve a variety of interdependent and independent variables. Essentially, the structural equation model allows us to examine multiple relationships among multiple variables simultaneously in order to build a model of influence of Marine and family quality of life. With the addition of the Multiple Discrepancy Theory items, there will be three indicators of domain level quality of life (i.e., satisfaction, happiness, have-want discrepancy).

Issues in Assessing Quality of Life.

What are objective measures of quality of life?

Modern industrial societies have tended to equate standard of living with quality of life because increases in wealth allow people to buy greater well-being. For this reason indicators of the material aspects of life, such as income, expenditures, savings, and the production of goods and services tend to be relied on heavily when evaluating quality of life.

Objective indicators can often be gathered from official records; this method of collection does not require the involvement of the individual to whom the records relate.

Objective indicators can also be indicators that require a respondent to describe, without subjective evaluating, their living conditions. For example, when objectively evaluating residence one might ask a respondent about age of the house, number of rooms in the house, acreage of the yard, or number of people occupying the house (to compute person per room). While objective indicators are attractive because they are relatively easy to count, researchers agree they cannot be used as the ultimate criteria against which quality of life should be assessed (*Campbell, 1976; Cummins, 2000*). Over reliance on objective indicators would result in a limited picture of quality of life.

What are subjective measures of quality of life?

In contrast to objective measures, subjective measures ask individuals to evaluate the circumstances of their lives. Subjective measures are thought to consist of affective, cognitive, and have/want components. The following subjective measures are typical of those used in quality of life studies, these include measures of:

- ◆ Happiness (affective component)
- ◆ Satisfaction (cognitive component)
- ◆ Expectations (have/want component)

Happiness And Satisfaction - Subjective well-being is often equated with avowed happiness, and can be defined as the degree to which an individual has an excess of positive over negative affect. Most frequently in the literature subjective well-being is merely measured with an evaluation of satisfaction (“how satisfied are you with your life as a whole?”). Happiness and satisfaction appear to be very similar constructs, but there are underlying differences. Happiness is an evaluation of one’s emotional experience, while satisfaction typically involves the comparison of one’s internal standards to the objective conditions of one’s life (*Michalos, 1980*).

Kerce (1995) pointed out that research indicates a given level of satisfaction can be associated with different affective states, meaning that happiness and satisfaction, while related, are separate dimensions of well-being that can vary independently. The 1993 Marine Quality of Life study results supported this research because the domains respondents felt the most positive about were not necessarily those with which they were most satisfied (see *Kerce, 1995*, Table 79).

| Subgroup | Interpretation | Short name |
|----------------------|-----------------------------|------------|
| Satisfied-Happy | Satisfaction of achievement | Achievers |
| Satisfied-Unhappy | Satisfaction of resignation | Resigned |
| Dissatisfied-Happy | Satisfaction of aspiration | Aspirers |
| Dissatisfied-Unhappy | Satisfaction of frustration | Frustrated |

Figure 1-2: A Level Of Satisfaction or Dissatisfaction Can Be Associated With Different Affective States.

A classification scheme based on distinguishing types of satisfaction on the basis of the value of its affective component would result in the following groups described in Figure 1-2.

Each may be equally satisfied in the sense of fulfilled needs, but the affective content associated with success and resignation may well differ. Similarly, the affective content of disappointment and frustration would accompany any failure to achieve one’s expectations (resulting in dissatisfaction).

Expectations. As discussed above in the section on Multiple Discrepancy Theory, additional indicators of subjective well-being are the comparisons individuals make between internal standards and objective living conditions. *Michalos (1985, 1991)* proposes that these comparisons result in various discrepancies, which impact

individuals' expectations. The most important discrepancy is between what one has and what one wants because the perceived gap between what one has and wants serves as a mediator or a go-between all other perceived gaps and net satisfaction.

In its full application, Multiple Discrepancy Theory measures seven discrepancies and relates them to happiness and satisfaction measures at the domain and global level. Four of the discrepancies have been deemed most useful in the bulk of the research using Multiple Discrepancy Theory (Michalos, 1985, 1986, 1991). These are 1) the have-want discrepancy, 2) the have- previous best discrepancy, 3) the have- deserve discrepancy, 4) the have- other (in our case "other" is a civilian peer).

Directionality Of Domain And Global Quality Of Life Relationships.

In both of the previous Marine Corps Quality of Life studies, the models of influence showed the relationship between domain and Global quality of life to be *bottom-up*. Global quality of life is the result of some subjective weighting of satisfactions (and happiness) derived from various life domains.

Much of the social indicators research investigating the predictability of overall life quality on the basis of judged quality of specific life domains has been conducted within a bottom-up framework. The rationale is that changes in overall subjective well-being can be brought about by addressing concerns associated with specific life domains (Lance, Mallard, & Michalos, 1995). Figure 1-3 displays the bottom-up approach.

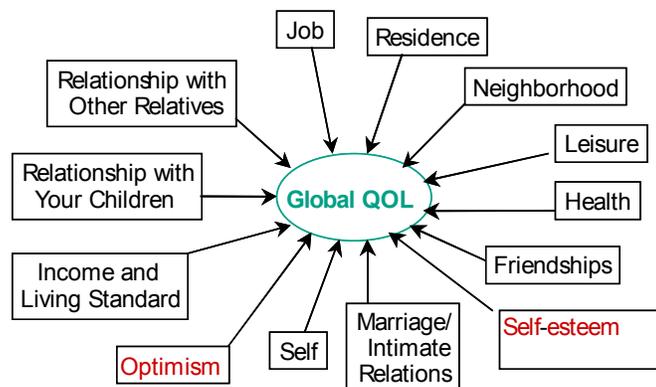


Figure 1-3: Bottom-Up Model Of Influence Of Domain Satisfaction On Global Quality Of Life With Self-Esteem And Optimism Conditioners.

However, there exist competing views of domain and overall life satisfaction relationships that were taken into account in the 2002 study. The top-down model is one alternative. According to this model, overall life quality exerts influence on satisfaction in various life domains. Figure 1-4 displays this model. This model is based on assuming that people's dispositions (stable individual differences) exert an inordinate amount of influence on how they evaluate objective life conditions.

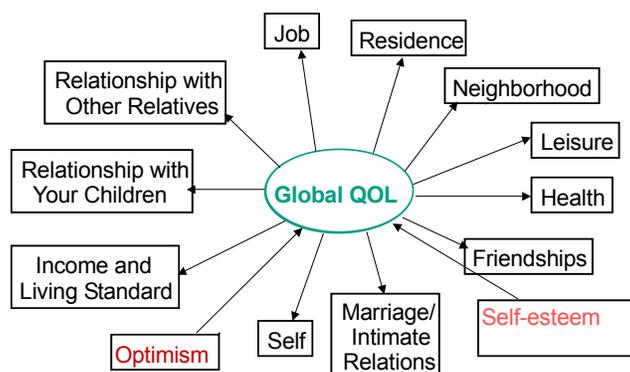


Figure 1-4: Top-Down Model Of Influence Of Conditions Optimism And Self-Esteem On Global Quality Of Life Leading To Domain Satisfaction.

Some individuals are predisposed towards being satisfied or unsatisfied with their lives in general and this has an impact on how they evaluate specific aspects of their lives. The rationale for this is derived from research on dispositional determinants of attitudes, including genetic factors, and personality traits, such as extroversion. Supporting anecdotal evidence includes reports that that people in dramatically different living conditions report similar levels of happiness and satisfaction (Mallard, Lance, & Michalos, 1997).

Finally some researchers propose that the relationship between domain satisfaction and overall life quality is in fact *reciprocal or bi-directional*. Proponents of this model suggest that overall life quality may be both derived from some weighted combination of satisfaction in several life domains and also causes satisfaction with specific life domains (Lance, Lautenschlager, Sloan, & Varca, 1989). Figure 1-5 demonstrates this model.

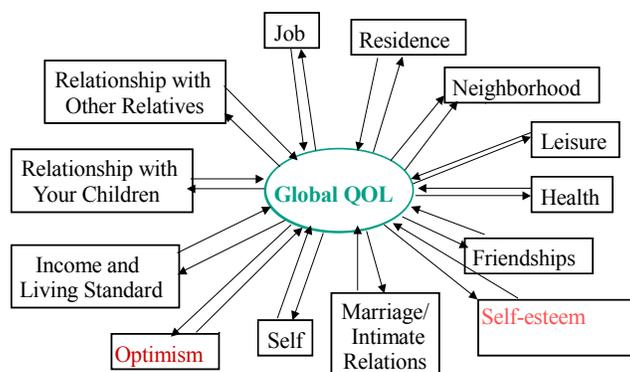


Figure 1-5: Bi-Directional Model Of Influence Of Global Quality Of Life, Domain Quality Of Life And Conditioners Of Self-Esteem And Optimism.

Four studies, (Heady, Veehoven, & Wearing, 1991; Lance, Lautenschlager, Sloan, & Varca, 1989; Mallard, Lance, & Michalos, 1997; Sloan, 1990) compare the fit of the bottom-up, top-down, and bi-directional models.

The findings of all of these studies suggest that the bi-directional model provided the best fit to the data. In fact, the cumulative research shows that when all three models are compared, the bottom-up model shows the least support (*Mallard, Lance, & Michalos, 1997*). These findings run counter to a majority of life satisfaction research whose theoretical assumptions are rooted in the bottom-up perspective.

Studies such as *Headley, Veenhoven, & Wearing (1991)* also show that the direction of relationships varies by domain (e.g., in their study the relationship between the marriage domain and the overall life satisfaction domain was bi-directional, while for the Leisure and Recreation domain the direction was top-down).

What does this mean for the Marine Corps 2002 study?

Past studies of Marine Corps Quality of Life have supported a bottom-up model of the relationship between domain and overall quality of life. In the case of the first Quality of Life study, attempts were made in the structural equation model to allow relationships to be top-down. It was determined that the bottom-up model had the best fit (*Kerce, personal communication, 2001*). In the case of the second administration, it is not known whether alternative direction models were considered.

Allowing for bi-directional relationships in the 2002 study enabled the study team to more accurately identify domains for improvement. The study team goal was to identify domains which have a direct and significant impact on Global quality of life, re-enlistment intentions, personal readiness, and job performance.

The possibility that the direction of the relationship between domain and Global quality of life is top-down or bi-directional also necessitated the inclusion of measures of personality disposition in both the 2002 Marine and Family surveys. The role of key individual differences in the relationship between domain satisfaction and overall life satisfaction could therefore be assessed.

How To Measure Family Quality Of Life.

The 2002 study of Marine QoL is a dual effort to gain input from both Marines and their families (through asking spouses about themselves and their children) about their quality of life. Two separate survey instruments were used. *Kerce (1995)* and *White, Baker and Wolosin (1999)* evaluated Marine quality of life by assessing satisfaction and happiness in 11 life domains and life as a whole. Those same 11 domains were used in the 2002 Marine survey instrument. However, the Marine Family Member QoL survey instrument was new.

Family Quality of Life assessments conducted by the U.S. Army and the U.S. Navy were instructive in designing the 2002 Marine Corps Family Quality of Life survey instrument. In the most recent study of Army family quality of life, the following areas were assessed (*Peterson, personal communication, 2001a*):

- ◆ Housing and neighborhood,
- ◆ Family Relocation,
- ◆ Family Separations,
- ◆ Chaplains,
- ◆ Deployment/Family readiness,
- ◆ Background,
- ◆ Paid Work,
- ◆ Volunteer Work,
- ◆ Spouse Background,
- ◆ Healthcare,
- ◆ Family Team Building,
- ◆ Morale, Welfare, and Recreation (MWR) programs,
- ◆ Other MWR programs and installation services,
- ◆ Pregnancy, recent birth,
- ◆ Children, and
- ◆ The Army Way of Life (evaluates how spouses handle the challenges of military life).

Unlike the Marine Corps Quality of Life study, these areas are not grouped into a domain framework designed for a structural equation model. Therefore, the data merely provides information that allows for a profile of Army families. The work of the Army did however help to orient the study team as to the issues that concern military family members.

The study team consulted scholarly studies to study the factors determining family quality of life (*Blake, & Darling, 2000; McGregor, & Goldsmith, 1998; Rettig, & Leichtentritt, 1998; Rettig, & Bubolz, 1982*). Studies that specifically focus on family quality of life are most prevalent in recent years. In the past, family quality of life has been typically measured with a few items that ask about satisfaction with primary relationships of partner and children (*Rettig, & Leichtentritt, 1998*).

A few scholars have suggested more sophisticated ways of measuring family quality of life. *McGregor & Goldsmith (1998)* proposed that family quality of life is made up of standard of living, economic well-being, physical well-being and emotional well-being, environmental well-being, political well-being and spiritual well-being. While, family strength is reported by *Olson (1983)* to be based on five factors: love, respect, religion, communication, and individuality.

Olson and Barnes (1987) have created a Quality of Life scale for use by family and marriage therapists that asks about satisfaction with marriage/family life, friends, extended family, health, home, education, time, religion, mass media, financial well-being, neighborhood, community and employment. Items that are identical or similar to many of those on this scale are already part of the Marine survey instrument with the exception of religion.

An alternative approach to measuring family well-being is offered by *Rettig and Bubolz (1982)* and *Rettig and Leichtentritt, (1998)*. They believe that family quality of

life can be understood by evaluating how the following resources: love, status, services, information, goods, money are distributed in the family to meet personal needs, including: love and affection, respect and esteem, comfort and assistance, communication with shared meaning, ownership of personal things, and money for personal use. One important finding of resource theory when applied to family quality of life is that men and women perceive the importance of resources differently, especially in regard to goods, services, information, and status and therefore have different priorities for their family life (*Rettig, & Leichtentritt, 1998*).

Blake and Darling (2000) also used resource theory to guide their study of African American families. They found that families gave each other support through the resources of love, status, services, goods, information, and money. As the level of perceived resources exchanged increased, so did quality of life.

According to resource theory, it appears that when one's needs for love, status, information, etc. are met, one's quality of life rises. However, the appropriateness of the environment for resource exchange affects the probability that it will occur. Shared time and motivation are conditions necessary for the transfer of most resources. In settings in which personal happiness, achievement and self-fulfillment are highly prized, serious strains are put on relationships as each member is pursuing individually oriented goals. Settings, which encourage team-work and family happiness and involve the sacrifice of personal goals for the sake of the family, are more conducive to resource exchange and healthy family relationships (*Rettig & Bubolz, 1982*).

While the structure of the resource theory family quality of life scale was inappropriate for the current study, the aspects that it identified were useful guides to the development of the family survey instrument: each of the aspects deemed important to family quality of life are covered within the domains that make up the Family Member survey instrument. Spouses were asked to evaluate their satisfaction, happiness and expectations within these specific domains of life and life as a whole. A comprehensive review of Marine family quality of life resulted.

Discussion of Problem

The challenge of efficiently and effectively focusing quality of life program efforts and funding lies with the ongoing requirement to balance the satisfaction of needs as perceived by Marines and their families with the reality of continually changing expectations and constrained resources. This 2002 QoL study and the attendant analyses provide a basis for decisions in this regard.

Literature Search

The 2002 QoL study began with a comprehensive literature search conducted by the study team. It provided an opportunity for comparative analysis. In conducting the literature review for the Family Member Quality of Life Survey Instrument, computerized searches were made of the psychological (using PsycINFO index),

sociological (using Sociological Abstracts), educational (using the ERIC index) and business (using the ABI/Proquest index) literatures for the years 1998-2001. In addition, recent issues of the journal titled Social Indicators Research (a top journal in the area of quality of life measurement) were searched. A search of the Marine Corps Research Center, National Technical Information Service (NTIS) database and the World Wide Web yielded sources of military studies. The on-line library catalogs of two academic (one private and one public) institutions in the Philadelphia area were also searched for relevant titles (typically books on the topic).

PURPOSE

The fundamental purpose of the 2002 QoL study was to determine (i.e., statistically quantify) the quality of life views of Marines and spouses, as well as to draw statistically valid comparisons, when possible, between such results and those of the 1993 study (*Kerce, 1995*), the 1998 study (*White, Baker, and Wolosin, 1999*), and the 1998 Recruiting Command Census Survey (*White, 1999*). Specifically, the 2002 study team evaluated how life domains and factors contribute to Marines and family members' subjective quality of life, and identified possible opportunities for improvement. In addition, an analysis was conducted of the effect of quality of life perceptions and satisfaction on military outcomes such as Personal Readiness and Retention.

OBJECTIVE AND SCOPE

The objective of the 2002 study was to conduct a survey utilizing the same methodology as the Marine Corps' two previous quality of life studies. The fundamental question was, "How, if at all, has quality of life perception and satisfaction changed over the last eight years, particularly in light of the increased funding for quality of life programs from FY 94 to FY 01?" The scope of the 2002 study focused on four separate groups of respondents. They included:

1. Active Duty Marines (all Marines currently on active duty),
2. Independent Duty Marines without military community support as defined by HQMC (sub-population of (1)),
3. Production Recruiters (sub-population of (1)) (For the purposes of this study, Production Recruiters were identified by the Marine Corps Recruiting Command.), and
4. Family members (Marine spouses).

The 2002 study allows the Marine Corps to measure and evaluate quality of life perceptions over time, and examine the effectiveness of program investments by comparing its results with those of past studies. In this study effort, the 2002 study team gauged the current state of the perception of Marines, to include the critical sub-population of Production Recruiters, and for the first time separately, those on independent duty, in regards to their quality of life. Both of these groups have Marines

who are assigned to locations without access to military community support. Marine Corps policy, as stated in Marine Corps Order (MCO) P1700.27A, is that Marines and their families should expect the same level of access and availability to standardized support services and programs, regardless of where they are stationed throughout the Marine Corps. Survey results for independent duty Marines without military community support are presented separately within this report, allowing the Marine Corps to have a baseline upon which to evaluate the efficacy of programs supporting this specific population. The results for the 2002 Production Recruiter sample are published in a separate report.

The 2002 QoL study team conducted the inaugural survey of the spouses of Marines to determine their quality of life perceptions. The 2002 Family Member survey instrument was designed to capture spouse evaluations of ten life domains believed to be most important to family quality of life. The resultant information provides a benchmark to enable decision makers to clarify which issues are the keys to ensuring family satisfaction and happiness with military life and, ultimately, enhance combat readiness. In Marine Corps Order (MCO) 1754.6, published in 1999, the Marine Corps emphasized the critical role of spouses in the military readiness of the service. The order established guidelines and standards for Marine Corps Family Team Building (MCFTB) programs designed for family education and prevention services that are directly related to combat readiness. The concept is that self sufficient families will positively contribute to the military readiness of the service member. The 2002 Family Member survey instrument captured the perceived effectiveness of a number of Marine Corps Family Team Building programs.

CHAPTER 2 – STUDY APPROACH

Assumptions

In conducting this study, the following assumptions were made by the study team.

1. The terrorist attacks on September 11, 2001, shortly after the commencement of study activities, would affect Marine and spouse quality of life perceptions to some extent.
2. The percentage of mail in survey instruments would be less for lower ranking enlisted Marines than for other active duty Marine pay grades based on information from previous studies.
3. The percentage of returned mail in survey instruments would be less for independent duty Marines and spouses than for the other active duty survey groups, based on return rates for mailed survey instruments from the previous studies.
4. While correlation of quality of life perceptions among active duty Marines and Marine family members (spouses) is desirable, the family members' survey participation would be adversely influenced by a survey design similar in length and depth as the baseline 1998 Active Duty Survey.
5. Anthrax contamination in the U. S. Postal System (USPS) after the events of September 11, 2001, and subsequent efforts by the government to irradiate some mail during processing, would affect public confidence in the system and mail delivery times.

Methodology

Conceptual Framework

Research has shown that people can and do divide their lives into domains which can be evaluated separately, *Andrews and Withey (1976)*. The contribution of each life domain to overall quality of life can be assessed through examining the relationship between domain and global measures of satisfaction and happiness. The 11 life domains utilized by the 1993 and 1998 studies were the foundation for the 2002 study. Figure 2-1 shows these 11 life domains.

Marine respondents evaluated their happiness, satisfaction, and expectations for these 11 life domains (note that the Health domain includes healthcare), while family members evaluated their satisfaction and happiness for six of these domains (although several were labeled slightly differently in the Family Member survey instrument) and four others (i.e., Relocation, Support Systems, Separation from Spouse, Marine Corps Life and You) were identified as unique to the evaluation of family quality of life.

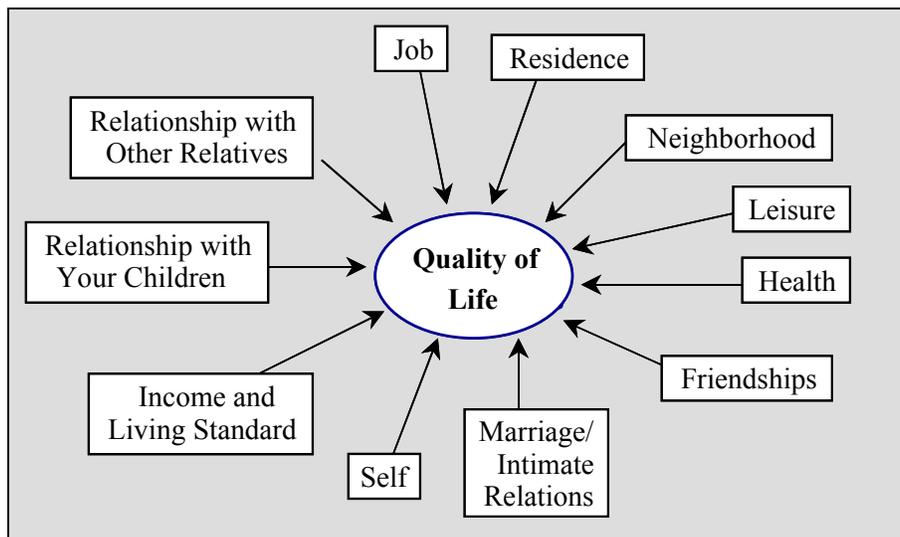


Figure 2-1. The Eleven Life Domains Were The Foundation For The 2002 QoL Study.

Sample Selection

The response size methodology used in the 2002 study is described in detail in Appendix A of this report. A representative sample of active duty Marines was randomly selected for participation in the study. The sample did not include E-1's or Marines with an expiration of active service of 1 June 2002 or earlier. Based on the assumption that the percentage of returned mail in survey instruments would be less for lower ranking enlisted Marines, the E-2 and E-3 group sample size was increased by 10% to compensate for the known lower response rate of that group for mailed surveys. (This turned out to be far too low.) The family member (spouse) survey sample provided by Headquarters, Marine Corps was representative of all spouses in the Marine Corps. The survey sample size provided by Headquarters, Marine Corps for the active duty Marine sub-population on 17 bases and stations was 4,803 (this sample was stratified by location and grade); the independent duty sample size was 6,500; and the family member (spouse) sample size was 8,000. The increased size of the independent duty and spouse samples was influenced by the assumption that the percentage of mail in surveys being returned by those groups would be less.

Analysis Plan

In general, the analysis methodology presented in the 1993 study was followed. However, the master database of responses was divided into three databases, each one representing a respondent group. Each database was analyzed separately and adjusted for pay grade imbalances in the sample. (The 1998 study adjusted for imbalances in the responses by pay grade.) The strategy for this study was to weight the results obtained from the different respondent groups by pay grade in an effort to generate quality of life

averages that correctly represented the Marine Corps population. The 1993 study focused on the active duty Marine population and had a relatively large sample, which proved not to be imbalanced, so adjustments were ignored.

The tasks described in the subsections below were performed on each of the three databases. This included the constructions of additional database tables and spreadsheets to assist in the analysis.

Initial Analysis. The initial analysis consisted of a review of the demographic characteristics of the sample (e.g., gender, race, age, marital, accompanied, and parental status, education, and length of service); review of the survey instrument response rates by location and pay grade.

Individual Domain Analyses. A separate analysis of each of the 11 life domains identified in Figure 2-1 of this report, plus the domains for the new family survey instrument was undertaken. This involved computing average domain quality of life perceptions and conducting a detailed improvement analysis to evaluate overall domain satisfaction.

Global Quality of Life Measures. A factor analysis was conducted to test the six measures of Global quality of life for internal consistency. This was important since one of the measures was changed from a peer comparison measure to an expectancy measure. The analysis of average composite Global quality of life was performed and segmented by sub-groupings when appropriate (e.g., pay grade, marital and parental status.)

Global Quality of Life and Domain Quality of Life. An improvement analysis parallel to that of the Individual Domain Analyses was conducted relating the satisfaction level of the global (life as a whole) quality of life measures to the individual domain quality of life measures, including identifying those with the greatest impact on Global quality of life.

Impact of Global Quality of Life on Military Outcomes. It was a conclusion from the 1993 study that there is some positive relationship between Global quality of life and the military outcomes of Personal Readiness, Retention, and Performance. In the 1993 study the relationships, however, appeared weak except for those expressing reenlistment intentions, which had generally higher Global quality of life scores; in the 1998 study, reenlistment intentions were down, although Global quality of life scores were up. On the other hand, the 1998 study indicated a strong relationship between Global quality of life and Personal Readiness, while the 1993 study was indecisive. One reason for this may be that the 1998 study reduced the number of Personal Readiness indicators used in the 1993 study.

With respect to military Performance, the results of the 1993 study found such a weak relationship between Performance measures and quality of life that the 1998 study excluded Performance from its analysis. As a result, this 2002 QoL Study also focused on the relationships between Global quality of life Personal Readiness, and Retention.

Impact of Domain Satisfaction on Perceived Military Outcomes. Each domain section of the survey instrument, except the Military Job domain, contained two items asking respondents to indicate how that life domain influences: (a) their job performance, and (b) their intentions to remain on active duty; the Military Job domain included only the latter. Response options were on a five point scale ranging from very negative to very positive. The study team assessed which domains had the most impact on career intentions, readiness, and job performance.

Impact of Domain Quality of Life and the Global Quality of Life on Military Outcomes. Chapter Seven of the 1993 study report put together a structural equation model (SEM) to assess the impact of domain quality of life scores and Global quality of life scores on the military outcomes of Personal Readiness, Retention, and Performance. The belief is that a structural equation model is the best recognized way to study social phenomena in which there is interdependence of multiple measurements among unobserved concepts such as domain quality of life.

The 1993 QoL study proposed some conceptual causal links between the variables, which turned out to differ depending on two factors: the married or unmarried factor, and the children or no-children factor. The 1998 study found another influential factor: officer or enlisted. The study team followed the previous studies and conducted a structural equation model evaluation of the data using the same factors.

Pull Together Trends from Previous Comparisons. Throughout these analyses, where appropriate, the study team exposed the trends in domain quality of life and the Global quality of life with respect to the results of the 1993 study, the 1998 study, and the 1998 Production Recruiter consensus, and identified whether the changes were statistically significant. Also, any trends in financial hardship (from questions at the end of the Income and Standard of Living section of the survey instrument) were noted.

Collection Plan

Survey Instrument Design

To ensure consistency of measurement and analysis, the Marine Corps' 1998 Quality of Life Study survey instrument was used as a template for the development of both the 2002 Marine and Family Member Quality of Life survey instruments. The surveys were designed to be anonymous; neither names nor social security numbers were requested from participants to encourage candid responses. Both instruments are described briefly in the paragraphs below and are located in Appendixes B and C of this report.

The majority of the 1998 survey questions and format of those questions were retained on the 2002 Marine survey instrument. Few deletions and additions in the areas of objective indicators, subjective indicators, and military outcomes were made. They are described below.

Objective indicators of Quality of Life. The study team predominately relied on objective indicators that were collected by asking for respondent input (e.g. demographic variables and domain descriptions such as the frequency of recreational activity). There were a small number of additions to this survey since 1998 necessitated by the requirements of data analyses. For example, two items were added to measure access to and use of military community support. These were necessary to identify, to the extent possible, those Marines who met the definition of being on independent duty for the purposes of this study.

Subjective indicators of Global and Domain Quality of Life. Results of the 1993 study indicated the continued usefulness of the inclusion of both happiness and satisfaction measures in the survey instruments. In the 2002 Marine and Family Member surveys, satisfaction with each life domain (e.g., How satisfied are you with your residence overall, considering all aspects?), and life as a whole (e.g., How satisfied are you with your life overall?) were measured. Happiness within each life domain (e.g., How are you feeling these days about your residence?), and life as a whole (e.g., Which point on the scale below best describes how you feel about your life as a whole at this time?) were also measured.

Military Outcomes. In the 2002 survey, the study team measured perceived domain influence on career intentions, (e.g., What effect does your housing have on your plans to remain on active duty?) and perceived domain influences on job performance (e.g., What effect does your housing have on your job performance?). Also included were two measures of overall career intentions. One of these was new to the 2002 study and was included to act as a test of the validity of measurement of the previously employed career intention measure. Personal Readiness was also extensively measured through a number of items reflecting the various aspects of life that contribute to it.

As discussed previously, following the recommendations of the 1993 study, this study replaced measures of social comparisons with civilians as indicators of domain and Global quality of life with a multi-part question derived from the Multiple Discrepancy Theory (MDT). These were added to the instruments to provide additional subjective indicators of domain and Global quality of life for statistical purposes. Multiple Discrepancy Theory questions were designed to determine the satisfaction of survey participants with what they have versus what they want or, in other words, their expectations within the various domains. Understanding the expectations at work, policy makers can determine whether or not the solution to the problem should involve modifying objective living conditions (e.g., provide better housing, more income, etc.) and/or managing expectations through education (e.g., programs that help Marine families to understand what to expect from life in the Marine Corps and to help them make internal adjustments).

Quality of Life in the U.S. Marine Corps Survey Instruments

2002 Marine Survey Instrument. Eleven domains were represented on the 2002 survey with few additions necessitated by the requirements of data analysis. Two items

were added to measure access to and use of military community support. These additions identified Marines who met the definition of independent duty for purposes of this study. The eleven domains in the 2002 Marine survey are listed below.

Marine Survey Domains

- | | |
|-----------------------------------|--------------------------------------|
| 1. Residence | 7. Relationship with Your Children |
| 2. Neighborhood | 8. Relationship with Other Relatives |
| 3. Leisure and Recreation | 9. Income/Standard of Living |
| 4. Health | 10. Military Job |
| 5. Friends and Friendship | 11. Yourself |
| 6. Marriage/Intimate Relationship | |

Questions concerning satisfaction with characteristics of each domain (e.g., How satisfied are you with the appearance of your residence?) were included within each of these domains to allow for specific improvement recommendations to be made. To ascertain information on individual differences, two measures of personality, Optimism and Self-Esteem, the latter new to the 2002 survey, were employed.

The Base and Station Active Duty Marine, and Independent Duty Marine survey instruments are located at Appendix B. Included with the surveys are raw survey response data.

2002 Family Member (Spouse) Survey Instrument. The Family Member survey instrument included ten domain areas and was much smaller in size. Understanding that respondent apathy and fatigue would impact the response rate, the study team considered these factors when determining the survey length. Appropriate subjective, objective, and military outcome questions from the 2002 Marine survey instrument were included on the Family Member survey. Most notable questions included satisfaction within each domain and life as a whole, a measure of happiness with life as a whole, and items asking about overall desires and domain influence on desires to remain part of the Marine Corps. To discover which domains were suitable for the Family Member survey instrument, spouse focus groups were conducted prior to the design. The focus groups supplemented the knowledge gained from the literature search and enabled the study team to verify how well academic discussions of family quality of life corresponded with Marine family experiences. As a result of this extensive research, the following domains were represented on the Family Member survey instrument.

Family Member Domains

- | | |
|---------------------------|--------------------------------------|
| 1. Residence | 6. Separation |
| 2. Relocation | 7. Children Quality of Life |
| 3. Leisure and Recreation | 8. Pay and Benefits |
| 4. Support Systems | 9. Your Job/Professional Development |
| 5. Health Care | 10. Marine Corps Life and You |

Three other domains, Friends and Friendship, Relationship with Spouse, and Relationship with Other Relatives, were recommended by the study team but were

eliminated to reduce survey length. The Family Member (Spouse) survey instrument is located at Appendix C. Included in the instrument are raw survey response data.

Data Collection

In general, the study performer conducted this survey process employing the same methods used in the 1993 and 1998 QoL studies and the 1998 Production Recruiter survey. However, in those previous studies, only active duty Marines were surveyed. The 2002 survey data was collected utilizing three methods: on site collections with survey administration teams; on site collection using command administration and mail in response survey collection.

Data Collection – On Site with Survey Administration Teams.

Three survey administration teams simultaneously administered the majority of the surveys on site to active duty Marines. Data collection took place at the following 12 locations:

Data Collection Sites

- | | |
|------------------------|--------------------------|
| 1. MCB, Camp Pendleton | 7. MCAS, Cherry Point |
| 2. MCAS, Miramar | 8. MCAS, Beaufort |
| 3. MCAS, Yuma | 9. MCB, Quantico |
| 4. MCAGCC 29 Palms | 10. HQMC, Henderson Hall |
| 5. MCB, Camp Lejeune | 11. MCB, Hawaii |
| 6. MCAS, New River | 12. MCB, Camp Butler |

Data Collection – On Site with Command-Administered Surveys.

Data collection at five locations was administered by local points of contact designated by their respective commands. This was done because of the small number of surveys required, remote location, or personnel availability at these sites. Headquarters, Marine Corps personnel randomly chose Marines to respond to the survey. The study team mailed surveys to each command point of contact with instructions to administer them by a certain date and return them by mail to the study team. The five commands with command administered surveys are listed below:

Command Administered Sites

1. MCAS, Iwakuni
2. MCLB, Barstow
3. MCLB, Albany
4. MCRD, Parris Island
5. MCRD, San Diego

Data Collection – Mail-In Surveys.

Survey techniques, other than on site and command administration, were required for members of the Independent Duty and Family Member populations. For these groups, the survey instruments were mailed with instructions, a letter from the Commandant and Sergeant Major of the Marine Corps, and a postage-paid, return envelope.

The study team employed the use of postcards as a tool to help increase the response rate for independent duty Marines and spouses. An initial postcard was mailed to all respondents who were randomly chosen to participate in the survey by Headquarters, Marine Corps. This postcard was mailed ten days prior to mailing the survey and briefly explained the purpose of the survey and solicited their cooperation. A follow-up postcard was sent ten days after the survey instrument was mailed. A second follow-up postcard was sent ten days after the first one. These postcards reminded the respondents of the importance of the survey and urged them to complete and return it. The postcards also thanked the respondents for complying if they had already returned the survey instrument.

Validation of Survey Instrument

Pilot Test

On site pilot testing was conducted at Camp Lejeune, North Carolina, to validate and revise the Family Member survey instrument. The pilot test was critical to the development of the Family Member survey instrument as it was new to the Marine Corps quality of life data collection process. The pilot test identified items or sections in the survey instrument that could not be understood by the respondents or were not complete (i.e., not enough response categories). It also provided valuable feedback as to readability, flow, and the information necessary to shorten the survey through elimination of repetitive or confusing items. A mail in pilot test was conducted to assess and streamline the procedures for performing the mail in portion of the survey administration. The same methodology planned for the actual survey administration was used. Because the Active Duty Marine survey instrument used in this study was the same one used in the 1998 survey with minor changes, it was not necessary to validate it through a pilot test.

Survey Administration Support

The study team developed and executed an extensive Survey Administration Publicity Plan to enhance survey return rates from all groups of participants. The 2002 Quality of Life Survey administration publicity was provided to major military periodicals and a web site, www.marinewives.com, oriented towards the Marine spouse audience. Each publication announced relevant information prior to the execution phase of the survey administration. Publicity regarding the Family Member (Spouse) survey administration was forwarded to the Marine Corps for dissemination to command Family Readiness Officers, the Key Volunteer Network, and participants in the Lifestyle Insights Networking Knowledge and Skills program. Finally, a 2002 Quality of Life Survey press kit was provided to each of the 12 bases and stations for publication in local papers prior to the on site team visits.

The study team also established both a toll free number and electronic mail address to support the survey administration efforts. The toll free number and electronic mail

address were listed on the Active Duty and Family Member (Spouse) Surveys, as well as both follow up post cards. This proved to be very worthwhile as the study team received many phone calls and electronic messages from participants during the period of survey administration. Many of the calls and electronic messages asked for replacement surveys as requested by the first follow-up post card. Others had misplaced or lost the original survey and called to request another. Some survey participants called to ask questions about the survey instrument. These additional support mechanisms enabled the study team to provide prompt, professional customer service to survey participants and thereby increased both the accuracy and response rate of completed survey instruments.

CHAPTER 3 – SURVEY RESULTS

Survey results are divided into three sections representing a battery of analyses conducted for the following three population samples of interest:

- ♦ Active Duty Marines (a balanced composite of Base and Station, Independent Duty, and Production Recruiters)
- ♦ Independent Duty Marines without Military Community Support, and
- ♦ Marine Family Members (Spouses).

Each section has an introduction, which is organized as follows:

Weighting of the Respondents.

This sub-section is included for all three of the major sections, but it is particularly important for the Active Duty Marine composite. For this section it was necessary to manipulate the analyses performed on Marines from three sets of Active Duty respondents (Base and Station, Independent Duty, and Production Recruiters) in order to produce results representative of a balanced composite.

Statistical Significance.

The phrases statistically significant and not due to sampling variation indicate that a finding represents a change or difference that can be considered real. This sub-section gives a detailed explanation of these phrases. These phrases are used extensively throughout the results sections. Since we can normally expect that the responses given by the set of respondents who participated in different quality of life studies (1993, 1998 and 2002) will vary from each other, we describe how it is that we can be assured that a particular finding is not an invalid by-product of the variability due to sampling. There is also a discussion contrasting statistically significant with practically significant.

Summary of Assessments.

In this sub-section you will find a synopsis of how Global quality of life was measured, a summary of the domains of life that were included, and a general description of the items used to evaluate those domains. The introduction ends with detailed a list of the key variables measured.

Next, the results produced from various analyses were presented. They are typically organized as follows (not all of these analyses are run for each sample).

Demographics.

For each sample, descriptive demographic information, which summarizes the characteristics of the sample, are presented.

Analyses of Domains.

Average Satisfaction/Happiness. Each domain is analyzed separately and the average ratings of domain satisfaction and domain happiness are presented for the 2002 study, as well as those reported in the 1993 Quality of Life study, *Kerce (1995)* and in the 1998 Quality of Life study, *White, Baker, and Wolosin (1999)*.

Trend Analyses. When possible and appropriate, significance testing is used to test the hypothesis that there has been a change in overall domain satisfaction from the findings of the 1993 Quality of Life study and the 1998 Quality of Life study. The benchmark study for these analyses is the 1993 Quality of Life study, but trends for the 1998 Quality of Life study are also displayed and discussed. In addition, the trend analyses typically present satisfaction changes by pay grade, but other sub-groupings are also used if deemed relevant (e.g., married versus unmarried; married with children versus married without children).

Key Drivers (Regression) Analysis. A key driver analysis is presented for each domain. This analytical procedure involves the use of factor analysis and multiple linear regression to determine which aspects/attributes of domains are most highly associated (correlated) with overall domain satisfaction. For the domain level the procedure proceeds in the following way:

The 1993 study identified several aspects/attributes of domains that are highly associated with the overall domain satisfaction; these are said to determine, or drive, domain satisfaction. The relative importance, or degree of influence, of each is expressed as the relative percentage of influence each contributes to overall domain satisfaction. This provides a list of domain aspects/attributes that have the most statistically significant correlation with the overall domain satisfaction and in combination can be said to predict or explain overall domain satisfaction. These aspects are called key drivers of domain satisfaction. While this information is valuable, its value is extended by examining the influence of the aspect/attribute along side the satisfaction ratings for that aspect. NOTE: *Drivers indicated as "Key" rarely explain all of the variability (influence) associated with overall domain satisfaction, but the regression analysis points to those which explain the most variance in overall domain satisfaction. The percent of variance explained indicates how well this set of drivers in combination with each other predict overall domain satisfaction.*

This was done as follows: A sample key driver diagram, sometimes called an influence diagram, is presented from the Residence domain in Figure 3-1 to show which drivers present the best opportunities for improving domain satisfaction. This is done by plotting the relative influence (the normalized regression beta weights) from the key driver analysis on the vertical axis against the satisfaction ratings of the corresponding domain aspect/attribute (ratings given on a scale of 1 – 7) on the horizontal axis. As beta weights vary by domain, the top of the vertical axis represents different values (normally between 0.2 and 0.6) for each domain, while the bottom of the vertical axis is always zero. Since the domain aspect/attribute ratings represent averages that turn out not to run

the range from 1 to 7, the key driver diagram displays a horizontal axis limited to the range of the ratings present. The diagram format used in this report shows combined relative satisfaction and relative strength of influence.

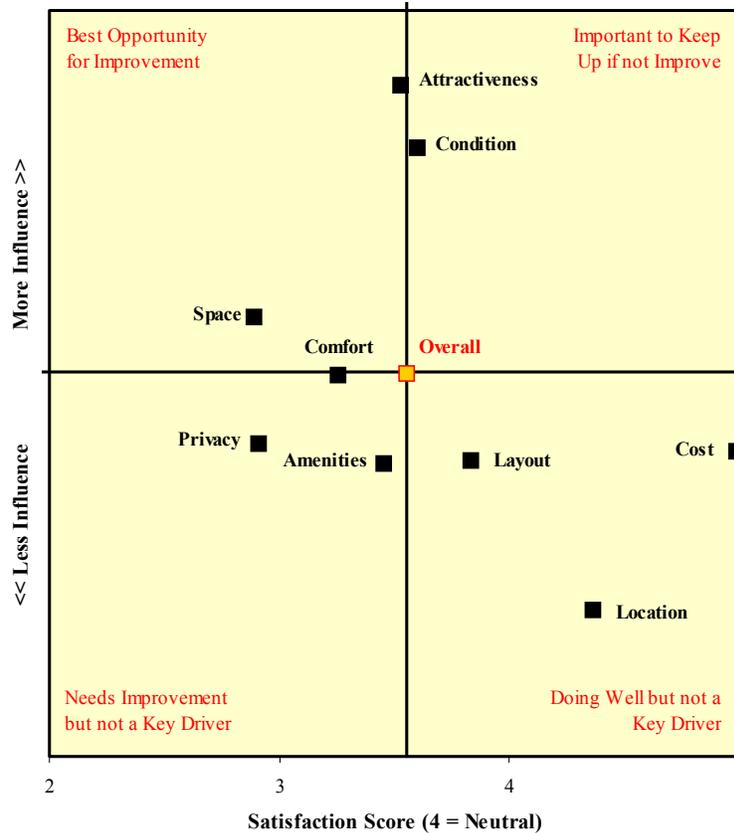


Figure 3-1. Sample Key Driver Diagram.

As the vertical axis description in the diagram indicates, aspects/attributes falling in the top two boxes have more influence in determining overall satisfaction, while those in the lower two boxes have less influence in determining overall satisfaction. Aspects/attributes in the left two boxes received lower satisfaction ratings (more dissatisfaction) while those in the right two boxes received higher satisfaction ratings. The overall domain satisfaction is used to center the diagram; it is plotted on the horizontal at its satisfaction rating and on the vertical at the average regression beta weights of the aspects/attributes.

Precise satisfaction and beta weight values are tabulated in Appendix F for each domain of each population.

The greatest opportunity for improving domain satisfaction/happiness will be realized by focusing on the key drivers, those aspects/attributes that have the highest levels of combined influence, with the lowest satisfaction ratings. This typically means a focus on the key drivers in the upper left quadrant, but also those with the greatest combined influence and dissatisfaction compared to the others. In the sample diagram

improvements in the satisfaction with Space (the aspect showing the greatest dissatisfaction) would be one focal point. Another focal point would be the Attractiveness/Condition cluster, the two dominant key drivers rated at average satisfaction. A third focal point would be Comfort.

Analysis of Global Quality of Life.

Average Satisfaction/Happiness. The average ratings for Global quality of life are presented for the 2002 study, as well as for the 1993 Quality of Life study and for the 1998 Quality of Life study.

Trend Analyses. When possible and appropriate, significance testing is used to test the hypothesis that there has been a change in Global quality of life from the findings of the 1993 Quality of Life study and the 1998 Quality of Life study. The benchmark study for this analysis is the 1993 Quality of Life study but Global quality of life ratings for the 1998 Quality of Life study are also displayed and discussed. In addition, the trend analyses presents Global quality of life changes by pay grade, and other appropriate sub-groupings.

Key Drivers (Regression) Analysis. A key driver analysis is presented for Global quality of life. This analytical procedure involves the use of factor analysis and multiple linear regression to determine which domains are most highly associated (correlated) with Global quality of life. Results of this analysis are displayed along with domain satisfaction ratings. The procedure and diagram are identical to that performed in the domain key driver analyses.

Analysis of Military Outcomes. The military outcome sub-sections include: 1) A display of perceived domain impact on the reenlistment intentions and job performance, 2) A series of analyses on career intentions, and 3) a series of analyses on personal readiness.

Active Duty Composite Introduction

Weighting Of Respondents For Composite Analyses.

To produce a Marine Corps Active Duty composite from the three sets of Active Duty respondents (Base and Station, Independent Duty, and Production Recruiters) it was necessary to combine the results of separate analyses of each. The Active Duty Marines assigned to bases and stations represent 83.8% of the Marine Corps, the Active Duty Marines assigned to Independent Duty, but not Production Recruiters, represent 14.2% of the Marine Corps, and the Production Recruiters represent 2.0% of the Marine Corps.

The Active Duty Marines assigned to bases and stations were sampled at a rate to produce returns of 3.6%; the Active Duty Marines assigned to Independent Duty, but not Production Recruiters were sampled at a rate to produce returns of 10%; and the Production Recruiters were census surveyed. The census survey of Production Recruiters

was a requirement of the study and full results of that analysis are reported separately. The oversampling of the Active Duty Marines assigned to Independent Duty, but not Production Recruiters, was done to gather sufficient responses to allow the analysis of the Independent Duty Marines without Military Community Support.

The 1993 and 1998 Quality of Life studies indicated that the life satisfaction ratings of junior level respondents tended to be lower than those of senior level respondents. Thus, this study proposed to generate a set of grade-balanced responses in spite of the prior indications that the junior enlisted levels respond at a reduced rate. This was impossible to satisfy across the board by sampling because the Production Recruiters could not be surveyed in excess of a census. It was thus necessary to insure in some way that the composite was representative of the Marine Corps population by pay grade level as displayed in Table 3-1 below using the pay grade bands of the two prior quality of life studies:

| TABLE 3-1. FRACTIONAL DISTRIBUTION OF THE MARINE CORPS POPULATION. | | | | |
|---|---------------|----------------|------------------------------|--------------|
| | BASE | IDMnoPR | Production Recruiters | |
| E2-23 | 0.3516 | 0.0322 | 0.0000 | 0.384 |
| E4-E5 | 0.2787 | 0.0436 | 0.0059 | 0.328 |
| E6-E7 | 0.1014 | 0.0290 | 0.0134 | 0.144 |
| E8-E9 | 0.0224 | 0.0066 | 0.0004 | 0.029 |
| W1-W5 | 0.0104 | 0.0017 | 0.0000 | 0.012 |
| O1-O3 | 0.0504 | 0.0146 | 0.0005 | 0.065 |
| O4 & up | 0.0234 | 0.0141 | 0.0000 | 0.037 |
| | 0.838 | 0.142 | 0.020 | |

The Base and Station responses were well balanced and pass a Chi-Square test for the fractional responses by pay grade band. They could have been used without balancing by pay grade band. However, since it was necessary to construct the analytic machinery to compensate for the other respondents, a 21-point averaging scheme was used across the board to insure a more-or-less perfectly balanced Marine Corps composite estimate of each satisfaction rating. For example, when reporting overall job satisfaction, the average job satisfaction score for each pay grade band in each respondent group was computed, this is a set of 21 averages. Then each average was weighted by its corresponding fractional representation in the Marine Corps population as displayed in Table 3-1.

These calculations were carried out in two steps using Visual Basic code embedded in linked Excel workbooks, one workbook for each of the three respondent groups. The first was performed at the respondent group level, where within each respondent group the averages per pay grade were extracted for each satisfaction response needed. Then the parallel results of each workbook were linked into a Composite workbook. In the Composite Workbook a pay grade band composite was assembled using the relative row weights from Table 3-1. Then the overall composite pay grade was assembled using the overall pay grade weights at the right of Table 3-1.

This two-dimensional weighting scheme made it more difficult than in 1998 to conduct tests of the hypothesis that the satisfaction of the underlying population had changed. This is because we had 21 sampling variances, each representing the spread of one sample satisfaction score from its corresponding population true score. The different respondent groups and pay grades were measured independently, so the variance of the composite satisfaction score could be taken as the appropriately weighted sum of each of 21 variances (easy to combine but see below). The appropriate weights for variances are the squares of the weights for averages so, notionally, Base and Station E2-E3s and E4-E5s contribute about 92% of the composite variance but the remaining 8% have larger sampling variances due to their smaller sample sizes.

The contribution of Production Recruiters to the variance is negligible; the response rate was so high that the computed averages were the true population averages not subject to sampling variance. Even had they been sparsely sampled, and had any variance at all from the true Production Recruiters averages, their contribution to the variance would have been negligible because of the proportional representation. Production Recruiters were not considered in the composite variance calculations.

The sampling variances were thus compiled from just the Base and Station and Independent Duty (w/o Production Recruiters) respondent groups. Since the Base and Station population is large with respect to the sample, we did not correct for the finite size of the population. The finite population correction should have been applied to the Independent Duty group but was not since their contribution to the variance was sufficiently small (although their sampling variance by pay grade was relatively large due to the smaller sample sizes).

Statistical Significance.

To test the hypothesis that the underlying population satisfaction has changed, the study team assumed the null hypothesis that it has not, that is, that the population score frequencies have not changed between studies, even if the population size has changed. Then we try to disprove this hypothesis by showing that the implied Gaussian distributed sampling differences between the 1993 and 2002 satisfaction scores and the 1998 and 2002 satisfaction scores are beyond what might be expected by random sampling.

The variance of such a difference Gaussian is nominally the sum of the two sampling variances for the study scores being compared. But under the null hypothesis, the population variance for any satisfaction score is the same for all studies. This means that the two sampling variances, being approximately the population variance divided by the respective sample sizes, will differ only by the ratio of the sample sizes.

Our effective composite sample size is about 5000 versus about 4000 for the 1998 study and 10000 for the 1993 study. So whatever the 2002 sampling variance (estimated using the 2002 sample variance), the implied 1993 sampling variance is taken as half that, and that of 1998 25% more. Thus the 2002/1993 difference Gaussian has a variance of

1.5 times the 2002 sampling variance, while the 2002/1998 difference variance is 2.25 times the 2002 sampling variance.

When we say that there is a statistically significant difference between a satisfaction score computed in this study versus the corresponding score of another, we mean that the difference of the two scores is less than 1.96 times the square root of the variance of the corresponding difference Gaussian. This says we will reject the null hypothesis when the difference between scores is so large that it would only occur at random in less than 5% of pairs of sample, of the appropriate sizes, drawn from the same population.

On the other hand, while there might be a statistically significant difference in the scores, there might not be a meaningful difference. For example, if a domain satisfaction score is 5.05 in this study and 5.10 in the 1993 Quality of Life study this difference may be statistically significant signaling a real shift in the domain satisfaction of Marines, not a chance finding due to sampling. However, the standard deviation for domain satisfaction within the overall Marine population is typically about 1.5. Thus, a difference of .05 represents an Effect Size in terms of Cohen's *d*; of only 3% ($=.05/1.5$) which, other than in studies of mortality, would not ordinarily be considered meaningful.

In other words, in domains analyzed below, while there may be differences that qualify as statistically significant between quality of life studies, the results are still within the same satisfaction range (for example, neutral to somewhat satisfied range that is, between 4 and 5). Differences may not be practically significant unless the change exceeds, perhaps, half a satisfaction range, for example, from 4.2 to 4.7. This would be an Effect Size of 0.33 ($=.5/1.5$) which is conventionally regarded as a small to medium size effect. In fact, the concept of a practically significant difference depends directly on the application: in the case of the Marine Corps Quality of Life studies, only a Quality of Life change which demonstrably negatively impacts the military outcomes of retention and personal readiness might be considered meaningful. Only when the differences are statistically significant and practically significant do we have truly meaningful differences.

Summary of Assessments.

Global quality of life was measured through six different indicators (three of which were multiple-item indicators). Unlike the 1993 Quality of Life study (*Kerce, 1995*) and 1998 study (*White, Baker, and Wolosin, 1999*), this 2002 Study did not measure social comparisons with peers as an indicator of Global quality of life. Instead, this Study included an item based on Multiple Discrepancy research of (*Michalos, 1985*) which asked the respondent to compare his or her life to one's ideal life or goals for his/her life. The deletion of the social comparison item and its replacement with a MDT item is warranted by the extensive use of this type of item in the most recent research on quality of life, and was recommended by the 1993 Study (*Kerce, 1995*, p 157). This change increased the consistency (reliability) of the six indicators with the Cronbach Alpha increasing to .90 from the value .87 in 1993 and .89 in 1998.

The eleven life domains measured for this study included Residence, Neighborhood, Leisure and Recreation, Health and Healthcare, Friends and Friendships, Marriage/Intimate Relationships, Relationship With Your Children, Relationships With Other Relatives, Income and Standard of Living, Military Job, and Yourself (personal development). These eleven life domains are identical to those measured in the 1995 and 1999 Quality of Life surveys.

Domain quality of life was measured with three indicators – an affective indicator (responses were answered on a 7-point delighted to terrible scale), a cognitive indicator (responses were reported on a 7-point satisfaction scale with 1 being very dissatisfied to 7 being very satisfied) and an expectancy indicator (respondents indicated on a 7-point scale how well an aspect of their life measures up to their goals with 0% being not at all to 100% being perfectly matches their goal).

| SUMMARY OF VARIABLES IN THE MARINE CORPS QUALITY OF LIFE ASSESSMENT. | | |
|---|---|--|
| Demographic Variables | Global Quality of Life | |
| <ul style="list-style-type: none"> ◆ Gender ◆ Age ◆ Race/ethnicity ◆ Education ◆ Marital status ◆ Number, type of dependents ◆ Children in household ◆ Children's ages ◆ Spouse employment ◆ Pay grade ◆ Time in grade ◆ Time on Active Duty in USMC ◆ Career intentions ◆ Primary MOS ◆ Duty MOS ◆ Time in present assignment ◆ Accompanied/unaccompanied ◆ Reason geographic bachelor ◆ Station or base ◆ Deployment status ◆ Type of deployment | <ul style="list-style-type: none"> ◆ Delighted-Terrible Scale (D-T) ◆ Life Characteristics Scale (LCS) (7 items) ◆ Index of Well Being ◆ Satisfaction with Life as a Whole ◆ Satisfaction with Life Scale (SWL) (5 items) ◆ Domain and Global Life Expectations | |
| | Personal Dispositions (Personality Variables) | <ul style="list-style-type: none"> ◆ Optimism scale (12 item scale) ◆ Sociability ◆ Self esteem (10 item scale) |
| | Military Outcomes | <ul style="list-style-type: none"> ◆ Retention <ul style="list-style-type: none"> ◆ Career intentions ◆ Personal Readiness <ul style="list-style-type: none"> ◆ Perceived adequacy of training ◆ Job-related problems ◆ Commitment |
| | Quality of Life - Domain Assessments | <ul style="list-style-type: none"> ◆ Delighted-Terrible Scale (D-T) ◆ Overall domain satisfaction ◆ Facet satisfactions ◆ Descriptive items ◆ Perceived effect on job performance ◆ Perceived effect on reenlistment |

Figure 3-2. Summary Of Variables In The Marine Corps Quality Of Life Assessment.

Figure 3-2 displays a summary of the variables measured in this 2002 Quality of Life study. Descriptive items, customized to the domain, were included in each section as were items that asked what effect each area of life had on job performance and career

intentions. Other key variables embedded within the questionnaire were the personality variables of Optimism and Self-Esteem, and the military outcomes of overall intention to reenlist and personal readiness.

Personal Demographics and Career Characteristics of Active Duty Marine Corps Respondents.

In this section we describe the respondents by a variety of Personal Demographics and Career Characteristics derived from their answers to the questions in the background and career sections of questionnaire (see Appendix B). *Not all respondents answered every question so totals in tables will vary.*

The survey was completed by 4698 Base and Station Marines and 2115 Independent duty (minus Production Recruiter) Marines. These numbers represent 3.6% of the total Base and Station Marine population and 10% of the Independent (minus Production Recruiter) Marine population.

Surveys were mailed to the Recruiting Stations for the 3118 Production Recruiters in the sample which was identified in mid-February. However, during the actual survey period, due to temporary duty assignments, transfers, illness and death, there were only 2935 Production Recruiters available to take the survey. There were 2802 surveys completed, which represents 95.5% of the Production Recruiter population. (Among those returned surveys, there were a small number that were unscannable, leaving 2768 completed survey with which to conduct the analysis.

Gender and Race. Table 3-2 shows the distribution of respondent samples in terms of gender for the three groups in the sample showing that in all three groups more than 90% of the sample is male.

| TABLE 3-2. GENDER DISTRIBUTION OF THE SAMPLE. | | | | | | |
|---|------------------|---------|---------------------------|---------|-----------------------|---------|
| Gender | Base and Station | | Independent Duty (w/o PR) | | Production Recruiters | |
| | Number | Percent | Number | Percent | Number | Percent |
| Male | 4251 | 92 | 1981 | 95 | 2634 | 96 |
| Female | 383 | 8 | 110 | 5 | 106 | 4 |

Gender is associated with variance in global satisfaction and happiness ratings, such that on the whole females tend to be more positive in their assessment of satisfaction and happiness with life as a whole. This world estimate was confirmed for Marines by the results of *Kerce (1995)* showing that female Marines reported higher levels of happiness and satisfaction as compared to male Marines.

When questioning the respondents in terms of their race, they were first asked if they were of Spanish/ Hispanic descent. Of the Base and Station respondents 18% said they

were of Spanish/Hispanic descent, while of the Independent Duty (w/o Production Recruiter) respondents, 12% said they were. Nineteen percent of the Production Recruiters reported that they were of Spanish/Hispanic descent. The respondents were then asked to further describe their race as either: White, Black/African-American, Asian/Pacific Islander, Native American/Aleut/Eskimo, or Other. Table 3-3 summarizes the race distribution of respondents for the three groups in the sample.

| TABLE 3-3. RACIAL DISTRIBUTION OF THE SAMPLE. | | | | | | |
|---|------------------|---------|---------------------------|---------|-----------------------|---------|
| Race | Base and Station | | Independent Duty (w/o PR) | | Production Recruiters | |
| | Number | Percent | Number | Percent | Number | Percent |
| White | 2944 | 65.3 | 1542 | 74.9 | 1586 | 58.7 |
| Black /African-American | 710 | 15.8 | 261 | 12.7 | 655 | 24.3 |
| Asian/Pacific Islander | 133 | 3.0 | 54 | 2.6 | 69 | 2.6 |
| Native American/Aleut-Eskimo | 67 | 1.5 | 23 | 1.1 | 32 | 1.2 |
| Other | 652 | 14.4 | 179 | 8.7 | 358 | 13.2 |

It is interesting to note that in all three respondent groups, the percentage that responded with other is large compared to those responding as Asian or Native American and this percentage is up from the previous two studies in 1993 and 1998. This could be due to increase number of mixed marriages in our society resulting in children not classifying themselves as belonging to any particular racial group. It could indicate an increased reluctance to reveal one's race. The results of *Kerce (1995)* indicated that race factors were associated with variance in Global quality of life. Blacks (excluding Black women) and Hispanics tend to be somewhat more positive in subjective evaluations of quality of life than Whites.

Age Distribution of the Respondents. Table 3-4 shows the ages (partitioned in seven different ranges) of the respondents for the three groups in the sample. The average age (in rounded years) of Base and Station respondents is 25, for Independent Duty (w/o Production Recruiter) is 32, and for Production Recruiters is 30.

| TABLE 3-4. AGE DISTRIBUTION OF THE SAMPLE. | | | | | | |
|--|------------------|---------|---------------------------|---------|-----------------------|---------|
| Age Range (Years) | Base and Station | | Independent Duty (w/o PR) | | Production Recruiters | |
| | Number | Percent | Number | Percent | Number | Percent |
| 17-20 | 1112 | 24.1 | 126 | 6.1 | 11 | 0.4 |
| 21-25 | 2060 | 44.7 | 427 | 20.5 | 476 | 17.6 |
| 26-30 | 617 | 13.4 | 397 | 19.1 | 1207 | 44.5 |
| 31-35 | 350 | 7.6 | 411 | 19.7 | 654 | 24.1 |
| 36-40 | 306 | 6.6 | 433 | 20.8 | 302 | 11.1 |
| 41-45 | 112 | 2.4 | 212 | 10.2 | 41 | 1.5 |
| 46 and above | 54 | 1.2 | 75 | 3.6 | 22 | 0.8 |

This distribution clearly indicates that Independent Duty and Production Recruiter Marines are older than Base and Station respondents. This is substantially due to the lack of the lower enlisted pay grades in these two groups.

Marital, Accompanied, and Parental Status. The marital statuses of the respondents are summarized in Table 3-5.

| TABLE 3-5. MARITAL STATUS OF THE SAMPLE. | | | | | | |
|--|------------------|---------|------------------------------|---------|-----------------------|---------|
| Marital Status | Base and Station | | Independent Duty (w/o PR) | | Production Recruiters | |
| | Number | Percent | Number | Percent | Number | Percent |
| Never Been Married | 2283 | 49.4 | 522 | 24.9 | 421 | 15.4 |
| Married | 2009 | 43.4 | 1341 | 64.0 | 1883 | 68.9 |
| Married But Separated | 129 | 2.8 | 65 | 3.1.1 | 110 | 4.0 |
| Divorced | 196 | 4.2 | 159 | 7.6 | 310 | 11.4 |
| Widowed | 8 | 0.2 | 7 | 0.4 | 7 | 0.3 |

This table indicates that the majority (more than 50%) of Independent Duty (w/o Production Recruiter) and Production Recruiters are married. Also notable is that the largest percentage of divorced Marines are Production Recruiters. The results of *Kerce (1995)* indicated that married Marines tended to report higher quality of life ratings than non-married Marines. Studies with non-military populations confirm that married people typically report higher levels of satisfaction and happiness (*Michalos, 1991*).

Table 3-6 presents information regarding dependent family members.

| TABLE 3-6. DEPENDENT FAMILY MEMBERS OF THE SAMPLE. | | | | | | |
|--|------------------|---------|------------------------------|---------|-----------------------|---------|
| Dependents | Base and Station | | Independent Duty (w/o PR) | | Production Recruiters | |
| | Number | Percent | Number | Percent | Number | Percent |
| None | 2365 | 51.9 | 578 | 27.9 | 530 | 19.5 |
| Spouse (non-military) | 1250 | 27.4 | 910 | 43.9 | 1151 | 42.4 |
| Living With Children | 1368 | 30.0 | 1098 | 53.0 | 1493 | 55.0 |
| Not Living With Children | 386 | 8.5 | 260 | 12.5 | 455 | 16.8 |
| Living With Legal Ward(s) | 7 | 0.2 | 5 | 0.2 | 8 | 0.3 |
| Parent(s) or Other Relatives | 51 | 1.1 | 19 | 0.9 | 27 | 1.0 |
| Percentage does not add to 100% due to multiple category responses | | | | | | |

Slightly more than 50% of the Base and Station respondents have no dependents living with them. Independent duty and Production Recruiters are more likely to have dependent family members. When asked if they are accompanied by these family members on their assignment, 82.6% of the married Base and Station respondents said that all or some of their dependents accompanied them, while 4.6% were permanently

unaccompanied. Among non-married Base and Station respondents, 5.0% were accompanied by some or all of their dependents.

When asked if they have any children under the age of 21 that currently live with them, 33.8% of the Base and Station, 54.5% of the Independent Duty (w/o Production Recruiter) and 58.9% of the Production Recruiters, reported that there were children in their household. While, it appears that more Independent Duty and Production Recruiter households include children, when compared to Base and Station households, the average number of children per each type of household is similar - between 1.89 and 2.07.

The average number of pre-school children in a Base and Station household is 1.0, while the average number of school-aged children is 0.87. For Independent Duty (w/o Production Recruiter) households the average number of pre-school children in the household is 0.82, while the average number of school-aged children is 1.22. For Production Recruiter households that have children living with them, the average number of pre-school children is 1.02, while the average number of school-aged children is 0.89.

Current Level Of Education. Half of the 4607 Base and Station respondents, who described their level of education, said that they have no more than a high-school diploma or its equivalency. Slightly less than half, 47%, have done some undergraduate college work, with 2.4% having gone on to do graduate college work. Only 0.5% has less than a high-school education. A little more than a quarter, 27%, of the 2086 Independent Duty (w/o Production Recruiter) respondents who described their level of education said that they have no more than a high-school diploma or its equivalency. The majority of Independent Duty (w/o Production Recruiter), 63%, have done at least some undergraduate college work and 9.5% have gone on to do graduate college work. Only 0.1% of them have less than a high school education. Of the 2703 Production Recruiter respondents who described their level of education, just less than half, about 45%, said that they have no more than a high-school diploma or its equivalency. The majority, 54%, has done some undergraduate college work and 0.3% has gone on to do graduate college work. Only 0.4% have less than a high-school education. Tables 3-7 through 3-9 presents the level of education for enlisted and officer personnel.

| TABLE 3-7. NUMBERS OF RESPONDENTS AND THEIR LEVEL OF EDUCATION. | | |
|--|-------------------------------|------------------------------|
| Level of Education (Base and Station Respondents) | Enlisted Personnel | Officer Personnel |
| No high school diploma | 22 | 0 |
| High school equivalency | 80 | 1 |
| High school diploma | 2173 | 25 |
| Less than one year of college | 853 | 18 |
| One or more years of college, non-degree | 721 | 32 |
| Associate's degree | 145 | 14 |
| Bachelor's Degree | 68 | 275 |
| Master's Degree | 11 | 76 |
| Doctoral or professional degree | 0 | 19 |
| Other | 2 | 0 |

| TABLE 3-8. NUMBERS OF RESPONDENTS AND THEIR LEVEL OF EDUCATION. | | |
|--|---------------------------|--------------------------|
| Level of Education (Independent Duty w/o PR) | Enlisted Personnel | Officer Personnel |
| No high school diploma | 3 | 0 |
| High school equivalency | 17 | 3 |
| High school diploma | 521 | 18 |
| Less than one year of college | 350 | 12 |
| One or more years of college, non-degree | 389 | 32 |
| Associate's degree | 98 | 12 |
| Bachelor's Degree | 65 | 316 |
| Master's Degree | 9 | 152 |
| Doctoral or professional degree | 4 | 19 |
| Other | 2 | 1 |

| TABLE 3-9. NUMBERS OF RESPONDENTS AND THEIR LEVEL OF EDUCATION. | | |
|--|---------------------------|--------------------------|
| Level of Education (Production Recruiters) | Enlisted Personnel | Officer Personnel |
| No high school diploma | 11 | 1 |
| High school equivalency | 37 | 0 |
| High school diploma | 1157 | 13 |
| Less than one year of college | 574 | 8 |
| One or more years of college, non-degree | 587 | 5 |
| Associate's degree | 146 | 0 |
| Bachelor's Degree | 75 | 57 |
| Master's Degree | 3 | 5 |
| Doctoral or professional degree | 1 | 0 |
| Other | 3 | 0 |

Some authors argue that education influences subjective quality of life and is in fact a root cause of individual well-being. Not only does education shape opportunities for employment, the kind of work people do, and their income and economic hardship, but it also impacts their social psychological resources and their distress management skills (*Ross & Van Willigen, 1997*). In general, better educated individuals tend to report higher levels of Global quality of life, however only about 1%-3% of the variance in subjective well being can be accounted for by level of educational attainment (*Michalos, 1991*).

Length of Service. The average length of service (in years) for Marines completing the quality of life questionnaires was 5.7 for Base and Station, 11.7 for Independent Duty (w/o Production Recruiter) and 10.2 for Production Recruiter respondents. Length of service is much less for Base and Station respondents due to the much higher density of the lower enlisted pay grades.

Current Duty Location, Pay Grade, and Response Rates. A detailed presentation of the responses by location, group and pay grade are provided in Tables 3-10 and 3-11. Note that the E1 grade was not knowingly sampled and that the few E1s who responded were grouped with the E2 and E3 grades for analysis purposes.

TABLE 3-10. NUMBERS OF RESPONDENTS BY PAY GRADE BAND AND LOCATION.

| Location/Group | E1-E3 | E4-E5 | E6-E7 | E8-E9 | O1-O3 | O4-O10 | WOs | Ungraded | Totals |
|--|--------------|--------------|--------------|--------------|--------------|---------------|------------|-----------------|---------------|
| 1. Marine Corps Base Camp Pendleton | 460 | 402 | 99 | 17 | 50 | 16 | 14 | 29 | 1087 |
| 2. Marine Corps Air Station Miramar | 110 | 119 | 38 | 8 | 24 | 7 | 4 | 1 | 311 |
| 3. Marine Corps Recruit Depot San Diego | 8 | 16 | 14 | 0 | 5 | 1 | 1 | 0 | 45 |
| 4. Marine Corps Air Station Yuma | 53 | 42 | 19 | 4 | 5 | 4 | 4 | 1 | 132 |
| 5. Marine Air Ground Task Force Training Command | 150 | 104 | 29 | 5 | 7 | 3 | 6 | 10 | 314 |
| 6. Marine Corps Logistics Base Barstow | 3 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 11 |
| 7. Marine Corps Base Camp Lejeune | 490 | 328 | 94 | 22 | 43 | 17 | 13 | 14 | 1021 |
| 8. Marine Corps Air Station New River | 68 | 80 | 33 | 3 | 15 | 6 | 4 | 2 | 211 |
| 9. Marine Corps Air Station Cherry Point | 105 | 106 | 44 | 8 | 22 | 8 | 3 | 1 | 297 |
| 10. Marine Corps Air Station Beaufort | 44 | 53 | 20 | 2 | 7 | 4 | 2 | 2 | 134 |
| 11. Marine Corps Recruit Depot Parris Island | 13 | 30 | 22 | 3 | 4 | 2 | 1 | 0 | 75 |
| 12. Marine Corps Logistics Base Albany | 7 | 10 | 5 | 2 | 2 | 2 | 0 | 0 | 28 |
| 13. Marine Corps Base Quantico | 30 | 63 | 26 | 8 | 42 | 20 | 4 | 12 | 205 |
| 14. Headquarters Battalion Henderson Hall | 13 | 27 | 12 | 4 | 3 | 14 | 2 | 0 | 75 |
| 15. Marine Corps Base Hawaii | 84 | 63 | 22 | 4 | 10 | 1 | 3 | 6 | 193 |
| 16. Marine Corps Air Station Iwakuni | 26 | 20 | 8 | 2 | 6 | 1 | 0 | 3 | 66 |
| 17. Marine Corps Base Camp Butler | 177 | 108 | 56 | 12 | 21 | 13 | 4 | 2 | 393 |
| 18. Others, Outside of CONUS | 13 | 67 | 38 | 8 | 14 | 41 | 0 | 8 | 189 |
| 19. Others, Inside of CONUS (minus MCRC) | 146 | 448 | 545 | 213 | 223 | 249 | 41 | 61 | 1926 |
| MCRC (District and below) | 11 | 822 | 1750 | 57 | 68 | 6 | 16 | 38 | 2768 |
| Unidentified BASE | 40 | 23 | 4 | 3 | 5 | 3 | 1 | 21 | 100 |
| Unidentified IDM | 11 | 13 | 25 | 7 | 2 | 5 | 0 | 13 | 76 |
| Base Subtotals | 1881 | 1598 | 547 | 108 | 272 | 122 | 66 | 104 | 4698 |
| IDM Subtotals | 170 | 528 | 608 | 228 | 239 | 295 | 41 | 82 | 2191 |
| Total | 2062 | 2948 | 2905 | 393 | 579 | 423 | 123 | 224 | 9657 |

TABLE 3-11. 2002 STUDY MARINE CORPS SNAPSHOT BY PAY GRADE BAND AND LOCATION.

| Location/Group | E2-E3 | E4-E5 | E6-E7 | E8-E9 | O1-O3 | O4-O10 | WOs | Totals |
|--|--------------|--------------|--------------|--------------|--------------|---------------|-------------|---------------|
| 1. Marine Corps Base Camp Pendleton | 13677 | 10521 | 3059 | 672 | 1452 | 537 | 341 | 30259 |
| 2. Marine Corps Air Station Miramar | 2851 | 3262 | 1098 | 214 | 619 | 254 | 118 | 8416 |
| 3. Marine Corps Recruit Depot San Diego | 201 | 370 | 212 | 60 | 110 | 47 | 17 | 1017 |
| 4. Marine Corps Air Station Yuma | 1430 | 1281 | 506 | 84 | 169 | 109 | 53 | 3632 |
| 5. Marine Air Ground Task Force Training Command | 4682 | 2787 | 844 | 164 | 367 | 93 | 67 | 9004 |
| 6. Marine Corps Logistics Base Barstow | 86 | 62 | 53 | 12 | 12 | 8 | 4 | 237 |
| 7. Marine Corps Base Camp Lejeune | 14288 | 9211 | 2663 | 672 | 1256 | 409 | 300 | 28799 |
| 8. Marine Corps Air Station New River | 1885 | 2033 | 801 | 117 | 394 | 145 | 68 | 5443 |
| 9. Marine Corps Air Station Cherry Point | 2939 | 2729 | 1123 | 242 | 479 | 252 | 125 | 7889 |
| 10. Marine Corps Air Station Beaufort | 1296 | 1287 | 519 | 85 | 176 | 86 | 60 | 3509 |
| 11. Marine Corps Recruit Depot Parris Island | 306 | 744 | 558 | 74 | 121 | 49 | 23 | 1875 |
| 12. Marine Corps Logistics Base Albany | 164 | 250 | 134 | 47 | 41 | 43 | 11 | 690 |
| 13. Marine Corps Base Quantico | 1140 | 1773 | 877 | 259 | 1619 | 761 | 101 | 6530 |
| 14. Headquarters Battalion Henderson Hall | 517 | 604 | 369 | 138 | 101 | 391 | 29 | 2149 |
| 15. Marine Corps Base Hawaii | 2617 | 2281 | 702 | 138 | 331 | 81 | 68 | 6218 |
| 16. Marine Corps Air Station Iwakuni | 908 | 697 | 350 | 60 | 67 | 38 | 38 | 2158 |
| 17. Marine Corps Base Camp Butler | 5518 | 3466 | 1763 | 426 | 561 | 354 | 195 | 12283 |
| 18. Others, Outside of CONUS | 434 | 1191 | 409 | 92 | 119 | 358 | 17 | 2620 |
| 19. Others, Inside of CONUS (minus MCRC) | 4557 | 5590 | 4060 | 927 | 2156 | 1,839 | 241 | 19370 |
| MCRC (District and below) | 0 | 913 | 2067 | 65 | 73 | 0 | 0 | 3118 |
| Unidentified | 853 | 546 | 441 | 69 | 62 | 33 | 12 | 2016 |
| Total | 60349 | 51598 | 22608 | 4617 | 10285 | 5887 | 1888 | 157232 |

Residence Domain

The average resident cognitive or satisfaction measurement was 4.47 in 1993, 4.51 in 1998, and 4.18 in 2002, indicating that overall satisfaction levels have remained in the neutral to somewhat satisfied range. As with the previous two quality of life studies, there is relatively small differential with the affective or happiness measure. The overall average for this measure for 1993 was 4.43, for 1998 it was 4.41, and for 2002 is 4.18. While the declines in 2002 cognitive and affective measurements of this domain are statistically significant (that is, unlikely to be an artifact of sampling), they are not of practical significance. The Residence domain is not a key driver of Marine Global quality of life.

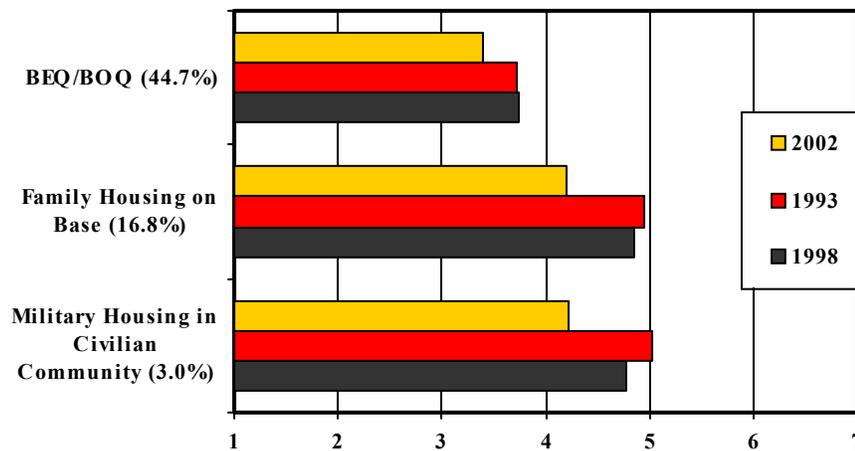


Figure 3-3. Satisfaction With Military Residence.

As is shown in Figure 3-3, the decrease in satisfaction for this domain is attributable primarily to declines in satisfaction that are both statistically and practically significant among those in family housing on base (-.65), and military housing in the civilian community (-.56). However, these groups represent only 16.8 and 3 percent of the Marine Corps, respectively. Six specific categories of housing were compared in the 1998 study.

- ◆ Military bachelor quarters
- ◆ Military family housing on base
- ◆ Military family housing in the civilian community
- ◆ Personally owned housing in the civilian community
- ◆ Personally rented housing in the civilian community
- ◆ Shared rental housing in the civilian community

The decrease in satisfaction to 3.40 with military Bachelor Quarters, although relatively slight compared to the others, was still statistically significant. This group represents almost 45% of the Marine Corps and they are reporting as still being dissatisfied, on average, with their quarters; this tends to seriously suppress overall

residence satisfaction. The pay grades reporting as satisfied (above 4.0) are E6-E7 and O1-O3, a total of less than 1.5% of Bachelor Quarter residents.

Figure 3-4 displays the results that Marines in personally owned housing remain close to satisfied with their residences; those in rented and shared rental housing remain in the somewhat satisfied band. The population living in civilian housing is sufficiently small that our composite is subject to wide variability in the 2002 estimate of the population average. Also, those in shared rental housing represent only 4.5% of the Marine Corps.

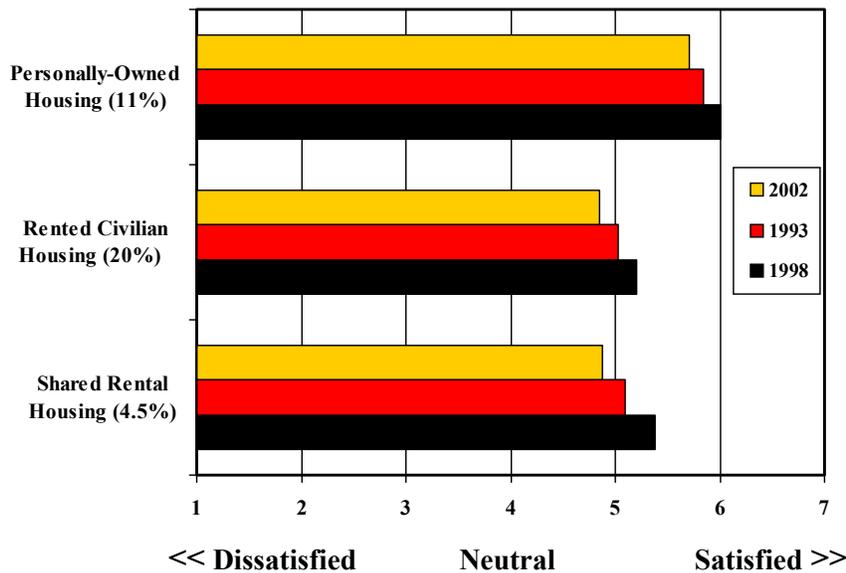


Figure 3-4. Satisfaction With Non-Military Residence.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Residence domain for the Base and Station group. An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The least correlated factor is cost; it is the most unique attribute.

Figure 3-5 displays the Residence domain aspect satisfactions for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). We focused on those who occupy military housing; personnel assigned to bases and stations dominate the military housing arena. All domain aspects and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 3.56, less than the Active Duty composite value of 4.18 and statistically significant. This indicates that Marines not in military housing are reporting distinctly higher residential satisfaction.

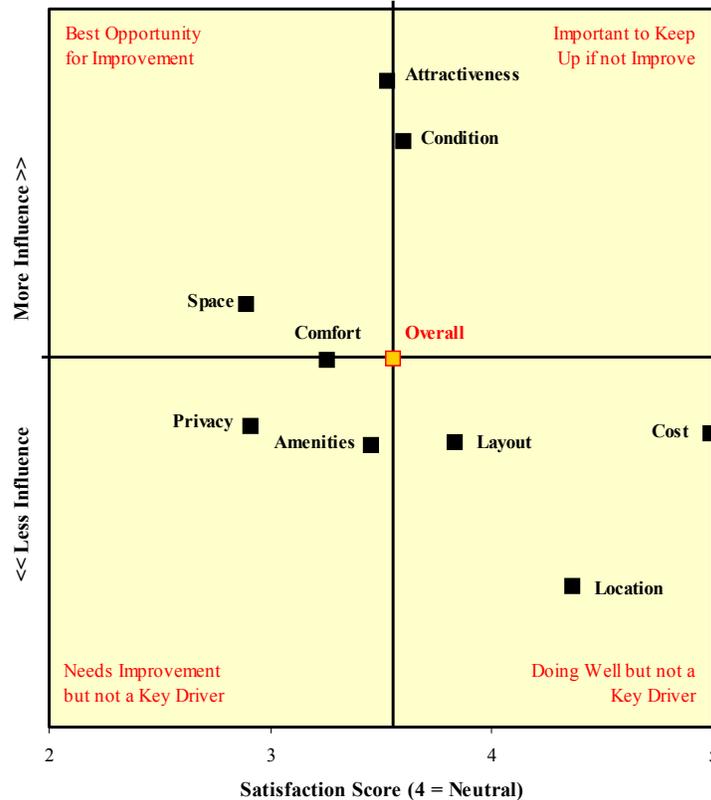


Figure 3-5. Key Driver Diagram For Military Housing.

This set of nine variables accounts for 77% of the variance in residence satisfaction, a high value for social research, with the 4 key drivers accounting for 73%. In order to understand the nature of these drivers, we display the evaluations of satisfaction with these aspects in relation to their influence.

Overall residence satisfaction for respondents living in military housing is most strongly influenced by, in order of influence:

- ◆ Satisfaction with attractiveness
- ◆ Satisfaction with condition (e.g., whether the residence is well-maintained)
- ◆ Satisfaction with space
- ◆ Satisfaction with comfort (e.g., whether the residence is too noisy, too hot, too cold).

All domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. Figure 3-5 shows that most influential drivers of residence satisfaction, for respondents in military housing, received ratings that fall into the dissatisfied portion of the scale, that is, less than 4.

One focal point would be the Attractiveness/Condition cluster, the two dominant key drivers rated at average satisfaction. Another would be improvement in the satisfaction

with Space (the aspect showing the greatest dissatisfaction). A third focal point would be Comfort. Additional investigation of these attributes in military housing by housing experts at each location could provide action plans customized to military base location.

Domain Conclusions.

Respondents in military housing are somewhat dissatisfied to neutral in their perception of their residences, possibly due to a perception of less attractiveness and of a poorer condition in military residences. Those who live in non-military residences reported ratings in the satisfied portion of the scale. It is possible that declines represented in this domain reflect an actual decline in housing conditions, but it may also be due to increased expectations of housing for military members. When asked to represent how much their housing measures up to what their goals are for their housing on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 44%. This indicates that Marines do not feel that their residences measure up even halfway to their goal in this area of life.

Neighborhood Domain

Marines remain in the neutral to somewhat satisfied range with regards to their military residence neighborhoods. The average neighborhood cognitive (satisfaction) measurement was 4.89 in 1993, 4.92 in 1998, and for 2002 is 4.61. This domain was also examined using an affective (happiness) measure. This measure asked respondents to rate their neighborhood using a seven-point scale which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure for 1993 was 4.53, for 1998 it was 4.52, and for 2002 is 4.45. While the declines in 2002 cognitive and affective measurements are statistically significant, they are not likely to be of practical significance. The Neighborhood domain is not a key driver of Marine Global quality of life.

There were six specific categories of housing for which domain satisfaction comparisons had been performed in the 1998 study:

- ◆ Military Bachelor Quarters
- ◆ Military Housing on Base
- ◆ Military family housing in the civilian community
- ◆ Personally owned housing in the civilian community
- ◆ Personally rented housing in the civilian community
- ◆ Shared rental housing in the civilian community

Figure 3-6 compares the results of the first three describing satisfaction with military housing neighborhood.

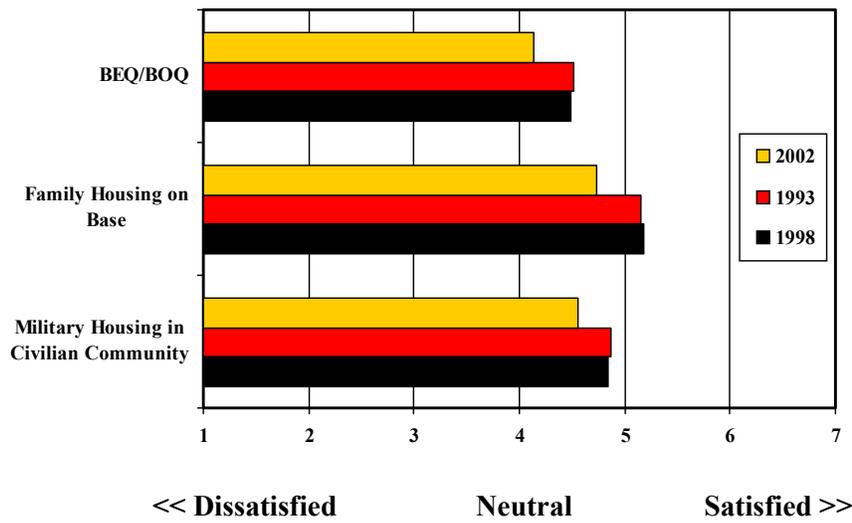


Figure 3-6. Satisfaction With Military Residence Neighborhood.

These declines accentuate those seen in the Residence domain for Marines living in military housing. However, while these results are statistically significant, they are not practically so.

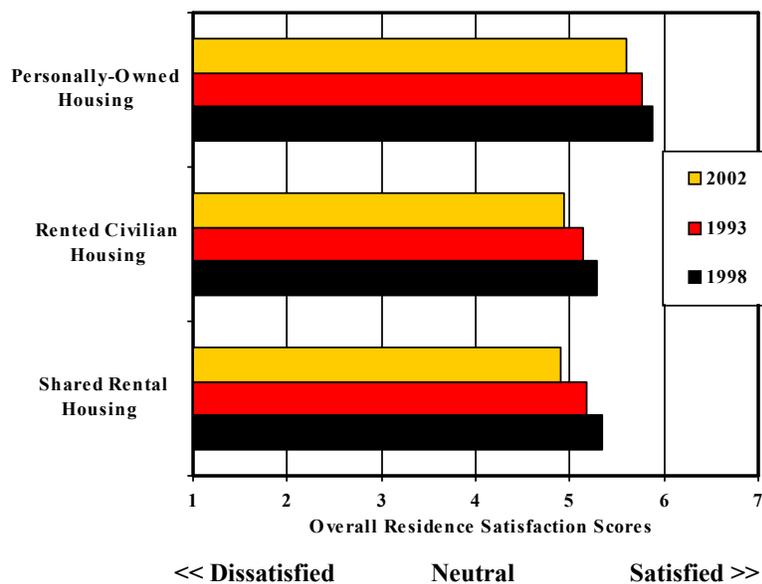


Figure 3-7. Satisfaction With Non-Military Neighborhood.

Figure 3-7 displays Neighborhood satisfaction with personally owned, rented, and shared housing. Marines in personally owned housing are still in the somewhat satisfied

to satisfied range. Marines in rented civilian housing and shared rental housing are still in the somewhat satisfied band. Those in shared rental housing represent only 3% of the Marine Corps.

The result of this analysis of the reports of Neighborhood satisfaction indicates that Neighborhood satisfaction averages are still on the satisfied side of neutral. As a life domain, Neighborhood is theoretically separate from Residence, however, it is so highly correlated with Residence as an influence on satisfaction with Global quality of life that it seems superfluous as it is currently measured. For example, items related to the physical neighborhood are repetitive with Residence, such as condition of other dwellings especially with respect to military housing. It may be better in the future to construct a domain called Community and concentrate on measuring aspects such as friendliness, services available, etc.

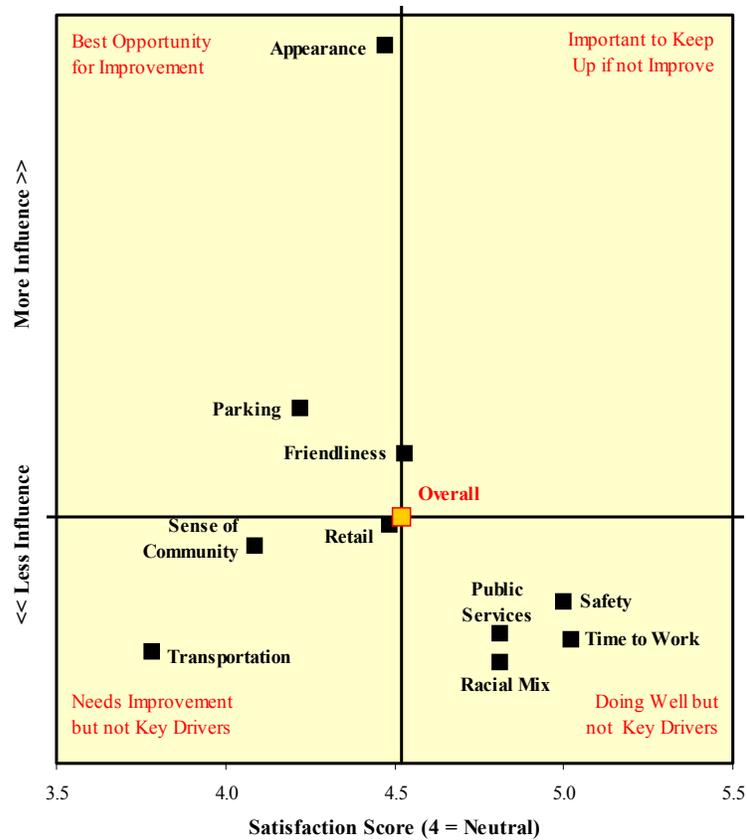


Figure 3-8. Key Driver Diagram For Neighborhood.

In order to indicate which aspects of Neighborhood are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the neighborhood domain for the Base and Station sample. The results are displayed in Figure 3-8.

Figure 3-8 displays the Neighborhood domain satisfaction overall and all but one of the domain aspect satisfaction scores (condition of other dwellings) for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction of 4.52 is almost equal to the Active Duty composite value of 4.61. An exploratory factor analysis suggests that these aspects are sufficiently highly correlated to signify the existence of a single underlying factor and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

The condition of other dwellings aspect is so highly correlated with the appearance aspect (.824 while all other aspect correlations are less than .65) that the regression ends up watering down the influence of each. Since appearance had the larger influence, we eliminated condition from the regression. The least correlated factor is time to work, which has the highest satisfaction score, not surprising since we are analyzing Base and Station respondents.

The Neighborhood domain aspects are located vertically in relation to their influence on the overall domain satisfaction score as indicated by the regression analysis. As a whole, they explain about 74% of the variance observed in the overall domain satisfaction score. The top three drivers of domain satisfaction are:

- ◆ Satisfaction with appearance
- ◆ Satisfaction with parking
- ◆ Satisfaction with friendliness

These account for 69% of the variability. In particular, the appearance aspect is by far the largest predictor of overall domain satisfaction accounting for 56% of the variance. Thus, it is a physical attribute, correlated to the attractiveness of residences, which dominates the overall domain satisfaction.

Improvements in the satisfaction with appearance, which subsumes condition, would be one focal point. Another focal point would be parking. A third focal point would be friendliness. Additional investigation of these attributes in military neighborhoods by experts at each location could provide action plans customized to military base location.

Domain Conclusions.

Respondents are generally somewhat satisfied with their non-military neighborhoods. It is possible that the change in satisfaction in several categories represents an actual decline in neighborhood conditions, but it may also be due to increased expectations of the kind of community desired by Active Duty Marines. When asked to represent how much their current neighborhood measures up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 46%. This indicates that

Marines do not feel that their neighborhoods measure up even halfway to their goal in this area of life.

Leisure and Recreation Domain

Overall, Marines remain neutral to somewhat satisfied in regards to the Leisure and Recreation domain. The average Leisure and Recreation cognitive (satisfaction) measurement was 4.34 in 1993, 4.52 in 1998, and is 4.13 in 2002. As with the previous two quality of life studies, there is a great differential with the affective (happiness) measure. This measure asked respondents to rate their happiness with how they spend their leisure time using a seven-point scale which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure for both 1993 and 1998 was 4.98, and for 2002 it is 4.85. While these 2002 declines in cognitive and affective measurements are statistically significant, they are likely not practically significant. Leisure and Recreation is the weakest key driver of the Marine Global quality of life.

Why should the affective measure be so different than the cognitive measure? The reason, hinted at in the 1993 study, may be that the questions are different: the affective measure concentrates on your happiness with how you spend leisure time while the cognitive measure incorporates not just what you do, but how much time you have to do it, the amount of time aspect of this domain has the lowest satisfaction rating within the group of four domain aspects.

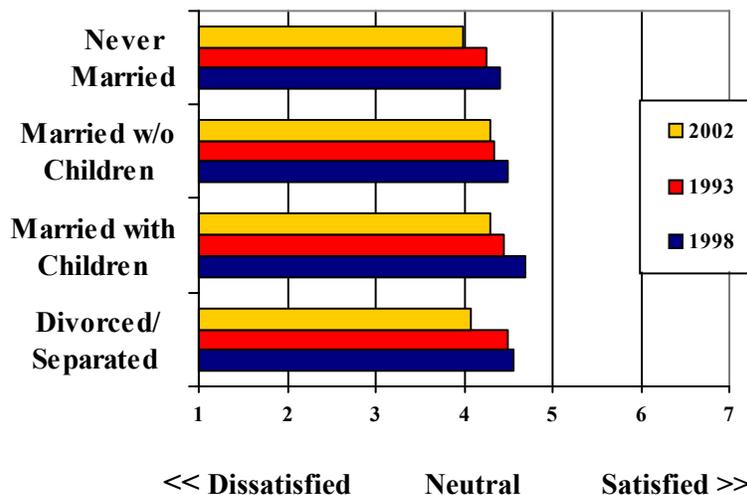


Figure 3-9. Satisfaction With Leisure And Recreation.

Because satisfaction/happiness with Leisure and Recreation are likely a function of how much free time one has and one’s home-life demands, analyses by both pay grade and marital/parental status were conducted. There were four specific subcategories of marital/parental respondents for which domain satisfaction comparisons were performed in the 1998 study. They are compared here in Figure 3-9.

All these results are statistically significant except the change from 1993 in the married without children group. Figure 3-10 displays the Leisure and Recreation satisfaction ratings by pay grade.

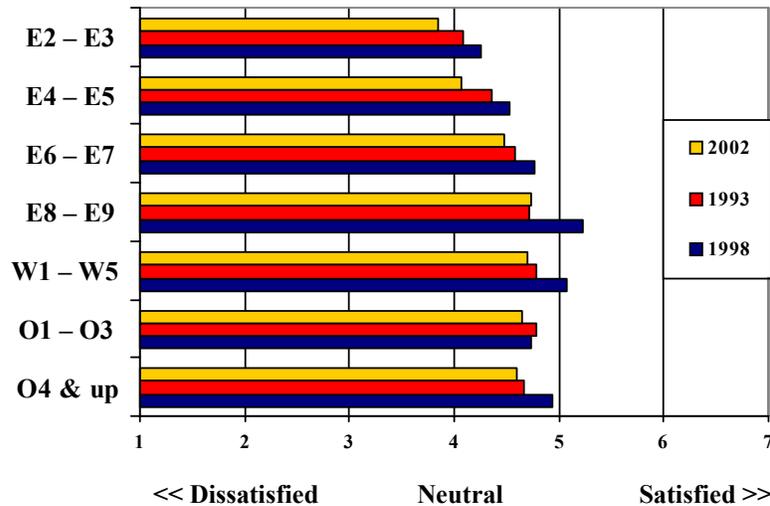


Figure 3-10. Satisfaction With Leisure And Recreation By Pay Grade.

Except for the two lower enlisted pay grades, the differences between this 2002 study and the 1993 study are not statistically significant (that is, could well be an invalid by-product of sampling.) Therefore, the statistically significant drop back from the 1998 study essentially brings us back to the 1993 values. The decrease in satisfaction of the lower enlisted pay grades, which represent over 70% of the Marine Corps, bears monitoring. The decline in this large cohort tends to depress the results of the domain, and reflects that, overall, these Marines are now barely within the neutral band.

Among the four aspects of the Leisure and Recreation domain, variety, cost, facilities provided, and amount of leisure time, all dropped to somewhat lower satisfaction levels with respect to 1993, except for cost, with about the same satisfaction. Satisfaction with the amount of time fell the most. In order to demonstrate more usefully which aspects of Leisure and Recreation are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Leisure and Recreation domain for the Base and Station group. Results are displayed in Figure 3-11.

Figure 3-11 displays the Leisure and Recreation domain satisfactions for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps and all the domain aspects can be controlled by the Marine Corps). The domain aspects and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 4.07, close to the Active Duty composite value of 4.13. An exploratory factor analysis indicates that these aspects are highly correlated and thus that the overall domain satisfaction score represents a

consistent measure of domain satisfaction. The least correlated factor is the satisfaction with the amount of leisure time, which has the lowest satisfaction score.

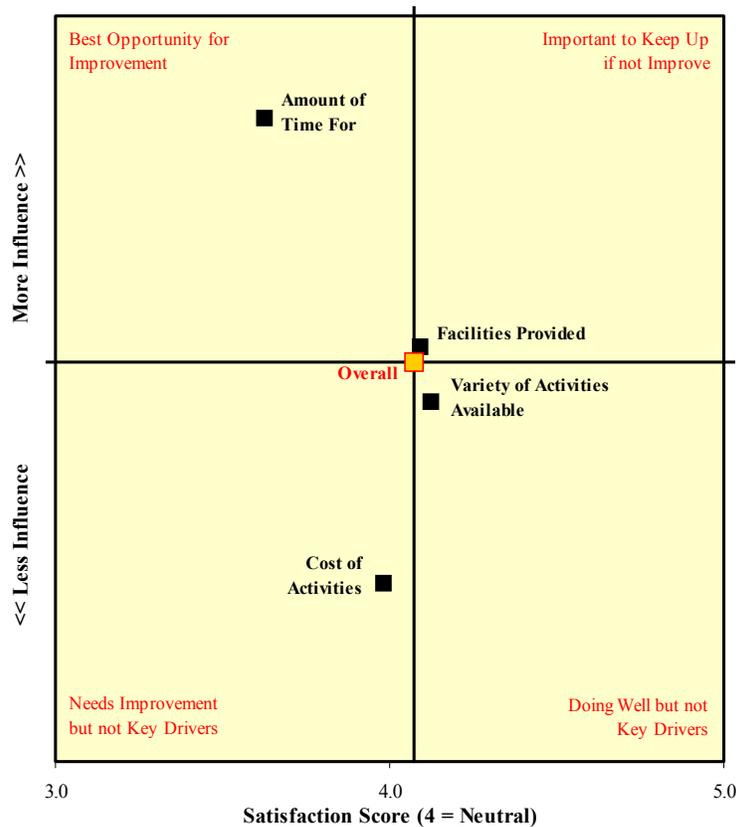


Figure 3-11. Key Diagram For Leisure And Recreation.

The Leisure and Recreation domain aspects are located vertically in relation to their influence on the overall domain satisfaction score as indicated by the regression analysis. As a whole, they explain about 72% of the variance observed in the overall domain satisfaction score. The top driver of overall domain satisfaction in this display is clearly the amount of leisure time. However, this aspect alone will only account for 46% of the variance in overall domain satisfaction. This is because the variety of leisure activities and the facilities provided are more highly correlated than any other pair of aspects (> .75) with facilities provided on its own accounting for 50% of the variance when it substitutes for both facilities provided and variety. Eliminating variety brings facilities provided up to equal in influence to the amount of leisure time, but, still, the greatest dissatisfaction is with the amount of leisure time, which represents the best opportunity for improvement of the domain overall.

Marines were asked about the frequency with which they participated in 29 different leisure activities. The five most frequently performed activities at bases and stations were: 1) listening to music, far ahead of any other activity; 2) working out, running, 3) watching TV/playing video games, about equally for each; 4) reading, and 5) dining out,

about equally for each. This is about the same list as in 1998 but perhaps in a different order if the 1998 report is in order of preference: participating in active sports is now absent. The reasons given by those not participating in these most popular activities were: 1) music, low priority, 2) working out, not enough time, 3) video, not enough time, 4) reading, not enough time, and 5) dining out, too expensive.

Domain Conclusions.

Respondents overall reported being neutral to somewhat satisfied in their perception of Leisure and Recreation opportunities. The lower pay grades appear to be becoming less satisfied with their Leisure and Recreation time. The reason seems to be a perception of less satisfaction with the amount of time they have available for leisure activities. When asked to represent how much their current Leisure and Recreation measures up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% represents no match at all with their goal, the average response for the Active Duty composite was 49%. This indicates that Marines do not feel that their Leisure and Recreation time and activities measure up even halfway to their goal in this area of life.

Health Domain

In general, Marines report being somewhat satisfied with their health. The average health cognitive (satisfaction) measurement was 5.41 in 1993, 5.30 in 1998, and is 5.04 in 2002. As with the previous two quality of life studies, there is little differential with the affective measure. This measure asked respondents to rate their happiness with how they spend their leisure time using a seven-point scale which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure was 5.42 in 1993, 5.25 in 1998 and 5.02 in 2002. The declines in 2002 cognitive and affective measurements are statistically, but likely not practically significant. Health is not a key driver of Marine Global quality of life.

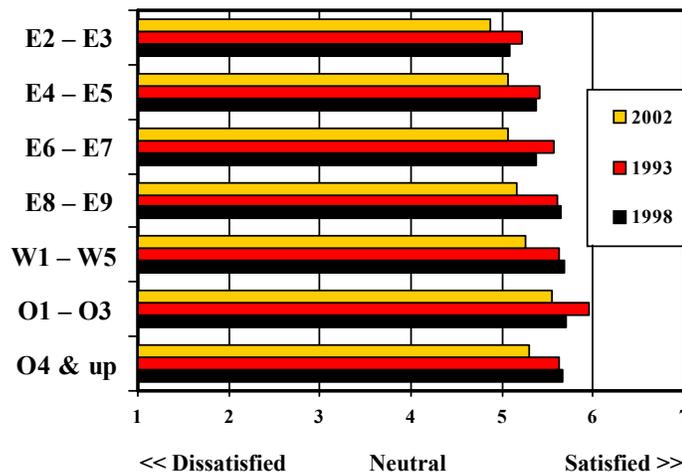


Figure 3-12. Satisfaction With Health By Pay Grade.

Because satisfaction/happiness with health are likely a function of how much time one has to exercise, to sleep, and to eat right, an analysis by pay grade was conducted. The results are displayed in Figure 3-12.

The decreases in health satisfaction are statistically significant, but are not likely practically significant. Most Marines still report being somewhat satisfied with their health. Satisfaction with health care is shown in Figure 3-13.

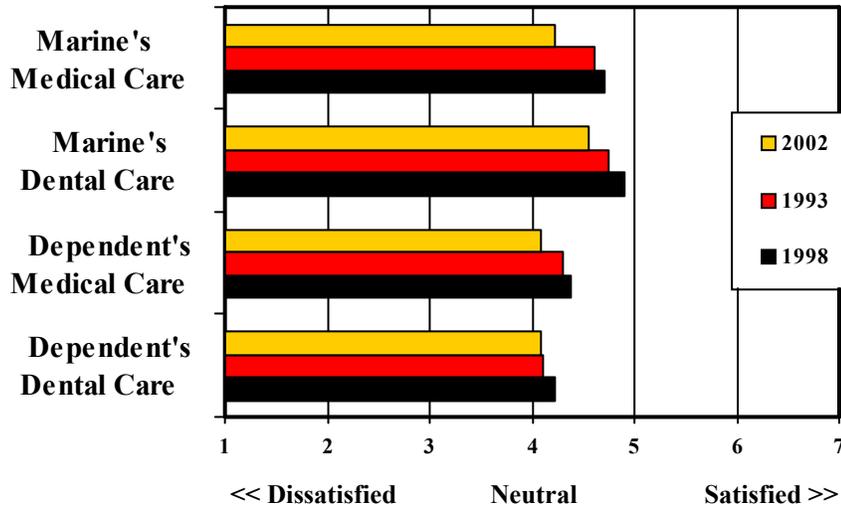


Figure 3-13. Satisfaction With Health Care.

Satisfaction with health and dental care are still in the neutral to somewhat satisfied range in 2002. When compared to 1993 and 1998 figures, the decreases in 2002 satisfaction ratings are statistically significant, except for family member dental care 2002 vs. 1993, which are about equal. However, we also note that satisfaction with health care depends on the provider. For the Base and Station respondent group, the greatest satisfaction, by far, are those few (0.4%) who have group fee for service contracts; they report an average satisfaction of 4.93 for medical care; however, because respondents were so few, the 95% confidence band spans from 3.84 and 6.02, so the 4.93 may be validly comparable to other figures. The next highest score is 4.37 for TRICARE Extra, although military medical, Group HMO, and TRICARE Standard are both statistically close to that figure. Thus, all four providers mentioned above may have equal satisfaction scores in the underlying population.

For dental, the group fee for service users report an average satisfaction of 5.86, with a tighter 95% confidence band, and no other plan is close. Results similar to Marine medical care pertain to family member medical care, but for family members' dental care, the military medical has the second highest score but a very tight range ($4.31 \pm .063\sigma$), a set of statistically close competitors have much broader regions of uncertainty: they are Primary HMO ($4.36 \pm .151\sigma$) and Group fee for service ($4.28 \pm .276\sigma$). All three may have equal satisfaction scores in the underlying population. Falling far behind was TRICARE Remote, followed by TRICARE Extra.

In order to indicate which aspects of health are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Health domain for the Base and Station group. Results are displayed in Figure 3-14.

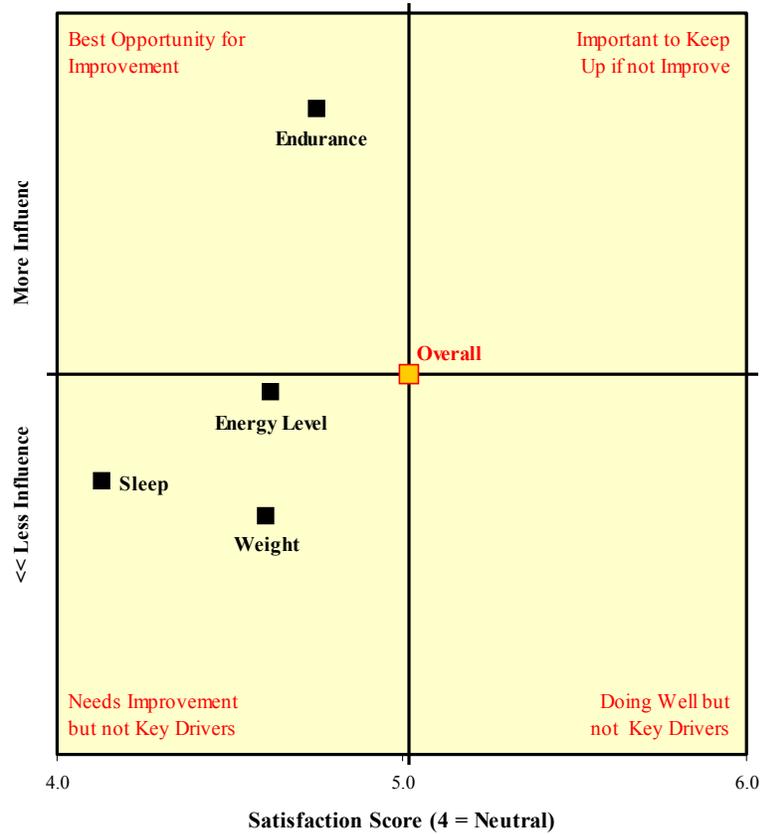


Figure 3-14. Key Driver Diagram For Health.

Figure 3-14 displays the Health domain satisfactions for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.02, somewhat larger than the Active Duty composite value of 4.95. This indicates that Independent Duty Marines are reporting distinctly lower scores in their overall satisfaction with their health. This will be explored later in this chapter. An exploratory factor analysis indicates that these aspects are highly correlated and thus that the overall domain satisfaction score represents a consistent measure of domain satisfaction. However, the overall domain satisfaction is larger than that of any of its aspects; this is consistent with prior studies and suggests that Marines may have in mind other facets of overall health not currently included as Health domain aspects.

The Health domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole, they explain only about 57% of the variance observed in the overall domain satisfaction. Given that in other domains, the domain aspects have been explaining over 70% of the

overall domain satisfaction variance, this again suggests that Marines may have in mind other facets of overall health not currently included as Health domain aspects.

The top driver and the sole focal point of overall domain satisfaction in this display is clearly the endurance aspect. This aspect alone accounts for 46% of the variance in overall domain satisfaction. The greatest dissatisfaction is with the amount of sleep which may be another indicator of the lack of time expressed in the Leisure and Recreation domain. Similar findings for the importance of endurance to the Health domain satisfaction and dissatisfaction with amount of sleep were articulated in *Kerce (1995)*.

We also note that among the four aspects of the Health domain, namely, weight, energy level, sleep, and endurance, all dropped to somewhat lower satisfaction levels with respect to both 1993 and 1998, which reported decreases with respect to 1993 of 2% for energy level and endurance, and a drop of 5% in satisfaction with sleep. For 2002 we have additional decreases in satisfaction of 9% for sleep and endurance and 5% for both energy level and now also for weight. All of these are statistically significant.

Domain Conclusions.

Respondents of all pay grades appear to be satisfied with their health, but somewhat less so than in 1993 and 1998. In addition, when asked to represent how much their current health measures up to what their goals are on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 68%, one of the highest scores in the expectancy measure. This indicates that Marines feel that their health measures up relatively well to their goal in this area of life.

Friends and Friendship Domain

Marines all report being somewhat satisfied with their Friends and Friendships in 2002. The average domain cognitive (satisfaction) measurement was 5.30 in 1993, 5.39 in 1998, and is 5.18 in 2002. An affective (happiness) measure asked respondents to rate their happiness with their friendships using a seven-point scale, which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure was 5.06 for 1993, 5.09 for 1998 and 4.97 in 2002. These small cognitive and affective declines, while statistically significant, are likely not practically so. This domain is not a key driver of Marine Global quality of life.

Similar to the 1998 study, a satisfaction with friendships analysis by pay grade was conducted. The results are displayed in Figure 3-15. Marines in all pay grades are somewhat satisfied to satisfied with their friendships overall. We analyzed the question "Do you have friends at this location with whom you feel free to discuss personal matters?" The majority of respondents in each pay grade felt they did have close friends at this location. However, the two groups that most frequently reported that they did not were the E8-E9s (33%) and O4s & up (37%).

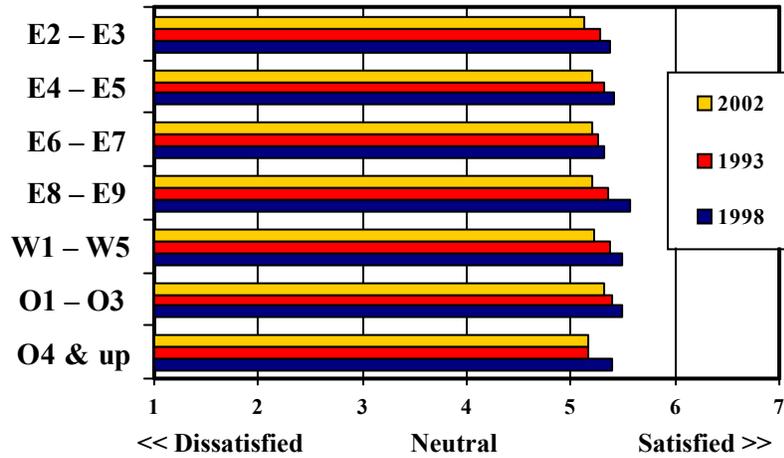


Figure 3-15. Satisfaction With Friends And Friendships By Pay Grade.

In order to indicate with more utility which aspects of domain satisfaction are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the aspects of friendship satisfaction for the Base and Station respondent group. Results are displayed in Figure 3-16.

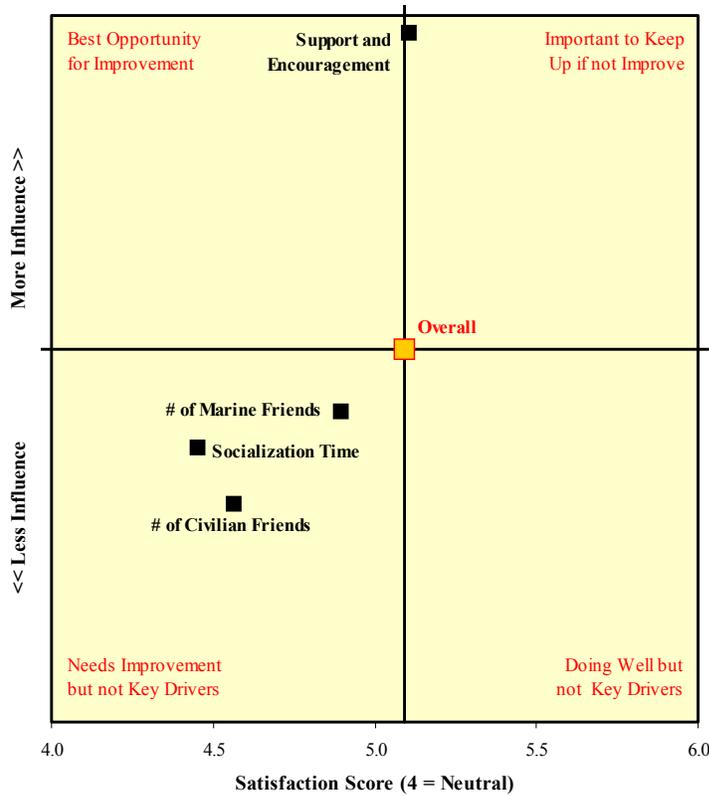


Figure 3-16. Key Driver Diagram For Friends.

Figure 3-16 displays the Friends and Friendships domain satisfactions for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.09, somewhat less than the Active Duty composite value of 5.18. An exploratory factor analysis indicates that these aspects are highly correlated and thus that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

The Friends and Friendships domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 59% of the variance observed in the overall domain satisfaction. Given that in other domains the domain aspects have been explaining over 70% of the overall domain satisfaction variance, this suggests that the current set of aspects measure satisfaction with friendships fairly well, but that Marines may have other issues in mind when evaluating their overall satisfaction with their friendships.

The top driver and the sole focal point of overall domain satisfaction in this display is clearly the support and encouragement aspect and, on average, Marines report being somewhat satisfied in this area. This aspect alone accounts for 49% of the variance in overall domain satisfaction. The greatest lack of satisfaction is with socialization time, although this is still in the neutral range. This may be another indicator of the lack of free time expressed in prior domains. The 1993 top key drivers of satisfaction with friendships were identical to those reported in 2002.

Domain Conclusions.

Respondents of all pay grades appear to be satisfied their relationships with their friends. When asked to represent how much their current friendships measure up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 67%, one of the highest scores in the expectancy measure. This indicates that Marines feel that their friendships measure up relatively well to their goal in this area of life.

Marriage/Intimate Relationship Domain

Marines' perceptions of their marriage/intimate relationships were well into the satisfied range. The average cognitive (satisfaction) measurement with Marriage/Intimate Relationships overall was 5.85 in 1993 and 1998, and is 5.59 in 2002. An affective (happiness) measure asked ALL respondents to rate their happiness with their Marriage/Intimate Relationship, even those not seriously involved, using a seven point scale which runs from 1 (Terrible) to 7 (Delighted). The average rating was 4.79 in 1993, 4.87 in 1998 and is 4.73 in 2002. The 2002 cognitive and affective measures are statistically, but likely not practically, significant. The Marriage/Intimate Relationship domain is not a key driver of Marine Global quality of life.

Just as for the 1998 study an analysis by pay grade was conducted. The results are displayed in Figure 3-17.

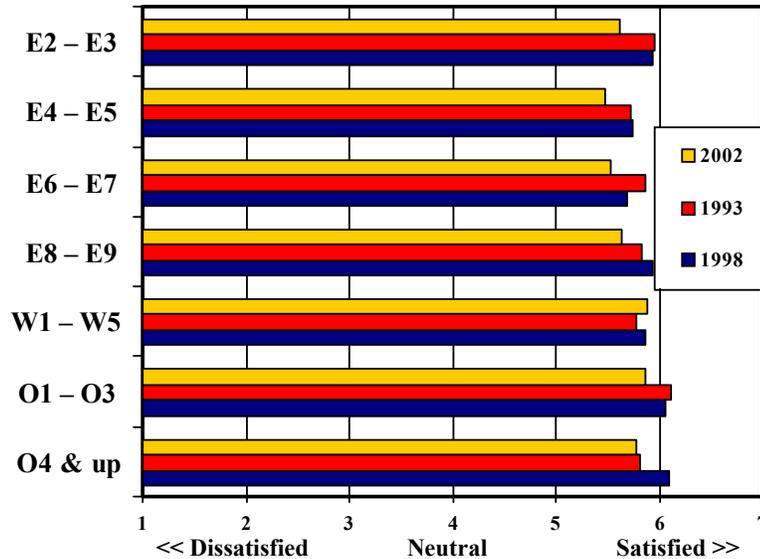


Figure 3-17. Satisfaction Marriage/Intimate Relationship By Pay Grade.

All averages are well into the satisfaction range. The changes in satisfaction with marriage/intimate relationship for the E-2/E-3 and E-4/E-5 subgroups were statistically significant from 1993 and 1998 levels, but likely not practically so.

We investigated whether those who are married differ in satisfaction from those who are unmarried but seriously involved. We found that the seriously involved report being significantly more satisfied (5.87) with their relationship than those who are married (5.51). Interestingly, the presence of children in the Marine marriage relationship did not make a statistically significant difference in reported domain satisfaction; they are both at 5.51. Because of the differences between married and seriously involved respondents further analyses were conducted separately for these two groups.

In order to indicate with more utility which aspects of domain satisfaction are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Marriage/Intimate Relationship domain for the Base and Station respondent group. Results are displayed in Figure 3-18 and Figure 3-19.

Figure 3-18 displays the domain satisfactions for married Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.47, somewhat less than the Active Duty composite value of 5.59. An exploratory factor analysis indicates that

these aspects are highly correlated and thus that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

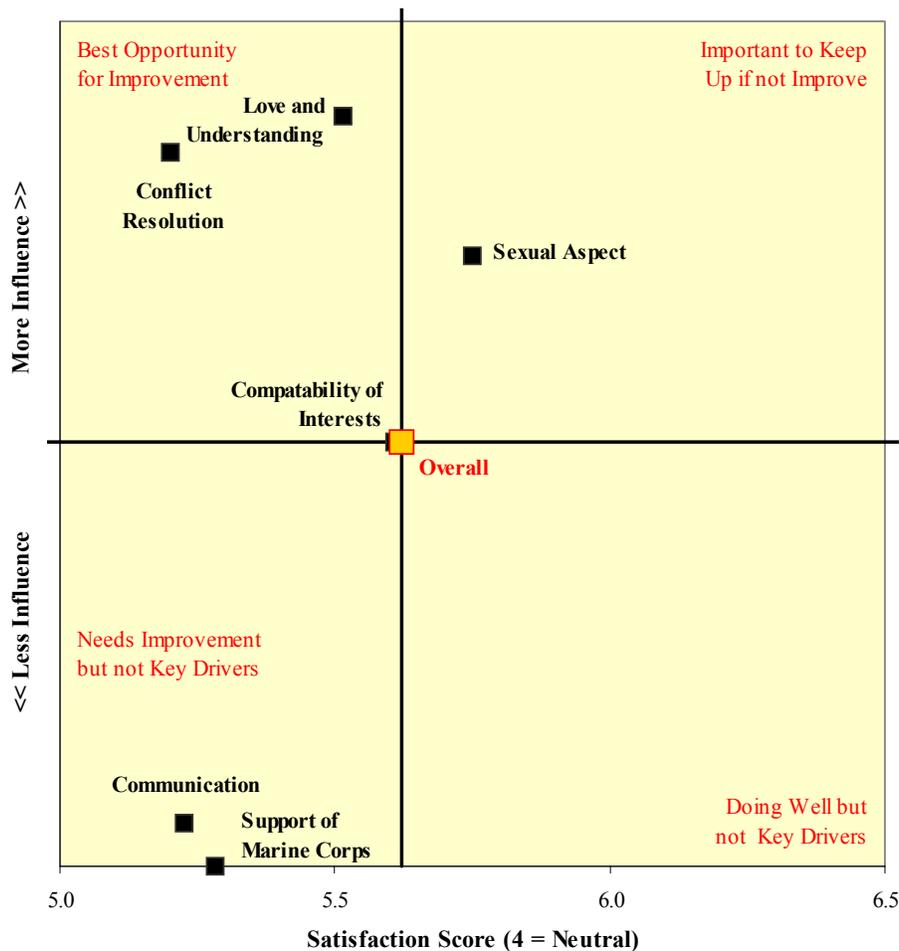


Figure 3-18. Key Driver Diagram For Married Marines.

The Marriage/Intimate Relationship satisfaction aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 86% of the variance observed in the overall domain satisfaction. This is the largest percentage of all domains and shows that the aspects do a very good job of assessing marriage satisfaction.

The two key drivers of overall domain satisfaction in this display are the sexual aspect and the love and understanding aspect. These aspects alone accounts for 83% of the variance in overall domain satisfaction. The third largest driver is satisfaction with communication (although very close to compatibility of interests). This set of drivers is reordered from those found for married Marines in 1993, when love and understanding was the number 1 driver followed by sex and then by compatibility of interests. It appears that the current population of married Marines has changed in terms of what it takes for them to be satisfied in their marriages.

When key drivers were examined for married Marines with children and those without children separately, the results were similar for the two groups. As with all of the key driver diagrams, the influence and satisfaction ratings are relative to the overall average influence and satisfaction. While both of the key drivers for married Marines fall into the best opportunity for improvement quadrant, notice that, overall, Marines are somewhat satisfied to satisfied with these key drivers.

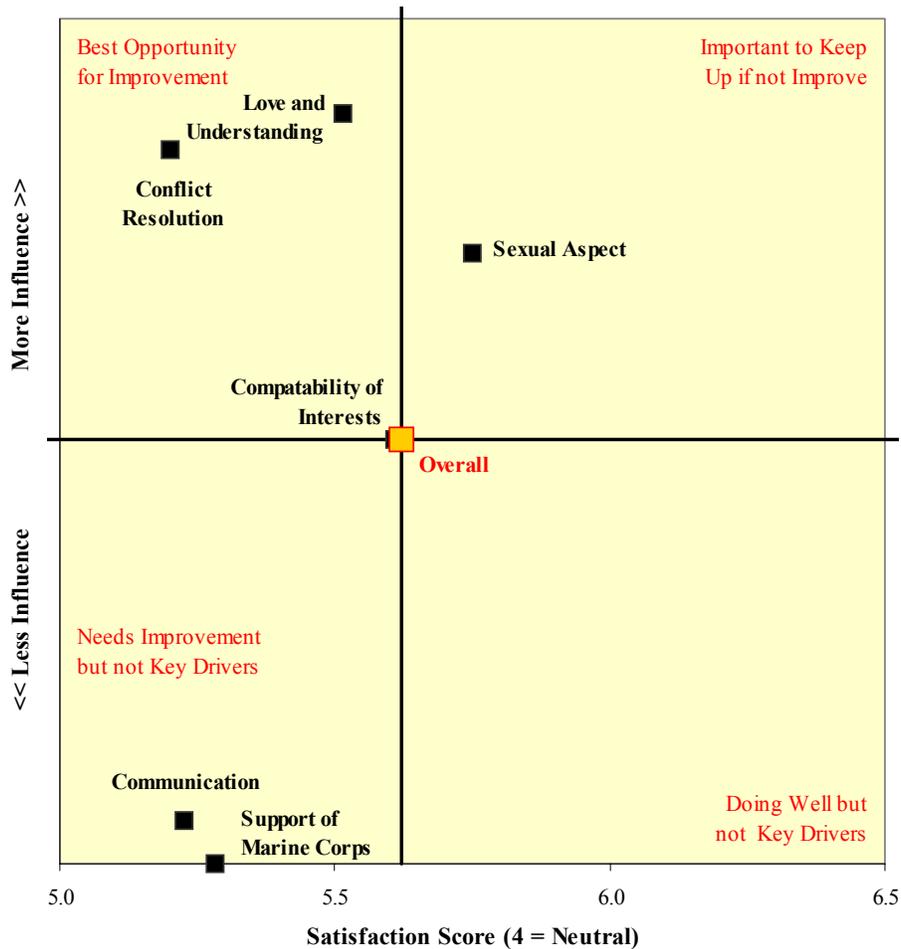


Figure 3-19. Key Driver Diagram For Seriously Involved Respondents.

Figure 3-19 displays the domain satisfactions for seriously involved Active Duty Marines assigned to Base and Stations. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.82, somewhat larger than the Active Duty composite value of 5.59. An exploratory factor analysis indicates that these aspects are highly correlated and thus that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

The Marriage/Intimate Relationship domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression

analysis. As a whole they explain 74% of the variance observed in the overall domain satisfaction.

The two key drivers again are the sexual aspect followed by love and understanding. These two aspects alone account for 69% of the variance in overall domain satisfaction. The third most important driver is compatibility of interests. In 1993, the number one key driver was love and understanding, followed by sex and conflict resolution. This again seems to reflect a change in priorities for seriously involved Marines since 1993.

As with all of the key driver diagrams, the influence and satisfaction ratings are relative to the overall average influence and satisfaction. While all of the key drivers for seriously involved Marines fall into the best opportunity for improvement quadrant, notice that, overall, Marines are somewhat satisfied to satisfied with these key drivers. The analysis above did not include seriously involved Marines with children (single parents), as they are a relatively small and unique population who should be analyzed separately. Since the usable sample size for this type of Marine was so small (N= 66), findings for this group should be used with caution. There are three key drivers of relationship satisfaction for single parents; they are in the order of influence: love and understanding, conflict resolution, and sex. Satisfaction with each of these drivers is also positive (in the somewhat satisfied to satisfied range).

Domain Conclusions.

Respondents of all pay grades are at least somewhat satisfied with their marriages/intimate relationships. When asked to represent how much their current marriage/intimate relationships measure up to what their goals are on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 59%, one of the middling scores in the expectancy measure. This indicates that Marines feel that their Marriage/Intimate Relationships measure up relatively well to their goal in this area of life.

Relationship with Children Domain

The average perceptions of the Relationship with one's Children overall remain in the somewhat satisfied to satisfied range for all Marines, except for those in the E-2/E-3 pay grades. Again, the large size of the E-2/E-3 cohort results in its relative dissatisfaction depressing the overall measurement for the domain. The average cognitive (satisfaction) measure with the Relationship with Children domain was 5.55 in 1993, 5.41 in 1998, and is 5.09 in 2002, which is statistically but likely not practically significant. This domain is not a key driver of Marine Global quality of life.

For the affective (happiness) measure, respondents answered separately for children that live with them in their household and children not living with them in their household. This overall average for this measure for children living in their household was 6.13 in 1998 and 6.12 in 2002, not a statistically significant change. Notably, when

reporting happiness with one's Relationship with Children not living in their household, the average was significantly less and in the neutral band, at 4.20 for 2002. This indicates that Marines are not as happy with their relationships with their children when their children are not with them.

As in the 1998 study, a comparison of satisfaction with Relationship with Children by pay grade was conducted. The results are displayed in Figure 3-20.

Domain satisfaction declined for the E4-E5 subgroup from both 1993 and 1998 levels; while both changes are statistically significant for this the largest group (37%) of all parents in the Marine Corps, they are likely not practically significant. That is, E-4s and E-5s are still somewhat satisfied with their relationship with their children. Note that, with the exception of the E2-E3 subgroup, the satisfaction with Relationship with Children is between somewhat satisfied and satisfied. It appears that there may be special issues involving the E2-E3 subgroup that are influencing the satisfaction with their relationships with their children.

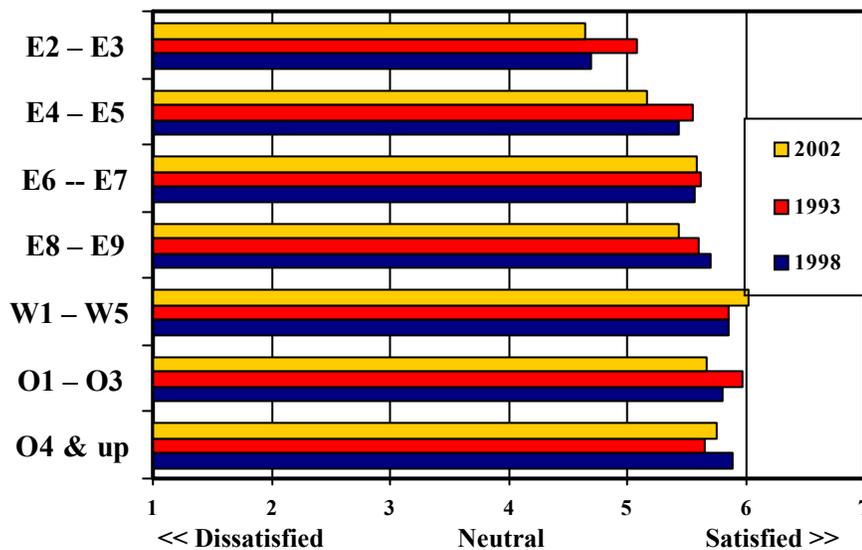


Figure 3-20. Satisfaction With Relationship With Children.

In order to indicate with more utility which aspects of domain satisfaction are key to the reported overall satisfaction with the military environment for raising children, we undertook a multiple regression and factor analysis of various aspects of child lifestyle satisfaction for the Base and Station respondent group. Figure 3-21 displays the results.

There were only two specific aspects for predicting overall satisfaction with Relationship with Children: the amount of time spent with children and the quality of time spent with children. With those two aspects explaining only about 42% of the variance in overall satisfaction, we took what we hoped was a more fruitful direction,

especially when attempting to compare Marine satisfactions to the spouse satisfactions discussed later in this chapter. We tried to predict satisfaction with the military environment for raising children, a good measure of overall military child quality of life, for the Base and Station respondent group.

Figure 3-21 displays the following domain satisfactions: The quality of the time you have with your children, the amount of time you have with your children, the activities available for children at your base, the overall quality of childcare, and the education received by your children. An exploratory factor analysis indicates that these aspects break up into two factors: one concerning the amount of time and the quality of time spent with children, and the other concerning childcare and education. The aspect of activities available splits into both.

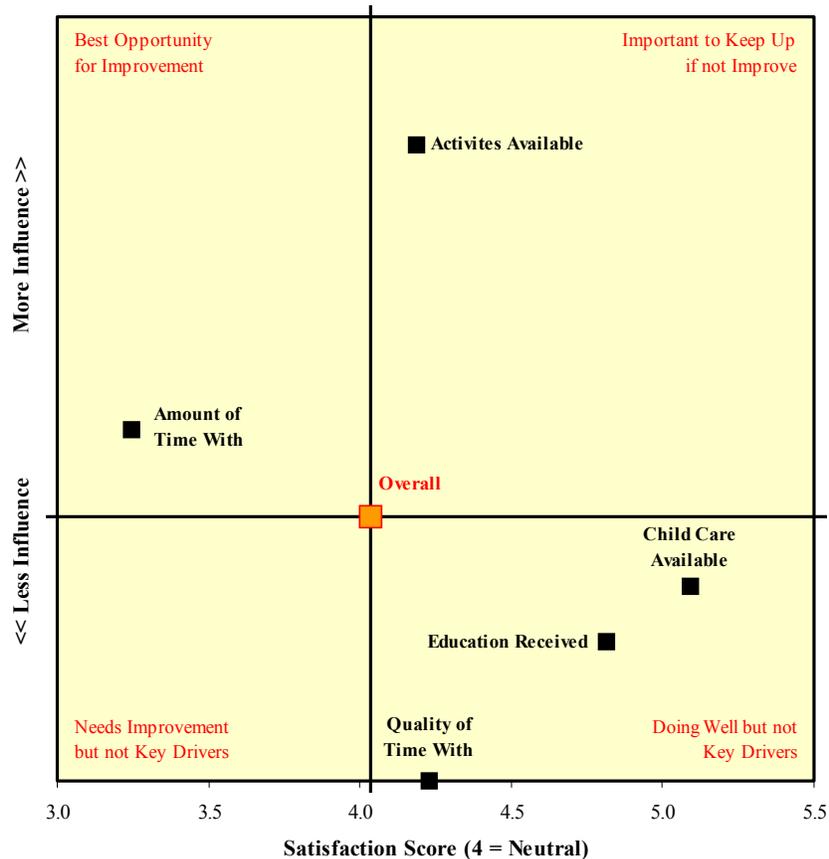


Figure 3-21. Key Driver Diagram For Child Lifestyle Satisfaction.

The satisfaction with the five Children’s Quality of Life aspects and the overall satisfaction are located in the horizontal above their individual satisfaction scores. The overall satisfaction with the military environment for raising children is 4.04, in the neutral band. The satisfaction with Children’s Quality of Life aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain only about 39% of the variance observed in the overall satisfaction with the military environment for raising children.

Given that in other domains the domain aspects have been explaining over 70% of the overall domain satisfaction variance, this suggests that Marines may have in mind other facets related to their children not currently measured when they are answering the overall item how satisfied are you with the military environment for raising children.

The top driver of overall military environment satisfaction in this display is the satisfaction with the activities available on base. This aspect alone accounts for 31% of the variance in the satisfaction with the military environment for raising children. The greatest dissatisfaction is also the second largest driver (explains 36% of the variance in combination with the first); it is the amount of time spent with children, which may be another indicator of the lack of time expressed in prior domains.

As noted above, we also looked at which aspects predicted Marines' own satisfaction with their relationships with their children using a regression. The aspects of quality of time and amount of time accounted for 42% of the variance in satisfaction with relationships with their children. However, results indicated that the dominant predictor by far was quality of time spent with children not the amount of time spent with children. Results of the 1993 key driver analysis also show quality of time to be the dominant predictor of satisfaction with Relationships with Children. However, in 1993 satisfaction with education was also a key driver.

Domain Conclusions.

Respondents whose children do not live with them expressed lower levels of happiness about their relationships as compared to those whose children do live with them. Overall, respondents of most pay grades appear to be satisfied with their relationships with their children. The E2-E3s are the least satisfied group, representing 30% of the parents in the Marine Corps. Satisfaction with Relationship with Children is for the most part driven by the quality of time spent with children, while satisfaction with the military environment for raising children has a lot to do with activities available on base (for Base and Station Marines) and the amount of time Marines can spend with their children. In general, Marines are dissatisfied with the amount of time they have to spend with their children. It appears that more quality time, perhaps enjoying organized activities on base together, are the keys to improving Marines' Relationships with Their Children. When asked to represent how much their current relationships with their children measured up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 63%, one of the highest scores in the expectancy measure. This indicates that Marines feel that their Relationships With Their Children measure up relatively well to their goal in this area of life.

Relationship with Relatives Domain

Active Duty composite Marines reported being somewhat satisfied to satisfied with this domain. The average cognitive (satisfaction) measurement was 5.52 in 1993, 5.60

in 1998, and is 5.29 in 2002. As with the previous two quality of life studies, there is relatively small differential with the affective measure. This measure asked respondents to rate their happiness with their Relationship with Relatives using a seven-point scale, which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure was 5.18 in 1993, 5.23 in 1998 and 5.07 in 2002. The cognitive and affective measurement differences for 2002 are statistically but likely not practically significant. This domain is not a key driver of Marine Global quality of life.

Paralleling the 1998 quality of life study, we looked at satisfaction with relationships with relatives as a function of pay grade. The results are displayed in Figure 3-22.

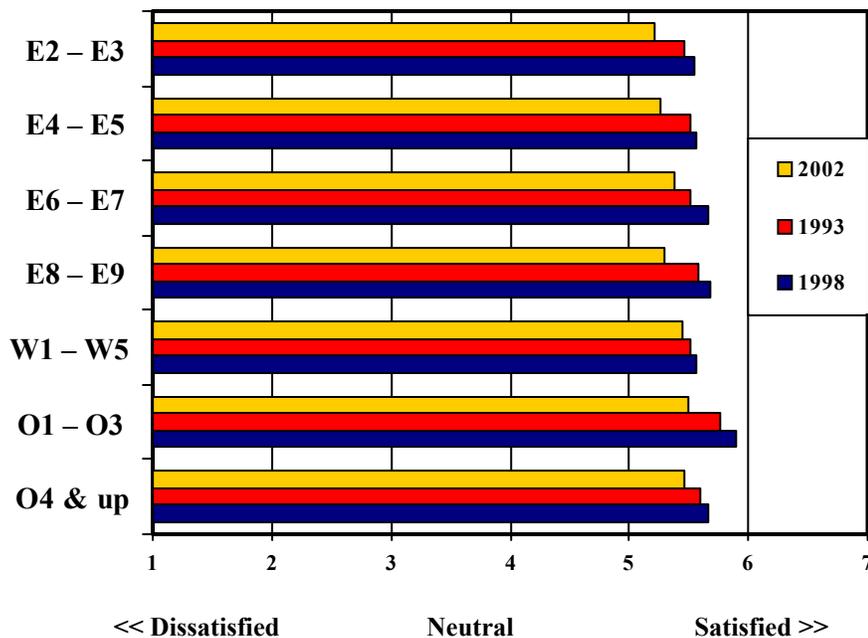


Figure 3-22. Satisfaction With Relatives By Pay Grade.

Marines all remain in the somewhat satisfied to satisfied range with these relationships. In order to indicate with more utility which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Relationship with Relatives domain for the Base and Station group. Results are displayed in Figure 3-23.

Figure 3-23 displays the Relationship with Relatives domain satisfactions for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.26, about the same as the Active Duty composite value of 5.29. An exploratory factor analysis indicates that the 'amount of contact' aspect is not too highly correlated with the other two.

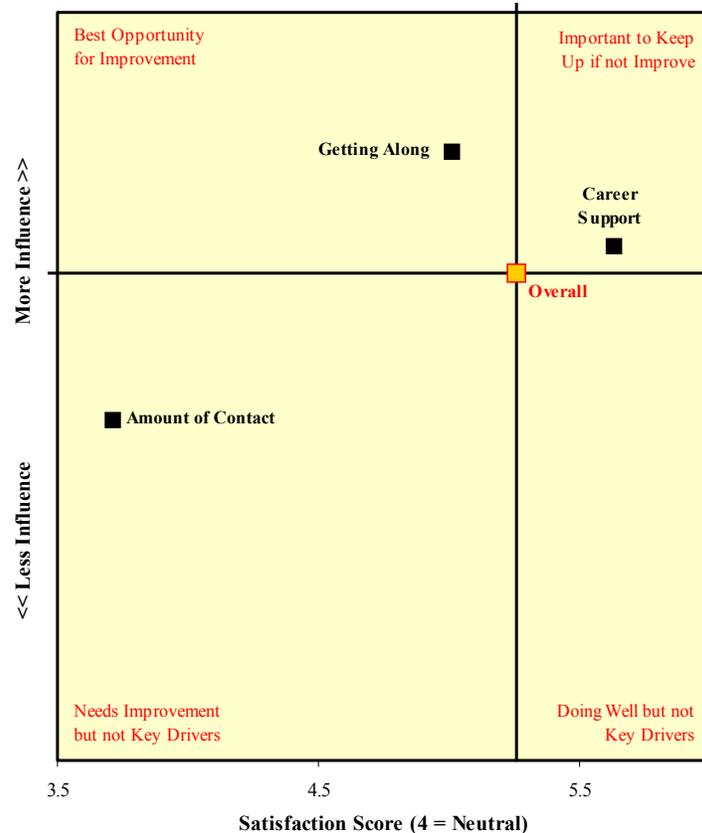


Figure 3-23. Key Driver Diagram For Relatives.

The domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain only about 53% of the variance observed in the overall domain satisfaction. Given that in other domains the domain aspects have been explaining over 70% of the overall domain satisfaction variance, this may suggest that Marines have in mind other facets of their Relationship with Relatives not currently captured by these three domain aspects.

The top driver and the sole focal point of overall domain satisfaction in this display is clearly the getting along with aspect. This aspect alone accounts for 37% of the variance in overall domain satisfaction. The greatest dissatisfaction is with amount of contact, which may be another indicator of the lack of time expressed in prior domains. However, this is the least influential aspect on the overall domain satisfaction.

Domain Conclusions.

Respondents of all pay grades have remained in the somewhat satisfied range with their Relationship with Relatives. When asked to represent how much their current Relationship with Relatives measures up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 57%, about equal to the average of the scores in the expectancy measure. This indicates that Marines feel that their Relationship with Relatives measures up not too badly to their goal in this area of life.

Income and Standard of Living Domain

Overall, this is the only domain measurement to fall into the dissatisfied side of neutral. The average cognitive (satisfaction) measurement was 3.93 in 1993 and 1998, and is 3.72 in 2002. As with the previous two quality of life studies, there is relatively small differential with the affective measure. This measure asked respondents to rate their happiness with their current standard of living using a seven point scale which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure was 4.10 in 1993, 4.04 in 1998 and 3.96 in 2002. The 2002 cognitive and affective measurements are statistically but likely not practically significant. This domain is a key driver of Marine Global quality of life.

Because satisfaction/happiness with Income are likely a function of how much one earns, an analysis by pay grade was conducted. The results are displayed in Figure 3-24.

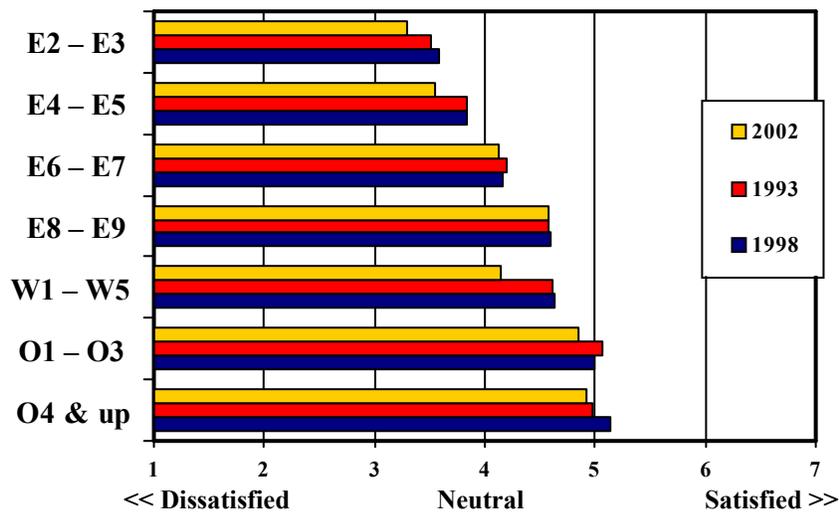


Figure 3-24. Satisfaction With Income By Pay Grade.

As in 1993 and 1998, Marines in the pay grades of E-6 and above are neutral to somewhat satisfied with their Income and Standard of Living, and the E-2/E-3 pay grades are neutral to somewhat dissatisfied. The warrant officers show a dramatic and statistically significant decrease in satisfaction with Income and Standard of Living, but are still in the neutral to somewhat satisfied range. The results for the E-6/E-7, E-8/E-9, O-1/O-3, and O-4 and up pay grades could well be invalid by-products of sampling. The two junior enlisted pay grades remain below neutral; however, for the first time, Marines perceptions of this domain are approaching the somewhat dissatisfied band.

In a self-report of several financial hardship measures there has been little statistically significant change (marked with an asterisk) from 1998 but a few

statistically significant increases from 1993. Table 3-12 displays the financial hardship statistics and compares them with those of the previous two studies.

| TABLE 3-12. FINANCIAL HARDSHIP MEASURES. | | | |
|--|--------|-------|-------|
| Have any of the following things happened to you since you have been at your present location? | | | |
| | 1993 % | 1998% | 2002% |
| Letter of indebtedness to command | 4.8* | 7.6 | 7.2 |
| Trouble over child support payments | 2.1* | 2.8 | 3.1 |
| Repossession of something purchased | 1.4 | 1.7 | 2.2 |
| Bankruptcy | 1.1 | 1.2 | 1.4 |
| Crisis loan from military relief | 8.3* | 6.7* | 5.4 |
| None of the above | 85.7 | 83.0* | 84.6 |
| Asterisk (*) indicates a statistically significant difference from 2002 | | | |

The large increase in the percentage of letters of indebtedness to the command noted in 1998 may have receded somewhat, although the decrease could well be an invalid by-product of sampling. The 1998 study noted that the number of letters of indebtedness may have been increased by two USMC internal programs: the exchange system's Deferred Payment Plan which uses letters of indebtedness to collect on past due accounts, and the USMC implemented Navy Campus Management Information System (NCMIS) which initiates collection action automatically when an individual fails a course or withdraws from a course voluntarily. The only financial hardship issue trending down in any statistically significant way is the reduction in crisis loans which may be a statement about that program rather than one about Marines. These findings continue to imply the need for financial management education and counseling for Marines.

In order to indicate which aspects of domain satisfaction are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Income domain for the Base and Station respondent group (which personnel represent about 84% of the Marine Corps). An exploratory factor analysis indicated the domain aspects are highly correlated and the overall domain satisfaction score represents a consistent measure of domain satisfaction.

In exploring the possibility of two underlying domain factors, the factor analysis produced two highly correlated factors (correlation = .60). The primary factor involved the aspects of satisfaction with money for essentials, money for extras, and money for savings, and the secondary factor involved the aspects of satisfaction with the car you drive and your household furnishings. For Marines with children, the aspect of satisfaction with what you can provide for your children was associated with the primary factor.

In order to represent the aspect influences properly we divided the sample into Marines with and without children and conducted two separate regression analyses: one for Marines with children and one for Marines without children. The results gave

the same ordering of aspects with respect to influence with the providing for children aspect ranked fourth in the Marines with Children analysis. Results for Marines with children are displayed in Figure 3-25.



Figure 3-25. Key Driver Diagram For The Income Domain – Marines With Children.

Figure 3-25 displays the Income domain satisfactions for Active Duty Marines with children assigned to bases and stations (Base and Station assigned personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 3.70, just a bit less than the Active Duty composite value of 3.72.

The Income domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 74% of the variance observed in the overall domain satisfaction. This indicates that the current set of domain aspects is doing a good job of representing what Marines have in mind when they report their overall satisfaction with their Income and Standard of Living.

The top drivers of overall domain satisfaction are clearly the money for savings followed by the money for extras, which Marines with children find even more unsatisfactory than overall Income and Standard of Living. These two aspects alone account for 68% of the variance in overall domain satisfaction. Still, when it comes to money for essentials, that rating is on the satisfied side of the scale. The diagram for Marines without children is similar. Interestingly, the key drivers in 1993 were slightly different; money for extras was the primary driver, followed by money for savings, and then satisfaction with household furnishings.

Figure 3-26 displays the Income domain satisfactions for Active Duty Marines without children assigned to bases and stations.

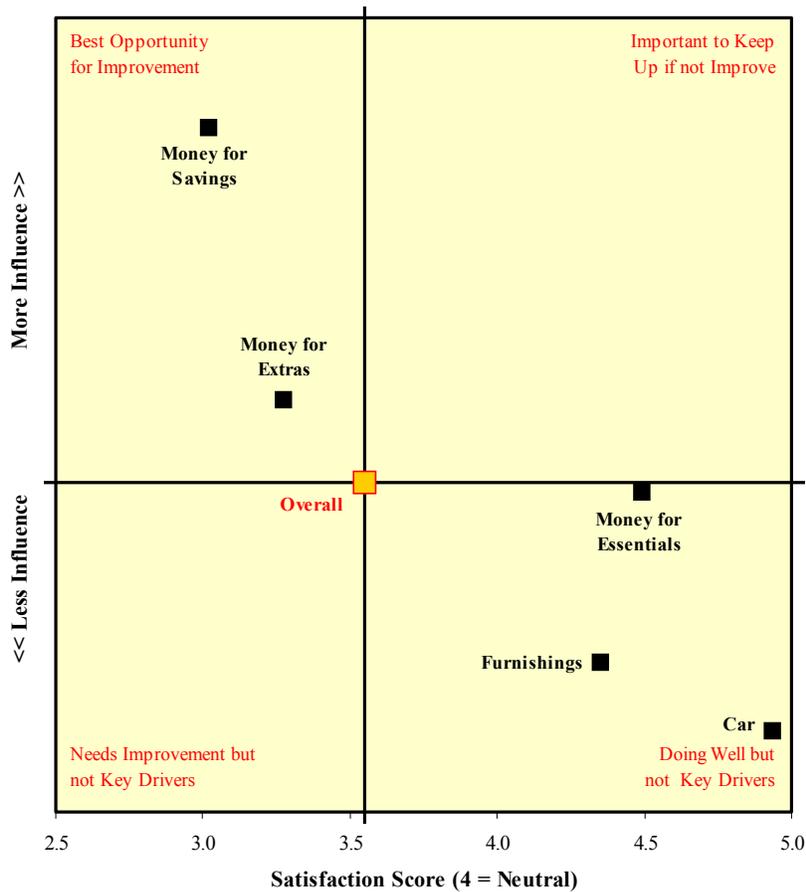


Figure 3-26. Key Driver Diagram For The Income Domain – Marines Without Children.

The overall satisfaction is 3.55, much less than the Active Duty composite value of 3.72 since the Marines of lower rank dominate this group. This diagram in relative terms looks much like Figure 3-25, essentially, the providing for children aspect, found only in 3-25, absorbs some of the influence mainly from the top two influences.

The Income domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis restricted to the

without children group. As a whole they explain about 77% of the variance observed in the overall domain satisfaction, another very good number.

The top drivers of overall domain satisfaction are the same as for the Marines with children; it is the money for savings followed by the money for extras. Marines without children, just as Marines with children, find these aspects more unsatisfactory than overall Income and Standard of Living. These two aspects alone account for 74% of the variance in overall domain satisfaction. Still, just as for Marines with children, when it comes to money for essentials, that rating is on the satisfied side of the scale. Again the 1993 key drivers differed slightly; money for extras was the primary driver, followed by money for children, and then money for savings.

Domain Conclusions.

Respondents of all pay grades range from somewhat dissatisfied to somewhat satisfied in their perceptions of their Income and Standard of Living. Only the two junior enlisted pay grade bands fall into the dissatisfied region. Something significant has happened to the warrant officers' perceptions in this regard; their overall decline in income satisfaction was led by the responses from some of the largest bases. Other than the warrant officers, satisfaction with Income and Standard of Living increases with pay grade. When asked to represent how much their current income measures up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 40.1%, the lowest score in the expectancy measure. This indicates that Marines feel that their incomes measure up relatively badly to their goal in this area of life. The warrant officer expectancy is 54%; it is not appreciably lower than that of the E8-E9 pay grade band.

Your Military Job Domain

Overall, Marines remain in the neutral to somewhat satisfied range in regards to their Military Job. The average overall cognitive (satisfaction) measure was 4.58 in 1993, 4.76 in 1998, and is 4.44 in 2002. As with the previous two quality of life studies, there is relatively large differential with the affective measure. This measure asked respondents to rate their happiness with their military job overall using a seven point scale which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure was 4.22 in 1993, 4.28 in 1998 and 4.09 in 2002. Both cognitive and affective measures were statistically but likely not practically significant. This domain is a key driver of Marine Global quality of life.

Paralleling the 1998 Quality of Life study, we looked at satisfaction with the military job as a function of pay grade. The results are displayed in Figure 3-27.

As in 1993 and 1998, Marines in the E-6 and above pay grades report being at least somewhat satisfied with their military jobs, and E-5s and below reported being neutral to somewhat satisfied. A decrease in domain satisfaction can be seen to run

across the board with respect to pay grade when compared to 1998, all are significant except for warrant officers. When compared to 1993, although the trend is toward decreased satisfaction, the changes for E6-E7, E8-E9, W1-W5, and O4 & up are not statistically significant (that is, could be invalid by-products of sampling).

Possible reasons for these declines can be found in the number of hours worked, and number of days worked per week. The number of hours worked per week was

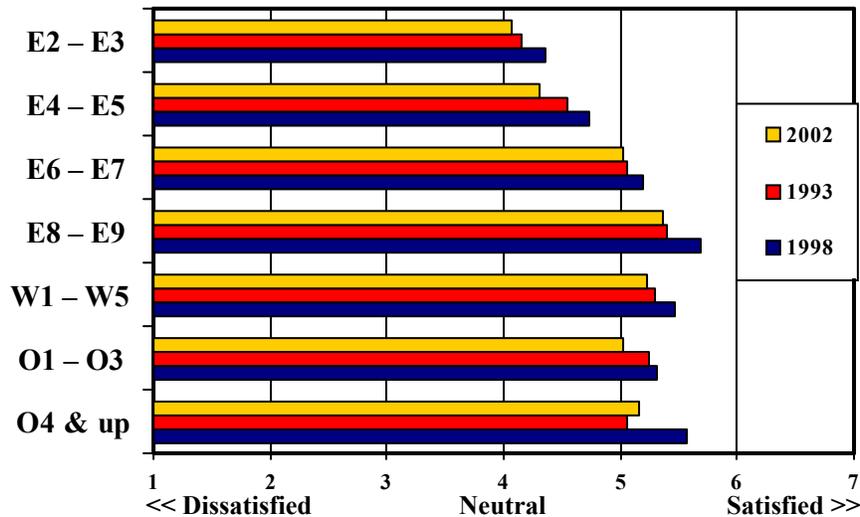


Figure 3-27. Satisfaction With Military Job By Pay Grade.

52.12 for 1993, 52.43 for 1998, and jumped to 54.97 for 2002. Also, the number of days worked per week returned to 1993 levels; it was 5.17 in 1993, dropped to 4.98 in 1998, and returned to 5.17 for 2002.

The 1998 study also compared measures of Organizational Commitment, a battery of 11 questions measured on a 7 point scale from completely disagree to completely agree with the value 4 meaning neither agree or disagree. Such a battery can be applied by summing the responses to the 11 individual questions or displaying how each facet of Organizational Commitment changes. Figure 3-28 displays the results for all but one of the 11 attributes.

The reason for using just 10 is that a factor analysis indicated that one attribute is much less correlated to the others, it was the question "Most things in life are more important than work?" which, when reverse coded, has consistently low correlation values. We do not display this measure nor did the 1998 study.

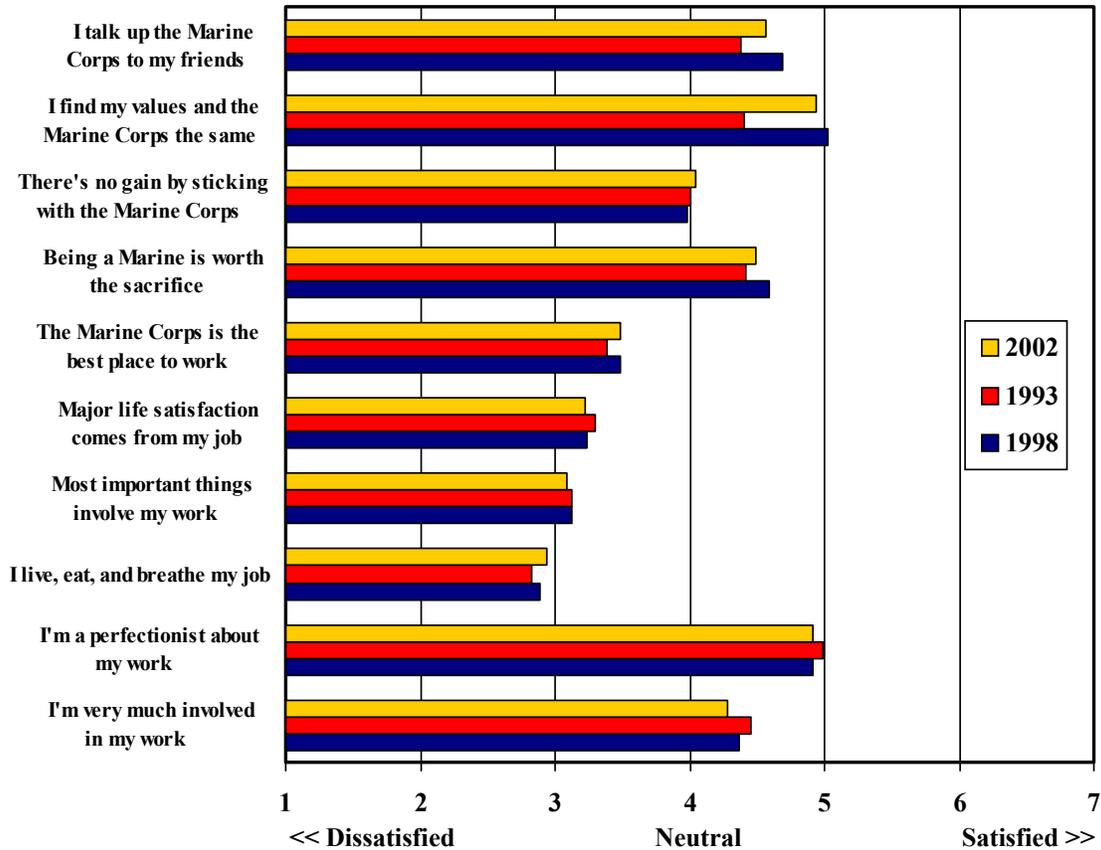


Figure 3-28. Measures Of Organizational Commitment.

In order to indicate with more utility which aspects of domain satisfaction are key to the reported overall military job satisfaction, we undertook a multiple regression and factor analysis of the domain for the Base and Station respondent group. Results are displayed in Figure 3-29.

Figure 3-29 displays the Military Job domain satisfactions for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 4.36, somewhat smaller than the Active Duty composite value of 4.44. This indicates that Base and Station Marines are reporting somewhat lower scores in their overall satisfaction with their military job when compared to Independent Duty Marines. An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

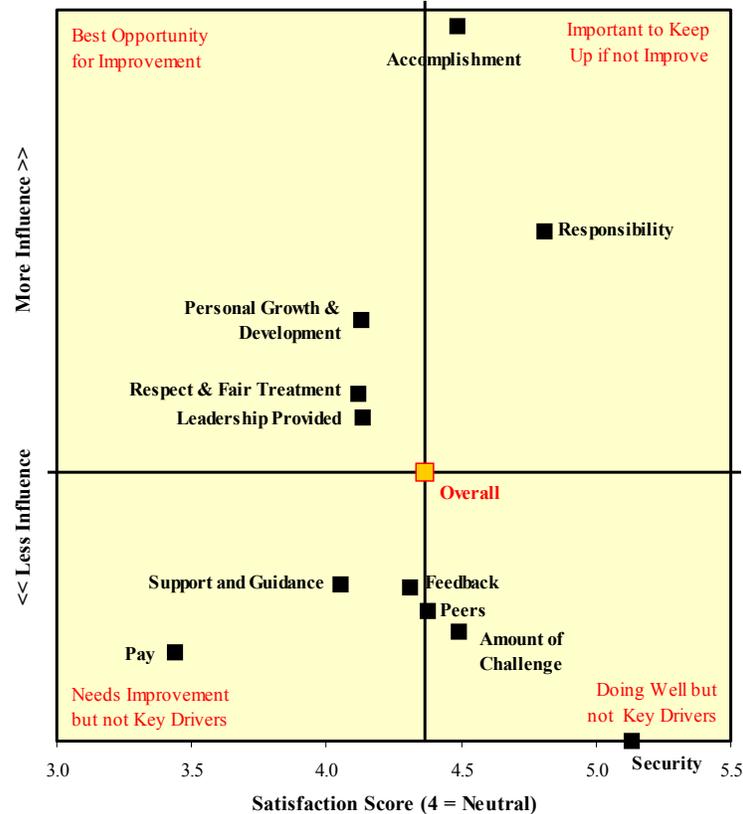


Figure 3-29. Key Driver Diagram For Military Job.

The Military Job domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 73% of the variance observed in the overall domain satisfaction, a good value. The top drivers of overall domain satisfaction are:

- ◆ Satisfaction with accomplishment
- ◆ Satisfaction with responsibility
- ◆ The cluster of satisfactions regarding
 - Personal growth and development
 - Respect and fair treatment
 - Leadership provided

The satisfaction with accomplishment alone accounts for about 50% of the variance in overall domain satisfaction and all five account for about 72% of the variance. The cluster of three components seems to be the best target to obtain improvement in the overall domain satisfaction. In 1993 accomplishment was also the dominant driver of job satisfaction, followed by respect and fair treatment, and amount of responsibility.

Domain Conclusions.

Respondents remain in the same satisfaction ranges as reflected in past studies in regards their perception of their military jobs. Marines report working more hours per week than they did in 1993 and 1998, and more days per week than they did in 1998. When Marines are asked to represent how much their current job measures up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 53%, a middling score in the expectancy measure. This indicates that Marines feel that their job only measures up to about half of their goal in this area of life. Nevertheless, with respect to Organizational Commitment, the 2002 results tend to equal those of 1998, which exceeded those of 1993.

Yourself Domain

Marines all report being somewhat satisfied to satisfied with themselves. The average cognitive (satisfaction) measurement overall was 5.73 in 1993, 5.75 in 1998, and 5.57 in 2002. As with the previous two quality of life studies, there is relatively large differential with the affective measure. This measure asked respondents to rate their happiness with themselves these days using a seven point scale which ran from 1 (Terrible) to 7 (Delighted). The overall average for this measure was 4.95 in 1993, 4.96 in 1998, and 4.82 in 2002. These relatively small declines in 2002 cognitive and affective measurements are statistically significant, but likely not practically so. This domain is a key driver of Marine Global quality of life.

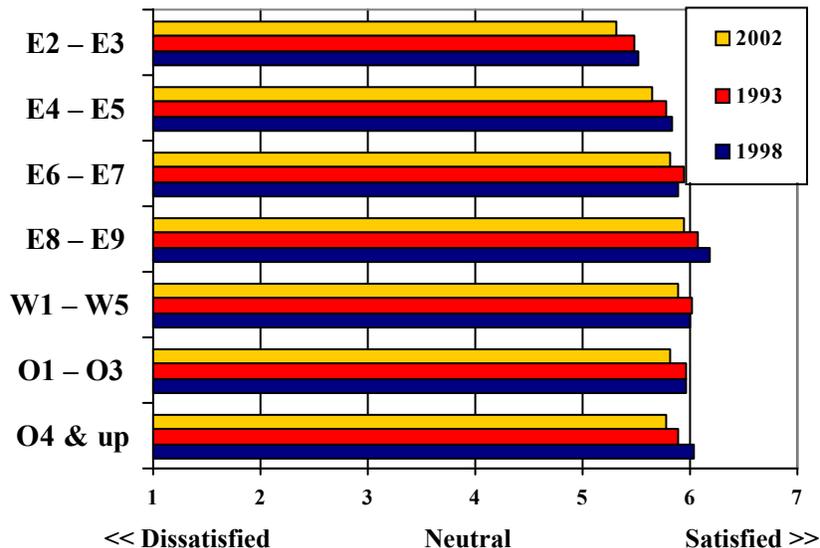


Figure 3-30. Satisfaction With Self By Pay Grade.

As in 1998, a comparison by pay grade was conducted. The results are displayed in Figure 3-30. All pay grades report being somewhat satisfied to satisfied. The

small changes indicated in 1998 from 1993 are not statistically significant (that is, they could be an invalid by-product of sampling), and for 2002, the differences with respect to 1993 are only statistically significant for the larger subgroups: E2-E3, E4-E5, and E6-E7. But again, these differences are likely not practically significant.

Among the responses to the Yourself domain were two well-known scales for measuring the personal characteristics of Optimism and Self-Esteem. The Optimism scale, measured on a 7-point scale from completely disagree to completely agree, comprises a battery of 12 questions such as “I am a believer in the idea that every cloud has a silver lining,” and “It’s easy for me to relax.” The Self-Esteem scale, measured on a 4-point scale from strongly disagree to strongly agree, comprises a battery of 10 questions such as “I am able to do things as well as most other people,” and “On the whole I am satisfied with myself.”

Each of these scales is meant to be applied by summing the responses to the 12 or 10 individual questions, respectively. Figure 3-31 displays the results of normalizing the summed response scores to a 7-point scale for each measure. The prior two quality of life studies included the Optimism scale and those results are compared.

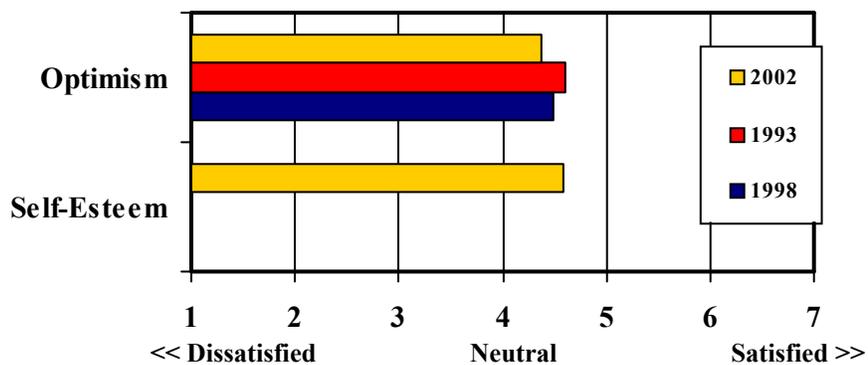


Figure 3-31. Normalized Optimism And Self-Esteem.

The results for 2002 fall into the neutral to somewhat satisfied range for Optimism, as they did in both 1993 and 1998. The Self-Esteem measurement is new for 2002.

In order to indicate which aspects of satisfaction with self, goals, and personal development are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Yourself domain for the Base and Station respondent group (which personnel represent about 84% of the Marine Corps). Results are displayed in Figure 3-32.

Figure 3-32 displays the satisfactions with self aspects for Active Duty Marines assigned to bases and stations (which personnel represent about 84% of the Marine Corps). The domain aspect and overall satisfactions are located in the horizontal

above their individual satisfaction scores. The overall satisfaction is 5.55, slightly less than the Active Duty composite value of 5.57. An exploratory factor analysis indicates that these aspects are highly correlated and thus that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

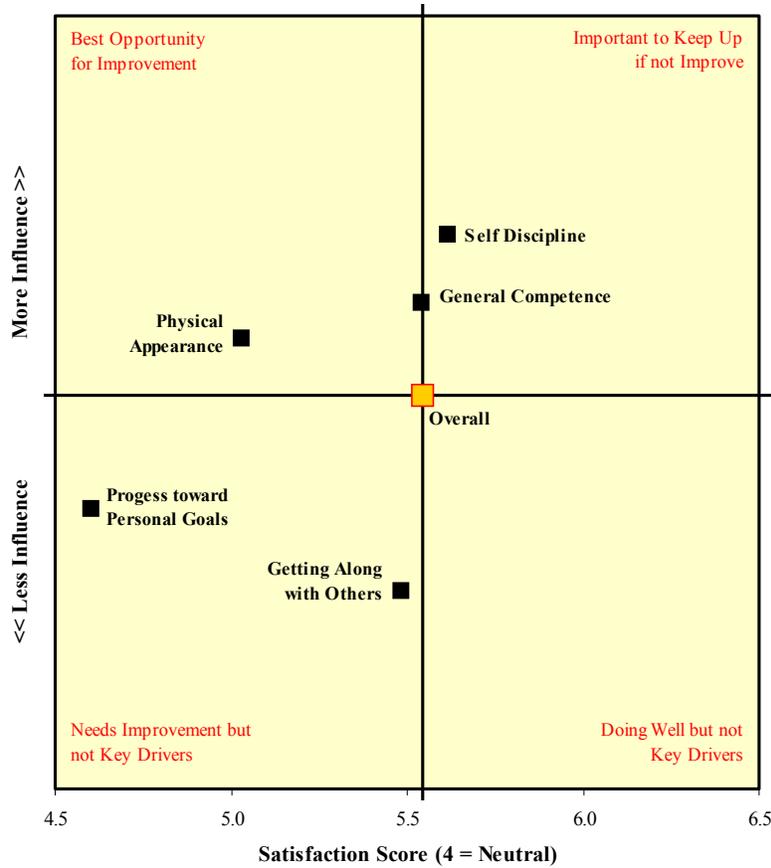


Figure 3-32. Key Driver Diagram For Yourself.

The domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole, they explain only about 62% of the variance observed in the overall domain satisfaction. Given that in other domains the domain aspects have been explaining over 70% of the overall domain satisfaction variance, this suggests that Marines may have in mind other facets of self not currently included as domain aspects.

While the number one key driver, self-discipline, falls toward the satisfied range, it is barely larger than the satisfaction with the overall domain. This may indicate some room for improvement in assisting Marines in developing self-discipline. Of the three key drivers of overall domain satisfaction, the physical appearance aspect is the one with the least satisfaction. This again may be another indicator of the lack of time expressed in prior domains. In the 1993 study, physical appearance was the number one key driver of satisfaction with self, followed by general competence and self-discipline. It appears that Marines of 2002 have slightly different priorities in how they evaluate themselves.

Domain Conclusions.

Respondents of all pay grades still report being at least somewhat satisfied with themselves. When asked to represent how much their current satisfaction measures up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Active Duty composite was 71%, the highest score in the expectancy measure. It would appear that Marines feel that their personal growth and development measures up relatively well to their goal in this area of life.

Life as a Whole or Global Quality of Life

The Life as a Whole assessment is a composite of six separate measures, three in the Life as a Whole section at the beginning of the survey instrument and three in the Life as a Whole section at the end. These are described in Appendix D, which is based on Appendix C of the 1998 Quality of Life study, and includes the method of computation. The Life as a Whole composite was developed by *Kerce (1995)* based on research instruments developed by *Andrews and Withey (1976)*; *Campbell et al. (1976)*; and *Diener, Emmons, Larsen, and Griffin (1985)*. *Kerce (1995)* selected these six measures for their demonstrated validity and reliability. For this 2002 study, the study team recommended a new Life as a Whole measure of expectations, based on Multiple Discrepancy Theory research (*Michalos 1985*) as a replacement for the 1995 study's peer comparison measure. A replacement for the peer comparison measure was recommended in *Kerce (1995)*.

Concerning the six measures, *Kerce (1995)* found that a factor analysis indicated a single factor that accounted for 62% of the variance for the 1993 data set. For the 2002 Base and Station respondent group we found a single factor accounting for 68% of the variance. This improvement is likely due to the replacement of the 1993 social comparison measure (Life as a Whole 4 which had all 5 intercorrelations below 0.5) with the Multiple Discrepancy Theory expectancy measure (how your Life as a Whole measures up to your own goals) with all 5 intercorrelations above 0.5.

In addition, by using an oblique rotated factor analysis, we found two very highly correlated factors (.82): the first comprising the three Life as a Whole measures in the beginning of the survey instrument and the second comprising the three Life as a Whole measures at the end of the survey instrument. *Kerce (1995)* reported that the ordering of Life as a Whole measure did not affect the results, however, we found a slight difference between the set of three measures asked in the beginning and the set of three asked at the end, which was not statistically significant except for Production Recruiters where the later set of three measured more than 6% higher than the earlier set.

Combining all six measures into a single Global quality of life composite index increases the confidence that all Life as a Whole components are being accounted for

and that any ordering effects are being averaged. Based on the 1993 data, the composite index displayed a standard measure of internal consistency of .87 (called the Cronbach Alpha). Roughly, this means that when (1) you split the six measures into two sets of three, (2) you sum each respondent's values in each of the set two creating two vectors of respondents' summed scores, and (3) you compute the correlation between the two vectors, then, among all the ways of splitting the six measures into two sets, you would get an average correlation of .87. A minimum of .7 is typically needed for application. The internal consistency of the composite index was .88 for the 1998 data, and .90 for 2002 for the Base and Station respondent group with no pair of intercorrelations less than .5 for 2002.

The Global quality of life assessment, normalized to a seven-point scale from 1 (a completely negative response) to 7 (a completely positive response), was 4.49 in 1993, 4.62 in 1998, and 4.54 for 2002. The 2002 value lies between the 1993 and 1998 values with just enough difference to make the change with respect to each statistically significant.

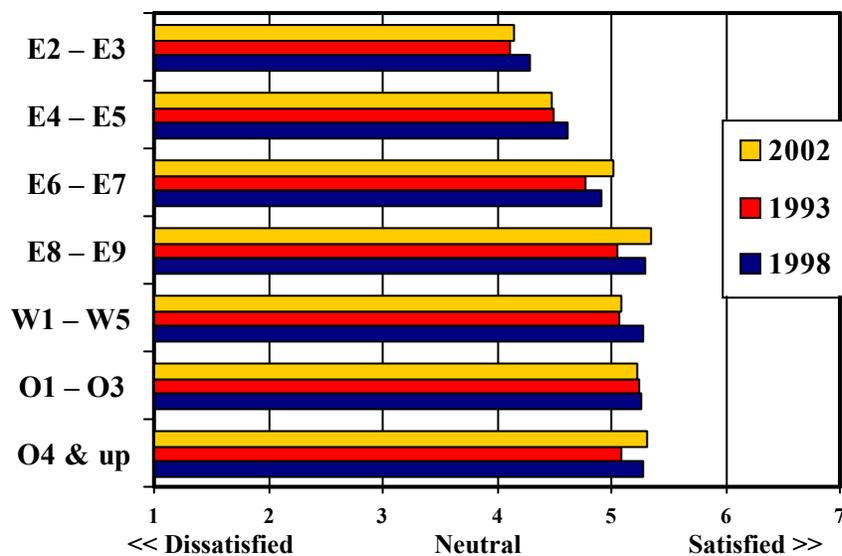


Figure 3-33. Global Quality Of Life Assessment By Pay Grade.

Figure 3-33 displays the Global quality of life by pay grade where the 1993 data is taken from the comparison chart in the 1998 study.

As opposed to the rather consistent decreases in domain satisfactions, we now show some increases in Life as a Whole satisfaction. The decreases with respect to 1998 for E2-E3, and E4-E5 are statistically significant as is the increase for E6-E7; the others could well be invalid by-products of sampling. When compared to 1993, the increases for E6-E7, E8-E9, and O4 & up are statistically significant; the others are not.

Paralleling the 1998 study, Figure 3-34 displays the Global quality of life by gender.

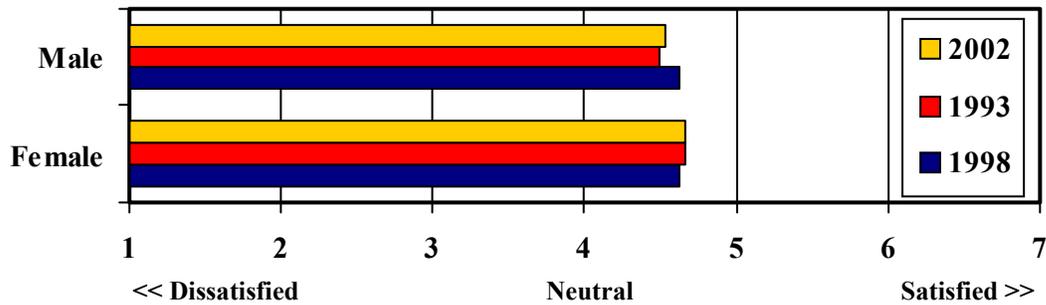


Figure 3-34. Global Quality Of Life Assessment By Gender.

Male Marines fell back closer to the 1993 Global quality of life assessment, the 4.53 score of 2002 does not reflect a statistically significant difference from that of 1993. However, the male's decline in Global quality of life with respect to 1998 is statistically significant. Female Marines, with a Global quality of life for 2002 of 4.66, slightly larger than for 1993 and 1998, cannot be said to have increased with any statistical significance. Also paralleling the 1998 study, Figures 3-35 and 3-36 compare the Life as a Whole composite scores by race and marital status respectively.

The only statistically significant racial changes, but likely of no practical significance, are in the *White* scores, both the decline from 1998 and the increase from 1993; also the decline in *Other* from 1993. The statistically significant changes by marital status are the declines from 1998 for the never married and divorced/separated group, and the increase compared with 1993 for the married with children group.

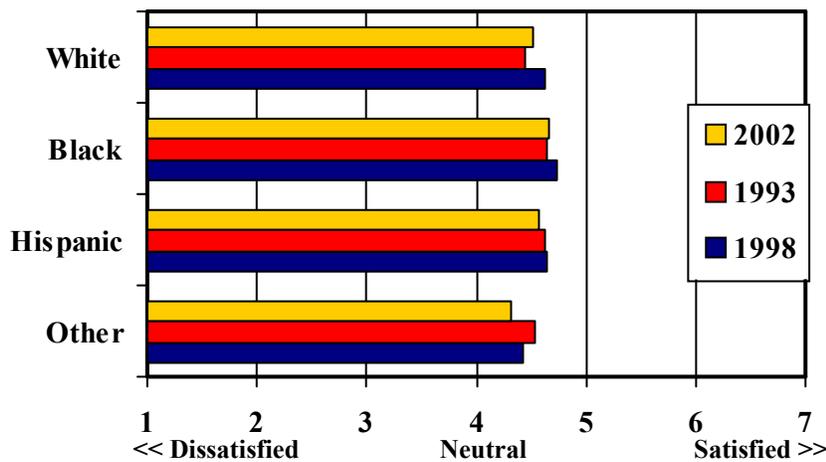


Figure 3-35. Global Quality Of Life Assessment By Race.

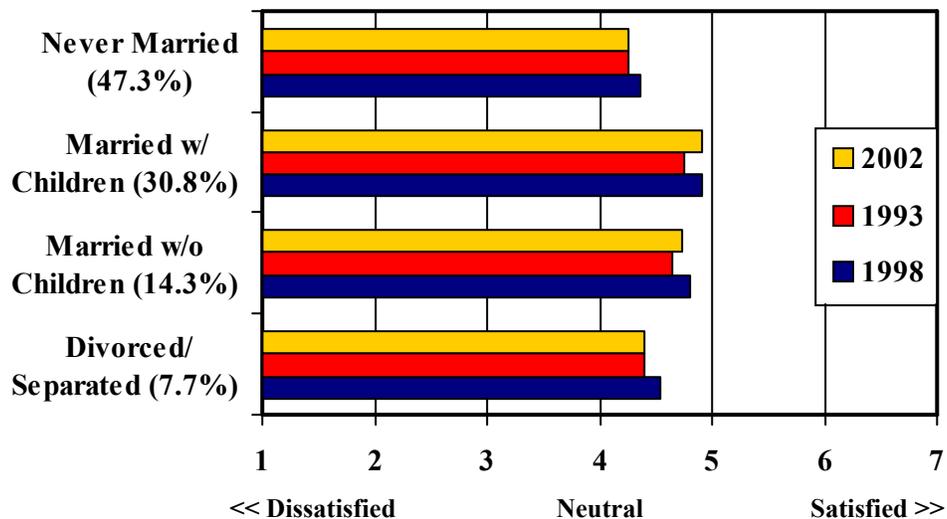


Figure 3-36. Global Quality Of Life Assessment By Marital Status.

Analysis of the Base and Station Respondent Group. In order to indicate with more utility which domain satisfactions are key to the Global quality of life assessment, we undertook a factor analysis of the domain satisfactions and a multiple regression of the Global quality of life assessment over the domain satisfactions for the Base and Station respondent group. Results are displayed in the key driver diagram of Figure 3-37 with the overall domain satisfactions located in the horizontal above their individual satisfaction scores (see the domain key driver diagrams).

The domains are located vertically in relation to their influence on the Global quality of life assessment as indicated by the regression analysis. As a whole they explain about 70% of the variance observed in the Global quality of life assessment; a good value and larger than the 64% found by *Kerce (1995)*, which also included measures of Optimism and commitment to the Marine Corps. The top five drivers of overall domain satisfaction are:

- ◆ Satisfaction with Self
- ◆ Satisfaction with Military Job
- ◆ Satisfaction with Income
- ◆ Satisfaction with Leisure
- ◆ Satisfaction with Marriage

The top three drivers are the same as found by *Kerce (1995)*. The Friends and Friendship domain and the Neighborhood domain have no statistically significant influence on Global quality of life.

In order to investigate the influence relationship among domains we undertook a factor analysis after eliminating the domains of Neighborhood and Friends and Friendships, which have no statistically significant impact on Global quality of life. An obliquely rotated factor analysis segregated the remaining domains into four

correlated factors. There were two strongly correlated factors and only one weak correlation between any two of the factors:

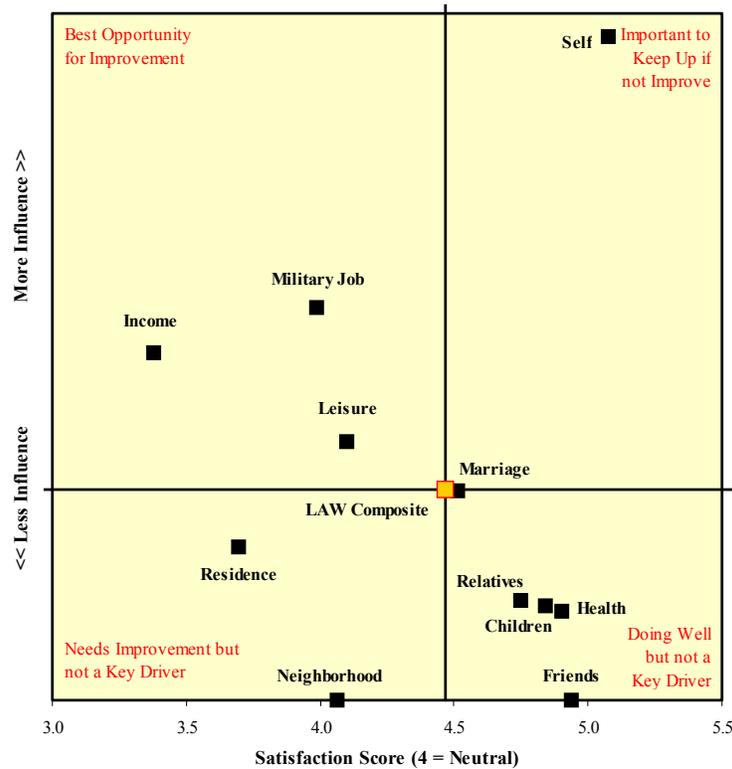


Figure 3-37. Key Driver Diagram For Global Quality Of Life.

The first factor is highly correlated with the domains of Health, Military Job and Yourself, this might be labeled the Marine persona sphere; the second factor is highly correlated with the domains of Residence, Leisure, and Income, this might be labeled the social sphere; the third factor is highly correlated to Marriage/Intimate Relationship and Relationships with Relatives domains, which might be labeled the personal sphere, and the fourth factor focused solely on the your Relationship with Children domain, the parental sphere. The parental sphere and the Marine persona sphere were the least correlated factor pair. These factor names are completely speculative with no basis in established theory, but are not at odds with the factors discussed in *Cavin (1988)* based on 18 somewhat different Marine Corps aspects.

With respect to the regression, the satisfaction with Self alone accounts for about 50% of the variance in the Global quality of life assessment, but it is not only the most highly satisfied domain already but it also has the highest expectancy value. The best targets for improvement would seem to come from Military Job, Income, and Leisure, all part of the two strongest correlated factors. All five of the key domains account for about 68% of the variance (67% without marriage). We have already seen, within each Marine Quality of Life study, that married Marines have higher Global quality of life scores than Marines who are not married, so a more proper analysis

would separate the married Marines out and analyze both groups separately. This is done in the structural equation modeling reported in Chapter 4.

It was noted in both prior quality of life studies that respondents' high scores in Global quality of life are relatively strongly associated with respondents' concomitant high scores in Optimism and in Organizational Commitment. For 2002 we found the coefficients of correlation to be .57 between Global quality of life and Optimism, .55 between Global quality of life and Organizational Commitment, and, new for 2002, .49 between Global quality of life and Self-Esteem. It is becoming more apparent that optimistic, committed people with high-self esteem will have higher Global quality of life scores.

Measures of Military Importance

Each domain section of the survey instrument, except for the Military Job and Health domains (includes Healthcare satisfaction), contains two questions which report the extent to which the topic of the domain impacts on (1) intentions to remain on Active Duty, and (2) job performance (not for the Military Job domain). Using the example from *White, Baker, and Wolosin (1999)* for the Income and Standard of Living domain, the questions are: "What effect does your financial situation have on your job performance?" and "What effect does your financial situation have on your plans to remain on Active Duty?" Response options to both questions were on a five point scale: very positive effect, positive effect, no effect, negative effect, and very negative effect.

Domain Impact on Retention (Base and Station). Figure 3-38 displays the results for the retention question for the Base and Station respondent group, which represents about 84% of the Marine Corps, and dominates the Active Duty Composite addressed in this chapter. The negative responses are to the left and the positive responses are to the right in proportion to their numbers.

The largest positive impact on retention was from the Self domain but with six other domains, including the Military Job domain, close behind. The biggest negative impact on retention is reported to be Marines' Income and Standard of Living with about 45% of the responses in the negative region. The next largest negative impact comes from the Job domain followed closely by Marriage/Intimate Relations and Residence domains. In addition, when asked, "how well does the Marine Corps accommodate the demands of your marriage/intimate relationship?" the balance of responses flowed even more negatively than the above domain impact response. The most critical cluster is Income and Standard of Living and Job satisfaction, which are the second and third largest driver of Global quality of life after Self/personal development.

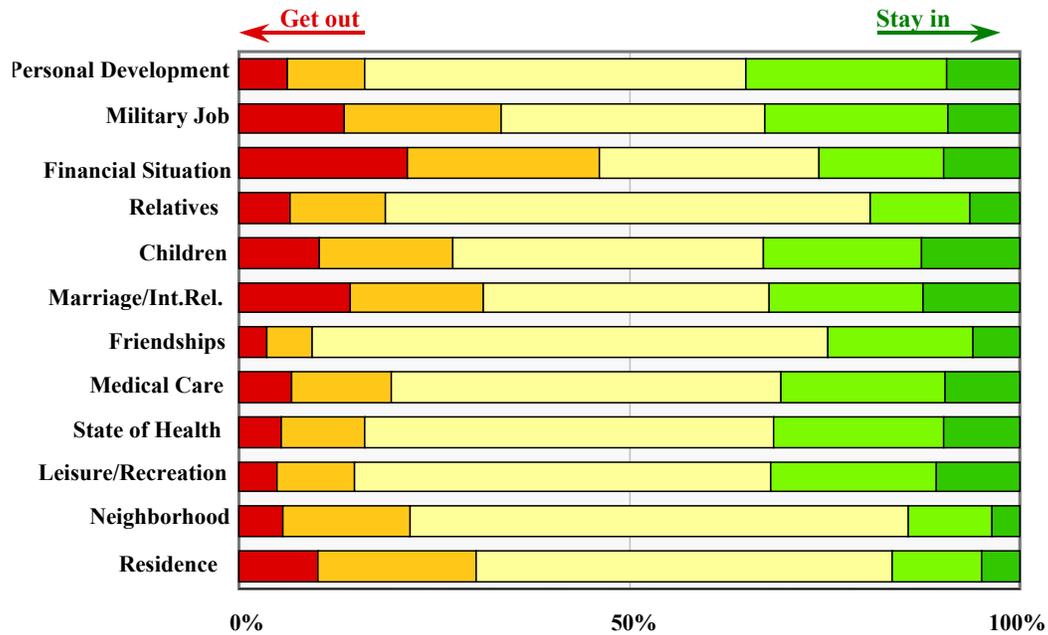


Figure 3-38. Reported Impact Of Domain Topics On Retention.

In some ways the critical domains may be those for which reasons to leave outnumber reasons to stay because neutral responses are unlikely to generate any action. The domains that clearly give more Marines reasons to leave than to stay are Income and Standard of Living, Residence, and Neighborhood.

Domain Impact of Job Performance (Base and Station). Figure 3-39 displays the results for the impact on job performance for the Base and Station respondent group. Again, the negative responses are to the left and the positive responses are to the right in proportion to their numbers.

Figure 3-39 shows that there is more reported positive impact and less reported negative impact on job performance than for retention intentions for the same set of domain topics, except for Income and Standard of Living, which has the same amount. Only the Income and Standard of Living domain has a negative impact on job performance, which exceeds the positive impact for Marines as a whole (again, not considering the neutral category). State of health and leisure and recreation are reported to have the largest positive impact on job performance after personal development.

Objective Measures. There is no way to test whether such self-reports have measurable objective impact on retention or job performance. In particular, there is no reliable objective measure of job performance available (see the discussion in *Kerce (1995)*). However, there is a part of the Personal Readiness composite that addresses the occurrence in the past month of negative workplace events associated with job performance. We turned this seven-part question (Question 14 in the Military Job domain) into a reverse-coded job performance surrogate.

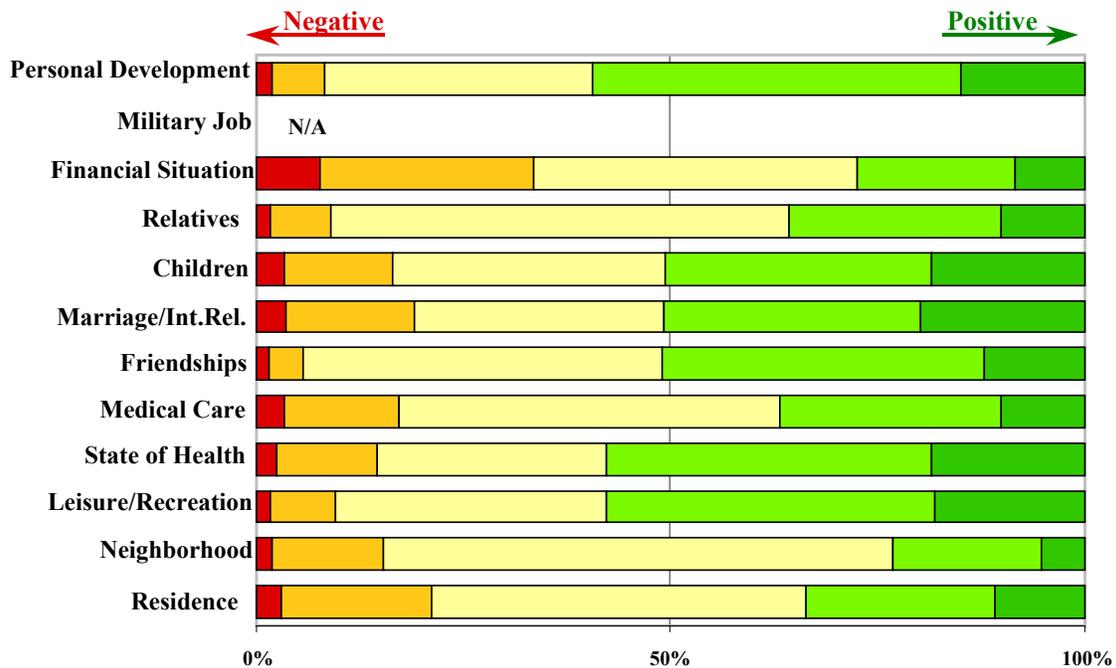


Figure 3-39. Reported Impact Of Domain Topics On Job Performance.

To assess the existence of any relationship between this surrogate and the domains, we averaged the three measures of domain happiness/satisfaction (the affective measure, the cognitive measure, and the expectancy measure). We found that this surrogate, although positively correlated with the Self domain, with Job domain, and Global quality of life left 75% of its variance unexplained by the domains and Global quality of life under regression. As with *Kerce (1995)* we could construct no reasonable association of domain satisfactions with a measure of job performance.

Concerning retention, taking retention intentions to be an objective measure, we found it at least moderately correlated (just less than .5) to only the Global quality of life and to the Job domain. In fact, together the domains of life explained only 35% of the variance in retention intentions, the rest of the variance in retention intentions was due either to other factors or to sheer randomness. The three most influential domains were Job, Income and Standard of Living, and Relationship with Children (together accounting for 33% of the variance in retention intentions). Since Marines with children tend to have higher retention scores, the inclusion of the Children domain may have been an artifact of this relationship, and we separated those with children from those without in order to investigate other possible factors that contribute to retention intentions. In an attempt to understand more of what contributes to retention intentions, we used the domains along with the personality variables of Optimism, Self-Esteem, and Organizational Commitment, and the composite measure of Global quality of life to predict retention intentions.

For Marines with children the domains and personality factors accounted for 45% of the variance in retention; Organizational Commitment alone accounted for 38%. The next most influential factor was Global quality of life, which, in combination with Organizational Commitment, accounted for 42% of the variance in retention intentions. The third most influential contributor was the Job domain, (adding another 1% to the variance explained). The fourth most influential was the Children domain (adding just another ½% to variance explained). Eliminating Global quality of life from the regression still left Organizational Commitment, the Job domain, and the Children domain explaining 43% of the variance in retention intentions. Therefore the most influential driver of retention intentions for Marines with children is Organizational Commitment.

For Marines without children the domains, the personality factors, and Global quality of life accounted for 41% of the variance in retention: Organizational Commitment alone accounted for 39%. Global quality of life was second in influence after Organizational Commitment, and in combination accounted for 40% of the variance in retention. Interestingly, the next domain of influence was Self, and its influence was negative. This signifies that Global quality of life, which is highly driven by self, is adding in too much self in trying to explain retention. By removing Global quality of life from the regression, the Income and Standard of Living domain joins with Organizational Commitment to account for 40% of the variance in retention. Organizational commitment rules again. Chapter 4 will discuss the utility of Global quality of life further.

Retention Analysis.

For 2002 there are two questions that relate directly to retention intentions, which differ in how they allow the Marine to respond. The first question, Question 5 in the Career section, common to the two prior quality of life studies, asks respondents to answer by picking which of six statement options, summarized in Table 3-13 below, best describes their career intentions. *Kerce (1995)* states that behavior intentions are reliable and valid predictors of actual behavior based on the results of several longitudinal studies. Table 3-13 displays the results of this study with that of the prior two quality of life studies. The changes, in essence, imply that some of the not sures in 1998 have moved to stay in but not until retirement in 2002. Among the three QoL studies, note that the higher the Global QoL composite, the lower the “stay in” percentage.

The second question, new to the 2002 survey, appears under the Yourself domain as question 11. It asks respondents to indicate how much they agree or disagree with the following statement:

"I want to remain in the Marine Corps until I'm eligible for retirement."

The respondent answers by selecting the point on a continuous seven point scale that best represents the intensity of their retention intentions. The options range from

a point labeled completely disagree (scored as 1) to a point labeled completely agree (scored as 7). These were the only two labels; there were no markings or interpretive guidance on the five points in between the endpoints (which we scored as 2 through 6). This second question was created to serve as a check on the appropriateness of converting the response categories of the first question into a continuous response scale, as the previous two studies had done.

| TABLE 3-13. RETENTION COMPARISONS. | | | |
|---|--------|-------|-------|
| Which of the following statements best describes your career intentions at this time? | | | |
| | 1993 % | 1998% | 2002% |
| Remain until retirement or already eligible and intend to stay in | 40.8* | 35.0 | 35.3 |
| Not sure what I intend to do | 21.3* | 26.5* | 24.4 |
| Stay in but not until retirement | 7.7* | 9.4* | 11.1 |
| Intend to leave as soon as possible | 27.5 | 28.6 | 28.3 |
| Other (involuntary separation) | 2.7* | 0.4* | 1.0 |
| Asterisk (*) indicates a statistically significant difference from 2002 | | | |

Using the 2002 survey responses we found that the correlation between the responses to these two questions (Table 3-13 responses ranked as above, other excluded) is 0.80; this means that the two questions are excellent surrogates for one another. In addition, the percentage of responses intend to leave as soon as possible to the first question (28.3%) was almost exactly that of the responses completely disagree to the second question (29.2%).

Otherwise the responses to the second question tended to spread out the not sure what I intend to do and smooth down the stay until retirement end. About one-third of those who chose the stay until retirement option under the first question did not choose completely agree to the second. Most of the remainder seem to have circled the next dot to the left (score 6) and some the dot to the left of that (score 5). This would seem to indicate some uncertainty. In addition, about half of those who chose the not sure option to the first question chose the middle circle of the second (score 4). The others spread out to either side (score 3 and 5), which indicates that their uncertainty could be better quantified.

As a result, especially for a visual presentation of retention intentions, it seemed more cogent to employ the responses to the second question as the means of constructing a true scale of retention intentions. Also, as a planning tool, this scale might be used to approximate a measure of retention probability in order to help manpower planners, in a rough way, to predict turnover rates, and to help evaluate promotion flow targets.

It was noted in *Kerce (1995)* that retention intentions can be viewed in many ways. They can be looked at by pay grade, marital and parental status, race, gender, type of residence, etc. All of these splits are themselves correlated, with the lower enlisted grades never married, not parents, living in bachelor quarter, etc. It is also

clear from both prior studies that higher reported Global quality of life is correlated with higher intentions to remain with the Marine Corps until retirement, and that lower reported Global quality of life is correlated with intentions to leave as soon as possible; both of these also correlate to pay grade. Figure 3-40 displays the seven point scale of retention intentions by pay grade based on the responses to the second retention question.

Figure 3-40 shows, not unexpectedly, that the lower enlisted grades have the least overall desire to remain in the Marine Corps until retirement. When it comes to both the senior officers and enlisted, the commitment to remain until retirement jumps to 65% or more. With respect to the junior officer and enlisted grades, as in any organization, the Marine Corps anticipates a certain amount of turnover. The military mission is only impacted if that amount of turnover is too high. In that case, the dissatisfiers must be addressed with a level of infusion of resources needed to bring level of retention up to that which manpower experts recognize as needed to support the military mission.

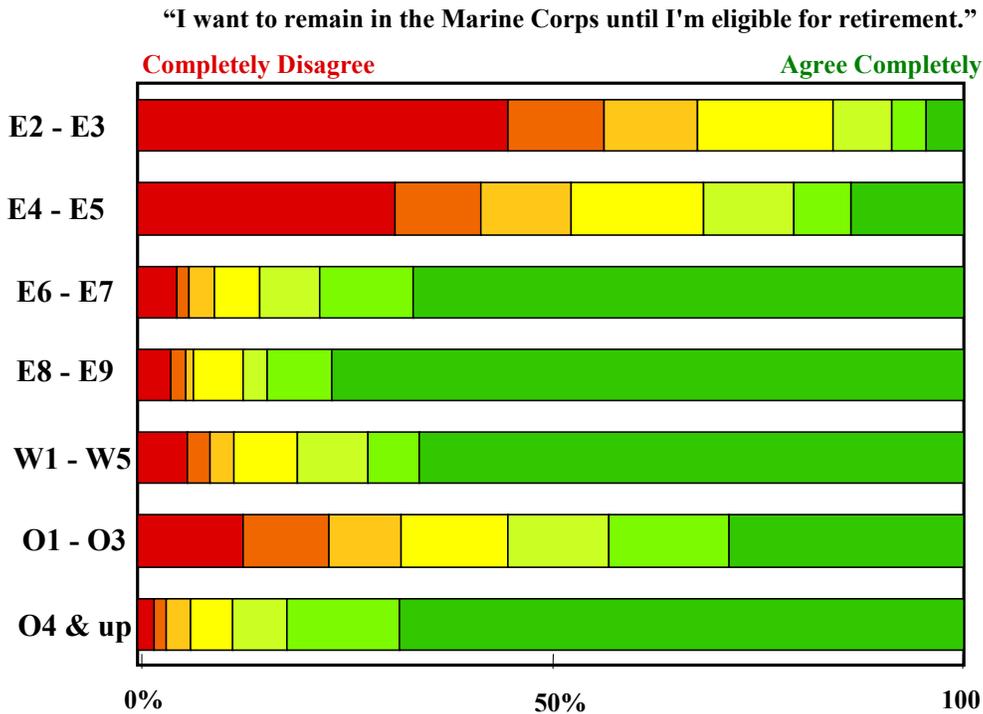


Figure 3-40. Composite Active Duty Retention Intentions.

Personal Readiness Analysis.

The concept of Personal Readiness, taken as a Military Outcome, is meant to convey the idea that personal, job, and family matters may affect an individual's ability to perform effectively within the military mission. Kerce (1995) operationalized Personal Readiness as a multidimensional construct reflecting the

extent to which individual Marines are: available for duty, ready to deploy, able to perform, and motivated to perform. For 2002 these aspects of Personal Readiness were measured by a set of indicators embedded in the survey instrument, the same indicators as in 1993 and 1998. These indicators are:

- ◆ Perceived Adequacy of Training (Question 4 – Job Domain)
 - Scaled 1 = not at all to 5 = completely
- ◆ Frequency of job-related problems (Question 14 – Job Domain)
 - Scaled 5 = none of the time to 1 = all of the time — applied to each of 7 dimensions and averaged
- ◆ Time lost due to health (Question 5 – Health Domain)
 - Numerical response from 0 to 365 — Scaled for 2002 as: 4 = no missed days, 3 = less than or equal to 5 days, 2 = more than 5 but less than 30 days, 1 = more than 30 days
- ◆ Time lost for personal/family business (Question 10 – Job Domain)
 - Scaled on each of 7 reasons from 0 = none to 7 = more than 40 hours — applied to each of 6 dimensions, averaged, and subtracted from 7
- ◆ Missing any time from alerts, deployments, or exercises (Question 6 – Job Domain)
 - Scaled as 2 = no or 1 = yes
- ◆ Commitment to Marine Corps (Question 13 – Job Domain)
 - Scaled 1 = completely disagree to 7 = completely agree — applied to each of 10 dimensions (not 13i) and averaged
- ◆ Confidence in Spouse Self-Sufficiency (Question 14 – Marriage Domain)
 - Scaled 1 = not at all capable to 5 = extremely capable — applied to each of 8 dimensions and averaged
- ◆ Adequacy of Child Care Arrangements (Question 15 – Children Domain)
 - Scaled 1 = completely unsure to 7 = completely sure
- ◆ Preparations for Absence (Question 12 – Job Domain)
 - Scaled 1 = no and 7 = yes — applied to each of 10 dimensions and averaged

We note that the 1998 Quality of Life study used only four of the indicators above. They were lost duty time due to personal reasons, lost duty time due to family reasons, commitment to Marine Corps, and perceived adequacy of training. There were no reasons stated for the abandonment of the other measures and the method of pooling the four was not discussed.

Kerce (1995) states:

"To compute the Personal Readiness composite, all of the contributing items were coded so that undesirable options were assigned negative values and desirable responses were assigned positive values. The coding

was implemented in such a way as to balance the range of positive and negative data points around a central neutral response coded as zero. Because the various component items utilized different response scales, all raw scores were transformed to standardized z scores in order to achieve *equivalence and a common metric* before they were combined. Procedures for computing composite scores were adjusted so that the scores of single Marines without children would not be negatively impacted by not/applicable responses on the two component measures related to spouses and children. The resulting composite yielded a range of scores from -25 to +13, with a mean of zero. Higher positive scores on this composite index indicate a greater level of Personal Readiness."

We found this procedure too mechanical. In particular, the respondents' numerical responses to time lost due to health were expressed in days lost over the past year. The responses could range from 0 to 365 days. In our sample, and similarly for the 1993 study, the fraction of responses with 0 days lost represented greater than 60% of the respondents, no central tendency, no possibility of fitting by a Gaussian distribution, and totally unfit to conversion to a z -score. (Even a distribution with a long tail will not prove adequate since several respondents indicated 365 lost days, there is a bump at the end of the distribution. For this reason we preferred a four category description of the variable.) We translated all of the Personal Readiness indicators into a clear ordinal, if not a cardinal, scale.

In addition, the translation to z -scores, although normalizing the variances of each element of the composite, a reasonable idea, also equalizes their contribution to the composite. This means, for example, that perceived adequacy of training is just as important to the concept of Personal Readiness as adequacy of child care arrangements. As another example, the frequency of job-related problems during the month prior to the administration of the surveys, is equally influential to the assessment of Personal Readiness as the long term measure of commitment to the Marine Corps. The Personal Readiness composite presented in *Kerce (1995)* is a mix of valid considerations. But if, like the concept of Retention, that of Personal Readiness is to be regarded as a military outcome which can be impacted by Marine Corps policy, then a properly balanced mix of considerations needs to be constructed. To this end let us look at these indicators anew.

Unlike the highly inter-correlated six Life as a Whole components, these 9 Personal Readiness indicators are not all strongly correlated and thus not indicative of a single concept. A factor analysis (using the 1451 complete responses) produced 4 factors with only two factors which might be called moderately correlated. The dominant factor comprises:

- ◆ Perceived Adequacy of Training
- ◆ Frequency of job-related problems
- ◆ Commitment to Marine Corps

The factor moderately correlated (.41) to this one comprises:

- ◆ Confidence in Spouse Self-Sufficiency
- ◆ Adequacy of Child Care Arrangements
- ◆ Preparations for Absence (not as well correlated to this factor as the former two)

A factor positively but weakly correlated with the other two (.186 and .103):

- ◆ Time lost due to health
- ◆ Time losses for personal/family business

The fourth factor missing time from alerts, etc. is essentially uncorrelated with the others. It is .030 correlated to the time losses factor above and -0.29 correlated with each of the first and second factors. (We note that a set of 1451 responses comprising random values 1, 2, 3, 4, 5, 6, 7 will, when randomly permuted and correlated to the original, have a correlation coefficient of size less than .03 about 75% of the time.)

How was Personal Readiness used in the prior quality of life studies? The 1993 study discussed and presented some statistics on each of the indicators. Primarily, however, the role of Personal Readiness was to be a recipient of influence from Global quality of life in the structural equation models (SEMs). That is, Personal Readiness was posited to be impacted by Global quality of life, and perhaps individual domain quality of life, so that improvements in Global and domain quality of life could be seen as positive to the military outcome represented by the Personal Readiness concept. The 1998 study, reduced the items in the Personal Readiness composite, did not discuss the composite or any statistics concerning the components, but followed the use in the SEMs to show that Global quality of life had a substantial impact on Personal Readiness.

Since the importance of the concept is tied to the relationship with Global quality of life, we ran the correlations between the 9 indicators of Personal Readiness and Global quality of life. There were five indicators correlated to Global quality of life with coefficients exceeding 0.2:

- ◆ Commitment to Marine Corps (.552)
- ◆ Frequency of job-related problems (.435)
- ◆ Confidence in Spouse Self-Sufficiency (.317)
- ◆ Perceived Adequacy of Training (.306)
- ◆ Preparations for Absence (.228)

We note that three of these are part of the dominant factor discussed above.

The structural equations models confirmed by the prior studies all ran the line of influence from Global quality of life to Personal Readiness. Thus, for an indicator to be included in the Personal Readiness index it must be reasonable that an increase in

Global quality of life could plausibly lead to an increased score on the indicator. It seems plausible that increased Global quality of life could lead to greater commitment to Marine Corps and perhaps to a decrease in frequency of job-related problems, and perhaps even an increase in perceived adequacy of training. However, the other two seem to run the other way, especially improved preparations for absence including improved spouse capability, these would seem more likely to lead to improved Global quality of life. These two look like indicators of family readiness (with preparation for absence more critical to families.) As such, family readiness might be a useful independent theoretical construct from Global quality of life impacting on Personal Readiness for married Marines. We discuss this below.

It seems to us that the best basis for a concept of Personal Readiness should be the structurally solid composite indicator for commitment to the Marine Corps. To this we add at $\frac{1}{2}$ weight the indicator for the frequency of job-related problems and at $\frac{1}{2}$ weight the perceived adequacy of training, this procedure also balances the variance contribution from each factor. Global quality of life explains about 34% of the variance in this Personal Readiness composite. Since Organizational Commitment is now the primary indicator of the concept of Personal Readiness, and since Organizational Commitment is the primary influence on Retention, one can expect Personal Readiness to influence Retention.

We found that the strongest influence on Personal Readiness for married Marines after Global quality of life was preparations for absence; it is much stronger than spouse self-sufficiency. It applies to all Marines, but it adds only 1% more to Global quality of life in explaining the variance in Personal Readiness. In addition, as an influence on Personal Readiness for all Marines, after Global quality of life and preparations for absence, lost duty time has the final measurable influence, but it adds only $\frac{1}{2}\%$ more of explanation. Global quality of life has effectively captured all these indicators with respect to their influence on Personal Readiness. We conclude that they are superfluous to this study as part of Personal Readiness or as an independent influence on Personal Readiness.

Independent Duty Marines Without Military Community Support

Weighting of Respondents. The Active Duty Marines assigned to Independent Duty, not to include Production Recruiters, represent about 14.2% of the Marine Corps, and Production Recruiters represent about 2.0% of the Marine Corps. The Active Duty Marines assigned to Independent Duty, not to include Production Recruiters, were sampled at a rate to produce returns of 10%; the Active Duty Marines assigned Production Recruiters were census surveyed. Although the census of the Production Recruiters was a requirement of the Study, and full results of that analysis are reported separately, the relatively heavy sampling of the Active Duty Marines assigned to Independent Duty, but not Production Recruiters, was done in order to gather a sufficient responses to allow the analysis of Independent Duty Marines without Military Community Support (IDMwoMCS).

It was not known in advance how many Active Duty Marines would fall into the category without Military Community Support (MCS). Our sample turned up 2042 of which 1356 were Production Recruiters and 686 were other Independent Duty Marines. The category was defined to capture those Marines who were one hour or more away from any military base of any service. This was seen to imply that these Marines, firstly, would not have the support afforded to Active Duty Marines assigned to Bases and Stations, and secondly, would have far more contact with civilian than with military peers. It is the goal of this chapter to compare the responses of the IDMwoMCS to their Base and Station counterparts.

For this group of respondents there were few responses from the E2-E3 pay grade band, and these few will not be reported on in the body of this chapter. This is because Marines assigned to Independent Duty stations are specially selected for their proven experience and maturity, and this does not normally allow for the selection of the lower enlisted pay grades. Where both grades and Military Community Support identifiers were reported in the survey, Table 3-14 displays the responses with respect to those who qualified as without Military Community Support:

| TABLE 3-14. SUMMARY OF THE INDEPENDENT DUTY RESPONSES BY GRADE AND MCS. | | | | |
|--|--------------------------------------|--------------|------------------------------|--------------|
| | IDM not Production Recruiters | | Production Recruiters | |
| | w+woMCS | woMCS | w+woMCS | woMCS |
| other | 209 | 22 | 30 | 12 |
| E4-E5 | 508 | 167 | 817 | 411 |
| E6-E7 | 577 | 221 | 1737 | 860 |
| E8-E9 | 218 | 96 | 57 | 27 |
| W1-W5 | 41 | 10 | 15 | 10 |
| O1-O3 | 238 | 80 | 68 | 32 |
| O4&Up | 286 | 90 | 6 | 4 |
| Total | 2077 | 686 | 2730 | 1356 |

In Table 3-14 note the relatively large number of other in the w+wo MCS column for the Independent Duty Marines not Production Recruiters. These are respondents who failed to identify their pay grade but did identify their time to get to the nearest military installation. Those other who are identified in Table 3-14 as wo MCS reported being an hour or more away, which qualified but not their pay grade.

In terms of the density of those without Military Community Support among all the members of the Independent Duty Marines or Production Recruiters groups, the percentages, including weighted totals, are:

| | IDM | Production Recruiters | |
|------------------|------------|------------------------------|--|
| E4-E5 | 32.9% | 50.3% | |
| E6-E7 | 38.3% | 49.5% | |
| E8-E9 | 44.0% | 47.4% | |
| W1-W5 | 24.4% | 66.7% | |
| O1-O3 | 33.6% | 47.1% | |
| O4&Up | 31.5% | 66.7% | |
| | 34.8% | 49.6% | |

About half the Production Recruiters are without Military Community Support as are about one-third of other Independent Duty Marines. With the high variability in the number of responses per pay grade it is almost fair to say that these percentages apply at each grade within the two groups. However, statistical tests do not quite bear this conjecture out based on the E8-E9 grades under Independent Duty Marines and the W1-W5 grades under Production Recruiters. So we need to use the above percentages by pay grade as our best estimate of which Marines are without military community support by pay grade.

With the Production Recruiters representing about 2% of the Marine Corps and the other Independent Duty Marines (without E2s and E3s) about 10.9% of Marine Corps, the overall percentage of Independent Duty Marines without military community support in the Marine Corps, assuming no bias in the sampling of the Independent Duty Marines, is approximately 4.8% ($= .02 \times .496 + .109 \times .348$). The grade balance, appropriately computed over the grade density in the population of the two groups is displayed in Table 3-16:

| E4-E5 | E6-E7 | E8-E9 | W1-W5 | O1-O3 | O4&Up |
|--------------|--------------|--------------|--------------|--------------|------------------|
| 0.360 | 0.369 | 0.064 | 0.008 | 0.106 | 0.092 |

This is robust against any moderate bias in the sampling of the Independent Duty Marines not Production Recruiters toward those with or without military community support. Normally in this chapter all comparisons will be by pay grade band. The composite over pay grade, using the above fractions, will be primarily used for the key driver diagrams.

Statistical Significance. To test the hypothesis that the Independent Duty Marines without military community support differ from their Base and Station counterparts, we assume the null hypothesis that they do not. Then we try to disprove this hypothesis by showing that the difference between the Independent Duty Marines without military community support and Base and Station satisfaction scores are beyond what might be expected by random sampling. To do this we used a two-sample t-test based on the sample means and the sampling variances drawn from each group. We have sufficient samples in each pay grade so that the t-test follows a Gaussian distribution (which we sometimes refer to as the difference Gaussian).

When we compare composite satisfactions we mean the pay grade-weighted average Independent Duty Marines without military community support satisfaction (following Table 3-16) compared with the pay grade-weighted Base and Station satisfaction without E2s and E3s, so that the pay grade counterparts are identical, although they are differently balanced between Independent Duty Marines without military community support and Base and Station Marines.

When we say that there is a statistically significant difference between an Independent Duty Marines without military community support satisfaction score and that of the Base and Station counterparts we mean that the difference of the two scores is less than 1.96 times the square root of the combined sampling variances. This says we will reject the null hypothesis only when the difference between scores is so large that it would only occur at random in less than 5% of paired samples, of respective sizes, drawn from the same population.

Summary of Assessments. Global quality of life was measured through six different indicators (three of which were multiple-item indicators). Unlike the 1993 Quality of Life Study (*Kerce, 1995*) and 1998 study (*White, Baker, and Wolosin, 1999*), this 2002 Study did not measure social comparisons with peers as an indicator of Global quality of life. Instead, this Study includes an item based on Multiple Discrepancy Theory (MDT) research of (*Michalos, 1985*), which asked the respondent to compare his or her life to ideal life or goals for his/her life. The deletion of the social comparison item and its replacement with a MDT item was warranted by the extensive use of this type of item in the most recent research on quality of life, and was recommended by the 1993 study (*Kerce, 1995*, p 157). This change increased the consistency (reliability) of the six indicators with the Cronbach Alpha increasing to .90 from the value .87 in 1993 and .89 in 1998.

The eleven life domains measured for this study are identical to those measured in the 1995 and 1999 Quality of Life studies. They are Residence, Neighborhood, Leisure and

Recreation, Health, Friends and Friendships, Marriage/Intimate Relationships, Relationship with Children, Relationship with Relatives, Income/Standard of Living, Job, and Self (personal development). Domain quality of life was measured with three indicators, an affective indicator (responses were answered on a 7-point delighted to terrible scale), a cognitive indicator (responses were reported on a 7-point satisfaction scale with 1 being very dissatisfied to 7 being very satisfied) and an expectancy indicator (respondents indicated on a 7-point scale how well an aspect of their life measures up to their goals with 0% being not at all to 100% being perfectly matches their goal).

Descriptive items, customized to the domain, were included in each section as were items that asked what effect each area of life had on job performance and career intentions. Other key variables embedded within the questionnaire were the personality variables of optimism and self-esteem and the military outcomes of retention and personal readiness. Figure 3-41 summarizes the variables measured in this 2002 Quality of Life study.

| SUMMARY OF VARIABLES IN THE MARINE CORPS QUALITY OF LIFE ASSESSMENT. | |
|--|--|
| <p>Demographic Variable</p> <ul style="list-style-type: none"> ◆ Gender ◆ Age ◆ Race/ethnicity ◆ Education ◆ Marital status ◆ Number, type of dependents ◆ Children in household ◆ Children’s ages ◆ Spouse employment ◆ Pay grade ◆ Time in grade ◆ Time on Active Duty in USMC ◆ Career intentions ◆ Primary MOS ◆ Duty MOS ◆ Time in present assignment ◆ Accompanied/unaccompanied ◆ Reason geographic bachelor ◆ Station or base ◆ Deployment status ◆ Type of deployment | <p>Global Quality of Life</p> <ul style="list-style-type: none"> ◆ Delighted-Terrible Scale (D-T) ◆ Life Characteristics Scale (LCS) (7 items) ◆ Index of Well Being ◆ Satisfaction with Life as a Whole ◆ Satisfaction with Life Scale (SWL) (5 items) ◆ Domain and Global Life Expectations <p>Personal Dispositions (Personality Variables)</p> <ul style="list-style-type: none"> ◆ Optimism scale (12 item scale) ◆ Sociability ◆ Self esteem (10 item scale) <p>Military Outcomes</p> <ul style="list-style-type: none"> ◆ Retention <li style="padding-left: 20px;">Career intentions ◆ Personal Readiness <li style="padding-left: 20px;">Perceived adequacy of training <li style="padding-left: 20px;">Job-related problems <li style="padding-left: 20px;">Commitment |
| <p>Quality of Life--Domain Assessments</p> <ul style="list-style-type: none"> ◆ Delighted-Terrible Scale (D-T) ◆ Overall domain satisfaction ◆ Facet satisfactions ◆ Descriptive items ◆ Perceived effect on job performance ◆ Perceived effect on reenlistment | |

Figure 3-41. Summary Of Variables In The Marine Corps Quality Of Life Assessment.

Characteristics of the Independent Duty Marines Without Military Community Support Respondents.

A total of 2042 Independent Duty Marines without Military Community Support completed the Quality of Life questionnaire. These are defined as Independent Duty Marines that live one hour or more away from the nearest military base. Approximately two-thirds of these respondents were Production Recruiters. In this section we describe the respondents on a variety of personal demographics and career characteristics derived from their answers to the questions in the background and career sections of questionnaire (see Appendix B for questionnaire).

Gender and Race. Table 3-17 shows the distribution of respondent samples in terms of gender for the Independent Duty Marines without Military Community Support sample showing that the sample is predominately male. Gender is associated with variance in global satisfaction and happiness ratings, such that on the whole females tend to be more positive in their assessment of satisfaction and happiness with life as a whole. This world estimate was confirmed for Marines by the results of *Kerce (1995)* showing that female Marines reported higher levels of happiness and satisfaction as compared to male Marines.

| TABLE 3-17. GENDER DISTRIBUTION OF THE SAMPLE. | | |
|--|---------------------------------------|---------|
| Gender | Independent Duty w/o Military Support | |
| | Number | Percent |
| Male | 1953 | 96 |
| Female | 78 | 4 |

When questioning the respondents in terms of their race, they were first asked if they were of Spanish/Hispanic descent. Of the respondents that answered this question, 295 out of 2042 or about 15% said they were of Spanish/Hispanic descent. The respondents were then asked to further describe their race as White, Black/African-American, Asian/Pacific Islander, Native American/Aleut/Eskimo, or Other. Table 3-18 summarizes the race distribution of respondents for the three groups in the sample.

| TABLE 3-18. RACIAL DISTRIBUTION OF THE SAMPLE. | | |
|--|---------------------------------------|---------|
| Race | Independent Duty w/o Military Support | |
| | Number | Percent |
| White | 1387 | 69.1 |
| Black/African-American | 352 | 17.7 |
| Asian/Pacific Islander | 42 | 2.1 |
| Native American/Aleut/Eskimo | 26 | 1.3 |
| Other | 199 | 9.9 |

It is interesting to note that in all three respondent groups, the percentage that responded with Other is large compared to those responding as Asian or Native American and this percentage is up from the previous two studies in 1995 and 1999. This could be

due to the increased number of mixed marriages in our society resulting in children not classifying themselves as belonging to any particular racial group. It could also indicate an increased reluctance to reveal one's race. The results of *Kerce (1995)* indicated that race factors were associated with variance in Global quality of life. Blacks (excluding Black women) and Hispanics tend to be somewhat more positive in subjective evaluations of quality of life than Whites.

Age Distribution of the Respondents. Table 3-19 shows the ages (partitioned in seven different ranges) of the respondents in the sample. The average age of these respondents is 31 years.

| TABLE 3-19. AGE DISTRIBUTION OF THE SAMPLE. | | |
|---|---------------------------------------|---------|
| Age Range (Years) | Independent Duty w/o Military Support | |
| | Number | Percent |
| 17 - 20 | 11 | 0.5 |
| 21 - 25 | 344 | 17.1 |
| 26 - 30 | 749 | 37.2 |
| 31 - 35 | 469 | 23.3 |
| 36 - 40 | 324 | 16.1 |
| 41 - 45 | 90 | 4.5 |
| 46 and above | 26 | 1.3 |

Marital Accompanied, and Parental Status. The marital statuses of the respondents are summarized in Table 3-20.

| TABLE 3-20. MARITAL STATUSES OF THE SAMPLE. | | |
|---|---------------------------------------|---------|
| Marital Status | Independent Duty w/o Military Support | |
| | Number | Percent |
| Never Been Married | 327 | 16.1 |
| Married | 1413 | 69.8 |
| Married But Separated | 74 | 3.7 |
| Divorced | 205 | 10.1 |
| Widowed | 6 | 0.3 |

A majority (about 70%) of the sample report that they are married. Marital status is important in the study of Global quality of life as virtually all studies indicate that being married has a positive effect on subjective well being (*Michalos, 1991*). The results of *Kerce (1995)* confirmed that this same effect existed for the Marines in her sample.

Table 3-21 presents information regarding dependent family members.

| TABLE 3-21. DEPENDENT FAMILY MEMBERS OF THE SAMPLE. | | |
|--|--|---------|
| Dependents | Independent Duty w/o Military Support | |
| | Number | Percent |
| None | 386 | 19.1 |
| Spouse (non-military) | 918 | 45.5 |
| Living With Children | 1146 | 56.8 |
| Not Living With Children | 318 | 15.8 |
| Living With Legal Ward(s) | 2 | 0.1 |
| Parent(s) or Other Relative(s) | 24 | 1.2 |
| Percentage does not add to 100% due to multiple category responses | | |

The majority of respondents reported having dependent family members. When asked if they have any children under the age of 21 that currently live with them, 59% of the sample reported that there were children in their household. In total, the households of Independent Duty w/o Military Community Support respondents care for 2312 children, for an average of 1.95 children per household. The average number of pre-school children per household is 0.96, while the average number of school-aged children per household is 0.98.

Current Level Of Education. Of the 2008 respondents who described their level of education, about 36.9% said that they have no more than a high-school diploma or its equivalency, while 59.6% have done some undergraduate college work and 3.1% have gone on to do graduate college work. Only 0.3% has less than a high-school education. Table 3-22 presents the level of education separately for enlisted and officer personnel.

| TABLE 3-22. NUMBERS OF RESPONDENTS AND THEIR LEVEL OF EDUCATION. | | |
|---|-------------------------------|--------------------------|
| Level of Education (Independent Duty w/o Marine Support) | Enlisted Personnel | Officer Personnel |
| No high school diploma | 7 | 0 |
| High school equivalency | 20 | 1 |
| High school diploma | 710 | 5 |
| Less than one year of college | 407 | 7 |
| One or more years of college, non-degree | 437 | 14 |
| Associate's degree | 108 | 1 |
| Bachelor's Degree | 66 | 138 |
| Master's Degree | 3 | 48 |
| Doctoral or professional degree | 1 | 7 |
| Other | 2 | 1 |

Some authors argue that education influences subjective quality of life and is, in fact, a root cause of individual well being. Not only does education shape opportunities for employment, the kind of work people do, and their income and economic hardship, but it also impacts their social psychological resources and their distress management skills (Ross & Van Willigen, 1997). In general, better-educated individuals tend to report higher

levels of Global quality of life, however only about 1%-3% of the variance in subjective well being can be accounted for by level of educational attainment (*Michalos, 1991*).

Length of Service. The average length of service for Independent Duty Marines without Military Community Support completing the quality of life questionnaires is about 11.1 years.

Current Duty Location, Pay Grade and Response Rates. Of all the Quality of Life questionnaires that were mailed to Independent Duty Marines without Military Community Support, 2042 were completed and returned; of these 1356 were Production Recruiters, and 686 were other Independent Duty Marines. Active Duty Marines assigned to Independent Duty were sampled at a rate to produce returns of 10%. Production Recruiters were census surveyed.

A more detailed presentation of responses by pay grade is provided in Table 3-23.

| TABLE 3-23. NUMBERS OF RESPONDENTS IN THE SAMPLE. | |
|--|------------------------------|
| Pay Grade | Number of Respondents |
| E2-E3 | 8 |
| E4-E5 | 578 |
| E6-E7 | 1081 |
| E8-E9 | 123 |
| O1-O3 | 112 |
| O4-O10 | 94 |
| WOs | 20 |
| No grade reported | 26 |
| Overall | 2042 |

Note that the E2-E3 grade represents such a small proportion of the sample, and were more or less unexpected, that they were not included in the analyses in this chapter. Because this distribution of responses did not accurately represent the distribution of pay grades within the Marine Corps of Independent Duty Marines without military community support, all analyses were weighted by the proportions discussed later.

Residence Domain

Independent Duty Marines without Military Community Support are taken to exclude Marines who live on base. Too small a number (2%) live in military family housing in the civilian community, so we do not report separately on their satisfaction with their residence. Residence satisfaction thus concentrates on respondents who selected:

- ◆ Personally owned housing in the civilian community
- ◆ Personally rented housing in the civilian community
- ◆ Shared rental housing in the civilian community

Figure 3-42 compares the satisfaction scores between Independent Duty Marines without military community support and their Base and Station counterparts (without E2-E3s).

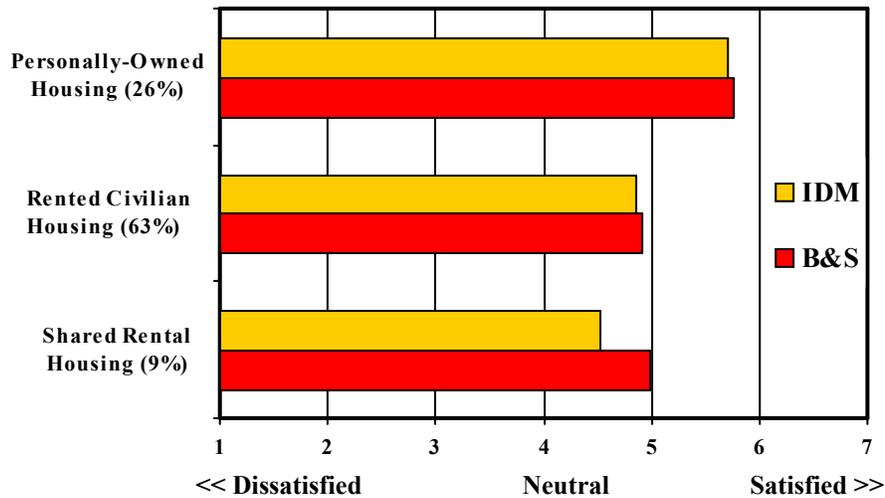


Figure 3-42. Satisfaction With (Non-Military Only) Residence.

Independent Duty Marines without military community support have all residence satisfaction averages on the satisfied side of neutral. Figure 3-42 displays only slight differences in residence satisfaction with personally owned and rented housing, neither of which are statistically significant. However, the shared housing shows a significant difference between the Independent Duty Marines without military community support and their Base and Station counterparts (without E2-E3s). As it turns out, although the shared housing numbers are small (< 10% of each) the overall satisfaction composite is 5.05 for Independent Duty Marines without military community support as compared with 5.22 for their Base and Station counterparts (without E2-E3s) living in civilian housing; this difference is statistically significant. So the smaller not statistically significant differences add up to a likely valid difference. Also, because some of their Base and Station counterparts live in military housing, the Independent Duty Marines without military community support overall residence satisfaction composite of 5.05 is much higher than the 4.39 of their Base and Station counterparts in all residences.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Residence domain for the Independent Duty Marines without military community support. An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The least correlated factor is cost, just like for the Base and Station group where we were looking at military housing; it is the most unique attribute.

Figure 3-43 displays the Residence domain aspect satisfactions for Independent Duty Marines without military community support who live in civilian housing. All domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. As previously indicated, the overall satisfaction is 5.05.

This set of nine aspects accounts for 80% of the variance in residence satisfaction, a high value, equaling the Base and Station regressions. In order to understand the impact of these drivers, Figure 3-43 displays the evaluations of satisfaction with these aspects in relation to their influence on overall domain satisfaction.

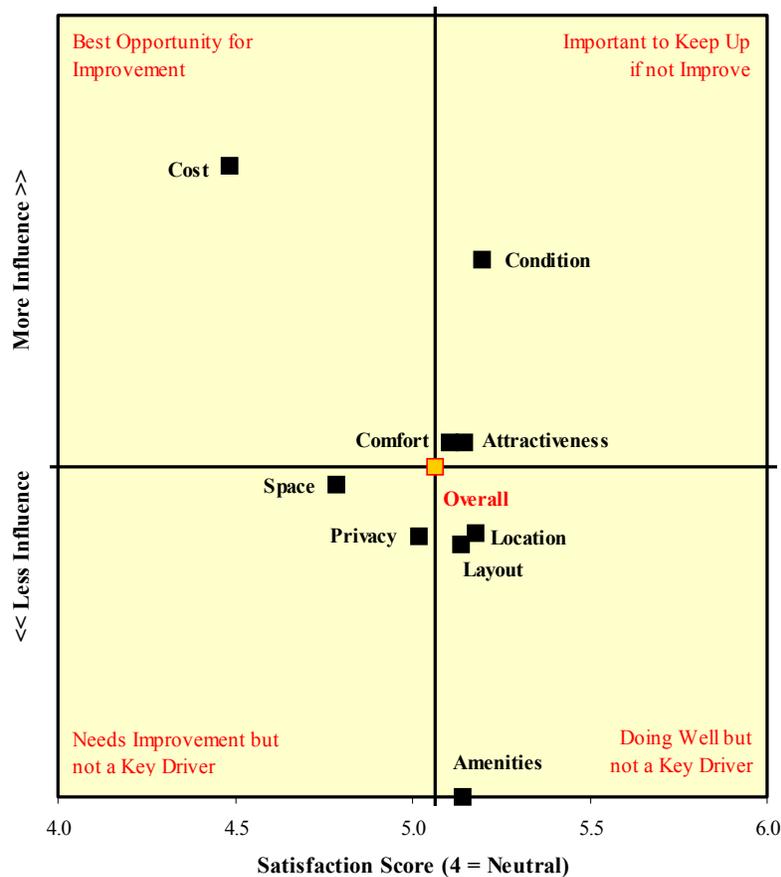


Figure 3-43. Key Driver Diagram For Civilian Housing.

All domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. Table 3-43 shows that most influential driver of residence satisfaction is cost, which received a satisfaction rating far below the overall satisfaction. The 5 key drivers in or touching the upper half of the display account for 79% of the variance in the overall satisfaction.

Overall residence satisfaction for this group of respondents living in civilian housing is most strongly influenced by, in order of influence:

- ◆ Satisfaction with cost
- ◆ Satisfaction with condition
- ◆ Satisfaction with attractiveness
- ◆ Satisfaction with comfort
- ◆ Satisfaction with space

Given that the Marine Corps has little influence over civilian housing in physical terms, it would seem that the only tenable focal point if trying improve satisfaction would be cost. It would seem, therefore, that an increase in housing allowance would increase the Independent Duty Marines without military community support overall satisfaction with residence. Then again, the Independent Duty Marines without military community support rate the Residence domain as somewhat satisfied.

Domain Conclusions.

Respondents in civilian housing appear generally satisfied with their residences but are least satisfied by the cost aspect. For the 9% of Independent Duty Marines without military community support living in shared housing, there appears to be a distinct gap in satisfaction with respect to their Base and Station peers similarly living in shared housing. This might reflect a higher cost of housing near to the duty station or a perception, focused on cost and ignoring the downside, that their Marine Corps peers living in military housing have a better deal. When asked to represent how much their housing measures up to their goals for housing, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the Independent Duty Marines without military community support was 63%, much higher than the Base and Station value of 42% (which is 65% military housing). This indicates that Independent Duty Marines without military community support feel relatively much better than their Base and Station peers about how much their residences measure up to their goal in this area of life.

Neighborhood Domain

Independent Duty Marines without military community support (IDMwoMCS) are taken to exclude Marines who live on base. Too small a number (2%) live in military family housing in the civilian community so we do not report separately on their satisfaction with their neighborhood. Neighborhood satisfaction thus concentrates on respondents who selected:

- ◆ Personally owned housing in the civilian community
- ◆ Personally rented housing in the civilian community
- ◆ Shared rental housing in the civilian community

Figure 3-44 compares the satisfaction scores between Independent Duty Marines without military community support and their Base and Station counterparts.

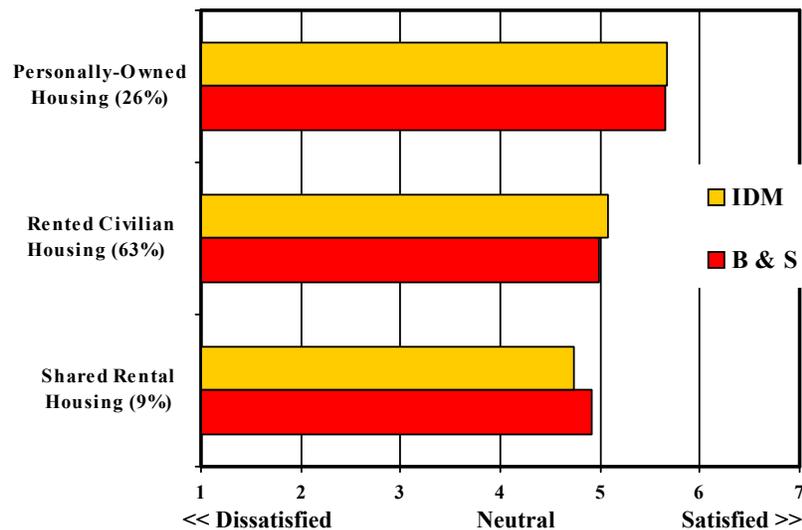


Figure 3-44. Satisfaction With Non-Military Neighborhood.

Independent Duty Marines without military community support have all satisfaction averages on the satisfied side of neutral. Figure 3-44 displays only slight differences in overall Neighborhood satisfaction with none of the differences statistically significant, even for shared housing since the sample from that population is small. The overall satisfaction composite is 5.17 for Independent Duty Marines without military community as compared to 5.20 for their Base and Station counterparts (without E2-E3s) living in civilian housing, and is not statistically significant. However, because some of their Base and Station counterparts live primarily in military housing, the Independent Duty Marines without military community overall Neighborhood satisfaction composite of 5.17 is distinctly higher than the 4.76 of their Base and Station counterparts (without E2-E3s) in all residences.

As a life domain, Neighborhood is theoretically separate from Residence, however, it is so highly correlated with Residence as an influence on satisfaction with Life as a Whole that it seems superfluous as it is currently measured. For example, items related to the physical neighborhood are repetitive with residence, such as condition of other dwellings. It may be better in the future to construct a domain called Community and concentrate on measuring aspects such as friendliness, services available, etc.

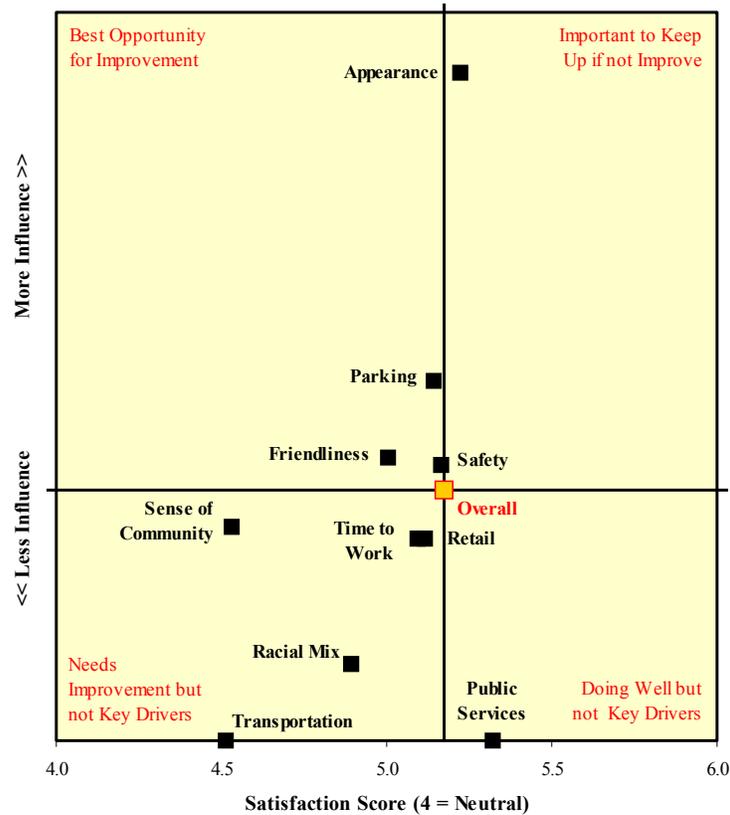


Figure 3-45. Key Driver Diagram For Neighborhood.

In order to indicate which aspects of Neighborhood are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Neighborhood domain for the Independent Duty Marines without military community. An exploratory factor analysis suggests that the domain aspects are sufficiently highly correlated so as to signify the existence of a single underlying factor and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The results are displayed in Figure 3-45.

Figure 3-45 displays the Neighborhood domain satisfaction overall and all but one of the domain aspect satisfaction scores (condition of other dwellings). The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores.

As with active duty Marines assigned to bases and stations, the condition of other dwellings aspect is so highly correlated with the appearance aspect (.865 while all other aspect correlations but 2 are less than .7) that the regression ends up watering down the influence of each. Since appearance had the larger influence, we eliminated condition from the regression. The least correlated factor is time to work, which is unique and might even be considered a separate factor within the domain.

The Neighborhood domain aspects are located vertically in relation to their influence on the overall domain satisfaction score as indicated by the regression analysis. As a whole, they explain about 79% of the variance observed in the overall domain satisfaction score. The top three drivers of domain satisfaction are:

- ◆ Satisfaction with appearance
- ◆ Satisfaction with parking
- ◆ Satisfaction with safety

These account for 73% of the variability. Satisfaction with safety (in civilian housing) replaces satisfaction with friendliness for the Base and Station group. However, the Base and Station analysis considered military housing where safety was relatively highly satisfied and had relatively small influence. The appearance aspect is by far the largest predictor of overall domain satisfaction accounting for 63% of the variance. Thus, it is a physical attribute, correlated to the attractiveness of residences, which dominates the overall domain satisfaction.

Improvements in the satisfaction with appearance, which subsumes condition, would be one focal point. Another focal point would be parking. A third focal point would be safety. All of these are relatively highly satisfied already with respect to overall domain satisfaction. It is not clear how any of these can be improved by Marine Corps policy, other than perhaps permitting, through a housing allowance increase, a more attractive neighborhood for Independent Duty Marines without military community.

Domain Conclusions.

Independent Duty Marines without military community are as satisfied with their neighborhoods as are Base and Station Marines in civilian housing. Furthermore, the Neighborhood has no measurable effect on Global quality of life so increasing the satisfaction with this domain should not be a priority. When asked to represent how much their current neighborhood measures up to what their goals are on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for Independent Duty Marines without Military Community Support was 63%. This indicates that Marines feel that their neighborhoods measure up somewhat to their goals in this area of life.

Leisure and Recreation Domain

Because satisfaction/happiness with Leisure and Recreation are likely a function of how much free time one has and one's home-life demands, analyses by both pay grade and marital/parental status were conducted. There were four specific subcategories of marital/parental respondents for which domain satisfaction comparisons were performed between Independent Duty Marines without military community, and their Base and Station counterparts.

- ◆ Never Married
- ◆ Married without Children
- ◆ Married with Children
- ◆ Divorced/Separated

They are compared in Figure 3-46.

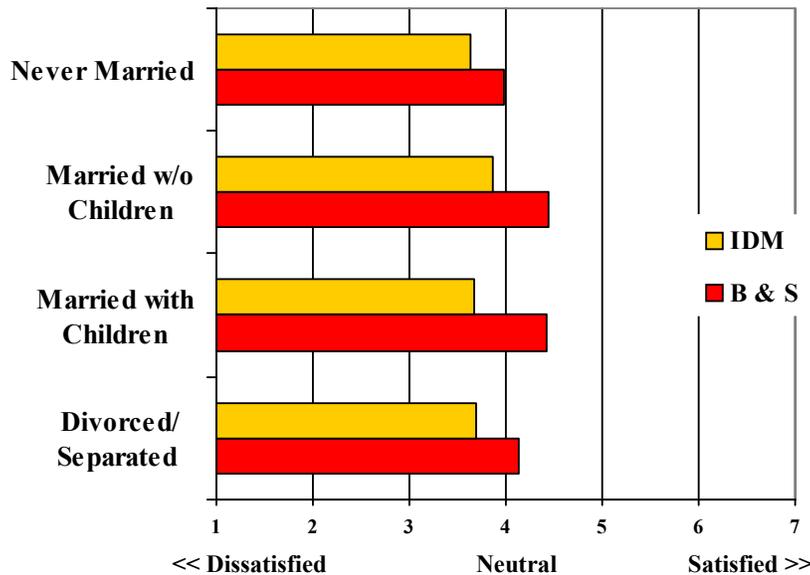


Figure 3-46. Satisfaction With Leisure And Recreation.

The lower satisfaction levels for Leisure and Recreation on the part of these independent duty Marines can be seen to run across the board with respect to marital status and child status as compared to their Base and Station counterparts. All are statistically significant.

Figure 3-47 displays the lower satisfaction levels for Leisure and Recreation by pay grade on the part of these independent duty Marines as compared to their Base and Station counterparts.

For Independent Duty Marines without military community support, satisfaction with Leisure and Recreation is lower across the board than that of their Base and Station

counterparts, and dramatically so for the enlisted grades and warrant officers, which are either into the dissatisfied area or just neutral. All but the officer grades are statistically significant. As a result, the Independent Duty Marines without military community support composite overall satisfaction of 3.80 is much lower than their Base and Station counterparts composite of 4.27 (without E2-E3s).

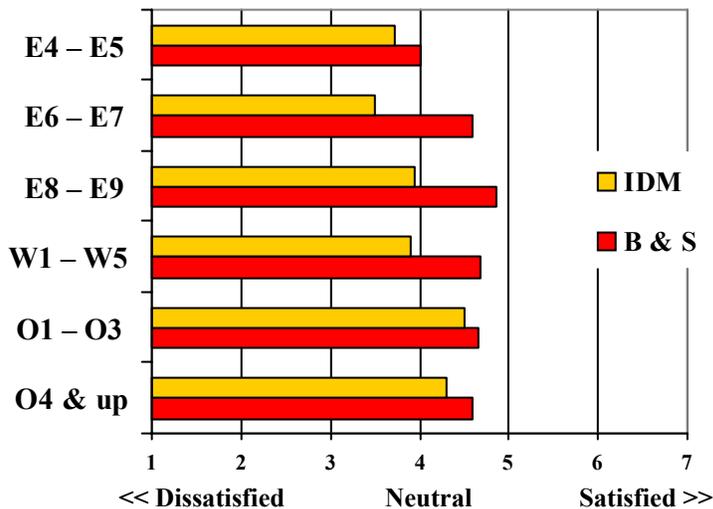


Figure 3-47. Satisfaction With Leisure And Recreation By Pay Grade.

In order to demonstrate which aspects of Leisure and Recreation are key to the reported overall satisfaction levels, we undertook a multiple regression and factor analysis of the Leisure and Recreation domain for the Independent Duty Marines without military community support. Results are displayed in Figure 3-48. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores.

An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The least correlated factor is the satisfaction with the amount of leisure time, which has the lowest satisfaction score.

The Leisure and Recreation domain aspects are located vertically in relation to their influence on the overall domain satisfaction score as indicated by the regression analysis. As a whole, they explain about 75% of the variance observed in the overall domain satisfaction score, up from the 72% for the Base and Station group. The top driver of overall domain satisfaction in this display is clearly the amount of leisure time with even more impact than for the Base and Station group domain aspect.

For the Independent Duty Marines without military community support, the time available for leisure explains 64% of the 75% of the variance explained by all four

domain aspects; for the Base and Station Marines time available for leisure explains 46% of the 72% of the variance explained by all four domain aspects.

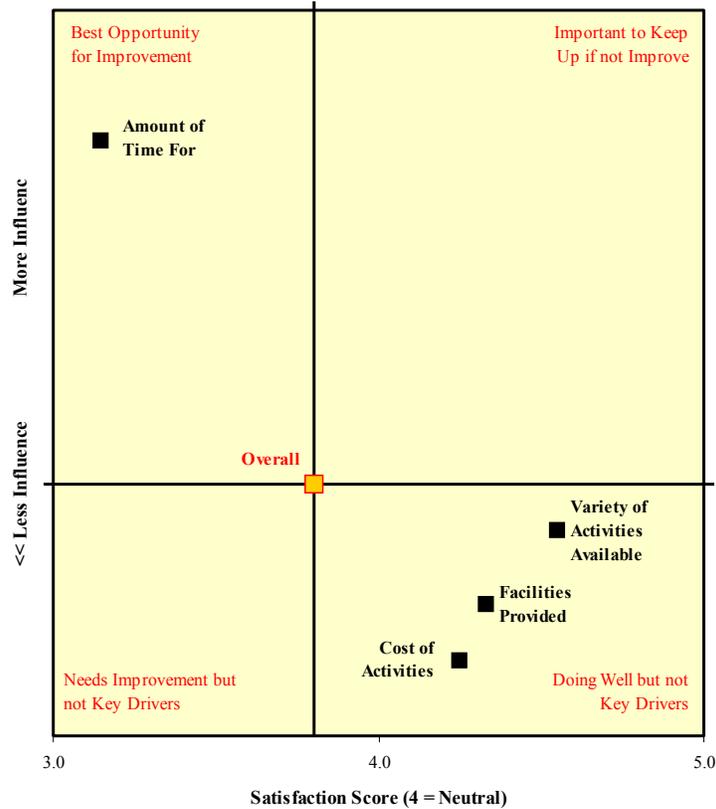


Figure 3-48. Key Driver Diagram For Leisure And Recreation.

The dissatisfaction with the amount of leisure time represents the sole focus and best opportunity for improvement of the domain overall. We note that Leisure and Recreation is one of the key drivers of Global quality of life and a domain where the satisfaction level is less than Global quality of life.

Domain Conclusions.

Independent Duty Marines without military community support of all pay grades report that they are less satisfied with their Leisure and Recreation time than their counterparts assigned to bases and stations. The main reason seems to be a perception of less satisfaction with the amount of time they have available for leisure activities. When asked to represent how much their current Leisure and Recreation measures up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% represents no match at all with their goal, the average response for the Independent Duty Marines without military community support was 50%, the lowest value on the domain expectancy scale. This indicates that these Marines are less satisfied with their Leisure and Recreation time and activities than they are with any other domain. Their 50% expectancy compares in absolute value to the 53% expectancy composite for their Base and Station counterparts (without E2-E3s), which is the lowest expectancy score save for the Income domain.

Health Domain

In order to compare satisfaction/happiness with Health between Independent Duty Marines without Military Community Support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-49.

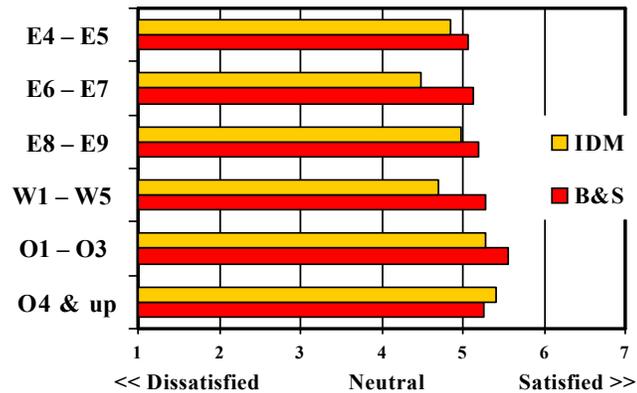


Figure 3-49. Satisfaction With Health By Pay Grade.

The reduced Health satisfaction on the part of Independent Duty Marines without military community support can be seen to run across the board with respect to pay grade except for the O4s and up. Half are statistically significant, namely, the E4-E5, E6-E7, and W1-W5 bands. Although it appears that the O4s and up are reporting higher levels as compared to their Base and Station counterparts, these differences are not statistically significant and therefore may well be an invalid by-product of sampling.

In order to compare satisfaction/happiness with Health and Dental Care between Independent Duty Marines without military community support and their Base and Station counterparts, a parallel analysis was conducted. The results are displayed in Figure 3-50.

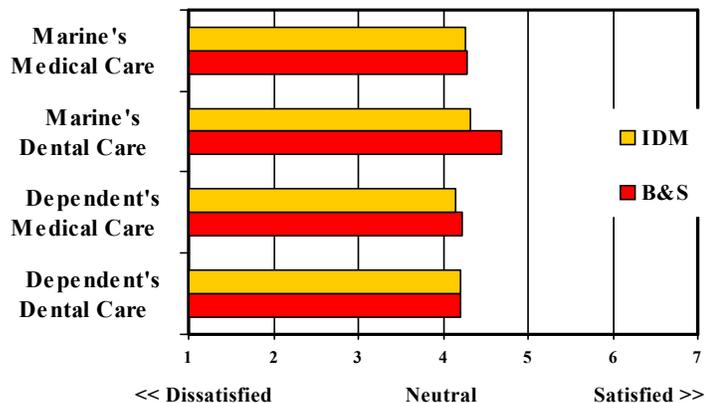


Figure 3-50. Satisfaction With Health Care.

Satisfaction with health and dental is about equal for the two groups, but the satisfaction with dental care is lower (and statistically significant) for the independent duty Marines. For the independent duty group the satisfaction level with dental care is actually slightly higher than for medical care; it is their Base and Station counterparts who are reporting that their satisfaction with dental care greatly exceeds that of their medical care. Both levels are still in the satisfied range, but just above neutral. The difference between family member medical and dental care are not statistically significant.

In order to indicate which aspects of Health are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Health domain for Independent Duty Marines without military community support. Results are displayed in Figure 3-51.

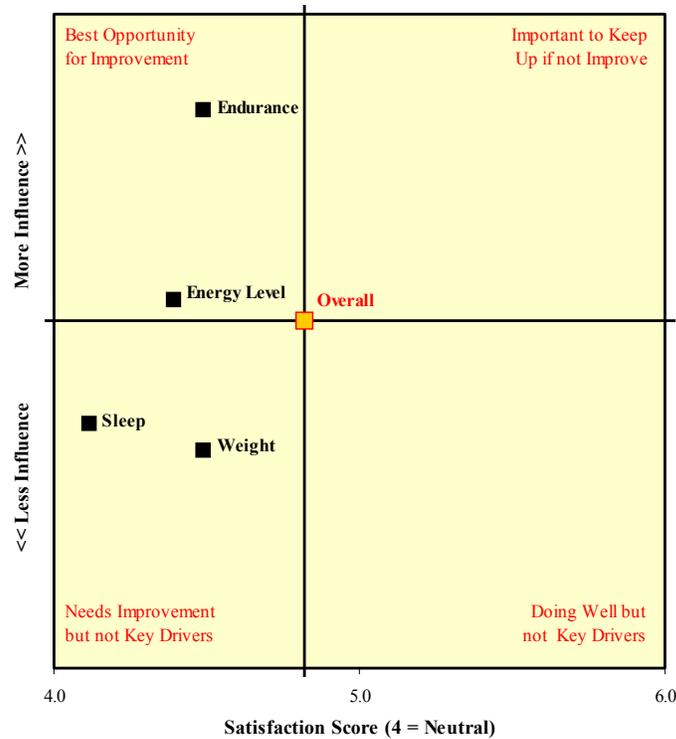


Figure 3-51. Key Driver Diagram For Health.

The domain aspects of endurance, sleep, energy level, weight, and the overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall composite satisfaction is 4.82 for Independent Duty Marines without military community support, distinctly lower than the 5.14 for their Base and Station counterparts (without E2-E3s). The difference is statistically significant, driven by the E4-E5 and E6-E7 pay grades, which represent 64% of Independent Duty Marines without military community support.

An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. However, the overall domain satisfaction is larger than that of any of its aspects; this is consistent with prior studies, and the Base and Station respondents: Marines may have in mind other facets of overall Health not currently included as Health domain aspects.

The Health domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain 71% of the variance observed in the overall domain satisfaction; this compares with the 57% reported concerning the Base and Station Marines. Otherwise, all the domain aspects are in the same order of influence. This would indicate that whatever other factors may influence satisfaction with Health overall they have a greater effect on Marines assigned to bases and stations.

The key driver and main focal point of overall domain satisfaction in this display is clearly the endurance aspect. This aspect alone accounts for 62% of the variance in overall domain satisfaction. In addition, for the Independent Duty Marines without military community support, a second key driver is energy level, which for Base and Station Marines did not get above the key driver threshold. The greatest dissatisfaction is with the amount of sleep, just as for their Base and Station counterparts. Altogether, we seem to be seeing an even greater indication of the lack of time expressed in the leisure domain compared to the Base and Station respondents.

Domain Conclusions.

Independent Duty Marines without military community support of all pay grades appear to be satisfied with their health, but are almost uniformly less satisfied than their Base and Station counterparts. It would appear that this is due to a lack of time in which to exercise, an even greater shortfall than that felt by their Base and Station counterparts. When asked to represent how much their current health measures up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the composite Independent Duty Marines without military community support response was 69%, a relatively high expectancy score among the domain expectancies from this group of Marines. This value is about equal to their Base and Station counterparts (without E2-E3s) expectancy score of 70%, which is also one of the highest scores among their expectancy measures. This would indicate that independent duty Marines feel that their health measures up relatively well to their goals in this area of life, although their satisfaction levels are relatively low. Since satisfaction with Health is not a key driver of Global quality of life, this gap alone would not seem sufficient to drive a policy decision.

Friends and Friendship Domain

In order to compare satisfaction/happiness with Health between Independent Duty Marines without military community support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-52.

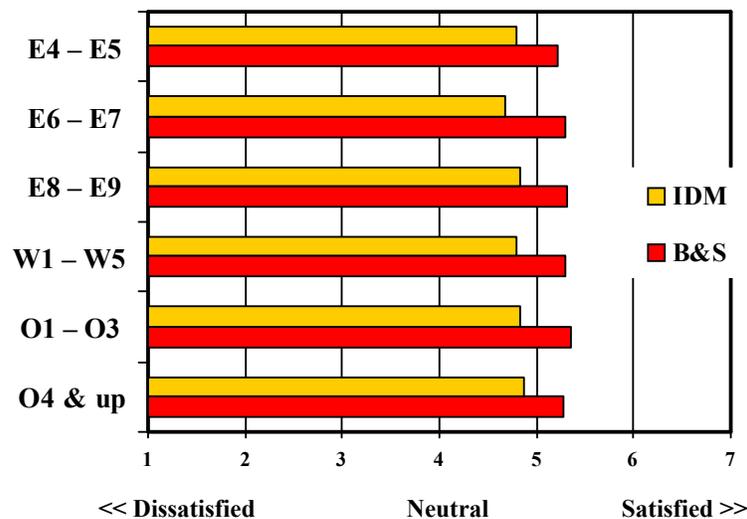


Figure 3-52. Satisfaction With Friendships By Pay Grade.

Independent Duty Marines without military community support in all pay grades are neutral to somewhat satisfied with their friendships overall. However, they are distinctly less satisfied than their Base and Station counterparts. All the lower satisfaction values are statistically significant.

To look for a reason, we analyzed the question "Do you have friends at this location with whom you feel free to discuss personal matters?" The overall response from the Base and Station Marines was that 77% (without E2-E3s) felt they did have such friends at their location. On the other hand only 62% of Independent Duty Marines without military community support reported the same. This tracks with their decrease in satisfaction, which in composite registers 4.77 vice 5.25 for their Base and Station counterparts (without E2-E3s). But this is not the whole story.

In order to indicate which aspects of domain satisfaction are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the aspects of friendship satisfaction for the Independent Duty Marines without military community support. Results are displayed in Figure 3-53.

In Figure 3-53 the domain aspect and overall satisfactions are located in the horizontal above their individual composite satisfaction scores. The overall composite satisfaction is 4.77, distinctly less than the 5.25 of their Base and Station counterparts, and statistically significant. An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

The domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 77% of the variance observed in the overall domain satisfaction. This compares to 72% for all Active Duty Marines assigned to bases and stations.

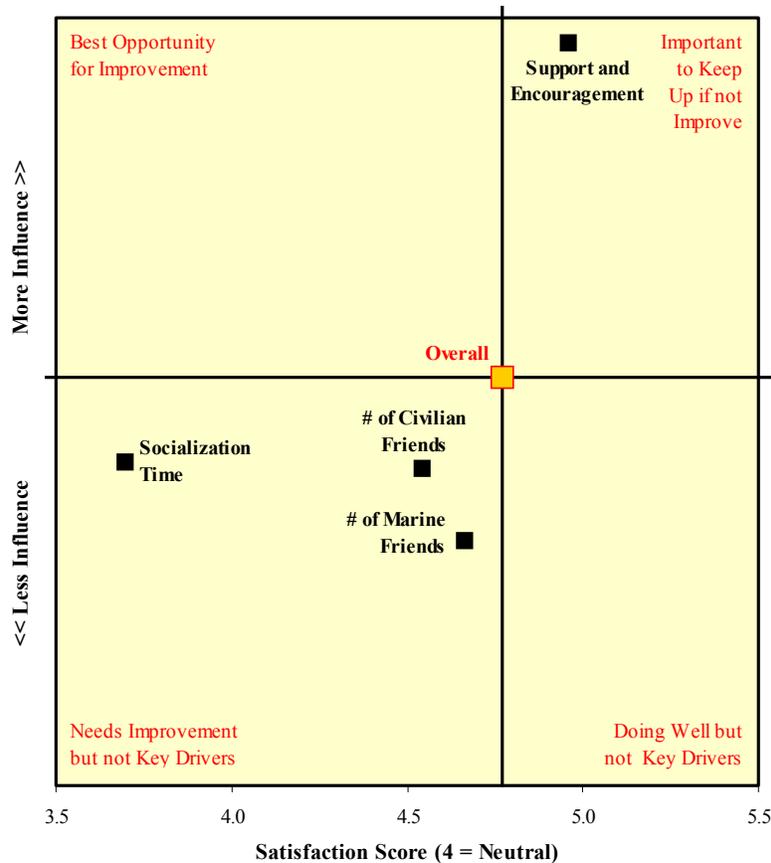


Figure 3-53. Key Driver Diagram For Friends.

The top driver of overall domain satisfaction in this display is clearly the support and encouragement aspect and, on average, Independent Duty Marines without military community support report being somewhat satisfied in this area. This aspect alone accounts for 62% of the variance in overall domain satisfaction. The greatest lack of satisfaction is with socialization time, which is in the dissatisfied area, together with the support and encouragement aspect, these two aspects account for 72% of the variance in overall domain satisfaction. This seems to be another indicator of the lack of free time expressed in prior domains.

Domain Conclusions.

Independent Duty Marines without military community support of all pay grades appear on the satisfied side with their relationships with their friends but much less so than their Base and Station counterparts. When asked to represent how much their current friendships measure up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for Independent Duty Marines without military community support was 66%, a middling score among their domain expectancy measures. This is less than the 69% indicated by Base and Station Marines, which was high among their expectancy scores. Nevertheless, in terms of Global quality of life, the Friends and Friendships domain has negligible influence.

Marriage/Intimate Relationship Domain

In order to compare satisfaction/happiness with Marriage/Intimate Relationships between Independent Duty Marines without military community support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-54.

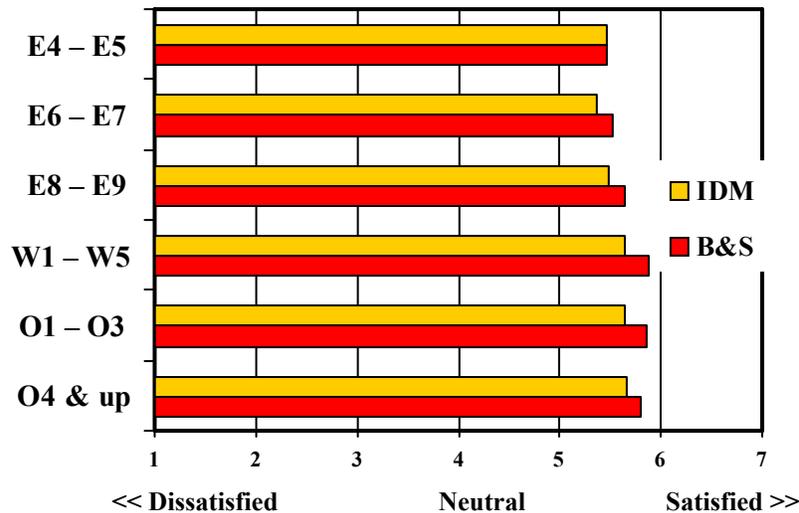


Figure 3-54. Satisfaction With Marriage/Intimate Relationship By Pay Grade.

While all averages are well into the satisfaction range, the domain satisfaction by pay grade measures a bit lower for Independent Duty Marines without military community support as compared to their Base and Station counterparts. However none of these differences by pay grade are statistically significant. In composite, the domain satisfaction for Independent Duty Marines without military community support (5.48) is also less than that (5.55) of their Base and Station peers (without E2-E3s). This difference is also not statistically significant.

We investigated whether Independent Duty Marines without military community support who are married differ in satisfaction from those who are unmarried but seriously involved. We found that the seriously involved report being significantly more satisfied (5.69) with their relationship than those who are married (5.42). This parallels the same effect in their Base and Station counterparts (5.80 versus 5.53 without E2-E3s).

In the general population, marital satisfaction reaches its lowest level when children are in the home. Interestingly, the presence of children in the Marine marriage relationship did not make a statistically significant difference in reported domain satisfaction; they are both at 5.42. This was also true for Base and Station Marines.

Because of the differences between married and seriously involved Independent Duty Marines without military community support, further analyses were conducted separately for these two respondent groups. This parallels the same distinction between these two respondent groups as was addressed earlier in this chapter for the Marines assigned to bases and stations.

In order to indicate which aspects of domain satisfaction are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Marriage/Intimate Relationship domain for Independent Duty Marines without military community support. Results are displayed in Figure 3-55 and Figure 3-56. Figure 3-55 treats married Independent Duty Marines without military community support.

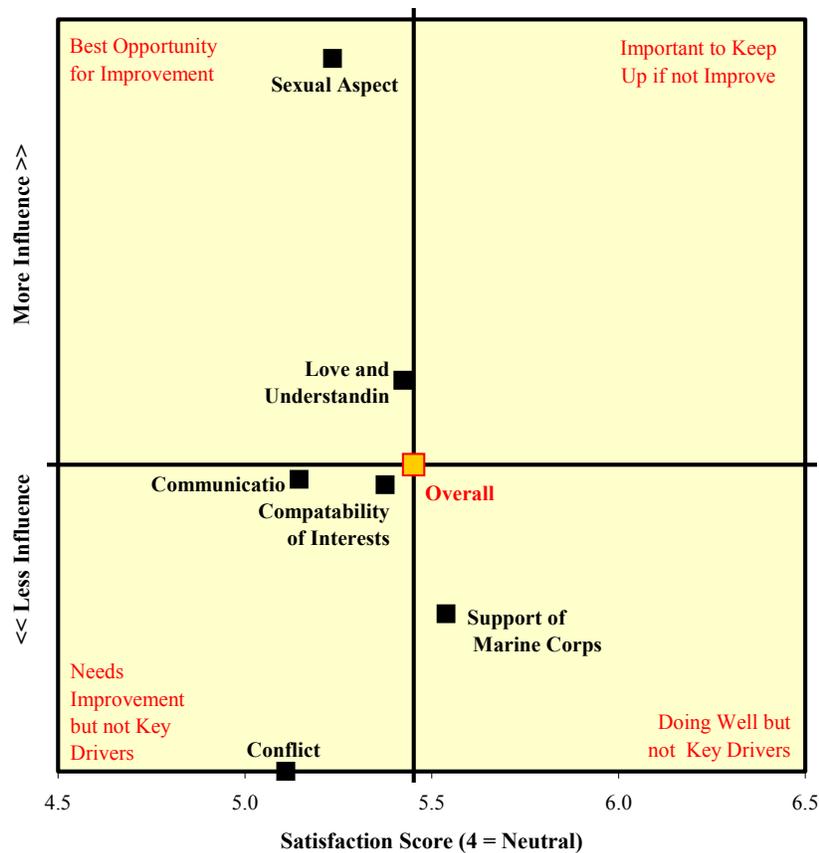


Figure 3-55. Key Driver Diagram For Married Marines.

Figure 3-55 displays the domain satisfactions for married Independent Duty Marines without military community support. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.48. An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

The Marriage/Intimate Relationship satisfaction aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 84% of the variance observed in the overall domain satisfaction. This is the largest percentage of all domains, and shows that the aspects are doing a very good job of assessing marriage satisfaction.

The two key drivers of overall domain satisfaction in this display are the sexual aspect and the love and understanding aspect. These aspects alone account for 81% of the variance in overall domain satisfaction. The third largest driver is satisfaction with communication (although very close to compatibility of interests). We note that the communication aspect and the love and understanding aspect are so strongly correlated ($>.8$) that one should perhaps be dropped from the analysis. This set of key drivers is the same as for the Base and Station Marines, but for Independent Duty Marines without military community support the conflict resolution aspect drops to zero in influence.

When key drivers were examined for married Marines with children and those without children separately, the results were similar for the two groups. Thus, they were not treated separately. As with all of the key driver diagrams, the influence and satisfaction ratings are relative to the overall average influence and satisfaction. While both of the key drivers for married Marines fall into the best opportunity for improvement quadrant, notice that, overall, Marines are somewhat satisfied to satisfied with these key drivers. In addition, it is not clear what Marine Corps policy changes might be effected in order to move these key drivers in a way to increase satisfaction within this domain.

Figure 3-56 displays the domain satisfactions for seriously involved Independent Duty Marines without military community support. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.68, somewhat larger than for the married Independent Duty Marines without military community support value of 5.45. An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

The Marriage/Intimate Relationship domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain 84% of the variance observed in the overall domain satisfaction just as for their married counterparts. Again we note that the communication aspect and the love and understanding aspect are so strongly correlated ($>.8$) that one should perhaps be dropped from the analysis since they end up splitting influence.

For this group, there are three key drivers: the sexual aspect, followed by communication and then by love and understanding. These aspects alone account for all 84% of the variance in overall domain satisfaction. We note again that love and understanding and communication are very strongly correlated ($>.8$). When they are

compared to their Base and Station counterparts, just as for their married peers, the conflict resolution aspects drops to zero, but now also the Marine Corps Support aspect no longer has any influence.

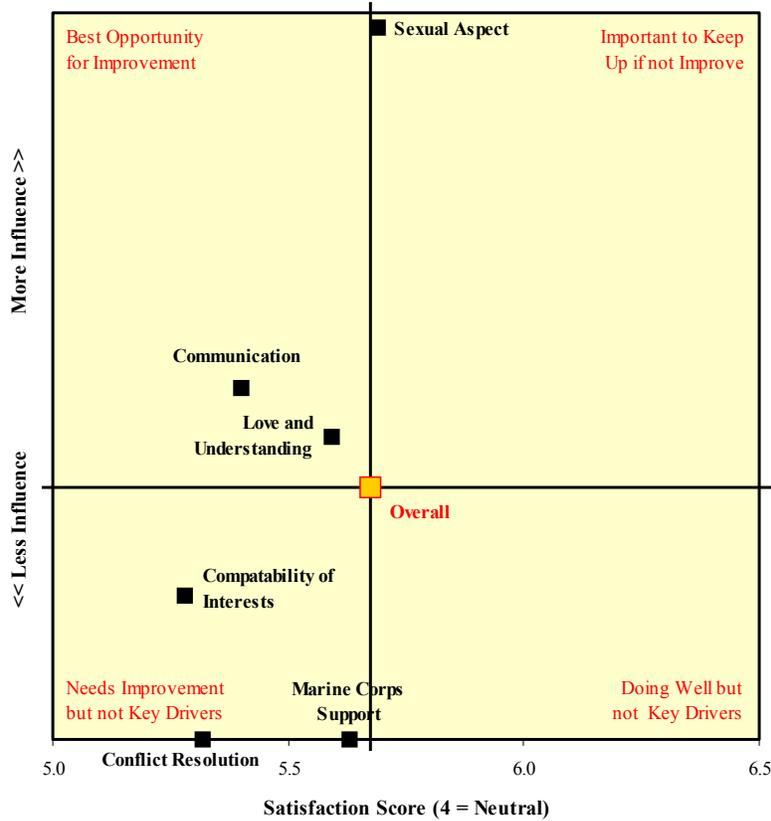


Figure 3-56. Key Driver Diagram For Seriously Involved Respondents.

As with all of the key driver diagrams, the influence and satisfaction ratings are relative to the overall average influence and satisfaction. While all of the key drivers for seriously involved Marines fall into or border the best opportunity for improvement quadrant, notice that, overall, Marines are somewhat satisfied with these key drivers. The analysis above did not include seriously involved Marines with children (single parents) as they are a small and unique population.

Domain Conclusions.

Respondents of all pay grades appear to be at least somewhat satisfied with their Marriage/Intimate Relationships. There is no satisfaction difference between Independent Duty Marines without military community support and their Base and Station counterparts. There are some slight differences in aspect influences but those are incidental to the key drivers of the sexual aspect and love and understanding. When asked to represent how much their current Marriage/Intimate Relationships measure up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for

the Independent Duty Marines without military community support was 71%, a scores well above average in the expectancy measure. This indicates that Independent Duty Marines without military community support feel that their Marriage/Intimate Relationships measure up relatively well to their goal in this area of life.

Relationship with Children Domain

In order to compare satisfaction/happiness with Relationship with Children between Independent Duty Marines without military community support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-57.

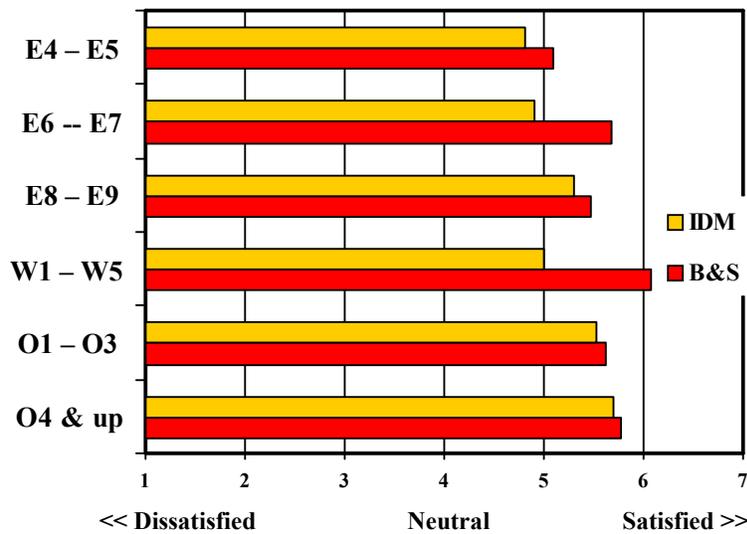


Figure 3-57. Satisfaction With Relationship With Children.

On the whole, Figure 3-57 indicates that Independent Duty Marines without military community support are somewhat satisfied with their overall relationship with their children but less satisfied than are their Base and Station counterparts. The lower satisfaction scores for the E4-E5, E6-E7, and W1-W5 subgroups are statistically significant. There is a statistically significant difference in the composite scores: 5.04 for the Independent Duty Marines without military community support and 5.34 for their Base and Station counterparts (without E2-E3s). We note that active duty Marines assigned to bases and stations, including the E2-E3s, had a composite satisfaction score of 5.00 which is not statistically different from the Independent Duty Marines without military community support composite.

In order to indicate which aspects of domain satisfaction are key to the reported overall satisfaction with the military environment for raising children, we undertook a multiple regression and factor analysis of various aspects of child lifestyle satisfaction

for Independent Duty Marines without military community support. Results are displayed in Figure 3-57.

There were only two specific aspects for predicting overall satisfaction with relationship with children: the amount of time spent with children and the quality of time spent with children. Thus, that section took a more fruitful direction in trying to predict satisfaction with the military environment for raising children, a good measure of overall military child quality of life, for the Base and Station respondent group. This section does the same for Independent Duty Marines without military community support to assess the differences between unique family environments.

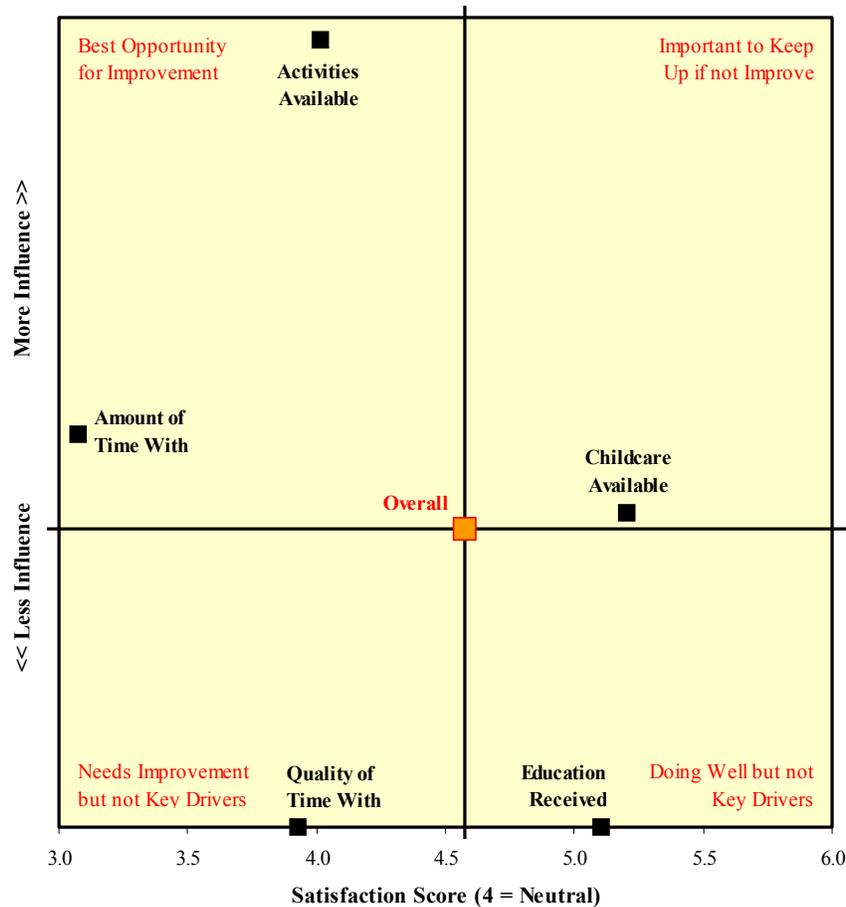


Figure 3-58. Key Driver Diagram For Child Lifestyle Satisfaction.

Figure 3-58 displays the following domain satisfactions: the quality of the time you have with your children, the amount of time you have with your children, the activities available for children at your base, the overall quality of childcare, and the education received by your children. An exploratory factor analysis indicates that these aspects break up into two factors: one concerning the amount of time and the quality of time spent with children, and the other concerning childcare and education. The aspect of activities available splits into both of these factors.

The satisfaction with the five child quality of life aspects and the overall satisfaction are located in the horizontal above their individual satisfaction scores. The overall satisfaction with the military environment for raising children is 4.58 between the neutral and the somewhat satisfied ranges for Independent Duty Marines without military community support. The satisfaction with child quality of life aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain only about 33% of the variance observed in the overall satisfaction with the military environment for raising children. This is similar to the Base and Station results, and suggests that Marine parents may have in mind other facets related to their children not currently measured, when they are answering the overall item "how satisfied are you with the military environment for raising children."

The top driver of overall military environment satisfaction in this display is the satisfaction with the activities available at your location (for Base and Station Marines this was activities available on base). The greatest dissatisfaction is also the second largest driver (explains 30% of the variance in combination with the first); it is the amount of time spent with children, which may be another indicator of the lack of time expressed in prior domains. These results are similar to those obtained from the Base and Station Marines, except that they were more satisfied by the activities available and with the time spent. Also, just like their Base and Station counterparts, the quality of time had no influence on the assessment of the military environment for raising children. One difference we found was that for Independent Duty Marines without military community support education also had no influence, while for their Base and Station counterparts there was some slight influence.

We also looked at which aspects predicted Marines' own satisfaction with their relationships with their children using a regression. The aspects of quality of time and amount of time accounted for 33% of the variance in satisfaction with one's relationship with their children. However, results indicated that the dominant predictor (32% of the 33%) by far was quality of time spent with children not the amount of time spent with children.

Domain Conclusions.

Overall Independent Duty Marines without military community support are not dissatisfied with their relationships with their children. Satisfaction, in general, with Relationship with Children is for the most part driven by the quality of time spent with children, while satisfaction with the military environment for raising children has a lot to do with activities available and the amount of time Marines can spend with their children. Marines are dissatisfied with the amount of time they have to spend with their children. Unlike their Base and Station counterparts, for which the Marine Corps might encourage organized activities on base together, Independent Duty Marines without military community support can best be affected by allowing them more time to spend with their children. When asked to represent how much their current relationships with their children measure up to what their goals are, on a

percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response was 72%, one of the highest scores in the expectancy measure. This is the same as for the Base and Station Marine composite (without the E2-E3s), and indicates that Marines feel that their relationships with their children measure up relatively well to their goal in this area of life.

Relationship with Relatives Domain

In order to compare satisfaction/happiness with Relationship with Relatives between Independent Duty Marines without military community support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-59.

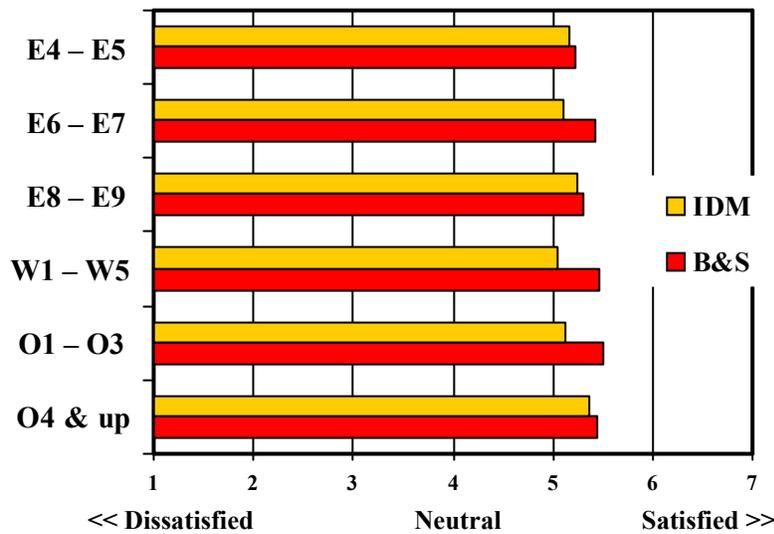


Figure 3-59. Satisfaction With Relatives By Pay Grade.

Overall, Figure 3-59 indicates that Independent Duty Marines without military community support are somewhat satisfied to satisfied with their overall relationship with their relatives, but less satisfied than are their Base and Station counterparts. Lower levels of overall domain satisfaction can be seen to run across the board with respect to pay grade. The statistically significant differences belong to the E6-E7 and the O1-O3s. There is a statistically significant difference in the composite scores: 5.17 for the Independent Duty Marines without military community support and 5.32 for their Base and Station counterparts (without E2-E3s).

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Relationship with Relatives domain for Independent Duty Marines without military community support. An exploratory factor analysis indicated that the domain

aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. Results are displayed in Figure 3-60.

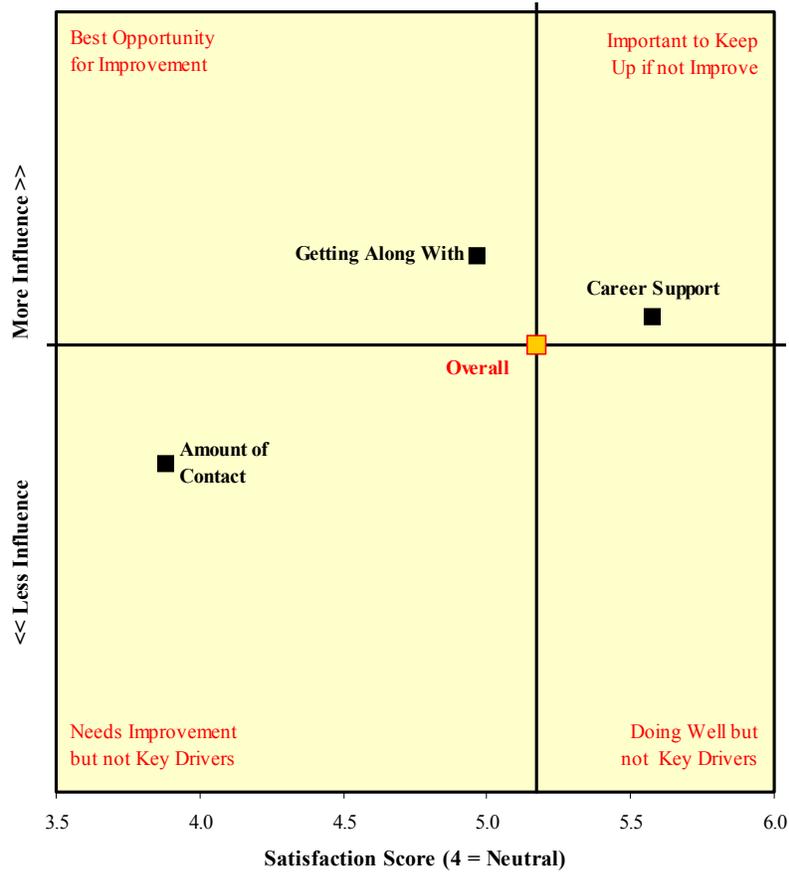


Figure 3-60. Key Driver Diagram For Relatives.

Figure 3-60 displays the Relationship with Relatives domain satisfactions for Independent Duty Marines without military community support; it looks identical to that of active duty Marines assigned to bases and stations. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. As previously mentioned, the overall (composite) satisfaction is 5.17.

The Relationship with Relatives domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole, they explain only about 64% of the variance observed in the overall domain satisfaction. However, this is more than the 53% that accrued to their Base and Station counterparts.

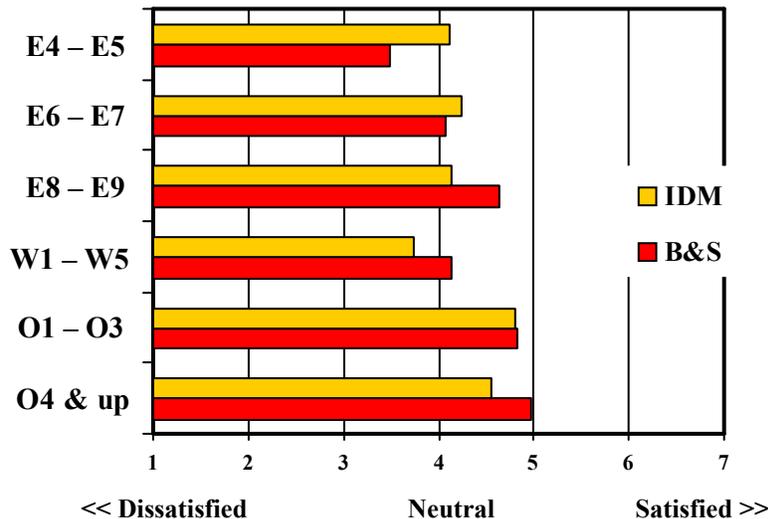
The top driver and the sole focal point of overall domain satisfaction in this display is clearly the getting along with aspect. This aspect alone accounts for about 48% of the variance in overall domain satisfaction. It is not clear how a policy change within the Marine Corps would help improve satisfaction with this aspect. The greatest dissatisfaction is with amount of contact which may be another indicator of the lack of time expressed in prior domains.

Domain Conclusions.

Independent Duty Marines without military community support of all pay grades appear to be less satisfied with their relationship with their relatives than their Base and Station counterparts. However, when asked to represent how much their current Relationship with Relatives measures up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for Independent Duty Marines without military community support was 64%, about equal to the average of the scores in the expectancy measure. (Their Base and Station counterparts register 62%, without E2-E3s). This indicates that Marines feel that their Relationship with Relatives measures up not too badly to their goal in this area of life. Since the domain of Relationship with Relatives would seem to be the one which could be least objectively impacted by a policy change within the Marine Corps, and the satisfaction with this domain has a negligible influence on Global quality of life, there may be little of utility to do. However, this aspect of relationships again points to a lack of time among Independent Duty Marines without military community support.

Income and Standard of Living Domain

In order to compare satisfaction/happiness with Income and Standard of Living between Independent Duty Marines without military community support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-61.



*Figure 3-61. Satisfaction With Income
By Pay Grade.*

On the whole, Figure 3-61 indicates that Independent Duty Marines without military community support are neither satisfied nor dissatisfied with their overall incomes, that is, the average response value for each pay grade lies in the neutral range. When satisfaction levels at each pay grade are compared to Base and Station respondents, we see that the lower enlisted grades are more satisfied with their incomes than their Base and Station counterparts: both differences are statistically significant. All of the other grades appear to be less satisfied than their Base and Station counterparts, but these differences are only statistically significant for the E8-E9s and the O4s and up. The independent duty Marine warrant officer satisfaction does however appear to track lower than the other paygrades, corresponding with the unusual decrease in Base and Station warrant officer satisfaction.

In order to indicate which aspects of domain satisfaction are key to the reported overall satisfaction, we undertook a multiple regression and factor analysis of the Income and Standard of Living domain for Independent Duty Marines without military community support. An exploratory factor analysis indicated that the domain aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

In exploring the possibility of two underlying domain factors, the factor analysis produced two strongly correlated factors (correlation = .69). The primary factor involved the aspects of satisfaction with money for essentials, money for extras, and money for savings, and the secondary factor involved the aspects of satisfaction with the car you drive and your household furnishings. For Independent Duty Marines without military community support with children, the aspect of satisfaction with what you can provide for your children was not clearly associated with either factor, whereas for their Base and Station counterparts that aspect was clearly associated with the primary factor.

In view of the factor analysis for Independent Duty Marines without military community support, we conducted only one regression analysis, combining Marines with children with Marines without children. Results are displayed in Figure 3-62.

Figure 3-62 displays the Income and Standard of Living domain satisfactions for Independent Duty Marines without military community support. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 4.27, distinctly more than their Base and Station counterparts (without E2-E3s) of 3.89. This difference is statistically significant.

The Income and Standard of Living domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 73% of the variance observed in the overall domain satisfaction. This indicates that the current set of domain aspects seems to be doing a good job of representing what Marines have in mind when they report their overall satisfaction with their Income and Standard of Living.

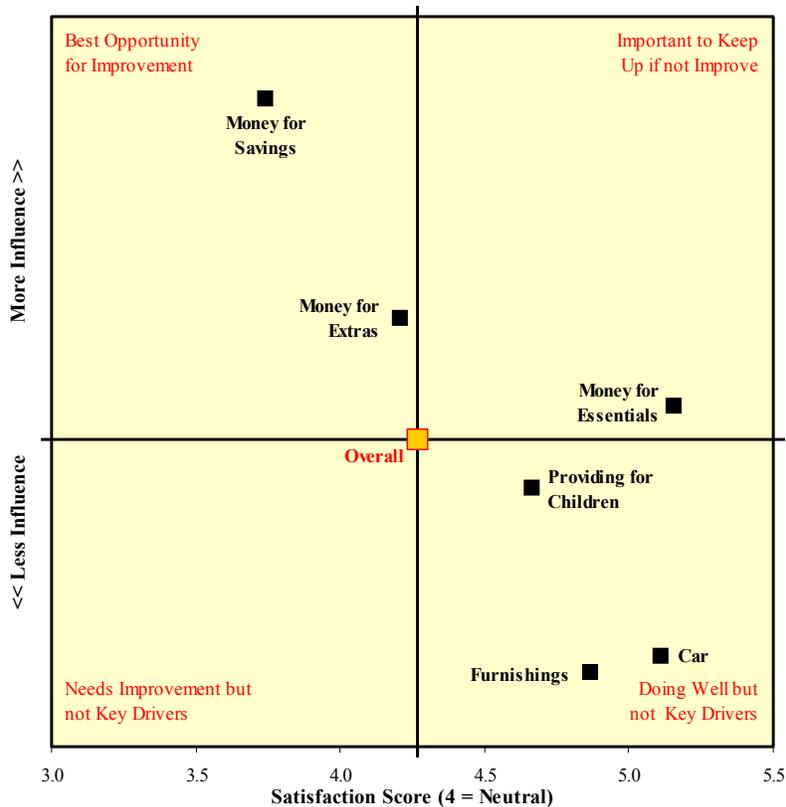


Figure 3-62. Key Driver Diagram For The Income Domain.

The top drivers of overall domain satisfaction are clearly the money for savings followed by the money for extras. These two aspects alone account for 69% of the variance in overall domain satisfaction. Still, when it comes to money for essentials, that rating is on the satisfied side of the scale, as is money for extras. The diagram for Marines assigned to Base and Station looks almost the same in the relative relationships, however, levels of satisfaction are distinctly lower than we see here.

Domain Conclusions.

Independent Duty Marines without military community support are, on the whole, neither satisfied nor dissatisfied with their Income and Standard of Living. Only the warrant officers are on the dissatisfied side as were their Base and Station peers. When asked to represent how much their current Income and Standard of Living measures up to what their goals are, on a percentage scale where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the active duty composite was 59%, the lowest score in the expectancy measure save for the Leisure and Recreation domain. This would indicate that Marines feel that their Income and Standard of Living measure up a little more than half as well their goal in this area of life. The warrant officer expectancy is 56% and not significantly different from the composite.

Military Job Domain

In order to compare satisfaction/happiness with Military Jobs between Independent Duty Marines without military community support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-63.

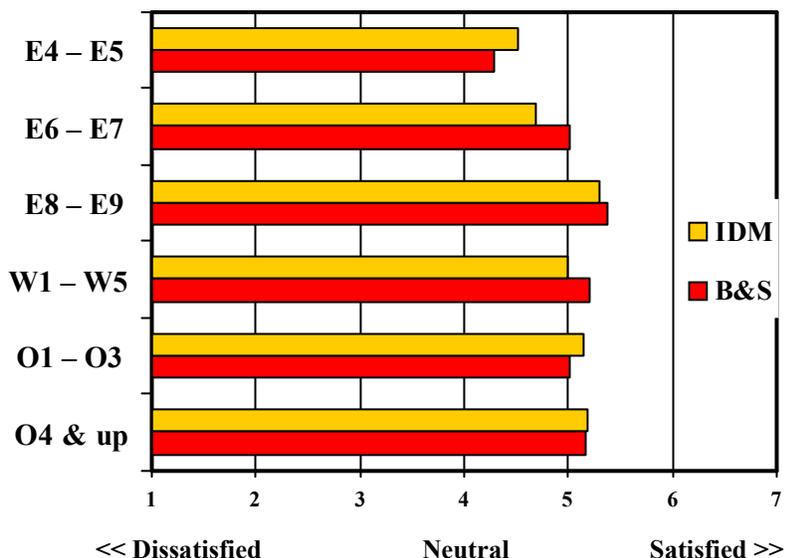


Figure 3-63. Satisfaction With Military Job By Pay Grade.

On the whole, Figure 3-63 indicates that Independent Duty Marines without military community support are neutral to somewhat satisfied with their Military Jobs overall. When satisfaction levels at each pay grade are compared to their Base and Station counterparts we see that the E4-E5 pay grades are more satisfied with their Military Jobs than their Base and Station counterparts, while the E6-E7 pay grades are less satisfied; both differences are statistically significant. All of the other grades are mixed but none of the differences are statistically significant.

The 1998 study also compared measures of Organizational Commitment, a battery of 11 questions measured on a 7-point scale from completely disagree to completely agree with the value 4 meaning neither agree or disagree. Such a battery can be applied by summing the responses to the 11 individual questions or displaying how each facet of Organizational Commitment changes. Figure 3-64 displays the results for all but one of the 11 attributes.

The reason for using just 10 is that a factor analysis indicated that one attribute is much less correlated to the others, it was the question “Most things in life are more important than work” which, when reverse coded, has consistently low correlation values. We do not display this measure here nor did we previously.

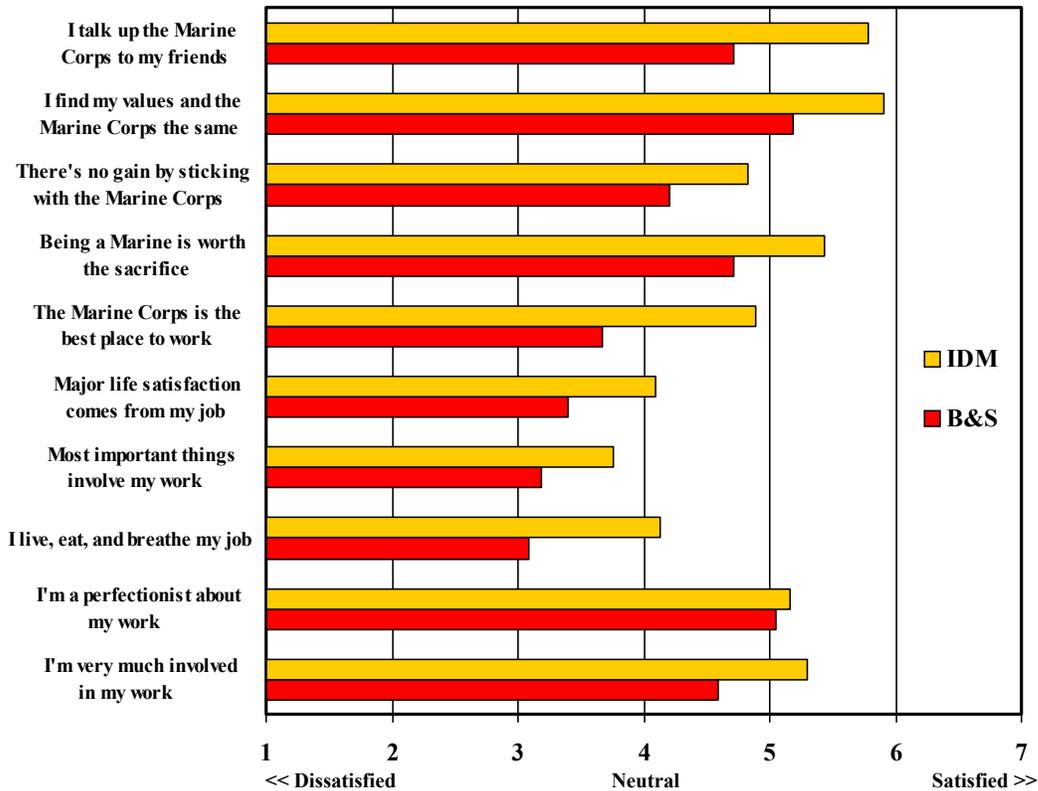


Figure 3-64. Measures Of Organizational Commitment.

Figure 3-64 shows a dramatic comparison between Independent Duty Marines without military community support and their Base and Station counterparts (without E2-E3s). The average is three-quarters of a point higher for the Independent Duty Marines without military community support, which would indicate that they are very special Marines. The only close value is in the statement “I’m a perfectionist about my work” where the difference is still statistically significant. (The item “There’s no gain by sticking with the Marine Corps” is reverse scored.)

In order to indicate with more utility which aspects of domain satisfaction are key to the reported overall Military Job satisfaction, we undertook a multiple regression and factor analysis of the domain for the Independent Duty Marines without military community support. Results are displayed in Figure 3-65.

Figure 3-65 displays the Military Job domain satisfactions for Independent Duty Marines without military community support. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 4.76, distinctly larger than the 4.36 of their Base and Station counterparts (without E2-E3s) and statistically significant. An exploratory factor analysis indicates that these aspects are, in general, highly correlated with a few weak correlations (> .2 but < .4). This is reflected in two strongly correlated (.70)

factors: one capturing the aspects of peers, pay, support, security, fairness, leadership, and feedback, the other capturing growth, challenge, accomplishment, and responsibility. Nevertheless, due to the strong factor correlation, the overall domain satisfaction score represents a consistent measure of domain satisfaction.

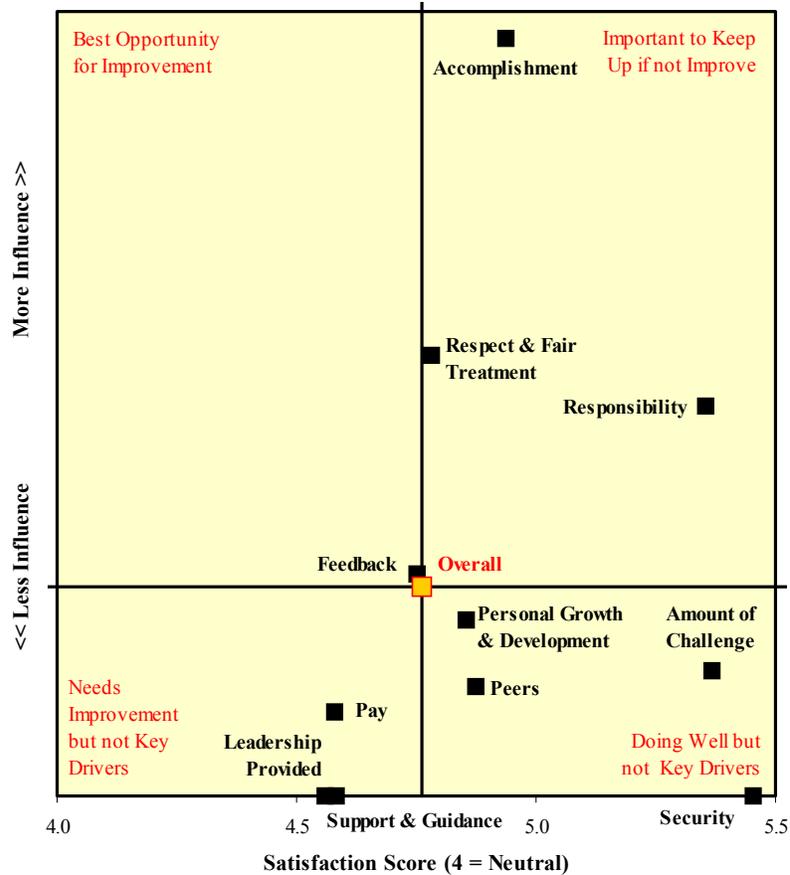


Figure 3-65. Key Driver Diagram For Military Job.

The Military Job domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. Of the two factors mentioned, the more dominant in influence over overall domain satisfaction is the second. As a whole, all domain aspects explain about 66% of the variance observed in the overall domain satisfaction, less than the 73% for active duty Marines assigned to bases and stations. The top drivers of overall domain satisfaction are:

- ◆ Satisfaction with accomplishment
- ◆ Satisfaction with responsibility
- ◆ Satisfaction with respect and fair treatment

The satisfaction with accomplishment and satisfaction with responsibility account for about 56% of the variance in overall domain satisfaction. All of these key drivers are in the satisfied side of the overall satisfaction.

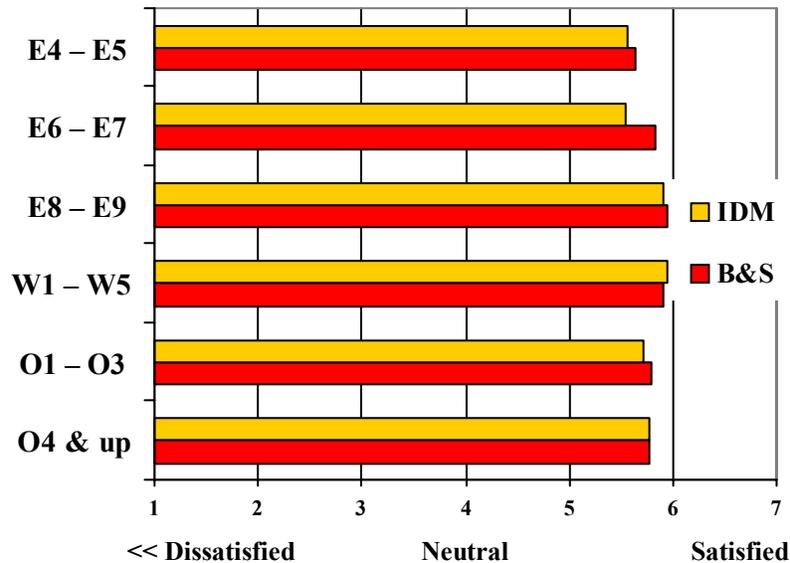
This key drivers diagram differs in some significant ways from the one for Base and Station Marines. Although the primary driver is the same, as are the top three but in a different order, some other aspects have no effective influence, namely, leadership, and support and guidance, perhaps not unexpected for Independent Duty Marines without military community support. We note that in the 1995 Quality of Life study Accomplishment was also the dominant driver of Military Job satisfaction, followed by Respect and Fair Treatment, and Amount of Responsibility, just as we have here for Independent Duty Marines without military community support. This fingerprint may indicate that 10 years ago all Marines felt more independent than they do now.

Domain Conclusions.

Independent Duty Marines without military community support are, on the whole, somewhat satisfied with their Military Jobs. When these Marines are asked to represent how much their current Military Job measures up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response was 66%, a middling score in the expectancy measure, and compared with the 62% score for their Base and Station counterparts (without E2-E3s). This indicates that Marines feel that their job only measures up to about two-thirds of their goal in this area of life. Nevertheless, with respect to organizational commitment, Independent Duty Marines without military community support show much greater levels of commitment to the Marine Corps than do their Base and Station counterparts (without E2-E3s).

Yourselves Domain

In order to compare satisfaction/happiness with Self, Goals, and Personal Development between Independent Duty Marines without military community support and their base and station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-66.



**Figure 3-66. Satisfaction With Self
By Pay Grade.**

On the whole, Figure 3-66 indicates that Independent Duty Marines without military community support are somewhat satisfied to satisfied with their personal development overall. When satisfaction levels at each pay grade are compared to their base and station counterparts we see that the E6-E7 pay grades are apparently less satisfied than their base and station counterparts. In fact, this difference in the E6-E7 pay grades is statistically significant; all of the other pay grade differences are not.

Among the responses to the Yourself domain were two well-known scales for measuring the personal characteristics of Optimism and Self-Esteem. The Optimism scale, measured on a 7- point scale from completely disagree to completely agree, comprises a battery of 12 questions such as "I am a believer in the idea that 'every cloud has a silver lining,'" and "It's easy for me to relax." The Self-Esteem scale, measured on a 4-point scale from strongly disagree to strongly agree, comprises a battery of 10 questions such as "I am able to do things as well as most other people," and "On the whole I am satisfied with myself."

Each of these scales is applied by summing the responses to the 12 or 10 individual questions, respectively. Figure 3-67 displays the comparison between Independent Duty Marines without military community support and their base and station counterparts after normalizing the summed response scores to a 7-point scale for each measure.

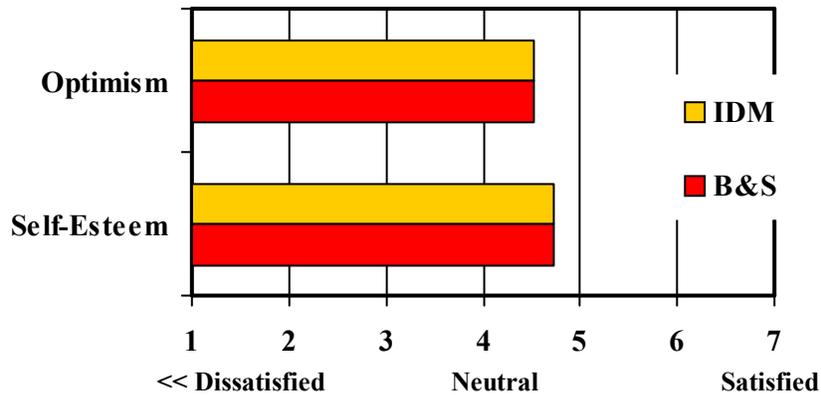


Figure 3-67. Normalized Optimism And Self-Esteem.

We see from Figure 3-67 that it is very much a dead heat between the two groups with respect to these personality measures.

In order to indicate which aspects of satisfaction with self, goals, and personal development are key to the reported overall satisfaction for Independent Duty Marines without military community support, we undertook a multiple regression and factor analysis of the domain. Results are displayed in Figure 3-68.

Figure 3-68 displays the satisfaction with self aspects for Independent Duty Marines without military community support. The domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores. The overall satisfaction is 5.62 for Independent Duty Marines without military community support, a bit less than the value of 5.72 for their base and station counterparts (without E2-E3s). An exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

The domain aspects are located vertically in relation to their influence on the overall domain satisfaction as indicated by the regression analysis. As a whole they explain about 69% of the variance observed in the overall domain satisfaction. In comparison, for Base and Station Marines the aspects explained only 62% of the overall domain satisfaction variance.

There are three key drivers: self-discipline, physical appearance, and progress toward personal goals. Self-discipline and physical appearance are common to Independent Duty Marines without military community support and Marines assigned to bases and stations.

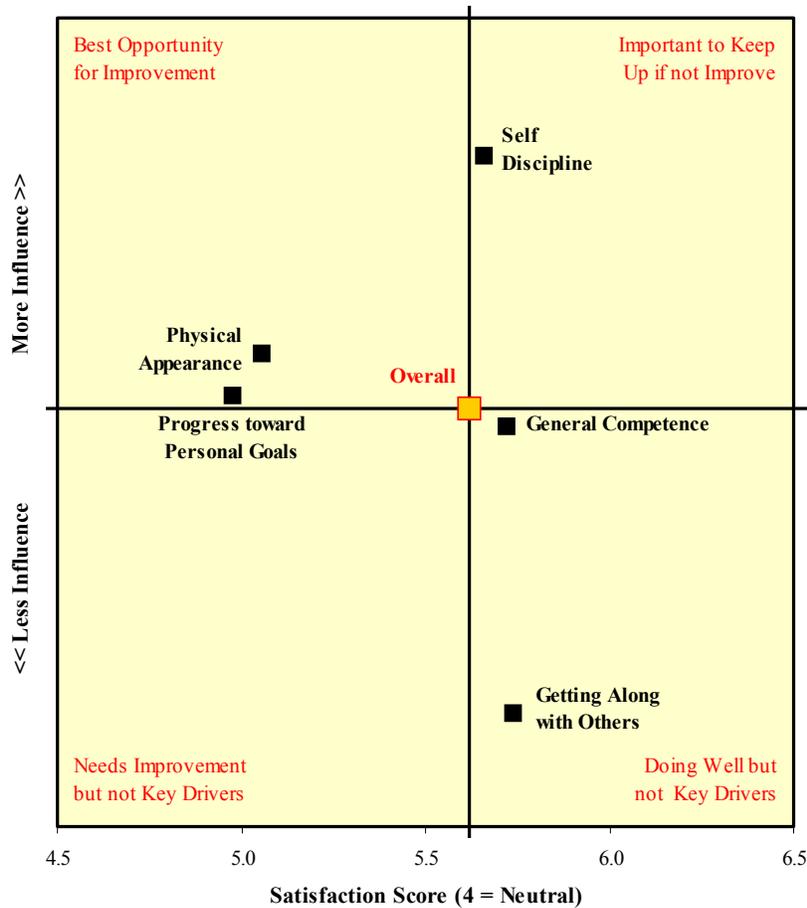


Figure 3-68. Key Driver Diagram For Satisfaction With Self.

The largest difference is the spread which the Independent Duty Marines without military community support find in the influence of self-discipline and that of general competence — for Base and Station Marines (which includes E2-E3s) the two were closer together, such that both self discipline and general competence qualified as a key drivers while progress towards personal goals did not. All of the satisfactions with these aspects are in the somewhat satisfied range but satisfaction with physical appearance and with progress toward personal goals are the ones with the least satisfaction. This again may be another indicator of the lack of time expressed in prior domains.

Domain Conclusions

Independent Duty Marines without military community support of all pay grades report being at least somewhat-satisfied with themselves — many in the satisfied range. When asked to represent how much their current satisfaction measures up to what their goals are on a percentage scale, where 100% indicates a match with their goal and 0% no match at all with their goal, the average response for the active duty composite was 74%, the highest score in the expectancy measure. It would appear that Marines feel that their

personal growth and development measures up relatively well to their goal in this area of life. As we see next, the Self - personal development domain is the most important domain in influence on Global QoL. Since it already has the highest satisfaction level, it would appear to be a challenge to improve it.

Life As A Whole Or Global Quality Of Life

The life as a whole (LAW) assessment is a composite of six separate measures, three in the LAW section at the beginning of the survey instrument and three in the LAW section at the end. These are described in Appendix D (based on Appendix C of the 1998 QoL study which included the method of computation).

In order to compare Global QoL between Independent Duty Marines without military community support and their Base and Station counterparts, an analysis by pay grade was conducted. The results are displayed in Figure 3-69.

In general, Figure 3-69 indicates that Independent Duty Marines without military community support are somewhat satisfied with respect to life as a whole. When satisfaction/happiness levels at each pay grade are compared to their counterparts we see that only the E4-E5 pay grade reports higher satisfaction/happiness levels while the other grades report lower levels. However, only the E4-E5 and the E6-E7 differences are

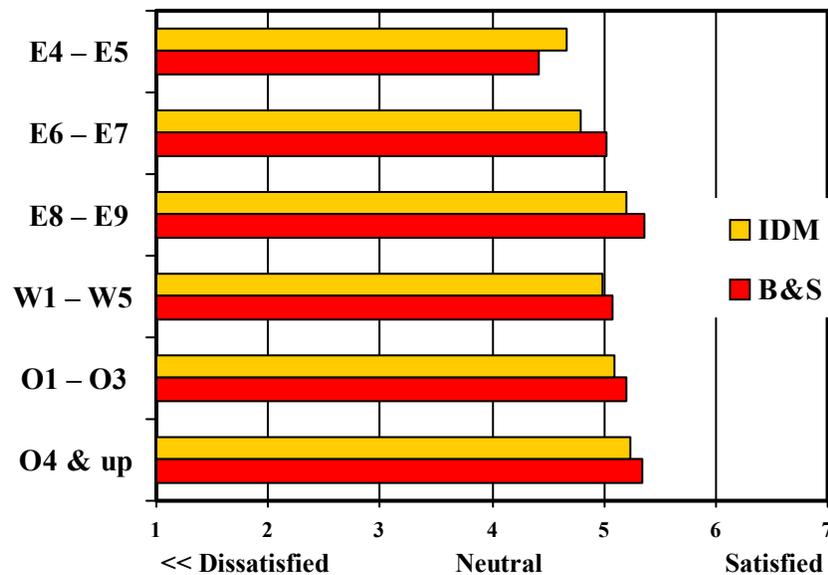


Figure 3-69. Global QoL Assessment By Pay Grade.

statistically significant. (The Independent Duty Marines without military community support Global QoL of 4.85 turns out higher than their Base and Station counterparts' composite of 4.73, with statistical significance, because E4-E5s are 57% of the Base and Station composite without E2-E3s).

Figure 3-70 displays the Global QoL by gender for Independent Duty Marines without military community support and their Base and Station counterparts (without E2-E3s).

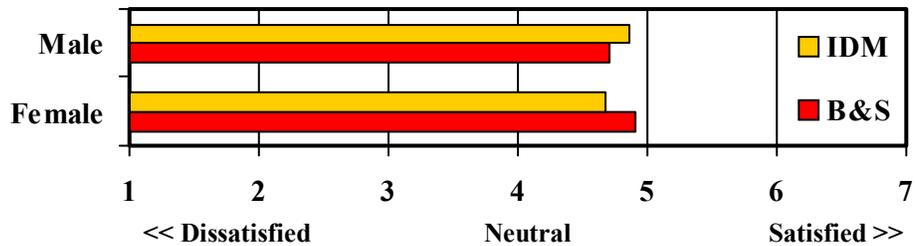


Figure 3-70. Global QoL Assessment By Gender.

As mentioned above, Independent Duty Marines without military community support have higher composite Global QoL levels than their base and station counterparts, but Figure 3-70 does not show this for the females. However, since the females represent less than 4% of all Independent Duty Marines, what we are seeing may be an artifact of a small sample — that is, because females are so few in the population of independent duty Marines any reported differences in Global QoL between them and any other group of Marines based on this sample should be regarded as speculative.

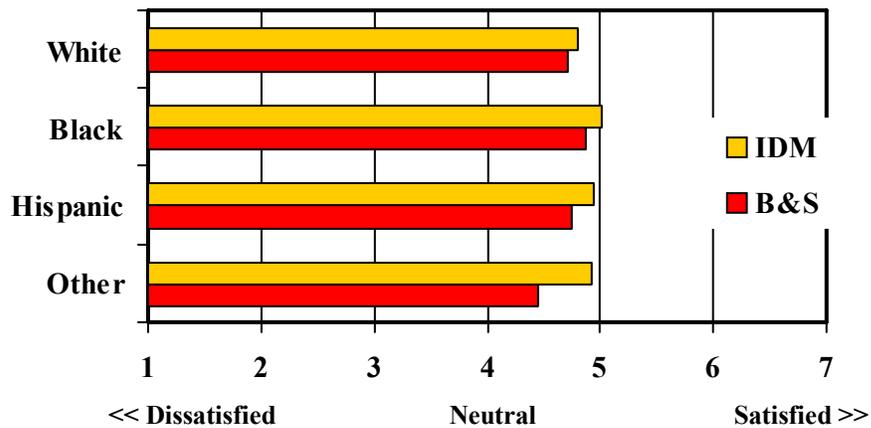


Figure 3-71. Global QoL Assessment By Race.

Figures 3-71 and 3-72 compare Global QoL composite scores by race and marital status respectively for Independent Duty Marines without military community support and their Base and Station counterparts (without E2-E3s).

Independent Duty Marines without military community support not only have higher Global QoL levels than their Base and Station counterparts, in pay grade composite, but they do so by race as well — all are statistically significant. This would indicate that the E4-E5 pay grades, which dominate both composites, are relatively uniformly distributed by race.

Married Independent Duty Marines without military community support are about equal in Global QoL assessment to their Base and Station counterparts. The differences between the two married groups are not statistically significant.

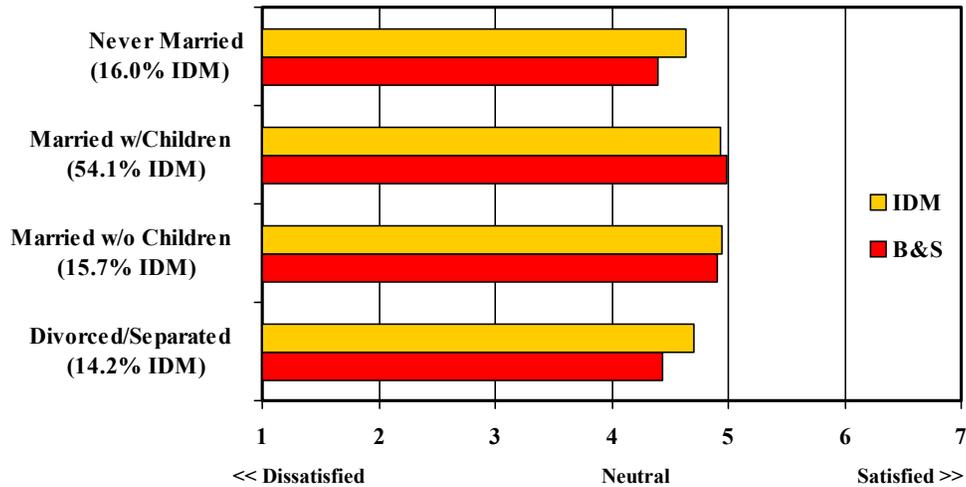


Figure 3-72. Global QoL Assessment By Marital Status.

However, unmarried or formerly married Independent Duty Marines without military community support have higher Global QoL than their Base and Station counterparts; both these differences are statistically significant.

In order to indicate which domain satisfactions are the key drivers of the Global QoL assessment, we undertook a factor analysis of the domain satisfactions and a multiple regression of the Global QoL assessment over the domain satisfactions for Independent Duty Marines without military community support. Results are displayed in the key driver diagram of Figure 3-73. The overall domain satisfactions are located in the horizontal above their individual satisfaction scores.

The domains are located vertically in relation to their influence on the Global QoL assessment as indicated by the regression analysis. As a whole they explain about 72% of the variance observed in the global QoL assessment — a good value, more than the 70% for Marines assigned to bases and stations, and more than the 64% found by Kerce (1995), which also included measures of optimism and commitment to the Marine Corps as independent variables.

The top five drivers of overall domain satisfaction are:

- ◆ Satisfaction with Self
- ◆ Satisfaction with Military Job
- ◆ Satisfaction with Leisure
- ◆ Satisfaction with Marriage
- ◆ Satisfaction with Income

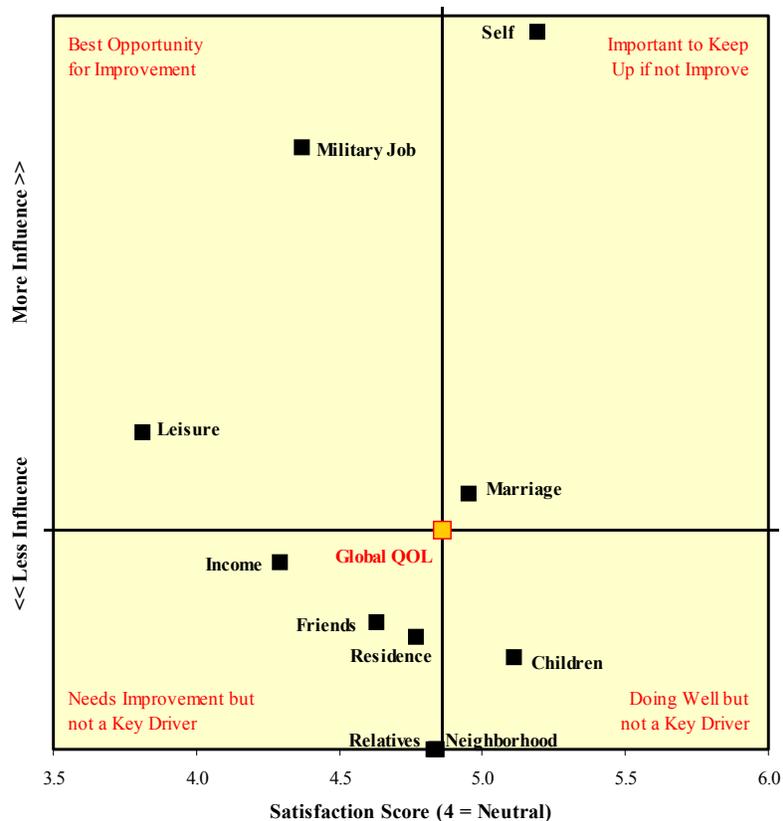


Figure 3-73. Key Diagram For Global Quality Of Life.

These are the same as the five top drivers for the Marines assigned to Bases and Stations. However, they are in a different order. For Independent Duty Marines without military community support the Income domain, which was the third top driver for the Marines assigned to bases and stations, now drops to fifth. The top two drivers are the same as found by *Kerce (1995)*. The Neighborhood, Health (including healthcare), and Relatives domains have no statistically significant influence on Global QoL for Independent Duty Marines without military community support, whereas for their Base and Station counterparts it was Neighborhood and Friends with no statistically significant influence.

In order to investigate the relationship among domain influences between Independent Duty Marines without military community support and Marines assigned to bases and stations, we undertook a factor analysis after eliminating only the domain of neighborhood that had no statistically significant impact on Global QoL for either group. An obliquely rotated factor analysis segregated the remaining domains into three correlated factors (rather than the four induced by the base and station data).

The first factor is highly correlated with the domains of Leisure, Health, Friends, Relatives, Military Job and Yourself; the second factor is highly correlated with the domains of Residence and Income; the third factor is highly correlated to

Marriage/Intimate Relationship and Relationship with Children domains. The second and third factors are weakly correlated while they are both highly correlated to the first factor. These factors are a bit different than those for Marines assigned to bases and stations: (1) the first factor here combines the first two factors in the Base and Station analysis, and (2) marriage and children are merged and separated from relatives. (Recall that the relationship with Relatives domain has no statistically significant influence on Global QoL for Independent Duty Marines without military community support.) Only the residence/income factor remains intact.

With respect to the regression, the satisfaction with self alone accounts for about 50% of the variance in the Global QoL assessment — it is not only the most highly satisfied domain already, but it also has the highest expectancy value. The best targets for improvement would seem to come from Military Job and Leisure, all part of the primary factor. All five of the key domains account for about 70% of the variance (69% without income).

We have already seen, within each Marine QoL study, that married Marines have higher Global QoL scores than Marines who are not married, so a more proper analysis would separate the married Marines out and analyze both groups separately. This is done in the structural equation modeling reported in Chapter 4.

It was noted in both prior quality of life studies that respondents' high scores in Global QoL are relatively strongly associated with respondents' concomitant high scores in optimism and in organizational commitment. For Independent Duty Marines without military community support we found the coefficients of correlation to be .56 between Global QoL and Optimism (vice .57 for Marines assigned to bases and stations), .34 between Global QoL and Organizational Commitment (vice .55 for Marines assigned to bases and stations), and .40 between Global QoL and Self-Esteem (vice .49 for Marines assigned to bases and stations). Although not as strongly correlated for Independent Duty Marines as for those at bases and stations, still, the way to bet is that optimistic, committed people with high-self esteem will have higher Global QoL scores.

Measures of Military Importance

Each domain section of the survey instrument, except for the Military Job and Health domains (includes healthcare satisfaction), contains two questions which report the extent to which the topic of the domain impacts on (1) intentions to remain on active duty, and (2) job performance (not for the military job domain). Using the example from *White, Baker, and Wolosin* (1999) for the income and standard of living domain, the questions are: "What effect does your financial situation have on your job performance?" and "What effect does your financial situation have on your plans to remain on active duty?" Response options to both questions were on a five-point scale: very positive effect, positive effect, no effect, negative effect, and very negative effect.

Domain Impact on Retention

Figure 3-74 displays the results for the retention question for Independent Duty Marines without military community support. The negative responses are to the left and the positive responses are to the right in proportion to their pay grade-weighted numbers.

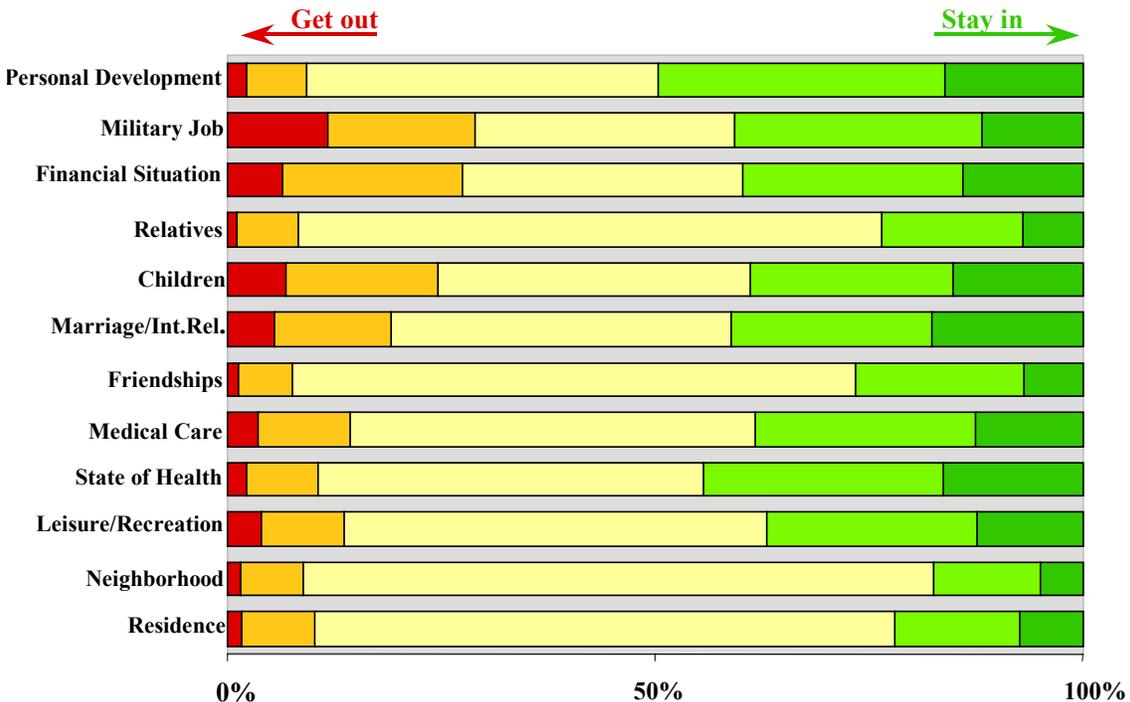


Figure 3-74. Reported Impact Of Domain Topics On Retention.

The biggest negative impact on retention is reported to be Military Job followed by Income and Standard of Living. For Military Job we estimate 29% to be in the negative region vice about 34% for Marines assigned to bases and stations (including E2-E3s). For Income and Standard of Living we estimate 28% to be in the negative region vice 45% for Marines assigned to bases and stations. The next largest negative impact, from Independent Duty Marines without military community support comes from the Relationship with Children domain – again perhaps reflecting a want of time to commit to those relationships. On the whole, the percentage of negative responses can be seen to be not quite half that of the Marines assigned to bases and stations, except for the most negative domains of Military Job, Income and Standard of Living, and Relationship with Children.

The largest positive impact on retention was from the Job/Professional Development domain followed by Health. Similar to Marines assigned to bases and stations, the smallest positive impacts come from the Residence and Neighborhood domains. In some

ways the critical domains may be those for which reasons to leave outnumber reasons to stay because neutral responses are unlikely to generate any action. For Independent Duty Marines without military community support there are no domains with this property (the domains which gave more Base and Station Marines reasons to leave than to stay were Income and Standard of Living, Residence, and Neighborhood).

Domain Impact of Job Performance

Figure 3-75 displays the results for the impact on job performance for Independent Duty Marines without military community support. Again, the negative responses are to the left and the positive responses are to the right in proportion to their numbers.

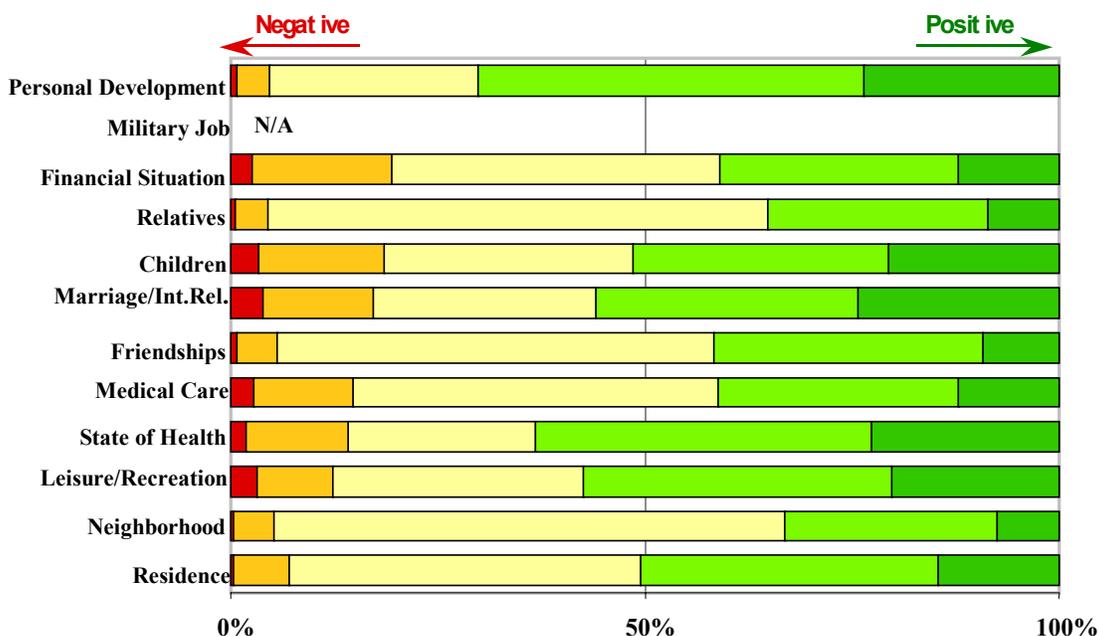


Figure 3-75. Reported Impact Of Domain Topics On Job Performance.

Figure 3-75 shows that, in general, there is less reported negative impact and more reported positive impact on job performance than for retention intentions for the same set of domain topics (Income and Health are close calls). State of Health, Marriage/Intimate Relationship, and Leisure and Recreation are reported to have the largest positive impact on Job Performance after personal development.

Objective Measures

There is no way to test whether such self-reports have measurable objective impact on retention or job performance. In particular, there is no reliable objective measure of job performance available (see the discussion in *Kerce (1995)*). However, there is a part of the personal readiness composite which addresses the occurrence in the past month of

negative workplace events associated with job performance. We turned this seven-part question (Question 14 in the Job domain) into a reverse-coded job performance surrogate.

To assess the existence of any relationship between this surrogate and the domains, we averaged the three measures of domain happiness/satisfaction (the affective measure, the cognitive measure, and the expectancy measure). We found that this surrogate, although most influenced by the Health, Job, and Self domains, Global QoL, and Optimism, left 77% of its variance unexplained by these factors under regression. As with *Kerce (1995)* we could construct no reasonable association of domain satisfactions with a measure of job performance.

Concerning retention, taking retention intentions to be an objective measure (discussed in Chapter 5), we found it weakly correlated (around .3) to Global QoL and to the Job domain. When we regressed retention over just the domains, as a whole they accounted for only 15% of the variance — the rest was due either to other factors or to sheer randomness. We then added the personality variables of optimism, self-esteem, and organizational commitment to the domain regression and we found 26% of the variance now accounted for – not very promising. We again separated Marines with children from those without.

For Marines with children the domains and personality factors combined to account for only 22% of the variance in retention: organizational commitment alone accounted for 17%; adding Global QoL, the next most influential factor, brought the variance accounting up to 21%; the Job domain, the next most influential, added a few tenths of a percent.

For Marines without children the domains and personality factors accounted for 30% of the variance in retention. The largest influences were with organizational commitment, then job, then income, then Global QoL. Organizational Commitment alone accounts for 25% and adding Global QoL to the regression at this point did nothing. However, adding the Job and Income domains to Organizational Commitment brought the variance accounting up to 27%.

Organizational Commitment seems to be the key driver of retention. For Marines with children, Global QoL has a measurable influence while, for Marines without children, Global QoL has no measurable influence, while satisfaction with the Job and Income and Standard of Living domains does. In summary, Organizational Commitment is a very powerful factor, and the retention influences on Marines with children are not captured as well by the domains and personality factors as for Marines without children.

Family Members

Weighting of Respondents. In order to produce a more accurate portrayal of the satisfaction within Marine Corps families, it was necessary to weight the results of separate analyses by pay grade. (The composite over pay grade will be primarily used for the key driver diagrams.) The balance of the population among families of active duty Marines (1) assigned to Base and Station, (2) assigned to Independent Duty but not Production Recruiters, and (3) assigned as Production Recruiters, was not known in advance. However, with a mail-in response rate of just over 50% to a random sample of about 8000 Marine Corps families, the response is sufficiently large to be confident that the representation by group and location is statistically valid after correction for the lower response rates of families of junior enlisted Marines.

From the Active Duty Marine composite covered earlier, we were able to project an Active Duty Marine composite picture of the pay grade breakout of married Marines. This was done by analyzing the responses to question 6 of the Personal section of the Active Duty survey instrument. We could then compare the family respondents by the pay grade indicated in question 4 of the Family Survey instrument (under section Your Spouse). Table 3-24 displays the comparison.

| TABLE 3-24. COMPARISON OF PERCENT ACTIVE DUTY MARRIAGES BY PAY GRADE AND THE RESPONSE PERCENTAGES BY FAMILY MEMBERS. | | | |
|---|---|---|----------------------|
| | Projected Percent Marine Marriages | Family Survey Response Percentages | Response Rate |
| E2-E3 | 19.2 | 10.1 | .53 |
| E4-E5 | 32.5 | 25.5 | .78 |
| E6-E7 | 25.2 | 29.7 | 1.18 |
| E8-E9 | 5.0 | 7.9 | 1.58 |
| W1-W5 | 1.8 | 3.2 | 1.78 |
| O1-O3 | 9.0 | 12.7 | 1.41 |
| O4&Up | 7.3 | 10.9 | 1.49 |
| Total | 100 % | 100 % | |

Table 3-24 says, for example, that of all the Active Duty Marines who are married, 19.2 percent are projected to fall into the E2-E3 pay grades, and that 7.3 percent are projected to fall into the O4 and Up pay grades. Looking at the Family Member survey responses, the E2-E3 pay grades provided about the same number of responses (10.1%) as did the O4 and Up pay grades (10.9%). With respect to the projected married population, the families of E2-E3s responded at about half of the desired rate while the

families of O4s and Up responded at about half again the desired rate. So, roughly speaking, when called for in this chapter, we will weight the satisfaction responses from E2-E3 families by a factor of about 2 and weight the satisfaction responses from O4 and Up families by a factor of about 2/3.

Statistical Significance. To test the hypothesis that families of Marines of different pay grades differ in their satisfactions, we assume the null hypothesis that they do not. Then we try to disprove this hypothesis by showing that the differences between the pay grade satisfaction scores are beyond what might be expected by random sampling. To do this we used an Analysis of Variance or ANOVA based on the sample means and the sampling variances drawn from each pay grade group. We have sufficient samples in each pay grade so that the ANOVA follows a Gaussian distribution.

When we say that there is a statistically significant difference between the satisfaction scores of Marine families of different pay grades, we mean that the difference of any two pairs of scores is less than 1.96 times the square root of the combined sampling variances. This says we will reject the null hypothesis when the difference between scores is so large that it would only occur at random in less than 5% of paired samples, of respective sizes, drawn from the same population.

Summary of Assessments. Global quality of life was measured through three different indicators (one of which was a multiple-item indicator and one of which was a signally important one of the multiple items). The reliability of these three indicators was measured at a Cronbach Alpha of .87.

The ten life domains measured for this study included Residence, Relocation, Leisure and Recreation, Support Systems, Healthcare, Separation, Children Quality of Life, Pay and Benefits, Your Job/Professional Development, and Marine Corps Life and You (retention desires). Of these ten domains, six were similar (though not identical) to domains measured by the Marine Quality of Life Assessment. Domain quality of life was measured with a single cognitive indicator (responses were reported on a 7-point satisfaction scale with 1 being very dissatisfied to 7 being very satisfied), except in the separation domain in which an additional affective indicator was deemed necessary (responses were answered on a 7-point delighted to terrible scale).

Descriptive items, customized to the domain, were included in each section (e.g., Relocation frequency, Separation frequency). Other key variables embedded within the questionnaire were a multiple; part item which asked what effect each area of life had on their desire to remain a part of the Marine Corps, an item which measured overall desire to remain in the Marine Corps, and an item that measured self-sufficiency as an indicator of family readiness. Figure 3-76 displays a summary of the variables measured in this 2002 Quality of Life study.

| Summary of Variables in the Family Member Quality of Life Assessment. | |
|---|--|
| Demographic Variables <ul style="list-style-type: none"> ◆ Gender ◆ Age ◆ Years married to Marine ◆ Employment situation ◆ Parental status | Global Quality of Life <ul style="list-style-type: none"> ◆ Delighted-Terrible Scale (D-T) ◆ Satisfaction with Life Scale (SWL) (5 items) |
| Marine Spouse Variables <ul style="list-style-type: none"> ◆ Pay grade of Marine ◆ Years Marine on Active Duty ◆ Accompanied/unaccompanied ◆ Station or base of Marine | Dispositional Variables <ul style="list-style-type: none"> ◆ Self-sufficiency/family readiness |
| Quality of Life--Domain Assessments <ul style="list-style-type: none"> ◆ Delighted-Terrible Scale (D-T) or ◆ Overall domain satisfaction ◆ Facet satisfactions ◆ Descriptive items ◆ Perceived domain effect on retention | Outcomes <ul style="list-style-type: none"> ◆ Retention desires |

Figure 3-76. Summary Of Variables In The Family Member Quality Of Life Assessment.

Characteristics of the Spouse Respondents

A total of 4184 Marine Corps Spouses completed the quality of life questionnaire. This represents about 5.9% of the total Marine Corps spouse population. This section describes these participants on a few characteristics derived from their answers to the demographical questions, and describes their Marine spouses based on a few characteristics derived from their answers to questions in the second section of the questionnaire (see Appendix C).

Gender and Age. Of the 4134 spouses who responded to the question of gender, 40 (or a little less than 1%) are male and the remaining 4094 (99%) are female.

| TABLE 3-25. AGE DISTRIBUTION OF THE SAMPLE. | | |
|---|--------------------|---------|
| Age Range (Years) | Spouse Respondents | |
| | Number | Percent |
| 16 – 20 | 283 | 6.9 |
| 21 – 25 | 969 | 23.8 |
| 26 – 30 | 915 | 22.4 |
| 31 – 35 | 877 | 21.5 |
| 36 – 40 | 613 | 15.0 |
| 41 – 45 | 275 | 6.8 |
| 46 – 50 | 113 | 2.8 |
| 51 and Above | 32 | 0.8 |

Table 3-25 shows the ages (partitioned in eight different ranges) of the respondents and the average age of the respondents is 30.5 years. The majority of respondents are between 21 and 35 years old.

Employment Status. About sixty percent of the respondents reported being employed outside of the home, either part-time or full-time.

Years Married. Table 3-26 shows the distribution of number of years married to a Marine (partitioned in seven different ranges) of the respondents, and the average number of years married for the respondents is about 7.9 years.

| TABLE 3-26. YEARS MARRIED DISTRIBUTION OF THE SAMPLE. | | |
|---|--------------------|---------|
| Age Range (Years) | Spouse Respondents | |
| | Number | Percent |
| 0 - 4 | 1570 | 43.0 |
| 5 - 9 | 851 | 23.3 |
| 10 - 14 | 659 | 18.0 |
| 15 - 19 | 380 | 10.4 |
| 20 - 24 | 137 | 3.7 |
| 25 - 29 | 46 | 1.3 |
| 30 and Above | 10 | 0.3 |

Note that the largest number of respondents have been married fewer than 5 years.

Parental Status. Seventy-one percent (2972 out of 4184) of the respondents reported having children age 18 or under of their own or of their spouse's (that is, this item accounted for children from previous relationships). Table 3-27 presents information regarding the ages and numbers of these children.

| TABLE 3-27. AGES AND NUMBERS OF CHILDREN BETWEEN THE COUPLE. | | | | | |
|---|--|----------|----------|----------|----------|
| Age Group | Number of Children In The Given Age Group | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| Under 1 year | 654 | 13 | 1 | 0 | 0 |
| 1 – 3 | 1090 | 107 | 6 | 0 | 0 |
| 4 – 6 | 900 | 123 | 5 | 0 | 2 |
| 7 – 12 | 788 | 346 | 49 | 1 | 0 |
| 13 – 18 | 452 | 214 | 36 | 7 | 1 |

From this Table, we see that these households care for 5828 children under the age of 19, for an average of 1.96 children per household. This figure is consistent with what was reported by the Marine respondents described earlier in this chapter.

Characteristics of the Marines Married to the Spouse Respondents. Respondents were asked to provide some basic information about their Marine spouses. Table 3-28 presents the breakdown of respondents by the pay grade of their Marines.

| TABLE 3-28. MARINE'S PAY GRADE IN THE SPOUSE SAMPLE. | | |
|---|---------------------------|----------------|
| Rank | Spouse Respondents | |
| | Number | Percent |
| E1-E2-E3 | 416 | 10.1 |
| E4-E5 | 1052 | 25.5 |
| E6-E7 | 1227 | 29.7 |
| E8-E9 | 328 | 7.9 |
| WO | 130 | 3.2 |
| 01-03 | 523 | 12.7 |
| 04 and above | 449 | 10.9 |

Table 3-29 shows the distribution of number of years (partitioned in seven different ranges) the Marine has been on Active Duty. The average number of years the Marine has been on Active Duty is about 11.6 years. Note that almost half of respondents report that their Marine has been on Active Duty for less than 10 years.

| TABLE 3-29. YEARS MARINE SPOUSE HAS BEEN ON ACTIVE DUTY. | | |
|---|---------------------------|----------------|
| Active Duty (Years) | Spouse Respondents | |
| | Number | Percent |
| 0 - 4 | 902 | 24.1 |
| 5 - 9 | 826 | 22.1 |
| 10 - 14 | 764 | 20.4 |
| 15 - 19 | 746 | 19.9 |
| 20 - 24 | 361 | 9.7 |
| 25 - 29 | 125 | 3.3 |
| 30 and Above | 17 | 0.5 |

Finally, Table 3-30 presents the permanent duty station of these Marines.

| TABLE 3-30. LOCATION OF THE MARINE IN SPOUSE SAMPLE. | | |
|---|---------------------------|----------------|
| Location | Spouse Respondents | |
| | Number | Percent |
| Albany | 36 | 0.9 |
| Barstow | 10 | 0.3 |
| Beaufort | 118 | 2.9 |
| Camp Lejeune | 627 | 15.4 |
| Camp Pendleton | 664 | 16.3 |
| Cherry Point | 261 | 6.4 |
| Iwakuni | 47 | 1.2 |
| Hawaii | 158 | 3.9 |
| Miramar | 189 | 4.6 |
| New River | 191 | 4.7 |
| Okinawa | 224 | 5.5 |
| Parris Island | 54 | 1.3 |
| Quantico | 250 | 6.1 |
| San Diego | 93 | 2.3 |
| 29 Palms | 142 | 3.5 |
| Washington, D. C. | 111 | 2.7 |
| Yuma | 121 | 3.0 |
| Other (Inside Continental USA) | 738 | 18.1 |
| Other (Outside Continental USA) | 35 | 0.9 |

Eighty-five percent of the respondents indicated that they are with their Marine at his/her present location. Of those spouses who did not accompany their Marine, 71% are living apart due to military requirements.

Residence and Community Domain

In this domain, families were asked to provide information about where they were now living and to evaluate their satisfaction with various aspects of their Residence and Community.

There were five specific categories of housing which were identified:

- ◆ Military family housing on base
- ◆ Military family housing in the civilian community
- ◆ Personally owned housing in the civilian community
- ◆ Personally rented housing in the civilian community
- ◆ Other

Figure 3-77 compares the overall satisfaction with Residence and Community for each of the identified housing types. In parenthesis for each housing type is an estimate, based on the sample and the density of married Marines by pay grade, of the percent of Marine families that live each kind of Residence.

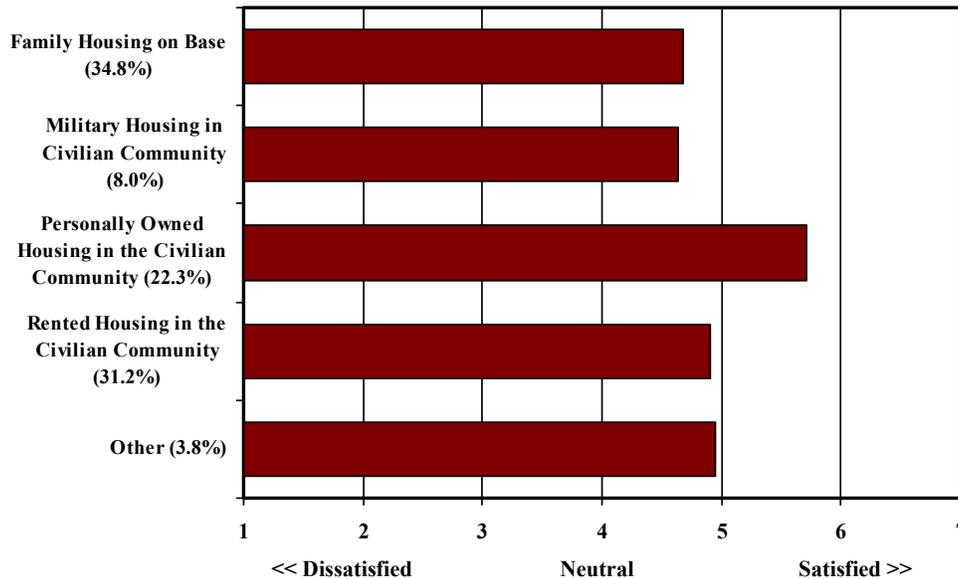


Figure 3-77. Satisfaction With Residence And Community.

The responses are mostly between neutral and somewhat satisfied except for the big winner, personally owned housing in the civilian community, for which the average satisfaction level is between somewhat satisfied and satisfied. There are three statistically significant groupings within this domain: (1) satisfaction with personally owned housing in the civilian community is the highest; (2) next highest is satisfaction with rental housing/other (with no statistically significant difference between the two);

and (3) last is satisfaction with military housing (with no statistically significant difference between the two).

Another way to look at overall spouse satisfaction with various aspects of the Residence and Community domain is by breaking out the overall satisfaction results by pay grade rather than by housing type. Figure 3-78 displays these results.

In general, Figure 3-78 shows that satisfaction increases with increasing pay grade. The pay grade running contrary to this general statement is the E8 and E9s who turn out to have the highest reported percentage (53.8%) of civilian community home ownership among all Marine pay grades. The next highest percentage (46.4%) belongs to O4s & Up. Since home ownership in the civilian community has the highest Residence and Community satisfaction, pay grades with a heavy concentration in this type of residence will tend to show higher average Residence and Community satisfaction scores.

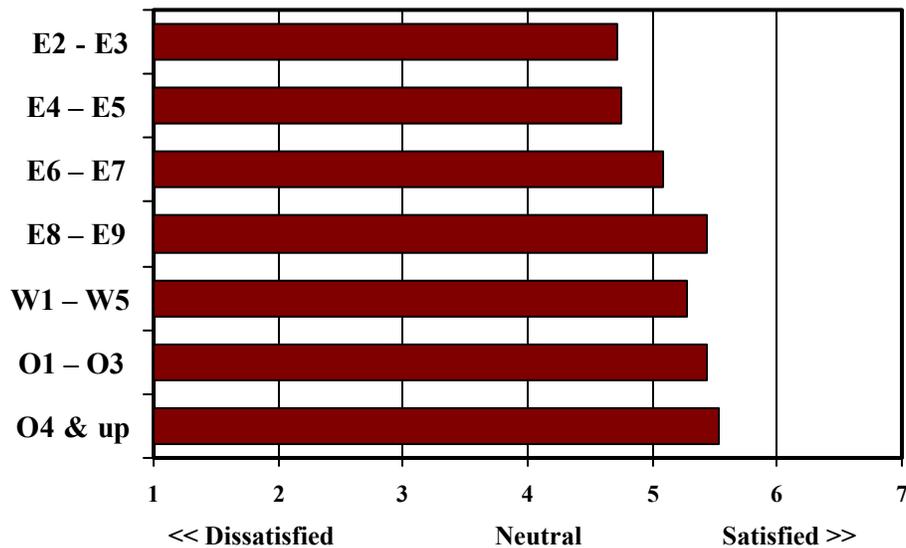


Figure 3-78. Satisfaction With Residence And Community By Pay Grade.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Residence and Community domain. Exploratory factor analysis indicates that these aspects are highly correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The least correlated factor is cost; it is the most unique attribute.

Figure 3-79 displays the Residence and Community domain aspects. All domain aspects and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model. This set of twelve variables accounts for

70% of the variance in Residence and Community satisfaction indicating that this set of items does a pretty good job of measuring satisfaction with Residence and Community.

Overall Residence and Community satisfaction is most strongly influenced by, in order of influence:

- ◆ Satisfaction with attractiveness
- ◆ Satisfaction with parks and playgrounds
- ◆ Satisfaction with location
- ◆ Satisfaction with condition
- ◆ Satisfaction with safety
- ◆ Satisfaction with privacy

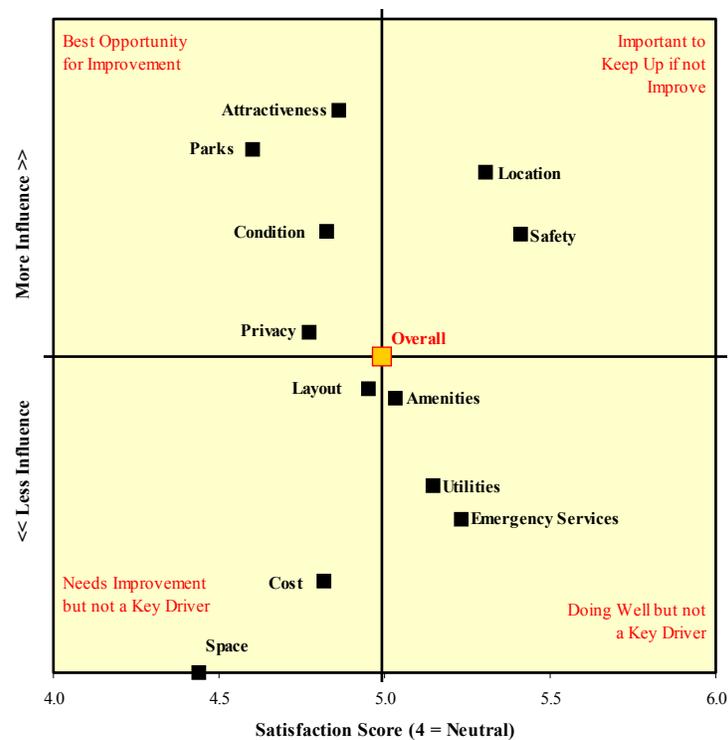


Figure 3-79. Key Driver Diagram For Residence And Community.

Figure 3-79 shows that the two most influential drivers of Residence and Community satisfaction, attractiveness and parks and playgrounds, are in the part of the diagram indicating best opportunity for improvement. Furthermore, because the factor analysis indicated two strongly correlated factors: one best represented by the key drivers attractiveness, condition, and privacy, the other represented by the key drivers parks and playgrounds, location, and safety, it would seem that improvements that are distributed between the two most influential drivers (attractiveness and parks and playgrounds) would maximize overall improvement in this domain.

However, this is not so for those in military housing: presuming the goal that military housing should be roughly equivalent to civilian housing, the largest difference in aspect satisfactions displayed in Figure 3-80 concentrates on the domain factor represented by attractiveness, condition, and privacy. That is the cluster of aspects to improve for military Residence and Community.

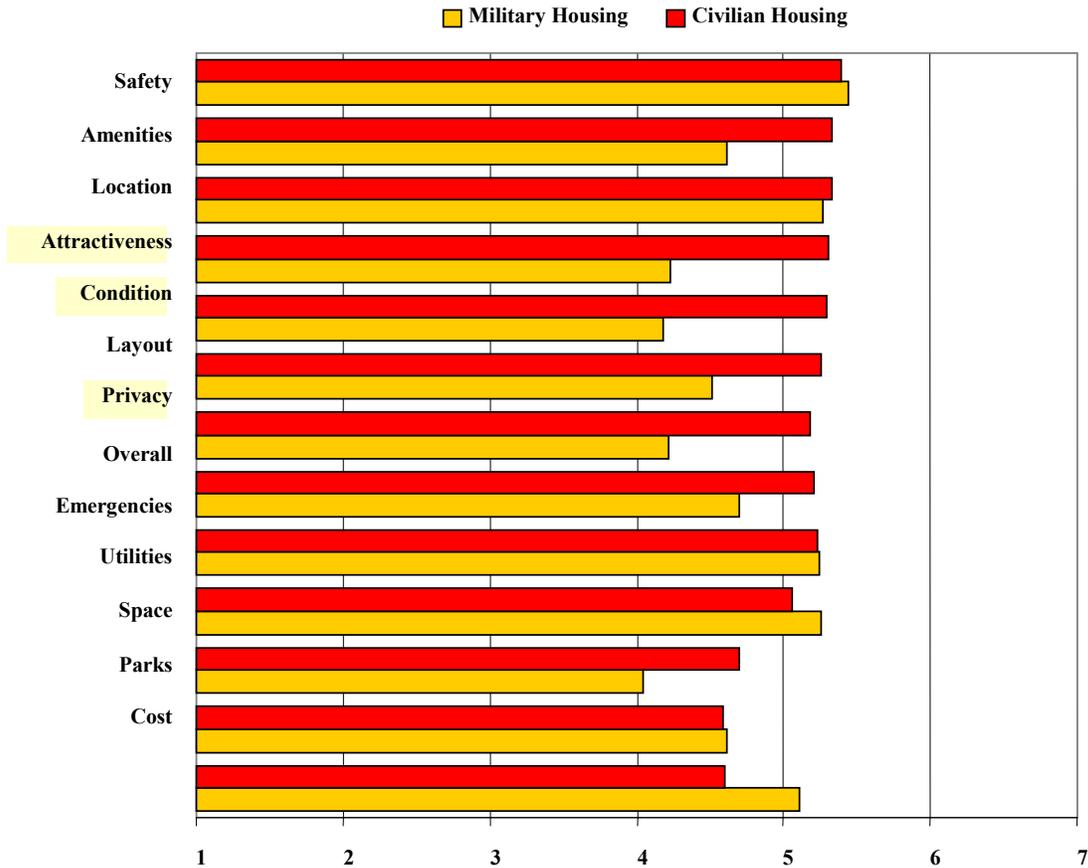


Figure 3-80. Military/Civilian Aspect Comparison.

Domain Conclusions.

A majority of the respondents reported that they were somewhat satisfied to completely satisfied with their Residences and Communities. However, the data indicate that families living in military housing have a neutral attitude about their Residences and communities, perhaps reflecting an acceptance of the state of military housing as part of Marine Corps living. Interestingly, the most frequently cited reasons for not applying for military housing (for respondents who have relocated with their spouse) were a preference to live off base, and the quality of the military housing. Respondents in personally-owned housing are more satisfied with their Residences and community than those in all other types of housing, possibly due to a perception of greater attractiveness, better condition, and more privacy.

The issue of Residence satisfaction was raised frequently at focus group discussions conducted prior to the distribution of this questionnaire, yet Residence and Community satisfaction on the whole appears to be positive and, in the case of military housing, not negative. In addition, while much was discussed during the focus groups, Residence satisfaction was not the dominant key driver of Global quality of life for spouses. This particular example illustrates the importance of combining qualitative approaches to examining quality of life (e.g., focus groups) with more representative quantitative approaches.

Relocation Domain

Spouses were asked to give their satisfaction levels with aspects of Relocation and Relocation overall, defined as moving to a new duty station (including the Relocation to first duty station). Spouses who reported having relocated (N = 2434 — about 74%) had an average satisfaction with Relocation overall of 4.53 which falls into the neutral to somewhat satisfied range. Figure 3-80 compares the overall satisfaction with Relocation by pay grade of the Marine.

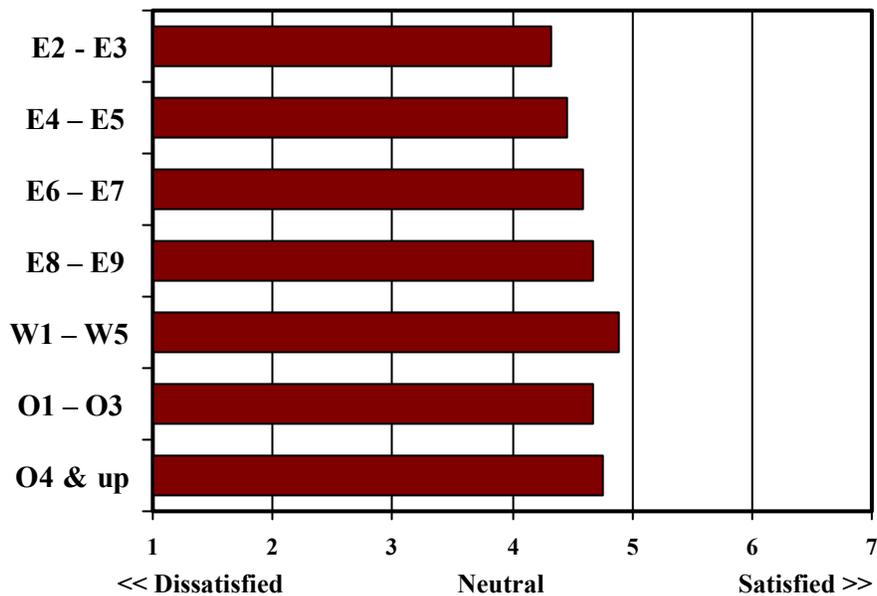


Figure 3-81. Satisfaction With Relocation By Pay Grade.

Families in all pay grades are neutral to somewhat satisfied with Relocation overall, with warrant officer and officer families being statistically above the average. To further investigate variations in satisfaction, we examined the relationship between Relocation frequency and Relocation satisfaction.

Respondents were asked, “How many times have you relocated with your spouse?” Of the respondents who have relocated, the majority (N = 710 or 41%) had relocated only one time. The average number of Relocations per pay grade band were:

- ◆ E2-E3 = 1.25 moves
- ◆ E4-E5 = 1.74 moves
- ◆ E6-E7 = 3.13 moves
- ◆ E8-E9 = 4.89 moves
- ◆ W1-W5 = 4.14 moves
- ◆ O1-O3 = 3.17 moves
- ◆ O4 & up = 6.44 moves

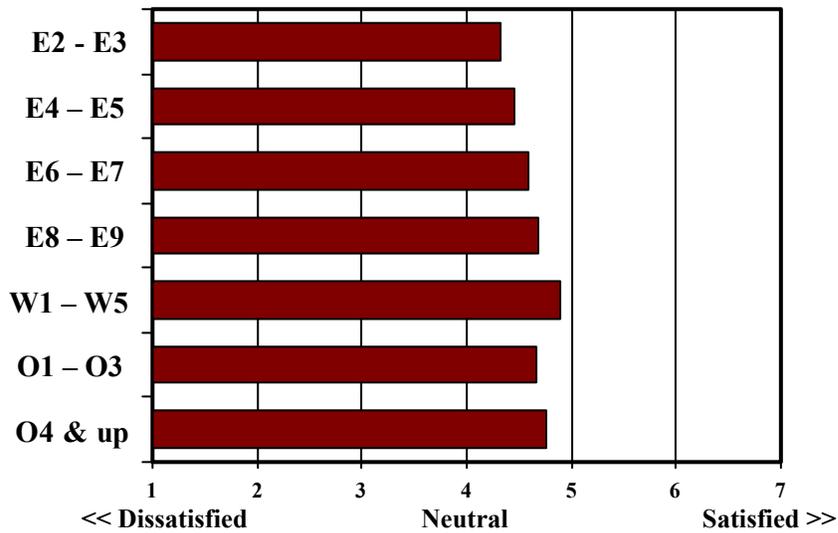


Figure 3-81. Satisfaction With Relocation By Pay Grade.

In general, we see that the more moves a family reports, the higher the pay grade of the Marine, and the higher the pay grade of the Marine, the higher the level of satisfaction with Relocation overall. This possibly indicates an acceptance of Relocation as a fact of Marine Corps life over time or that some aptitude in Relocation is achieved with experience. To explore which explanation was more likely we compared the composite satisfaction with Relocation in terms of the number of moves (displayed in Figure 3-82). Percentages in parentheses represent the Marine families that fall into the moved bands.

Since we could not find a significant difference in satisfaction due to number of moves, it appears that satisfaction with Relocation has more to do with the pay grade of the Marine (which can be translated into length of time in the Marine Corps) than simply experience in relocating.

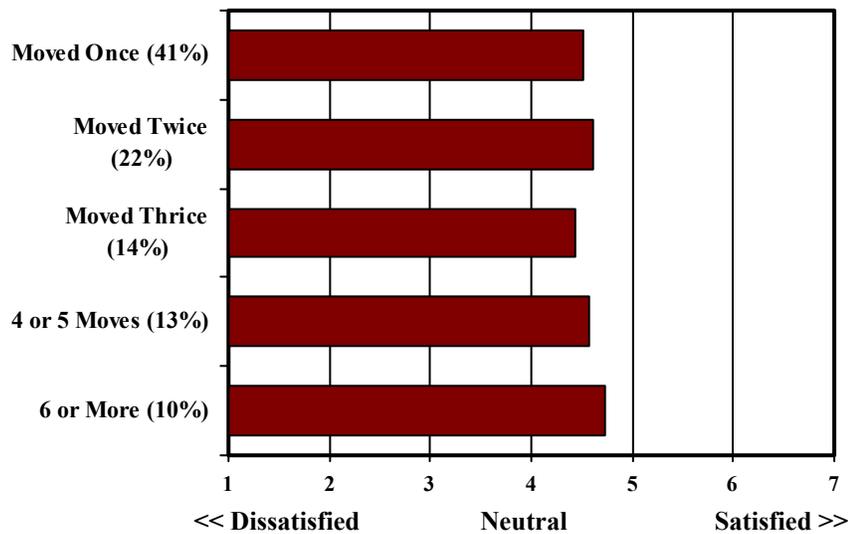


Figure 3-82. Satisfaction With Relocation.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Relocation domain. An exploratory factor analysis indicates that these aspects are moderately correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

Figure 3-83 displays the Relocation domain aspects. All domain aspects and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model regression. This set of seven variables accounts for 69% of the variance in Relocation satisfaction, indicating that these items do a good job of measuring Relocation satisfaction.

Overall Relocation satisfaction is most strongly influenced by, in order of influence:

- ◆ Satisfaction with movement and storage
- ◆ Satisfaction with finding new housing
- ◆ Satisfaction with Relocation assistance services

All of these key drivers are in the area of best opportunity for improvement of the overall domain satisfaction.

The factor analysis indicated two strongly correlated factors: one best represented by the three key drivers noted above (the other aspects on factor 1 are pay and allowances and temporary lodging) and the other represented by the two most highly satisfied aspects amount of notice, and time of year. In light of this, efforts to improve any of the key drivers that make up the assistance factor are likely to lead to a benefit in the area of Relocation satisfaction.

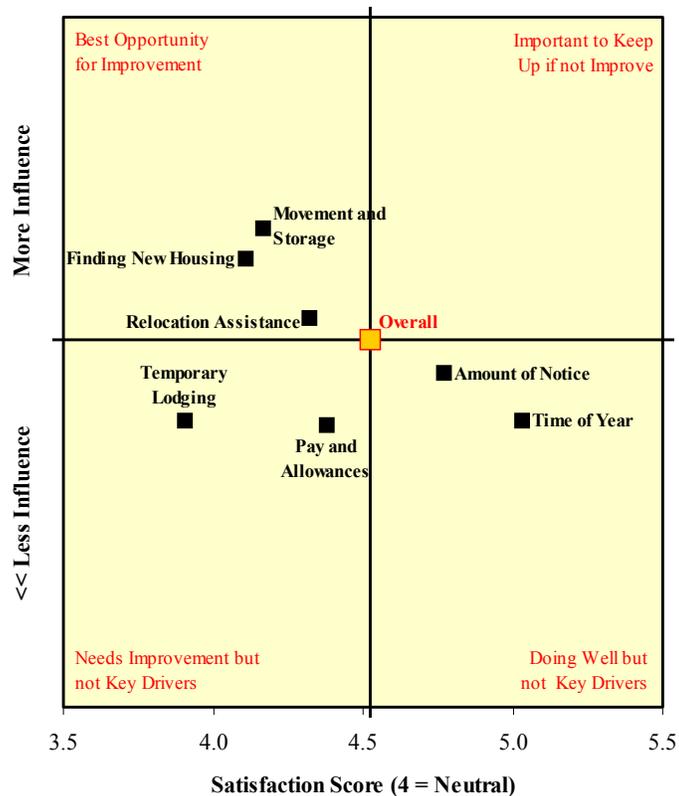


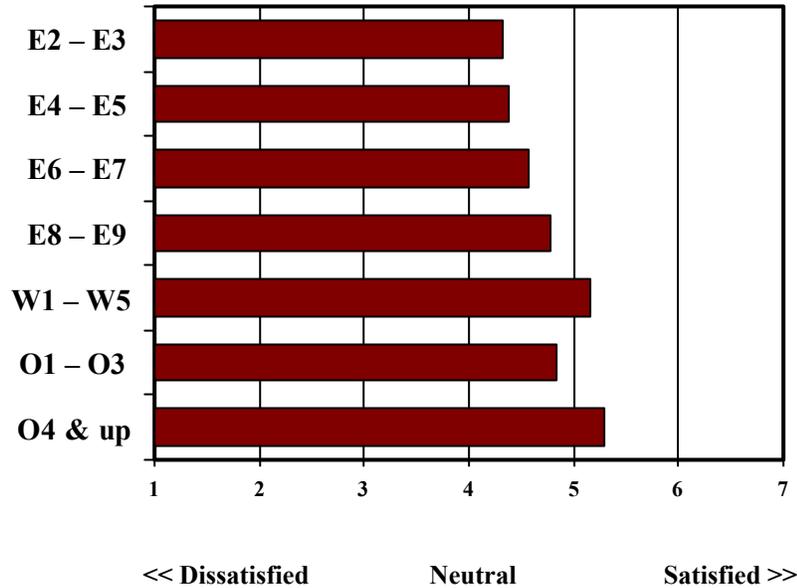
Figure 3-83. Key Driver Diagram For Satisfaction with Relocation.

Domain Conclusions.

Overall families of all pay grades report being neutral to somewhat satisfied with Relocation. This satisfaction appears to have more to do with the pay grade of the Marine than with the number of times the family has had to move. In addition, it is projected on the basis of grade weighting that 52% of Marine families are unaware of the Relocation sponsorship program. Their composite satisfaction with Relocation was 4.36, less than the overall composite of 4.53 and statistically significant. The most satisfied spouses were those 18% who knew of the sponsorship program, and perhaps had served as sponsors themselves, and those who did not request a sponsor: their satisfaction score was 4.92, significantly above 4.53. The next most satisfied group were the 12% who requested and obtained a sponsor: their satisfaction score was 4.65, not significantly above 4.53. The least satisfied group were those 4½% who requested a sponsor and did not obtain one: their satisfaction score was 3.76, significantly below the average of 4.53. Improvement in the sponsorship area of Relocation assistance (a key driver of domain satisfaction) would likely be beneficial.

Leisure and Recreation Domain

In this domain spouses were asked to indicate how often they or their children used certain military programs and services over the past year, and to indicate their satisfaction with leisure activities overall. The composite family member satisfaction with Leisure and Recreation domain aspects overall was 4.56. Figure 3-84 compares domain satisfaction by pay grade.



**Figure 3-84. Satisfaction With Leisure And Recreation
By Pay Grade.**

All satisfactions by pay grade are different from the composite of 4.56 with statistical significance, except for the E6-E7 band, which, at 4.57, about equals the composite. Spouses of Marines who are pay grades W1-W5 and O4 and up are in the somewhat satisfied range, while all other spouse are reporting satisfactions in the neutral range.

There are only two aspects of this domain: variety of activities and cost of activities, both in the satisfied region with satisfaction scores of 4.56 and 4.44 respectively. To provide more explanatory power and additional information, we created new variable, activity level (see Kerce, 1995), which measures the number of activities with reported activity levels of at least several time per month. Both variety and cost were each strongly correlated (> 0.7) to the overall domain satisfaction and highly correlated to each other (about 0.6). In regression, they account for 73% of the variance in overall leisure satisfaction with variety having the greater influence. When activity level was added to the regression, it was very weakly correlated ($< .2$) with the aspect satisfaction and the overall domain satisfaction levels and contributed no more explanatory information to the regression.

Figure 3-85 displays the reported use of each activity described in the questionnaire weighted by the responses within pay grade. The most frequently used programs are the fitness facilities (including fitness center, gym, pools, courts, playing fields) and the Recreation facilities (including recreation programs, campgrounds, parks, beaches, bowling, golf, marina, and stables). The least used by this sample are Athletics (youth sports, intramurals) and Skills programs (arts and crafts, auto).

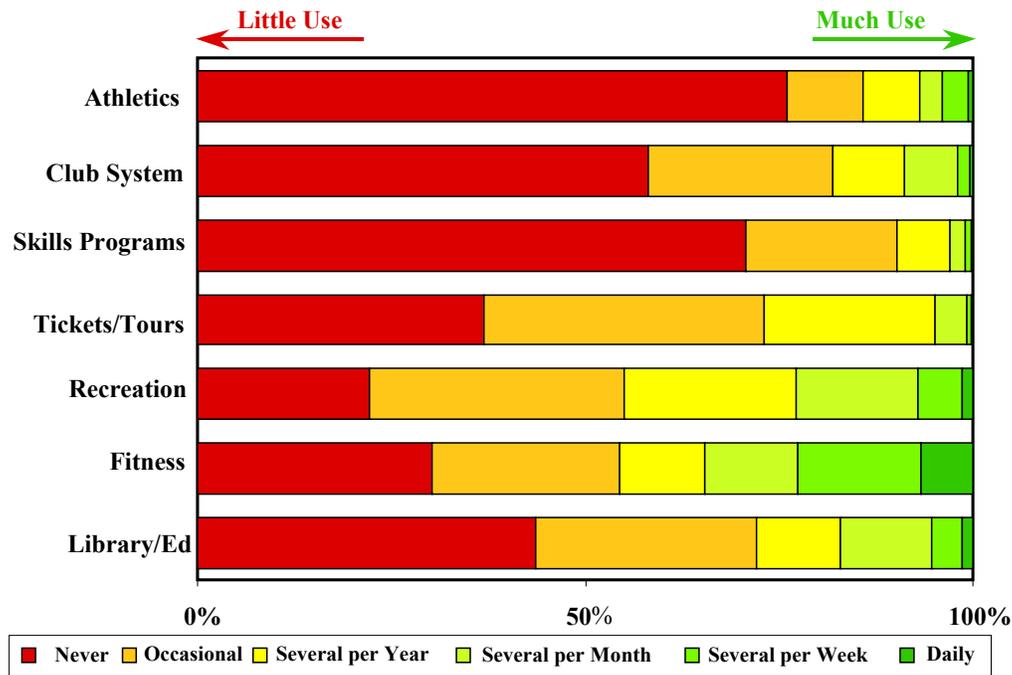


Figure 3-85. Activity Diagram For Leisure And Recreation.

Domain Conclusions.

Satisfaction with Leisure and Recreation falls into the neutral range except for families of officers grade O4 and above and warrant officers. Spouses report being neutral to somewhat satisfied about the cost and variety of activities, with variety being the more important driver of their overall satisfaction. Every program is used by at least some spouses or their children on a daily basis.

Support Systems Domain

This domain consisted of a single multiple-item question that asked about satisfaction on a scale from 1 (completely dissatisfied) to 7 (completely satisfied) with various military community services that are designed to help support spouses and their families. Therefore, the results of this domain apply only to program level satisfaction and not to a more general satisfaction with social support that is provided by friends and relatives. The composite family satisfaction with military support systems aspects overall was 4.53. Figure 3-86 compares domain satisfaction by pay grade.

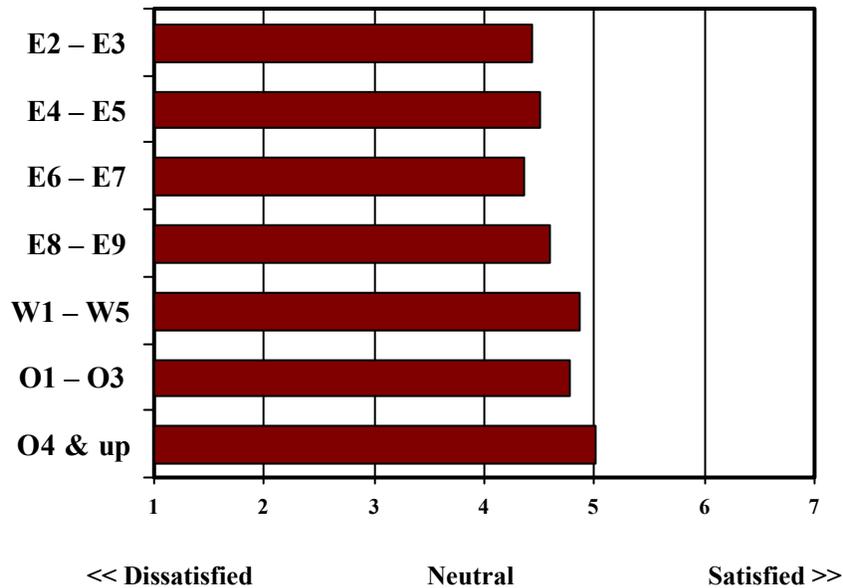


Figure 3-86. Satisfaction With Support Systems By Pay Grade.

Most satisfactions by pay grade are different from the composite average of 4.56 with statistical significance, except for the E2-E3, E4-E5, and E8-E9 bands, which hover about the average. The distinct discontent relative to the other pay grades is the E6-E7 band, which is the second largest pay grade group in the Marines Corps.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Support Systems domain. An exploratory factor analysis indicates that these aspects are moderately to strongly correlated (.4 to .8) and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

Figure 3-87 displays the Support Systems domain aspects. All domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model. This set of eleven aspects accounts for 76% of the variance in Support Systems satisfaction, a very high value indicative of the relativity of the items/programs that made up this question.

We note that these programs have little or no current impact on families without military community support, as previous defined. However, depending on the question, between 15% and 40% of the 300 or so families satisfying the without military community support criterion answered, presumably based on their previous experience. Their satisfaction levels were consistently 0.5 below the averages.

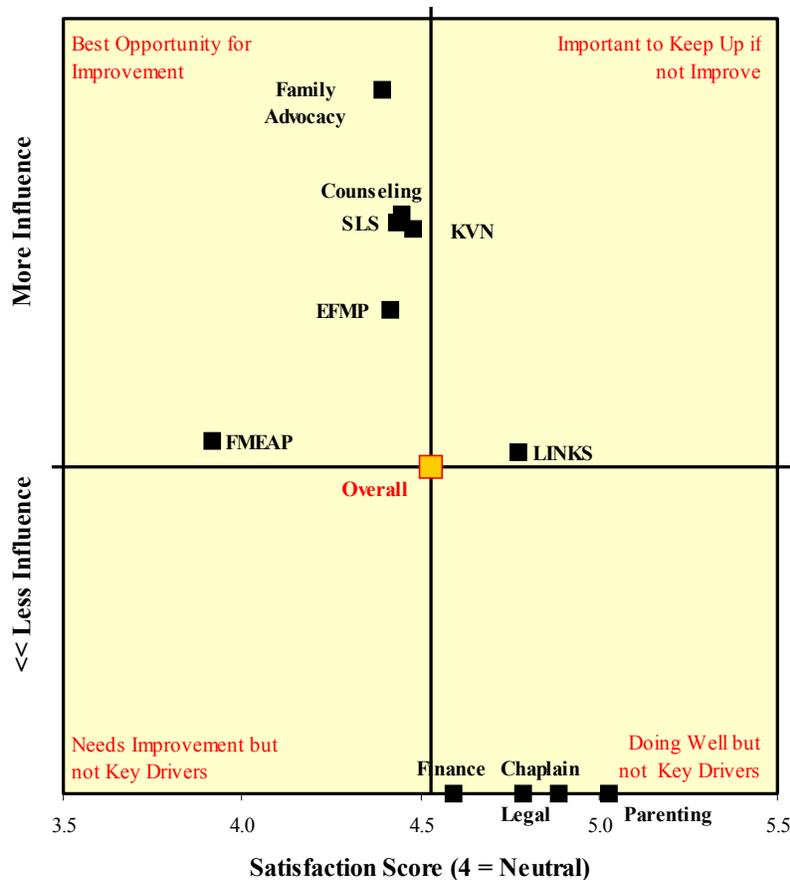


Figure 3-87. Key Driver Diagram For Support Systems.

Figure 3-87 displays a substantial number of aspects in the best opportunity for improvement quadrant. The aspects offering the best targets for improvement are:

- ◆ Satisfaction with the Family Advocacy Program
- ◆ Satisfaction with Individual and Family Counseling
- ◆ Satisfaction with Spouses Leadership Seminar
- ◆ Satisfaction with the Key Volunteer Network
- ◆ Satisfaction with Exceptional Family Member Program
- ◆ Satisfaction with Family Member Employment Assistance Program

The least satisfactory aspect is the Family Member Employment Assistance Program (FMEAP), which is below the neutral threshold; this aspect was evaluated by about one-third of the respondents. All other satisfaction levels for these key drivers fall into the neutral band. The most influential driver of Military Community Support Services satisfaction is satisfaction with the Family Advocacy Program, which was evaluated by only one-fifth of respondents, the fewest number answering any of the support services questions and just edged out by Exceptional Family Member Program and Spouses

Leadership Seminar. In comparison, the Key Volunteer Network was evaluated by about one-half of respondents, and the overall satisfaction question by two-third of respondents.

The factor analysis indicated two strongly correlated factors: one represented by the Family Member Employment Assistance Program, Family Advocacy Program, Individual and Marriage Counseling, and by the Exceptional Family Member Program (programs that are more family centered); the other represented by the two key drivers of Spouse Leadership Seminar and Key Volunteer Network (programs that are more spouse-centered). Improvements sought, therefore, should be balanced between the family-centered and spouse-centered programs, perhaps with a focus on Family Member Employment Assistance Program and Key Volunteer Network.

Domain Conclusions.

Average satisfaction with Military Community Support Services for the majority of families is in the neutral range; for families of O4s and above the average is in the somewhat satisfied range. However, in general the data does not show that more satisfaction is achieved the higher the pay grade of the Marine. One concern is that families of Marines in the E6-E7 pay grade, who make up the second largest pay grade group in the Marine Corps, report lower satisfaction levels than those of any other pay grade. Additionally, the second most frequently used program (1417 respondents), the Family Member Employment Assistance Program, is the one with which the reporting spouses are the most dissatisfied. Given that Spouses' own Job/Professional Development satisfaction is one of the top four key drivers of Global quality of life (as will be discussed further in this chapter), the Family Member Employment Assistance Program would be a reasonable target for improvement.

Health Care Domain

Items in this domain specifically questioned families about the Health Care services (including all medical care, but not dental or mental Health Care services) that they have used. The composite family satisfaction with medical care overall was 4.66. Figure 3-88 compares domain satisfaction by pay grade.

Since, no satisfaction score by pay grade can be said to be different from the composite of 4.66 with any statistical significance, we can say that family satisfaction with medical care does not vary by pay grade of the Marine.

In order to show which Health Care systems have the best satisfaction scores we undertook an analysis of the responses to the types of medical insurance/medical care and matched them with the reported overall satisfaction. Many respondents (38%) indicated more than one system and it was not possible to separate satisfaction with each.

Predominantly the pairing found was the joint use of military medical and TRICARE Prime. Thirty-nine percent reported that they used military medical facilities, but only

3.8% used military medical alone. Eighty-five percent reported using TRICARE Prime. The next largest subscription was to TRICARE Standard, indicated in 9.9% of responses. In order to produce a clean estimate of satisfaction, we focused only on those responses indicating only one medical provider. Again, the satisfaction ratings for all of them were not statistically different from the composite average of 4.66. The, family satisfaction with medical care appears not to vary based on type of medical insurance/medical care used or with pay grade.

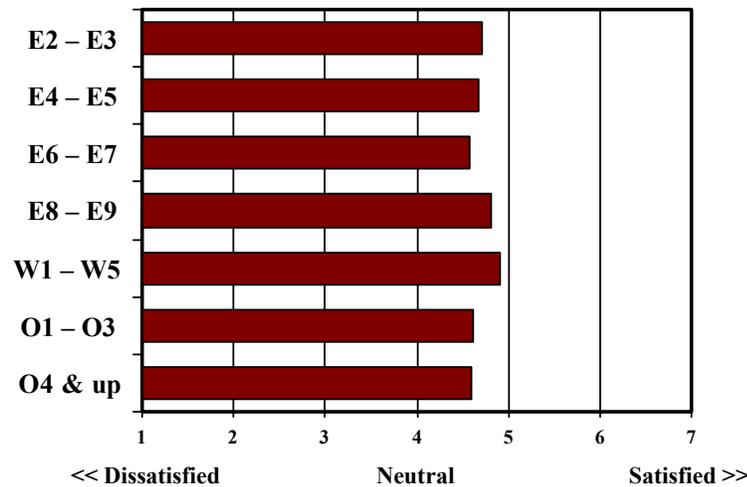


Figure 3-88. Satisfaction With Health Care By Pay Grade.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Health Care domain. An exploratory factor analysis indicates that these aspects are mostly weakly to moderately (.3 to .5) correlated and that the overall domain satisfaction score represents a consistent measure of domain satisfaction.

Figure 3-89 displays the Health Care domain aspects. All domain aspects and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model. This set of eleven aspects accounts for 71% of the variance in medical care satisfaction, a high value, indicating that this set of items measures satisfaction with medical care quite well.

Figure 3-89 displays the two most influential drivers in the best opportunity for improvement quadrant: treatment quality and out of pocket expenses. Most of the aspects are in the neutral range. However, the least satisfactory aspect, availability of appointments, is at the neutral threshold. The factor analysis indicated three strongly correlated factors: one represented by the key driver of treatment quality (and includes availability of appointments), the second represented by the key driver of out of pocket expenses. The third factor comprises hours and emergency care, the best satisfied aspects, but of little influence on overall satisfaction. Improvements sought, therefore, should

place a balance between the two key drivers as they represent two separate constructs in terms of medical care.

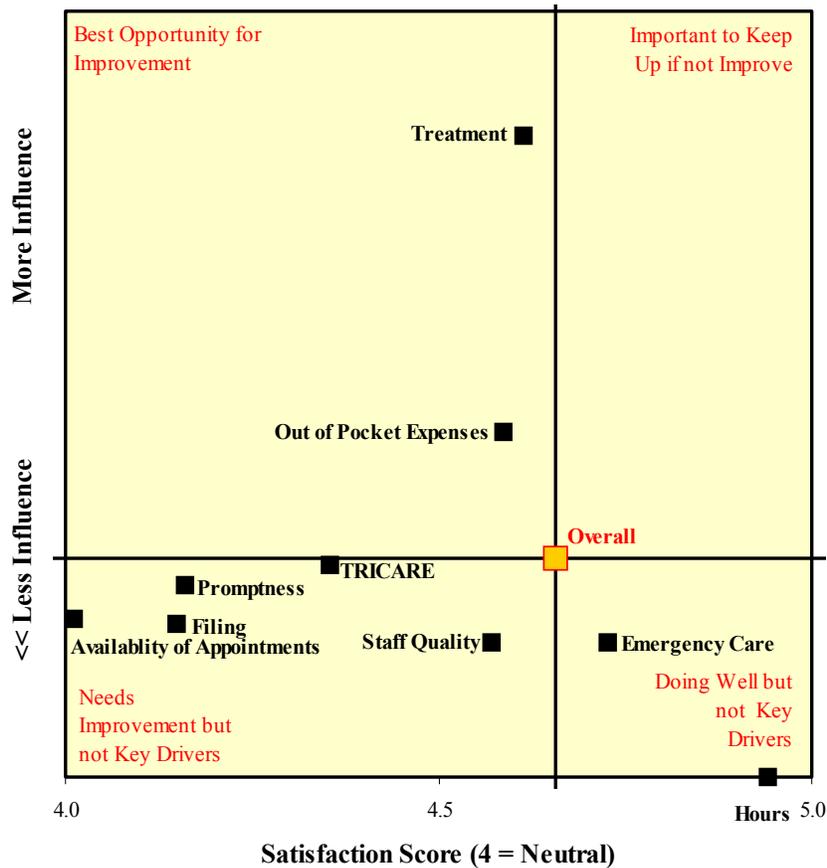


Figure 3-89. Key Driver Diagram For Health Care.

Domain Conclusions.

Overall reported medical care satisfaction falls into the neutral range, and does not appear to vary based on pay grade or type of medical insurance/medical care used. The majority of respondents live within 30 minutes of both a military and a civilian medical facility. Respondents are most displeased with the availability of medical appointments (which is not a key driver), but still on the average are neutral on this aspect. Improvements in treatment quality by doctors and medical support staff (or perceptions of treatment quality) and reduction out of pocket expenses could lead to higher levels of satisfaction in this domain.

Separation Domain

Spouses were asked to evaluate their satisfaction with the impact of deployment and Separation on their family life overall and various aspects related to being separated from their Marine. The composite family satisfaction with aspects of Separation overall was

3.67, between somewhat dissatisfied and neutral. Figure 3-90 compares domain satisfaction by pay grade.

Families of the senior enlisted and officers seem to have made an accommodation with the fact of Separation while the families of the more junior grades have not. As we can see, the junior grades are the most dissatisfied with Separation, with the E2-E3 grade reporting levels clearly in the dissatisfied range. All the scores can be said to be different from the composite of 3.67 with statistical significance, which implies a relatively large range over pay grade.

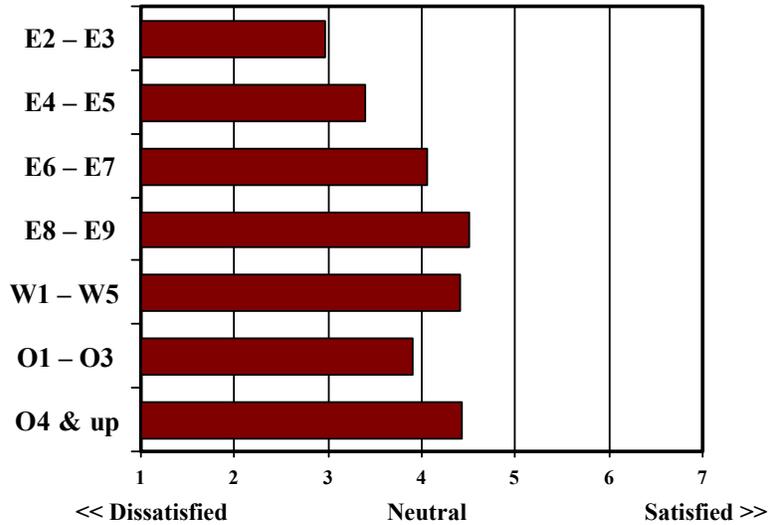


Figure 3-90. Satisfaction With Separation By Pay Grade.

Spouses were asked how happy or unhappy they were with the frequency with which they have seen their Marines since they have been on Active Duty. Spouses were also asked about the number of months in the past year that their Marines had been away from home because of military duties. One expects that the greater the number of months their Marines have been away, the unhappier the reporting spouses would be. Figure 3-91 shows that this is the case.

Figure 3-91 displays a graph of the happiness/unhappiness responses (which ranged from 1 – terrible to 7 – delighted) against the average Separation in months they have experienced over the past year. As can be seen, there is almost a linear relationship between the number of months away, on average, and the happiness/unhappiness score.

It seems quite clear that the happiness of families can be improved with respect to the necessity of Separation by reducing the amount of separated time. If a vertical line was drawn from the x-axis, happiness scale, straight up from neutral (4), to the plotted curve, we see that after about 15 weeks of Separation spouses begin to report that they are unhappy with the frequency with which they have seen their spouse since he/she has been a Marine.

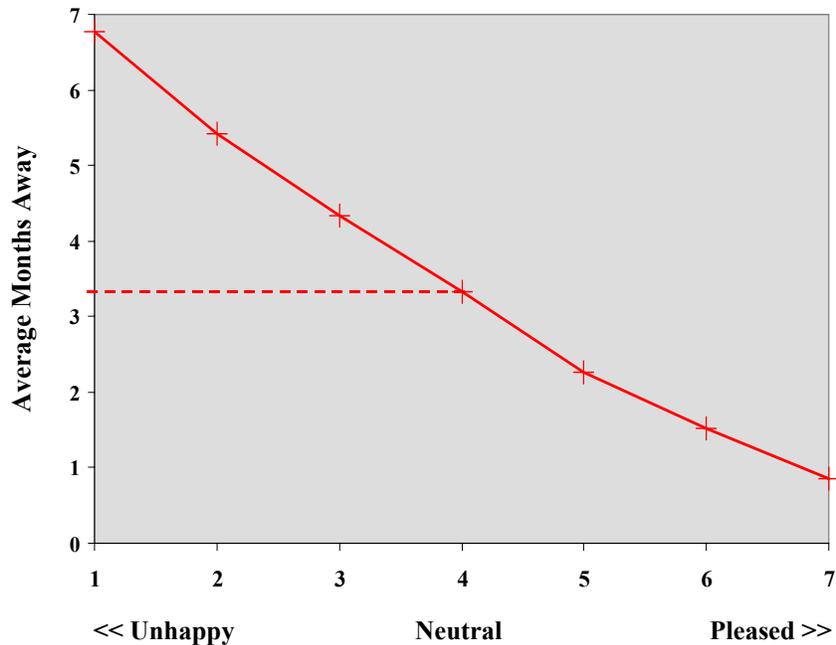


Figure 3-91. Family Happiness With Separation By Months Apart.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Separation domain. To enhance this we added to the domain aspects a composite of the readiness indicators of question 3, frequency of Separation in the past year, as represented by the happiness/unhappiness scores indicated above. An exploratory factor analysis indicates that these aspects are on the whole weakly to moderately correlated (.3 to .5) among themselves and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The readiness composite can be broken out into its own factor with a correlation to the other factor (strongly correlated to the remaining aspects) of about .5.

Figure 3-92 displays the Separation domain aspects. All domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model regression. This set of five aspects accounts for 61% of the variance in Separation satisfaction, a good value. Eliminating Readiness only reduces the variance explained to 60%.

Figure 3-92 is unusual in that the overall satisfaction is less than the satisfaction with each of the aspects of Separation noted in the survey instrument. This may indicate that while spouses are willing to more-or-less objectively evaluate their satisfaction with the aspects of Separation, overall they cannot be expected to be satisfied with this fact of Marine Corps life. This is also indicated by the fact that the most frequently marked category for this question was neutral, representing about 25% of all responses, a value

which is high although exceeded in 24% of random multinomial distributions on the integers from 1 to 7 which average to 3.67.

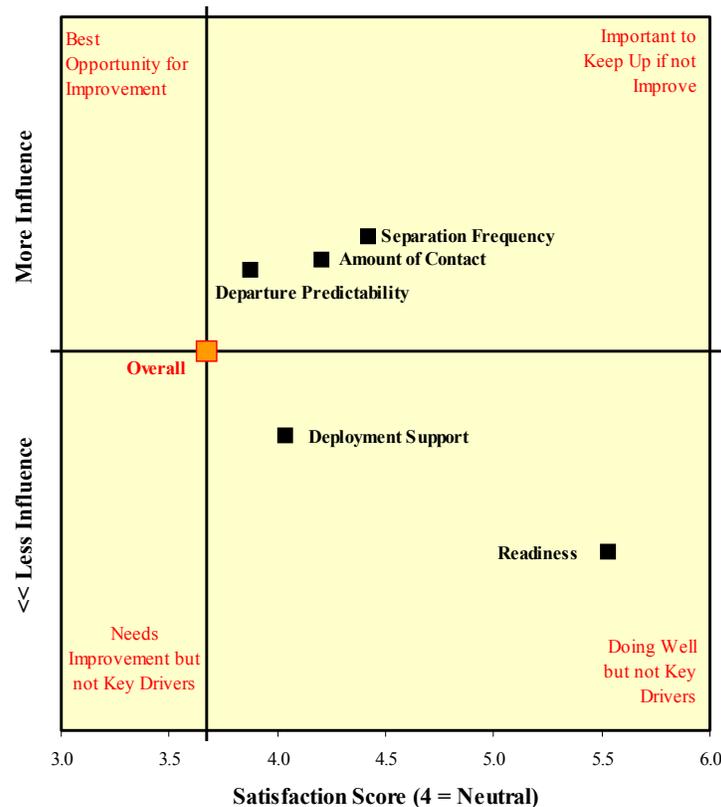


Figure 3-92. Key Driver Diagram For Separation.

Separation frequency is the dominant key driver, followed by amount of contact. However for both of these, satisfaction levels are in the neutral to somewhat satisfied range. The next strongest driver, satisfaction with predictability of departure, is clearly in the somewhat dissatisfied range and may therefore be the most fruitful area for improvement

Domain Conclusions.

Satisfaction with deployment separations impact on family life overall increases with length of time in the Marine Corps. The Separation domain is the key driver of Global quality of life for spouses without children and second only to Children Quality of Life for spouses with children. It is clear that an ability of a family to adapt to being separated from the Marine is a key ingredient in the satisfaction and happiness of a Marine's spouse and family.

This was supported by focus group discussions conducted prior to the distribution of the questionnaire, in which spouses of Marines who had served for a longer period of time felt that, after a while, the presence of the usually absent Marine becomes somewhat

of a hindrance for them. For these spouses the adaptation to Separation has taken the form of the creation of a family unit that is not dependent on the physical presence of the Marine. The data indicate that the majority of spouses report being extremely capable to handle the family responsibilities on their own, but improvement in their ability to predict departures and deployment support are areas that could be helpful to them in learning to deal with Separation from their spouse. On the other hand, given the data, it may not be too far fetched to suggest that continued education of current and potential Marine spouses about the reality of Separation as a part of Marine life would help to manage their expectations.

Children Quality of Life Domain

Spouses were asked to evaluate their satisfaction with Children Quality of Life (age eighteen or under) in a military environment. The composite family satisfaction with their children's quality of life overall was 5.15, between somewhat satisfied and satisfied. Figure 3-93 compares domain satisfaction by pay grade.

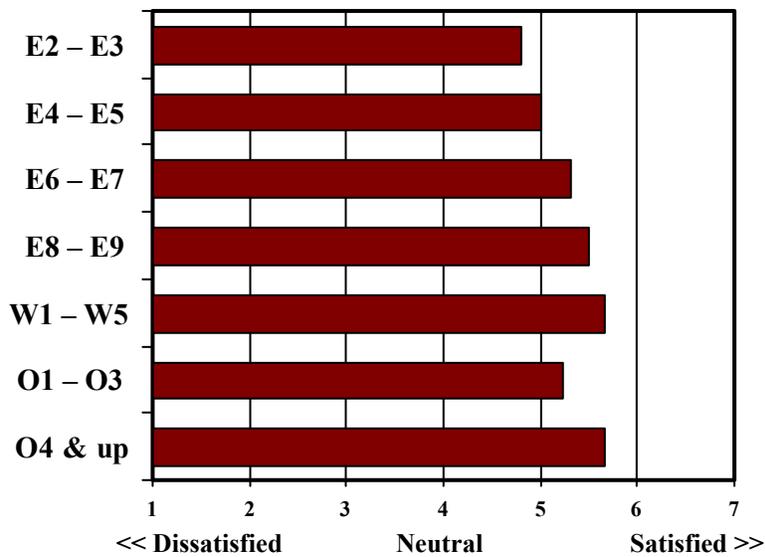


Figure 3-93. Satisfaction With Children Quality Of Life.

Families of the senior enlisted and senior officers are demonstrably more satisfied. All these overall satisfaction scores can be said to be different from the composite of 5.15 with statistical significance except for the O1-O3s. This implies a relatively large range over pay grades, which might be an accommodation to the military environment acquired over time by the parents. This might also be due to the age of the children involved.

To test this hypothesis we looked at the overall domain satisfaction in terms of the five age groups identified in the questionnaire. Since many families have children of various age groups, and their reported satisfaction overall is, in essence, a mental average

for them of Children Quality of Life satisfaction for all their children, we selected only those that reported children in a particular age group. Our objective was to avoid contaminating satisfaction levels for different age groups, but this also exposes us to an only child bias. Figure 3-94 displays the results.

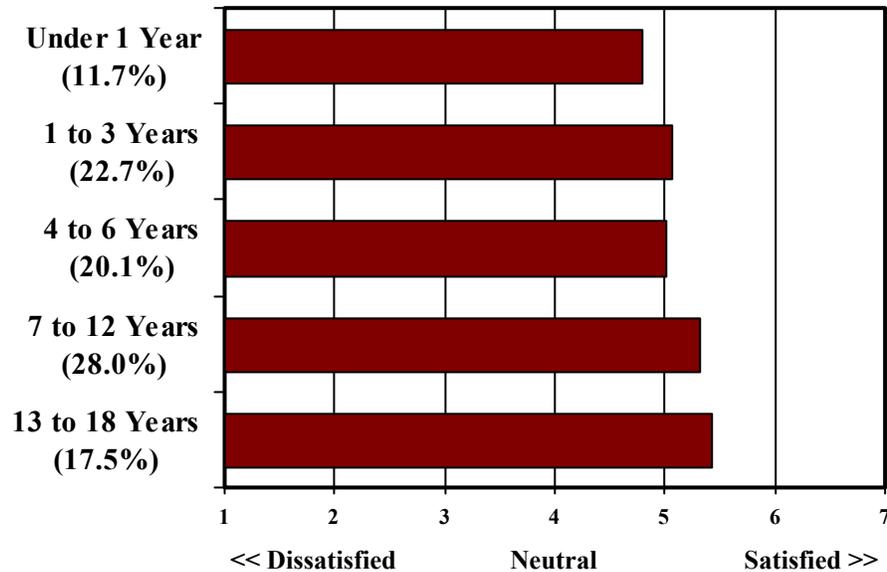


Figure 3-94. Satisfaction With Children Quality Of Life By Age Group Of The Children.

Figure 3-94 shows that the happiness of families about their children's quality of life depends on the age of the child, families are most satisfied for their school age children, less so for preschool children, and least satisfied for the babies, although all are in the satisfied range. These three groupings of children differ in a statistically significant way. It turns out that the strongest quality of life correlation is between the overall spouse quality of life, and the quality of life of the children. So Figure 3-94 may be the precursor to a similar relationship between the quality of life of the spouse and the age of the children.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Children Quality of Life domain. To enhance this we added to the domain aspects the overall satisfaction with childcare.

An exploratory factor analysis indicates that these aspects are weakly to moderately correlated (.3 to .6) among themselves, and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The aspect of activities available can be broken out into its own factor with a correlation to the other factor (moderately to strongly correlated to the remaining aspects) of about .55.

Figure 3-95 displays the Children’s QoL domain aspects. All domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model regression. This set of five aspects accounts for 55% of the variance in the domain satisfaction, not too bad a value but it may be pointing to a missing aspect.

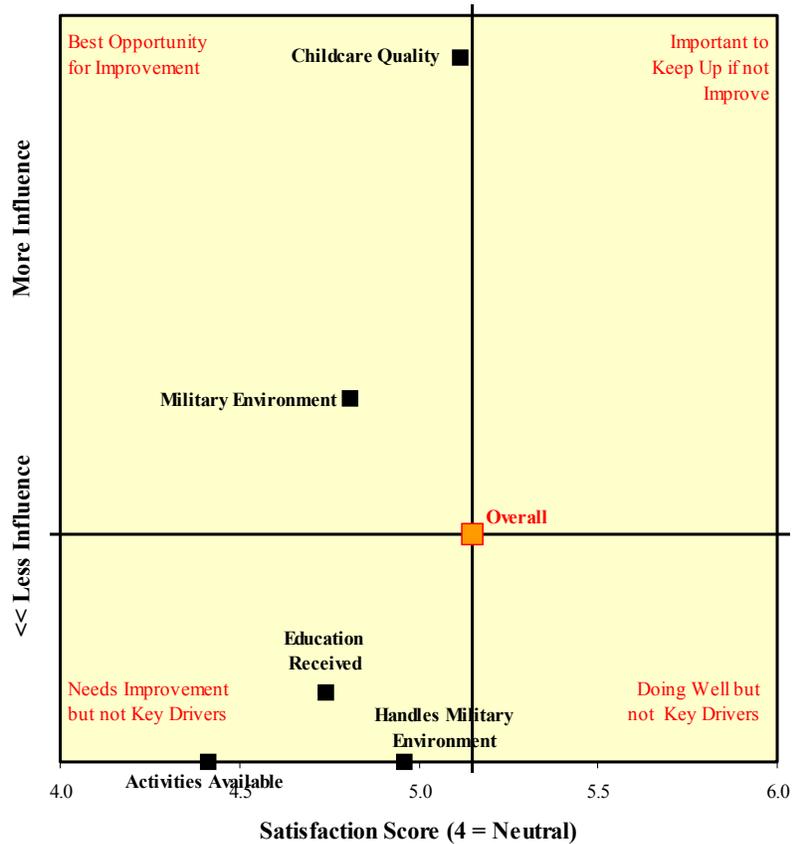


Figure 3-95. Key Driver Diagram For Children Quality Of Life.

Figure 3-95 is unusual in that the overall satisfaction is greater than the satisfaction with any of the aspects of Children Quality of Life noted in the survey instrument. (This is just the opposite of the structure of Figure 3-92.) It may be that spouses are thinking of additional aspects not covered in the aspect evaluations. Or perhaps, this indicates that while spouses are willing to more-or-less objectively evaluate their satisfaction with the aspects of their children's quality of life, they can be expected to react more positively about their children overall. This explanation is supported by the large number of satisfied (6) responses, representing about 42% of all responses, a value more than double the 20% of 6s expected among all random multinomial distributions on the integers from 1 to 7 which average to about 5.15.

The quality of childcare is the dominant key driver, followed by satisfaction with the military environment for raising children. Both of these key drivers have satisfaction

levels in the somewhat satisfied range, yet, they offer the best opportunity for improvement. The activities available and satisfaction with how the children handle the military environment have no independent effect, their impact being absorbed by the other three aspects.

However, satisfaction with the military environment may be just a different way to ask about overall satisfaction with Children Quality of Life. Dropping it from the regression re-emphasizes the effect of childcare quality. Using military environment as the dependent variable in the regression gives equal influence to overall domain satisfaction transfers it influence to childcare quality.

Since childcare is so important, we also investigated which aspects of childcare are key to reported overall childcare satisfaction. We undertook a multiple regression and factor analysis of the childcare question responses. The results are reflected in Figure 3-96.

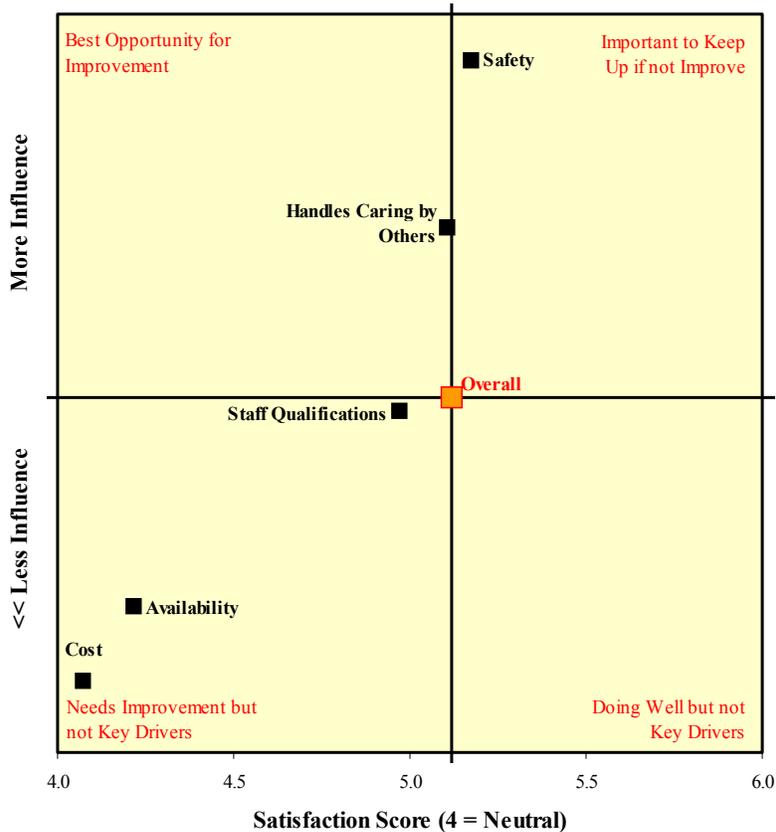


Figure 3-96. Key Driver Diagram For Childcare.

An exploratory factor analysis indicates that the five aspects are moderately to strongly correlated (.4 to .75) among themselves and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The childcare aspect of availability and cost can be broken out into a separate factor with a strong correlation

(>.7) to the other factor comprising staff qualifications, safety, and how the child handles caring by others.

The satisfaction with the safety of the childcare environment is the dominant key driver, followed by the satisfaction with the how the child handles being cared for by others. These are part of the same factor, which also includes staff qualifications. The least satisfied influences are the aspects associated with the second factor, namely, availability and cost. Improvements sought, therefore, should focus on safety of the childcare environment and staff qualifications (which should in turn have an effect on how the child handles being cared for by others), improvements in this area could be perhaps related to child/caretaker ratios in the childcare environment.

Domain Conclusions.

Satisfaction with Children Quality of Life is dependent on the age of the child. The most satisfied are those spouses with school-aged children. The infancy and pre-school stages are likely more difficult for spouses, especially if they are frequently the sole caretaker of the child. Furthermore, infants and toddlers are more reliant on and therefore more likely to miss the presence and/or attention of the Marine parent than are older children. Perhaps the missing aspect in this domain (recall all aspects only explained 55% of variance in domain satisfaction) is one such as time or quality of time child spends with Marine parent. Childcare quality drives overall satisfaction with Children Quality of Life, not surprisingly, as the majority of children reported by these spouses are not of school age.

Pay and Benefits Domain

Spouses were asked to evaluate their satisfaction with their financial situation. The composite family satisfaction with their financial situation overall was 4.06, that is, at the neutral level. Figure 3-97 compares domain satisfaction by pay grade.

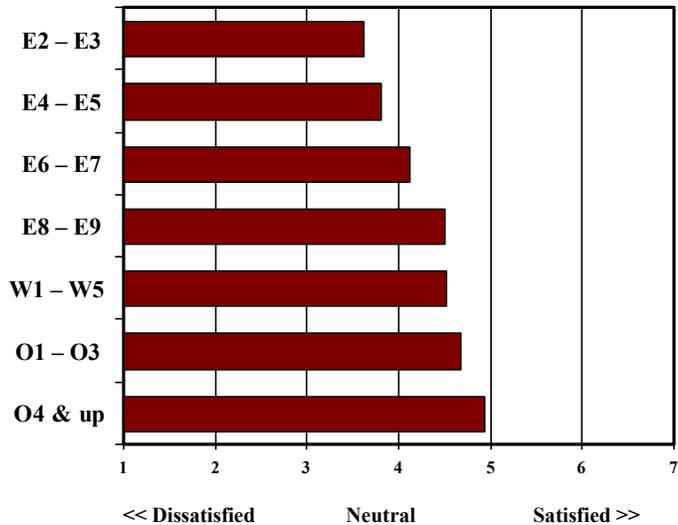


Figure 3-97. Satisfaction With Pay And Benefits By Pay Grade.

Families at the higher pay grades are demonstrably more satisfied than those at lower pay grades. Each of these overall satisfaction scores can be said to be different from its neighbor pay grades with statistical significance, except for the E8-E9 and W1-W5 pay grades, which satisfactions are the same. More Marine Corps pay is related to greater satisfaction with the family financial situation.

However, a family's financial situation also depends on any Pay and Benefits accruing to the spouse or other family members who may also generate income. To test the hypothesis that satisfaction with financial situation also depends on the fraction of income provided by the pay of the Marine, we looked at the overall domain satisfaction in terms of the income groups identified in question 2 of the Pay and Benefits section of the family questionnaire (Appendix C). Figure 3-98 displays these results.

Figure 3-98 shows that the overall family satisfaction with their financial situation depends on the fraction of income provided by the Marine pay. The least satisfied, in fact dropping into the dissatisfied range, are those families depending on Marine pay completely for their income. The two most satisfied groups, not statistically different, are those families in which more than 25% of family income comes from outside the Marine Corps.

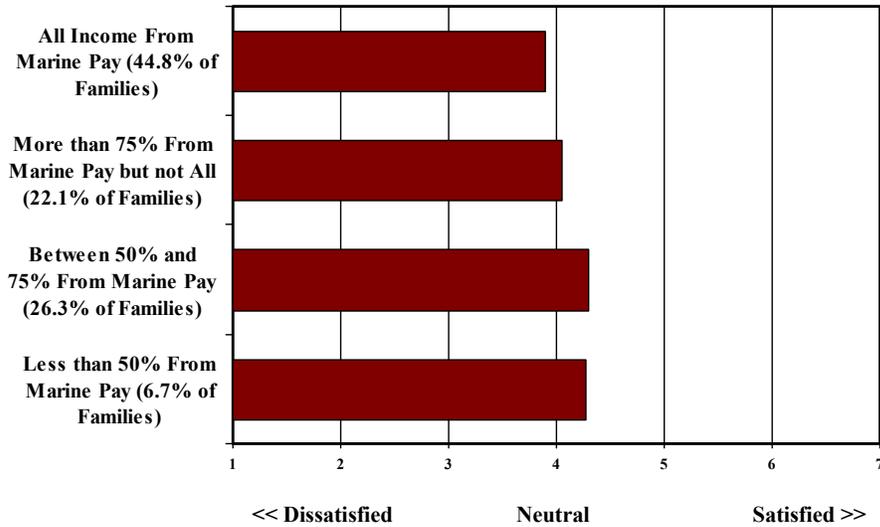


Figure 3-98. Satisfaction With Pay And Benefits By Percent Income From Marine Pay.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Pay and Benefits domain. An exploratory factor analysis indicated that the four aspects are moderately to strongly correlated (.4 to .8) among themselves and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. The least correlated aspect is housing allowance which can be broken out into its own factor with a correlation to the other three-aspect factor of about .6.

Figure 3-99 displays the Pay and Benefits domain aspects. All domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model regression. This set of four aspects accounts for 63% of the variance in the domain satisfaction, a satisfactory value but there might be a missing aspect.

Figure 3-99 shows two key drivers on the dissatisfied side: money for extras and housing allowance. We note that, for Active Duty Marines, the dominant driver of satisfaction with financial situation is money for savings, which is the least satisfied aspect for both Marines and spouses. For the spouses, however, money for savings, although still the aspect with the largest dissatisfaction, did not provide much influence. Dropping it from the regression hardly affected the explanatory power of the remaining aspects, still retaining 63%.



Figure 3-99. Key Driver Diagram For Financial Situation.

Also, money for essentials was more influential for active duty Marines than for their spouses. (Housing allowance was not one of the active duty aspects for the Income and Standard of Living domain.) For the spouses, money for extras is the most important. It would seem that Marine spouses are less concerned than the Marine about the provisions for long-term financial health and more concerned about the immediate standard of living.

To learn more about how Marine Corps benefits help families make ends meet we asked spouses to give their perception of how much money each of five benefits saves them; responses were on a five-point scale ranging from saves me nothing at all to saves me a great deal. The results are displayed in Figure 3-100. Military childcare is reported to be the least cost-saving benefit for those who do use it, while health care and military housing appear to provide the most cost-saving benefits. Health Care is the benefit most used by respondents (96%), while military childcare is the least used benefit (19%).

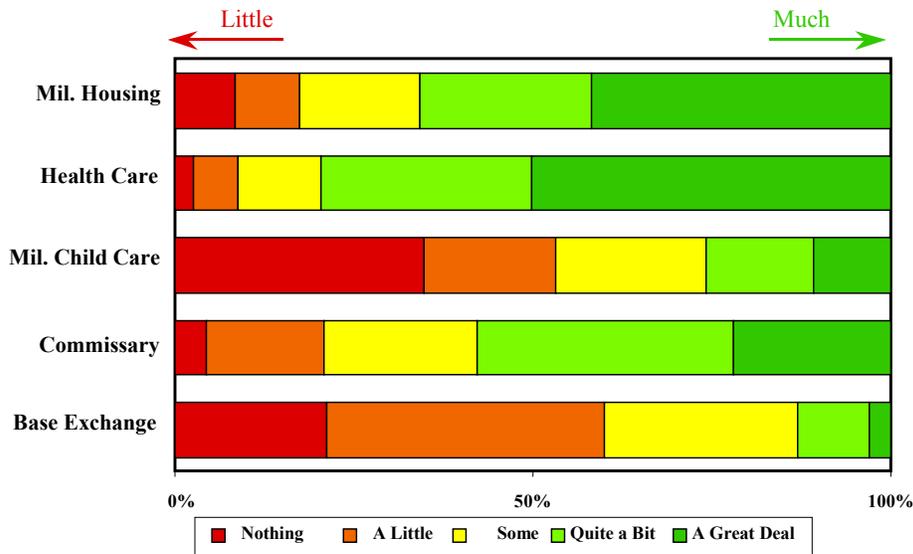


Figure 3-100. Savings Attributable To Benefits.

Domain Conclusions.

Spouses married to Marines in grades E2-E5 are somewhat dissatisfied with their financial situation, while spouses married to Marines of higher pay grades report only being neutral about their financial situation. Satisfaction improves as grade level rises, yet for no pay grade do spouses report, on average, being satisfied with their financial situation. This is also true when we consider families in which the Marine Corps paycheck represents 50% or less of total household income. While satisfaction levels do not break from neutral for families in which additional income is provided (by presumably a spouse's job or a Marine's non-military job), it is clear that the greater the additional monies coming from sources other than the Marine Corps paycheck, the greater the satisfaction level. This leads us to the conclusion that gains in satisfaction with financial situation may be made through more effective support for family member employment (for example, less costly childcare, part-time opportunities, job search/career development educational programs).

Job/Professional Development Domain

Spouses were asked to evaluate their satisfaction with aspects of their job and/or professional development. The overall satisfaction item for this domain asked, "How satisfied are you with your employment situation overall considering all aspects (of Job/Professional Development)?" Therefore, the answer to that question could reflect (1) a mental averaging of the respondent's satisfactions about their Job/Professional Development, or (2) only their satisfaction about their job (under the circumstances that

they do not have an opinion about professional development), or (3) only their satisfaction about their professional development (under the circumstances that they do not have a job).

The composite satisfaction overall was 4.37 which is between the neutral and somewhat satisfied levels. However, there were statistically significant differences depending on the employment status of the spouse. The composite satisfaction overall was 4.63 for the employed, 4.06 for the unemployed outside the home by choice, and 2.96 for the unemployed outside the home by chance. Figure 3-101 compares overall domain satisfaction by pay grade.

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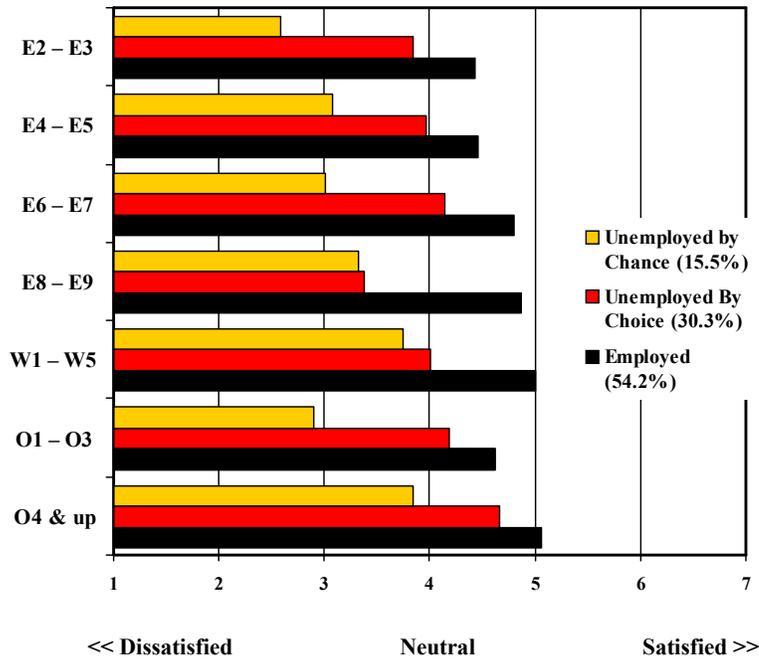


Figure 3-101. Satisfaction With Job/Professional Development By Pay Grad.

In families of the senior officers (O4s and up) and senior enlisted (E6-E7, E8-E9, WOs) employed spouses are more satisfied with their own Job/Professional Development than those at the junior pay grades. Due to the high volatility of the data caused by the relatively small number of responses by pay grade, findings for our other two categories, those not employed by choice and those not employed by chance, are not reliable when examined by pay grade. Only about 23% of those not employed by choice answered the overall satisfaction question (this implies that for 77% of them satisfaction with professional development was not applicable).

The best that might be said is that, for those unemployed by choice, there is a reliable difference in professional development satisfaction between all officer pay grades taken

together and all enlisted pay grades taken together, with officer spouses being more satisfied with professional development than enlisted spouses. The best that might be said for those unemployed by chance is that there is a reliable difference between the spouses of the senior officers and enlisted and the junior officers and enlisted. The spouses of the senior Marines are more satisfied with Job/Professional Development than the spouses of their junior counterparts.

In order to indicate which aspects of domain satisfaction are key to the reported overall domain satisfaction, we undertook a multiple regression and factor analysis of the Job/Professional Development domain. An exploratory factor analysis indicated that the seven aspects are from weakly to strongly correlated (.25 to .75) among themselves and that the overall domain satisfaction score represents a consistent measure of domain satisfaction. Two aspects correlate well to each other but not to the remaining five; they are educational costs and Marine Corps help in finding a job. They can be broken out into their own factor with a correlation to the other five-aspect factor of about .55.

Given the range of correlation between aspects, we divided the respondents into two groups: the employed and the unemployed, without distinction concerning the two types of unemployed groups. We expected the employed to give their satisfactions about their Job/Professional Development. We expected the unemployed to give only their satisfaction about their professional development. Figure 3-102 displays the Job/Professional Development domain aspects for spouses who are employed. All domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model regression. This set of seven aspects accounts for 74% of the variance in the domain satisfaction, a good value.

Figure 3-102 shows three key drivers, two of which have satisfaction values just below average (as compared to the overall satisfaction level): pay and benefits and ease of getting hired (in other words, ease of finding a job). The third key driver, job opportunities, was just above the overall satisfaction mark. This cluster is the major part of one of the domain's two factors and would seem to offer opportunities to improve the satisfaction with this domain. The least satisfied aspects, educational costs and Marine Corps help in finding a job, are well into the dissatisfied region, represent the same domain factor, and are also the least influential. In particular, there was a wide uncertainty in the path model as to the influence of Marine Corps help in finding a job. We found that by setting it to zero, the remaining six aspects still accounted for 74% of the variance in the domain satisfaction. It is as if, for employed spouses, any lack of expected help by Marine Corps in finding a job has been forgiven.

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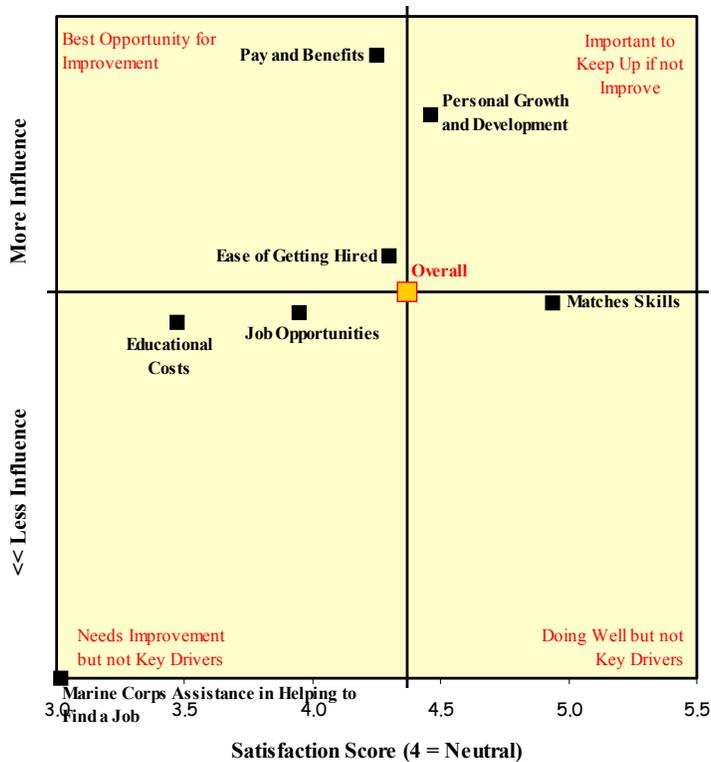


Figure 3-102. Key Driver Diagram For The Job/Professional Domain For Employed Spouses.

For the unemployed spouse the situation is different. Figure 3-103 displays Job/Professional Development domain aspects for spouses who are not employed. All domain aspect and overall satisfactions are located in the horizontal above their individual satisfaction scores and in the vertical in proportion to their influence on the overall satisfaction based on the results of a path model regression. The job-related aspects have been eliminated, leaving a set of four aspects which account for 51% of the variance in the domain satisfaction, a value which would indicate, given the 74% for employed spouses, that an important aspect of satisfaction with their employment situation is missing.

Figure 3-103 shows one key driver, the job opportunities available to you, with a satisfaction value just below average (as compared to the overall satisfaction level) but all aspect satisfactions and the overall satisfaction are well into the somewhat dissatisfied region with the overall satisfaction higher than all the aspects, another indication that an important aspect is missing. The least satisfied aspect, Marine Corps help in finding a job, is bordering on the dissatisfied region, and is a distinct contributor to the overall satisfaction. It is as if, for unemployed spouses, the lack of expected help by Marine Corps in finding a job has not been forgiven.

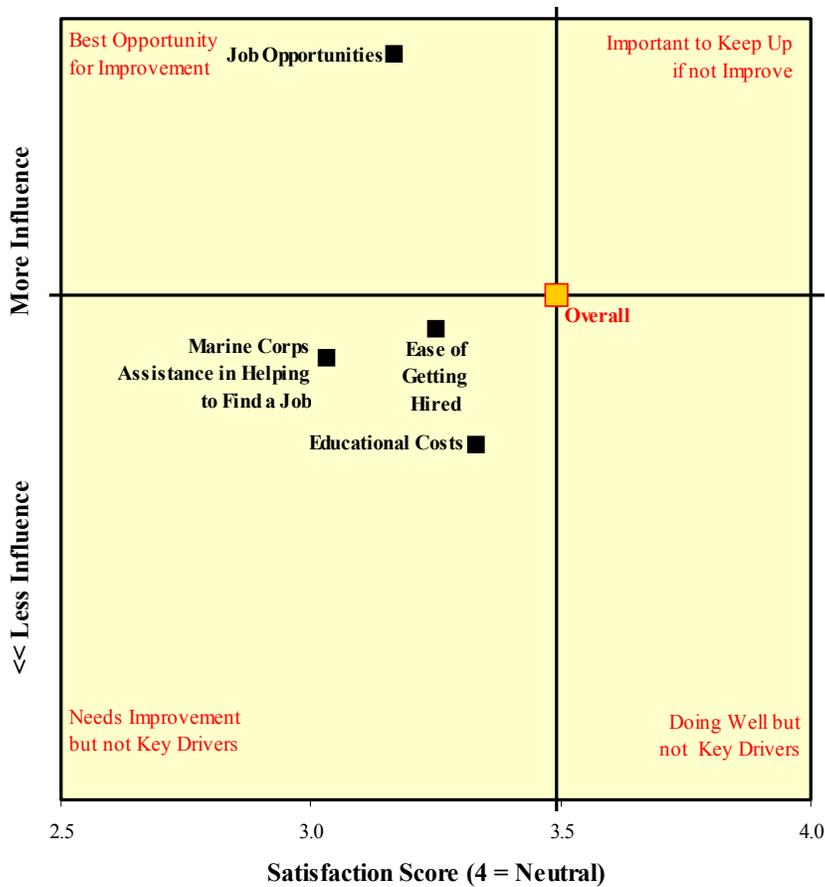


Figure 3-103. Key Driver Diagram For The Job/Professional Development Domain For Unemployed Spouses.

Domain Conclusions.

In general, employed spouses report being somewhat satisfied with their employment situation. Satisfaction with employment situation is at a neutral level overall for those who are unemployed by choice. Satisfaction with employment situation is in the dissatisfied to somewhat dissatisfied range for those that are unwillingly unemployed. Due to the phrasing of the overall satisfaction question it is difficult to evaluate whether it is the quality of their professional development activities or the frustration of simply not having a job (and wanting one) that is driving their dissatisfaction. We do know that the job opportunities drive overall satisfaction with employment for all unemployed. One interesting finding is that the majority of respondents (64%) did not evaluate the Marine

Corps assistance in helping them find a job, but of those who did, the majority of responses were on the dissatisfied end of the scale.

Recall that the Job/Professional Development domain is one of the top drivers of spouse overall quality of life (for spouses without children it is second and for spouses with children it is fourth). In addition, spouse satisfaction with Marine Pay and Benefits (another key driver, third for spouses without children and second for spouses with children) is impacted by the percentage of income that comes from other sources besides the Marine's pay. Thus, it is clear that Marine Corps support of spouse employment would improve spouses' quality of life overall. This could even be true for spouses who are currently unemployed by choice, who might gain satisfaction from educational advancement, or classes on how to bring in a small supplemental income through part-time, flexible employment opportunities.

Life as a Whole or Global Quality of Life

The life as a whole assessment is a weighted composite of three measures: one comes from the life as a whole section at the beginning of the survey instrument, and two from the life as a whole section at the end. These are described in Appendix D (based on Appendix C of the 1998 Quality of Life study that included the method of computation) as life as a whole 1 and the Satisfaction with Life Scale. Since the Satisfaction with Life scale consists of 5 questions, we used the third question that explicitly asks about life satisfaction as a separate third measure as well as in combination with its four scale mates.

The composite family member Global quality of life is 4.94. Figure 3-104 displays Global quality of life by pay grade.

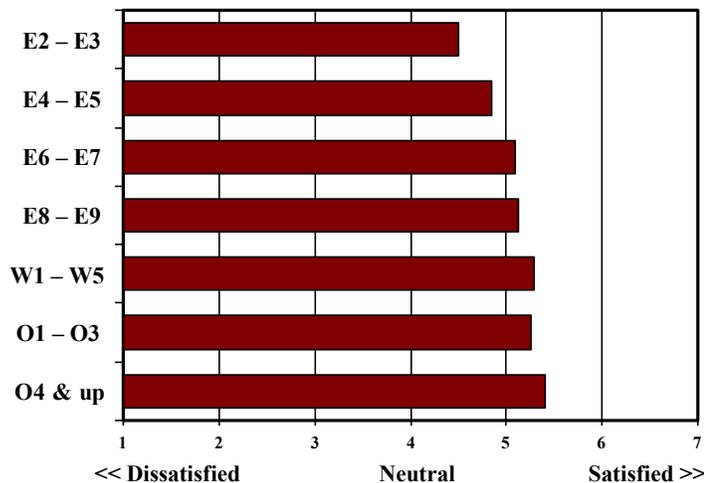


Figure 3-104. Global Quality Of Life Assessment By Pay Grade.

In general, Figure 3-104 indicates that spouses are somewhat satisfied with respect to Life as a Whole. Also the trend is for increasing Global for increasing pay grade with a dip in the O1–O3 band likely due to time of service (insufficient time for spouse acclimation to Marine Corps.)

Since spouses are almost completely (99%) female, we do not display Global quality of life by gender. There was no question regarding race in the demographics section of the family member questionnaire, so we were unable to display Global quality of life by that category. However, we can distinguish between those with children and those without, and between those living with their Marine and those who are not. These results are reflected in Figure 105.

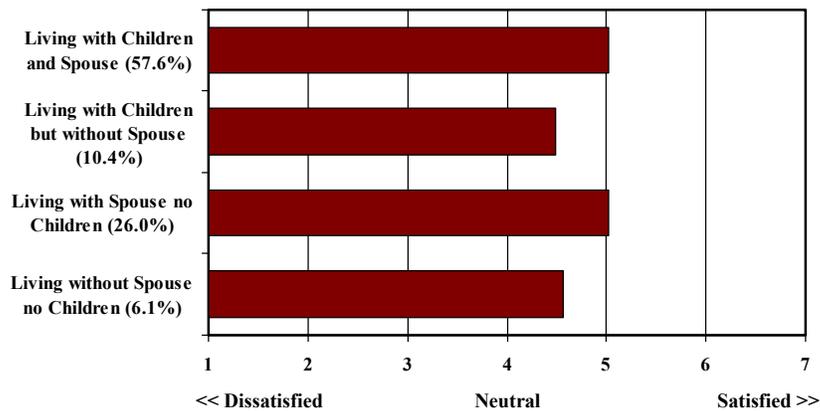


Figure 3-105. Global Quality Of Life Assessment By Family Situation.

The Global quality of life when a family is living with their Marine is 5.02 whether there are children in the family or not. When a family is not living with their Marine, the Global quality of life falls to 4.52 (the difference between children and no children is not statistically significant.) While statistical significance testing allows us to assess that there is a reliable association between the presence of the Marine in the household and family Global quality of life, we also wanted to know something about how much association exists so that it could become more meaningful.

One way we can further illuminate these findings is to consider the strength of the association between having the Marine present in the household and family Global quality of life, that is, we will examine the effect size of this relationship. The effect of the treatment on the family of having the Marine removed is a negative one of medium size in terms of Cohen's *d*: with a standard deviation in Global quality of life of 1.29 we compute $d = .388 [= (5.02 - 4.52) / 1.29]$ and the effect of removal is to drop family Global quality of life to about the 35th percentile of the distribution of family Global

quality of life of the families living with their Marine. This is usually considered to be an effect of medium size in the social science literature.

In order to indicate which domain satisfactions are the key drivers of the Global quality of life assessment, we undertook a factor analysis of the domain satisfactions and a multiple regression of the Global quality of life assessment over the domain satisfactions for Marine spouses. Not unexpectedly, based on the results of the previous two Marine quality of life studies, there was a difference between those with children and those without children.

The results for those with children are displayed in the key driver diagram of Figure 3-106, and those without children in Figure 3-107.

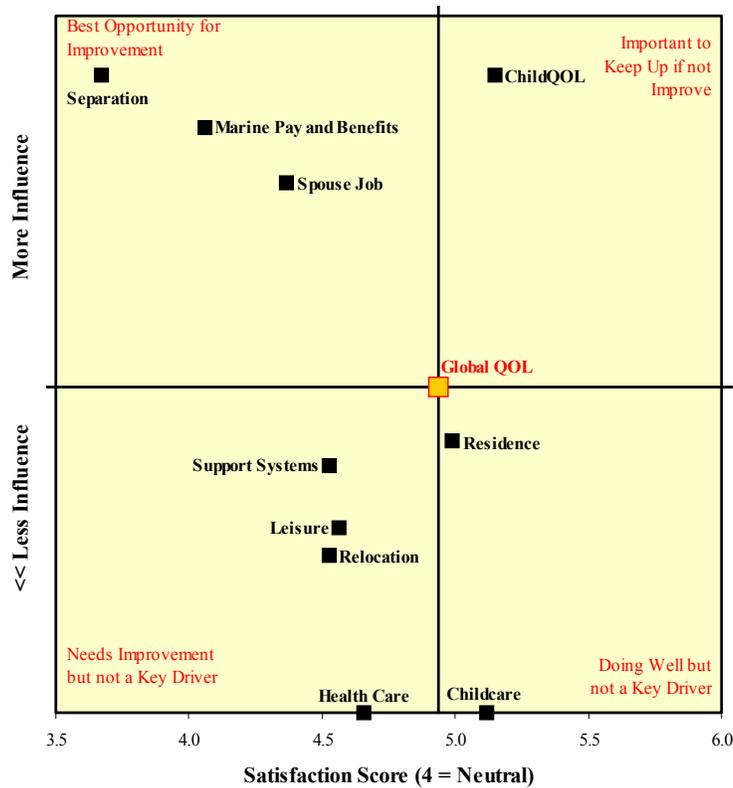


Figure 3-106. Key Driver Diagram For Global Quality Of Life With Children.

The overall domain satisfactions are located in the horizontal above their individual satisfaction scores. The domains are located vertically in relation to their influence on the Global quality of life assessment as indicated by the regression analysis.

As a whole, the domains used in the family member questionnaire explain only about 36% of the variance observed in this Global quality of life assessment, a much lower value than the 70% or so for the domains used for Active Duty Marines. There appears to be more going on with the Global quality of life from the family point of view than what is covered by the domains. The fact that this was not captured may have resulted from the decision to reduce survey instrument length discussed in Chapter 2.

Also, there may be a more substantial effect due to the presence of children in the family, which might be biasing the accuracy of the predications.

There are six key drivers, four with lower satisfaction scores than the Global quality of life level, and thus offering the best opportunity for improvement in Global quality of life. The largest single influence is the spouses' satisfaction with Children Quality of Life, but this is into the satisfied range indicating that spouses are pleased about the military environment for raising children. The aspects offering the best targets for improvement are:

- ◆ Satisfaction with Marine Pay and Benefits
- ◆ Satisfaction with Separation
- ◆ Satisfaction with Spouse's Own Job/Personal Development

Health Care, Childcare, and Relocation seem to have no influence according to the path model used for the regression; their influences and correlations being absorbed into the key drivers. In order to investigate the relationship among domain influences, we undertook a factor analysis eliminating these domains, which had no statistically significant impact on Global quality of life.

An obliquely rotated factor analysis segregated the remaining domains into two strongly correlated ($>.7$) factors. The first factor is highly correlated with the key drivers of Pay and Benefits, spouse's job/personal development, and the support systems (and includes the domains of Residence and Leisure and Recreation). The second factor is highly correlated with the domains of Separation and Child Quality of Life, ironically the least and best satisfied of the key drivers. With respect to the regression, the five top drivers account for 35% of the variance in the Global quality of life assessment, the four top drivers accounting for 34%. Therefore, caution should be used in utilizing key driver results as they present at best a fairly incomplete picture of what drives Spouse quality of life.

To assess if the reason for the low percentage of explanation of variance is somehow related to a lack of sufficient domains involving children, we looked at key drivers of Global quality of life for families without children. The results are displayed in the key driver diagram of Figure 3-107.

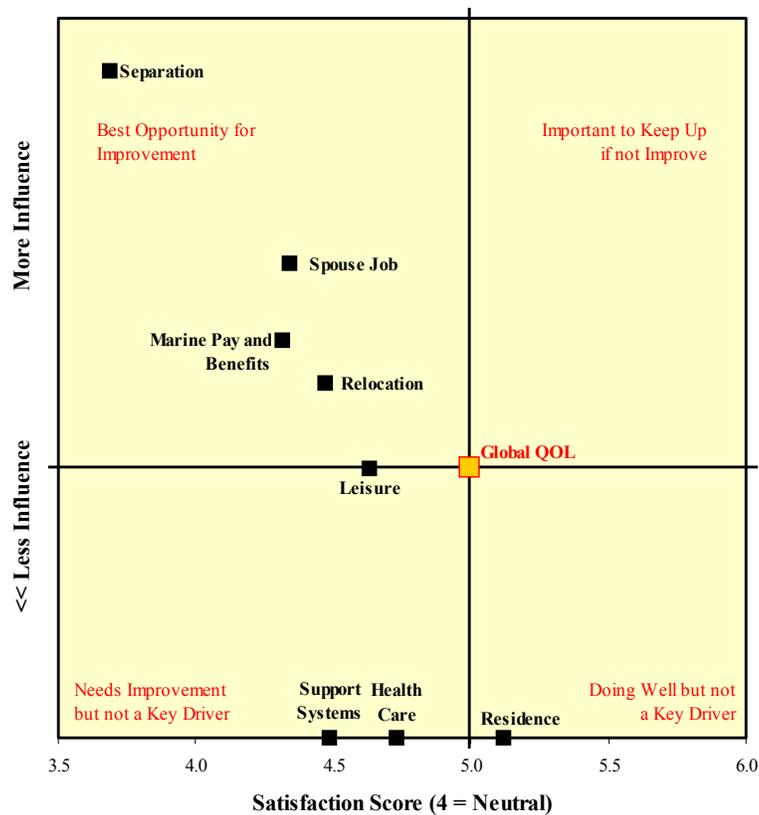


Figure 3-107. Key Driver Diagram For Global Quality Of Life Without Children.

The overall domain satisfactions are located in the horizontal above their individual satisfaction scores. The domains are located vertically in relation to their influence on the Global quality of life assessment as indicated by the regression analysis.

As a whole, the domains used in the family questionnaire again explain only about 36% of the variance observed in this Global quality of life assessment, a much lower value than the 70% or so for the domains used for active duty Marines, and equal to that for families with children, as already discussed. There appears to be more going on with the Global quality of life from the spouse point of view than what is covered by the domains, and it would seem to have nothing at all to do with children.

Comment: I lost the thread here and needed a reminder

There are four key drivers all with lower satisfaction scores than the Global quality of life level and thus offering the best opportunity for improvement in Global quality of life:

- ◆ Satisfaction with Separation
- ◆ Satisfaction with Marine Pay and Benefits
- ◆ Satisfaction with Spouse's Own Job/Personal Development
- ◆ Satisfaction with Relocation

Health Care, Support Systems, and Residence seem to have no influence according to the path model used for the regression; their influences and correlations being absorbed into the key drivers. In order to investigate the relationship among domain influences we undertook a factor analysis eliminating these domains that had no statistically significant impact on Global quality of life.

An obliquely rotated factor analysis segregated the remaining domains into two strongly correlated (>.7) factors. The first factor is highly correlated with the key drivers of Separation, Pay and Benefits, and Spouse's Job; the second factor is highly correlated with the domain of relocation (includes leisure). With respect to the regression, the four top drivers account for 34% of the variance in the Global QoL assessment. Again, caution should be used in utilizing key driver results as they present at best a fairly incomplete picture of what drives Spouse quality of life and are only relative to the drivers included in the regression. Since Separation is such a dissatisfied dominant driver, the missing ingredient might be factors which ameliorate the effects of separation, such as the support system offered by friends, relatives, and groups not formally part of the Marine Corps support services.

Domain Conclusions.

The impact of Children's QoL on family member Global QoL is substantial for those who have children that live with them, and positive satisfaction scores indicate that the Marine Corps is on the right track in this area. In general, Global quality of life appears to be, given this limited set of drivers, most influenced by the satisfaction with Separation, Pay and Benefits of the Marine, and the spouse Job/Professional Development, all areas in which satisfaction levels are low to neutral. On the whole though, spouses are somewhat satisfied in their assessment of family Global QoL, with satisfaction trending upward as the Marines' time in service increases. This quantitative data confirms the comments and opinions given during the focus groups undertaken prior to the distribution of this questionnaire. Spouses' were eager to voice complaints, but were proud to be part of the Marine Corps, and, on the whole, willing to accept what was necessary to support their Marines continuing as part of the Marine Corps.

Measures of Military Importance

The last domain section of the family member survey instrument (Marine Corps Life and You) contains a multi-part question to report the extent to which the topics of the nine domains influence the spouse's desire to remain a part of the Marine Corps. The strength and direction of influence of each domain was indicated on a seven-point scale: the first point was labeled Stay in USMC and the last (seventh) point was labeled Leave USMC. The points at the ends were meant to indicate the direction of influence and to represent

the strongest influence in that direction. The points in between were meant to reflect various strengths of influence intermediate to the strongest with the central (fourth) point labeled no influence in either direction.

Figure 3-108 displays the results for the retention intentions question. The negative responses are to the left and the positive responses are to the right in proportion to their grade weighted numbers.

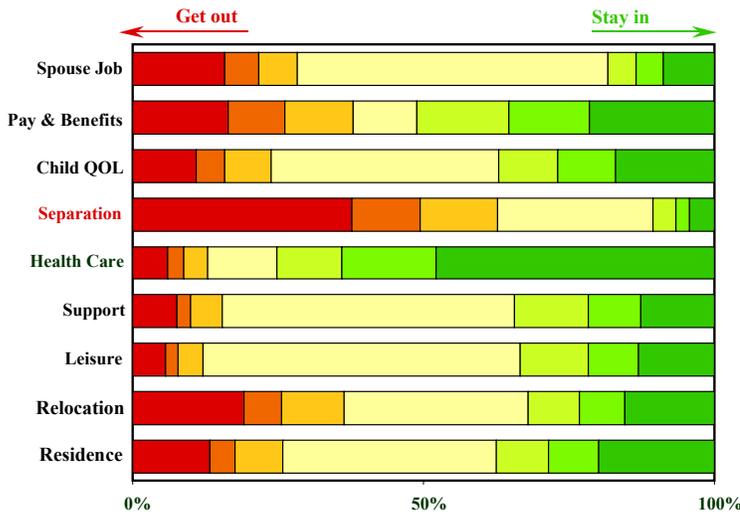


Figure 3-108. Reported Impact Of Domain Topics On Retention.

The biggest negative impact on retention can be seen to be Separation with over 60% in the leave Marine Corps region. This is decidedly negative relative to the next most negative responses to Relocation and Marine Pay and Benefits, which are about 36½% negative. The largest positive impact on retention was from the Health Care domain with more than 75% in the stay with Marine Corps area. The next most positive was Marine Corps Pay and Benefits at 52% positive. The third tier of positive responses was for Children QoL and Residence at about 37½% positive. Another question in the same section concerned the retention desires of the spouses regarding a future with the Marine Corps ranging from stay until retirement to leave as soon as s/he can.

Combining the two stay (or retirement) responses, combining the two leave Marine Corps responses, and retaining the Don't Know response, Figure 3-109 displays (A) the spouse responses by pay grade and (B) the parallel active duty married Marine composite responses to the same question.

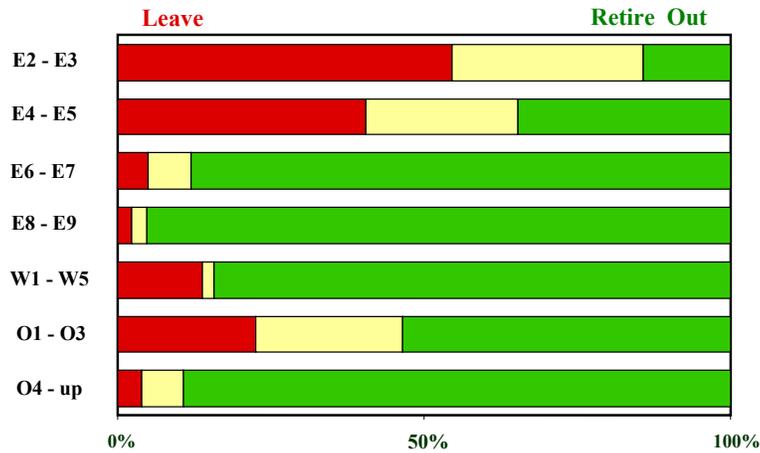
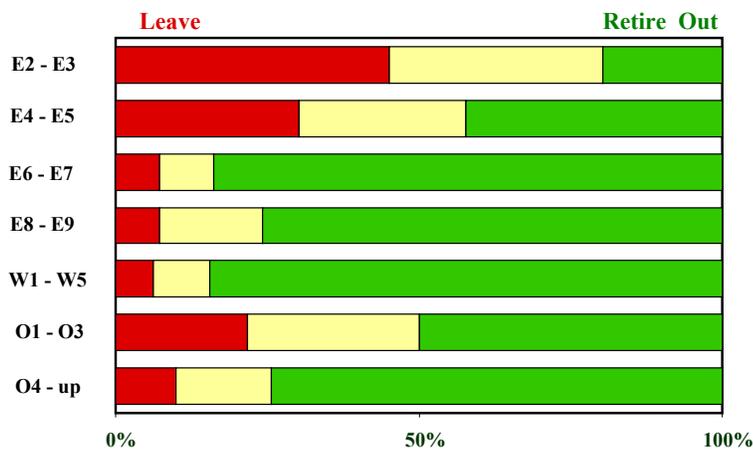


Figure 3-109 (A) Spouse Retention Desires.



(B) Marine Retention Intentions

Figure 3-109. Spouse Retention Desires/
Marine Retention Intentions.

It can be seen that these two sets of responses are very similar. To encapsulate the differences, we might say that the younger Marines have a greater tendency to want to remain in the Marine Corps than their spouses, and that the older spouses tend to want to remain with the Marine Corps more than their Marines.

Treating the spouses retention desires as an objective measure, we found it correlated very weakly to the domain satisfactions, except the domains of Separation, Children QoL, and Pay and Benefits to which it was weakly correlated (.2 to .4). It was also weakly correlated (.29) to Global QoL. In fact, together, the domains of life and Global quality of life explain only 15% of the variance in retention desires as it is currently measured, a very poor showing. This is much poorer than the already marginal showing of 35% for active duty Marines with respect to their domains. The remainder of the variance in retention desires was due either to missing domains, missing other factors (such as the failure to link spouse desires with Marine intentions), or to sheer randomness. The two most important influences on spouse retention desires were Global quality of life and the Separation domain, these two accounting for 13% of the variance in retention desires. This relationship will be more fully explored in Chapter 4.

CHAPTER 4 – QUALITY OF LIFE MODELS

The Structural Equation Models

Background

Understanding the antecedents and consequences of quality of life in the Marine Corps necessarily involves a complex set of factors, many of which have been discussed one at a time in previous sections. The concept of life domain has been used throughout these discussions as a framework for presenting results in a way in which the data can be converted to actionable recommendations.

In real life, however, individuals' lives are not so clearly compartmentalized: concerns in one area of life frequently spill over to affect other areas. In fact, previous Global Quality of Life sections have discussed how, through factor analysis, some life domains can be construed to cluster together into life spheres, such as the social sphere represented by the Residence, Leisure and Recreation, and Income domains, and the Marine persona sphere represented by the Self, Military Job, and Health domains.

To fully understand the relationships among domains as well as their combined effects on Global Quality of Life, and ultimately on military outcomes, it is advantageous to consider all relevant factors and their interrelationships simultaneously. This is best achieved through the use of Structural Equation Modeling, an analytic technique that requires statistical tools that go beyond the conventional regression analysis and analysis of variance utilized in domain analyses heretofore. Such a technique was used by both prior Marine Corps QoL studies, the 1993 QoL study (*Kerce, 1995*) and the 1998 QoL study (*White, Baker, & Wolosin, 1999*).

The goal of this chapter is primarily to reconfirm the structural equation models that came out of the 1998 QoL study based on applying updated survey data to the models originally developed in the course of the 1993 QoL study. In addition, this chapter reports whatever evolution of those models might be indicated by the 2002 survey data.

What is Structural Equation Modeling?

Structural Equation Modeling (SEM) allows us to look at not only a single relationship between an independent variable and a set of dependent variables, as in a regression, but also to examine a series of relationships simultaneously, in a sense a set of linked regressions which might even include feedback loops. However, even linked regressions have limitations in social science applications because most social science theories and models are formulated to include theoretical constructs, such as quality of life, which are neither objectively measurable nor perhaps even directly observable.

In social science, multiple indicators of such theoretical constructs are postulated. These indicators are the directly measured surrogate variables used to study the relationships among the theoretical constructs. (With just one indicator a theoretical

construct is no longer theoretical — it becomes, in essence, equivalent to the observable indicator.) The scientific goal is to understand the causal relationships among the theoretical constructs. Of course, these relationships can only be established as more or less reasonable relative to some alternative specification; they can never be considered to be proven. SEM is the foremost tool that has evolved, primarily over the past forty years, to assess how good of a job a theory is doing with respect to explaining the relationships of interest.

Several software packages have been available for developing and testing structural equation models. Among the best known are LISREL (perhaps the best known), AMOS, and EQS. The package utilized in this 2002 QoL study is EQS 6, a later version of the EQS system that was used in the 1998 QoL study. EQS has been reported to be the most flexible of the packages.

As it happens, in order to perform the domain regressions in Chapter 3, SEM was used in its simple single regression form: (1) the overall domain satisfaction was formulated as a linear equation in the aspect satisfactions, and (2) each of these satisfactions was a directly measured variable coming from the response, interpreted on a seven-point Likert scale, to its own specific question in the 2002 QoL survey instrument. This was done through the EQS 6 system because it allowed the study team to incorporate pay grade weighting, to handle missing values through pair-wise present covariance calculations, and to compensate for non-normality in the Likert-scale distributions using the latest (as yet unpublished) robust methods built into the EQS 6 system.

There is another important aspect to structural equation modeling besides being able to handle a linked mix of relationships among observable and unobservable (typically called latent) variables. Unlike the physical sciences, there are few places in social science, beyond economics, where a case can be made successfully that directly observed variables can be measured without appreciable error. In this study it would be far-fetched to postulate that the assessments of satisfaction, happiness, and expectation are measured perfectly. For example, given that the "true" value of domain satisfaction will vary from individual to individual, there is no way with one measurement to separate the "true" value from measurement error. The result in a multiple regression of domain satisfaction over aspect satisfactions is that some computed effect coefficients will be larger than they should be, and some smaller, without knowing which is which, or how much is attributable to measurement error.

The classic route to reducing measurement error is to average multiple measurements. For example, in the case of the Global Quality of Life regression (performed as a single SEM) the cognitive, affective, and expectancy measures were averaged for each domain to bring into being a set of domain quality of life values. In this case the theoretical construct of domain Quality of Life, designed to capture more or less the common ground of the domain cognitive, affective, and expectancy assessments, was no longer treated as a latent variable but "objectivized." The domain QoLs could then be related, under

normal regression, to a similarly “objectivized” Global Quality of Life value constructed as a six-component average following Appendix D.

When there are latent variables in a structural equation model, measurement error can be teased out from the multiple indicators; it is more or less extracted from the uncorrelated portion of the indicators. SEM systems will compensate for this measurement error by partitioning the variance of a latent variable into "true" variance and "error" variance and only use the "true" portion when computing effect coefficients among variables. It is known that three indicators of a latent variable are sufficient to have a complete solution to the measurement model (see *Bollen (1989)*) and that two indicators will usually work in practice since there are typically several latent variables.

Note that SEMs employing latent variables are data expensive because the guidance for a SEM solution is to have 10 cases per variable (indicators are also variables). When there are too few respondents in a subgroup under study, typically under 200 in our SEMs, we "objectivize" Domain and Global Quality of Life. As a result, in order to appropriately compare SEMs across all respondent groups, Domain and Global Quality of Life were always "objectivized". For a more analytic, yet accessible, discussion of SEM as it applies to Marine Corps Quality of Life, see the 1998 SEM report of *Craiger and Weiss (1999)*. SEM results from that report were carried over into the 1998 QoL study report (*White, Baker, & Wolosin, 1999*).

Path Diagrams, Variables, and Indicators

The general model and conceptual framework shown in the path diagram from Figure 5 of the 1993 QoL study report, is reproduced in Figure 4-1 on the next page for discussion in the paragraphs below. Note the use of the convention that ellipses represent latent variables and rectangles represent measured, or objective, variables.

Following the 1998 QoL study, the 2002 study team streamlined this general model by eliminating any reference to recent events and objective performance evaluations, as suggested in the 1993 QoL study report itself, by reducing the four indicators of the 1998 QoL study's Personal Readiness factor to three, namely, Organizational Commitment, Adequacy of Training, and Job Problems, and by eliminating factors with no statistically significant influence, namely, (a) the contextual factors, (b) the Person-Environment (PE) Fit indicator, (c) the activity level indicator, and (d) the sociability indicator. We note that PE fit played a role in the 1993 structural equation models but that, as a key ingredient of Military Job domain QoL, it is somewhat duplicative of the Military Job domain.

In addition (1) a self-esteem indicator was added to supplement the optimism indicator; (2) a third indicator was added to each domain QoL, namely, the domain expectancy measure derived from Multiple Discrepancy Theory (MDT) (*Michalos, 1991*); and (3) the civilian/peer comparison measure, incorporated as the sixth Life as a Whole indicator in the 1998 QoL study, was replaced by a Global QoL expectancy measure, similarly from Multiple Discrepancy Theory.

The principal hypothesis underlying the general model is that Global QoL is a function of domain QoL and in turn influences the military organizational outcomes of Retention and Personal Readiness. In this regard, the study team followed the 1998 SEM report in using only the simplest such model that conforms to acceptable levels of goodness of fit under maximum likelihood estimation methods. Model parameters for this 2002 QoL study were evaluated with the robust maximum likelihood estimation methods in the EQS 6 system that allowed the study team to incorporate missing value methods and to compensate for non-normality in the observed variables.

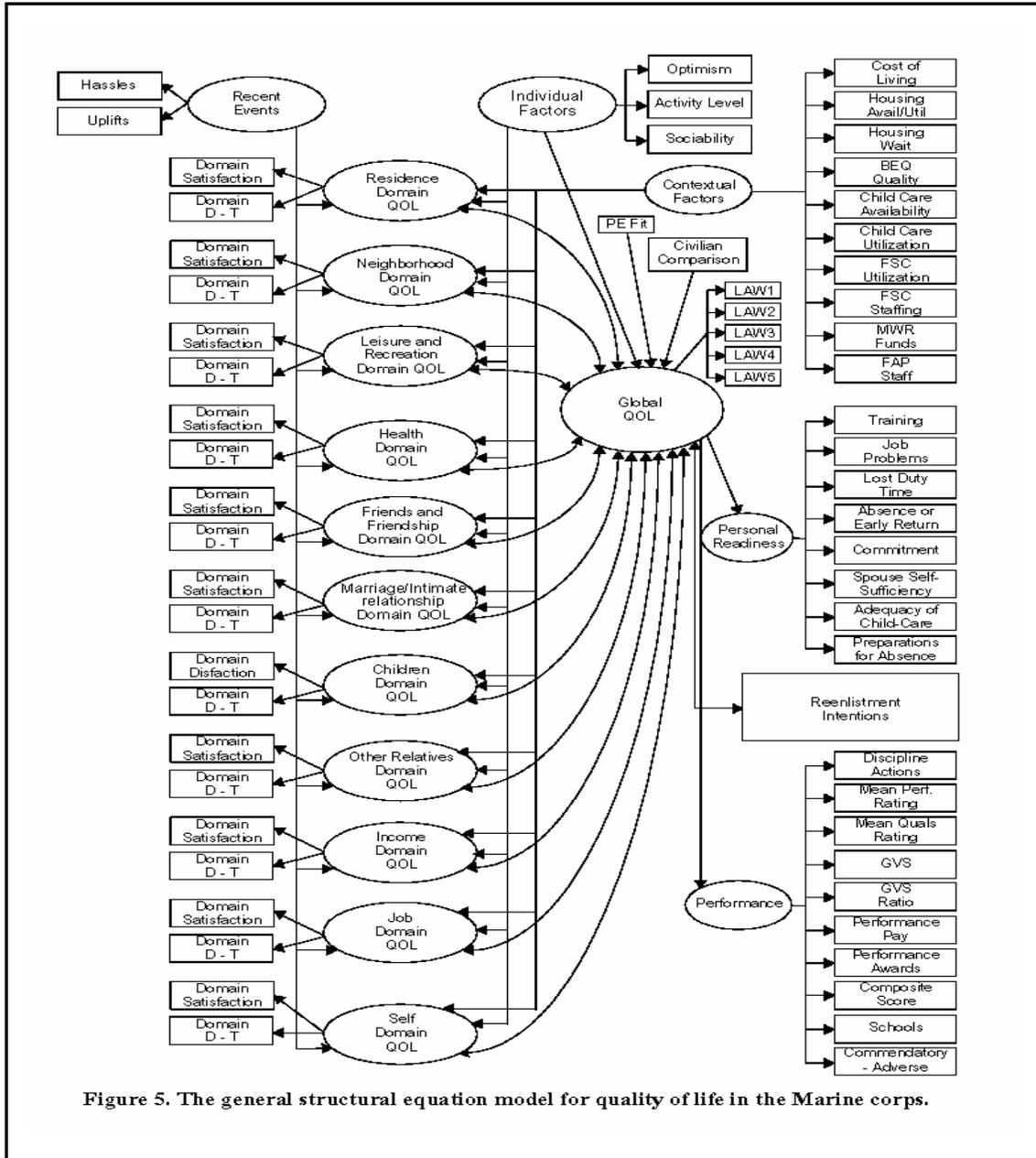


Figure 5. The general structural equation model for quality of life in the Marine corps.

Figure 4-1. General Model From The 1993 Study Report.

In the 1998 QoL study, the most common situation for a simple but effective SEM was to find three domains influencing Global Quality of Life and to find Global Quality of Life alone, without other domains or factors, influencing Personal Readiness and Retention (Career Intentions). (The models reported in the 1993 QoL study were similar in the influential domains but tended to include extra domains or other factors, such as Person-Environment fit.) A typical example from the 1998 Study report is reproduced below in Figure 4-2.

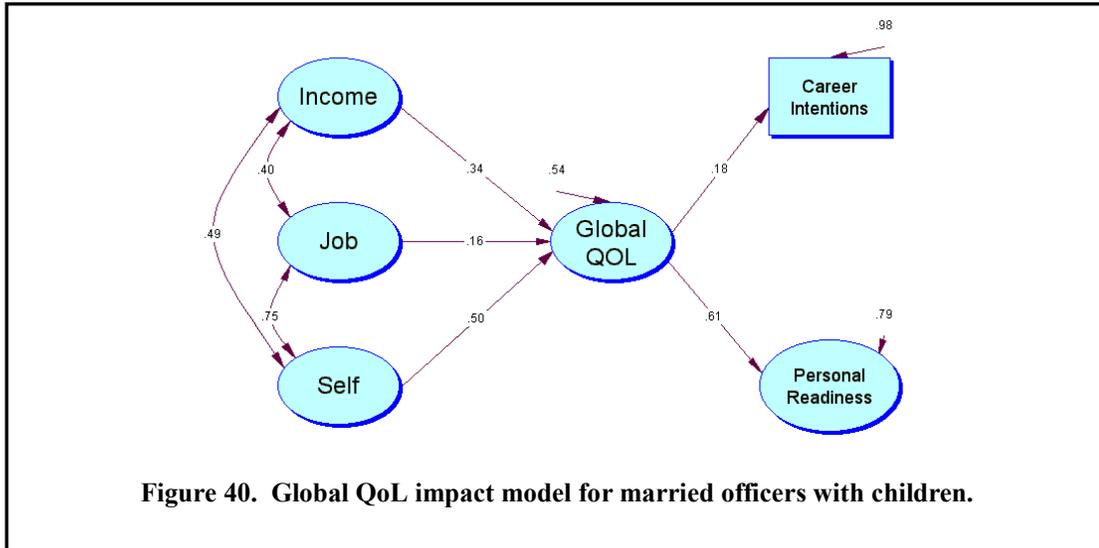


Figure 4-2. Typical QoL Model From The 1998 Study Report.

Figure 4-2 is a graphical representation of a typical SEM path diagram. It shows causal relationships using a one-headed arrow with its normalized regression coefficient indicating the relative strength of the effect of that predictor variable on the predicted variable. That is, looking at the Global QoL oval we see that it is positively impacted by the QoL of three domain (Income and Standard of Living, Military Job, and Self) as indicated by the incoming arrows with positive coefficients. The largest impact comes from the Self domain with its 0.5 coefficient. This 0.5 means that, all other things being equal, a one standard deviation increase in the Self domain QoL will induce a ½ standard deviation increase in Global QoL. The second largest impact is from the Income and Standard of Living domain with its 0.34 coefficient and the third largest impact is from the Military Job domain with its 0.16 coefficient. Other domains have impact as well — but they have sufficiently lesser impact that their explicit inclusion does not materially improve the SEM fit. However, they do have an implicit effect which is more or less "matrixed" into the coefficients of the explicitly-represented domains.

Figure 4-2 shows non-causal relationships using a two-headed arrow with its correlation coefficient indicating the strength of the association between the two variables. These correlations result from of the best fit to the SEM input data represented by the set of all covariances between variables. In addition, the influence of factors not in the model is depicted as a one-headed arrow with no origin, such as the arrow with .54 pointing towards the Global QoL oval. This one-headed arrow is interpreted differently

from those between variables; it is used to compute the SEM equivalent of the regression R^2 . The SEM R^2 is computed as $71\% = 1 - .54^2$ indicating that 71% of the variance in Global Quality of Life is explained by this SEM model and 29% ($=.54^2$) is not explained. This report uses a diamond question mark to represent the unexplained influences. Since we know that the measurement of the quality of life of any one domain is typically positively correlated with any another (see the discussion in Section 3), and that the reasons for such correlation have never been fully discussed, this 2002 QoL study follows the 1993 QoL study convention of not showing the two-headed arrows.

Finally, just as domain QoL impacts Global QoL so does the Global QoL impact the military outcomes of Retention (Career Intentions) and Personal Readiness. With respect to Personal Readiness in Figure 4-2 the arrow from Global QoL to Personal Readiness carries a weight of 0.61, so this SEM says that a one standard deviation increase in Global QoL will induce a 0.61 standard deviation increase in Personal Readiness, all other things being equal. Nevertheless, other influences carry substantial weight since 64% ($=.79^2$) of the variance in Personal Readiness is not explained by Global QoL — some of which is attributable to measurement error. Note that for Career Intentions, although Global QoL has positive impact, it is so small that 96% ($=0.98^2$) of the observed variance in Career Intentions is not explainable by the variance of Global QoL under this SEM.

As in both previous QoL studies, two measures of goodness of fit are reported which are computed and reported as part of the EQS system: the Comparative Fit Index (CFI) and the standardized root mean square residual (SRMSR) that is touted in the EQS program manual to be the most robust measures of fit based on the simulation studies in the literature. The study team followed the 1998 SEM report of *Craig and Weiss (1999)*, and the general guidance in the literature for SEM, by accepting a model when $SRMSR < .05$ and $CFI > .90$. (The CFI used is the one generated under robust maximum likelihood methods). The study team also followed the 1998 SEM report in preferring parsimony over perfect fit — one can almost always get a better fit by piling on more variables.

Model Directionality

Both previous studies of Marine Corps Quality of Life have supported a bottom-up model of the relationship between domain QoL and Global QoL, that is, the direction of causality is from domain QoL to Global QoL. This enabled previous study teams to identify domains for improvement which would positively impact Global QoL. During the 1993 QoL study, attempts were made in the structural equation models to allow relationships to be top-down. It was determined that the bottom-up model had the best fit (*Kerce, personal communication, 2001*). In the case of the 1998 QoL study, it is not known whether alternative direction models were considered.

In this 2002 study the primary goal is again to identify domains which have a direct and significant impact on Global QoL, re-enlistment intentions, and personal readiness. Similar to the 1993 and 1998 QoL studies we found strong bottom-up associations from

various domain QoLs to Global QoL; however, once these associations were identified we performed two top-down tests: (1) reversing the strong bottom-up associations one-at-a-time, and (2) adding, one at a time, a weaker domain association with Global QoL from each direction. In the latter case we found that adding a selected domain as a causal influence on Global QoL (bottom-up) had, in general, no material effect on the fit. On the other hand, allowing Global QoL to causally influence the selected domain (top-down) invariably led to serious model deterioration.

In the case of the strong association reversals, we found none which were as accurate and parsimonious as the corresponding bottom-up model, reinforcing the results of the 1993 QoL study. However, the goodness of fit of a top-down model could often be made to equal that of the corresponding bottom-up model by spurning parsimony and spreading two to five more variables as direct influences on Global QoL (replacing the impact of the reversed domain arrow) and/or on the reversed domain itself. We conclude that the causal influences are still bottom-up even though the 2002 survey instrument, in contrast to the previous instruments, included a new MDT expectancy indicator for each domain.

Only in the case of Production Recruiters could we consistently obtain a bi-directional model on the Marine Corps data with arrows going both ways between the Self domain and Global QoL. These were typically semi-stable — the severing of one peripheral bottom-up connection would ruin a solution. On the other hand we always obtained a bi-directional model for Marine families with children where there is a dual link between children's QoL and spouse QoL. Top-down experiments on these bi-directional models proved fruitless — often not converging at all.

Models for Demographic Groups

In order to make comparisons with the results of the 1998 QoL study, the data for the 2002 active duty Marine samples were partitioned into the following six groups based on marital and parental status and pay grade:

- ◆ Single Officers with No Children
- ◆ Single Enlisted with No Children
- ◆ Married Officers with No Children
- ◆ Married Enlisted with No Children
- ◆ Married Officers with Children
- ◆ Married Enlisted with Children

The study team notes that the stated reason the 1998 QoL study divided the sample between officers and enlisted (the 1993 QoL study did not) was to compensate for the differential in response rate between the two groups which might otherwise be improperly dominated by the officer respondents. The EQS system at that time did not have a respondent weighting scheme.

The data gathered from the Family Member (Spouse) Survey were similarly partitioned into four groups:

- ◆ Officer Families with No Children
- ◆ Enlisted Families with No Children
- ◆ Officer Families with Children
- ◆ Enlisted Families with Children

Weighting of Data by Pay Grade for SEM

Using the same procedures as for the domain regressions conducted in Chapter 3, respondents were weighted by pay grade within the EQS 6 input files to balance their influence in the SEMs to the population of pay grades in the populations being studied.

Indicator Variables for Marine Models

The variables used as indicators for each of the latent variables included in the active duty Marine models have already been described. This section elaborates on some specific indicators.

Global Quality of Life or Life as a Whole. This variable was measured using six quality of life indicator variables, consistent with both prior QoL studies. Included are the Overall Delighted-Terrible Scale (D-T), the 7-item Life Characteristics Scale (LCS), the Index of Well Being, Satisfaction with Life as a Whole, and the 5-item Satisfaction with Life (SWL) scale. The peer/civilian comparison items were replaced with a more contemporary one of Global Life Expectations derived from the Multiple Discrepancy Theory (Michalos, 1991).

Individual Life Domains. The eleven domains used in the two prior QoL studies continued to be employed as shown in Figure 4-1. For each domain, three indicators, vice two in the prior QoL studies, were utilized: (1) overall domain happiness (Delighted-Terrible Scale), (2) overall domain satisfaction, and (3) new in 2002, a measure of domain expectations derived from Multiple Discrepancy Theory. For two domains, Relationship with Children and Health, two additional indicators were also included, satisfaction with children's QoL, and satisfaction with healthcare; these were found to have no influence on Global QoL.

Individual Differences. As initiated in the 1993 QoL study, measures of individual differences were included. For this Study three multiple-item indicators were used: Organizational Commitment, Optimism, and Self-Esteem. Organizational Commitment is incorporated into the Personal Readiness factor and was not used as an indicator in the SEMs. Also, there is a current theoretical debate on whether or not perceptions of quality of life are trait or personality determined.

Retention. A single indicator was used to measure personnel's intention to remain in the Marine Corps. This indicator asked for agreement or disagreement on a seven-point scale with the sentence "I want to remain in the Marine Corps until I'm eligible for

retirement." This replaced the categorical indicator used in the prior QoL studies; they are very strongly correlated, as expected.

Indicator Variables for Family Member Models

This section describes the variables used as indicators for each of the latent variables included in the Family Member models. As with the active duty models, not every graphic shows all domains.

Global Quality of Life or Life as a Whole. This variable was measured using two indicators, the Overall Delighted-Terrible Scale (D-T), and the composite 5-item Satisfaction with Life (SWL) Scale.

Individual Life Domains. Ten life domains were included: these were: Residence, Leisure and Recreation, Healthcare, Relationship with Children, Pay and Benefits, Your Job/Professional Development, Separation, Support Systems, Relocation, and Marine Corps Life and You. For each domain one indicator was utilized, overall domain satisfaction.

Spouse Retention Desires. A single indicator, similar to that used for the active duty Marine samples, was used to measure the spouses' desires for their Marines to remain in Corps until retirement.

ACTIVE DUTY MARINES ASSIGNED TO BASES AND STATIONS

The starting position, for the structural equation models in this section, is to confirm the models produced in the 1998 Study, matched, as closely as the data allowed, the models originated in the 1993 QoL study. However, the 1998 response rates left a sample with 16% officers (who were less than 10% of the population) so the 1998 QoL study divided officers from enlisted and stated:

"A consequence of this is that it is impossible to make one-to-one comparisons between these models and the models described in the 1993 study." (Craiger and Weiss, 1999, p 15)

The pay grade balance for 1993 not only closely matched the 1993 Marine Corps population but also provided over 10,000 respondents. For 1998, the number of respondents was about 4200 (about 4050 with identified pay grades) and, of that, those with large amounts of missing data had to be deleted. For 2002, improvements in SEM technology allowed the study team to better compensate for missing data, and, with only slightly more respondents than 1998, to sometimes utilize twice as many. For 2002, just as for the 1993 study, our sampling plan produced a good pay grade balance for Marines assigned to bases and stations and precise pay grade weighting, although possible, was not utilized.

Finally, the two prior QoL studies used a mix of base and station and independent duty Marines. Whereas the 1993 QoL study was fairly balanced in this regard, the 1998 QoL Study included only about 10% of independent duty Marines — the 2002 population is about 16% independent duty. Since the 1998 QoL study sample was so highly populated by Marines assigned to bases and stations, this 2002 QoL study compares SEMs with the 1998 QoL study using the 2002 base and station database. We think such comparisons are valid, especially for enlisted Marines, where the E2-E3 pay grades, which represent 40% of the Marine Corps, are rarely found on independent duty.

SINGLE MARINES WITH NO CHILDREN

Figure 4-3a displays the 1998 model for single enlisted Marines with no children; the 1998 values precede those of 2002. The fit is actually marginal but better than in 1998 although the coefficients have changed: in particular under the 2002 data, Personal Readiness is less explained solely by Global QoL than it was for the 1998 data — .77 in 1998 to .57 for 2002.

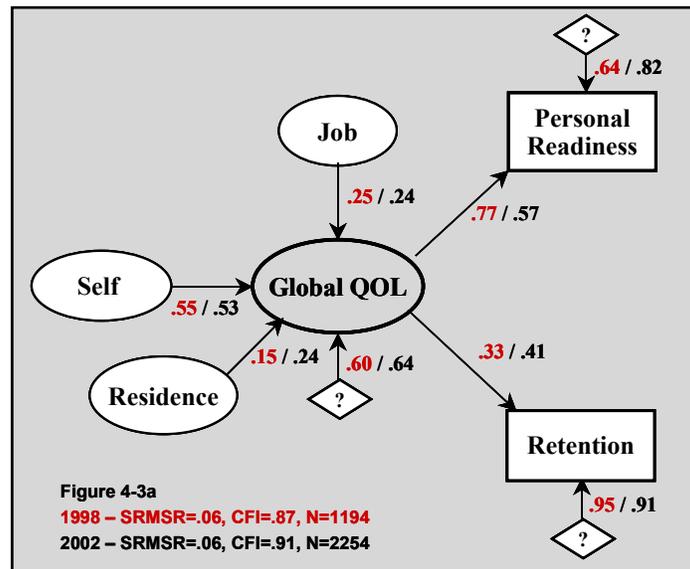


Figure 4-3a. 1998 Model For Unmarried Enlisted Marines With No Children.

For the 2002 analysis, the study team was able to improve the fit, see Figure 4-3b. The 2002 data suggests the Residence domain is no longer a key driver, and the key driver in the social sphere is the Income domain. Also, as shown in the 1993 and 1998 QoL studies, there can be a direct connection between a domain and a military outcome, in this case, Military Job on Personal Readiness. Note also that Personal Readiness impacts Retention; this permits Global QoL and Military Job QoL to influence Retention through Personal Readiness which also contains, in its definition, a substantial component of Organizational Commitment. Uniformly, the influence of unknown factors is diminished with respect to the 1998 model applied to the 2002 data and the military outcomes are better explained.

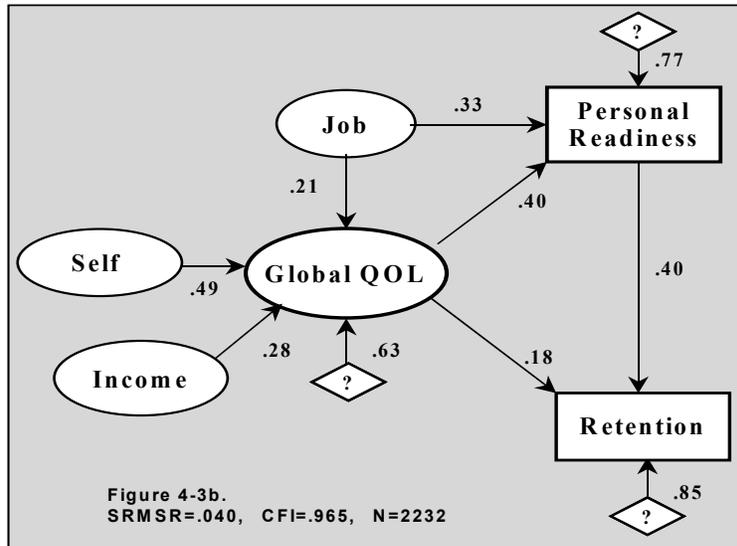


Figure 4-3b. 2002 Model For Unmarried Enlisted Marines With No Children.

Figure 4-3c displays the 1998 model for single officers with no children; the 1998 values precede those of 2002. The fit is poor and this 1998 model cannot be confirmed by the 2002 data.

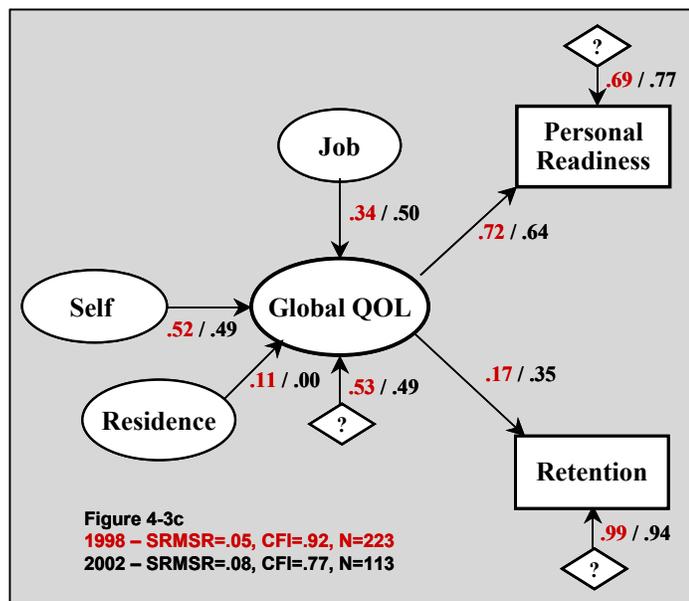


Figure 4-3c. 1998 Model For Unmarried Marine Officers With No Children.

Such poor fits for officers are typical perhaps because the 2002 officer sample was relatively small (even smaller than that of 1998). Figure 4-3d displays an adaptation of the model of Figure 4-3b replacing the Income domain by the Relationship with Relatives domain and dropping the direct influence of Global QoL on Retention. The influence of

unknown factors is diminished and the military outcomes are better explained than with the 1998 model.

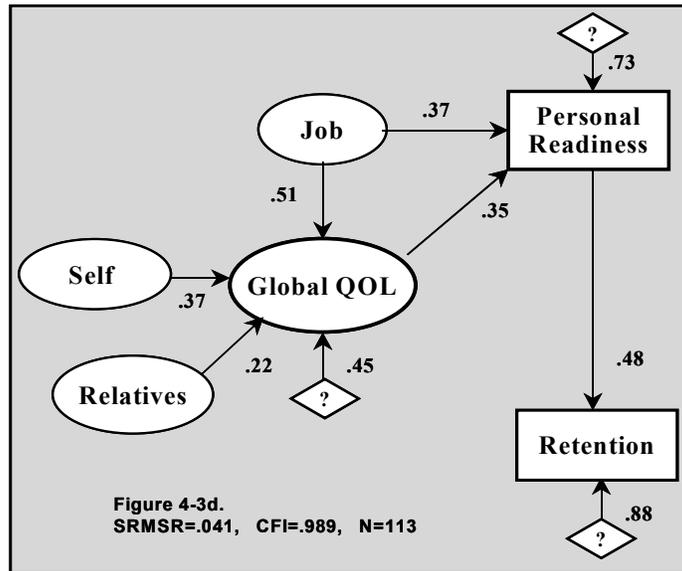


Figure 4-3d. 2002 Model For Unmarried Marine Officers With No Children.

MARRIED MARINES WITH NO CHILDREN

Figure 4-4a displays the 1998 model for married enlisted Marines with no children; the 1998 values precede those of 2002. The fit is mediocre; the 1998 model is not confirmed by the 2002 data.

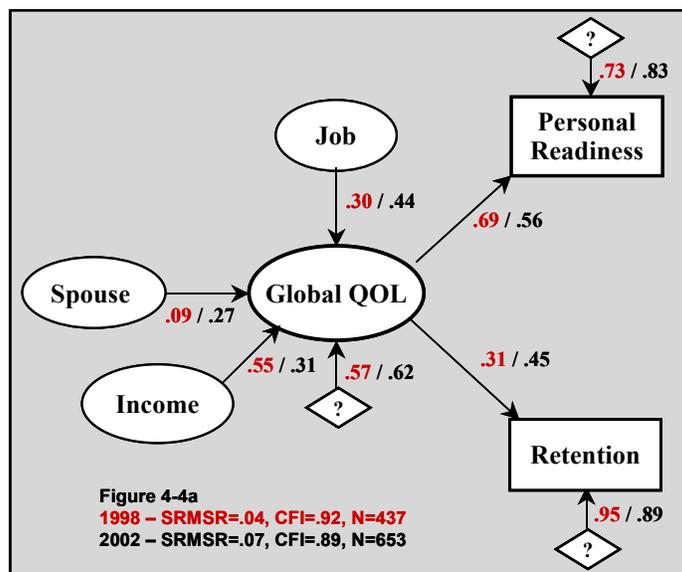


Figure 4-4a. 1998 Model For Married Enlisted Marines With No Children.

Figure 4-4b displays a dramatically improved fit with little effort. The 2002 data suggests that the Income domain is a larger driver than the Marriage domain (which at .09 was marginal anyway) and that married enlisted Marines without children are not so different from unmarried enlisted Marines without children. Uniformly, the influence of unknown factors is diminished and the military outcomes better explained. Although this fit is very good, there is a slightly better fit obtainable by adding back the Marriage domain: its influence is achieved by reducing the influence of Self.

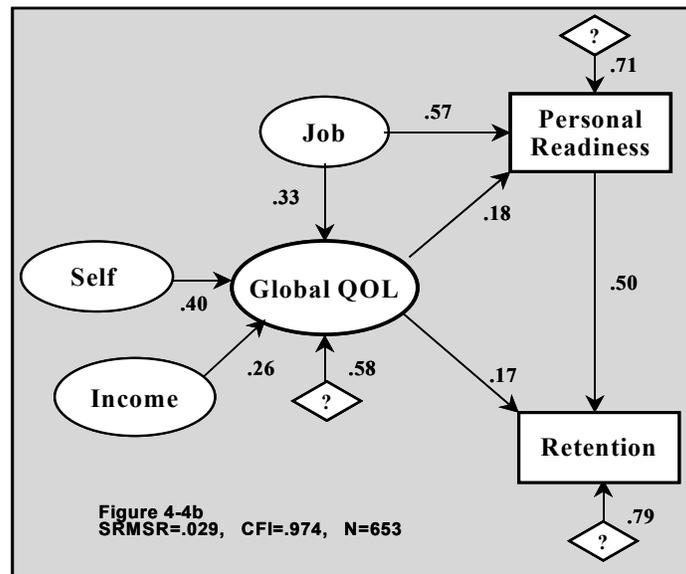


Figure 4-4b. 2002 Model For Married Enlisted Marines With No Children.

Figure 4-4c displays the 1998 model for married officers with no children; the 1998 values precede those of 2002. The fit is quite poor and the 1998 model is not confirmed by the 2002 data.

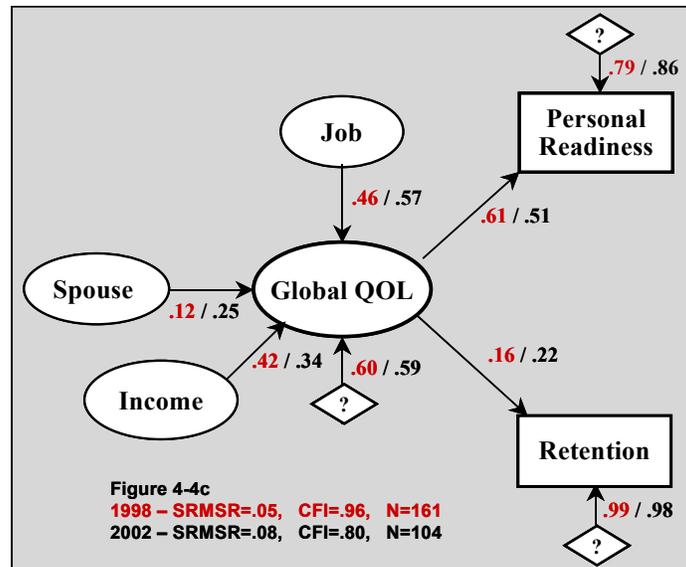


Figure 4-4c. 1998 Model For Married Marine Officers With No Children.

Figure 4-4d displays an improved fit, again with little effort, by modifying the model of Figure 4-4b. All connections between military outcomes and Global QoL are severed, the Income domain is replaced by the Friends domain, and the Military Job domain is allowed to influence Personal Readiness directly and Personal Readiness to drive Retention. The influence of unknown factors is diminished and the military outcomes are better explained than for the 1998 model. We note that this sample of 104 officers is small and that SEM may not be reliable with these few cases.

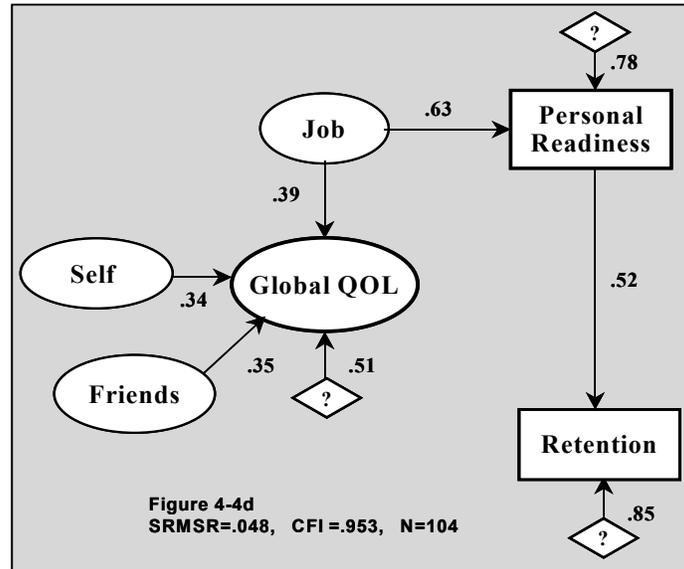


Figure 4-4d. 2002 Model For Married Marine Officers With No Children.

MARRIED MARINES WITH CHILDREN

Figure 4-5a displays the 1998 model for married enlisted Marines with children; the 1998 values precede those of 2002. The fit is marginal with the 1998 data, and worse with the 2002 data, yet the unexplained variance in Retention is distinctly reduced.

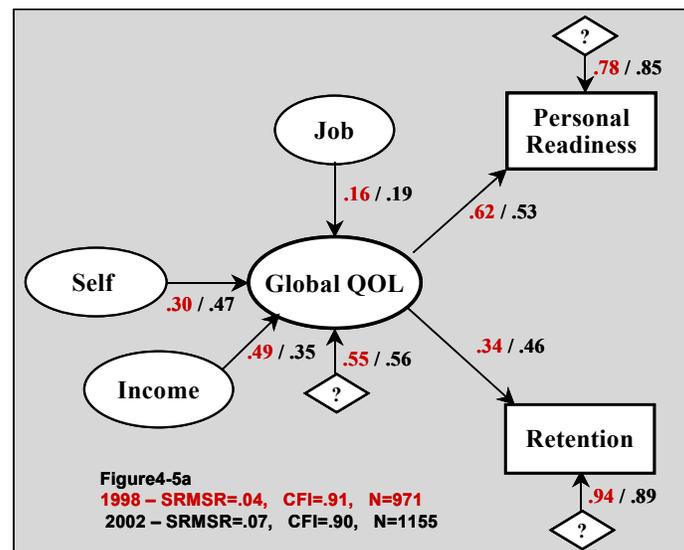


Figure 4-5a. 1998 Model For Married Enlisted Marines With Children.

Figure 4-5b displays a dramatically improved fit. The 2002 data suggests that married enlisted Marines with children are not so different from married enlisted Marines without children. The influence of unknown factors is generally diminished and the military outcomes better explained. There is a slightly better fit obtainable by adding the Marriage domain or the Optimism indicator but that complicates the model with little result.

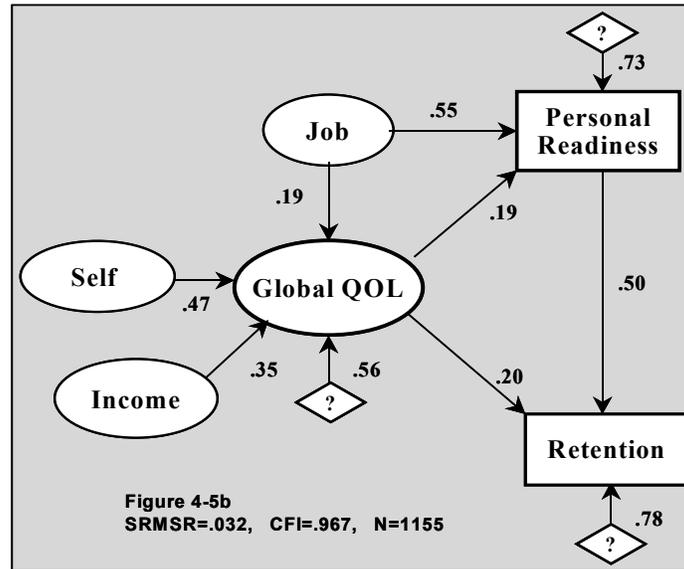


Figure 4-5b. 2002 Model For Married Enlisted Marines With Children.

Figure 4-5c displays the 1998 model for married officers with children; the 1998 values precede those of 2002. The fit again is mediocre and the 1998 model cannot be confirmed by the 2002 data.

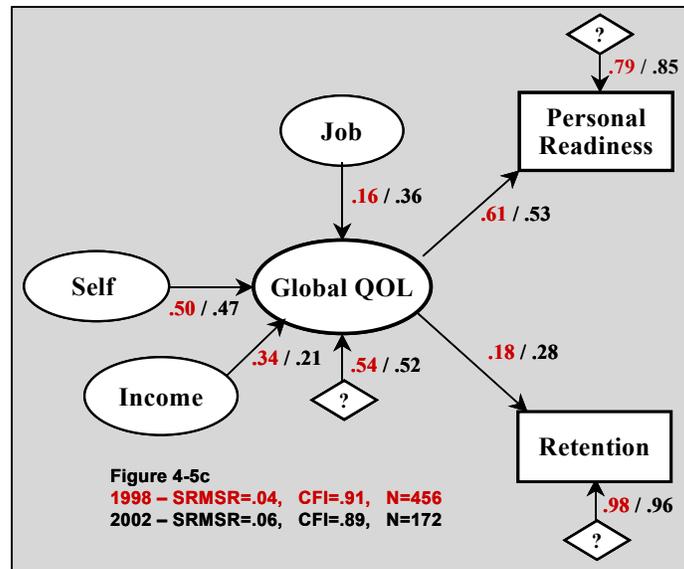


Figure 4-5c. 1998 Model For Married Marine Officers With Children.

For 2002, the only way we found to reduce the standardized root mean square residual (SRMSR) to below .05 was by adopting the unusual model variant of Figure 4-5d. Here, the Leisure and Recreation domain replaces Income and Standard of Living and the Military Job domain replaces Global QoL as the sole influence on military outcomes. Notice the unusual negative linking of the Relationship With Children domain to Retention, this means the married Marines who are least satisfied with their relationship with their children are more likely to remain until retirement. We note that the sample is small (172), but more than acceptable for a total of 16 “objectivized” SEM variables. (We also note that reversing the arrow from the Military Job domain to Global QoL to create a top-down model with Global QoL impacting the military outcomes through the Military Job domain produces a poorer fit; this poor fit can be improved when the Income and Standard of Living domain is added to substitute for the reversed Military Job domain but it is still not as good as the bottom-up model.)

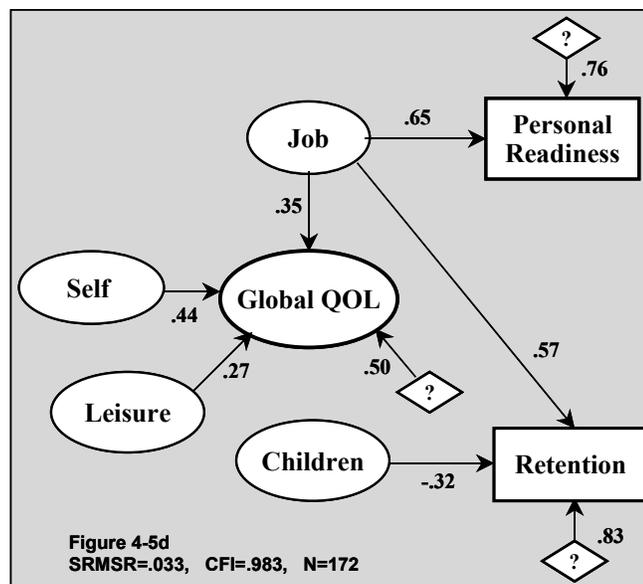


Figure 4-5d. 2002 Model For Married Marine Officers With Children.

Discussion

This section summarizes the impact of the structural equation models constructed for this 2002 QoL study, takes into account those of the 1993 and 1998 QoL studies, and compares them in this section through path diagrams in the various graphics to the 1998 QoL study:

- ♦ As they stand, none of the 1998 models could be confirmed using the 2002 data, although the two key drivers of Global QoL, the Military Job and Self domains, and the influence of Global QoL on the military outcomes of Personal Readiness and Retention are supported. Thus, the general model introduced in the 1993 QoL study remains viable.
- ♦ Variations within this general model, not too different from the models and approaches of the 1993 and 1998 QoL studies, provided very good to excellent fits consistent with professional standards.

- ◆ There are greater differences between officer and enlisted Marines than simply the quantitative difference in the effect coefficients found in the 1998 QoL study. The Global QoL of Marine officers assigned to bases and stations is qualitatively different from those of enlisted Marines in that there is no effective influence of the Income and Standard of Living domain. More personal relationships seem to be replacing the Income and Standard of Living domain in influence.
- ◆ There are greater similarities between married and unmarried Marines than reflected in the previous two QoL studies. Specifically, the 1993 QoL study found the Marriage/Intimate Relationship domain to affect the Global QoL of all married Marines but not unmarried Marines, the 1998 QoL study found that domain to affect the Global QoL of only married Marines without children, and this 2002 QoL study found that domain to have no compelling effect on the Global QoL of any Marine.
- ◆ For married Marines without children, the 2002 QoL study cannot support the withdrawal of the influence of the Self domain in favor of the Marriage/Intimate Relationship domain on Global QoL. It is however possible to replace the Income domain with the Marriage/Intimate Relationship domain accepting only a small loss in goodness-of-fit.
- ◆ In all six-group models, the Military Job domain had a causal influence on Personal Readiness as redefined in this study to include only the indicators, defined in the 1993 QoL study, which could most plausibly be impacted by Global QoL. These turned out to be the most job-related of the indices.
- ◆ In five of the six group models, there was a causal influence of Personal Readiness on Retention that imparted a substantial reduction in the variance in Retention left unexplained in the 1993 and 1998 QoL studies. This was particularly important for Marine officers where Global QoL, previously the sole modeled influence, could only explain a few percent of the variance in Retention.
- ◆ For married Marine officers Global QoL has no causal influence on Personal Readiness nor on Retention, a condition also to be found among independent duty Marines.

Also noted is that some of the improvement in the evaluation of Retention is attributable to the new numerical (1 to 7) indicator which replaced the less flexible categorical indicator used in prior QoL studies. This numerical indicator allowed for more intrinsic variance as discussed in Chapter 3.

INDEPENDENT DUTY MARINES WITHOUT MILITARY COMMUNITY SUPPORT

The starting position for the structural equation models in this section was to assess the extent to which this different set of active duty Marines confirms the models produced for Marines assigned to bases and stations. However, although the key drivers of Global QoL were much the same, the military outcomes were more driven by the personality variable of Optimism than by Global QoL.

As indicated in Chapter 3 the pay grade balance for independent duty Marines without military community support (IDMwoMCS) needs to be adjusted for differential response rates especially the lower responses rates of enlisted Marines. Precise pay grade weighting is utilized as provided for in the EQS 6 system.

SINGLE MARINES WITH NO CHILDREN

Figure 4-6a displays the 2002 independent duty Marines without military community support model for single enlisted Marines with no children. With respect to the model for their base and station counterparts (Figure 4-3b) the Leisure and Recreation domain replaces the Income and Standard of Living domain as a key driver of Global QoL at about the same influence level, and the influence of Global QoL on Retention is no longer statistically significant.

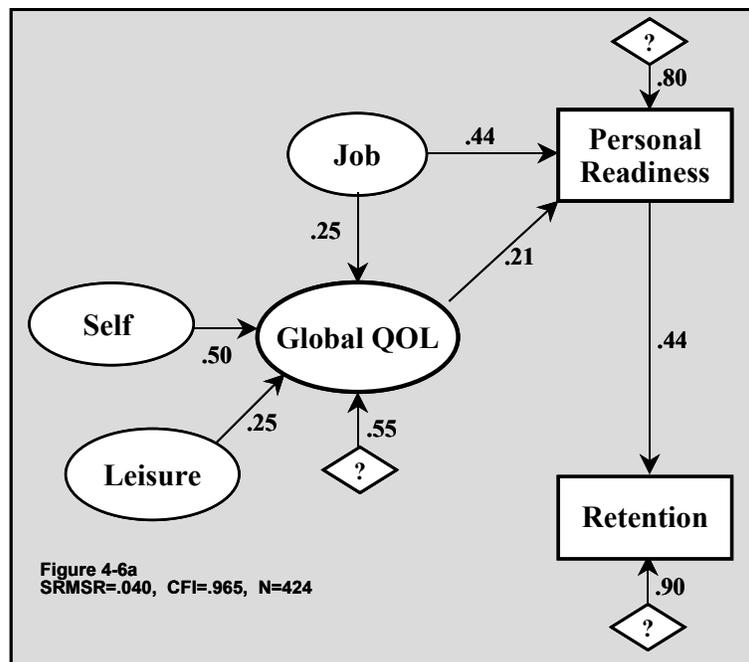


Figure 4-6a. 2002 Model For Independent Duty Single Enlisted Marines Without Military Community Support, With No Children.

Figure 4-6b displays the 2002 independent duty Marines without military community support model for single officers with no children. This model is similar to the model for single enlisted Marines with no children in Figure 4-6a except that the direct influence of the Global QoL on Personal Readiness is overwhelmed by the influence of the Military Job domain, and the strength of domain influence on Global QoL rotates away from Self. With respect to the model for their base and station counterparts (Figure 4-3d), the Leisure and Recreation domain replaces the Relationship With Relatives domain as an influence of Global QoL, and becomes the primary driver.

With only 49 cases in this group the SEM results may be unreliable, however, since the results show about the same model as for single enlisted Marines, there is some confidence the results are meaningful. In fact, there is not likely enough difference to separate Marine officers from enlisted Marines and we recommend their merger.

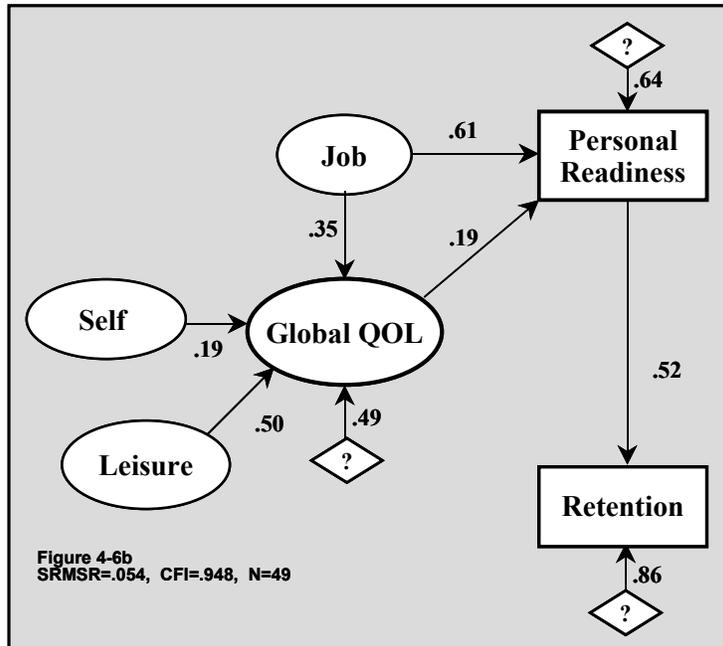


Figure 4-6b. 2002 Model For Independent Duty Single Marine Officers Without Military Community Support, With No Children.

We note in Figures 4-6a and 4-6b that there is no causal influence of Global QoL on Retention. In fact, the causal influence of Global QoL on Personal Readiness in these figures can be eliminated in favor of an additional causal influence of the Military Job domain on Retention with a result of little deterioration in goodness of fit (models not shown). So there is an acceptable model for these Marines in which Global QoL has no effective influence on military outcomes, just as for married officers assigned to bases and stations.

MARRIED MARINES WITH NO CHILDREN

Figure 4-7a displays the path model for married enlisted independent duty Marines without military community support without children. This model is structurally similar to that for single enlisted Marines with no children in Figure 4-6a except the influence of the Leisure domain on Global QoL is replaced by the Marriage domain here designated, following the 1998 QoL study, as spouse. Also there is more influence on Global QoL from the Military Job domain than for the single enlisted independent duty Marines without military community support. With respect to the model for their base and station counterparts, the Marriage domain replaces the Income domain as a key driver of Global QoL, and Global QoL has no effective influence on military outcomes.

Figure 4-7b displays the path model for married officers without children. It is like the 1998 model in terms of key drivers. It is very different from Figure 4-4d, the base and station counterparts, in terms of key drivers. On the other hand, this model is not reliable due to the extremely small sample. With respect to the model for married enlisted Marines with no children in Figure 4-7a the Self-domain is replaced by the Income and Standard of Living domain and Global QoL returns as an influence on Retention.

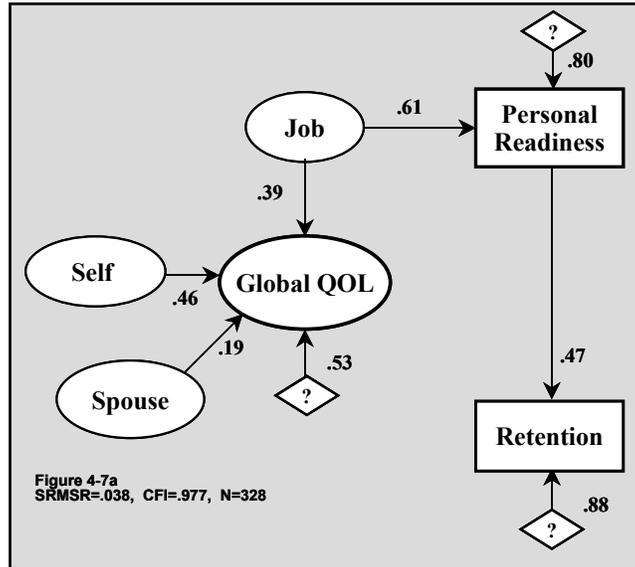


Figure 4-7a. 2002 Model for Married Enlisted Independent Duty Marines Without Military Community Support, With No Children.

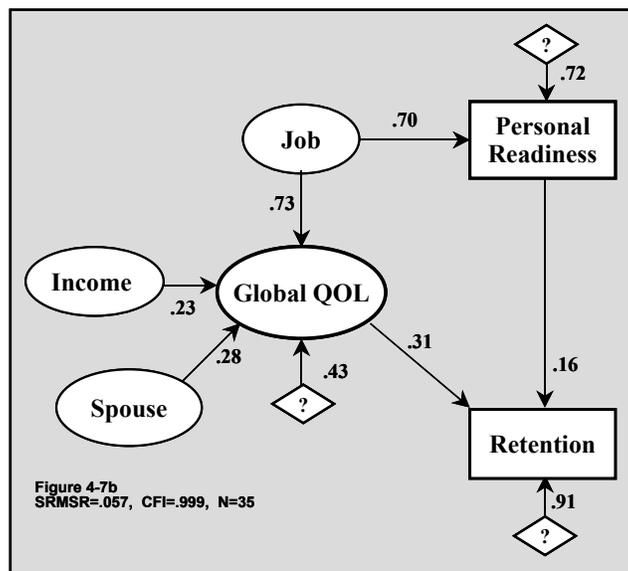


Figure 4-7b. 2002 Model for Married Independent Duty Marine Officers Without Military Community Support, With No Children.

Again we note for Figure 4-7b that the causal influence of Global QoL on Retention can be eliminated in favor of an additional causal influence of the Military Job domain on Retention. In this case there is no deterioration in goodness of fit (model not shown). Thus the influence of Global QoL on military outcomes can thus be severed for these married Marines without children.

MARRIED MARINES WITH CHILDREN

Figure 4-7c displays the path model for married enlisted independent duty Marines without community support with children. With respect to the model for their base and station counterparts (Figure 4-5b), the Military Job domain obtains greater influence mainly at the expense of Income. Here again, the Military Job domain can replace Global QoL as an influence on Retention with no deterioration in goodness of fit.

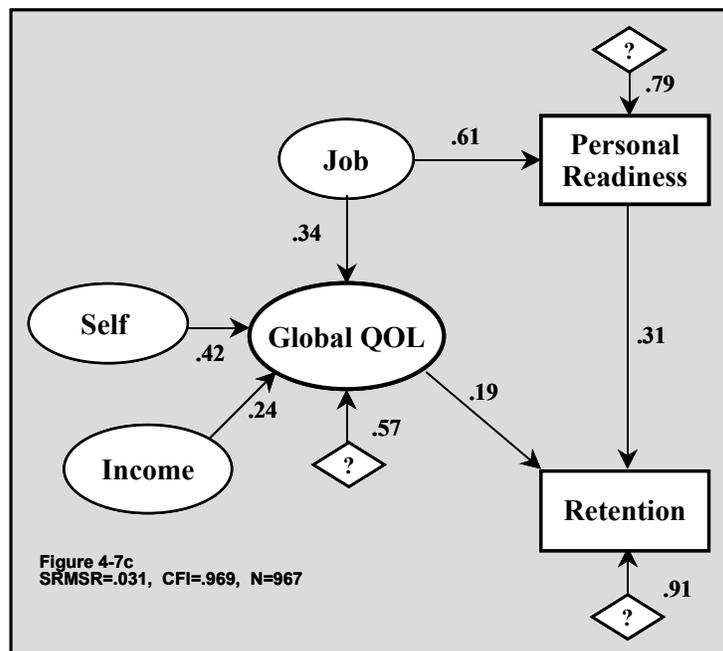


Figure 4-7c. 2002 Model for Married Enlisted Independent Duty Marines Without Military Community Support, With Children.

Figure 4-7d displays the path model for married Marine officers with children. It has the same domain influences on Global QoL as for their base and station counterparts (Figure 4-5d), with Leisure and Recreation playing a more important role than Military Job, and the influences on Retention now coming only from Personal Readiness (the poorer explanation reverts to 1998 values).

Discussion

This section summarizes the impact of the structural equation models constructed for independent duty Marines without military community support, taking into account those of the 1993 and 1998 QoL studies, and those of their base and station counterparts:

- ◆ Variations within the general model introduced in the 1993 QoL study (see Figure 4-1), are not too different from the variations in the models and approaches of the 1993 and 1998 QoL studies, and provide very good to excellent fits consistent with professional standards.

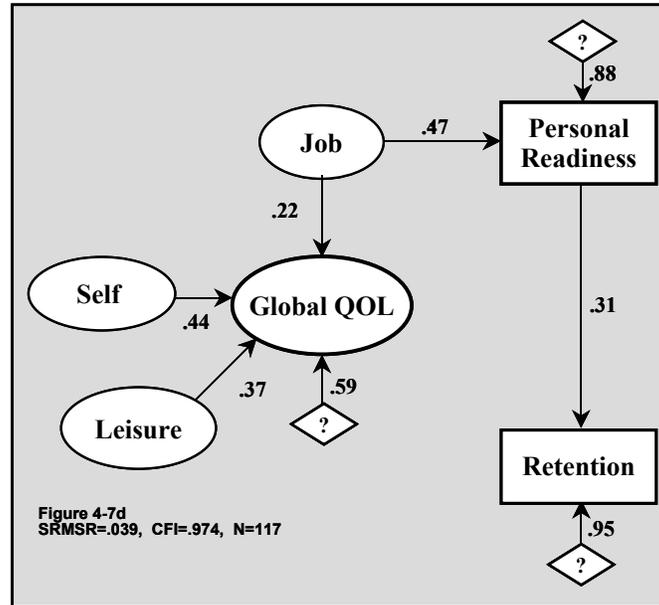


Figure 4-7d. 2002 Model for Married Independent Duty Marine Officers Without Military Community Support, With Children.

- ◆ The two key drivers of Global QoL, the Military Job and Self domains, continue to be supported. Only in the unreliably small sample of married independent duty Marine officers without military community support with no children did the Self domain disappear.
- ◆ The influence of Global QoL on any military outcomes is not well supported; a Military Job domain influence on Retention can well substitute for any Global QoL influence.
- ◆ The finding of the 1998 QoL study that the Marriage/Intimate Relationship domain is a key driver of Global QoL for married Marines without children is supported in the independent duty Marines without military community support population, although is was not supported for the base and station population.
- ◆ In all six sub-group models, the Military Job domain had a causal influence on Personal Readiness as redefined in this study to include only the indicators, defined in the 1993 QoL study, which could most plausibly be impacted by Global QoL. These turned out to be the most job related of the indices.
- ◆ In all of the six sub-group models was found a material causal influence of Personal Readiness on Retention as found for Marines assigned to bases and stations.

MARINE FAMILY MEMBERS

The structural equation models in this section are new and are not comparable to those of active duty Marines, although they do follow the general model from the 1993 QoL study (see Figure 4-1). The primary reason is that some of the domains are different as pointed out in the introduction to this Chapter. The second reason is that there is only one military outcome, spouse Retention desires. Also, the study team used no latent variables for domains because domains are measured by the single indicator of overall domain satisfaction. Because of this the study team “objectivized” Global QoL following the scheme discussed in earlier. Finally, without comparisons to make, and for future reference, the study team suspended parsimony to find models encompassing all domains with statistically significant impact.

MARINE FAMILIES WITH NO CHILDREN

There were 1271 Marine families with no children that reported pay grades. Of those 958 were families of enlisted Marines and 313 were families of officers. Figures 4-8a and 4-8b indicate that the life domains of spouse Job/Professional Development, Relocation, Separation, Leisure and Recreation, and Marine Pay and Benefits were found to predict Global QoL for both Marine officer and enlisted families. Satisfaction with spouse Job/Professional Development and Relocation domains are less influential, and Marine Pay and Benefits more influential, for the families of enlisted Marines than for Marine officer's families. The Leisure and Recreation domain affects both equally.

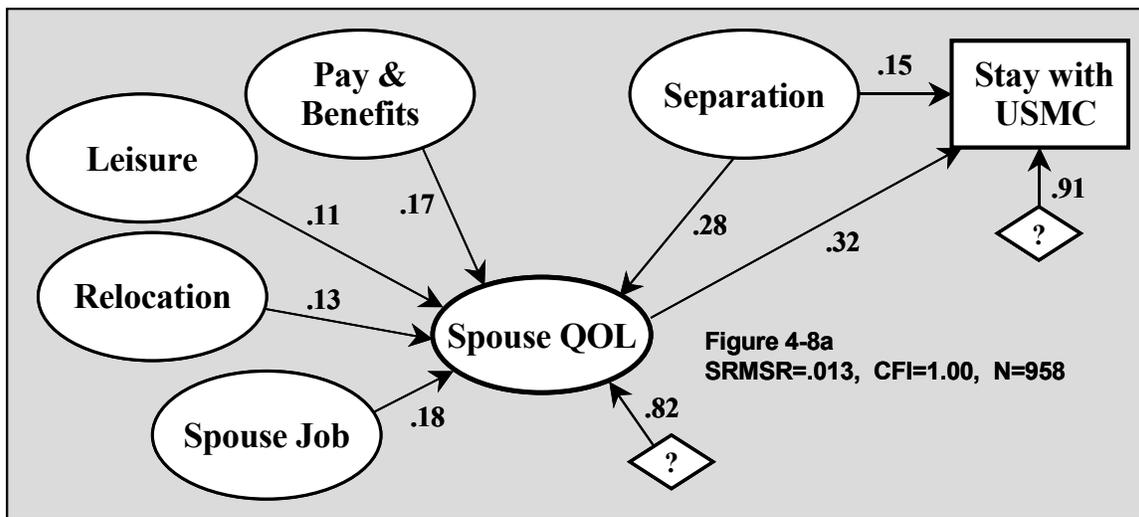


Figure 4-8a. 2002 Model for Enlisted Marine Families With No Children.

Recall that the influence of factors not in the model is depicted as a one-headed arrow from the diamond question mark. For example, see the arrow with .82 pointing at spouse QoL indicating that 67% ($= .82^2$) of the variance in Global QoL is left unexplained by the set of variables in the model and similarly that 83% ($= .91^2$) of the variance in

Retention Desire is left unexplained. This is so despite the essentially perfect fit of the model to the data that were provided.

For Marine officers' spouses, Figure 4-8b shows that satisfaction with their Job/Professional Development are the most influential to their overall quality of life relative to the other domains measured. Their satisfaction with Relocation and Separation are also large influences, followed by Leisure and Recreation and the Marine's Pay and Benefits. In comparison to the spouses of enlisted Marines, this set of domain influences paints a picture of a group of spouses who are dedicated to self-fulfillment through work (at the moment), who find it difficult to be separated from their spouses, but no so difficult as for spouses of enlisted Marines; officers' spouses may compensate by focusing on work and leisure activities. Their reasons for desiring to stay with Marine Corps life revolve around their overall quality of life, but also to a substantial degree to their ability to handle the separation from their Marine, just as for the spouses of enlisted Marines. The goodness-of-fit measures show that this model, given all the domain variables provided, fits the data very well. Still, the amount of variance accounted for in Global QoL by all measured family domain variables is less than that accounted for by the parallel set of active duty Marine domain variables.

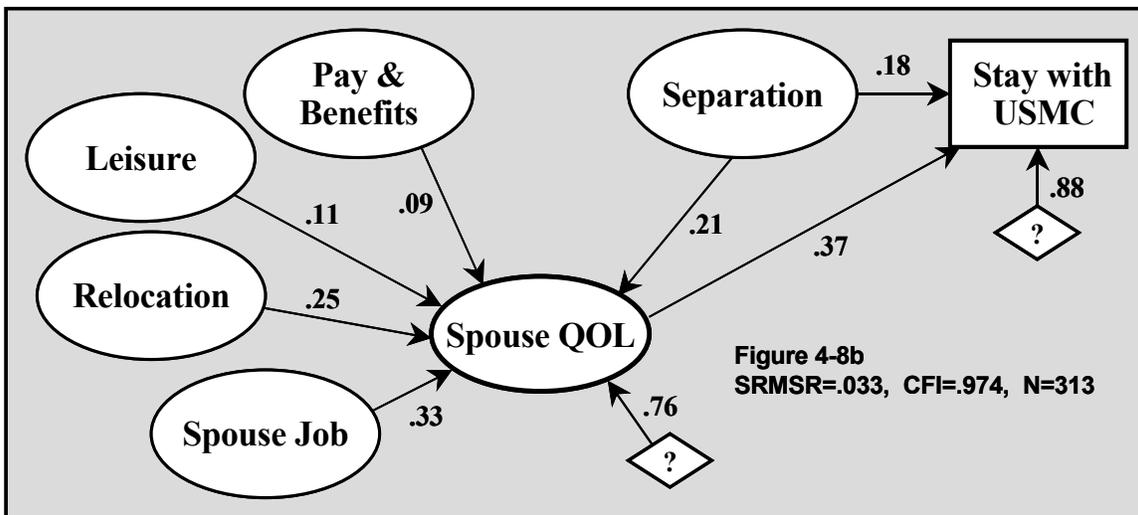


Figure 4-8b. 2002 Model for Marine Officer Families With No Children.

MARINE FAMILIES WITH CHILDREN

There were 2,913 Marine families with children that reported pay grades. Of those, 2,254 were families of enlisted Marines and 659 were families of Marine officers. Figures 4-8c and 4-8d display the path diagrams representing the influences on QoL and Retention Intentions. Clearly, the presence of children in the family changes the path diagram significantly. Children's QoL has its own relationship with spouse QoL and spouse Retention desires for families of both enlisted Marines and Marine officers. In particular, note the reciprocal relationship between children's QoL and spouse QoL. To

be clear, it is the spouse who evaluates satisfaction with the Children’s QoL domain and that a reciprocal relationship between the Children’s QoL domain and the spouse QoL is not unexpected.

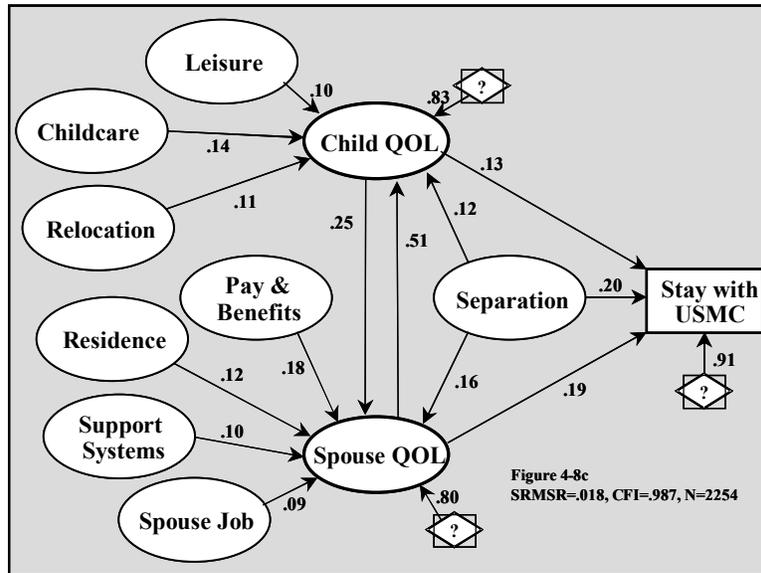


Figure 4-8c. 2002 Model for Enlisted Marine Families With Children.

Note that Leisure and Recreation now impacts spouse QoL only indirectly, through children’s QoL, and that Relocation, a large influence on officer spouse QoL when there were no children in the family drops off to “no statistically significant influence” when children enter the family.

For Marine officer families, children’s QoL is heavily influenced by spouse QoL, so much so as to reduce to statistical insignificance the domains of Relocation which impacts children’s QoL for families of enlisted Marines. Reciprocally, children’s QoL is the single largest influence on spouse QoL, more for Marine officer families than for enlisted Marine families. We can also see that the importance of the spouse’s Job/Professional Development declines as compared to families without children and is reduced to low influence for both officer and enlisted families.

Spouses of Marine officers are more influenced by satisfaction with Marine Corps provided Support Systems than spouses of enlisted Marines who are much more influenced by satisfaction with Pay and Benefits. For families of enlisted Marines, the influence of Separation is as strong as it was for childless families, but it applies itself through its effect on all family members. For families of Marine officers, Separation is less influential. With respect to the family desire to remain with the Marine Corps, Separation is about as strong an influence as it was for families without children, but whereas spouse QoL was the only other influence for families without children, for families with children the influence is split between spouse QoL and children’s QoL. For families of enlisted Marines, the two family quality of life measurements and Separation still only explain 27% ($1-.91^2$) of the variance in Retention desires. With children in the

officer family the explanation of the amount of variance in Retention desires deteriorates from 23% (= 1- .88²) without to 12% (= 1-.94²) with children.

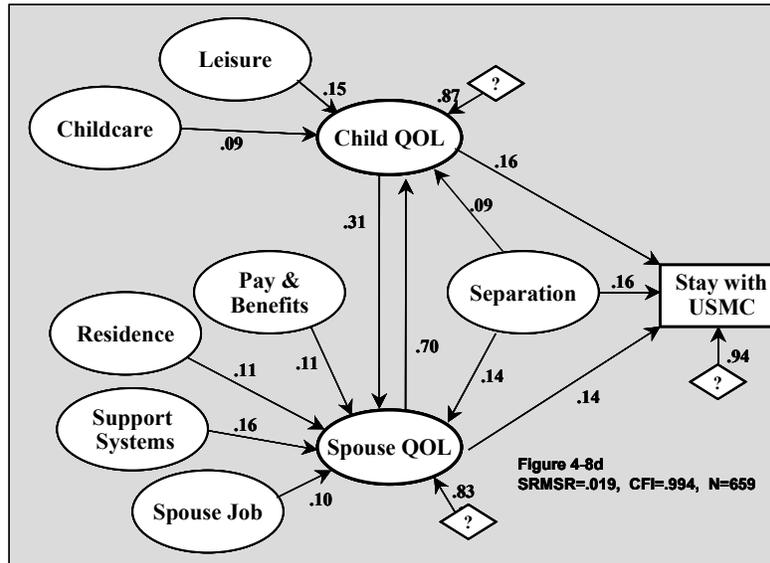


Figure 4-8d. 2002 Model for Marine Officer Families With Children.

Discussion

This section summarizes the impact of the structural equation models constructed for Marine families:

- ♦ Variations within the general model introduced in the 1993 QoL study (see Table 4-1), not too different from the variations in the models and approaches of the 1993 and 1998 QoL studies, provide very good to excellent fits for Marine families consistent with professional standards, except that —
- ♦ There is a strong reciprocal (bi-directional) relationship between spouse QoL and children’s QoL that is not accounted for in the general model.
- ♦ Separation plays a central role in spouse QoL, children’s QoL, and families' desire to remain with the Marine Corps.
- ♦ Marine Pay and Benefits are more of a concern to the families of enlisted than to those of officers.
- ♦ Spouse Job/Professional Development are very important in families without children.

The amount of variance in Global QoL or Retention that is explained by these models is not as high as the amount of variance explained by the active duty Marine models. That is, the set of variables measured by the Family Member survey were unable to provide the same level of explanatory power as the set of variables measured in the Active Duty Marine survey. Critical explanatory variables would appear to be absent.

CHAPTER 5 - DISCUSSION AND RECOMMENDATIONS

This chapter provides study results and makes recommendations for action which both enhance the quality of the lives of Marines and their families, and improve future assessments of quality of life.

These findings, conclusions, recommendations, and the survey upon which they are based were all developed in the aftermath of the September 11, 2001 terrorist attacks on the United States and subsequent anthrax contamination in the country's postal system. It is uncertain what effect, if any, these events had on the results of this study.

Overall, the Marine Corps appears to be doing a good job of maintaining satisfaction levels within the ranges reported in *Kerce (1995)* and *White, Baker, and Wolosin (1999)* for the important domains. Marines are satisfied with 10 of 11 domains. Only in the Income and Standard of Living domain did they indicate being somewhat dissatisfied. Independent duty Marines are also satisfied in 10 of 11 domains; the only domain in which they are somewhat dissatisfied is Leisure and Recreation. Spouses are satisfied in 9 of 10 domains. They are somewhat dissatisfied with the Separation domain. This chapter focuses primarily on the global or life as a whole aspects of the results.

Major Findings and Conclusions

ACTIVE DUTY MARINES

When examined as a whole, the top three drivers of Global quality of life satisfaction for Active Duty Marines are Self, Military Job, and Income, the same three found by Kerce (1995).

The satisfaction with Self alone accounts for about 50% of the variance in the Global quality of life assessment; it is the most highly satisfied domain, and has the highest expectancy value. The best targets for improvement of Global quality of life satisfaction come from the Military Job, Income, and Leisure and Recreation domains.

2002 Organizational Commitment results tend to equal those of 1998, which exceeded those of 1993.

It was noted in both prior studies that higher Global quality of life scores are associated with high scores in Optimism and Organizational Commitment. For 2002, the same correlation was found; in addition, an association between self-esteem and Global quality of life was determined. It is becoming clear that optimistic, committed Marines with high self-esteem also have a higher sense of Global quality of life.

The Job domain had a causal influence on Personal Readiness, as redefined in this study to include only the indicator, provided in the 1993 study, which could most plausibly be impacted by Global quality of life.

As also shown in 1993 and 1998, there can be a direct connection between a domain and a military outcome. The three dominant Job aspects which influenced Personal Readiness were Commitment to the Marine Corps, Frequency of job-related problems, and Perceived adequacy of training. As noted above, measures of organizational commitment are as high as they have been in almost ten years.

In five of six group structural equation models, there was a causal influence of Personal Readiness on Retention that imparted a substantial reduction in variance in Retention left unexplained in the 1993 and 1998 studies.

Global quality of life influences Retention both directly and through Personal Readiness. The influence of unknown factors has been diminished in this 2002 QoL study, and the military outcomes are better explained as a result.

There has been a statistically significant decline in satisfaction with Leisure and Recreation for the E-2/E-3 pay grades.

Marines in pay grades E-2/E-3 dropped to the somewhat dissatisfied range in 2002 from the neutral range in 1993 and 1998 in this domain. The dissatisfaction of this large group depresses the overall satisfaction results of this domain. As discussed, the Leisure and Recreation domain is one opportunity for improvement in the Global quality of life of active duty Marines. This finding coincides with the study determination that the number of hours Marines reported having worked has increased from that reported in the previous two studies, and the number of days worked increased since 1998. It is possible that these increases are a result of the military response to the current world situation. Junior Marines, not completely assimilated into the military lifestyle, may not fully appreciate the sacrifices required in these situations.

Income and Standard of Living was the only domain in which the overall measurement fell into the somewhat dissatisfied range for the active duty composite group.

The results of the Income and Standard of Living domain, one of the key drivers of Global quality of life, reflected neutral to somewhat satisfied perceptions from the E-6 pay grade and higher. The E-2/E-3 and E-4/E-5 pay grades reported neutral to somewhat dissatisfied results, the same as in the past two studies. It is noted that recent pay increases for service members have been the largest in some time, and more are scheduled to bring military pay in line with that of civilian counterparts. In addition, housing allowances are being increased so that, by 2005, they will cover all out of pocket housing costs now incurred by Marines in civilian housing. These aggressive measures address past concerns of Marines regarding pay and standard of living; they should make a positive impact on future perceptions of

satisfaction with this domain, and consequently improve Global quality of life. (This housing allowance increase should also mitigate the cost aspect of civilian housing identified as being a key driver of the Residence domain for independent duty Marines without military community support, discussed in Chapter 3.)

The Global quality of life assessment, normalized to a seven-point scale from 1 (a completely negative response) to 7 (a completely positive response) was 4.49 in 1993, 4.62 in 1998, and 4.54 for 2002.

When compared to 1993, in 2002 there were increases in Global quality of life in the E-6/E-7, E-8/E-9, and O-4 and higher pay grades. When compared to 1998, in 2002 there was an increase in Global quality of life for the E-6/E-7 pay grades, and decreases with respect to the E-2/E-3 and E-4/E-5 pay grades. Except for the E-2/E-3 and E-4/E-5 pay grades, measured active duty Marine Global quality of life is in the somewhat satisfied to satisfied range for the first time. The E-2/E-3 and E-4/E-5 pay grades remained in the neutral to somewhat satisfied range as in past studies.

There are greater differences between Marine officers and enlisted Marines than simply the quantitative difference in the effect coefficients found in the structural equation models of the 1998 QoL study.

The Global quality of life of Marine officers assigned to bases and stations is qualitatively different from those of enlisted Marines in that there is no compelling influence of the Income and Standard of Living domain. Personal relationships seem to be replacing the Income and Standard of Living domain influence for these Marines.

When examined as a whole, the Marriage/Intimate Relationship domain has no compelling effect on the Global quality of life of any Marine.

The 1993 study found the Marriage/Intimate Relationship domain to affect the Global quality of life of all married Marines, but not that of single Marines. The 1998 study found that domain to affect the Global quality of life of only married Marines without children. The 2002 study found the domain not to have a compelling effect on the Global quality of life of any previously identified subgroup of Marines.

INDEPENDENT DUTY MARINES WITHOUT MILITARY COMMUNITY SUPPORT

Independent Duty Marines without military community support are somewhat satisfied with respect to life as a whole.

The composite Independent Duty Marines without military community support Global quality of life score of 4.85 is higher than the Active Duty Marine composite score of 4.73.

The top two drivers of Global quality of life, Self, and Military Job, are the same found by Kerce (1995).

The Self domain alone accounts for 50% of the variance in the Global quality of life assessment, is the most highly satisfied domain, and has the highest expectancy values for Independent Duty Marines without military community support. The best target for improvement of the Global quality of life of this group of Marines is the Leisure and Recreation domain.

The composite overall satisfaction with Leisure and Recreation for Independent Duty Marines without military community support is in the somewhat dissatisfied range, a much lower score than their Base and Station counterparts. This is the only domain in which The Independent Duty Marines without military community support satisfaction overall measures in the somewhat dissatisfied range.

This domain is a key driver of these Marines' Global quality of life. The E-4/E-5, E-6/E-7, E-8/E-9 and warrant officer pay grades all registered dissatisfaction with the Leisure and Recreation domain. The O-1/O-3 and O4 and higher pay grades were neutral in their perceptions. The Amount of Time aspect for Leisure and Recreation is the best opportunity for improvement in this domain.

There is a dramatic difference in the Organizational Commitment of Independent Duty Marines without military community support and Base and Station Marines. The average difference measured in Organizational Commitment for the various aspects is three-quarters of a point higher for Independent Duty Marines without military community support.

The aspects "I talk up the Marine Corps to my friends," "I find my values and the Marine Corps the same," "Being a Marine is worth the sacrifice," "I'm a perfectionist about my work," and "I'm very much involved in my work" are all in the somewhat satisfied to satisfied range of the scale. It appears the Marine Corps manpower process has done a fine job of selecting the right Marines for the unique challenges Of Independent Duty without military community support.

FAMILY MEMBERS (SPOUSES)

Given the scope of the initial Family Member Survey, the best opportunities for improvement of Spouse Global quality of life, when all spouses are considered as a whole, appear to be satisfaction with Separation, Pay and Benefits of the Marine, and the spouse Job/Professional Development domains.

Satisfaction levels for these domains ranged from somewhat satisfied to neutral. Other domains such as Relocation, Leisure and Recreation, Support Systems, and Residence play an influential role for specific sub-groups of spouses. On the

whole, spouses were somewhat satisfied in their assessment of family Global quality of life, with satisfaction increasing with the Marines' time in service. This quantitative data confirms the comments and opinions given during focus groups undertaken prior to the distribution of the survey instrument. Spouses were eager to discuss perceived shortcomings of military life, but were proud to be a part of the Marine Corps, and, in general, willing to accept the challenges that come with this lifestyle to support their Marine's career choice.

The impact of Children's quality of life on Spouse Global quality of life is substantial for those whose children reside with them.

Children's quality of life is the single largest influence of spouse quality of life. Spouses with school-aged children reported satisfaction levels in the somewhat satisfied to satisfied range. These positive scores reflect that the spouses are pleased with the military environment for raising children.

Children's quality of life has an independent influence on the families' desires to remain part of the Marine Corps, which is similar in strength to the influence of Spouse quality of life.

This finding reinforces the adage that, while the Marine Corps recruits Marines, it retains families. It also emphasizes the importance of addressing quality of life issues for married Marines in terms of the family unit. Spouses are, in general, satisfied with their children's quality of life, and this is a positive influence on retention intentions.

Separation was the only domain in which spouses overall were somewhat dissatisfied. It has a direct impact on the families' desire to remain with the Marine Corps and on Family quality of life.

As measured in this study, Separation was the key driver of Global quality of life for spouses without children, and second only to Children's quality of life for spouses with children. It is clear that the ability of a family to adapt to being separated from the Marine is an important ingredient in the satisfaction and happiness of a Marine spouse and family, and the retention of the Marine in the Marine Corps.

Marine pay and benefits are more of a concern to families of enlisted Marines than those of Marine officers.

Families of Marines in higher pay grades were more satisfied with Pay and Benefits than those in lower pay grades, similar to the results obtained from their active duty spouses. Overall family satisfaction with their financial situation depends on the percentage of income provided by the Marines' pay. The least satisfied spouses were those who depended completely on the Marine for their income. The most

satisfied spouses were those in families that derived at least 25% of their income from sources other than the Marines' pay.

Spouse jobs and professional development are very important in Marine families without children.

For spouses of Marine officers without children, the Job/Professional Development domain was the most influential to their overall quality of life relative to other domains measured. To a lesser extent, this domain also influences Global quality of life for spouses of enlisted Marines without children.

Relocation has the most impact on the quality of life of the families of Marine officers without children.

Relocation is a key driver of spouse Global quality of life. This finding is related to the previous one regarding Jobs/Professional Development in that for the spouses of Marine officers without children, the Job/Professional Development domain was the most influential to their overall quality of life relative to the other domains measured. It is likely, therefore, that frequent relocation hinders the spouses of Marine officers in their job and professional development opportunities, and subsequently negatively impacts their satisfaction with this aspect of their military lives.

Leisure and Recreation has an almost equivalent impact on quality of life for all families.

Leisure and Recreation is a key driver of spouse quality of life for families without children and of children's quality of life for families with children, indicating that this aspect of military life is important to all Marine families. The strength of this relationship is about the same for all sub-groupings. The reported satisfaction levels in this domain are generally in the neutral to somewhat satisfied range. Because leisure and recreation activities are highly tangible, this is one domain in which the Marine Corps could have a direct and equivalent impact on family quality of life regardless of grade or parental status.

Families' desire to remain with the Marine Corps and the active duty Marines' intentions to remain with the Marine Corps are well aligned.

As measured in this study, the military outcome of Retention is not well explained by the domain - Global quality of life either for the family or for the active duty Marine, although in the latter case it is somewhat better explained than in previous QoL studies. When inspected by paygrade, the family retention desire and the Marine retention intentions show approximately the same levels of agreement. As a result, there is indication that the action/reaction of family retention desires and Marine retention intentions may well be a significant missing part of the explanation of each.

Recommendations For Action

ACTIVE DUTY MARINES

Recommendation: That maintenance of BEQ/BOQ be improved.

Although Residence was not a key driver of Global QoL in this study, satisfaction with BEQs/BOQs remains in the somewhat dissatisfied range, as it was in prior studies. The aspects of Attractiveness and Condition most strongly influenced satisfaction perceptions. Funding for Barracks Maintenance and Repair has remained relatively flat over the last several years, and that trend is projected to continue for FY 2003. An increase of funding would address both of these aspects. It is noted that funding in FY 2002 for Personnel Support Equipment (Barracks Furniture/Fixtures) increased approximately 23% over FY 2000, and is projected to increase again in FY 2003. These funding increases should help improve both the attractiveness and condition of the BEQs/BOQs. Another opportunity for improvement within this area that should be explored is the management of expectations versus reality regarding bachelor housing.

Recommendation: That improvement of leisure and recreation facilities and activities continues.

The Leisure and Recreation domain is a key driver of Global QoL for all Marines and their spouses. The domain aspects of Facilities Provided and Variety of Activities Available were identified as opportunities for improvement of satisfaction for these groups. For Marines on Independent Duty without military community support, it was the Amount of Time for leisure and recreation that caused them to be dissatisfied. Funding for Morale, Welfare, and Recreation Activities increased approximately 10% in FY 2002 from that expended in FY 2000, and is projected to increase another 7% in FY 2003.

Recommendation: That efforts continue to improve satisfaction with Marines' military jobs.

Military job is another key driver with great influence on Global QoL for active duty Marines. Marines in the pay grades E-6 and higher are somewhat satisfied to satisfied with their military jobs. Junior Marines were in the neutral range of satisfaction. Marines are working more hours and longer weeks than they have in past studies, but this may be due to military necessity. Continued emphasis on individual Marine personal growth and development, respect and fair treatment through established programs, and positive leadership aspects are recommended.

INDEPENDENT DUTY MARINES WITHOUT MILITARY COMMUNITY SUPPORT

Recommendation: That opportunities to increase the amount of time Independent Duty Marines without military community support have for leisure and recreation be explored.

These enthusiastic, dedicated Marines clearly need opportunities for leisure and recreation. This should be the foremost consideration for improving the Global quality of life of the independent duty Marine without military community support.

FAMILY MEMBERS (SPOUSES)

Recommendation: That the Family Member Employment Assistance Program (FMEAP) be invigorated.

The Family Member Employment Assistance Program has the lowest spouse satisfaction level of all the aspects in the Support Services domain, dropping into the somewhat dissatisfied range. This program impacts all four key drivers of spouse Global QoL:

- 1) Separation is the most important driver of Global quality of life for Marine spouses without children. If these spouses were able to find jobs providing a sense of self-fulfillment, separation hardships might be eased.
- 2) For spouses without children, Jobs and Professional Development are also very important. A base and station agency that provided placement services for these spouses, and seminars and workshops to contribute to their professional development would be appropriate.
- 3) Family satisfaction with Income and Standard of Living is based on the percentage that comes from sources other than the Marines' pay. Employment opportunities for family members should enhance perceptions of their financial situation.
- 4) Relocation has the most impact on the Global quality of life of spouses of Marine officers without children. Assistance in finding a meaningful job at the next duty location could be effective in improving this population's satisfaction with relocation.

There is tremendous potential for improvement of spouse Global QoL with an enhanced Family Member Employment Assistance Program. It is noted the Marine Corps launched a family member employment pilot program which should address the dissatisfaction identified in this study.

Recommendation: That greater emphasis be placed on the Sponsorship Program.

Relocation is a key driver of spouse Global QoL. Study results project over half of Marine spouses are unfamiliar with the Sponsorship program which is designed to provide assistance to their families in conjunction with a permanent change of station relocation. The spouses least satisfied with Relocation are those who requested sponsors and were not provide one. Increased emphasis on this program from commanders, the Key Volunteer Network (KVN), and the Lifestyle Insights, Networking, Knowledge, and Skills (L.I.N.K.S.) Program should positively impact spouse satisfaction with relocation, especially for those married to junior Marines.

Recommendation: That improvements be made in the Key Volunteer Network (KVN).

The Key Volunteer Network was identified as an opportunity for improvement in the Support Service domain. Separation is a key driver for spouse and children's quality of life, and the families' desire to remain with the Marine Corps. Departure Predictability, Amount of Contact, and Deployment Support were aspects of the domain that had the lowest satisfaction measurements and provide some opportunities for improvement. Although the Key Volunteer Network doesn't control departure dates, it could, in coordination with the Lifestyle Insights, Networking, Knowledge, and Skills Program, become more involved in the education of spouses, particularly those of junior Marines, regarding the uncertainty of departure dates and thereby assist in the management of expectations regarding those dates. These programs can provide the most current information to spouses regarding departures through direct liaison with unit family readiness officers. The uncertainty of Departure Predictability is, unfortunately, a reality of military life. Additional methods of reducing this uncertainty can be explored. MCO P1700.27A provides for both pre-deployment and deployment support such as prevention services to families through the Family Team Building Program and the Key Volunteer Network. Opportunities should be sought to improve the perceptions of support during deployments, and increase the amount of contact a family has with their deployed Marine.

Recommendation: That leisure and recreation activities for Marine families continue to be improved.

Leisure and Recreation is a key driver of spouse quality of life. This aspect of military life is important to all Marine families. The most frequently used programs were those involving fitness and recreational facilities.

Recommendation: That current levels of childcare be maintained or increased.

Overall, Marine spouses are somewhat satisfied with childcare services. Childcare is the dominant driver of children's quality of life. Children's quality of life has an

independent influence on the families' desires to remain with the Marine Corps. In addition, children's quality of life is the single largest influence on spouse quality of life, which in turn impacts on the military outcome of Retention.

Recommendations For Future QoL Assessments

CHALLENGES AND CONCERNS

Mailed Surveys.

The administration of the survey instrument for this study was conducted during a very difficult period in our nation's history. Over 14,000 surveys were mailed around the world within months of the terrorist attacks in New York and Washington D.C., and shortly after the deaths of individuals as a result of anthrax contamination in the postal system in several locations in the country. Despite these challenges, as the result of a well coordinated survey administration effort between the Marine Corps and the study team, a satisfactory number of mailed responses were received, particularly from the family member group. However, as long as survey instruments are mailed, the accuracy of USMC unit, and individual Marine and spouse addresses will be both a challenge and a concern. The processing of re-work due to incorrect addresses is costly in terms of additional printing, postage, and time. The accuracy of the addresses of selected respondents also impacts directly on survey response rates. Several options for consideration are discussed below.

Survey Sample.

Marines in the entry-level training pipeline should not be included in survey samples. Due to their relative lack of experience in the Marine Corps, the opportunity for meaningful feedback is limited. Additionally, their transient status often makes it difficult to reach them by mail on a timely basis.

SURVEY INSTRUMENTS

Active Duty Survey Instrument.

The Neighborhood domain in the Active Duty Marine survey instrument, as it currently exists, is so highly correlated with the Residence domain as an influence on satisfaction with Life as a Whole that it seems superfluous. Consideration should be given to either deleting the domain, or incorporating aspects of it into the Residence domain, as was done in the Family Member survey instrument.

It is recommended that the current Marriage/Intimate Relationship domain be re-named the "Relationship with Spouse" domain, and questions adjusted accordingly. It is important to understand how perceptions of relationships influence quality of

life satisfaction. However, the Marine Corps is interested primarily in opportunities to influence and contribute to the quality of life of Marines, their spouses, and families. Community support programs are funded with this goal in mind. Service opportunities to influence other relationships are minimal, at best. This was the only aspect of the survey instrument that drew negative comments, both telephonic and written, from survey participants. The sentiment expressed was that questions regarding “intimate relationships” were too intrusive. Additionally, this adjustment will bring this domain title in line with the other relationship domains of Relationship with Your Children, and Relationship with other Relatives.

Finally, the Personal Readiness measurement was re-built for the purposes of this study. This new construct provided meaningful measurement for this facet of military outcomes, and should be retained.

Family Member Survey Instrument.

Future assessments including measures of satisfaction and happiness using the domains of Friends and Friendship, Relationship with Spouse, and Relationship with other Relatives, should be considered. For purposes of conciseness, this can be done by simply asking a multipart question that has as its sub-items the domains of interest. Also, domains over which the Marine Corps has more of an impact can be evaluated in greater depth using aspect evaluations and descriptive items. The overall satisfaction measure questions for these in-depth domains should always be asked after the aspect satisfaction questions. This will aid in explaining more variance in Global quality of life without adding significant length to the survey instrument.

To improve the measurement of existing domains, aspect questions can be added that will assist in explaining the variance in domain satisfaction. Domains to be considered for this action are Separation, Children Quality of Life, Pay and Benefits, and Job/Professional Development.

Maintaining the method of gaining qualitative information from focus groups, in combination with the quantitative measurement provided by the Family Member Survey Instrument, will provide the appropriate balance of information for analysis purposes for future quality of life assessments.

Finally, the dynamics between spouse and children’s QoL, the QoL of their active duty Marines, and military outcomes are important, and should continue to be investigated in future assessments.

SURVEY ADMINISTRATION

Based in part on the previous discussion regarding costs associated with mailed surveys, consideration should be given to either total or partial electronic

administration of survey instruments for future assessments. As this report was written, the U.S. Navy embarked on a quality of life survey effort in which electronic submission of responses was optional. The results of this and other similar efforts should be studied for feasibility.

In particular, the Production Recruiter and/or Base and Station respondent groups seem likely candidates for an incremental transformation to total electronic reporting. As technology and techniques improve, particularly in the areas of security and confidentiality, opportunities to exploit this medium should be explored.

As another, cost-saving measure, consideration should be given to conducting a survey of a representative random sample of Production Recruiters versus a census survey. Satisfactory results could be achieved in this manner with reduced expense in terms of material, postage, and time from these busy Marines' schedules.

As recommended by both *Kerce (1995)*, and *White, Baker, Wolosin (1999)*, future assessments of quality of life perceptions should continue to be conducted at regular, three-year intervals. This schedule seems appropriate to capture any demographic or socio-economic changes as well as afford an adequate opportunity for the Marine Corps to implement programmatic adjustments, as required. In addition, consideration should be given to conducting a group sequential analysis. That is, there now exists three sets of data from the three sequential QoL studies in which there were no clear trends and some small shift of domains of influence on Global quality of life. It may be possible to set up a structural equation model that simultaneously processes all three sets of data in an attempt to find a common conclusion.

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Abbey, A. & Andrews, F.M. (1985). Modeling the Psychological Determinants of Life Quality; Social Indicators Research.

Personality and social psychologists have recently focused on a number of issues which life quality researchers have also examined. This study combines these two perspectives on well being to address the following two questions: (1) To what extent are perceptions of stress, internal and external control, social support, performance, anxiety, and depression determinants of life quality? (2) To what extent are the predictors of different aspects of life quality (affective, cognitive, global, specific domains) similar or different? Data were collected from 675 respondents in a longitudinal study. Respondents were interviewed four times, six weeks apart. Bivariate analyses, stepwise regressions, and structural modeling were used to analyze the data. The modeling results suggested that internal controls social support, and performance caused increased life quality, whereas stress, and depression caused decreased life quality. Control by others did not related to life quality. The implications of these findings for further life quality research are described. The study team used this document as background information in the development of survey methodology.

Andrews, F.M. & Withey, S.B. (1976). Social Indicators of Well Being: American's Perception of Life Quality. New York: Plenum Press.

This text discusses a study about perceptions of well being. Its purpose is to investigate how these perceptions are organized in the minds of different groups of American adults, to find valid and efficient ways of measuring these perceptions, to suggest ways these measurement methods could be implemented to yield a series of social indicators, and to provide some initial readings on these indicators. The findings are based on data from more than five thousand Americans and include results from four separate representative samples of the American population. This text is a classic in the quality of life field and provided the necessary insight to allow the study team to confirm domains for inclusion in the family questionnaire and to confirm the validity of the Delighted-Terrible scale of happiness. The study used this document as background information in the development of survey methodology.

Author Unknown (1999). A Measure of Subjective Happiness: Preliminary Reliability and Construct Validation. Netherlands: Kluwer Academic Publishers.

This study discusses the development, validation and rationale of a new 4-item measure of global subjective happiness. Results indicated that the Subjective Happiness Scale has high internal consistency. The study team used this document as background information in the development of survey methodology.

Babbie, Earl R. (1995). The Practice of Social Research. California: Wadsworth Publishing Company.

The study team used this book to examine the fundamental characteristics and issues of practicing scientific social research. This book examines the fundamental characteristics and issues that make science different from other ways of knowing things. Specifically explored are the social scientific inquiry, the structure and creation of social scientific theories, and the links between theory and research. Also addressed is the nature and logic of causation as appropriate to social scientific research, laying the foundation for the study of analytical techniques.

Berry, R.E. & Williams, F.L. (1987). Assessing the Relationship Between Quality of Life and Marital and Income Satisfaction: A Path Analytic Approach. *Journal of Marriage and Family*.

In a study of factors directly and indirectly involved with the quality of life for married couples, economic and non-economic variables appeared to cluster and show two paths for husbands and wives to satisfaction with quality of life. Path analysis revealed that agreement over financial expenditures contributed to satisfaction with quality of life indirectly, through satisfaction with spouse for husbands and through satisfaction with spouse and income satisfaction for wives. Increased understanding of the role of disagreements over finances and other family satisfactions in contributing to family well being may give counselors a firmer foundation upon which to build intervention strategies with their clients. The study team used this document as background information in the development of survey methodology.

Blake, Wayne M. & Darling, Carol Anderson (2000). *Quality of Life Perceptions of African Americans*. Journal of Black Studies. Sage Publications, Inc.

Due to a lack of research, very little is known about the quality of life of African American males and females and the familial factors that influence it. To study the quality of life of African Americans from a family perspective, the resource exchange theory was used to address the relationships among the variables of interest. The basic premise of this theory is that humans form interpersonal relationships in light of the rewards, costs, or profits (outcomes) that such associations might be expected to bring. The study team used this document as background information in the development of survey methodology.

Booth-Kewley, Stephanie & Thomas, Marie D. (1993). *The Subjective Quality of Life of Navy Personnel*. California: Navy Personnel Research and Development Center. Unclassified.

The subjective quality of life of a sample of enlisted Navy personnel (68 males and 64 females) was studied. Measures were administered assessing: Global quality of life, satisfaction with 13 life domains, satisfaction with the Navy, satisfaction with Navy job, personality dimensions, and demographic characteristics. Subjective Global quality of life for this Navy sample was high. Respondents were the most satisfied with Relations With Your Children, Marriage/Romantic Relationship, and Health. They were the least satisfied with Income/Standard of Living, Neighborhood, Community, and the Navy. The life domains that contributed the most to respondents' global subject quality of life were Income/Standard of Living, Marriage/Romantic Relationship, Job and Self. In general, the demographic variables were not related to subjective quality of life. Each of the six personality variables studied was significantly associated with Global quality of life. The

results of this investigation were compared with past civilian quality of life research, and their implications for the Navy were discussed. The study team used this document as background information in the development of survey methodology.

Calahan, Charles A. (1997). Internal Consistency, Reliability, and Concurrent Validity of the Kansas Marital Satisfaction Scale and the Quality Marriage Index. *Psychological Reports*.

The internal consistencies of the Kansas Marital Satisfaction Scale and the Quality Marriage Index were measured for responses of 113 conservative church couples. Analyses indicated that the two scales are reliable marital measures when sampling a conservative church setting. The study team used this document as background information in the development of survey methodology.

Campbell, A., Converse, P.E., & Rodgers, W.L. (1976). *The Quality of American Life; Perceptions, Evaluations, and Satisfactions*. New York: Russell Sage Foundation.

This text is a classic in the quality of life field. It is based on research conducted by the Institute for Social Research at the University of Michigan. It is concerned with how Americans define the quality of their life experiences, as expressed in their perceptions, evaluations, and satisfactions. The information is also based on the conviction that the relationship between objective conditions and psychological states is imperfect. Topics covered are residential environment, experience of work, marriage and family life, and personal resources and competence. The text was used by the study team to provide background to the development of the Family questionnaire.

Cavin, Edward S. (1988). *Is There Such a Thing As Overall Satisfaction With Military Life? A Factor Analysis of Marine Corps Data*. Center for Naval Analysis.

The study described in this paper determines the number of important dimensions in which Marine satisfaction with military life should be measured, or more specifically, whether it is meaningful to discuss satisfaction as a single variable. The basic approach used was to form a correlation matrix for 18 different measures of Marine satisfaction with military life and to factor the correlation matrix, using the standard factor analysis model, into three dimensions. The results suggest that economic factors, on which current retention models depend, are only part of the retention story and that military personnel policies bearing on family stability and personal satisfaction may be important as well. The study team members will use this document in the analysis phase of the study.

Cohen, E. H. (2000). *A Facet Theory Approach to Examining Overall and Life Facet Satisfaction Relationships*. Social Indicators Research. Netherlands: Kluwer Academic Publishers.

This study extends Multiple Discrepancies Theory one-step further by applying a Facet Theory statistical approach to our understanding of the same set of data. In this way a holistic model emerges, presenting not only the relationship between overall life satisfaction and life facet satisfaction, but also the inter-relationships between and among each and every facet. The study team used this document as background information in the development of survey methodology.

Craiger, Philip, Ph.D. & Weiss, R. Jason (1999). Structural Equations Models of U.S. Marine Corps Quality of Life. North Carolina: U.S. Army Research Office, Research Triangle Park. Unclassified.

This report describes the procedures implemented and corresponding results of the validation of structural equations models of Marine Corps Quality of Life. Model results for this report are based upon data from a survey administered to Marine Corps personnel in 1998. The study team used this document as background information in the development of survey methodology.

Cramer, Duncan (1995). Life and Job Satisfaction: A Two-Wave Panel Study. *The Journal of Psychology*. Provincetown.

This article explores the relationships between job and life satisfaction. Two hundred and ninety-nine professional employees of a British engineering company were examined over a 13-month period. The study team used this document as background information in the development of survey methodology.

Crane, D. Russell, Middleton, Kenneth C., & Bean, Roy A. (2000). Establishing Criterion Scores for the Kansas Marital Satisfaction Scale and the Revised Dyadic Adjustment Scale. Bunner/Mazel.

The study team used this document as background information in the development of survey methodology. The study demonstrates the usefulness of the Kansas Marital Satisfaction Scale (KMSS) and Revised Dyadic Adjustment Scale (RDAS) in distinguishing between the maritally distressed and nondistressed. An equivalency table of mathematical formulas is also presented, allowing the conversion from any one of a number of instruments (KMSS, RDAS, Dyadic Adjustment Scale, Marital Adjustment Test, Revised Marital Adjustment Test) to an equivalent score as measured by another instrument.

Cummins, Robert A. (2000). *Objective and Subjective Quality of Life: An Interactive Model*. Netherlands: Kluwer Academic Publishers.

This paper reviews the relationship between objective and subjective quality of life indicators. It proposes that the interaction of these variables occurs within a system that homeostatically maintains subjective quality of life within a narrow range. Due to the capacity of this system to adapt to varying environmental circumstances, the objective and subjective indicators are normally poorly correlated. However, it is also proposed that very poor objective conditions can defeat homeostasis and, once this occurs, the objective and subjective indicators display stronger covariation. The document was used by the study team as background information in the development of survey methodology.

Department of Defense (1999). 1998 Department of Defense Recruiter Survey: Active Duty Results. Defense Manpower Data Center.

This briefing provides the background, goals, and achievements of active duty recruiters. The study team used this document for survey instrument development as well as study analysis purposes.

Department of Defense (2001). 2001 Military Recruiter Survey. Defense Manpower Data Center.

In 1989, the Defense Manpower Data Center (DMDC), on behalf of Accession Policy, designed and administered a survey to obtain baseline information regarding field recruiters' perceptions of issues related to recruiter selection and training, organizational leadership, recruiter support, and quality of life. Since then, the recruiter survey has been administered in 1991, 1994, 1996, 1998 and 2000. The purpose of this survey was to assess a recruiters' quality of work life and issues that affect a recruiters' ability to achieve mission goals. The study team will use this document in the analysis phase of the study.

Department of the Navy (January 2000). Department of the Navy Morale, Welfare, and Recreation Master Plan.

This Master Plan organizes efforts and resources to improve the Quality of Life for sailors and their families. This plan is flexible and tracks the status of current objectives, incorporates new goals, shows customer satisfaction, and shows budgeted versus funds obligated and funds spent. The study team used this as background information.

Diener, Ed (1984). Subjective Well Being. *Psychological Bulletin*.

The literature on subjective well being, including happiness, life satisfaction, and positive affect, is reviewed in three areas: measurement, causal factors, and theory. Psychometric data on single-item and multi-item subjective well being scales are presented, and the measures are compared. Measuring various components of subjective well being is discussed. In terms of causal influences, research findings on the demographic correlates of subjective well being are evaluated, as well as the findings on other influences such as health, social contact, activity, and personality. A number of theoretical approaches to happiness are presented and discussed: telic theories, associationistic models, activity theories, judgment approaches, and top-down versus bottom-up conceptions. The study team used this document as background information in the development of survey methodology.

Diener, Ed, Emmons, Robert A., Larsen, Randy J., & Griffin, Sharon (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*.

This article reports the development and validation of a scale to measure global life satisfaction, the Satisfaction With Life Scale. Among the various components of subjective well being, the Satisfaction With Life Scale is narrowly focused to assess global life satisfaction and does not tap related constructs such as positive affect or loneliness. The scale is shown to have favorable psychometric properties, including high internal consistency and high temporal reliability. Scores on the Satisfaction With Life Scale correlate moderately to highly with other measures of subjective well being, and correlate predictably with specific personality characteristics. It is noted that this scale is suited for use with different age groups, and other potential uses are discussed. The study team used this document as background information in the development of survey methodology.

Dillman, Don A. and Carley-Baxter, Lisa R. (1999). Structural Determinants of Mail Survey Response Rates Over a 12 Year Period, 1988-1999. Washington: Washington State University.

One of the most nagging and difficult questions to answer about response rates to mail surveys concerns whether response rates have been declining in recent years, as they appear to be for telephone surveys. This paper provides results from regression analyses. The 102 response rates were regressed on these structural variables, year of study, questionnaire length, and number of replacement questionnaires in order to understand their individual and combined effects on survey response rates. The study team used this document in the development of the data collection plan.

Doyle, Kenneth O. & Youn, Seounmi (2000). Exploring the Traits of Happy People. Netherlands: Kluwer Academic Publishers.

The document was used by the study team as background information in the development of survey methodology. This paper explores self-reported happiness across a fourfold personality framework that synthesizes psychoanalytic and psychometric approaches to personality structure. More specifically, the authors identified patterns of similarities and differences across personality types in the meaning of happiness with respect to good eating habits, financial insecurity, anxiety and tension, financial optimism, and health concerns.

Eckersley, Richard (2000). The State and Fate of Nations: Implications of Subjective Measures of Personal and Social Quality of Life. Netherlands: Kluwer Academic Publishers.

The study team used this document as background information in the development of survey methodology. Quality of life includes both objective and subjective elements, so indicators of progress should include measures of how people feel about their lives. Drawing mainly on Australian data – but also on U.S. and international studies – this analysis examines and differentiates between subjective measures of personal and social quality of life, and discusses their use in evaluating whether life is getting better, or worse.

Ellison, Christopher G., Taylor, R.J., Jackson, J.S. & Chatters, L.M. (1997). Family Life in Black America. California: Sage Publications, Inc.

The study team focused on Chapter 6, Religious Involvement and the Subjective quality of Family Life Among African Americans, to support the inclusion of the Spiritual domain in the Family Quality of Life survey instrument. The religion-family connection has received significant attention from social scientists in recent years. To date, however, most of the research on the religion-family connection has been based on data from predominantly white samples. This chapter examines the relationships between religious involvement and subjective assessments of the quality of family life among African Americans. Using a series of multivariate logistic regression models, the net effects of religious variables and covariates on three indicators of the subjective quality of family: (a) positive evaluations of performance in family roles, (b) perceptions of family closeness; and (c) satisfaction with family life. The findings showed that frequent churchgoers and individuals with strong convictions regarding the religious socialization of young people enjoy higher subjective quality of family life than other African Americans.

Gauthier, B. (1987). Client Satisfaction in Program Evaluation. Social Indicators Research.

Gauthier used Multiple Discrepancies Theory and successfully tested it using a population of rehabilitation clients. The study team used this document as background information in the development of survey methodology.

Glenn, N. D. (1985). Quantitative Research on Marital Quality in the 1980s: A Critical Review, 1990. Journal of Marriage and Family. University of Texas at Austin.

The study team used this document as background information in the development of survey methodology. The author focuses on reviewing the quantitative “mainstream” social scientific research on marital quality of the 1980s. Further, the author concentrated on the topics to which the most attention was devoted and on a few studies that (in his judgment) made the greatest contributions, were most influential, or illustrated important points. Theoretical, conceptual and methodological issues are discussed first, and then selective research findings are reviewed.

Hazelrigg, Lawrence E. & Hardy, Melissa A.; Scaling the Semantics of Satisfaction. Netherlands: Kluwer Academic Publishers.

The document was used by the study team as background information in the development of survey methodology. Self-assessed satisfaction is typically measured on an ordinal scale of verbal categories (“very satisfied,” “somewhat satisfied,” etc.). This paper explores the boundaries that persons implicitly set between contiguous categories uniformly set across persons and/or across domains of satisfaction and questions whether they are variably sensitive to status characteristics and/or to domain? Analysis of relevant data demonstrate systematic variations and sensitivities in the semantics of satisfaction. Moreover, this semantic elasticity affects other estimates in models of self-assessed satisfaction.

Headey, Bruce, Veenhoven, Ruut, & Wearing, Alex (1991). Top-Down Versus Bottom-Up Theories of Subjective Well Being; Netherlands: Kluwer Academic Publishers.

This paper addresses issues of causal direction in research on subjective well being. The main purpose is to propose a general statistical model which holds promise of resolving this controversy of the top-down versus bottom-up theories of subjective well being. The model can be used when three or more waves of panel data are available. It is used here to assess causal direction between six domain satisfactions (marriage, work, leisure, standard of living, friendship and health) and subjective well being. The study team used this document as background information in the development of survey methodology.

Heylighen, Francis & Bernheim, Jan (2001). Global Progress: An Empirical Analysis and An Evolutionary Framework. Belgium: CLEA, Free University of Brussels.

The authors argue that Global quality of life indicators such as wealth, security, knowledge, freedom and equality have undergone significant improvements during the last half-century. Life factors can be reliably measured through life satisfaction questionnaires. This document will be used in the analysis phase of the study.

Kerce, Elyse W. (1992). *Quality of Life: Meaning, Measurement, and Models*. California: Navy Personnel Research and Development Center. Unclassified.

The author reviews the history of quality of life research, identifies reasons for focusing on quality of life as a desired outcome, and discusses objective and subjective approaches to its assessment. The distinction between cognition and affect in perceptions of well being is explored to facilitate a more thorough understanding of the components of subjective quality of life. Several models specifying the relationship between components of quality of life are presented, and the advantages of applying a life domains model are discussed. Research findings on the demographic correlates of quality of life are summarized. The properties of a number of popular measurement scales are compared, and recommendations are made for conducting quality of life assessment within the military community. The study team used this document as background information in the development of survey methodology.

Kerce, Elyse W. (1995). *Quality of Life in the U.S. Marine Corps*. California: Navy Personnel Research and Development Center. Unclassified.

This study report from 1995 assessed the Quality of Life in the Marine Corps using data collected from a questionnaire designed for this effort and objective data from Headquarters, United States Marine Corps data files. The assessment utilized a life domain framework, in which the domains of Residence, Neighborhood, Leisure and Recreation, Health, Friends and Friendships, Marriage/Intimate Relationship, Relationship with Children, Relationship with Relatives, Income/Standard of Living, Job, and Self were included. Structural equation modeling techniques were used to specify the relationships among life domains, Global quality of life, and organizational outcomes such as performance, retention and personal readiness. The study team used this document as background information in the development of the survey methodology and in all the analysis phases of the study.

Kerce, Elyse W. (1996). *Quality of Life in the U.S. Marine Corps: Executive Summary*. California: Navy Personnel Research and Development Center. Unclassified.

The study team used this document as background information in the development of survey methodology. This report discusses the major findings, conclusions and recommendations of the Quality of Life in the U.S. Marine Corps study report.

Kerce, Elyse W. (1998). *Assessment of USMC Quality of Life (QoL) Program Contributions to Readiness, Performance, and Retention Volume 1: Design and Methodology*. California: Navy Personnel Research and Development Center.

This document was used as background information in the development of survey methodology by the study team. This report presents an integrated system for assessing the impact of Marine Corps quality of life programs on readiness, retention, and performance. The system is based on the integration of program input data and qualitative data provided by program patrons/participants with the quality of life data base compiled from periodic administration of the Marine Corps Quality of Life Questionnaire. The rationale for this approach is discussed,

appropriate respondent samples are specified, and data collection methods are outlined.

Kingsbury (2001). Report to the Honorable George R. Nethercutt, Jr., House of Representatives. Actions Needed to Achieve Greater Results from Air Force Family Need Assessments. United States General Accounting Office.

In this report to the Honorable George R. Nethercutt, Jr., the Government's General Accounting Office details their evaluation of the U.S. Air Force's family needs assessment process. Specifically, how the needs of military families are determined; what type of information the Air Force obtains; and, how information from needs assessments affects allocation of Air Force funding for family support programs. Included in this report are recommendations for process improvement. The study team used this document as background information in the development of survey methodology and analysis phases.

Kocher, Kathryn M. & Thomas, George W. (2000). A Preliminary Analysis of the 1999 USMC Retention Survey. California: Naval Postgraduate School.

This paper provides a summary of the Marine Corps Exit and Retention Survey results and provides information about subject surveys. The study team used this document for survey analysis purposes.

Koopman, Martha E. & Goldhaber, Dan D. (1997). Return on Quality of Life Investment. Virginia: Center for Naval Analyses.

The study team will use this document in the analysis phase of the study. This paper addresses the need for an analysis of return on investment for Quality of Life programs. Utilizing statistical analysis, simulated continuation effects and cost-benefit analysis, the return on investment is quantified.

Krulak, General Charles C. (1999). Commandant's Guidance. United States Marine Corps Reserve Command.

The study team will use this document as background information in the development of draft Final Report.

Lakhani, Hyder (1994). The Socioeconomic Benefits to Military Families of Home-Basing of Armed Forces. New Brunswick: Armed Forces and Society.

An analysis of the Survey of Army Families, 1987 and Army Family Survey Research data reveals that home-basing of armed forces is likely to improve quality of spouse employment and the quality of family life. Home-basing is also likely to reduce childcare costs to the Army. Home basing is defined as the relocation of a large number of Army units from Outside of the Continental United States in Europe to the Continental United States. An objective to this article is to determine the socioeconomic benefits, if any, of home-basing in the United States. The study team used this document as background information in the development of survey methodology.

Lance, Charles E., Lautenschlager, Gary J., Sloan, Christopher E., & Varca, Philip E. (1989). *A Comparison Between Bottom-Up, Top-Down, and Bidirectional Models of Relationships Between Global and Life Facet Satisfaction*. Duke University.

The study team used this document as background information in the development of survey methodology. The article compares bottom-up, top-down and bi-directional models of relationships between global and life facet satisfactions in a sampling of university professors.

Lance, Charles, Mallard, Alison G., & Michalos, Alex C. (1995). *Kluwer Tests of the Causal Directions of Global-Life Facet Satisfaction Relationships*. Netherlands: Academic Publishers.

The document was used by the study team as background information in the development of survey methodology. Previous research generally has supported multiple discrepancies theory of the processes by which individuals arrive at judgments of satisfaction with various aspects of their lives as well as with life overall. The purpose of this study was to extend multiple discrepancies theory by testing alternative theoretical models which specified Bottom-up, Top-Down, and Bidirectional relationships between overall life satisfaction and satisfaction with 11 life facets in a sample of 1354 U.S. college students. The need to identify boundary conditions which determine the direction of the overall-life satisfaction relationship is discussed.

Lewis, Virginia G., & Borders, L. Dianne (1995). *Life Satisfaction of Single Middle-Aged Professional Women*. Journal of Counseling and Development. Alexandria, VA: JCD.

The document was used by the study team as background information in the development of survey methodology. Ten factors and their relation to the life satisfaction of single middle-aged professional women were assessed by administering a questionnaire to the women. Performance on life satisfaction was explained by recourse to the variables of job satisfaction, internal locus of control, regrets about life circumstances, sexual satisfaction and leisure-time activities.

Mallard, Alison G., Lance, Charles E., & Michalos, Alex C. (1997). *Culture As A Moderator Of Overall Life Satisfaction - Life Facet Satisfaction Relationships*. Netherlands: Kluwer Academic Publishers.

This study provided additional competitive tests between three models of relationships between overall and life facet satisfaction [Bottom-Up (BU), Top-Down (TD), and Bidirectional (BD) models], and explored whether culture moderates these relationships. Models were tested using data collected as part of Michalos' (1991) global study of student well being from samples of college students in 32 different countries. The study team used this document as background information in the development of survey methodology and for comparison analysis.

Mallard, Alison G.C. & Lance, Charles E. (1998). *Development and Evaluation of a Parent-Employee Interrole Conflict Scale*. Netherlands: Kluwer Academic Publishers.

The document was used by the study team as background information in the development of survey methodology. The authors took a deductive (theoretically-

based) approach to develop scales to measure a specific aspect of work-family conflict: interrole conflict between individuals' roles as parents and as employees, or parent-employee conflict. Scale items are presented, and recommendations for scale use and future research directions are offered.

McGregor, Sue L.T. & Goldsmith, Elizabeth B. (1998). *Expanding Our Understanding of Quality of Life, Standard of Living, and Well Being*. American Association of Family & Consumer Sciences.

The authors define and differentiate quality of life, standard of living and well being. Collective agreement on these concepts provide a strength and focus with a unique approach to families. The study team used this document as background information in the development of survey methodology.

Michalos, Alex C. (1980). *Satisfaction and Happiness*. Holland and Massachusetts: D. Reidel Publishing Co.

The article is a review of the recent literature on satisfaction and happiness. The author also identifies some plausible next steps to take at the frontiers of the research field and offers suggestions to facilitate those steps. Using partial correlation techniques, substantial levels of covariation are found among the variables used in predictions of satisfaction and happiness with life as a whole from satisfaction with specific domains (e.g., family life, health). Using path analysis, confirmation is found in a dozen domains for a model which has satisfaction as a function of a perceived goal-achievement gap, and the latter as a function of comparisons with previous best experience and the status of average folks. Using discriminant analysis, satisfaction with family life is found to be a powerful and predominant discriminator among three groups, identified as Frustrated (dissatisfied and unhappy), Resigned (satisfied and unhappy) and Achievers (satisfied and happy). The study team used this document as background information in the development of survey methodology.

Michalos, Alex C. (1985). *Multiple Discrepancies Theory (MDT)*. Massachusetts: D. Reidel Publishing Company.

The author presents an account of multiple discrepancies theory, with a review of its historical antecedents and an examination of its strength in accounting for the happiness and satisfaction of nearly 700 university undergraduates. The domains studies were health, finances, family, job, friendships, housing, area, recreation, religion, self-esteem, transportation and education. The study team used this document as background information in the development of survey methodology.

Michalos, A.C. (1986). *An Application of Multiple Discrepancies Theory (MDT) to Seniors*. Social Indicators Research. D. Reidel Publishing Company.

Multiple Discrepancies Theory posits that satisfaction and happiness are functions of 7 perceived discrepancies, viz., between what one has and wants, relevant others have, needs, deserves, has had in the past, expected to have and expects to have. The theory and its historic antecedents are explained. The theory was applied to a sample of 450 seniors from 4 areas of Ontario. Briefly, Multiple Discrepancies Theory accounted for about a third of the variance in reported life satisfaction for

the whole group and both sexes separately, and about a quarter of the variance in happiness. The study team used this document as background information in the development of survey methodology.

Michalos, A.C. (1991). *Global Report on Student Well Being; Volume I: Life Satisfaction and Happiness*. New York: Springer-Verlag.

This text is the first of four volumes that document a large-scale study of global student well being, using a Multiple Discrepancy Theory framework. Multiple Discrepancy Theory has been tested and supported extensively by this study. This volume discusses theoretical background on satisfaction and happiness measures and outcomes and provides an extensive literature review of all prior quality of life research. This text was essential to the updating of the Marine questionnaire and in the creation of the Family questionnaire.

Michalos, A.C. (1991). *Global Report on Student Well Being; Volume II: Family, Friends, Living Partner, and Self-Esteem*. New York: Springer-Verlag.

The study team used this text in updating the Marine questionnaire and in the creation of the Family questionnaire. This is the second of four volumes that document a large-scale study of global student well being, using a Multiple Discrepancy Theory framework. Multiple Discrepancy Theory has been tested and supported extensively by this study. This volume discusses the results of the study for family, friends, living, partner, self-esteem.

Michalos, A.C. (1993). *Global Report on Student Well Being; Volume IV: Religion, Education, Recreation, and Health*. New York: Springer-Verlag.

This text is the fourth of four volumes that document a large-scale study of global student well being, using a Multiple Discrepancy Theory framework. The Multiple Discrepancy Theory has been tested and supported extensively by this study. This volume discusses the results of the study for religion, education, recreation and health. This text was essential to the study team in updating the Marine questionnaire and in the creation of the Family questionnaire.

Michalos, Alex C., Zumbo, Bruno D., & Hubley, Anita (2000). *Health and the Quality of Life*; Netherlands: Kluwer Academic Publishers.

The aim of this investigation was to explain the impact of people's self-reported health on their levels of satisfaction with their health, and the impact of these things plus satisfaction with other specific domains of their lives on the perceived quality of their lives. The study team used this document as background information in the development of survey methodology.

Michalos, Alex C., Hubley, Anita M., Zumbo, Bruno D. & Hemingway, Dawn (2000). *Health and Other Aspects of the Quality of Life of Older People*. Netherlands: Kluwer Academic Publishers.

This article discusses a survey research project that evaluated a sample older population of British Columbia and their satisfaction with specific life domains and

life as a whole. The study team used this document as background information into global satisfaction within a particular life domain and the affects of various domain satisfactions determining life satisfactions.

Military Family Resource Center (2000). 2000 Demographics, Profile of the Military Community. Virginia.

This Demographics Report, prepared for the Department of Defense, presents a synthesis of demographic information describing military members and families in the military community in fiscal year 2000. Where available, the report also profiles data for fiscal years 1980, 1985, 1990 and 1995 to denote trends. The study team used this document as background information in the development of survey methodology.

Noller, Patricia & Fitzpatrick, Mary Anne (1990). Marital Communication in the Eighties. *Journal of Marriage and Family*.

The study team used this document as background information in the development of survey methodology. This review of the research on marital communication conducted during the past decade notes an increasing emphasis on attempting to identify factors that mediate the relation between marital communication and marital satisfaction, rather than just describing the differences between those high and low in satisfaction. Longitudinal studies that allow the development of causal models have also been important. The decade of the eighties has seen the development of sophisticated technological and statistical procedures that have enabled researchers to use multiple methods and obtain different perspectives on the same interaction. Although we know much more about marital communication and the various processes involved than we did at the beginning of the decade, much more work still needs to be done.

Olson, D.H. & Barnes, H.L.; Edited by Fredman, N. & Sherman, R. (1987). *Quality of Life Scale Handbook of Measurements for Marriage and Family Therapy*. New York: Brunner/Mazel Publishers.

The study team used this document as background information in the development of survey methodology. The Quality of life scale is a five response, 40-item scale for parents, 25-item scale of adolescents. It measures satisfaction with family life, friends, extended family, health, home, education, time, religion, mass media, financial well being, neighborhood, and community and (for parents) employment.

Olson, D.H., Larson, A.S., & McCubbin, H.I.; Edited by Fredman, N. & Sherman, R. (1987). *Family Strengths Scale; Handbook of Measurements for Marriage and Family Therapy*. New York: Brunner/Mazel Publishers.

Olson and colleagues (1983) conducted a national survey that identified five factors of family strength: love, religion, respect, communication, and individuality. Based on further research, a 25-item list was produced measuring three dimensions: Pride (including respect, trust and a loyalty), positive values and beliefs and accord. A 12-item inventory emerged. The study team used this scale as background information in the development of survey methodology.

Rettig, Kathryn D. & Bubolz, Margaret M. (1983). Interpersonal Resource Exchanges as Indicators of Quality of Marriage. *Journal of Marriage and the Family*.

The document was used by the study team as background information in the development of survey methodology. This study was designed to test Foa and Foa's (1974) resource exchange theory in predicting satisfaction with marriage. Data were obtained by survey using self-administered questionnaires from 224 husband-wife couples. Respondents provided information concerning feelings about perceived quality of marriage, resources received from spouse, and shared time. It was hypothesized that the order of resource classes on the particularism dimension would correspond to the order of their effectiveness in contributing to marital satisfaction. Questionnaire items chosen to represent resource classes were verified by hierarchical complete-linkage clustering. The forward method of multiple regression indicated that the theory is useful and that additional testing is needed.

Rettig, Kathryn D., & Leichtentritt, Ronit D. (1999). *A General Theory for Perceptual Indicators of Family Life Quality*. Netherlands: Kluwer Academic Publishers.

The document was used by the study team as background information in the development of survey methodology. The article presents Foa and Foa's Resource Theory (1974) that was used to develop a self-report, multidimensional measure of family well being. Facet theory methods of sentence mapping provided an explicit way to explain how theoretical constructs were translated to operational measures, and a rationale for the use of multidimensional scaling analysis to verify the circular structure of resource classes proposed by the theory.

Ross, Catherine E. & Van Willigen, Marieke (1997). *Education and the Subjective Quality of Life*. American Sociological Association.

The authors examined whether education influences subjective quality of life. They propose that education improves well being because it increases access to non-alienated paid work and economic resources that increase the sense of control over life. The study team used this document as background information in the development of survey methodology.

Rossi, R.J. & Gilmartin, K.J. (1980). *The Handbook of Social Indicators: Sources, Characteristics, and Analysis*. New York: Garland STPM Press.

This handbook is a pioneering venture in social indicators and development – a textbook that works to provide both a conceptual grasp of the idea of social indicators and a set of practical guidelines for the practitioners of the art. Chapters include 1) A brief history of the social indicators movement, 2) Introduction to social indicators, 3) Important characteristics of social indicators, 4) Constructing social indicators, 5) Existing data sources of social indicators, 6) New data sources for social indicators, 7) Combining and refining social indicators, 8) Analyzing social indicators, 9) Preparing social indicator reports. The study team consulted this text with a focus on Chapter 4 as background information for the construction of the family questionnaire.

Schulz, Wolfgang. (1995). *Multiple- Discrepancies Theory Versus Resource Theory*; Netherlands: Kluwer Academic Publishers.

The study team used this document as background information in the development of survey methodology. The explanatory value of two theories expounding the quality of life are compared and discussed. To make this comparison possible, it is necessary to distinguish between clear theoretical assumptions and avoid a mix of theories: the variance explained by comparisons (multiple discrepancies) is compared with the variance explained by resource. Data obtained from the Vienna Student Survey (n = 350) are presented. Although multiple-discrepancies theory does explain far more variance than the resource approach, critical comments and proposals complete the study.

Sirgy, M. Joseph, Rahtz, Don R., Cicic, Muris, & Underwood, Robert (2000). *A Method for Assessing Residents' Satisfaction With Community-Based Services: A Quality-of-Life Perspective*. Netherlands: Kluwer Academic Publishers.

The study team used this document as background information in the development of survey methodology. The article presents a method for assessing satisfaction with community-based services. The method is based on the theoretical notion that consumer satisfaction with individual government services, business services, and nonprofit services affect satisfaction with the community at large. The article shows how the model and the assessment method can be used to tap citizens' perception of community quality-of-life and its determinants and identify strategic gaps or problem areas.

Sloan, C.E. (1990). *Relations Between Global Life and Domain Satisfaction: The Role of Domain Scope and Criticality*. Georgia: University of Georgia.

The study team used this document as background information in the development of survey methodology. This dissertation takes a bottom-up theoretical approach to the modeling of domain and global satisfaction and happiness.

Stones, M. J. & Kozma, A. (1985). *Structural Relationships Among Happiness Scales: A Second Order Factorial Study*. D. Reidel Publishing Company.

The study team used this document as background information in the development of survey methodology. The intent of this study was to investigate structural relationships among happiness scales, and to determine whether the happiness construct could be represented adequately by a single score index. Second order principal factors analyses were comprised of global or sub-global indices of happiness. Single factor solutions were obtained from every analysis and interpreted.

The U.S. Army Community and Family Support Center (CFSC) (1995). *In-Depth Analysis of The Survey of Army Families II (1991-1992)*. Walter Reed Army Institute of Research.

The study team will use this document as background information in the development of survey methodology. This report summarizes findings from the Survey of Army Families II (SAF-II), a mail-out survey completed by 4,897 civilian spouses (96% female) of active duty soldiers. The SAF-I survey was

performed in 1987. The U.S. Army Community and Family Support Center (CFSC) is the proponent and sponsor for spouse studies on the quality of Army family life, military life stressors, and Army family program supports. SAF-II was fielded with a representative sample of spouses, Army-wide, for information on their use of, and satisfaction with, support programs and unit-family leadership. SAF findings are a yardstick for progress in Army Family Action Plan (AFAP) goals that fulfill the Chief of Staff's 'White Paper on the Army Family' (1983).

U.S. Army (2001). Fall 2000 Army Sample Survey of Military Personnel. U.S. Army Research Institute for the Behavioral and Social Sciences.

The Army Personnel Survey Office at the U.S. Army Research Institute conducts this sample survey of military personnel in the spring and fall each year on behalf of the Army Deputy Chief of Staff for Personnel. The survey evaluates 56 quality of life, well being, and job satisfaction factors and was used by the study team as background information in the development of survey methodology.

United States General Accounting Office; Report to the Chairman and Ranking minority Member, Subcommittee on Military Personnel, Committee on Armed Services, House of Representatives. (2001). Military Personnel, Higher Allowances Should Increase Use of Civilian Housing, But Not Retention.

The General Accounting Office analyzed the results of a 1999 survey of Active Duty Personnel in this report to Congress. The survey was administered to a random sample of over 66,000 military personnel with the purpose of determining how increasing the housing allowance would satisfy a service member's intent to stay in the military. The results of the survey were compared to and analyzed against a DoD sponsored report by Rand to better understand the reasons for service members' housing choices and preferences. This report was used by the study team in the analysis phase of the study.

United States Marine Corps. (8 November 1999). Marine Corps Order, P1700.27A; United States Marine Corps Community Services Policy Manual; Headquarters, Washington, DC.

This order establishes general policy for the operation and support of Marine Corps Community Services Programs. The study team used this document as background information into the Quality of Life programs directed by the Commandant of the Marine Corps.

United States Marine Corps. (1 December 1999). Marine Corps Order, 1754.6; Marine Corps Family Team Building (MCFTB).

Order 1754.6 establishes guidelines and provides instructions to ensure standardization and equity of Marine Corps Family Team Building throughout the Marine Corps. The study team used this document as background information throughout the study.

United States Marine Corps (2000-2005). United States Marine Corps Quality of Life (QoL) Master Plan.

The study team will use this document as background information in the development of survey methodology, and study analysis, conclusions, and recommendations. This Master Plan discusses Quality of Life programs and services that directly support and sustain Marine Corps readiness.

White, Michael A., Ph.D. (1999). *Quality of Life in the Marine Corps Recruiting Command: A 1998 Comparison of Marine Corps Recruiters and their Garrison Counterparts*. California: Navy Personnel Research and Development Center. Unclassified.

This report contains the results of the Recruiting Command survey for recruiter paygrades E-5 through E-9 and O-1 through O-3. It compares the recruiter data to data gathered during the broader 1998 Marine Corps administration to Marines in the same paygrades as those in Recruiting Command. It was found that overall satisfaction with quality of life was significantly lower for those in Recruiting Command than for their garrison counterparts. The study team used this document as background information in the development of survey methodology and for comparison analysis.

White, Michael A., Ph.D., Baker, Herbert G., Ph.D.; & Wolosin, Donna A., Ph.D. (1999). *Quality of Life in the Marine Corps: A Comparison Between 1993 and 1998*. California: Navy Personnel Research and Development Center. Unclassified.

The authors provide an overview of Quality of Life conditions in the Marine Corps when the study was first administered in 1993 and then again in 1998 in terms of programmatic performance and resourcing. It describes the results and impacts from the 1993 study to set the context for the 1998 findings. It also presents the results of the 1998 study and provides some considerations and proposed actions that respond to the results. The study team used this document as background information in the development of survey methodology and for comparison analysis.

White, Michael A. & Mottern, Jackqueline (2001). *United States Marine Corps Retention Survey: 2001 Preliminary Results*. Navy Personnel Research, Studies and Technology.

This draft report presents an analysis of the first 10,000 of 141,000 Marine Corps Retention Surveys mailed to all Marines who were not in transit or training. The study team will use this document for survey analysis purposes.

Wicker, Allan W. (1996). *Quality of Life and Military Outcomes: A Conceptual Framework and Suggestions for Planned Research*; California: Navy Personnel Research and Development Center. Unclassified.

This report presents a conceptual framework and suggestions for a planned study of quality of life and military outcomes among Navy personnel. The conceptual framework links individual variables (e.g., age, marital status, and Navy pay grade) and contextual Navy variables (e.g., command) with two conceptions of subjective quality of life: satisfaction with particular domains in one's life (e.g., marriage and job) and global life satisfaction. A number of facets of life domains are identified, including overall satisfaction, satisfaction with aspects of the domain, centrality of the domain, and perceived relevance of the Navy to domain satisfaction. Quality of life needs in a given domain are represented as the interaction of domain

satisfaction and centrality. Additional contributors to life satisfaction are recent experiences of satisfaction and dissatisfaction within life domains, the degree to which individuals' personal characteristics fit the Navy environment, and personal dispositions such as optimism. Three types of person-level military outcomes are considered: retention, job performance, and readiness. These outcomes are related to global and domain satisfaction and to person-environment fit. One section of the report lists expectations derived from the conceptual framework; another presents specific research recommendations. The study team used this document as background information in the development of survey methodology.

Wilcove, Gerry L. (1994). *Quality of Life in the Navy, Findings From 1990 to 1992: The Navy-wide Personnel Survey, Volume 1: Research Report*. California: Navy Personnel Research and Development Center. Unclassified.

The document was used by the study team as background information in the development of survey methodology. The Navy-wide Personnel Survey has been administered to over 20,000 officers and enlisted personnel for each of the past 4 years (1990-1993). Its purpose is to provide feedback to policy makers and managers on key personnel issues. This report presents the results obtained from the first three surveys on quality of life issues connected with voluntary college-level education, first skills training, family support programs, childcare services, leadership training, living conditions (housing), recreational programs, and Navy exchanges.

Wilcove, Gerry L. (1994). *Quality of Life in the Navy, Findings From 1990 to 1992: The Navy-wide Personnel Survey, Volume 2: Management Report*. California: Navy Personnel Research and Development Center. Unclassified.

This report presents survey results bearing on four questions: (1) How did personnel characterize the Navy's quality of life efforts in the period from 1990 through 1992? (2) Did the opinions of personnel regarding the Navy's quality of life efforts exhibit any trends between 1990 and 1992? (3) Did some personnel view the Navy's efforts more favorably than other personnel in the period from 1990 to 1992? And (4) In the period between 1990 and 1992, did the Navy's quality of life efforts favorably impact the job performance of personnel and their career-continuance decisions? Results were based on completed surveys from 20,121 enlisted personnel and 14,530 officers. The study team used this document as background information in the development of survey methodology.

Focus Group Summaries

Family Member (Spouse) Focus Group Sessions

Four family member (spouse) focus group sessions were held at the James Wesley Marsh Center at Marine Corps Base Quantico, Virginia on October 3, 2001. The purpose of the four focus groups was to gather information from the spouse population in order for the questionnaire design specialist to create an appropriate survey instrument questionnaire to accurately measure quality of life for Marine families. This section captures the concerns and perceptions of spouses regarding their feelings, thoughts, and opinions of their quality of life.

Overview

There were four Quality of Life Focus Groups held with a facilitator leading each focus group. Following introductions, and an explanation of the survey, the participants in each focus group were asked the same questions and in the same order. Each question was followed by group discussion and any follow-up questions. The participants remain anonymous.

Questions

1. Describe marriage to a Marine.
2. What is the best thing about being married to a Marine?
3. What do you like least about being married to a Marine?
4. What factors contribute to your personal sense of well being?
5. How would you rank these factors in order of importance to you?
6. Have the events of September 11th had an impact on your life?
7. Do you think the Marine Corps should support you in these areas? (In response to Question 5)
8. How does your well being affect your spouse's well being?

Focus Group 1: Spouses of enlisted personnel in the grades of E-5 and below with children.

Date: 3 October 2001.

Place: James Wesley Marsh Center, Marine Corps Base Quantico, Virginia.

Facilitators: Dr. Theresa Ditton.

Summary: There were two participants in this group. All participants like being Marine spouses and enjoy the benefits such as the exchange, commissary, movie theatre, gym, gas station, library, school system, and healthcare. The participants listed on-base housing, out of pocket cost of living expenses, and lack of contact with other Marine spouses as negative aspects of Marine life. When asked to rank the factors involved in their sense of well being, one participant listed religion, marriage/intimate relations (social support system), and health and fitness; the other participant listed health, marriage, and neighborhood factors in her sense of well being. The participants felt the events of September 11 had little impact on their lives as they were always aware of the reality of their spouse's job or their spouse's MOS meant they were unlikely to be deployed. For the most part, the participants felt their needs are being met by the Marine Corps and feel their well being has a direct impact on their spouse's. The spouses feel flexibility and conformity are key to happiness; the wives' personality is important. Where there's an unhappy wife, there is an unhappy Marine.

Focus Group 2: Spouses of enlisted personnel in the grades of E-5 and below without children.

Date: 3 October 2001.

Place: James Wesley Marsh Center, Marine Corps Base Quantico, Virginia.

Facilitators: Mr. Donald McGee-Pasceri.

Summary: There were two participants in this group. All participants like being Marine spouses, but agreed that it is a difficult life. The participants enjoy the benefits the Marine Corps offers such as the movie theatre, PX, commissary, gym, and clinic. Both participants agreed housing and lack of income is the worst part of being married to a Marine. The participants listed the following as factors that influenced their sense of well being: prompt healthcare, income, a new spouses welcome program, singles housing, recreation and leisure activities, time management, job/education assistance, command communication/relationship with spouse, and marriage. When asked to rank factors in order of impact on their well being, one participant listed marriage, self/personal development, and relations with relatives, while the other participant listed health, marriage, and income. Both participants felt the events of September 11th had little impact on their lives because their spouse's MOS does not require them to be deployed. The participants felt the Marine Corps can help support them in several areas including allowing more use of leave time in greater frequency and larger increments; allow holy days of obligation to be taken, and improve on the move system (Items didn't arrive for a month). Both participants feel the well being of the wife has a direct impact on the Marine, good or bad, and realize their impact on their spouse.

Focus Group 3: Spouses of Non-Commissioned Officers in the grades of E-6 and above.

Date: 3 October 2001.

Place: James Wesley Marsh Center, Marine Corps Base Quantico, Virginia.

Facilitators: Dr. Theresa Ditton.

Summary: There were six participants in this group. When asked to describe married life to a Marine, the participants agreed it was unpredictable, they were not used to their husbands being home (separation issues), and agreed they were proud to be Marine wives. The participants listed traveling, the ability to make friends quickly, and the ideal that Marines always look out for their own as the best parts of being married to a Marine. On the other hand, the spouses agreed that income and housing are the worst aspects of Marine life. When asked to list factors that contribute to their sense of well being, the participants listed neighborhood, sense of well being, child activities, and career. The participants then ranked three factors in order of importance to their well being. Participant 1: residence, health, deployment/separation issues; Participant 2: religion, marriage, children; Participant 3: health, childcare, job/career; Participant 4: Residence, health, childcare/schools; Participant 5: family, children's education, health and healthcare;

Participant 6: religion, health, and deployment/separation. The participants agreed the events of September 11 have had little impact on their lives because deployment and separation has always been a reality for them. The participants feel the Marine Corps does a good job of supporting them in the areas that most impact their well being and agreed that the spouses have an obligation to stand up for themselves and rely on the great spouse support network in place. The participants recognize their well being has a direct impact on their spouse's well being and their attitude affects their spouse in every conceivable way.

Focus Group 4: Spouses of all Officer grades.

Date: 3 October 2001.

Place: James Wesley Marsh Center, Marine Corps Base Quantico, Virginia.

Facilitators: Mr. Donald McGee-Pasceri.

Summary: When asked to identify the positive aspects of being married to a Marine, the participants listed the sense of community, job/financial security, predictability, children with their own identities, and their own independence. The ten participants listed frequent moves, instability with special-needs children, the disruption to spouse career path, inconsistent healthcare and management, base housing, cost of living and basic allowance for housing are unequal, the job placement services are not geared for the professional, and the inability to take advantage of in-state tuition rates. The events of September 11 have had little impact on their priorities and well being and the participants know they have the support of the community. The participants feel the Marine Corps does not support them in their career development.

Interview Summaries

Name of Person

Visited/Interviewed: Dr. Morris Peterson.

Title: Chief, Army Personnel Survey Office

Organization: U.S. Army Research Institute

Date: 26 September 2001.

Interviewer: Dr. Theresa Ditton.

Type of Interview: Telephone.

Summary: Dr. Peterson indicated that he was the point of contact along with Dr. Robert Fafara for the Survey of Army Families Study. The Survey of Army Family is in its fifth administration. Dr. Peterson gave advice in the area of focus group strategy and questionnaire design. When asked if he would provide a copy of the survey, he agreed and sent it via electronic mail later that day. Dr. Peterson indicated that he would be willing to be contacted for advice on other occasions. The study team used the document

produced by this conversation as background information in the development of survey methodology.

Name of Person

Visited/Interviewed: Dr. Elyse Kerce.

Title: Developer of the 1993 Marine QoL Survey.

Date: 17 October 2001.

Interviewer: Dr. Theresa Ditton.

Type of Interview: Telephone.

Summary: Dr. Kerce provided specific advice to Dr. Ditton about the proposed 2001 Marine Corps Quality of Life study family questionnaire.

Name of Person

Visited/Interviewed: Dr. Elyse Kerce.

Title: Developer of the 1993 Marine QoL Survey.

Date: 19 October 2001.

Interviewer: Dr. Theresa Ditton.

Type of Interview: Telephone.

Summary: During this conversation, Dr. Kerce was asked to consult with the study team on the Marine 2001 Quality of Life study survey design. Dr. Kerce and Dr. Ditton discussed sampling strategy, initial design ideas, and spoke about the spouse questionnaire administered in 1993. She noted that in 1993 they distributed the spouse questionnaire by handing them to the Marine. She noted that this was not an advisable distribution strategy as she felt it was in part the reason for low response rate and for lack of variability in the data (she felt the Marines had influenced their spouses answers). She confirmed the study performer's spouse questionnaire distribution method (mail) as being the best alternative.

Name of Person

Visited/Interviewed: Dr. Morris Peterson.

Title: Chief, Army Personnel Survey Office

Organization: U.S. Army Research Institute

Date: 6 November 2001.

Interviewer: Dr. Theresa Ditton.

Type of Interview: Electronic Mail

Summary: Dr. Peterson was asked to comment on strategies that are useful in getting military spouses to participate in the quality of life survey. Dr. Peterson confirmed that the data collection strategy that the study performer is recommending for increasing response rate of the Marines spouse (e.g., using pre-notice postcards, two follow-up postcards) was sound and a necessary step to insure adequate response rate. Dr. Peterson also responded to questions about questionnaire development software, and cover design.

Name of Person

Visited/Interviewed: Major James Evans, USMC.

Title: Manpower Analyst

Organization: HQMC, Integration & Analysis Section (MPP-50)

Date: 9 November 2001.

Interviewer: Mr. John Webb.

Summary: Major James Evans, an Analyst at MPP-50, discussed objective performance indicators. He suggested use of “Relative Value.” This is a number from 80 to 100, enumerated in tenths. Problems: it changes over time as the Reporting Senior writes more reports; it can be gamed; it is, in fact, subjective, as it is the reporting seniors opinion; and, it is only available for the past few years.

For E-4 and below the pro marks are in Marine Corps Total Force System (MCTFS). However, the problem is that there is not one indicator across the population. That is, you would have to use con marks for part of the sample and Relative Value for the other. The big concern is Privacy. Performance information cannot be released. Major Evans recommended the study team contact the Fitness Report Branch to determine the legality of accessing individual Marine performance indicators.

Major Evans confirmed there were no objective retention indicators. There had been some retention surveys done in past years, but the retention-intention was “self professed. Also, he confirmed there were no databases containing objective indicators that reflect an individual’s readiness. Applicability to Current Project: The Statement of Work requires the study team to review databases in order to identify objective data fields for the measurement of military outcomes (i.e., performance, retention, readiness).

APPENDIX A: RESPONSE SIZE METHODOLOGY REVIEW

APPENDIX A: RESPONSE SIZE METHODOLOGY REVIEW

Response Size Methodology

The survey instruments used in the 1993 and 1998 QoL studies sought to identify the respondents' judgment of quality of life in terms of, normally, seven levels. These are coded into numerical form by associating the value 1 with the lowest QoL level to a value of 7 for the highest QoL level. With individuals in the total population taken as being in one of seven states, respectively numbered with scores 1 through 7, the total population may be represented by $(f_1, f_2, f_3, f_4, f_5, f_6, f_7)$, which are the fractions corresponding to the total population in each state. The question to be answered is: How can changes in quality of life perceptions be measured accurately?

The quality of life response of the i^{th} respondent to the survey instrument is modeled by a random variable x_i , which can take on one of the values 1, 2, 3, 4, 5, 6, or 7. After such a sample is drawn from the population, an estimate $(\hat{f}_1, \hat{f}_2, \hat{f}_3, \hat{f}_4, \hat{f}_5, \hat{f}_6, \hat{f}_7)$ of the underlying population fractions can be constructed. A natural question arises about what sample size is required to insure that the difference between a sample fraction \hat{f}_i and population fraction f_i is small with high probability. However, the study team was more concerned with the accuracy of the average quality of life score.

With this in mind, the sample average needs to be close to the true population average, that is,

$$\hat{\mu} = \sum_{i=1}^7 i \hat{f}_i \quad \text{needs to be close to} \quad \mu = \sum_{i=1}^7 i f_i . \quad (1)$$

It is known that $\hat{\mu}$ is approximately Gaussian distributed about μ since the average score of all the n respondents is represented by identically distributed random variables x_i , taking on integer values between 1 and 7 with occurrence fractions $(f_1, f_2, f_3, f_4, f_5, f_6, f_7)$. The sample average is:

$$\hat{\mu} = \frac{1}{n} \sum_{i=1}^n x_i = \sum_{i=1}^7 i \cdot \hat{f}_i . \quad (2)$$

For large populations and sample sizes, $\hat{\mu}$ is easily Gaussian about mean μ . Thus, with confidence $1-\alpha$, μ lies in the zone:

$$\begin{aligned} \mu &= \hat{\mu} \pm z_{\frac{\alpha}{2}} \cdot \sigma[\hat{\mu}], \quad \text{or} \\ |\mu - \hat{\mu}| &\leq z_{\frac{\alpha}{2}} \cdot \sigma[\hat{\mu}] \end{aligned} \quad (3)$$

where $\sigma[\hat{\mu}]$ is the standard deviation of the estimate $\hat{\mu}$ and $z_{\alpha/2}$ can be read from tables of the Gaussian distribution. The study team used 95% confidence, for which $z_{.025} = 1.96$; this grants significance at the .05 level. Even when the population size (N) and sample sizes (n) are small ($N > 2n > 10$) the Gaussian approximation is acceptable.

Given the underlying (although unknown) score fractions ($f_1, f_2, f_3, f_4, f_5, f_6, f_7$) characterizing a population of size N, then for a sample of size n:

$$\sigma^2[\hat{\mu}] = \frac{1}{n} \left(\frac{N-n}{N-1} \right) \sigma_{\text{pop}}^2 \quad (4)$$

where

$$\begin{aligned} \sigma_{\text{pop}}^2 &= \sum_{i=1}^7 (i - \mu)^2 f_i, \text{ and} \\ \mu &= \sum_{i=1}^7 i f_i. \end{aligned} \quad (5)$$

So with 95% confidence we can bound the difference by:

$$\varepsilon = \max |\mu - \hat{\mu}| = \frac{1.96}{\sqrt{n}} \left(\frac{N-n}{N-1} \right)^{\frac{1}{2}} \sigma_{\text{pop}} \quad (6)$$

which solves to

$$n = \left(\frac{1}{N} + \frac{\left(1 - \frac{1}{N}\right) \varepsilon^2}{1.96^2 \sigma_{\text{pop}}^2} \right)^{-1}. \quad (7)$$

Equation (7) needs an estimate of the variance σ_{pop}^2 . In practice the sample variance reported by previous studies can be used:

$$\hat{\sigma}^2 = \sum_{i=1}^7 (i - \hat{\mu})^2 \hat{f}_i. \quad (8)$$

The only past variance reports discovered so far are those of the 1993 QoL study report in Tables C-2 and C-5. The Global Measures of quality of life exhibit $\hat{\sigma}^2 \approx 1.9$ while the overall domain satisfactions show $1.08 \leq \hat{\sigma}^2 \leq 2.99$. The lowest variance is associated with the Self-domain and the highest with the Residence domain. A value of σ_{pop}^2 in the order of 2 would be good to use. In fact $\sigma_{\text{pop}}^2 = 2.08$ converts Equation (7) into the simple rule of thumb

$$n \approx \left(\frac{1}{N} + \frac{\varepsilon^2}{8} \right)^{-1}. \quad (9)$$

In addition to sizing the sample in order to insure that estimates of average QoLs are correct, a method of sizing a sample to test the hypothesis that the results of this 2002 study are statistically different from those of one of the previous studies is required. The key here is to compare the measured average $\hat{\mu}_1$ from a sample of size n_1 in a previous study, Study 1, with the measured average $\hat{\mu}_2$ from a sample of n_2 of this 2002 study, Study 2, as if both were from the same population of size N . To be 95% confident there is a statistically significant difference when the measured difference $|\hat{\mu}_1 - \hat{\mu}_2|$ is greater than ε , then n_2 must satisfy

$$\frac{2}{N} + \frac{\left(1 - \frac{1}{N}\right) \left(\frac{\varepsilon}{1.96}\right)^2}{\hat{\sigma}_1^2} - \frac{1}{n_1} = \frac{1}{n_2} \quad (10)$$

where $\hat{\sigma}_1^2$ is the sample variance reported by Study 1. Solving for n_2 using $\hat{\sigma}_1^2 = 2.08$ the simple rule is obtained which is always larger than Equation (9):

$$n_2 \approx \left(\frac{\varepsilon^2}{8} + \frac{2}{N} - \frac{1}{n_1} \right)^{-1}. \quad (11)$$

So for example since $\hat{\mu}_1 = 4.62$ was the composite Global quality of life satisfaction score of the 1998 study, with N about 157,120 (Table A-1) and $n_1 = 4200$, then if we measure $\hat{\mu}_2 = 4.56$ or less in a new sample of size of 4452 or larger then a statistically significant decrease at the .05 level can be claimed. The study team would reject the hypothesis that the underlying population parameters are the same and accept $\hat{\mu}_2$ as the new estimate of the Global QoL average. The study team would also accept the newly measured fractions $(\hat{f}_1, \hat{f}_2, \hat{f}_3, \hat{f}_4, \hat{f}_5, \hat{f}_6, \hat{f}_7)$ as our best estimate of the underlying population QoL score distribution. The study team fixed on a difference of .06 as our goal to claim significance.

How can the significance of the difference between \hat{f}_i and f_i be measured? It is:

$$|\hat{f} - f| \leq 1.96 \sqrt{\frac{f(1-f)}{n} \left(\frac{N-n}{N-1} \right)}. \quad (12)$$

Note that Equation (12) is valid for any estimate of any fraction of the population, such as the fraction of married Marines.

Required Response Sizes by Locations/Groups

For the 2002 QoL survey the study team first stratified the current Marine population by location and by an estimate of military community support. The data location and population in Table A-1 were provided by Headquarters, U.S. Marine Corps (MR) in December 2001. (Production Recruiter counts were ultimately updated to 3118.)

| TABLE A-1. Marine Locations And Population. | |
|--|----------------|
| Location/Group | Population |
| Camp Pendleton | 30,259 |
| Miramar | 8,416 |
| San Diego | 1,017 |
| Yuma | 3,632 |
| 29 Palms | 9,004 |
| Barstow | 237 |
| Camp Lejeune | 28,799 |
| New River | 5,443 |
| Cherry Point | 7,889 |
| Beaufort | 3,509 |
| Parris Island | 1,875 |
| Albany | 690 |
| Quantico | 6,530 |
| Washington, DC | 2,149 |
| Hawaii | 6,218 |
| Iwakuni | 2,158 |
| Okinawa | 12,283 |
| Production Recruiters with support | 1,202 |
| Production Recruiters without support | 1,804 |
| Other, CONUS with support | 13,559 |
| Other, CONUS without support | 5,811 |
| Other, OCONUS with support | 1,834 |
| Other, OCONUS without support | 786 |
| Other, no MCC with support | 1,411 |
| Other, no MCC without support | 605 |
| TOTAL | 157,120 |
| Note: Totals exclude E-1s. | |

Given these populations, the first step was to create a set of response sizes for measuring the population parameters of the All Active Duty composite by dividing 4452 responses evenly over the population. However, as the Production Recruiter and "Other" populations were to be treated separately, and the accuracy of each of their quality of life estimates were desired to be the same as that of the All Active Duty composite (.06 for statistical significance) their portion of the 4452 total responses was ultimately superceded. Table A-2 displays the required responses per location.

| TABLE A-2. Required Responses Per Location/Group. | |
|---|--------------------------|
| Location/Group | Responses |
| Camp Pendleton | 857 |
| Miramar | 238 |
| San Diego | 29 |
| Yuma | 103 |
| 29 Palms | 255 |
| Barstow | 7 |
| Camp Lejeune | 816 |
| New River | 154 |
| Cherry Point | 224 |
| Beaufort | 99 |
| Parris Island | 53 |
| Albany | 20 |
| Quantico | 185 |
| Washington, DC | 61 |
| Hawaii | 176 |
| Iwakuni | 61 |
| Okinawa | 348 |
| Production Recruiters with support | (34) ¹ 687 |
| Production Recruiters without support | (51) ¹ 1,030 |
| Other, CONUS with support | (384) ¹ 671 |
| Other, CONUS without support | (165) ¹ 1,150 |
| Other, OCONUS with support | (52) ¹ 91 |
| Other, OCONUS without support | (22) ¹ 156 |
| Other, no MCC with support | (40) ¹ 70 |
| Other, no MCC without support | (17) ¹ 120 |
| TOTAL | 7,661 |
| Note ¹ : Number Needed For The Active Duty Composite Analysis. | |

Now consider the group of Independent Duty Marines without Military Community Support (IDMwoMCS). Table A-1 shows them to represent 5.73% of All Active Duty Marines, including the Production Recruiters. Thus the study team looked for 255 (= 5.73% of 4452) IDMwoMCS responses among the All Active Duty responses — the remaining 4197 responses came from Marines with Military Community Support (wMCS). To develop quality of life satisfaction estimates for the without Military Community Support group with an accuracy commensurate with that of the All Active Duty composite then 255 responses from the IDMwoMCS population of 9006 would have been insufficient.

To get within 0.06 of the true quality of life averages for IDMwoMCS, 1783 responses would be needed according to Equation (9). Since the Production Recruiters without Military Community Support represented about 20% of the IDMwoMCS, a balanced stratification would mean taking only 357 of the 1030 Production Recruiters without Military Community Support responses with 1426 coming from non-Production Recruiter Independent Duty Marines without Military Community Support as shown in Table A-2. Unfortunately, the identity of the IDMwoMCS from among all Independent

Duty Marines was not fully known in advance; the estimated identification accuracy is ID% = 75%. So a plan to acquire 1426 Independent Duty Marines without Military Community Support responses was expected to entail an unknown number of responses from Independent Duty Marines with Military Community Support. Table A-2 displays the results when wMCS% = 70% for non-Production Recruiter Independent Duty Marines (from Table A-1) given a sampling plan which is designed to include at least 12.5% of non-Production Recruiter Independent Duty Marines with Military Community Support.

Required Sample Sizes by Marine Corps Locations/Groups

The 1993 and 1998 QoL studies indicated that in order to obtain the responses listed in Table A-2, a larger sample of individuals must be selected. For mailed survey instruments to the personnel below the double line in Table A-1 and A-2, the response rate was about 80% for Production Recruiters and 33% for all others. The response rate for on site administration varied, but 80% was originally expected for this study. For the non-Production Recruiter locations employing mail in questionnaires, the study team needed to sample about three times the number of responses as recommended in Table A-2, while for the locations with on site administration and the Production Recruiter population, a nominal sample 25% larger than the number of required responses recommended in Table A-2 was needed.

However, these averages were not sufficient as half the time the responses would fall short at any location. To insure there were sufficient responses per location, more samples were added to this average, enough to obtain high confidence that the recommended number of responses was forthcoming. It was as if each location contained a fraction of responders (1/3 or 4/5) randomly distributed throughout the personnel at that location and we needed a sample large enough to insure that we secured enough of them.

For example, for the mail in location Other, OCONUS w/o MCS with N = 786 personnel R = 156 responses were needed. Nominally since p = 1/3 were expected to respond, the study team needed to identify at least R/p = 468 individuals at random and send them questionnaires. But of the 468, although 156 were expected to come back on average, perhaps much fewer would come back. So the question was posed; "How many individuals, X, are needed to be identified so that 156 or more will respond in, say, 95% of possible random samples of size X from 786?" The answer was 500, 32 more than 468.

This is the result from a truncated negative binomial distribution (approximately Gaussian for R > 30.) The formula for a 95%-confidence sample size is:

$$\frac{R}{p} + 1.65 \frac{R}{p} \sqrt{\frac{1-p}{R} \sqrt{\left(1 - \frac{R+p}{N}\right)}} \quad (14)$$

where the 1.65 indicates the 95% confidence level (one-sided), the rightmost radical corrects for the finite size of the population, and the entire right side term provides the over sampling amount. Table A-3 displays the projected sample size results.

With respect to Production Recruiters, Equation (14) computes to 2176 but the Marine Corps opted for a census of all Production Recruiters.

| TABLE A-3. Projected Sample Sizes Per Location/Group. | |
|--|---------------|
| Location/Group | Size |
| Camp Pendleton | 1,098 |
| Miramar | 312 |
| San Diego | 41 |
| Yuma | 138 |
| 29 Palms | 333 |
| Barstow | 11 |
| Camp Lejeune | 1,046 |
| New River | 204 |
| Cherry Point | 293 |
| Beaufort | 133 |
| Parris Island | 73 |
| Albany | 28 |
| Quantico | 244 |
| Washington, DC | 83 |
| Hawaii | 232 |
| Iwakuni | 84 |
| Okinawa | 452 |
| Production Recruiters with support | 1,202 |
| Production Recruiters without support | 1,804 |
| Other, CONUS with support | 2,109 |
| Other, CONUS without support | 3,537 |
| Other, OCONUS with support | 309 |
| Other, OCONUS without support | 500 |
| Other, no MCC with support | 241 |
| Other, no MCC without support | 388 |
| TOTAL | 15,007 |

Implications for the Sample Balance Among Pay Grades.

For the 2002 study, the study team wanted to have the same balance of grades in the responses as existed in the Marine Corps overall. To consciously stratify the sample so that each grade at each location were to be properly over-sampled so as to produce quality of life results accurate to about 0.06 for each grade at each location, then responses from three-quarters of the Marine Corps would be needed. This is because the results for each small group would need to be known with precision.

So, if 4452 responses out of 157,120 non-E-1 Marines yield sufficiently accurate quality of life results for the Marine Corps overall, what is the implication on the balance of grades in those responses? The result is in Equation (12). To use it, first pick any grouping of pay grades, say E-2 and E-3. The E-2 and E-3 group represents about $f = 38.4\%$ of the Marine Corps so what would $n = 4452$ expected responses randomly taken from $N = 157,120$ Marines show in terms of the observed fraction of E-2 and E-3 responses? (We assume here a uniform response rate for all pay grades of the random sample)

Equation (12) says that the largest difference between the true fraction of $f = 0.384$ and the sample fraction \hat{f} would be 0.014. In fact, for any notional fracture of the Marine Corps into two groups, the largest error of the response fraction from the true population fraction will be less than 0.0145 with 95% confidence, much less as f becomes small. Thus, there is no serious imbalance problem for a sample size, which will produce a total of 4452 active duty responses under the assumption of equal response rates for all pay grades.

In addition, there was little trouble in stratifying by grade at each location given the totals already in Table A-3, as the ratio of grades per location was available. Government provided data included the number of Marines at each location of each grade and thus a set of ratios, which were applied for each location and grade. Table A-4 displays the recommended sample sizes stratified by location and pay grade. The E-2 and E-3 group sample size was increased by 10% to compensate for the known lower response rate of that group for mail-ins.

As a practical matter, if the balance of participation produced a sample for which the grade balance was far from representative, the solution is to follow the method of the 1999 study and weight the responses by grade in order to produce a data set roughly representative of the balance of grades in the Marine Corps. The same could be done for both grade and location but that was not part of the methodology of earlier studies, and was also beyond the scope of the 2002 Quality of Life study.

TABLE A-4. Estimated Location/Group Populations by Grade and the Recommended Sample Size of Each.

| Location/Group | E-2 & E-3 | E-4 & E-5 | E-6 & E-7 | E-8 & E-9 | O1-O3 | O4-O10 | WOs | Totals |
|--|-------------|-------------|-------------|------------|-------------|------------|------------|---------------|
| Camp Pendleton | 496 | 382 | 111 | 24 | 53 | 20 | 12 | 1098 |
| Miramar | 106 | 121 | 41 | 8 | 23 | 9 | 4 | 312 |
| San Diego | 8 | 15 | 9 | 2 | 4 | 2 | 1 | 41 |
| Yuma | 54 | 49 | 19 | 3 | 7 | 4 | 2 | 138 |
| 29 Palms | 173 | 103 | 31 | 6 | 14 | 3 | 3 | 333 |
| Barstow | 4 | 3 | 2 | 1 | 1 | 0 | 0 | 11 |
| Camp Lejeune | 519 | 334 | 97 | 24 | 46 | 15 | 11 | 1046 |
| New River | 71 | 76 | 30 | 4 | 15 | 5 | 3 | 204 |
| Cherry Point | 109 | 101 | 42 | 9 | 18 | 9 | 5 | 293 |
| Beaufort | 49 | 49 | 20 | 3 | 7 | 3 | 2 | 133 |
| Parris Island | 12 | 29 | 22 | 3 | 4 | 2 | 1 | 73 |
| Albany | 7 | 10 | 5 | 2 | 2 | 2 | 0 | 28 |
| Quantico | 43 | 66 | 33 | 10 | 60 | 28 | 4 | 244 |
| Washington, DC | 20 | 23 | 14 | 6 | 4 | 15 | 1 | 83 |
| Hawaii | 98 | 85 | 26 | 5 | 12 | 3 | 3 | 232 |
| Iwakuni | 35 | 27 | 14 | 2 | 3 | 2 | 2 | 85 |
| Okinawa | 203 | 127 | 65 | 16 | 21 | 13 | 7 | 452 |
| Others, OCONUS ¹ | 147 | 368 | 126 | 28 | 37 | 111 | 5 | 822 |
| Others, CONUS (minus Production Recruiters) ¹ | 1461 | 1629 | 1184 | 270 | 629 | 536 | 70 | 5779 |
| Production Recruiters ¹ | 0 | 908 | 1962 | 66 | 70 | 0 | 0 | 3006 |
| Unidentified ¹ | 293 | 170 | 138 | 22 | 19 | 10 | 4 | 656 |
| TOTAL | 3908 | 4675 | 3991 | 514 | 1049 | 792 | 140 | 15,069 |

Note ¹: Includes a 10% over sampling of the E-2 and E-3 group.

APPENDIX B: ACTIVE DUTY MARINE RESPONSE REPORT

- Annex A: Instruction Letter to Command Administered Bases and Stations
- Annex A: Commandant and Sergeant Major of the Marine Corps Cover Letter
- Annex A: Survey Cover and Marking Instructions
- Annex B: Base and Station Response Report
- Annex C: Independent Duty Response Report (exclusive of Production Recruiter)

ANNEX A:

- Annex A: Instruction Letter to Command Administered Bases and Stations
- Annex A: Commandant and Sergeant Major of the Marine Corps Cover Letter
- Annex A: Survey Cover and Marking Instructions

20 February 2002

Base/Station Rep Name
MCB or MCAS Somplace
341 Main Street
Anywhere, State 12345

Dear Base/Station Rep Name,

Thank you for your support in ensuring full completion of the *2002 Marine Corps Quality of Life (QOL)* survey by your installation's selected Marines.

Decision Engineering Associates, LLC has been contracted by the Marine Corps to conduct this study. Your name was provided to us, by Headquarters, Marine Corps, as the point of contact for administration of the survey at your installation. The goal of the study is to determine the perceptions of Marines with regard to various quality of life issues.

This is the third QOL survey the Marine Corps has conducted. The two previous surveys were held in 1993 and 1998. These earlier surveys were invaluable in helping the Marine Corps set priorities for various quality of life programs.

Your role, as the base/station point of contact, is to administer the survey instrument to Marines on the enclosed list, account for 100% of the surveys, and return the surveys to Decision Engineering Associates using the enclosed mailing label. In this box, you will find enough survey instruments for each Marine on the list, return envelopes, and copies of a letter from the Commandant of the Marine Corps (CMC) and Sergeant Major of the Marine Corps (SGTMAJMARCOR).

You may administer the survey instrument to your entire group at an "all hands" event, in smaller groups, or to individuals. However, you must mail the completed surveys back to us **absolutely** no later than 18 March 2002.

The following procedures should be followed in administering the surveys:

1. Provide each Marine a survey instrument, the letter from the CMC/SGTMAJMARCOR, a return envelope, and a pencil or black ink pen.
2. Please stress to your Marines the importance of completing the survey and answering all questions. It is imperative that we achieve the sample requirement for your installation (e.g., substitute for unavailable Marines as required).
3. Have your Marines read the instructions and answer any questions they may have.
4. Ensure your Marines understand that the survey is anonymous (i.e., we do not ask for a name or social security number) and that they are to seal it in the return envelope prior to turning it in to you. When conducting accountability, please do NOT write the names of Marines on the survey or envelope.
5. Allow them as much time as necessary to complete the survey. This is not a timed event.

6. When you have collected the sealed envelopes from all of the Marines on your list, **mail the surveys** back to Decision Engineering using the same box they came in. Use a mailing option that will allow tracking of the package (e.g., registered mail, FEDEX, UPS). We have provided a return address label for your convenience.
7. Electronically complete the enclosed accountability roster that was also sent to you by Headquarters, Marine Corps via email. Return a copy of the completed roster in the box with the surveys.
8. Please notify us by email when you receive this letter and when you mail the completed survey instruments back to us. The email address is qolusmc@de-group.net.

If you have any questions concerning the study, the survey instrument, or any of the procedures please contact the Quality of Life Study Team toll free at 1-866-QOL-USMC or via e-mail at qolusmc@de-group.net. Your assistance in this effort is greatly appreciated.

Sincerely,

J. M. Webb
Quality of Life Study Team
Decision Engineering Associates

“Marines Take Care of Their Own...”



Marines:

The words above express an old and honored tradition within the Marine Corps ... Marines unfailingly grasp the opportunity to support and assist their fellow Marines. Part of this responsibility requires that Marines provide their candid views and opinions to the chain of command so informed, effective decisions can be made.

Take a few minutes to “step forward and be heard” regarding Quality of Life in the Marine Corps. By completing and returning the enclosed survey, you will help take care of your fellow Marines and their families by ensuring an accurate and complete assessment of life within the Corps.

Semper Fidelis,

A. L. McMichael

Sergeant Major of the Marine Corps

J. L. Jones

Commandant of the Marine Corps

Quality of Life in the U. S. Marine Corps

2002



This survey concerns how you feel about your life. The questions ask about various aspects of life as a whole. There are many aspects to our lives and the questionnaire attempts to cover the major ones for most people. This accounts for its length. We think you will find most of the questions interesting and easy because it is YOUR life. All people don't feel the same way about what happens to them in everyday life, so there are no right or wrong answers. We hope you will answer each question as carefully and frankly as possible. You were randomly selected to take part in this survey. Your responses will help us obtain a representative picture of life as it is experienced by Marines.

The information collected in this survey will be used to evaluate existing and proposed policies, procedures, and programs in the Marine Corps.

All responses are anonymous. The information you provide will be considered only when statistically combined with the responses of others, and will not be identified with any single individual. The information will not become part of your permanent record and will not affect your career in any way. Failure to respond to any questions will not result in any penalties except lack of your opinions in the survey results.

MARKING INSTRUCTIONS

GENERAL INSTRUCTIONS

- ❖ Please use a black pen or pencil.
- ❖ Make heavy black marks that fill the circle completely for your answer.
- ❖ Erase changes cleanly and completely.
- ❖ Please do not make stray marks of any kind.

❖ INCORRECT MARKS CORRECT MARK



MARKING ALL THAT APPLY

Sometimes you will be asked to “*Mark ALL That Apply.*” When this instruction appears, you may **mark more than one answer.**

EXAMPLE:

Do you have any dependent family members? *Mark ALL That Apply.*

- No, I have no dependent family members
- Spouse (non-military)
- Dependent child(ren) living with me
- Dependent child(ren) not living with me
- Legal ward(s) living with me
- Dependent parent(s) or other relative(s)

USING A COMMON SCALE FOR MORE THAN ONE QUESTION

Sometimes you will be asked to “*MARK A RESPONSE FOR EACH*” to answer a number of different questions.

EXAMPLE:

Please darken the circle that best indicates how satisfied or dissatisfied you are with various aspects of your house, apartment or barracks. *MARK A RESPONSE FOR EACH.*

| How satisfied are you with: | Completely dissatisfied | | Somewhat dissatisfied | Neutral | Somewhat satisfied | | Completely satisfied |
|---|-------------------------|-----------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------|-----------------------|
| | 1 | 2 | | | 3 | 4 | |
| a. the ATTRACTIVENESS of your housing? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. the CONVENIENCE OF THE LAYOUT of your housing? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. the CONVENIENCE OF AMENITIES in your housing (e.g., appliances)? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. the PRIVACY of your housing? | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

MARKING NUMBERS

Sometimes you will be asked to give numbers for your answer by filling in a grid. If you are asked to give numbers, please record the numbers in the boxes in front of the grid, then fill in the circles of the grid as shown below.

EXAMPLE:

How long have you been on active duty?

| | | |
|----|----|--|
| 0 | 9 | |
| ● | - | |
| □ | □ | |
| ◻ | ◻ | |
| ◀ | ◀ | |
| ▶ | ▶ | |
| ▲ | ▲ | |
| ▼ | ▼ | |
| ◀◀ | ◀◀ | |
| ▶▶ | ▶▶ | |
| ◀◀ | ● | |

MARK ONE

Sometimes you will be asked to “*Mark ONE*” response from a list of possible items.

EXAMPLE:

How long would it take you to get to a 24-hour military medical facility from your residence? *Mark ONE.*

- About 5 minutes
- 6 to 20 minutes
- 21 to 40 minutes
- 41 minutes to an hour
- More than 1 hour

Who May I Contact For More Information?

The 2002 Marine Quality of Life Survey is sponsored by Headquarters, U.S. Marine Corps, Department of Manpower and Reserve Affairs. Decision Engineering Associates, an independent firm, has been hired to conduct the survey.

For assistance in filling out this survey, or for more information, you may contact Decision Engineering Associates through e-mail or by telephone.

E-mail: qolusmc@de-group.net

Toll Free (0800 until 1700 Eastern Standard Time): (866) QOL-USMC
(866) 765-8762

ANNEX B:

- Base and Station
Response Report

2002
Quality of Life
in the
U. S. Marine Corps

Base and Station
Response Report

BACKGROUND

PERSONAL

1. What is your sex?

| | | | |
|------|------|-----|--------|
| 2634 | Male | 106 | Female |
|------|------|-----|--------|

2. What was your age on your last birthday?

| | | | | | | | | | | |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | | | | | | | | 16 | 117 | 353 |
| 20 | 626 | 702 | 509 | 355 | 271 | 223 | 161 | 127 | 126 | 113 |
| 30 | 90 | 97 | 74 | 60 | 56 | 63 | 81 | 71 | 65 | 45 |
| 40 | 44 | 27 | 31 | 25 | 16 | 13 | 9 | 9 | 9 | 8 |
| 50 | 2 | 4 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 60 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 70 | 0 | 0 | 1 | 0 | 1 | 5 | | | | |

3. Are you of Spanish/Hispanic descent?

| | | | |
|-----|-----|------|----|
| 838 | Yes | 3771 | No |
|-----|-----|------|----|

4. Are you:

| | |
|------|------------------------------|
| 2944 | White |
| 710 | Black/African-American |
| 133 | Asian/Pacific Islander |
| 67 | Native American/Aleut/Eskimo |
| 652 | Other |

5. Which best describes your current level of education?
Mark ONE.

| | |
|------|---------------------------------------|
| 22 | Do not have a high school diploma |
| 81 | High school equivalency |
| 2224 | High school diploma |
| 882 | Less than one year of college |
| 756 | One or more years college, non-degree |
| 162 | Associate's degree |
| 366 | Bachelor's degree |
| 92 | Master's degree |
| 20 | Doctoral or professional degree |
| 2 | Other |

6. What is your marital status? *Mark ONE.*

| | | | |
|------|-----------------------|-----|----------|
| 2283 | Never been married | 196 | Divorced |
| 2009 | Married | 8 | Widowed |
| 129 | Married but separated | | |

7. What is your spouse's employment situation?

| | |
|------|--|
| 2425 | I do not have a spouse |
| 238 | My spouse is in the military |
| 119 | My spouse is self-employed at home |
| 277 | My spouse works in a civilian job part time |
| 705 | My spouse works in a civilian job full time |
| 527 | My spouse is unemployed by choice |
| 276 | My spouse is unemployed, but actively seeking employment |

8. Do you have any dependent family members? *Mark ALL That Apply.*

| | |
|------|--|
| 2365 | No, I have no dependent family members |
| 1250 | Spouse (non-military) |
| 1368 | Dependent child(ren) living with me |
| 386 | Dependent child(ren) not living with me |
| 7 | Legal ward(s) living with me |
| 51 | Dependent parent(s) or other relative(s) |

9. Are there children under the age of 21 living in your household?

| | |
|------|---|
| 1515 | Yes |
| 2962 | No (skip to CAREER section, question 1) |

10. If yes to question 9, how many children in each age group? *Mark ALL That Apply.*

| | AGE GROUP OF CHILDREN | NUMBER OF CHILDREN IN AGE GROUP | | | | |
|----|-----------------------|---------------------------------|----|---|---|---|
| a. | Under 6 weeks | 80 | 5 | 2 | 0 | 0 |
| b. | 6 wks through 12 mos | 304 | 4 | 0 | 0 | 0 |
| c. | 13 through 24 mos | 290 | 7 | 1 | 1 | 0 |
| d. | 25 through 35 mos | 220 | 4 | 1 | 0 | 1 |
| e. | 3 through 5 yrs | 420 | 59 | 2 | 0 | 2 |
| f. | 6 through 9 yrs | 383 | 74 | 4 | 0 | 0 |
| g. | 10 through 12 yrs | 226 | 43 | 1 | 0 | 0 |
| h. | 13 through 15 yrs | 187 | 29 | 2 | 1 | 0 |
| i. | 16 through 20 yrs | 130 | 23 | 7 | 1 | 1 |
| j. | Over 20 yrs | 19 | 2 | 3 | 0 | 1 |

CAREER

1. What is your pay grade? *Mark circle to the left.*

| | | | | | | |
|------|---|-----|----|------|-----|---------------|
| 2 | 4 | E-1 | 27 | E-9 | 25 | O-3E |
| 352 | | E-2 | 16 | W-1 | 52 | O-1 |
| 1505 | | E-3 | 28 | W-2 | 66 | O-2 |
| 954 | | E-4 | 13 | W-3 | 101 | O-3 |
| 644 | | E-5 | 5 | W-4 | 67 | O-4 |
| 311 | | E-6 | 4 | W-5 | 37 | O-5 |
| 236 | | E-7 | 17 | O-1E | 12 | O-6 |
| 81 | | E-8 | 11 | O-2E | 6 | O-7 and above |

2. How long have you been in your present pay grade? (Fill in all columns: for example, 3 years=03, and nine months=09)

| | |
|------|--------------------|
| 1062 | Less than 6 Months |
| 1117 | 6 to 11 Months |
| 854 | 12 to 17 Months |
| 422 | 18 to 23 Months |
| 539 | 24 to 35 Months |
| 289 | 36 to 47 Months |
| 148 | 48 to 59 Months |
| 153 | 5 Years or More |

3. How long have you been on active duty in the Marine Corps? (Fill in all columns: for example, 3 years=03, and nine months=09)

| | |
|-----|---------------------|
| 368 | Less than 1 Year |
| 785 | ≥ 1 but < 2 Years |
| 880 | ≥ 2 but < 3 Years |
| 804 | ≥ 3 but < 4 Years |
| 317 | ≥ 4 but < 5 Years |
| 655 | ≥ 5 but < 10 Years |
| 644 | ≥ 10 but < 20 Years |
| 184 | 20 or More Years |

4. When you joined the Marine Corps, what were your intentions/interests? *Mark ALL That Apply.*

| | |
|------|--|
| 1167 | I intended to remain in the Marine Corps until eligible for retirement |
| 1388 | I intended to remain in the Marine Corps until I could earn educational benefits |
| 864 | I intended to remain in the Marine Corps until I could get the training I needed |
| 1886 | I was interested in the travel and adventure |
| 1559 | I wanted to find out if I had what it takes to be one of the few and the proud |
| 1375 | I wanted the discipline the Marine Corps provides |
| 494 | I'm not sure what I intended |
| 867 | Other |

5. Which of the following statements best describes your career intentions at this time?

| | |
|------|---|
| 1266 | I intend to remain in the Marine Corps until eligible for retirement |
| 158 | I am eligible for retirement, but intend to remain in the Marine Corps |
| 544 | I intend to stay in the Marine Corps, but not until retirement |
| 1134 | I'm not sure what I intend to do |
| 1416 | I intend to leave the Marine Corps as soon as I can |
| 46 | I intend to remain on active duty, but I am being involuntarily separated |

6. What are your primary and duty MOS?

| | | | |
|-----|--------------|-----|-------|
| 498 | 03** | 93 | 11** |
| 385 | 35** | 91 | 62** |
| 358 | 01** | 84 | 64** |
| 270 | 06** | 79 | 33** |
| 261 | 30** | 78 | 18** |
| 251 | 13** | 70 | 70** |
| 210 | Unidentified | 67 | 66** |
| 173 | 60** | 64 | 72** |
| 172 | 61** | 61 | 02** |
| 149 | 28** | 55 | 59** |
| 143 | 04** | 54 | 34** |
| 130 | 58** | 53 | 65** |
| 111 | 08** | 44 | 23** |
| 107 | 21** | 44 | 44** |
| 105 | 40** | 44 | 99** |
| 97 | 75** | 33 | 26** |
| 95 | 63** | 169 | Other |

7. How long have you been in your present assignment?

| | |
|------|--------------------|
| 925 | Less than 6 Months |
| 1135 | 6 to 11 Months |
| 642 | 12 to 17 Months |
| 524 | 18 to 23 Months |
| 817 | 24 to 35 Months |
| 382 | 36 to 47 Months |
| 92 | 48 to 59 Months |
| 47 | 5 Years or More |

8. Are you accompanied by your family members on your present assignment? *Mark ONE.*

| | |
|------|--|
| 2247 | Does not apply, no family members |
| 303 | Accompanied by some family members |
| 1591 | Accompanied by all family members |
| 222 | Temporarily unaccompanied |
| 189 | Permanently unaccompanied by choice |
| 62 | Permanently unaccompanied because required by billet |

9. If you are a “geographic bachelor” by choice, is it because of: *Mark ALL That Apply.*

| | |
|------|---------------------------------------|
| 3973 | Does not apply |
| 87 | Spouse’s job |
| 31 | Children’s schools |
| 56 | Cost of living at this location |
| 30 | Moving costs for family |
| 96 | Personal preference of self or spouse |
| 179 | Some other reason |

10. Are you presently deployed?

| | |
|---------------------------|-------------------|
| 46 | Yes |
| 4540 | No |
| If yes, are you deployed: | |
| 5 | Aboard ship |
| 1 | At a U.S. Embassy |
| 37 | Other |

11. How many months total have you been deployed during the last 12 months? *Mark ONE.*

| | |
|------|--------------|
| 2987 | Not at all |
| 791 | 1-3 months |
| 575 | 4-6 months |
| 208 | 7-9 months |
| 38 | 10-12 months |

12. Where are you permanently stationed?

| | | | |
|------|---|-----|------------------|
| 0 | Recruiting Duty, 1 st Marine Corps District | | |
| 1 | Recruiting Duty, 4 th Marine Corps District | | |
| 1 | Recruiting Duty, 6 th Marine Corps District | | |
| 0 | Recruiting Duty, 8 th Marine Corps District | | |
| 1 | Recruiting Duty, 9 th Marine Corps District | | |
| 1 | Recruiting Duty, 12 th Marine Corps District | | |
| 28 | Albany | 211 | New River |
| 11 | Barstow | 393 | Okinawa |
| 134 | Beaufort | 75 | Parris Island |
| 1021 | Camp Lejeune | 205 | Quantico |
| 1087 | Camp Pendleton | 45 | San Diego |
| 297 | Cherry Point | 314 | 29 Palms |
| 66 | Iwakuni | 75 | Washington, D.C. |
| 193 | Hawaii | 132 | Yuma |
| 311 | Miramar | | |
| 16 | Other Location <u>inside</u> continental United States | | |
| 8 | Other Location <u>outside</u> continental United States | | |

13. How long would it take you to get to the nearest military installation or the one you use the most? *Mark ONE.*

| | |
|------|---|
| 2696 | Does not apply (e.g., live on base) |
| 748 | Less than 15 minutes |
| 808 | 15-30 minutes |
| 278 | More than 30 minutes, but less than an hour |
| 60 | 1-2 hours |
| 21 | More than 2 hours |

14. How often do you go to the nearest military installation or the one you use the most? *Mark ONE.*

| | |
|------|--|
| 2838 | I live on base |
| 6 | Never, no military installation nearby |
| 1293 | Everyday |
| 289 | Several times a week |
| 75 | Once a week |
| 44 | Once a month |
| 21 | Several times a year |
| 15 | Once or twice a year |
| 12 | Have never visited |

Now we are going to ask you a number of questions about your quality of life and how you feel about your life. Some questions will ask about your life overall and others concern specific areas of your life, such as your job, or the neighborhood where you live. Answer in terms of your SITUATION AT THIS TIME or your EXPERIENCES AT YOUR CURRENT ASSIGNMENT unless the questions ask you to consider a different period of time.

LIFE AS A WHOLE

1. First, which point on the scale below best describes how you feel about your life as a whole at this time?

| | |
|------|-------------------------------|
| 119 | 1 Terrible |
| 273 | 2 Unhappy |
| 529 | 3 Mostly unhappy |
| 1051 | 4 Neither unhappy nor pleased |
| 1366 | 5 Mostly pleased |
| 997 | 6 Pleased |
| 305 | 7 Delighted |

2. Below are some words that can apply to how you feel about your life as a whole. For example, if you think your life is very boring, blacken the circle closest to "boring"; if you think your life is very interesting, blacken the circle closest to "interesting". If your life falls somewhere in between, blacken one of the circles in between to indicate how boring or interesting you think your life is. *Blacken one circle for every line.*

| | 1 | 2 | 3 | 4 | 5 | |
|------------------|------|------|------|------|------|-------------|
| a. Boring | 301 | 604 | 1392 | 1474 | 701 | Interesting |
| b. Enjoyable | 732 | 1413 | 1430 | 669 | 167 | Miserable |
| c. Useless | 194 | 355 | 972 | 1544 | 1275 | Worthwhile |
| d. Friendly | 1197 | 1286 | 1013 | 585 | 285 | Lonely |
| e. Full | 938 | 1291 | 1285 | 583 | 211 | Empty |
| f. Discouraging | 268 | 578 | 905 | 1487 | 1042 | Hopeful |
| g. Disappointing | 398 | 609 | 1137 | 1339 | 841 | Rewarding |

3. Which of the following best describes how you think of your life at this time? *Mark ONE.*

| | |
|------|---|
| 221 | An ideal kind of life for me |
| 247 | What I most want in my life to be |
| 1057 | The best kind of life I am able to have now |
| 1349 | A good enough life for now |
| 1174 | A tolerable life for now |
| 458 | An unsatisfactory kind of life |
| 114 | A miserable life |

We will return to questions about your life as a whole later in this questionnaire, after considering particular areas of your life.

YOUR RESIDENCE

Please answer the following questions about the place where you are now living at your permanent duty station.

1. Overall, how do you feel about your residence (or quarters) where you live now?

| | |
|------|-------------------------------|
| 412 | 1 Terrible |
| 566 | 2 Unhappy |
| 674 | 3 Mostly unhappy |
| 955 | 4 Neither unhappy nor pleased |
| 1009 | 5 Mostly pleased |
| 724 | 6 Pleased |
| 259 | 7 Delighted |

2. Which of the following best describes the place where you now live? *Mark ONE.*

| | |
|------|---|
| 2168 | Bachelor Quarters (BEQ or BOQ) |
| 801 | Military housing on base |
| 117 | Military family housing in the civilian community |
| 419 | Personally-owned housing in the civilian community |
| 774 | Personally-rented housing in the civilian community |
| 185 | Shared rental housing in the civilian community |
| 79 | Mobile home |
| 1 | Aboard ship |
| 69 | Other |

3. If you live in civilian housing, how much is your monthly rent or mortgage payment? *(If you share housing, list the amount YOU pay.)*

| | |
|------|---|
| 3023 | Does not apply, not in civilian housing |
| 142 | Less than \$400 |
| 156 | ≥ \$400 but < \$500 |
| 152 | ≥ \$500 but < \$600 |
| 167 | ≥ \$600 but < \$700 |
| 140 | ≥ \$700 but < \$800 |
| 147 | ≥ \$800 but < \$900 |
| 110 | ≥ \$900 but < \$1000 |
| 175 | ≥ \$1000 but < \$1250 |
| 118 | ≥ \$1250 but < \$1500 |
| 141 | \$1500 or More |

4. If you live in civilian housing, how much of your monthly rent or mortgage payment is offset by BAH?

| | |
|------|---|
| 2960 | Does not apply, not in civilian housing |
| 444 | 100% of mortgage or rent, plus some utilities |
| 305 | 100% of mortgage or rent |
| 526 | 75% of mortgage or rent |
| 124 | 50% of mortgage or rent |
| 93 | Less than 50% of rent or mortgage |

5. How many rooms are in your residence, not counting bathrooms and hallway? *(Count attic or basement only if it is finished and furnished.)*

| | | | |
|------|---------------------------------------|-----|---------------|
| 2126 | Does not apply, in BEQ/BOQ or on ship | | |
| 150 | One | 358 | Five |
| 466 | Two | 285 | Six |
| 466 | Three | 130 | Seven |
| 435 | Four | 102 | Eight or more |

6. Regardless of whether you live in civilian or government housing, approximately how much money do you spend on maintenance out of pocket per month?

| | |
|------|------------------|
| 1104 | \$0 |
| 748 | \$1 to \$25 |
| 940 | \$26 to \$50 |
| 226 | \$51 to \$75 |
| 571 | \$76 to \$100 |
| 387 | \$101 to \$200 |
| 256 | \$201 to \$500 |
| 71 | \$501 to \$1000 |
| 82 | \$1001 to \$2000 |
| 113 | > \$2000 |

7. How many adults live in your house or apartment?

| | | | |
|------|---------------------------------------|----|---------------|
| 2143 | Does not apply, in BEQ/BOQ or on ship | | |
| 385 | One | 12 | Five |
| 1809 | Two | 3 | Six |
| 159 | Three | 1 | Seven |
| 47 | Four | 3 | Eight or more |

8. Please darken the circle that best indicates how satisfied or dissatisfied you are with various aspects of your house, apartment or barracks.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the ATTRACTIVENESS of your housing? | 460 | 684 | 372 | 985 | 566 | 988 | 319 |
| b. the CONVENIENCE OF THE LAYOUT of your housing? | 307 | 567 | 616 | 962 | 714 | 1012 | 344 |
| c. the CONVENIENCE OF AMENITIES in your housing (e.g., appliances)? | 560 | 673 | 584 | 764 | 653 | 939 | 353 |
| d. the PRIVACY of your housing? | 1008 | 735 | 574 | 597 | 478 | 734 | 390 |
| e. the AMOUNT OF SPACE in your housing? | 1039 | 785 | 660 | 531 | 561 | 640 | 292 |
| f. the LOCATION of your housing? | 346 | 309 | 386 | 1017 | 670 | 1173 | 572 |
| g. the COMFORT of your housing (e.g., is it too hot, too cold, too noisy)? | 737 | 628 | 657 | 628 | 546 | 882 | 364 |
| h. the CONDITION of your housing (is it well maintained)? | 585 | 534 | 580 | 707 | 606 | 1025 | 442 |
| i. the COST of your housing? | 306 | 273 | 305 | 1312 | 392 | 778 | 1051 |
| j. your residence OVERALL, considering all aspects of your housing? | 402 | 660 | 705 | 771 | 695 | 989 | 244 |

9. If good quality housing were to be guaranteed upon reenlistment, would that influence your decision to reenlist?

| | |
|------|-----|
| 2387 | Yes |
| 2135 | No |

10. What effect does your housing have on your job performance?

| | |
|------|----------------------|
| 497 | Very positive effect |
| 1037 | Positive effect |
| 2070 | No effect |
| 826 | Negative effect |
| 134 | Very negative effect |

11. What effect does your current housing have on your plans to remain on active duty?

| | |
|------|----------------------|
| 218 | Very positive effect |
| 525 | Positive effect |
| 2431 | No effect |
| 917 | Negative effect |
| 465 | Very negative effect |

If you are stationed aboard ship, go to the LEISURE AND RECREATION SECTION on the next page.

YOUR NEIGHBORHOOD

Please answer the following questions about the place where you are now living at your permanent duty station. If you are in bachelor quarters, neighborhood refers to the immediate area around your quarters.

1. Overall, how do you feel about your neighborhood?

| | |
|------|-------------------------------|
| 185 | 1 Terrible |
| 308 | 2 Unhappy |
| 532 | 3 Mostly unhappy |
| 1415 | 4 Neither unhappy nor pleased |
| 1044 | 5 Mostly pleased |
| 843 | 6 Pleased |
| 221 | 7 Delighted |

2. Compared to the neighborhood(s) where you lived when you were growing up, is this neighborhood better or worse? My present neighborhood is:

| | |
|-----|---------------------|
| 777 | A lot worse |
| 698 | Considerably worse |
| 905 | A little worse |
| 995 | About the same |
| 425 | A little better |
| 410 | Considerably better |
| 347 | A lot better |

3. Please darken the circle that shows best how satisfied or dissatisfied you are with various aspects of your neighborhood.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the SAFETY of your neighborhood? | 131 | 241 | 373 | 899 | 646 | 1623 | 636 |
| b. the PUBLIC SERVICES in your neighborhood, such as trash collection, mail delivery, police protection, etc.? | 189 | 290 | 371 | 953 | 686 | 1472 | 520 |
| c. the APPEARANCE of your neighborhood? | 275 | 391 | 591 | 916 | 701 | 1229 | 388 |
| d. the CONDITION OF OTHER DWELLINGS in your neighborhood? | 255 | 383 | 496 | 1244 | 620 | 1124 | 309 |
| e. the FRIENDLINESS OF PEOPLE living in your neighborhood? | 203 | 299 | 440 | 1249 | 802 | 1116 | 330 |
| f. the TRANSPORTATION SERVICES in your neighborhood? | 584 | 464 | 434 | 1779 | 378 | 656 | 157 |
| g. the RACIAL MIX in your neighborhood? | 145 | 110 | 140 | 1841 | 409 | 1306 | 450 |
| h. the SENSE OF COMMUNITY in your neighborhood? | 305 | 446 | 533 | 1592 | 550 | 760 | 214 |
| i. the AVAILABILITY OF RETAIL SERVICES in your neighborhood? (e.g., groceries, dry cleaning) | 344 | 376 | 415 | 965 | 725 | 1166 | 434 |
| j. the LENGTH OF TIME it takes you to get to work? | 239 | 221 | 385 | 806 | 501 | 1275 | 1013 |
| k. the AVAILABILITY OF PARKING in your neighborhood? | 633 | 463 | 480 | 823 | 440 | 1025 | 599 |
| l. the neighborhood OVERALL, considering all the different aspects of your neighborhood? | 152 | 305 | 610 | 1013 | 878 | 1188 | 246 |

4. What effect does the neighborhood where you live have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 236 | Very positive effect |
| 817 | Positive effect |
| 2795 | No effect |
| 607 | Negative effect |
| 88 | Very negative effect |

5. What effect does the neighborhood where you live have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 162 | Very positive effect |
| 488 | Positive effect |
| 2901 | No effect |
| 742 | Negative effect |
| 254 | Very negative effect |

LEISURE AND RECREATION

Questions in this section have to do with the way you spend your leisure time and the recreational opportunities available to you.

1. Please show how you feel about the things you do now in your leisure time.

| | |
|------|-------------------------------|
| 108 | 1 Terrible |
| 203 | 2 Unhappy |
| 441 | 3 Mostly unhappy |
| 848 | 4 Neither unhappy nor pleased |
| 1349 | 5 Mostly pleased |
| 1221 | 6 Pleased |
| 431 | 7 Delighted |

2. Do you generally prefer leisure activities:

| | |
|------|----------------------------|
| 1172 | That you do by yourself |
| 3330 | That you share with others |

3. Answer the next questions using this scale to indicate how satisfied or dissatisfied you are with the way you spend your leisure time.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the VARIETY of leisure activities available at this location? | 395 | 622 | 687 | 806 | 763 | 974 | 330 |
| b. the COST of leisure activities at this location? | 350 | 582 | 682 | 1241 | 743 | 745 | 190 |
| c. the FACILITIES PROVIDED for leisure activities you enjoy? | 377 | 510 | 670 | 989 | 827 | 898 | 206 |
| d. the AMOUNT OF LEISURE TIME you have? | 722 | 688 | 744 | 835 | 630 | 721 | 171 |
| e. your leisure time OVERALL considering all aspects of leisure activities? | 301 | 493 | 773 | 1058 | 868 | 850 | 141 |

4. Here is a list of some activities that people might do in their spare time. Please show how often you have been doing these things (scale on the left). If you haven't recently participated in an activity, please show the ONE main reason why (scale on the right)—because the activity is not available locally; the local facilities are not adequate; it is too expensive for your budget; it is of low priority with you and you don't have enough time for it now; or simply because you are not interested in that activity.

| Never | Occasionally | Several times a year | Several times a month | Several times a week | Daily | | Not available | Inadequate facilities | Too expensive | Low priority | Not enough time | Not interested |
|-------|--------------|----------------------|-----------------------|----------------------|-------|--|---------------|-----------------------|---------------|--------------|-----------------|----------------|
| 670 | 1449 | 307 | 608 | 771 | 371 | Participating in active sports | 175 | 88 | 26 | 447 | 891 | 439 |
| 129 | 480 | 91 | 444 | 2011 | 1354 | Working out, running | 31 | 77 | 7 | 200 | 440 | 140 |
| 1308 | 1614 | 568 | 373 | 133 | 53 | Swimming | 207 | 273 | 18 | 586 | 558 | 743 |
| 772 | 1192 | 371 | 664 | 663 | 496 | Watching sporting events | 144 | 93 | 118 | 412 | 399 | 617 |
| 2579 | 739 | 312 | 216 | 48 | 23 | Golfing | 104 | 43 | 201 | 319 | 337 | 1993 |
| 2616 | 809 | 214 | 146 | 53 | 25 | Tennis and racquet sports | 108 | 107 | 22 | 376 | 256 | 2048 |
| 3384 | 194 | 51 | 21 | 8 | 6 | Sailing | 452 | 69 | 362 | 344 | 252 | 1955 |
| 1375 | 1289 | 824 | 310 | 80 | 57 | Outdoor activities (e.g., camping, hiking) | 150 | 114 | 102 | 435 | 834 | 685 |
| 1827 | 1051 | 616 | 268 | 67 | 30 | Fishing, boating | 239 | 109 | 263 | 439 | 630 | 891 |
| 111 | 855 | 459 | 1985 | 713 | 170 | Dining out | 37 | 94 | 655 | 210 | 150 | 65 |
| 1066 | 1286 | 603 | 792 | 282 | 76 | Picnics, pleasure drives | 145 | 71 | 116 | 378 | 553 | 499 |
| 268 | 1321 | 979 | 1433 | 235 | 44 | Going to the movies | 22 | 81 | 368 | 341 | 345 | 153 |
| 836 | 1279 | 490 | 1026 | 417 | 123 | Going to clubs, bars, etc. | 42 | 85 | 365 | 375 | 181 | 716 |
| 227 | 970 | 461 | 919 | 867 | 914 | Spending time with friends, relatives, neighbors | 161 | 14 | 71 | 128 | 595 | 81 |
| 2331 | 802 | 269 | 324 | 143 | 32 | Going to club meetings, activities | 137 | 36 | 38 | 368 | 371 | 1655 |
| 1875 | 1126 | 322 | 464 | 227 | 60 | Participating in church activities | 60 | 58 | 12 | 359 | 411 | 1293 |
| 904 | 1450 | 505 | 765 | 354 | 195 | Playing cards, indoor games | 41 | 20 | 14 | 448 | 306 | 731 |
| 1839 | 994 | 358 | 332 | 370 | 165 | Going to classes or lectures | 116 | 36 | 76 | 295 | 754 | 932 |
| 1914 | 1379 | 499 | 119 | 28 | 24 | Going to concerts, plays, etc. | 372 | 130 | 434 | 312 | 425 | 807 |
| 1837 | 1473 | 459 | 102 | 27 | 17 | Going to museums, exhibits, etc. | 435 | 189 | 141 | 389 | 453 | 858 |
| 1066 | 1286 | 603 | 792 | 282 | 76 | Gardening or working around the yard | 854 | 133 | 27 | 194 | 220 | 997 |
| 1247 | 1113 | 434 | 714 | 333 | 159 | Making or fixing things around the house | 466 | 97 | 96 | 256 | 296 | 579 |
| 1306 | 1109 | 387 | 526 | 381 | 308 | Working on hobbies, painting, musical instrument | 151 | 76 | 87 | 273 | 610 | 683 |
| 1782 | 1379 | 381 | 260 | 126 | 94 | Volunteering | 68 | 28 | 25 | 327 | 830 | 949 |
| 277 | 1283 | 765 | 1464 | 406 | 74 | Shopping (except for groceries) | 27 | 90 | 590 | 220 | 168 | 206 |
| 483 | 1120 | 403 | 704 | 792 | 751 | Reading | 13 | 13 | 28 | 271 | 395 | 376 |
| 156 | 614 | 128 | 468 | 1188 | 1769 | Watching TV, playing video games | 28 | 31 | 53 | 260 | 284 | 145 |
| 48 | 283 | 95 | 193 | 705 | 3076 | Listening to music | 26 | 27 | 35 | 200 | 194 | 41 |
| 2013 | 865 | 541 | 234 | 78 | 67 | Hunting and shooting | 433 | 187 | 136 | 305 | 447 | 1102 |

5. Compared to other places where you have been stationed since joining the Marine Corps, do you find your leisure activities at this station more enjoyable or less enjoyable? My present leisure activities are: *Mark ONE.*

| | |
|------|-----------------------------|
| 1251 | N/A, first assignment |
| 574 | Much less enjoyable |
| 389 | Considerably less enjoyable |
| 453 | A little less enjoyable |
| 786 | About the same |
| 448 | A little more enjoyable |
| 442 | Considerably more enjoyable |
| 262 | Much more enjoyable |

6. What effect do leisure activities have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 832 | Very positive effect |
| 1829 | Positive effect |
| 1504 | No effect |
| 358 | Negative effect |
| 78 | Very negative effect |

7. What effect do leisure activities have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 489 | Very positive effect |
| 974 | Positive effect |
| 2446 | No effect |
| 453 | Negative effect |
| 224 | Very negative effect |

HEALTH

The items in the following section are all related to your health and to health benefits.

1. Please indicate how you feel about the state of your health.

| | |
|------|-------------------------------|
| 82 | 1 Terrible |
| 179 | 2 Unhappy |
| 482 | 3 Mostly unhappy |
| 664 | 4 Neither unhappy nor pleased |
| 1185 | 5 Mostly pleased |
| 1536 | 6 Pleased |
| 482 | 7 Delighted |

2. What was your most recent PFT score?

| | |
|------|----------------------|
| 3292 | First class |
| 1003 | Second class |
| 191 | Third class |
| 33 | Failed |
| 64 | Not required to take |

3. How long would it take you to get to a 24-hour military medical facility from your residence? *Mark ONE.*

| | |
|------|-----------------------|
| 1125 | About 5 minutes |
| 1919 | 6-20 minutes |
| 1081 | 21-40 minutes |
| 254 | 41 minutes to an hour |
| 153 | More than 1 hour |

4. How long would it take you to get to a 24-hour civilian medical facility from your residence? *Mark ONE.*

| | |
|------|-----------------------|
| 397 | About 5 minutes |
| 1984 | 6-20 minutes |
| 1495 | 21-40 minutes |
| 389 | 41 minutes to an hour |
| 255 | More than 1 hour |

5. How many duty days did you miss because of illness or injury in the past year?

| | |
|------|--------------|
| 2926 | 0 Days |
| 525 | 1 - 2 Days |
| 413 | 3 - 5 Days |
| 189 | 6 - 10 Days |
| 85 | 11 - 15 Days |
| 45 | 16 - 20 Days |
| 71 | 21 - 30 Days |
| 20 | 31 - 40 Days |
| 101 | > 40 Days |

6. Are you a smoker?

| | |
|------|-----|
| 1461 | Yes |
| 2984 | No |

7. Please use this scale to indicate how satisfied or dissatisfied you are with various aspects of your state of health.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|----------------------------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. your current WEIGHT? | 179 | 395 | 872 | 602 | 699 | 1256 | 589 |
| b. your LEVEL OF ENERGY? | 129 | 445 | 714 | 577 | 888 | 1344 | 401 |
| c. HOW WELL YOU SLEEP? | 364 | 666 | 779 | 554 | 790 | 1025 | 323 |
| d. your ENDURANCE? | 112 | 292 | 673 | 621 | 1056 | 1304 | 442 |
| e. your HEALTH OVERALL? | 97 | 240 | 430 | 624 | 851 | 1693 | 513 |
| f. the MEDICAL care you receive? | 387 | 463 | 640 | 825 | 719 | 1093 | 328 |
| g. the DENTAL care you receive? | 298 | 314 | 421 | 887 | 744 | 1301 | 440 |

8. If you were not in the Marine Corps, do you think your health would be better or worse? My present state of health is: *Mark ONE.*

| | |
|------|---------------------|
| 203 | A lot worse |
| 315 | Considerably worse |
| 845 | A little worse |
| 1595 | About the same |
| 666 | A little better |
| 574 | Considerably better |
| 414 | A lot better |

9. To what extent has the Marine Corps' emphasis on fitness helped to promote in you a healthier lifestyle? *Mark ONE.*

| | |
|------|--------------|
| 421 | Not at all |
| 467 | Very little |
| 629 | A little |
| 1072 | Somewhat |
| 1002 | A lot |
| 606 | Quite a lot |
| 425 | A great deal |

10. What effect does your state of health have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 840 | Very positive effect |
| 1790 | Positive effect |
| 1255 | No effect |
| 558 | Negative effect |
| 109 | Very negative effect |

11. What effect does your state of health have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 453 | Very positive effect |
| 1005 | Positive effect |
| 2407 | No effect |
| 496 | Negative effect |
| 252 | Very negative effect |

12. What effect does your medical care have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 462 | Very positive effect |
| 1215 | Positive effect |
| 2102 | No effect |
| 630 | Negative effect |
| 156 | Very negative effect |

13. What effect does your medical care have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 435 | Very positive effect |
| 966 | Positive effect |
| 2286 | No effect |
| 583 | Negative effect |
| 312 | Very negative effect |

Answer questions 14 through 22 ONLY if you have family members. If you do not have family members, go to the next section, FRIENDS AND FRIENDSHIPS.

14. What type of medical insurance/medical care do your family members use most often? *Mark ONE.*

| | |
|------|--------------------------------|
| 646 | Military medical facilities |
| 1482 | TRICARE Prime |
| 20 | TRICARE Extra |
| 260 | TRICARE Standard |
| 15 | TRICARE Remote |
| 56 | Group HMO |
| 10 | Group fee-for-service policy |
| 80 | Private HMO |
| 18 | Private fee-for-service policy |
| 268 | Other |

15. Do you have TRICARE supplemental insurance coverage? *Mark ONE.*

| | |
|------|-----|
| 1128 | Yes |
| 1688 | No |

16. Which of your family members, if any, have special medical needs (e.g., disabilities and/or medical conditions requiring special care)? *Mark ALL That Apply.*

| | |
|------|--------------------------------|
| 2293 | None have special needs |
| 271 | My spouse |
| 191 | Child(ren) living with me |
| 49 | Child(ren) not living with me |
| 3 | Legal ward(s) living with me |
| 116 | Parent(s) or other relative(s) |

17. How satisfied are you with the MEDICAL care received by your family members? *Mark ONE.*

| | |
|-----|-------------------------|
| 242 | Completely dissatisfied |
| 284 | Dissatisfied |
| 350 | Somewhat dissatisfied |
| 737 | Neutral |
| 452 | Somewhat satisfied |
| 631 | Satisfied |
| 137 | Completely satisfied |

18. How satisfied you are with the DENTAL care received by your family members? *Mark ONE.*

| | |
|-----|-------------------------|
| 254 | Completely dissatisfied |
| 259 | Dissatisfied |
| 268 | Somewhat dissatisfied |
| 954 | Neutral |
| 370 | Somewhat satisfied |
| 597 | Satisfied |
| 155 | Completely satisfied |

19. What effect does your family members' state of health have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 441 | Very positive effect |
| 873 | Positive effect |
| 1022 | No effect |
| 406 | Negative effect |
| 108 | Very negative effect |

20. What effect does your family members' state of health have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 341 | Very positive effect |
| 668 | Positive effect |
| 1407 | No effect |
| 289 | Negative effect |
| 139 | Very negative effect |

21. What effect does your family members' medical care have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 347 | Very positive effect |
| 762 | Positive effect |
| 1301 | No effect |
| 368 | Negative effect |
| 97 | Very negative effect |

22. What effect does your family members' medical care have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 327 | Very positive effect |
| 627 | Positive effect |
| 1414 | No effect |
| 311 | Negative effect |
| 162 | Very negative effect |

FRIENDS AND FRIENDSHIPS

The questions in this section concern your friendships and how those friendships affect your quality of life. Think about the friends you have and your relationships with them.

1. In general, how do you feel about your friendships these days? *Mark ONE.*

| | |
|------|-------------------------------|
| 75 | 1 Terrible |
| 155 | 2 Unhappy |
| 380 | 3 Mostly unhappy |
| 802 | 4 Neither unhappy nor pleased |
| 1295 | 5 Mostly pleased |
| 1421 | 6 Pleased |
| 412 | 7 Delighted |

2. Are your close friends MOSTLY: *Mark ONE.*

| | |
|------|--|
| 2182 | Fellow Marines at this location |
| 464 | Marines who are stationed at other locations |
| 331 | Civilians in this area |
| 1176 | Civilians "back home" |
| 83 | Members of other military services |
| 275 | Other |

3. Do you have friends at this location with whom you feel free to discuss personal matters?

| | |
|------|-------------------------|
| 3535 | Yes |
| 1017 | No (skip to question 5) |

4. If Yes, which statements best describe those friends? *Mark ALL That Apply.*

| | |
|------|--|
| 883 | Marines I see only at work |
| 388 | Marines I socialize with once in a while |
| 2232 | Marines I socialize with regularly |
| 159 | Members of other military services |
| 725 | Civilians |
| 195 | Other |

5. Use this scale to show how satisfied or dissatisfied you are with your friendships at this time.

| How satisfied are you with: | | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|-----------------------------|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. | the AMOUNT OF TIME YOU SOCIALIZE with your friends? | 186 | 416 | 570 | 843 | 816 | 1389 | 315 |
| b. | the NUMBER OF MARINE CORPS FRIENDS you have? | 141 | 203 | 252 | 1054 | 619 | 1682 | 515 |
| c. | the NUMBER OF CIVILIAN FRIENDS you have? | 256 | 334 | 416 | 1112 | 571 | 1293 | 500 |
| d. | the SUPPORT AND ENCOURAGEMENT you receive from your friends? | 98 | 126 | 161 | 1003 | 728 | 1743 | 608 |
| e. | your friendships OVERALL at this time? | 93 | 126 | 266 | 801 | 763 | 1812 | 568 |

6. What effect do your friendships have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 554 | Very positive effect |
| 1758 | Positive effect |
| 1972 | No effect |
| 189 | Negative effect |
| 64 | Very negative effect |

7. What effect do your friendships have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 271 | Very positive effect |
| 854 | Positive effect |
| 3014 | No effect |
| 271 | Negative effect |
| 160 | Very negative effect |

MARRIAGE/INTIMATE RELATIONSHIP

Next, we will ask a few questions about your marriage or other intimate relationship, and how it relates to your quality of life.

1. How are you feeling these days about your marriage or other intimate relationship(s)? *Mark ONE.*

| | |
|-----|-------------------------------|
| 319 | 1 Terrible |
| 357 | 2 Unhappy |
| 498 | 3 Mostly unhappy |
| 832 | 4 Neither unhappy nor pleased |
| 707 | 5 Mostly pleased |
| 966 | 6 Pleased |
| 846 | 7 Delighted |

2. At this time, are you: *Mark ONE.*

| | |
|------|--|
| 2119 | Married |
| 1074 | Involved in a serious intimate relationship, but not married |
| 1354 | Not seriously involved with anyone |

If you are NOT married or NOT seriously involved with anyone, please skip to YOUR RELATIONSHIP WITH YOUR CHILDREN.

3. How satisfied do you think you would be with your marriage/intimate relationship if you were not in the Marines? *Mark ONE.*

| | |
|------|-------------------------|
| 70 | Completely dissatisfied |
| 83 | Dissatisfied |
| 103 | Somewhat dissatisfied |
| 582 | Neutral |
| 264 | Somewhat satisfied |
| 1083 | Satisfied |
| 1230 | Completely satisfied |

4. What effect does your marriage/intimate relationship have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 669 | Very positive effect |
| 1046 | Positive effect |
| 1017 | No effect |
| 521 | Negative effect |
| 122 | Very negative effect |

5. What effect does your marriage/intimate relationship have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 419 | Very positive effect |
| 668 | Positive effect |
| 1243 | No effect |
| 583 | Negative effect |
| 482 | Very negative effect |

6. How well does the Marine Corps accommodate the demands of your marriage/intimate relationship?

| | |
|------|------------------|
| 78 | Extremely well |
| 491 | Very well |
| 1482 | So, so |
| 761 | Very poorly |
| 595 | Extremely poorly |

If you are ARE married, answer questions 7-8 then skip to question 13.

If you are NOT married, but ARE seriously involved with someone, skip to question 9.

7. How long have you been married? *Mark ONE.*

| | |
|-----|--------------------|
| 165 | Less than 6 months |
| 279 | 6 to 12 months |
| 312 | 13 to 23 months |
| 422 | 2 to 3 years |
| 239 | 4 to 5 years |
| 347 | 6 to 10 years |
| 320 | 11 to 20 years |
| 52 | More than 20 years |

8. If you are not accompanied at this station, how frequently do you see your spouse? *Mark ONE.*

| | |
|------|----------------------|
| 1136 | Daily |
| 46 | Several times a week |
| 48 | Once a week |
| 45 | Once a month |
| 31 | 9 to 11 times a year |
| 12 | 7 to 8 times a year |
| 21 | 5 to 6 times a year |
| 40 | 3 to 4 times a year |
| 103 | 1 to 2 times a year |

9. How long have you been involved in this relationship?
Mark ONE.

| | |
|-----|-------------------|
| 67 | Less than a month |
| 118 | 1 to 3 months |
| 177 | 4 to 6 months |
| 277 | 7 to 12 months |
| 282 | 13 to 23 months |
| 578 | 2 to 5 years |
| 256 | More than 5 years |

10. Is your intimate partner: *Mark ONE.*

| | |
|------|--------------------------------------|
| 239 | Also a Marine |
| 57 | A member of another military service |
| 1501 | A civilian |

11. Does your intimate partner live: *Mark ONE.*

| | |
|-----|------------------------------|
| 594 | “Back home” |
| 815 | At or near your duty station |
| 345 | Other |

12. If your intimate partner does not live in the area, how frequently are you able to see each other? *Mark ONE.*

| | |
|-----|----------------------|
| 623 | Not applicable |
| 126 | Every day |
| 110 | Several times a week |
| 151 | Once a week |
| 139 | Once a month |
| 69 | 9 to 11 times a year |
| 45 | 7 to 8 times a year |
| 70 | 5 to 6 times a year |
| 139 | 3 to 4 times a year |
| 204 | 1 to 2 times a year |

13. If you are married or have an intimate relationship, please use this scale to show how satisfied or dissatisfied you are with various aspects of this relationship.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the LOVE AND UNDERSTANDING you receive in this relationship? | 101 | 157 | 206 | 309 | 400 | 1050 | 1035 |
| b. the COMMUNICATION within the relationship? | 113 | 198 | 280 | 300 | 536 | 1039 | 782 |
| c. the way CONFLICTS ARE RESOLVED with your partner? | 138 | 188 | 297 | 332 | 543 | 992 | 737 |
| d. your partner’s SUPPORT OF YOUR MILITARY CAREER? | 183 | 145 | 187 | 429 | 356 | 862 | 1066 |
| e. the COMPATABILITY OF INTERESTS between you and your partner? | 92 | 134 | 166 | 333 | 420 | 1043 | 997 |
| f. the SEXUAL ASPECT of your relationship? | 190 | 158 | 171 | 277 | 301 | 817 | 1255 |
| g. your intimate relationship OVERALL? | 115 | 139 | 178 | 279 | 308 | 1017 | 1146 |

14. If your military duties took you away for 6 months or more, how capable do you think your spouse or partner would be to take full responsibility for the following?

| | Does not apply | Extremely capable | Very capable | Capable | Not so capable | Not at all capable |
|--|----------------|-------------------|--------------|---------|----------------|--------------------|
| a. Childcare | 1363 | 1001 | 310 | 434 | 109 | 4 8 |
| b. Family members’ health | 789 | 1182 | 503 | 575 | 103 | 5 6 |
| c. Family finances | 496 | 1178 | 527 | 629 | 261 | 9 7 |
| d. Managing the maintenance of your residence. | 550 | 851 | 566 | 766 | 358 | 123 |
| e. Emotional or parenting matters | 593 | 909 | 546 | 691 | 325 | 109 |
| f. Safety of family members | 713 | 1130 | 520 | 626 | 118 | 6 5 |
| g. Transportation | 370 | 1337 | 555 | 653 | 137 | 9 6 |
| h. Investments | 580 | 828 | 421 | 687 | 413 | 206 |

YOUR RELATIONSHIP WITH YOUR CHILDREN

The next group of questions has to do with your relations with your children. If you do not have children under age 18, skip to the following section, [YOUR RELATIONSHIP WITH OTHER RELATIVES](#).

1. If you have children from a previous marriage, which of the following best describes the legal custody status of those child(ren)? *Mark ONE.*

| | |
|------|---------------------------------------|
| 1606 | Does not apply |
| 120 | Full custody of your child(ren) |
| 15 | Full custody of some of your children |
| 200 | Shared custody |
| 127 | No custody |

2. How do you feel about your relations with your children who live with you in your household? *Mark ONE.*

| | |
|-----|-------------------------------|
| 635 | Not applicable, none |
| 11 | 1 Terrible |
| 20 | 2 Unhappy |
| 41 | 3 Mostly unhappy |
| 62 | 4 Neither unhappy nor pleased |
| 165 | 5 Mostly pleased |
| 390 | 6 Pleased |
| 765 | 7 Delighted |

3. How do you feel about your relations with your children who do not live with you? *Mark ONE.*

| | |
|------|-------------------------------|
| 1544 | Not applicable, none |
| 66 | 1 Terrible |
| 67 | 2 Unhappy |
| 71 | 3 Mostly unhappy |
| 54 | 4 Neither unhappy nor pleased |
| 100 | 5 Mostly pleased |
| 97 | 6 Pleased |
| 87 | 7 Delighted |

4. If you have school age children who live with you, do they attend: *Mark ALL That Apply.*

| | |
|------|---------------------------|
| 1137 | No school age children |
| 550 | Public school |
| 238 | DoD school |
| 43 | A church school |
| 56 | A private day school |
| 3 | A private boarding school |

5. If you have school age children, how satisfied are you with the education your children are receiving? *Mark ONE.*

| | |
|------|-------------------------|
| 3736 | No school age children |
| 36 | Completely dissatisfied |
| 57 | Dissatisfied |
| 94 | Somewhat dissatisfied |
| 86 | Neutral |
| 169 | Somewhat satisfied |
| 384 | Satisfied |
| 136 | Completely satisfied |

6. Now we would like you to tell us how satisfied or dissatisfied you are with various aspects of your relations with your children.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the AMOUNT OF TIME you have with your children? | 383 | 307 | 326 | 232 | 273 | 274 | 89 |
| b. the QUALITY OF TIME you have with your children? | 231 | 155 | 211 | 257 | 280 | 492 | 241 |
| c. your OVERALL relationship with your children? | 110 | 85 | 114 | 255 | 205 | 583 | 503 |

7. Next, how satisfied are you with:

| | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the MILITARY ENVIRONMENT for raising children? | 152 | 178 | 210 | 493 | 308 | 454 | 114 |
| b. the ACTIVITIES AVAILABLE for children at your base? | 132 | 160 | 177 | 564 | 304 | 416 | 137 |

If you do not have children who require childcare, skip to question 11.

8. Who is usually the primary care provider for your youngest child while you are on duty? *Mark ONE.*

| | |
|-----|---|
| 107 | Private licensed facility |
| 100 | Civilian-operated family home care |
| 22 | At-home employee (nanny, au pair, etc.) |
| 83 | Relative or older siblings |
| 46 | Friend |
| 596 | Your spouse |
| 122 | Military Child Development Center |
| 37 | Base-operated family home care program |
| 104 | Other |

9. What is your ONE most critical childcare requirement?

| | |
|-----|-----------------------------------|
| 250 | Occasional babysitting |
| 276 | All day care for pre-school child |
| 141 | Before and/or after school |
| 27 | Overnight care |
| 28 | Extended care for several days |
| 202 | Access to care at any time |
| 54 | Sick childcare |
| 215 | Other |

10. Now we would like you to tell us how satisfied or dissatisfied you are with various aspects of childcare for your child(ren).

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the QUALIFICATIONS of the person(s) who cares for your child(ren) while you are on duty? | 42 | 29 | 42 | 305 | 108 | 369 | 313 |
| b. the COST of childcare? | 195 | 146 | 142 | 329 | 96 | 169 | 130 |
| c. the SAFETY of your child(ren) while they are with their childcare provider? | 30 | 25 | 49 | 298 | 128 | 378 | 277 |
| d. the OVERALL quality of childcare received by your child(ren)? | 32 | 32 | 62 | 297 | 154 | 349 | 266 |

11. If you were not in the Marine Corps, do you think you would be able to spend more time or less time with your child(ren)? *Mark ONE.*

| | |
|-----|------------------------|
| 39 | Much less time |
| 24 | Considerably less time |
| 53 | A little less time |
| 325 | About the same |
| 340 | A little more time |
| 505 | Considerably more time |
| 623 | Much more time |

12. What effect does your relationship with your child(ren) have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 350 | Very positive effect |
| 609 | Positive effect |
| 625 | No effect |
| 247 | Negative effect |
| 64 | Very negative effect |

13. What effect does your relationship with your child(ren) have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 238 | Very positive effect |
| 385 | Positive effect |
| 759 | No effect |
| 322 | Negative effect |
| 197 | Very negative effect |

14. If you had to be separated from your child(ren) for 6 months or more because of your military duties, who would care for them? *Mark ONE.*

| | |
|------|--|
| 111 | No child(ren) under 18 |
| 1431 | Spouse |
| 144 | Immediate family member (e.g., grandparent(s)) |
| 45 | Other family member |
| 14 | Friend or neighbor |
| 3 | Public agency |
| 136 | Other |

15. How sure are you that the person(s) named in question 14 would adequately take care of your child(ren) in your absence? *Mark ONE.*

| | |
|------|-------------------|
| 153 | Not applicable |
| 1402 | Completely sure |
| 189 | Very sure |
| 72 | Somewhat sure |
| 34 | Somewhat unsure |
| 9 | Very unsure |
| 43 | Completely unsure |

YOUR RELATIONSHIP WITH OTHER RELATIVES

Questions in this section ask about your relations with other relatives, such as your parents, grandparents, brothers and sisters, and/or in-laws if you are married.

1. How do you feel about your relations with your relatives at this time? *Mark ONE.*

| | |
|------|-------------------------------|
| 130 | 1 Terrible |
| 191 | 2 Unhappy |
| 408 | 3 Mostly unhappy |
| 675 | 4 Neither unhappy nor pleased |
| 1078 | 5 Mostly pleased |
| 1432 | 6 Pleased |
| 679 | 7 Delighted |

2. How far are your nearest relatives from your present duty station? *Mark ONE.*

| | |
|------|-----------------------------|
| 35 | N/A, no relatives |
| 168 | Local area |
| 240 | Within 100 miles |
| 273 | Between 101 and 200 miles |
| 679 | Between 201 and 500 miles |
| 1010 | Between 501 and 1,000 miles |
| 2192 | More than 1,000 miles |

3. Is the amount of time you spend with the relatives listed below less than you would like, more than you would like, or about the right amount of time? (*If you do not have relatives in one of these categories, please blacken the Does not apply circle.*)

| | | Does not apply | Less than liked | About right | More than liked |
|----|--------------------------|----------------|-----------------|-------------|-----------------|
| a. | Parent(s) | 183 | 3417 | 855 | 122 |
| b. | Grandparent(s) | 1090 | 2687 | 614 | 90 |
| c. | Brother(s) and sister(s) | 282 | 3288 | 730 | 133 |
| d. | In-laws | 1769 | 1446 | 955 | 266 |
| e. | Other close relatives | 391 | 2912 | 975 | 107 |

4. When you were growing up, did you live with a parent who was a career military member? *Mark ONE.*

| | |
|------|---|
| 3952 | No |
| 158 | Yes, parent was in the Marine Corps |
| 421 | Yes, parent was in another service branch |

5. Show how satisfied or dissatisfied you are with various aspects of your relationships with your relatives.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the AMOUNT OF CONTACT you have with your relatives? | 470 | 881 | 924 | 676 | 691 | 759 | 191 |
| b. the way your relatives GET ALONG WITH EACH OTHER? | 134 | 258 | 324 | 898 | 625 | 1608 | 654 |
| c. their SUPPORT OF YOUR MILITARY CAREER? | 87 | 74 | 121 | 720 | 468 | 1592 | 373 |
| d. relations with your relatives OVERALL? | 82 | 145 | 287 | 703 | 765 | 1686 | 762 |

6. What effect do relations with your relatives have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 462 | Very positive effect |
| 1177 | Positive effect |
| 2540 | No effect |
| 338 | Negative effect |
| 73 | Very negative effect |

7. What effect do relations with your relatives have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 291 | Very positive effect |
| 591 | Positive effect |
| 2869 | No effect |
| 558 | Negative effect |
| 305 | Very negative effect |

INCOME AND STANDARD OF LIVING

Now, we would like you to consider your income and standard of living as these relate to your quality of life.

1. Overall, how do you feel about your current standard of living? *Mark ONE.*

| | |
|------|-------------------------------|
| 368 | 1 Terrible |
| 606 | 2 Unhappy |
| 925 | 3 Mostly unhappy |
| 970 | 4 Neither unhappy nor pleased |
| 1068 | 5 Mostly pleased |
| 600 | 6 Pleased |
| 85 | 7 Delighted |

2. Have any of the following things happened to you since you have been at your present location? *Mark ALL That Apply.*

| | |
|------|---|
| 358 | Indebtedness letter to your command |
| 103 | Repossession of something purchased on time |
| 67 | Bankruptcy |
| 263 | Crisis loan from military relief organization |
| 151 | Trouble over child support payments |
| 3728 | None of the above |

3. Which of the following best describes your own or your family's financial situation at this time? *Mark ONE.*

| | |
|------|---|
| 980 | I/we can afford most of the things I/we want |
| 1288 | I/we can easily afford most of the things I/we need, plus some extras |
| 1278 | I/we can easily afford most of the things I/we need, but not extras |
| 779 | I/we can barely afford the things I/we need |
| 196 | I/we often cannot afford the things that I/we need |

4. Do you have a second (civilian) job? *Mark ONE.*

| | |
|------|--|
| 3048 | No, and I have not looked for one (skip to #7) |
| 969 | No, but I'm trying to find one (skip to #7) |
| 125 | Yes, working less than 10 hours per week |
| 195 | Yes, working between 10 and 20 hours per week |
| 119 | Yes, working between 21 and 30 hours per week |
| 52 | Yes, working more than 30 hours per week |

5. If you answered Yes to question #4, what's the main reason you have a second job? *Mark ONE.*

| | |
|-----|--|
| 46 | To prepare for my next career, gain experience |
| 17 | To pursue interest in a certain type of work |
| 424 | To earn additional income |
| 15 | To occupy my off duty time |
| 32 | I enjoy the work |
| 47 | Other |

6. How many days do you usually work each week at your second job? *Mark ONE.*

| | | | |
|-----|-------|-----|-------|
| 54 | One | 105 | Five |
| 108 | Two | 51 | Six |
| 118 | Three | 27 | Seven |
| 97 | Four | | |

How much of your family's total income comes from your spouse? *Mark ONE.*

| | | | |
|------|----------------|-----|---------------|
| 2257 | N/A, no spouse | 453 | 41% to 60% |
| 857 | None | 100 | 61% to 80% |
| 343 | Less than 20% | 33 | More than 80% |
| 401 | 20% to 40% | | |

8. To what extent does the base exchange help you make ends meet? *Mark ONE.*

| | |
|------|--------------|
| 255 | A great deal |
| 585 | Quite a bit |
| 1275 | Some |
| 941 | A little |
| 1426 | Not at all |

9. To what extent does the commissary help you make ends meet? *Mark ONE.*

| | |
|------|--------------|
| 466 | A great deal |
| 934 | Quite a bit |
| 1173 | Some |
| 873 | A little |
| 1107 | Not at all |

10. Where does your family shop for food? *Mark ONE.*

| | |
|------|---|
| 568 | Exclusively at the commissary |
| 1281 | Mostly at the commissary |
| 1088 | About 50-50 at the commissary and civilian stores |
| 1004 | Mostly at civilian stores |
| 519 | Exclusively at civilian stores |

11. Where does your family shop for clothing, personal items, and household items? *Mark ONE.*

| | |
|------|---|
| 103 | Exclusively at the exchange |
| 338 | Mostly at the exchange |
| 1001 | About 50-50 at the exchange and civilian stores |
| 2040 | Mostly at civilian stores |
| 994 | Exclusively at civilian stores |

12. Please use this scale to indicate how satisfied or dissatisfied you are with various aspects of your current financial situation.

| How satisfied are you with: | Does not apply | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|----------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the money you have available for ESSENTIALS? | 34 | 296 | 468 | 524 | 708 | 852 | 1300 | 420 |
| b. the money you have available for EXTRAS? | 53 | 819 | 902 | 733 | 605 | 709 | 594 | 122 |
| c. the money you have available for SAVINGS? | 77 | 1046 | 934 | 759 | 553 | 576 | 447 | 110 |
| d. your current financial situation OVERALL? | 40 | 602 | 752 | 778 | 754 | 755 | 660 | 134 |
| e. if you own a car, how satisfied are you with the CAR you drive? | 498 | 225 | 274 | 358 | 588 | 704 | 1229 | 580 |
| f. if you have a house or apartment, how satisfied are you with your HOUSEHOLD FURNISHINGS? | 1446 | 187 | 249 | 369 | 632 | 572 | 709 | 190 |
| g. if you have children, how satisfied are you with WHAT YOU CAN PROVIDE FOR YOUR CHILDREN? | 2086 | 222 | 236 | 259 | 497 | 355 | 461 | 141 |

13. What effect does your financial situation have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 376 | Very positive effect |
| 864 | Positive effect |
| 1755 | No effect |
| 1168 | Negative effect |
| 343 | Very negative effect |

14. What effect does your financial situation have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 443 | Very positive effect |
| 716 | Positive effect |
| 1261 | No effect |
| 1106 | Negative effect |
| 973 | Very negative effect |

YOUR MILITARY JOB

The following questions ask about several aspects of your current military job.

1. Overall, how are you feeling these days about your military job? *Mark ONE.*

| | |
|------|-------------------------------|
| 429 | 1 Terrible |
| 495 | 2 Unhappy |
| 734 | 3 Mostly unhappy |
| 936 | 4 Neither unhappy nor pleased |
| 1011 | 5 Mostly pleased |
| 758 | 6 Pleased |
| 178 | 7 Delighted |

2. In a normal work week, how many hours do you work on your military job?

| | |
|------|---------------|
| 136 | 1 - 10 Hours |
| 72 | 11 - 20 Hours |
| 30 | 21 - 30 Hours |
| 531 | 31 - 40 Hours |
| 1446 | 41 - 50 Hours |
| 1319 | 51 - 60 Hours |
| 509 | 61 - 70 Hours |
| 473 | > 70 Hours |

3. How many days do you usually work each week at your military job? *Mark ONE.*

| | | | |
|----|-------|------|-------|
| 26 | One | 3830 | Five |
| 13 | Two | 542 | Six |
| 29 | Three | 95 | Seven |
| 55 | Four | | |

4. How well do you think your Marine Corps training prepared you for your present job? *Mark ONE.*

| | |
|------|-------------|
| 352 | Not at all |
| 819 | Barely |
| 1411 | Somewhat |
| 1735 | Pretty well |
| 253 | Completely |

5. In your opinion, how well are most other members of your work group trained to do their jobs? *Mark ONE.*

| | |
|------|-------------|
| 132 | Not at all |
| 701 | Barely |
| 1624 | Somewhat |
| 1954 | Pretty well |
| 180 | Completely |

6. During the past year, did you entirely miss, arrive late, or have to leave early from a no-notice alert, deployment, or exercise? *Mark ALL That Apply.*

| | |
|------|--------------------------------|
| 2964 | Does not apply (no such event) |
| 1367 | No, I was there when directed |
| 133 | Yes, I was late |
| 145 | Yes, I left early |
| 79 | Yes, I missed it entirely |

7. If you answered Yes on question #6, what was the main reason? *Mark ALL That Apply.*

| | |
|------|-------------------------------|
| 2197 | Not applicable |
| 53 | I was sick |
| 85 | Someone in my family was sick |
| 106 | Personal or family business |
| 33 | Legal matter |
| 21 | I couldn't be reached |
| 115 | Other |

8. How satisfied are you with your military co-workers? *Mark ONE.*

| | |
|------|-------------------------|
| 178 | Completely satisfied |
| 1216 | Satisfied |
| 1128 | Somewhat satisfied |
| 932 | Neutral |
| 662 | Somewhat dissatisfied |
| 359 | Dissatisfied |
| 147 | Completely dissatisfied |

9. Some people are completely involved in their job - they are absorbed in it day and night. For other people, their job is simply one of their several interests. How involved are you in your military job? *Mark ONE.*

| | |
|------|---|
| 664 | Very slightly involved; other interests are more absorbing |
| 649 | Slightly involved |
| 1569 | Moderately involved; your job and other interests are equally absorbing |
| 1438 | Strongly involved |
| 294 | Very strongly involved; your work is the most absorbing interest in your life |

10. In the past month, how much time did you take off from duty for each of the following PERSONAL reasons? *(Include time when you arrived late or left early, but not scheduled leave time.)*

| | None | Less than 1 hour | 1-2 hours | 3-4 hours | 5-7 hours | 1 day | 2-5 days | More than 5 days |
|---|------|------------------|-----------|-----------|-----------|-------|----------|------------------|
| a. Your education (if not part of your military duties) | 4113 | 139 | 128 | 73 | 40 | 38 | 29 | 32 |
| b. Your transportation (e.g., your car wouldn't start) | 3882 | 310 | 168 | 73 | 24 | 45 | 28 | 12 |
| c. Pregnancy (e.g., prenatal care or doctor visit) | 4101 | 34 | 91 | 73 | 32 | 48 | 47 | 74 |
| d. Your health (e.g., sick or doctor/dentist appointment) | 2756 | 293 | 532 | 229 | 110 | 196 | 275 | 111 |
| e. Personal business (e.g., financial matters) | 2804 | 480 | 564 | 264 | 81 | 152 | 104 | 34 |
| f. Other personal reasons | 2835 | 426 | 457 | 234 | 92 | 192 | 124 | 115 |

11. In the past month, how much time did you take off from duty for each of the following FAMILY reasons? *(Include time when you arrived late or left early, but not scheduled leave time.)*

| 983 Do not have family with me (skip to #13) | | | | | | | | |
|---|------|------------------|-----------|-----------|-----------|-------|----------|------------------|
| | None | Less than 1 hour | 1-2 hours | 3-4 hours | 5-7 hours | 1 day | 2-5 days | More than 5 days |
| a. Care for children (e.g., a sick child, school visits, no sitter, discipline) | 2526 | 100 | 234 | 121 | 34 | 110 | 96 | 34 |
| b. Helping spouse (e.g., illness or emotional problems) | 2590 | 117 | 179 | 106 | 31 | 99 | 69 | 39 |
| c. Family business (e.g., financial or housing matters) | 2574 | 146 | 234 | 106 | 32 | 77 | 34 | 26 |
| d. Family transportation | 2762 | 119 | 146 | 54 | 30 | 27 | 24 | 13 |
| e. Other family matters | 2497 | 134 | 197 | 78 | 49 | 85 | 51 | 64 |

12. If you had to deploy on short notice, have you made provisions for the following? *(Blacken the N/A circle for those that do not apply.)*

| | N/A | No | Yes |
|--|------|------|------|
| a. A will | 350 | 1381 | 1829 |
| b. A joint checking account | 826 | 907 | 1814 |
| c. A power of attorney | 413 | 1348 | 1713 |
| d. Storage of possessions | 757 | 1503 | 1197 |
| e. Payment of bills | 252 | 868 | 2298 |
| f. Elder care | 2656 | 601 | 165 |
| g. Care for pets | 2176 | 465 | 822 |
| h. Lease obligations | 2090 | 516 | 815 |
| i. Management of investments | 1446 | 642 | 1309 |
| j. Modifying official records if necessary | 1122 | 1105 | 1174 |

13. Show how much you agree or disagree with each of the following statements.

| | Completely disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Completely agree |
|--|---------------------|----------|-------------------|----------------------------|----------------|-------|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. I talk up the Marines to my friends as a great outfit. | 340 | 492 | 282 | 1147 | 795 | 1087 | 395 |
| b. I find my values and the Marine Corps' values are very similar. | 251 | 331 | 322 | 642 | 1028 | 1480 | 486 |
| c. There is not much to be gained by my sticking with the Marine Corps indefinitely. | 352 | 855 | 559 | 926 | 570 | 741 | 510 |
| d. The Marine Corps is the best of all places for me to work. | 822 | 907 | 649 | 1025 | 525 | 441 | 172 |
| e. The major satisfaction in my life comes from my military job. | 947 | 1046 | 645 | 880 | 574 | 354 | 100 |
| f. The most important things that happen to me involve my work. | 902 | 1181 | 680 | 872 | 508 | 279 | 78 |
| g. I'm really a perfectionist about my work. | 193 | 251 | 319 | 795 | 1148 | 1249 | 525 |
| h. I live, eat, and breathe my work. | 1186 | 1136 | 605 | 745 | 515 | 234 | 87 |
| i. Most things in life are more important than work. | 139 | 438 | 639 | 1049 | 761 | 826 | 616 |
| j. I am very much involved personally in my work. | 381 | 504 | 454 | 1012 | 1021 | 876 | 211 |
| k. Being a Marine is worth personal sacrifice. | 493 | 431 | 385 | 779 | 918 | 913 | 531 |

14. During the past month, how often did the following happen while you were on duty?

| | None of the time | A little of the time | Some of the time | Most of the time | All of the time |
|---|------------------|----------------------|------------------|------------------|-----------------|
| a. Your mind was not on the job. | 648 | 1746 | 1469 | 467 | 186 |
| b. You lost your temper. | 1481 | 1273 | 1222 | 373 | 148 |
| c. You accomplished less than you would like. | 743 | 1568 | 1416 | 522 | 211 |
| d. You were not at your best. | 688 | 2100 | 1258 | 283 | 119 |
| e. You were more likely to make mistakes. | 1135 | 2234 | 808 | 171 | 69 |
| f. Your performances were criticized by co-workers. | 2200 | 1177 | 575 | 267 | 227 |
| g. You had problems with a superior. | 2116 | 936 | 727 | 352 | 321 |

15. Please show how satisfied or dissatisfied you are with each of the following aspects of your job.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. your PEERS AND CO-WORKERS? | 171 | 362 | 626 | 1251 | 890 | 1118 | 147 |
| b. your PAY AND BENEFITS? | 625 | 895 | 995 | 582 | 777 | 559 | 83 |
| c. the amount of SUPPORT AND GUIDANCE you receive from your supervisor? | 414 | 552 | 627 | 1011 | 797 | 894 | 211 |
| d. the AMOUNT OF JOB SECURITY you have? | 153 | 176 | 213 | 963 | 648 | 1541 | 804 |
| e. the opportunity for PERSONAL GROWTH AND DEVELOPMENT on your job? | 425 | 523 | 563 | 916 | 833 | 961 | 240 |
| f. the degree of RESPECT AND FAIR TREATMENT you receive from superiors? | 530 | 531 | 588 | 748 | 675 | 1072 | 328 |
| g. the AMOUNT OF CHALLENGE in your job? | 311 | 358 | 424 | 944 | 851 | 1157 | 372 |
| h. the FEELING OF ACCOMPLISHMENT you get from doing your job? | 386 | 379 | 394 | 789 | 894 | 1172 | 418 |
| i. the LEADERSHIP provided by your superiors? | 487 | 480 | 610 | 818 | 799 | 1005 | 276 |
| j. the FEEDBACK you get from others? | 245 | 306 | 519 | 1280 | 989 | 901 | 159 |
| k. the AMOUNT OF RESPONSIBILITY you have on your job? | 236 | 238 | 357 | 789 | 860 | 1341 | 521 |
| l. your job OVERALL, considering all these different aspects? | 289 | 388 | 521 | 921 | 963 | 1142 | 186 |

16. Look at the five job statements below and show in the column to the left how often each is true of the job you have NOW. Then in the column to the right, show how often the statement would be true of your IDEAL job.

| Present Marine Job | | | | | | Ideal Job | | | | |
|--------------------|--------|--------------|------------------|--------|--|-----------|--------|--------------|------------------|--------|
| Never | Seldom | Occasionally | Most of the time | Always | | Never | Seldom | Occasionally | Most of the time | Always |
| 362 | 955 | 1357 | 1161 | 647 | I am able to do a lot of different things on my job. | 77 | 170 | 868 | 1713 | 1257 |
| 618 | 861 | 992 | 1450 | 516 | I get to decide on my own how to go about doing my work. | 73 | 161 | 516 | 1765 | 1557 |
| 250 | 547 | 988 | 1661 | 978 | I can see from the work itself how well I am doing. | 44 | 70 | 364 | 1432 | 2092 |
| 241 | 501 | 881 | 1490 | 1295 | I do work that is important in the overall scheme of things. | 49 | 70 | 355 | 1347 | 2194 |
| 147 | 440 | 909 | 1902 | 1005 | I get to completely finish the tasks I begin. | 40 | 55 | 236 | 1147 | 2498 |

17. What effect does your military job have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 416 | Very positive effect |
| 1063 | Positive effect |
| 1519 | No effect |
| 913 | Negative effect |
| 607 | Very negative effect |

18. In your opinion, what is the ONE best thing about being a Marine? *Mark ONE.*

| | |
|------|--------------------------------------|
| 1358 | A chance to serve your country |
| 481 | Job security |
| 147 | Pay and benefits |
| 246 | Adventure and excitement |
| 978 | Being one of "the few and the proud" |
| 587 | Training and personal development |
| 102 | Retirement options |
| 590 | Other |

3. How about your work skills? Do you think your skills are? *Mark ONE.*

| | |
|------|------------------------------|
| 1586 | Readily marketable |
| 1573 | Likely to be marketable |
| 872 | May or may not be marketable |
| 294 | Not likely to be marketable |
| 201 | Not marketable |

4. Since joining the Marine Corps, have you: *Mark ALL That Apply.*

| | |
|------|--|
| 273 | Completed your high school equivalency |
| 1495 | Taken college courses |
| 482 | Begun a college degree program |
| 252 | Obtained a college degree |
| 966 | Taken personal enrichment class(es) |

5. In the next question, please tell us how satisfied or dissatisfied you are with various aspects of your personal development.

YOURSELF

This section asks how you feel about you, your goals, and your personal development.

1. All in all, how are you feeling about yourself these days? *Mark ONE.*

| | |
|------|-------------------------------|
| 95 | 1 Terrible |
| 230 | 2 Unhappy |
| 549 | 3 Mostly unhappy |
| 840 | 4 Neither unhappy nor pleased |
| 1187 | 5 Mostly pleased |
| 1305 | 6 Pleased |
| 334 | 7 Delighted |

2. Do you feel that you are pretty much in control of your life? *Mark ONE.*

| | |
|------|---|
| 952 | I am handling all areas of my life well |
| 2137 | I am handling most areas of my life well |
| 1024 | Some areas of my life seem out of control |
| 302 | Many areas of my life seem out of control |
| 107 | My life seems totally out of control |

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. your ABILITY TO GET ALONG WITH OTHERS? | 51 | 95 | 174 | 680 | 644 | 2009 | 860 |
| b. your PROGRESS TOWARD YOUR PERSONAL GOALS? | 182 | 336 | 604 | 667 | 1187 | 1272 | 280 |
| c. your PHYSICAL APPEARANCE? | 78 | 180 | 464 | 643 | 992 | 1671 | 464 |
| d. your GENERAL COMPETENCE? | 39 | 44 | 128 | 657 | 718 | 2142 | 765 |
| e. your SELF DISCIPLINE? | 30 | 40 | 151 | 449 | 873 | 2041 | 849 |
| f. YOURSELF OVERALL? | 37 | 47 | 163 | 500 | 771 | 2124 | 695 |

6. Please indicate how much you agree or disagree with each of the following statements.

| | Completely disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Completely agree |
|---|---------------------|----------|-------------------|----------------------------|----------------|-------|------------------|
| a. In uncertain times I usually expect the best. | 199 | 442 | 356 | 950 | 943 | 1363 | 267 |
| b. It's easy for me to relax. | 190 | 584 | 747 | 615 | 1013 | 1128 | 213 |
| c. If something can go wrong for me, it will. | 141 | 669 | 627 | 1271 | 814 | 707 | 284 |
| d. I always look on the bright side of things. | 107 | 242 | 433 | 881 | 1214 | 1203 | 391 |
| e. I'm always optimistic about my future. | 80 | 176 | 286 | 873 | 1089 | 1408 | 476 |
| f. I enjoy my friends a lot. | 41 | 62 | 145 | 681 | 855 | 1846 | 734 |
| g. It's important for me to keep busy. | 45 | 88 | 164 | 689 | 989 | 1790 | 593 |
| h. I hardly ever expect things to go my way. | 167 | 742 | 770 | 1120 | 766 | 630 | 278 |
| i. Things never work out the way I want them to. | 189 | 948 | 885 | 1134 | 714 | 404 | 181 |
| j. I don't get upset too easily. | 215 | 411 | 588 | 762 | 726 | 1317 | 409 |
| k. I'm a believer in the idea that "every cloud has a silver lining." | 184 | 312 | 368 | 1507 | 852 | 905 | 297 |
| l. I rarely count on good things happening to me. | 267 | 928 | 165 | 1123 | 649 | 514 | 210 |

7. To what extent has life in the Marine Corps helped you to fulfill each of the following?

| | Not at all | Very little | A little | Somewhat | A lot | Quite a lot | A great deal |
|---|------------|-------------|----------|----------|-------|-------------|--------------|
| a. Your personal goals for this time in your life. | 455 | 506 | 682 | 1262 | 857 | 535 | 249 |
| b. Your development as a person. | 240 | 255 | 516 | 910 | 1304 | 812 | 443 |
| c. Living the values that are important to you. | 300 | 312 | 497 | 1085 | 1056 | 793 | 413 |
| d. Assuming desired levels of responsibility. | 221 | 263 | 419 | 940 | 1101 | 950 | 518 |
| e. Increasing your financial status. | 864 | 763 | 598 | 1044 | 536 | 379 | 236 |
| f. The opportunity to correct mistakes you have made in life. | 748 | 500 | 543 | 1042 | 746 | 509 | 349 |
| g. Increasing your confidence in yourself. | 279 | 214 | 367 | 874 | 1014 | 921 | 718 |

8. What effect does your personal development have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 675 | Very positive effect |
| 2024 | Positive effect |
| 1464 | No effect |
| 293 | Negative effect |
| 84 | Very negative effect |

9. What effect does your personal development have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 414 | Very positive effect |
| 1139 | Positive effect |
| 2155 | No effect |
| 445 | Negative effect |
| 271 | Very negative effect |

10. Think about your expectations when you entered the Marine Corps. Keep those expectations in mind as you answer the following questions. To what extent have your expectations been fulfilled in:

| | Much better than expected | Better than expected | About what expected | Worse than expected | Much worse than expected |
|---|---------------------------|----------------------|---------------------|---------------------|--------------------------|
| a. The duties I have been assigned. | 329 | 917 | 1893 | 1004 | 357 |
| b. My living conditions. | 163 | 718 | 1854 | 1249 | 479 |
| c. My overall standard of living. | 151 | 692 | 2036 | 1119 | 367 |
| d. The amount of off-duty time. | 153 | 603 | 1996 | 1091 | 546 |
| e. My rate of advancement in rank. | 229 | 717 | 1732 | 1054 | 619 |
| f. The quality of direct supervision I receive. | 132 | 601 | 2447 | 762 | 394 |
| g. The Marine Corps' concern for my family. | 134 | 601 | 1898 | 1009 | 695 |
| h. The way I am treated on the job. | 159 | 750 | 2243 | 753 | 418 |
| i. My sense of accomplishment in my work. | 255 | 1102 | 2024 | 621 | 293 |
| j. My environment as a Marine. | 187 | 845 | 2226 | 798 | 302 |
| k. The quality of leadership I receive. | 183 | 828 | 1896 | 918 | 470 |
| l. My social interactions with fellow Marines. | 236 | 1093 | 2314 | 520 | 199 |
| m. The level of responsibility in my work. | 390 | 1231 | 1934 | 546 | 212 |

11. Indicate how much you agree or disagree with the statement; "I want to remain in the Marine Corps until I'm eligible for retirement." *Mark ONE.*

| Completely Disagree | 1464 | 432 | 445 | 620 | 390 | 303 | 910 | Completely Agree |
|---------------------|------|-----|-----|-----|-----|-----|-----|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

12. Please indicate how much you agree or disagree with each of the following statements.

| | Strongly disagree | Disagree | Agree | Strongly agree |
|--|-------------------|----------|-------|----------------|
| a. I feel that I am a person of worth, at least on an equal basis with others. | 124 | 262 | 2295 | 1811 |
| b. I feel that I have a number of good qualities. | 61 | 100 | 2138 | 2134 |
| c. All in all, I am inclined to feel that I am a failure. | 2340 | 1614 | 352 | 116 |
| d. I am able to do things as well as most other people. | 95 | 200 | 2202 | 1819 |
| e. I feel I do not have much to be proud of. | 2092 | 1562 | 545 | 179 |
| f. I take a positive attitude toward myself. | 83 | 356 | 2281 | 1562 |
| g. On the whole, I am satisfied with myself. | 81 | 462 | 2455 | 1296 |
| h. I wish I could have more respect for myself. | 1539 | 1652 | 951 | 181 |
| i. I certainly feel useless at times. | 1630 | 1436 | 1053 | 211 |
| j. At times I think I am no good at all. | 2235 | 1392 | 567 | 135 |

LIFE AS A WHOLE

Now, once again about your life as a whole, considering all aspects of life that have been covered in this survey.

- Please indicate how much you agree or disagree with each statement.

| | Completely disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Completely agree |
|---|---------------------|----------|-------------------|----------------------------|----------------|-------|------------------|
| a. In most ways, my life is close to ideal. | 350 | 872 | 687 | 987 | 902 | 665 | 81 |
| b. The conditions of my life are excellent. | 324 | 878 | 807 | 919 | 888 | 617 | 106 |
| c. I am satisfied with my life. | 197 | 498 | 586 | 738 | 1051 | 1199 | 225 |
| d. So far, I have gotten the important things I want in life. | 280 | 617 | 594 | 759 | 979 | 978 | 238 |
| e. If I could live my life over, I would change almost nothing. | 660 | 888 | 819 | 559 | 661 | 664 | 251 |

- How satisfied are you with your life overall? *Mark ONE.*

| | |
|------|------------------------------------|
| 118 | Completely dissatisfied |
| 241 | Dissatisfied |
| 595 | Somewhat dissatisfied |
| 645 | Neither dissatisfied nor satisfied |
| 1351 | Mostly satisfied |
| 1358 | Satisfied |
| 277 | Completely satisfied |

The FINAL section will ask you to consider what you have compared to what you want out of life for each of the areas of your life and for your life as a whole.

- Compared to your own aims or goals how would you say that your life measures up now: matches your goal; fairly well; about half as well as your goal; fairly poorly; or not at all to WHAT YOU WANT?

| Please fill in the circle under the percentage that best describes how closely what you have now measures up to what you want for each of the areas named. | Not applicable/no opinion | Not at all | Fairly poorly | Half as well as your goal | Fairly well | Matches your goal | | |
|--|---------------------------|------------|---------------|---------------------------|-------------|-------------------|------|------|
| | | 0% | 10% | 20% | 50% | 70% | 80% | 100% |
| a. Residence | 243 | 686 | 451 | 644 | 1085 | 719 | 552 | 150 |
| b. Neighborhood | 275 | 510 | 387 | 588 | 1097 | 772 | 667 | 172 |
| c. Leisure and Recreation | 61 | 352 | 422 | 713 | 1223 | 848 | 684 | 149 |
| d. Health | 43 | 126 | 141 | 285 | 736 | 935 | 1602 | 610 |
| e. Friends and Friendships | 57 | 138 | 157 | 295 | 754 | 996 | 1407 | 641 |
| f. Marriage/Intimate Relationships | 372 | 511 | 349 | 370 | 588 | 451 | 892 | 926 |
| g. Relationship(s) with Child(ren) | 2178 | 196 | 140 | 139 | 310 | 259 | 606 | 581 |
| h. Relationships with Other Relatives | 163 | 305 | 352 | 504 | 859 | 791 | 991 | 477 |
| i. Income and Standard of Living | 88 | 694 | 728 | 727 | 1010 | 695 | 416 | 112 |
| j. Military Job | 97 | 528 | 351 | 428 | 941 | 877 | 921 | 269 |
| k. Yourself | 39 | 109 | 107 | 177 | 628 | 838 | 1751 | 769 |
| l. Life as a Whole | 48 | 136 | 133 | 253 | 904 | 1023 | 1455 | 515 |

YOU ARE FINISHED!!

THANK YOU FOR YOUR
PARTICIPATION.

Please return the survey immediately using the enclosed envelope.

ANNEX C:

- Independent Duty Response Report (exclusive of Production Recruiter)

2002
Quality of Life
in the
U. S. Marine Corps

Independent Duty
Exclusive of Production Recruiters
Response Report

BACKGROUND

PERSONAL

1. What is your sex?

| | | | |
|------|------|-----|--------|
| 1981 | Male | 110 | Female |
|------|------|-----|--------|

2. What was your age on your last birthday?

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| 10 | | | | | | | | | 0 | 21 | 53 |
| 20 | 52 | 72 | 88 | 92 | 90 | 85 | 76 | 73 | 80 | 85 | |
| 30 | 83 | 74 | 76 | 81 | 88 | 92 | 95 | 98 | 89 | 77 | |
| 40 | 74 | 56 | 58 | 48 | 21 | 29 | 16 | 19 | 10 | 5 | |
| 50 | 4 | 2 | 6 | 4 | 2 | 1 | 0 | 1 | 1 | 0 | |
| 60 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 70 | 0 | 0 | 0 | 1 | 0 | 2 | | | | | |

3. Are you of Spanish/Hispanic descent?

| | | | |
|-----|-----|------|----|
| 247 | Yes | 1838 | No |
|-----|-----|------|----|

4. Are you:

| | |
|------|------------------------------|
| 1541 | White |
| 262 | Black/African-American |
| 54 | Asian/Pacific Islander |
| 23 | Native American/Aleut/Eskimo |
| 179 | Other |

5. Which best describes your current level of education?
Mark ONE.

| | |
|-----|---------------------------------------|
| 3 | Do not have a high school diploma |
| 20 | High school equivalency |
| 543 | High school diploma |
| 366 | Less than one year of college |
| 126 | One or more years college, non-degree |
| 111 | Associate's degree |
| 415 | Bachelor's degree |
| 175 | Master's degree |
| 24 | Doctoral or professional degree |
| 3 | Other |

6. What is your marital status? *Mark ONE.*

| | | | |
|------|-----------------------|-----|----------|
| 522 | Never been married | 159 | Divorced |
| 1341 | Married | 7 | Widowed |
| 65 | Married but separated | | |

7. What is your spouse's employment situation?

| | |
|-----|--|
| 665 | I do not have a spouse |
| 55 | My spouse is in the military |
| 81 | My spouse is self-employed at home |
| 222 | My spouse works in a civilian job part time |
| 523 | My spouse works in a civilian job full time |
| 390 | My spouse is unemployed by choice |
| 128 | My spouse is unemployed, but actively seeking employment |

8. Do you have any dependent family members? *Mark ALL That Apply.*

| | |
|------|--|
| 578 | No, I have no dependent family members |
| 910 | Spouse (non-military) |
| 1098 | Dependent child(ren) living with me |
| 260 | Dependent child(ren) not living with me |
| 5 | Legal ward(s) living with me |
| 19 | Dependent parent(s) or other relative(s) |

9. Are there children under the age of 21 living in your household?

| | |
|------|---|
| 1128 | Yes |
| 941 | No (skip to CAREER section, question 1) |

10. If yes to question 9, how many children in each age group? *Mark ALL That Apply.*

| | AGE GROUP OF CHILDREN | NUMBER OF CHILDREN IN AGE GROUP | NUMBER OF CHILDREN IN AGE GROUP | | | |
|----|-----------------------|---------------------------------|---------------------------------|---|---|---|
| | | | | | | |
| a. | Under 6 weeks | 48 | 2 | 0 | 0 | 0 |
| b. | 6 wks through 12 mos | 149 | 4 | 0 | 0 | 0 |
| c. | 13 through 24 mos | 131 | 5 | 1 | 0 | 0 |
| d. | 25 through 35 mos | 128 | 3 | 0 | 0 | 0 |
| e. | 3 through 5 yrs | 336 | 52 | 1 | 0 | 0 |
| f. | 6 through 9 yrs | 353 | 62 | 3 | 1 | 0 |
| g. | 10 through 12 yrs | 272 | 43 | 1 | 1 | 0 |
| h. | 13 through 15 yrs | 217 | 30 | 0 | 0 | 0 |
| i. | 16 through 20 yrs | 146 | 40 | 7 | 0 | 0 |
| j. | Over 20 yrs | 26 | 4 | 0 | 0 | 0 |

CAREER

1. What is your pay grade? *Mark circle to the left.*

| | | | | | |
|-----|-----|----|------|-----|---------------|
| 0 | E-1 | 58 | E-9 | 49 | O-3E |
| 54 | E-2 | 3 | W-1 | 12 | O-1 |
| 105 | E-3 | 9 | W-2 | 16 | O-2 |
| 165 | E-4 | 18 | W-3 | 144 | O-3 |
| 350 | E-5 | 8 | W-4 | 170 | O-4 |
| 329 | E-6 | 3 | W-5 | 90 | O-5 |
| 254 | E-7 | 5 | O-1E | 26 | O-6 |
| 163 | E-8 | 14 | O-2E | 4 | O-7 and above |

2. How long have you been in your present pay grade? (Fill in all columns: for example, 3 years=03, and nine months=09)

| | |
|-----|--------------------|
| 248 | Less than 6 Months |
| 332 | 6 to 11 Months |
| 299 | 12 to 17 Months |
| 204 | 18 to 23 Months |
| 358 | 24 to 35 Months |
| 287 | 36 to 47 Months |
| 160 | 48 to 59 Months |
| 182 | 5 Years or More |

3. How long have you been on active duty in the Marine Corps? (Fill in all columns: for example, 3 years=03, and nine months=09)

| | |
|-----|---------------------|
| 73 | Less than 1 Year |
| 151 | ≥ 1 but < 3 Years |
| 264 | ≥ 3 but < 5 Years |
| 472 | ≥ 5 but < 10 Years |
| 381 | ≥ 10 but < 15 Years |
| 446 | ≥ 15 but < 20 Years |
| 310 | 20 or More Years |

4. When you joined the Marine Corps, what were your intentions/interests? *Mark ALL That Apply.*

| | |
|-----|--|
| 670 | I intended to remain in the Marine Corps until eligible for retirement |
| 425 | I intended to remain in the Marine Corps until I could earn educational benefits |
| 299 | I intended to remain in the Marine Corps until I could get the training I needed |
| 927 | I was interested in the travel and adventure |
| 756 | I wanted to find out if I had what it takes to be one of the few and the proud |
| 669 | I wanted the discipline the Marine Corps provides |
| 230 | I'm not sure what I intended |
| 410 | Other |

5. Which of the following statements best describes your career intentions at this time?

| | |
|------|---|
| 1093 | I intend to remain in the Marine Corps until eligible for retirement |
| 255 | I am eligible for retirement, but intend to remain in the Marine Corps |
| 119 | I intend to stay in the Marine Corps, but not until retirement |
| 346 | I'm not sure what I intend to do |
| 239 | I intend to leave the Marine Corps as soon as I can |
| 17 | I intend to remain on active duty, but I am being involuntarily separated |

6. What are your primary and duty MOS?

| | | | |
|-----|--------------|-----|-------|
| 296 | 01** | 40 | 28** |
| 222 | 03** | 38 | 60** |
| 161 | 30** | 36 | 21** |
| 136 | 99** | 33 | 18** |
| 84 | 26** | 33 | 72** |
| 83 | 75** | 28 | 66** |
| 71 | 35** | 26 | 59** |
| 69 | 08** | 25 | 64** |
| 65 | 84** | 24 | 58** |
| 62 | 13** | 23 | 44** |
| 61 | 04** | 21 | 61** |
| 59 | 06** | 21 | 63** |
| 54 | Unidentified | 18 | 65** |
| 51 | 02** | 16 | 23** |
| 45 | 34** | 16 | 62** |
| 45 | 40** | 112 | Other |
| 41 | 43** | | |

7. How long have you been in your present assignment?

| | |
|-----|--------------------|
| 274 | Less than 6 Months |
| 511 | 6 to 11 Months |
| 257 | 12 to 17 Months |
| 397 | 18 to 23 Months |
| 465 | 24 to 35 Months |
| 111 | 36 to 47 Months |
| 35 | 48 to 59 Months |
| 26 | 5 Years or More |

8. Are you accompanied by your family members on your present assignment? *Mark ONE.*

| | |
|------|--|
| 555 | Does not apply, no family members |
| 130 | Accompanied by some family members |
| 1213 | Accompanied by all family members |
| 55 | Temporarily unaccompanied |
| 91 | Permanently unaccompanied by choice |
| 16 | Permanently unaccompanied because required by billet |

9. If you are a “geographic bachelor” by choice, is it because of: *Mark ALL That Apply.*

| | |
|------|---------------------------------------|
| 1739 | Does not apply |
| 53 | Spouse’s job |
| 34 | Children’s schools |
| 15 | Cost of living at this location |
| 9 | Moving costs for family |
| 53 | Personal preference of self or spouse |
| 53 | Some other reason |

10. Are you presently deployed?

| | |
|---------------------------|-------------------|
| 66 | Yes |
| 2023 | No |
| If yes, are you deployed: | |
| 4 | Aboard ship |
| 40 | At a U.S. Embassy |
| 21 | Other |

11. How many months total have you been deployed during the last 12 months? *Mark ONE.*

| | |
|------|--------------|
| 1558 | Not at all |
| 390 | 1-3 months |
| 74 | 4-6 months |
| 20 | 7-9 months |
| 36 | 10-12 months |

12. Where are you permanently stationed?

| | | | |
|------|---|----|------------------|
| 77 | Recruiting Duty, 1 st Marine Corps District | | |
| 96 | Recruiting Duty, 4 th Marine Corps District | | |
| 40 | Recruiting Duty, 6 th Marine Corps District | | |
| 43 | Recruiting Duty, 8 th Marine Corps District | | |
| 62 | Recruiting Duty, 9 th Marine Corps District | | |
| 33 | Recruiting Duty, 12 th Marine Corps District | | |
| 1 | Albany | 4 | New River |
| 0 | Barstow | 0 | Okinawa |
| 0 | Beaufort | 0 | Parris Island |
| 7 | Camp Lejeune | 2 | Quantico |
| 3 | Camp Pendleton | 15 | San Diego |
| 6 | Cherry Point | 0 | 29 Palms |
| 1 | Iwakuni | 24 | Washington, D.C. |
| 53 | Hawaii | 4 | Yuma |
| 0 | Miramar | | |
| 1376 | Other Location <u>inside</u> continental United States | | |
| 189 | Other Location <u>outside</u> continental United States | | |

13. How long would it take you to get to the nearest military installation or the one you use the most? *Mark ONE.*

| | |
|-----|---|
| 338 | Does not apply (e.g., live on base) |
| 319 | Less than 15 minutes |
| 401 | 15-30 minutes |
| 263 | More than 30 minutes, but less than an hour |
| 393 | 1-2 hours |
| 365 | More than 2 hours |

14. How often do you go to the nearest military installation or the one you use the most? *Mark ONE.*

| | |
|-----|--|
| 391 | I live on base |
| 158 | Never, no military installation nearby |
| 409 | Everyday |
| 159 | Several times a week |
| 134 | Once a week |
| 282 | Once a month |
| 205 | Several times a year |
| 273 | Once or twice a year |
| 62 | Have never visited |

Now we are going to ask you a number of questions about your quality of life and how you feel about your life. Some questions will ask about your life overall and others concern specific areas of your life, such as your job, or the neighborhood where you live. Answer in terms of your SITUATION AT THIS TIME or your EXPERIENCES AT YOUR CURRENT ASSIGNMENT unless the questions ask you to consider a different period of time.

LIFE AS A WHOLE

1. First, which point on the scale below best describes how you feel about your life as a whole at this time?

| | |
|-----|-------------------------------|
| 22 | 1 Terrible |
| 44 | 2 Unhappy |
| 111 | 3 Mostly unhappy |
| 266 | 4 Neither unhappy nor pleased |
| 682 | 5 Mostly pleased |
| 731 | 6 Pleased |
| 224 | 7 Delighted |

2. Below are some words that can apply to how you feel about your life as a whole. For example, if you think your life is very boring, blacken the circle closest to "boring"; if you think your life is very interesting, blacken the circle closest to "interesting". If your life falls somewhere in between, blacken one of the circles in between to indicate how boring or interesting you think your life is. *Blacken one circle for every line.*

| | 1 | 2 | 3 | 4 | 5 | |
|------------------|-----|-----|-----|-----|-----|-------------|
| a. Boring | 70 | 125 | 545 | 815 | 497 | Interesting |
| b. Enjoyable | 512 | 785 | 478 | 218 | 51 | Miserable |
| c. Useless | 56 | 109 | 316 | 755 | 775 | Worthwhile |
| d. Friendly | 665 | 681 | 428 | 185 | 63 | Lonely |
| e. Full | 588 | 728 | 183 | 171 | 43 | Empty |
| f. Discouraging | 62 | 148 | 354 | 780 | 661 | Hopeful |
| g. Disappointing | 76 | 154 | 424 | 770 | 589 | Rewarding |

3. Which of the following best describes how you think of your life at this time? *Mark ONE.*

| | |
|-----|---|
| 150 | An ideal kind of life for me |
| 230 | What I most want in my life to be |
| 746 | The best kind of life I am able to have now |
| 554 | A good enough life for now |
| 303 | A tolerable life for now |
| 84 | An unsatisfactory kind of life |
| 17 | A miserable life |

We will return to questions about your life as a whole later in this questionnaire, after considering particular areas of your life.

YOUR RESIDENCE

Please answer the following questions about the place where you are now living at your permanent duty station.

1. Overall, how do you feel about your residence (or quarters) where you live now?

| | |
|-----|-------------------------------|
| 50 | 1 Terrible |
| 94 | 2 Unhappy |
| 184 | 3 Mostly unhappy |
| 328 | 4 Neither unhappy nor pleased |
| 594 | 5 Mostly pleased |
| 578 | 6 Pleased |
| 254 | 7 Delighted |

2. Which of the following best describes the place where you now live? *Mark ONE.*

| | |
|-----|---|
| 264 | Bachelor Quarters (BEQ or BOQ) |
| 266 | Military housing on base |
| 109 | Military family housing in the civilian community |
| 525 | Personally-owned housing in the civilian community |
| 708 | Personally-rented housing in the civilian community |
| 131 | Shared rental housing in the civilian community |
| 14 | Mobile home |
| 1 | Aboard ship |
| 62 | Other |

3. If you live in civilian housing, how much is your monthly rent or mortgage payment? *(If you share housing, list the amount YOU pay.)*

| | |
|-----|---|
| 651 | Does not apply, not in civilian housing |
| 59 | Less than \$400 |
| 72 | ≥ \$400 but < \$500 |
| 112 | ≥ \$500 but < \$600 |
| 141 | ≥ \$600 but < \$700 |
| 159 | ≥ \$700 but < \$800 |
| 125 | ≥ \$800 but < \$900 |
| 119 | ≥ \$900 but < \$1000 |
| 230 | ≥ \$1000 but < \$1250 |
| 141 | ≥ \$1250 but < \$1500 |
| 192 | \$1500 or More |

4. If you live in civilian housing, how much of your monthly rent or mortgage payment is offset by BAH?

| | |
|-----|---|
| 627 | Does not apply, not in civilian housing |
| 413 | 100% of mortgage or rent, plus some utilities |
| 301 | 100% of mortgage or rent |
| 535 | 75% of mortgage or rent |
| 89 | 50% of mortgage or rent |
| 54 | Less than 50% of rent or mortgage |

5. How many rooms are in your residence, not counting bathrooms and hallway? *(Count attic or basement only if it is finished and furnished.)*

| | | | |
|-----|---------------------------------------|-----|---------------|
| 258 | Does not apply, in BEQ/BOQ or on ship | | |
| 72 | One | 301 | Five |
| 191 | Two | 288 | Six |
| 283 | Three | 209 | Seven |
| 285 | Four | 190 | Eight or more |

6. Regardless of whether you live in civilian or government housing, approximately how much money do you spend on maintenance out of pocket per month?

| | |
|-----|------------------|
| 477 | \$0 |
| 253 | \$1 to \$25 |
| 332 | \$26 to \$50 |
| 92 | \$51 to \$75 |
| 332 | \$76 to \$100 |
| 279 | \$101 to \$200 |
| 204 | \$201 to \$500 |
| 28 | \$501 to \$1000 |
| 21 | \$1001 to \$2000 |
| 21 | > \$2000 |

7. How many adults live in your house or apartment?

| | | | |
|------|---------------------------------------|----|---------------|
| 263 | Does not apply, in BEQ/BOQ or on ship | | |
| 371 | One | 7 | Five |
| 1289 | Two | 4 | Six |
| 90 | Three | 2 | Seven |
| 39 | Four | 10 | Eight or more |

8. Please darken the circle that best indicates how satisfied or dissatisfied you are with various aspects of your house, apartment or barracks.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the ATTRACTIVENESS of your housing? | 70 | 130 | 174 | 388 | 298 | 702 | 316 |
| b. the CONVENIENCE OF THE LAYOUT of your housing? | 54 | 132 | 173 | 314 | 387 | 704 | 298 |
| c. the CONVENIENCE OF AMENITIES in your housing (e.g., appliances)? | 70 | 146 | 193 | 323 | 334 | 680 | 322 |
| d. the PRIVACY of your housing? | 112 | 178 | 226 | 294 | 317 | 587 | 342 |
| e. the AMOUNT OF SPACE in your housing? | 160 | 204 | 262 | 232 | 318 | 547 | 331 |
| f. the LOCATION of your housing? | 79 | 88 | 169 | 291 | 324 | 664 | 418 |
| g. the COMFORT of your housing (e.g., is it too hot, too cold, too noisy)? | 75 | 148 | 226 | 258 | 335 | 690 | 301 |
| h. the CONDITION of your housing (is it well maintained)? | 85 | 124 | 207 | 254 | 354 | 693 | 338 |
| i. the COST of your housing? | 104 | 152 | 231 | 447 | 299 | 438 | 369 |
| j. your residence OVERALL, considering all aspects of your housing? | 57 | 130 | 209 | 317 | 380 | 710 | 241 |

9. If good quality housing were to be guaranteed upon reenlistment, would that influence your decision to reenlist?

| | |
|------|-----|
| 985 | Yes |
| 1043 | No |

10. What effect does your housing have on your job performance?

| | |
|-----|----------------------|
| 298 | Very positive effect |
| 741 | Positive effect |
| 878 | No effect |
| 136 | Negative effect |
| 12 | Very negative effect |

11. What effect does your current housing have on your plans to remain on active duty?

| | |
|------|----------------------|
| 124 | Very positive effect |
| 289 | Positive effect |
| 1423 | No effect |
| 202 | Negative effect |
| 37 | Very negative effect |

If you are stationed aboard ship, go to the LEISURE AND RECREATION SECTION on the next page.

YOUR NEIGHBORHOOD

Please answer the following questions about the place where you are now living at your permanent duty station. If you are in bachelor quarters, neighborhood refers to the immediate area around your quarters.

1. Overall, how do you feel about your neighborhood?

| | |
|-----|-------------------------------|
| 28 | 1 Terrible |
| 59 | 2 Unhappy |
| 149 | 3 Mostly unhappy |
| 426 | 4 Neither unhappy nor pleased |
| 588 | 5 Mostly pleased |
| 642 | 6 Pleased |
| 185 | 7 Delighted |

2. Compared to the neighborhood(s) where you lived when you were growing up, is this neighborhood better or worse? My present neighborhood is:

| | |
|-----|---------------------|
| 145 | A lot worse |
| 233 | Considerably worse |
| 432 | A little worse |
| 612 | About the same |
| 259 | A little better |
| 237 | Considerably better |
| 155 | A lot better |

3. Please darken the circle that shows best how satisfied or dissatisfied you are with various aspects of your neighborhood.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the SAFETY of your neighborhood? | 35 | 83 | 195 | 258 | 310 | 859 | 339 |
| b. the PUBLIC SERVICES in your neighborhood, such as trash collection, mail delivery, police protection, etc.? | 23 | 61 | 145 | 269 | 333 | 891 | 344 |
| c. the APPEARANCE of your neighborhood? | 45 | 95 | 193 | 295 | 345 | 803 | 293 |
| d. the CONDITION OF OTHER DWELLINGS in your neighborhood? | 43 | 96 | 181 | 358 | 357 | 748 | 276 |
| e. the FRIENDLINESS OF PEOPLE living in your neighborhood? | 41 | 91 | 193 | 432 | 396 | 661 | 248 |
| f. the TRANSPORTATION SERVICES in your neighborhood? | 104 | 142 | 143 | 876 | 188 | 442 | 155 |
| g. the RACIAL MIX in your neighborhood? | 41 | 55 | 81 | 813 | 185 | 637 | 243 |
| h. the SENSE OF COMMUNITY in your neighborhood? | 81 | 167 | 248 | 657 | 298 | 435 | 163 |
| i. the AVAILABILITY OF RETAIL SERVICES in your neighborhood? (e.g., groceries, dry cleaning) | 97 | 101 | 175 | 293 | 356 | 686 | 348 |
| j. the LENGTH OF TIME it takes you to get to work? | 105 | 133 | 200 | 235 | 283 | 592 | 513 |
| k. the AVAILABILITY OF PARKING in your neighborhood? | 84 | 129 | 180 | 281 | 249 | 711 | 430 |
| l. the neighborhood OVERALL, considering all the different aspects of your neighborhood? | 24 | 72 | 193 | 302 | 408 | 824 | 222 |

4. What effect does the neighborhood where you live have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 142 | Very positive effect |
| 579 | Positive effect |
| 1257 | No effect |
| 94 | Negative effect |
| 11 | Very negative effect |

5. What effect does the neighborhood where you live have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 86 | Very positive effect |
| 278 | Positive effect |
| 1545 | No effect |
| 144 | Negative effect |
| 29 | Very negative effect |

LEISURE AND RECREATION

Questions in this section have to do with the way you spend your leisure time and the recreational opportunities available to you.

1. Please show how you feel about the things you do now in your leisure time.

| | |
|-----|-------------------------------|
| 29 | 1 Terrible |
| 67 | 2 Unhappy |
| 169 | 3 Mostly unhappy |
| 310 | 4 Neither unhappy nor pleased |
| 644 | 5 Mostly pleased |
| 372 | 6 Pleased |
| 186 | 7 Delighted |

2. Do you generally prefer leisure activities:

| | |
|------|----------------------------|
| 552 | That you do by yourself |
| 1506 | That you share with others |

3. Answer the next questions using this scale to indicate how satisfied or dissatisfied you are with the way you spend your leisure time.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the VARIETY of leisure activities available at this location? | 74 | 160 | 182 | 289 | 391 | 683 | 299 |
| b. the COST of leisure activities at this location? | 101 | 211 | 327 | 402 | 404 | 508 | 113 |
| c. the FACILITIES PROVIDED for leisure activities you enjoy? | 92 | 196 | 232 | 392 | 386 | 588 | 170 |
| d. the AMOUNT OF LEISURE TIME you have? | 208 | 281 | 285 | 291 | 343 | 491 | 175 |
| e. your leisure time OVERALL considering all aspects of leisure activities? | 84 | 163 | 252 | 393 | 444 | 595 | 128 |

4. Here is a list of some activities that people might do in their spare time. Please show how often you have been doing these things (scale on the left). If you haven't recently participated in an activity, please show the ONE main reason why (scale on the right)—because the activity is not available locally; the local facilities are not adequate; it is too expensive for your budget; it is of low priority with you and you don't have enough time for it now; or simply because you are not interested in that activity.

| Never | Occasionally | Several times a year | Several times a month | Several times a week | Daily | | Not available | Inadequate facilities | Too expensive | Low priority | Not enough time | Not interested |
|-------|--------------|----------------------|-----------------------|----------------------|-------|--|---------------|-----------------------|---------------|--------------|-----------------|----------------|
| 276 | 558 | 162 | 323 | 449 | 174 | Participating in active sports | 65 | 40 | 27 | 213 | 359 | 138 |
| 28 | 108 | 31 | 165 | 1047 | 690 | Working out, running | 8 | 40 | 14 | 50 | 134 | 25 |
| 633 | 664 | 282 | 174 | 68 | 15 | Swimming | 201 | 141 | 62 | 249 | 151 | 309 |
| 308 | 561 | 238 | 344 | 325 | 169 | Watching sporting events | 52 | 19 | 104 | 196 | 157 | 217 |
| 972 | 468 | 241 | 128 | 26 | 3 | Golfing | 32 | 13 | 151 | 175 | 181 | 742 |
| 1175 | 398 | 116 | 77 | 35 | 6 | Tennis and racquet sports | 62 | 64 | 30 | 210 | 117 | 918 |
| 1576 | 108 | 24 | 6 | 3 | 0 | Sailing | 306 | 44 | 141 | 132 | 95 | 954 |
| 494 | 700 | 479 | 154 | 27 | 12 | Outdoor activities (e.g., camping, hiking) | 53 | 40 | 24 | 220 | 351 | 250 |
| 773 | 552 | 345 | 141 | 26 | 5 | Fishing, boating | 83 | 42 | 76 | 237 | 262 | 398 |
| 30 | 362 | 288 | 1032 | 263 | 25 | Dining out | 7 | 17 | 239 | 90 | 61 | 20 |
| 350 | 695 | 436 | 370 | 61 | 11 | Picnics, pleasure drives | 27 | 24 | 25 | 169 | 252 | 187 |
| 152 | 671 | 594 | 528 | 40 | 5 | Going to the movies | 11 | 25 | 208 | 157 | 145 | 60 |
| 477 | 718 | 266 | 357 | 103 | 26 | Going to clubs, bars, etc. | 12 | 15 | 92 | 186 | 77 | 406 |
| 96 | 473 | 348 | 568 | 318 | 210 | Spending time with friends, relatives, neighbors | 50 | 4 | 21 | 55 | 248 | 43 |
| 918 | 489 | 190 | 189 | 56 | 15 | Going to club meetings, activities | 49 | 13 | 15 | 185 | 190 | 628 |
| 752 | 528 | 185 | 318 | 129 | 13 | Participating in church activities | 16 | 20 | 2 | 179 | 168 | 533 |
| 436 | 765 | 292 | 283 | 126 | 37 | Playing cards, indoor games | 11 | 7 | 3 | 222 | 133 | 353 |
| 734 | 571 | 204 | 117 | 158 | 109 | Going to classes or lectures | 41 | 14 | 31 | 142 | 335 | 367 |
| 708 | 843 | 262 | 53 | 12 | 3 | Going to concerts, plays, etc. | 59 | 24 | 224 | 180 | 202 | 336 |
| 566 | 955 | 314 | 57 | 6 | 1 | Going to museums, exhibits, etc. | 70 | 40 | 78 | 205 | 227 | 289 |
| 350 | 695 | 436 | 370 | 61 | 11 | Gardening or working around the yard | 265 | 38 | 11 | 89 | 135 | 312 |
| 329 | 591 | 303 | 473 | 194 | 60 | Making or fixing things around the house | 108 | 32 | 21 | 91 | 166 | 165 |
| 561 | 580 | 204 | 289 | 170 | 87 | Working on hobbies, painting, musical instrument | 27 | 17 | 24 | 139 | 299 | 299 |
| 558 | 762 | 303 | 206 | 73 | 17 | Volunteering | 12 | 6 | 6 | 140 | 413 | 271 |
| 113 | 585 | 460 | 661 | 134 | 23 | Shopping (except for groceries) | 5 | 7 | 159 | 118 | 81 | 128 |
| 82 | 430 | 169 | 347 | 478 | 486 | Reading | 2 | 5 | 13 | 86 | 167 | 69 |
| 49 | 260 | 54 | 230 | 628 | 776 | Watching TV, playing video games | 6 | 6 | 6 | 95 | 97 | 54 |
| 41 | 197 | 53 | 136 | 443 | 1144 | Listening to music | 4 | 5 | 3 | 78 | 74 | 34 |
| 887 | 430 | 306 | 110 | 55 | 28 | Hunting and shooting | 137 | 57 | 56 | 164 | 210 | 511 |

5. Compared to other places where you have been stationed since joining the Marine Corps, do you find your leisure activities at this station more enjoyable or less enjoyable? My present leisure activities are: *Mark ONE.*

| | |
|-----|-----------------------------|
| 123 | N/A, first assignment |
| 270 | Much less enjoyable |
| 215 | Considerably less enjoyable |
| 264 | A little less enjoyable |
| 466 | About the same |
| 284 | A little more enjoyable |
| 292 | Considerably more enjoyable |
| 199 | Much more enjoyable |

6. What effect do leisure activities have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 351 | Very positive effect |
| 936 | Positive effect |
| 656 | No effect |
| 127 | Negative effect |
| 14 | Very negative effect |

7. What effect do leisure activities have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 187 | Very positive effect |
| 528 | Positive effect |
| 1201 | No effect |
| 134 | Negative effect |
| 39 | Very negative effect |

HEALTH

The items in the following section are all related to your health and to health benefits.

1. Please indicate how you feel about the state of your health.

| | |
|-----|-------------------------------|
| 21 | 1 Terrible |
| 67 | 2 Unhappy |
| 146 | 3 Mostly unhappy |
| 226 | 4 Neither unhappy nor pleased |
| 527 | 5 Mostly pleased |
| 813 | 6 Pleased |
| 284 | 7 Delighted |

2. What was your most recent PFT score?

| | |
|------|----------------------|
| 1659 | First class |
| 317 | Second class |
| 73 | Third class |
| 4 | Failed |
| 28 | Not required to take |

3. How long would it take you to get to a 24-hour military medical facility from your residence? *Mark ONE.*

| | |
|------|-----------------------|
| 188 | About 5 minutes |
| 306 | 6-20 minutes |
| 322 | 21-40 minutes |
| 235 | 41 minutes to an hour |
| 1022 | More than 1 hour |

4. How long would it take you to get to a 24-hour civilian medical facility from your residence? *Mark ONE.*

| | |
|------|-----------------------|
| 376 | About 5 minutes |
| 1224 | 6-20 minutes |
| 374 | 21-40 minutes |
| 47 | 41 minutes to an hour |
| 40 | More than 1 hour |

5. How many duty days did you miss because of illness or injury in the past year?

| | |
|------|--------------|
| 1343 | 0 Days |
| 286 | 1 - 2 Days |
| 227 | 3 - 5 Days |
| 102 | 6 - 10 Days |
| 42 | 11 - 15 Days |
| 18 | 16 - 20 Days |
| 36 | 21 - 30 Days |
| 10 | 31 - 40 Days |
| 20 | > 40 Days |

6. Are you a smoker?

| | |
|------|-----|
| 387 | Yes |
| 1667 | No |

7. Please use this scale to indicate how satisfied or dissatisfied you are with various aspects of your state of health.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|----------------------------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. your current WEIGHT? | 57 | 168 | 397 | 210 | 335 | 639 | 278 |
| b. your LEVEL OF ENERGY? | 29 | 139 | 290 | 240 | 404 | 750 | 213 |
| c. HOW WELL YOU SLEEP? | 81 | 188 | 320 | 244 | 382 | 626 | 224 |
| d. your ENDURANCE? | 30 | 116 | 266 | 191 | 515 | 740 | 205 |
| e. your HEALTH OVERALL? | 32 | 74 | 195 | 201 | 347 | 949 | 265 |
| f. the MEDICAL care you receive? | 116 | 168 | 236 | 375 | 395 | 608 | 167 |
| g. the DENTAL care you receive? | 71 | 114 | 165 | 417 | 351 | 705 | 226 |

8. If you were not in the Marine Corps, do you think your health would be better or worse? My present state of health is: *Mark ONE.*

| | |
|-----|---------------------|
| 81 | A lot worse |
| 137 | Considerably worse |
| 478 | A little worse |
| 806 | About the same |
| 284 | A little better |
| 197 | Considerably better |
| 101 | A lot better |

9. To what extent has the Marine Corps' emphasis on fitness helped to promote in you a healthier lifestyle? *Mark ONE.*

| | |
|-----|--------------|
| 110 | Not at all |
| 122 | Very little |
| 206 | A little |
| 451 | Somewhat |
| 519 | A lot |
| 382 | Quite a lot |
| 305 | A great deal |

10. What effect does your state of health have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 467 | Very positive effect |
| 972 | Positive effect |
| 452 | No effect |
| 170 | Negative effect |
| 16 | Very negative effect |

11. What effect does your state of health have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 271 | Very positive effect |
| 635 | Positive effect |
| 974 | No effect |
| 164 | Negative effect |
| 46 | Very negative effect |

12. What effect does your medical care have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 200 | Very positive effect |
| 680 | Positive effect |
| 937 | No effect |
| 222 | Negative effect |
| 46 | Very negative effect |

13. What effect does your medical care have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 201 | Very positive effect |
| 578 | Positive effect |
| 979 | No effect |
| 232 | Negative effect |
| 84 | Very negative effect |

Answer questions 14 through 22 ONLY if you have family members. If you do not have family members, go to the next section, FRIENDS AND FRIENDSHIPS.

14. What type of medical insurance/medical care do your family members use most often? *Mark ONE.*

| | |
|-----|--------------------------------|
| 205 | Military medical facilities |
| 907 | TRICARE Prime |
| 9 | TRICARE Extra |
| 146 | TRICARE Standard |
| 242 | TRICARE Remote |
| 21 | Group HMO |
| 1 | Group fee-for-service policy |
| 29 | Private HMO |
| 5 | Private fee-for-service policy |
| 57 | Other |

15. Do you have TRICARE supplemental insurance coverage? *Mark ONE.*

| | |
|------|-----|
| 355 | Yes |
| 1247 | No |

16. Which of your family members, if any, have special medical needs (e.g., disabilities and/or medical conditions requiring special care)? *Mark ALL That Apply.*

| | |
|------|--------------------------------|
| 1317 | None have special needs |
| 122 | My spouse |
| 149 | Child(ren) living with me |
| 23 | Child(ren) not living with me |
| 1 | Legal ward(s) living with me |
| 28 | Parent(s) or other relative(s) |

17. How satisfied are you with the MEDICAL care received by your family members? *Mark ONE.*

| | |
|-----|-------------------------|
| 118 | Completely dissatisfied |
| 181 | Dissatisfied |
| 266 | Somewhat dissatisfied |
| 239 | Neutral |
| 273 | Somewhat satisfied |
| 450 | Satisfied |
| 80 | Completely satisfied |

18. How satisfied you are with the DENTAL care received by your family members? *Mark ONE.*

| | |
|-----|-------------------------|
| 84 | Completely dissatisfied |
| 173 | Dissatisfied |
| 169 | Somewhat dissatisfied |
| 369 | Neutral |
| 258 | Somewhat satisfied |
| 459 | Satisfied |
| 104 | Completely satisfied |

19. What effect does your family members' state of health have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 279 | Very positive effect |
| 582 | Positive effect |
| 515 | No effect |
| 205 | Negative effect |
| 33 | Very negative effect |

20. What effect does your family members' state of health have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 213 | Very positive effect |
| 449 | Positive effect |
| 748 | No effect |
| 157 | Negative effect |
| 36 | Very negative effect |

21. What effect does your family members' medical care have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 215 | Very positive effect |
| 515 | Positive effect |
| 636 | No effect |
| 208 | Negative effect |
| 35 | Very negative effect |

22. What effect does your family members' medical care have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 186 | Very positive effect |
| 440 | Positive effect |
| 717 | No effect |
| 203 | Negative effect |
| 55 | Very negative effect |

FRIENDS AND FRIENDSHIPS

The questions in this section concern your friendships and how those friendships affect your quality of life. Think about the friends you have and your relationships with them.

1. In general, how do you feel about your friendships these days? *Mark ONE.*

| | |
|-----|-------------------------------|
| 22 | 1 Terrible |
| 49 | 2 Unhappy |
| 154 | 3 Mostly unhappy |
| 415 | 4 Neither unhappy nor pleased |
| 590 | 5 Mostly pleased |
| 682 | 6 Pleased |
| 154 | 7 Delighted |

2. Are your close friends MOSTLY: *Mark ONE.*

| | |
|-----|--|
| 560 | Fellow Marines at this location |
| 493 | Marines who are stationed at other locations |
| 349 | Civilians in this area |
| 337 | Civilians "back home" |
| 129 | Members of other military services |
| 165 | Other |

3. Do you have friends at this location with whom you feel free to discuss personal matters?

| | |
|------|-------------------------|
| 1415 | Yes |
| 653 | No (skip to question 5) |

4. If Yes, which statements best describe those friends? *Mark ALL That Apply.*

| | |
|-----|--|
| 353 | Marines I see only at work |
| 221 | Marines I socialize with once in a while |
| 544 | Marines I socialize with regularly |
| 219 | Members of other military services |
| 551 | Civilians |
| 84 | Other |

5. Use this scale to show how satisfied or dissatisfied you are with your friendships at this time.

| How satisfied are you with: | | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|-----------------------------|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. | the AMOUNT OF TIME YOU SOCIALIZE with your friends? | 98 | 233 | 273 | 406 | 348 | 591 | 111 |
| b. | the NUMBER OF MARINE CORPS FRIENDS you have? | 49 | 114 | 157 | 443 | 307 | 789 | 197 |
| c. | the NUMBER OF CIVILIAN FRIENDS you have? | 49 | 116 | 165 | 512 | 322 | 720 | 171 |
| d. | the SUPPORT AND ENCOURAGEMENT you receive from your friends? | 23 | 58 | 87 | 460 | 326 | 850 | 247 |
| e. | your friendships OVERALL at this time? | 20 | 84 | 136 | 378 | 378 | 843 | 209 |

6. What effect do your friendships have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 169 | Very positive effect |
| 794 | Positive effect |
| 1023 | No effect |
| 74 | Negative effect |
| 6 | Very negative effect |

7. What effect do your friendships have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 97 | Very positive effect |
| 409 | Positive effect |
| 1427 | No effect |
| 111 | Negative effect |
| 25 | Very negative effect |

MARRIAGE/INTIMATE RELATIONSHIP

Next, we will ask a few questions about your marriage or other intimate relationship, and how it relates to your quality of life.

1. How are you feeling these days about your marriage or other intimate relationship(s)? *Mark ONE.*

| | |
|-----|-------------------------------|
| 70 | 1 Terrible |
| 79 | 2 Unhappy |
| 148 | 3 Mostly unhappy |
| 261 | 4 Neither unhappy nor pleased |
| 352 | 5 Mostly pleased |
| 630 | 6 Pleased |
| 529 | 7 Delighted |

2. At this time, are you: *Mark ONE.*

| | |
|------|--|
| 1391 | Married |
| 346 | Involved in a serious intimate relationship, but not married |
| 335 | Not seriously involved with anyone |

If you are NOT married or NOT seriously involved with anyone, please skip to YOUR RELATIONSHIP WITH YOUR CHILDREN.

3. How satisfied do you think you would be with your marriage/intimate relationship if you were not in the Marines? *Mark ONE.*

| | |
|-----|-------------------------|
| 25 | Completely dissatisfied |
| 32 | Dissatisfied |
| 42 | Somewhat dissatisfied |
| 428 | Neutral |
| 134 | Somewhat satisfied |
| 598 | Satisfied |
| 525 | Completely satisfied |

4. What effect does your marriage/intimate relationship have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 404 | Very positive effect |
| 704 | Positive effect |
| 487 | No effect |
| 157 | Negative effect |
| 27 | Very negative effect |

5. What effect does your marriage/intimate relationship have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 239 | Very positive effect |
| 448 | Positive effect |
| 781 | No effect |
| 224 | Negative effect |
| 90 | Very negative effect |

6. How well does the Marine Corps accommodate the demands of your marriage/intimate relationship?

| | |
|-----|------------------|
| 74 | Extremely well |
| 439 | Very well |
| 812 | So, so |
| 277 | Very poorly |
| 171 | Extremely poorly |

If you are ARE married, answer questions 7-8 then skip to question 13.

If you are NOT married, but ARE seriously involved with someone, skip to question 9.

7. How long have you been married? *Mark ONE.*

| | |
|-----|--------------------|
| 36 | Less than 6 months |
| 67 | 6 to 12 months |
| 90 | 13 to 23 months |
| 161 | 2 to 3 years |
| 156 | 4 to 5 years |
| 340 | 6 to 10 years |
| 439 | 11 to 20 years |
| 94 | More than 20 years |

8. If you are not accompanied at this station, how frequently do you see your spouse? *Mark ONE.*

| | |
|-----|----------------------|
| 591 | Daily |
| 31 | Several times a week |
| 35 | Once a week |
| 38 | Once a month |
| 7 | 9 to 11 times a year |
| 8 | 7 to 8 times a year |
| 9 | 5 to 6 times a year |
| 12 | 3 to 4 times a year |
| 27 | 1 to 2 times a year |

9. How long have you been involved in this relationship?
Mark ONE.

| | |
|-----|-------------------|
| 14 | Less than a month |
| 33 | 1 to 3 months |
| 63 | 4 to 6 months |
| 76 | 7 to 12 months |
| 118 | 13 to 23 months |
| 156 | 2 to 5 years |
| 170 | More than 5 years |

10. Is your intimate partner: *Mark ONE.*

| | |
|-----|--------------------------------------|
| 49 | Also a Marine |
| 35 | A member of another military service |
| 576 | A civilian |

11. Does your intimate partner live: *Mark ONE.*

| | |
|-----|------------------------------|
| 94 | “Back home” |
| 364 | At or near your duty station |
| 151 | Other |

12. If your intimate partner does not live in the area, how frequently are you able to see each other? *Mark ONE.*

| | |
|-----|----------------------|
| 248 | Not applicable |
| 51 | Every day |
| 34 | Several times a week |
| 44 | Once a week |
| 54 | Once a month |
| 16 | 9 to 11 times a year |
| 11 | 7 to 8 times a year |
| 13 | 5 to 6 times a year |
| 28 | 3 to 4 times a year |
| 33 | 1 to 2 times a year |

13. If you are married or have an intimate relationship, please use this scale to show how satisfied or dissatisfied you are with various aspects of this relationship.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the LOVE AND UNDERSTANDING you receive in this relationship? | 45 | 57 | 80 | 123 | 201 | 622 | 612 |
| b. the COMMUNICATION within the relationship? | 56 | 68 | 109 | 150 | 286 | 625 | 438 |
| c. the way CONFLICTS ARE RESOLVED with your partner? | 56 | 79 | 117 | 155 | 292 | 645 | 385 |
| d. your partner’s SUPPORT OF YOUR MILITARY CAREER? | 61 | 46 | 85 | 150 | 173 | 478 | 733 |
| e. the COMPATABILITY OF INTERESTS between you and your partner? | 45 | 52 | 87 | 165 | 226 | 625 | 515 |
| f. the SEXUAL ASPECT of your relationship? | 84 | 66 | 85 | 164 | 164 | 529 | 602 |
| g. your intimate relationship OVERALL? | 57 | 47 | 74 | 123 | 178 | 603 | 629 |

14. If your military duties took you away for 6 months or more, how capable do you think your spouse or partner would be to take full responsibility for the following?

| | Does not apply | Extremely capable | Very capable | Capable | Not so capable | Not at all capable |
|--|----------------|-------------------|--------------|---------|----------------|--------------------|
| a. Childcare | 521 | 782 | 179 | 197 | 43 | 18 |
| b. Family members’ health | 235 | 893 | 273 | 268 | 45 | 11 |
| c. Family finances | 142 | 777 | 282 | 348 | 133 | 36 |
| d. Managing the maintenance of your residence. | 149 | 548 | 309 | 455 | 211 | 53 |
| e. Emotional or parenting matters | 190 | 669 | 361 | 343 | 127 | 30 |
| f. Safety of family members | 222 | 800 | 325 | 303 | 56 | 18 |
| g. Transportation | 107 | 894 | 328 | 307 | 56 | 22 |
| h. Investments | 212 | 509 | 265 | 388 | 245 | 101 |

YOUR RELATIONSHIP WITH YOUR CHILDREN

The next group of questions has to do with your relations with your children. If you do not have children under age 18, skip to the following section, YOUR RELATIONSHIP WITH OTHER RELATIVES.

1. If you have children from a previous marriage, which of the following best describes the legal custody status of those child(ren)? *Mark ONE.*

| | |
|-----|---------------------------------------|
| 977 | Does not apply |
| 86 | Full custody of your child(ren) |
| 7 | Full custody of some of your children |
| 147 | Shared custody |
| 71 | No custody |

2. How do you feel about your relations with your children who live with you in your household? *Mark ONE.*

| | |
|-----|-------------------------------|
| 248 | Not applicable, none |
| 6 | 1 Terrible |
| 6 | 2 Unhappy |
| 20 | 3 Mostly unhappy |
| 30 | 4 Neither unhappy nor pleased |
| 150 | 5 Mostly pleased |
| 354 | 6 Pleased |
| 555 | 7 Delighted |

3. How do you feel about your relations with your children who do not live with you? *Mark ONE.*

| | |
|-----|-------------------------------|
| 957 | Not applicable, none |
| 23 | 1 Terrible |
| 28 | 2 Unhappy |
| 48 | 3 Mostly unhappy |
| 39 | 4 Neither unhappy nor pleased |
| 77 | 5 Mostly pleased |
| 80 | 6 Pleased |
| 71 | 7 Delighted |

4. If you have school age children who live with you, do they attend: *Mark ALL That Apply.*

| | |
|-----|---------------------------|
| 489 | No school age children |
| 643 | Public school |
| 30 | DoD school |
| 59 | A church school |
| 64 | A private day school |
| 0 | A private boarding school |

5. If you have school age children, how satisfied are you with the education your children are receiving? *Mark ONE.*

| | |
|------|-------------------------|
| 1148 | No school age children |
| 25 | Completely dissatisfied |
| 43 | Dissatisfied |
| 82 | Somewhat dissatisfied |
| 65 | Neutral |
| 167 | Somewhat satisfied |
| 412 | Satisfied |
| 153 | Completely satisfied |

6. Now we would like you to tell us how satisfied or dissatisfied you are with various aspects of your relations with your children.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the AMOUNT OF TIME you have with your children? | 138 | 227 | 216 | 93 | 244 | 290 | 86 |
| b. the QUALITY OF TIME you have with your children? | 60 | 121 | 136 | 114 | 262 | 424 | 175 |
| c. your OVERALL relationship with your children? | 26 | 40 | 64 | 89 | 171 | 529 | 364 |

7. Next, how satisfied are you with:

| | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the MILITARY ENVIRONMENT for raising children? | 42 | 86 | 115 | 322 | 247 | 404 | 87 |
| b. the ACTIVITIES AVAILABLE for children at your base? | 131 | 122 | 103 | 433 | 168 | 253 | 67 |

If you do not have children who require childcare, skip to question 11.

8. Who is usually the primary care provider for your youngest child while you are on duty? *Mark ONE.*

| | |
|-----|---|
| 115 | Private licensed facility |
| 61 | Civilian-operated family home care |
| 11 | At-home employee (nanny, au pair, etc.) |
| 36 | Relative or older siblings |
| 21 | Friend |
| 455 | Your spouse |
| 47 | Military Child Development Center |
| 12 | Base-operated family home care program |
| 53 | Other |

9. What is your ONE most critical childcare requirement?

| | |
|-----|-----------------------------------|
| 222 | Occasional babysitting |
| 158 | All day care for pre-school child |
| 131 | Before and/or after school |
| 15 | Overnight care |
| 20 | Extended care for several days |
| 85 | Access to care at any time |
| 38 | Sick childcare |
| 113 | Other |

10. Now we would like you to tell us how satisfied or dissatisfied you are with various aspects of childcare for your child(ren).

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the QUALIFICATIONS of the person(s) who cares for your child(ren) while you are on duty? | 10 | 9 | 23 | 179 | 81 | 255 | 218 |
| b. the COST of childcare? | 72 | 76 | 82 | 232 | 89 | 120 | 93 |
| c. the SAFETY of your child(ren) while they are with their childcare provider? | 8 | 8 | 19 | 183 | 96 | 260 | 191 |
| d. the OVERALL quality of childcare received by your child(ren)? | 8 | 10 | 19 | 185 | 94 | 273 | 172 |

11. If you were not in the Marine Corps, do you think you would be able to spend more time or less time with your child(ren)? *Mark ONE.*

| | |
|-----|------------------------|
| 10 | Much less time |
| 29 | Considerably less time |
| 50 | A little less time |
| 267 | About the same |
| 288 | A little more time |
| 378 | Considerably more time |
| 278 | Much more time |

12. What effect does your relationship with your child(ren) have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 214 | Very positive effect |
| 528 | Positive effect |
| 416 | No effect |
| 122 | Negative effect |
| 18 | Very negative effect |

13. What effect does your relationship with your child(ren) have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 135 | Very positive effect |
| 317 | Positive effect |
| 574 | No effect |
| 196 | Negative effect |
| 76 | Very negative effect |

14. If you had to be separated from your child(ren) for 6 months or more because of your military duties, who would care for them? *Mark ONE.*

| | |
|------|--|
| 49 | No child(ren) under 18 |
| 1080 | Spouse |
| 67 | Immediate family member (e.g., grandparent(s)) |
| 20 | Other family member |
| 4 | Friend or neighbor |
| 0 | Public agency |
| 79 | Other |

15. How sure are you that the person(s) named in question 14 would adequately take care of your child(ren) in your absence? *Mark ONE.*

| | |
|------|-------------------|
| 70 | Not applicable |
| 1036 | Completely sure |
| 116 | Very sure |
| 39 | Somewhat sure |
| 11 | Somewhat unsure |
| 12 | Very unsure |
| 20 | Completely unsure |

YOUR RELATIONSHIP WITH OTHER RELATIVES

Questions in this section ask about your relations with other relatives, such as your parents, grandparents, brothers and sisters, and/or in-laws if you are married.

1. How do you feel about your relations with your relatives at this time? *Mark ONE.*

| | |
|-----|-------------------------------|
| 19 | 1 Terrible |
| 38 | 2 Unhappy |
| 136 | 3 Mostly unhappy |
| 287 | 4 Neither unhappy nor pleased |
| 509 | 5 Mostly pleased |
| 737 | 6 Pleased |
| 342 | 7 Delighted |

2. How far are your nearest relatives from your present duty station? *Mark ONE.*

| | |
|-----|-----------------------------|
| 1 | N/A, no relatives |
| 186 | Local area |
| 153 | Within 100 miles |
| 184 | Between 101 and 200 miles |
| 398 | Between 201 and 500 miles |
| 422 | Between 501 and 1,000 miles |
| 730 | More than 1,000 miles |

3. Is the amount of time you spend with the relatives listed below less than you would like, more than you would like, or about the right amount of time? (*If you do not have relatives in one of these categories, please blacken the Does not apply circle.*)

| | Does not apply | Less than liked | About right | More than liked |
|-----------------------------|----------------|-----------------|-------------|-----------------|
| a. Parent(s) | 104 | 1402 | 510 | 40 |
| b. Grandparent(s) | 797 | 925 | 269 | 17 |
| c. Brother(s) and sister(s) | 117 | 1419 | 457 | 34 |
| d. In-laws | 548 | 702 | 606 | 134 |
| e. Other close relatives | 243 | 1138 | 590 | 33 |

4. When you were growing up, did you live with a parent who was a career military member? *Mark ONE.*

| | |
|------|---|
| 1817 | No |
| 71 | Yes, parent was in the Marine Corps |
| 170 | Yes, parent was in another service branch |

5. Show how satisfied or dissatisfied you are with various aspects of your relationships with your relatives.

| How satisfied are you with: | | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|-----------------------------|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. | the AMOUNT OF CONTACT you have with your relatives? | 100 | 343 | 401 | 303 | 369 | 469 | 78 |
| b. | the way your relatives GET ALONG WITH EACH OTHER? | 34 | 83 | 156 | 380 | 299 | 827 | 247 |
| c. | their SUPPORT OF YOUR MILITARY CAREER? | 18 | 22 | 44 | 273 | 185 | 833 | 655 |
| d. | relations with your relatives OVERALL? | 18 | 36 | 90 | 293 | 334 | 939 | 298 |

6. What effect do relations with your relatives have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 135 | Very positive effect |
| 504 | Positive effect |
| 1359 | No effect |
| 61 | Negative effect |
| 5 | Very negative effect |

7. What effect do relations with your relatives have on your plans to remain on active duty? *Mark ONE.*

| | |
|------|----------------------|
| 78 | Very positive effect |
| 277 | Positive effect |
| 1506 | No effect |
| 171 | Negative effect |
| 43 | Very negative effect |

INCOME AND STANDARD OF LIVING

Now, we would like you to consider your income and standard of living as these relate to your quality of life.

1. Overall, how do you feel about your current standard of living? *Mark ONE.*

| | |
|-----|-------------------------------|
| 40 | 1 Terrible |
| 98 | 2 Unhappy |
| 243 | 3 Mostly unhappy |
| 357 | 4 Neither unhappy nor pleased |
| 737 | 5 Mostly pleased |
| 549 | 6 Pleased |
| 67 | 7 Delighted |

2. Have any of the following things happened to you since you have been at your present location? *Mark ALL That Apply.*

| | |
|------|---|
| 46 | Indebtedness letter to your command |
| 21 | Repossession of something purchased on time |
| 16 | Bankruptcy |
| 47 | Crisis loan from military relief organization |
| 34 | Trouble over child support payments |
| 1767 | None of the above |

3. Which of the following best describes your own or your family's financial situation at this time? *Mark ONE.*

| | |
|-----|---|
| 530 | I/we can afford most of the things I/we want |
| 787 | I/we can easily afford most of the things I/we need, plus some extras |
| 542 | I/we can easily afford most of the things I/we need, but not extras |
| 181 | I/we can barely afford the things I/we need |
| 25 | I/we often cannot afford the things that I/we need |

4. Do you have a second (civilian) job? *Mark ONE.*

| | |
|------|--|
| 1612 | No, and I have not looked for one (skip to #7) |
| 238 | No, but I'm trying to find one (skip to #7) |
| 58 | Yes, working less than 10 hours per week |
| 90 | Yes, working between 10 and 20 hours per week |
| 48 | Yes, working between 21 and 30 hours per week |
| 23 | Yes, working more than 30 hours per week |

5. If you answered Yes to question #4, what's the main reason you have a second job? *Mark ONE.*

| | |
|-----|--|
| 15 | To prepare for my next career, gain experience |
| 8 | To pursue interest in a certain type of work |
| 175 | To earn additional income |
| 6 | To occupy my off duty time |
| 22 | I enjoy the work |
| 12 | Other |

6. How many days do you usually work each week at your second job? *Mark ONE.*

| | | | |
|----|-------|----|-------|
| 28 | One | 37 | Five |
| 48 | Two | 9 | Six |
| 58 | Three | 4 | Seven |
| 45 | Four | | |

How much of your family's total income comes from your spouse? *Mark ONE.*

| | | | |
|-----|----------------|-----|---------------|
| 596 | N/A, no spouse | 241 | 41% to 60% |
| 529 | None | 49 | 61% to 80% |
| 259 | Less than 20% | 11 | More than 80% |
| 333 | 20% to 40% | | |

8. To what extent does the base exchange help you make ends meet? *Mark ONE.*

| | |
|------|--------------|
| 53 | A great deal |
| 152 | Quite a bit |
| 348 | Some |
| 337 | A little |
| 1160 | Not at all |

9. To what extent does the commissary help you make ends meet? *Mark ONE.*

| | |
|-----|--------------|
| 181 | A great deal |
| 301 | Quite a bit |
| 323 | Some |
| 294 | A little |
| 973 | Not at all |

10. Where does your family shop for food? *Mark ONE.*

| | |
|-----|---|
| 145 | Exclusively at the commissary |
| 449 | Mostly at the commissary |
| 301 | About 50-50 at the commissary and civilian stores |
| 395 | Mostly at civilian stores |
| 783 | Exclusively at civilian stores |

11. Where does your family shop for clothing, personal items, and household items? *Mark ONE.*

| | |
|-----|---|
| 14 | Exclusively at the exchange |
| 80 | Mostly at the exchange |
| 285 | About 50-50 at the exchange and civilian stores |
| 764 | Mostly at civilian stores |
| 931 | Exclusively at civilian stores |

12. Please use this scale to indicate how satisfied or dissatisfied you are with various aspects of your current financial situation.

| How satisfied are you with: | Does not apply | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|----------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| a. the money you have available for ESSENTIALS? | 3 | 32 | 96 | 145 | 189 | 391 | 868 | 354 |
| b. the money you have available for EXTRAS? | 10 | 168 | 267 | 312 | 253 | 485 | 462 | 105 |
| c. the money you have available for SAVINGS? | 13 | 270 | 338 | 380 | 217 | 425 | 336 | 87 |
| d. your current financial situation OVERALL? | 5 | 106 | 239 | 350 | 279 | 480 | 496 | 102 |
| e. if you own a car, how satisfied are you with the CAR you drive? | 92 | 37 | 104 | 139 | 214 | 360 | 797 | 310 |
| f. if you have a house or apartment, how satisfied are you with your HOUSEHOLD FURNISHINGS? | 234 | 35 | 107 | 189 | 205 | 436 | 677 | 150 |
| g. if you have children, how satisfied are you with WHAT YOU CAN PROVIDE FOR YOUR CHILDREN? | 619 | 50 | 111 | 152 | 155 | 286 | 471 | 104 |

13. What effect does your financial situation have on your job performance? *Mark ONE.*

| | |
|-----|----------------------|
| 190 | Very positive effect |
| 607 | Positive effect |
| 883 | No effect |
| 326 | Negative effect |
| 43 | Very negative effect |

14. What effect does your financial situation have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 211 | Very positive effect |
| 510 | Positive effect |
| 702 | No effect |
| 445 | Negative effect |
| 174 | Very negative effect |

YOUR MILITARY JOB

The following questions ask about several aspects of your current military job.

1. Overall, how are you feeling these days about your military job? *Mark ONE.*

| | |
|-----|-------------------------------|
| 84 | 1 Terrible |
| 133 | 2 Unhappy |
| 251 | 3 Mostly unhappy |
| 359 | 4 Neither unhappy nor pleased |
| 550 | 5 Mostly pleased |
| 532 | 6 Pleased |
| 147 | 7 Delighted |

2. In a normal work week, how many hours do you work on your military job?

| | |
|-----|---------------|
| 20 | 1 - 10 Hours |
| 21 | 11 - 20 Hours |
| 16 | 21 - 30 Hours |
| 260 | 31 - 40 Hours |
| 706 | 41 - 50 Hours |
| 603 | 51 - 60 Hours |
| 247 | 61 - 70 Hours |
| 187 | > 70 Hours |

3. How many days do you usually work each week at your military job? *Mark ONE.*

| | | | |
|----|-------|------|-------|
| 7 | One | 1385 | Five |
| 6 | Two | 605 | Six |
| 5 | Three | 43 | Seven |
| 30 | Four | | |

4. How well do you think your Marine Corps training prepared you for your present job? *Mark ONE.*

| | |
|-----|-------------|
| 111 | Not at all |
| 226 | Barely |
| 571 | Somewhat |
| 925 | Pretty well |
| 244 | Completely |

5. In your opinion, how well are most other members of your work group trained to do their jobs? *Mark ONE.*

| | |
|------|-------------|
| 21 | Not at all |
| 168 | Barely |
| 575 | Somewhat |
| 1153 | Pretty well |
| 154 | Completely |

6. During the past year, did you entirely miss, arrive late, or have to leave early from a no-notice alert, deployment, or exercise? *Mark ALL That Apply.*

| | |
|------|--------------------------------|
| 1490 | Does not apply (no such event) |
| 446 | No, I was there when directed |
| 25 | Yes, I was late |
| 37 | Yes, I left early |
| 13 | Yes, I missed it entirely |

7. If you answered Yes on question #6, what was the main reason? *Mark ALL That Apply.*

| | |
|-----|-------------------------------|
| 929 | Not applicable |
| 11 | I was sick |
| 18 | Someone in my family was sick |
| 23 | Personal or family business |
| 4 | Legal matter |
| 4 | I couldn't be reached |
| 15 | Other |

8. How satisfied are you with your military co-workers? *Mark ONE.*

| | |
|-----|-------------------------|
| 175 | Completely satisfied |
| 826 | Satisfied |
| 446 | Somewhat satisfied |
| 287 | Neutral |
| 231 | Somewhat dissatisfied |
| 86 | Dissatisfied |
| 30 | Completely dissatisfied |

9. Some people are completely involved in their job - they are absorbed in it day and night. For other people, their job is simply one of their several interests. How involved are you in your military job? *Mark ONE.*

| | |
|------|---|
| 96 | Very slightly involved; other interests are more absorbing |
| 129 | Slightly involved |
| 597 | Moderately involved; your job and other interests are equally absorbing |
| 1023 | Strongly involved |
| 243 | Very strongly involved; your work is the most absorbing interest in your life |

10. In the past month, how much time did you take off from duty for each of the following PERSONAL reasons? *(Include time when you arrived late or left early, but not scheduled leave time.)*

| | None | Less than 1 hour | 1-2 hours | 3-4 hours | 5-7 hours | 1 day | 2-5 days | More than 5 days |
|---|------|------------------|-----------|-----------|-----------|-------|----------|------------------|
| a. Your education (if not part of your military duties) | 1883 | 58 | 45 | 30 | 21 | 14 | 20 | 10 |
| b. Your transportation (e.g., your car wouldn't start) | 1733 | 156 | 92 | 27 | 12 | 25 | 12 | 2 |
| c. Pregnancy (e.g., prenatal care or doctor visit) | 1901 | 16 | 37 | 27 | 14 | 13 | 12 | 26 |
| d. Your health (e.g., sick or doctor/dentist appointment) | 1209 | 135 | 267 | 158 | 46 | 97 | 106 | 41 |
| e. Personal business (e.g., financial matters) | 1302 | 209 | 275 | 93 | 32 | 74 | 44 | 9 |
| f. Other personal reasons | 1195 | 205 | 265 | 121 | 35 | 102 | 88 | 35 |

11. In the past month, how much time did you take off from duty for each of the following FAMILY reasons? *(Include time when you arrived late or left early, but not scheduled leave time.)*

| 983 Do not have family with me (skip to #13) | | None | Less than 1 hour | 1-2 hours | 3-4 hours | 5-7 hours | 1 day | 2-5 days | More than 5 days |
|---|------|------|------------------|-----------|-----------|-----------|-------|----------|------------------|
| a. Care for children (e.g., a sick child, school visits, no sitter, discipline) | 1273 | 79 | 150 | 93 | 29 | 90 | 53 | 7 | |
| b. Helping spouse (e.g., illness or emotional problems) | 1367 | 90 | 113 | 43 | 12 | 80 | 37 | 18 | |
| c. Family business (e.g., financial or housing matters) | 1389 | 112 | 124 | 49 | 14 | 45 | 19 | 8 | |
| d. Family transportation | 1482 | 79 | 95 | 35 | 15 | 18 | 10 | 6 | |
| e. Other family matters | 1348 | 102 | 109 | 50 | 15 | 53 | 35 | 16 | |

12. If you had to deploy on short notice, have you made provisions for the following? *(Blacken the N/A circle for those that do not apply.)*

| | N/A | No | Yes |
|--|-----|-----|------|
| a. A will | 272 | 665 | 1099 |
| b. A joint checking account | 282 | 275 | 1253 |
| c. A power of attorney | 291 | 800 | 890 |
| d. Storage of possessions | 298 | 761 | 616 |
| e. Payment of bills | 296 | 381 | 1348 |
| f. Elder care | 307 | 258 | 86 |
| g. Care for pets | 291 | 231 | 660 |
| h. Lease obligations | 298 | 276 | 616 |
| i. Management of investments | 310 | 339 | 942 |
| j. Modifying official records if necessary | 327 | 598 | 692 |

13. Show how much you agree or disagree with each of the following statements.

| | Completely disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Completely agree |
|--|---------------------|----------|-------------------|----------------------------|----------------|-------|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. I talk up the Marines to my friends as a great outfit. | 51 | 82 | 48 | 270 | 316 | 785 | 514 |
| b. I find my values and the Marine Corps' values are very similar. | 25 | 44 | 67 | 121 | 324 | 962 | 519 |
| c. There is not much to be gained by my sticking with the Marine Corps indefinitely. | 294 | 589 | 267 | 356 | 202 | 232 | 131 |
| d. The Marine Corps is the best of all places for me to work. | 116 | 235 | 247 | 491 | 363 | 411 | 206 |
| e. The major satisfaction in my life comes from my military job. | 170 | 390 | 271 | 410 | 100 | 308 | 124 |
| f. The most important things that happen to me involve my work. | 197 | 473 | 342 | 429 | 372 | 202 | 46 |
| g. I'm really a perfectionist about my work. | 25 | 72 | 94 | 259 | 607 | 690 | 309 |
| h. I live, eat, and breathe my work. | 265 | 498 | 315 | 372 | 372 | 188 | 59 |
| i. Most things in life are more important than work. | 53 | 300 | 388 | 494 | 349 | 319 | 149 |
| j. I am very much involved personally in my work. | 40 | 83 | 117 | 360 | 573 | 678 | 191 |
| k. Being a Marine is worth personal sacrifice. | 49 | 69 | 120 | 218 | 441 | 713 | 437 |

14. During the past month, how often did the following happen while you were on duty?

| | None of the time | A little of the time | Some of the time | Most of the time | All of the time |
|---|------------------|----------------------|------------------|------------------|-----------------|
| a. Your mind was not on the job. | 376 | 998 | 569 | 95 | 23 |
| b. You lost your temper. | 825 | 688 | 457 | 66 | 17 |
| c. You accomplished less than you would like. | 305 | 845 | 660 | 180 | 54 |
| d. You were not at your best. | 358 | 1128 | 468 | 76 | 17 |
| e. You were more likely to make mistakes. | 660 | 1095 | 251 | 24 | 12 |
| f. Your performances were criticized by co-workers. | 1412 | 442 | 133 | 48 | 21 |
| g. You had problems with a superior. | 1317 | 383 | 219 | 89 | 47 |

15. Please show how satisfied or dissatisfied you are with each of the following aspects of your job.

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. your PEERS AND CO-WORKERS? | 39 | 102 | 230 | 351 | 442 | 790 | 119 |
| b. your PAY AND BENEFITS? | 92 | 238 | 357 | 245 | 524 | 536 | 68 |
| c. the amount of SUPPORT AND GUIDANCE you receive from your supervisor? | 99 | 153 | 235 | 368 | 389 | 640 | 166 |
| d. the AMOUNT OF JOB SECURITY you have? | 30 | 41 | 47 | 268 | 247 | 920 | 506 |
| e. the opportunity for PERSONAL GROWTH AND DEVELOPMENT on your job? | 99 | 154 | 212 | 285 | 398 | 668 | 242 |
| f. the degree of RESPECT AND FAIR TREATMENT you receive from superiors? | 108 | 116 | 188 | 228 | 306 | 760 | 346 |
| g. the AMOUNT OF CHALLENGE in your job? | 87 | 103 | 159 | 309 | 388 | 701 | 304 |
| h. the FEELING OF ACCOMPLISHMENT you get from doing your job? | 99 | 121 | 173 | 251 | 440 | 673 | 294 |
| i. the LEADERSHIP provided by your superiors? | 134 | 147 | 258 | 302 | 399 | 614 | 204 |
| j. the FEEDBACK you get from others? | 47 | 85 | 178 | 490 | 486 | 645 | 110 |
| k. the AMOUNT OF RESPONSIBILITY you have on your job? | 64 | 90 | 139 | 238 | 322 | 799 | 391 |
| l. your job OVERALL, considering all these different aspects? | 55 | 117 | 178 | 262 | 458 | 808 | 175 |

16. Look at the five job statements below and show in the column to the left how often each is true of the job you have NOW. Then in the column to the right, show how often the statement would be true of your IDEAL job.

| Present Marine Job | | | | | | Ideal Job | | | | |
|--------------------|--------|--------------|------------------|--------|--|-----------|--------|--------------|------------------|--------|
| Never | Seldom | Occasionally | Most of the time | Always | | Never | Seldom | Occasionally | Most of the time | Always |
| 72 | 276 | 540 | 766 | 406 | I am able to do a lot of different things on my job. | 9 | 40 | 346 | 915 | 621 |
| 102 | 214 | 320 | 976 | 440 | I get to decide on my own how to go about doing my work. | 10 | 34 | 174 | 879 | 834 |
| 58 | 184 | 414 | 871 | 517 | I can see from the work itself how well I am doing. | 3 | 22 | 120 | 766 | 1001 |
| 44 | 141 | 356 | 792 | 703 | I do work that is important in the overall scheme of things. | 7 | 24 | 116 | 657 | 1117 |
| 24 | 90 | 295 | 1033 | 594 | I get to completely finish the tasks I begin. | 6 | 12 | 65 | 630 | 1194 |

17. What effect does your military job have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 246 | Very positive effect |
| 689 | Positive effect |
| 690 | No effect |
| 302 | Negative effect |
| 137 | Very negative effect |

18. In your opinion, what is the ONE best thing about being a Marine? *Mark ONE.*

| | |
|-----|--------------------------------------|
| 504 | A chance to serve your country |
| 162 | Job security |
| 32 | Pay and benefits |
| 148 | Adventure and excitement |
| 776 | Being one of "the few and the proud" |
| 194 | Training and personal development |
| 75 | Retirement options |
| 178 | Other |

3. How about your work skills? Do you think your skills are? *Mark ONE.*

| | |
|-----|------------------------------|
| 883 | Readily marketable |
| 768 | Likely to be marketable |
| 306 | May or may not be marketable |
| 83 | Not likely to be marketable |
| 33 | Not marketable |

4. Since joining the Marine Corps, have you: *Mark ALL That Apply.*

| | |
|-----|--|
| 74 | Completed your high school equivalency |
| 895 | Taken college courses |
| 366 | Begun a college degree program |
| 283 | Obtained a college degree |
| 525 | Taken personal enrichment class(es) |

5. In the next question, please tell us how satisfied or dissatisfied you are with various aspects of your personal development.

YOURSELF

This section asks how you feel about you, your goals, and your personal development.

1. All in all, how are you feeling about yourself these days? *Mark ONE.*

| | |
|-----|-------------------------------|
| 17 | 1 Terrible |
| 44 | 2 Unhappy |
| 143 | 3 Mostly unhappy |
| 259 | 4 Neither unhappy nor pleased |
| 590 | 5 Mostly pleased |
| 821 | 6 Pleased |
| 187 | 7 Delighted |

2. Do you feel that you are pretty much in control of your life? *Mark ONE.*

| | |
|------|---|
| 561 | I am handling all areas of my life well |
| 1122 | I am handling most areas of my life well |
| 294 | Some areas of my life seem out of control |
| 60 | Many areas of my life seem out of control |
| 24 | My life seems totally out of control |

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. your ABILITY TO GET ALONG WITH OTHERS? | 8 | 21 | 60 | 151 | 261 | 1071 | 497 |
| b. your PROGRESS TOWARD YOUR PERSONAL GOALS? | 26 | 95 | 202 | 198 | 594 | 759 | 190 |
| c. your PHYSICAL APPEARANCE? | 13 | 54 | 194 | 182 | 488 | 910 | 227 |
| d. your GENERAL COMPETENCE? | 6 | 8 | 34 | 104 | 246 | 1205 | 465 |
| e. your SELF DISCIPLINE? | 6 | 12 | 51 | 111 | 346 | 1053 | 473 |
| f. YOURSELF OVERALL? | 7 | 14 | 50 | 102 | 326 | 1198 | 345 |

6. Please indicate how much you agree or disagree with each of the following statements.

| | Completely disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Completely agree |
|---|---------------------|----------|-------------------|----------------------------|----------------|-------|------------------|
| a. In uncertain times I usually expect the best. | 39 | 128 | 142 | 274 | 437 | 884 | 147 |
| b. It's easy for me to relax. | 31 | 195 | 336 | 248 | 536 | 625 | 86 |
| c. If something can go wrong for me, it will. | 74 | 547 | 301 | 608 | 305 | 161 | 60 |
| d. I always look on the bright side of things. | 19 | 47 | 161 | 340 | 619 | 666 | 193 |
| e. I'm always optimistic about my future. | 16 | 31 | 117 | 323 | 545 | 782 | 220 |
| f. I enjoy my friends a lot. | 5 | 16 | 52 | 317 | 428 | 944 | 268 |
| g. It's important for me to keep busy. | 7 | 36 | 75 | 235 | 511 | 909 | 248 |
| h. I hardly ever expect things to go my way. | 132 | 603 | 358 | 492 | 277 | 153 | 38 |
| i. Things never work out the way I want them to. | 185 | 738 | 379 | 454 | 186 | 81 | 23 |
| j. I don't get upset too easily. | 43 | 143 | 303 | 364 | 381 | 651 | 160 |
| k. I'm a believer in the idea that "every cloud has a silver lining." | 37 | 75 | 165 | 543 | 551 | 533 | 133 |
| l. I rarely count on good things happening to me. | 182 | 633 | 356 | 476 | 235 | 126 | 35 |

7. To what extent has life in the Marine Corps helped you to fulfill each of the following?

| | Not at all | Very little | A little | Somewhat | A lot | Quite a lot | A great deal |
|---|------------|-------------|----------|----------|-------|-------------|--------------|
| a. Your personal goals for this time in your life. | 57 | 117 | 191 | 526 | 517 | 423 | 227 |
| b. Your development as a person. | 32 | 51 | 117 | 329 | 589 | 582 | 351 |
| c. Living the values that are important to you. | 47 | 62 | 122 | 374 | 520 | 555 | 359 |
| d. Assuming desired levels of responsibility. | 32 | 47 | 87 | 291 | 504 | 661 | 416 |
| e. Increasing your financial status. | 179 | 293 | 258 | 545 | 336 | 276 | 136 |
| f. The opportunity to correct mistakes you have made in life. | 343 | 234 | 214 | 475 | 324 | 271 | 168 |
| g. Increasing your confidence in yourself. | 36 | 58 | 97 | 344 | 486 | 553 | 444 |

8. What effect does your personal development have on your job performance? *Mark ONE.*

| | |
|------|----------------------|
| 460 | Very positive effect |
| 1120 | Positive effect |
| 401 | No effect |
| 68 | Negative effect |
| 12 | Very negative effect |

9. What effect does your personal development have on your plans to remain on active duty? *Mark ONE.*

| | |
|-----|----------------------|
| 246 | Very positive effect |
| 764 | Positive effect |
| 847 | No effect |
| 121 | Negative effect |
| 58 | Very negative effect |

10. Think about your expectations when you entered the Marine Corps. Keep those expectations in mind as you answer the following questions. To what extent have your expectations been fulfilled in:

| | Much better than expected | Better than expected | About what expected | Worse than expected | Much worse than expected |
|---|---------------------------|----------------------|---------------------|---------------------|--------------------------|
| a. The duties I have been assigned. | 286 | 708 | 756 | 254 | 55 |
| b. My living conditions. | 125 | 550 | 1010 | 318 | 47 |
| c. My overall standard of living. | 118 | 552 | 1016 | 308 | 35 |
| d. The amount of off-duty time. | 95 | 415 | 936 | 460 | 130 |
| e. My rate of advancement in rank. | 206 | 493 | 855 | 346 | 137 |
| f. The quality of direct supervision I receive. | 58 | 354 | 1227 | 321 | 79 |
| g. The Marine Corps' concern for my family. | 88 | 352 | 978 | 446 | 162 |
| h. The way I am treated on the job. | 95 | 473 | 1189 | 206 | 74 |
| i. My sense of accomplishment in my work. | 160 | 706 | 873 | 226 | 60 |
| j. My environment as a Marine. | 119 | 616 | 1040 | 211 | 45 |
| k. The quality of leadership I receive. | 110 | 486 | 964 | 354 | 109 |
| l. My social interactions with fellow Marines. | 119 | 567 | 1119 | 188 | 43 |
| m. The level of responsibility in my work. | 237 | 745 | 835 | 173 | 43 |

11. Indicate how much you agree or disagree with the statement; "I want to remain in the Marine Corps until I'm eligible for retirement." *Mark ONE.*

| Completely Disagree | 216 | 110 | 107 | 226 | 173 | 232 | 997 | Completely Agree |
|---------------------|-----|-----|-----|-----|-----|-----|-----|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

12. Please indicate how much you agree or disagree with each of the following statements.

| | Strongly disagree | Disagree | Agree | Strongly agree |
|--|-------------------|----------|-------|----------------|
| a. I feel that I am a person of worth, at least on an equal basis with others. | 18 | 42 | 774 | 1216 |
| b. I feel that I have a number of good qualities. | 19 | 17 | 707 | 1297 |
| c. All in all, I am inclined to feel that I am a failure. | 1456 | 481 | 73 | 40 |
| d. I am able to do things as well as most other people. | 39 | 48 | 851 | 1082 |
| e. I feel I do not have much to be proud of. | 1351 | 503 | 110 | 70 |
| f. I take a positive attitude toward myself. | 21 | 86 | 947 | 958 |
| g. On the whole, I am satisfied with myself. | 15 | 107 | 1101 | 798 |
| h. I wish I could have more respect for myself. | 1002 | 687 | 273 | 57 |
| i. I certainly feel useless at times. | 1116 | 610 | 252 | 47 |
| j. At times I think I am no good at all. | 1383 | 504 | 117 | 22 |

LIFE AS A WHOLE

Now, once again about your life as a whole, considering all aspects of life that have been covered in this survey.

1. Please indicate how much you agree or disagree with each statement.

| | Completely disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Completely agree |
|---|---------------------|----------|-------------------|----------------------------|----------------|-------|------------------|
| a. In most ways, my life is close to ideal. | 69 | 215 | 263 | 344 | 589 | 494 | 82 |
| b. The conditions of my life are excellent. | 33 | 150 | 282 | 339 | 576 | 585 | 91 |
| c. I am satisfied with my life. | 23 | 98 | 161 | 228 | 538 | 832 | 168 |
| d. So far, I have gotten the important things I want in life. | 39 | 114 | 195 | 234 | 595 | 683 | 182 |
| e. If I could live my life over, I would change almost nothing. | 135 | 266 | 351 | 234 | 455 | 468 | 143 |

2. How satisfied are you with your life overall? *Mark ONE.*

| | |
|-----|------------------------------------|
| 17 | Completely dissatisfied |
| 44 | Dissatisfied |
| 142 | Somewhat dissatisfied |
| 164 | Neither dissatisfied nor satisfied |
| 604 | Mostly satisfied |
| 892 | Satisfied |
| 209 | Completely satisfied |

The FINAL section will ask you to consider what you have compared to what you want out of life for each of the areas of your life and for your life as a whole.

3. Compared to your own aims or goals how would you say that your life measures up now: matches your goal; fairly well; about half as well as your goal; fairly poorly; or not at all to WHAT YOU WANT?

| Please fill in the circle under the percentage that best describes how closely what you have now measures up to what you want for each of the areas named. | Not applicable/no opinion | Not at all | Fairly poorly | Half as well as your goal | Fairly well | Matches your goal | | |
|--|---------------------------|------------|---------------|---------------------------|-------------|-------------------|-----|------|
| | | 0% | 10% | 20% | 50% | 70% | 80% | 100% |
| a. Residence | 41 | 132 | 95 | 179 | 510 | 498 | 464 | 138 |
| b. Neighborhood | 51 | 99 | 91 | 201 | 463 | 511 | 484 | 147 |
| c. Leisure and Recreation | 8 | 80 | 132 | 253 | 522 | 509 | 451 | 84 |
| d. Health | 6 | 25 | 26 | 68 | 261 | 416 | 898 | 336 |
| e. Friends and Friendships | 13 | 32 | 50 | 117 | 349 | 502 | 723 | 246 |
| f. Marriage/Intimate Relationships | 76 | 116 | 106 | 93 | 231 | 249 | 575 | 576 |
| g. Relationship(s) with Child(ren) | 618 | 34 | 43 | 55 | 137 | 201 | 470 | 445 |
| h. Relationships with Other Relatives | 49 | 51 | 83 | 159 | 357 | 469 | 605 | 249 |
| i. Income and Standard of Living | 11 | 116 | 167 | 243 | 527 | 510 | 384 | 75 |
| j. Military Job | 13 | 83 | 73 | 114 | 322 | 515 | 666 | 243 |
| k. Yourself | 6 | 14 | 15 | 41 | 192 | 397 | 999 | 360 |
| l. Life as a Whole | 5 | 14 | 22 | 50 | 230 | 512 | 921 | 278 |

YOU ARE FINISHED!!

THANK YOU FOR YOUR PARTICIPATION.

Please return the survey immediately using the enclosed envelope.

APPENDIX C: FAMILY MEMBER RESPONSE REPORT

- Commandant and Sergeant Major of the Marine Corps Cover Letter
- Survey Cover
- Survey Instructions
- Marking Instructions
- Family Member Response Report

Marines Take Care of Their Own... ”



Marine Spouse:

The words above express an old and honored tradition within the Marine Corps ... Marines unfailingly grasp the opportunity to support and assist their fellow Marines. As a Marine Spouse, we hope that you will join us in upholding this tradition as we seek to improve lives of Marines and their families.

Please take a few minutes to provide us your candid views and opinions regarding Quality of Life in the Marine Corps. By completing and returning the enclosed survey, you will help take care of Marines and Marine families by ensuring an accurate and complete assessment of life within the Corps.

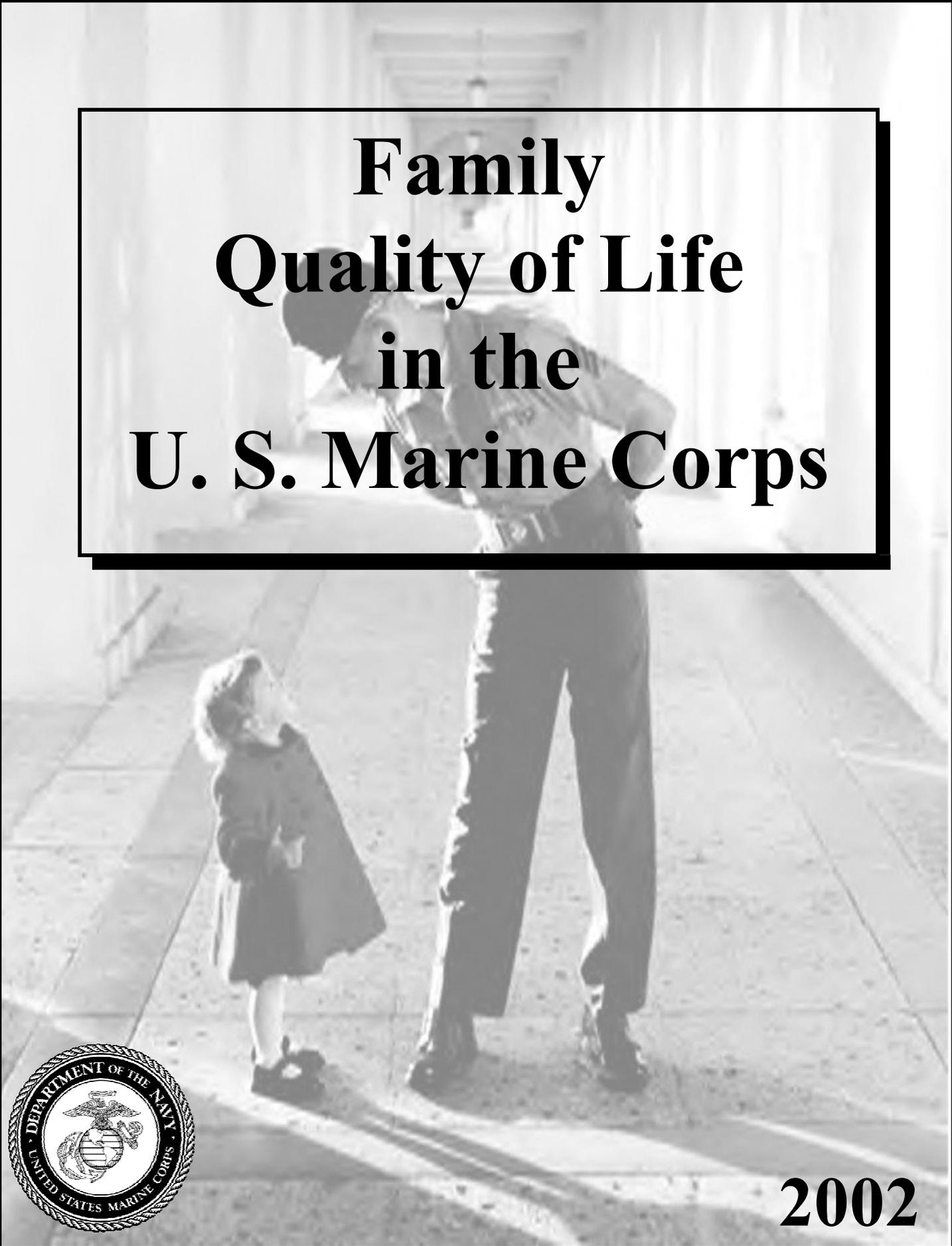
Semper Fidelis,

A. L. McMichael
A. L. McMichael

Sergeant Major of the Marine Corps

J. L. Jones
J. L. Jones

Commandant of the Marine Corps



**Family
Quality of Life
in the
U. S. Marine Corps**



2002

AM I ELIGIBLE TO COMPLETE THIS SURVEY?

Only spouses of Active Duty Marines are being asked to complete this survey. If you are **INELIGIBLE** to complete this survey, please indicate why by filling in the appropriate circle below. Please return the survey in the enclosed envelope. No postage is required.

- My spouse is not on Active Duty with the U.S. Marine Corps.
- I am not currently married to an Active Duty Marine.

WHY THIS SURVEY?

The 2002 Marine Family Quality of Life Survey concerns how you feel about your life. The questions ask about particular areas of life and about life as a whole. There are many aspects to life, and this survey attempts to cover the major ones to most people. This accounts for its length. We think you will find most of the questions interesting and easy to answer because they ask you about YOUR life. All people don't feel the same way about what happens to them in everyday life, so there are no right or wrong answers.

WHY SHOULD I PARTICIPATE?

Marine Corps leadership wants to know what it is like to be "Married to a Marine." This is the first time Marine spouses have been asked how they feel about their quality of life. The input you provide will be the basis for Marine Corps decisions about proposed policies, procedures and programs in the Marine Corps. For example in 1993, and again in 1998 only Marine Corps members completed a similar questionnaire. Based on the information collected substantial improvements were made in the Barracks, Family Housing, and Family Support Programs. This is your opportunity to be heard.

WHY AM I BEING ASKED TO PARTICIPATE?

You were randomly selected by computer to take part in this survey. It is important that the answers to this survey reflect your personal opinion and not that of your Marine spouse. As a representative of Marine spouses, you can have a real impact in directing attention to issues that are important to you and those like you.

WILL I BE IDENTIFIED?

This survey is anonymous. This means we will not let anyone know what you as an individual say on this questionnaire. We will not single out any specific answer you give, but we will group your responses with others and report trends. Our hope is to provide the Marine Corps with a full picture of the needs of Marine Corps family members by asking family members directly about their quality of life. We hope you will answer each question carefully, frankly, and honestly so that an accurate picture is drawn.

| <i>Who May I Contact For More Information?</i> | |
|---|----------------------|
| <p>The 2002 Marine Family Quality of Life Survey is sponsored by Headquarters, U.S. Marine Corps, Department of Manpower and Reserve Affairs. Decision Engineering Associates, an independent firm, has been hired to conduct the survey.</p> | |
| <p>For assistance in filling out this survey or for more information you may contact Decision Engineering Associates through e-mail or by telephone.</p> | |
| E-mail: | qolusmc@de-group.net |
| Toll Free: | (866) QOL-USMC |
| 8:00 am until 5:00pm (Eastern Standard Time) | (866) 765-8762 |

MARKING INSTRUCTIONS

GENERAL INSTRUCTIONS

- Please use a black pen or pencil.
- ❖ Make heavy black marks that fill the circle completely for your answer.
 - ❖ Please do not make stray marks of any kind.
 - ❖ **INCORRECT MARKS** **CORRECT MARK**
- 


- ❖ Please provide comments within the boxes provided.

MARKING ALL THAT APPLY

Sometimes you will be asked to “*Mark ALL That Apply.*” When this instruction appears, you may **mark more than one answer.**

EXAMPLE:

Do you or any of your children or other dependent family members have special medical needs (e.g., disabilities and/or medical conditions requiring special care)? *Mark ALL That Apply.*

- None have special needs
- I have special needs
- Child(ren) living with me
- Child(ren) not living with me
- Legal ward(s) living with me
- Dependent parent(s) or other relative(s)

USING A COMMON SCALE FOR MORE THAN ONE QUESTION

Sometimes you will be asked to “*MARK A RESPONSE FOR EACH*” to answer a number of different questions.

EXAMPLE:

Please darken the circle that best indicates how satisfied or dissatisfied you are with various aspects of your house or apartment. *MARK A RESPONSE FOR EACH.*

| | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|-----------------------|-----------------------|----------------------------------|----------------------------------|-----------------------|-----------------------|
| How satisfied are you with: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the ATTRACTIVENESS of your housing? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. the CONVENIENCE OF THE LAYOUT of your housing? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

MARKING NUMBERS

Sometimes you will be asked to give numbers for your answer by filling in a grid. If you are asked to give numbers, please record the numbers in the boxes on top of the grid, then fill in the circles of the grid as shown below.

EXAMPLE:

How long have you been married?

| 0 | 9 | |
|----------------------------------|----------------------------------|--|
| <input checked="" type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input type="radio"/> | |
| <input type="radio"/> | <input checked="" type="radio"/> | |

MARK ONE

Sometimes you will be asked to “*Mark ONE*” response from a list of possible items.

EXAMPLE:

How long would it take you to get to a 24-hour military medical facility from your residence? *Mark ONE.*

- Less than 15 minutes
- 15-30 minutes
- More than 30 minutes, but less than an hour
- 1-2 hours
- More than 2 hours

USING A CONTINUOUS SCALE

Sometimes you will be asked to select a value on a continuous scale that reflects your agreement with a statement or concept.

EXAMPLE:

Please indicate how each aspect of our life (as listed below) influences YOUR DESIRE to remain a part of the Marine Corps. *MARK A RESPONSE FOR EACH.*

| | Stay in USMC | | | No Influence | | | Leave USMC |
|--------------|-----------------------|-----------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. RESIDENCE | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

BACKGROUND

YOU

1. What is your sex?

| | |
|------|--------|
| 40 | Male |
| 4094 | Female |

2. What is your age?

Age of Spouse

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 10 | | | | | | | 1 | 6 | 32 | 87 |
| 20 | 157 | 212 | 192 | 187 | 192 | 186 | 172 | 198 | 160 | 187 |
| 30 | 198 | 206 | 186 | 150 | 170 | 165 | 142 | 152 | 130 | 95 |
| 40 | 94 | 68 | 69 | 59 | 43 | 36 | 34 | 19 | 28 | 14 |
| 50 | 18 | 9 | 1 | 10 | 5 | 2 | 1 | 1 | 1 | 1 |
| 60 | | 1 | | | | | | | | |

3. How many years have you been married to a Marine?

Years Married

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0 | 466 | 246 | 377 | 270 | 211 | 195 | 171 | 196 | 146 | 143 |
| 10 | 191 | 122 | 121 | 110 | 115 | 89 | 83 | 89 | 75 | 44 |
| 20 | 41 | 33 | 22 | 25 | 16 | 19 | 9 | 5 | 9 | 4 |
| 30 | 1 | 3 | 2 | 2 | 1 | 1 | | | | |

YOUR SPOUSE

4. What is your spouse's rank/grade? *Mark ONE.*

| | | | |
|-----|---------------------|-----|--|
| 4 | Private | 130 | WO-CWO |
| 62 | Private First Class | 182 | 2 nd / 1 st Lieutenant |
| 350 | Lance Corporal | 341 | Captain |
| 435 | Corporal | 253 | Major |
| 617 | Sergeant | 133 | Lt. Colonel |
| 714 | Staff Sergeant | 57 | Colonel |
| 513 | Gunnery Sergeant | 6 | General Officer |
| 195 | 1stSgt / Master Sgt | | |
| 133 | MGySgt / SgtMaj | | |

5. How many years has your spouse been on active duty in the Marine Corps?

Years on Active Duty

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0 | 64 | 92 | 225 | 346 | 175 | 190 | 186 | 156 | 156 | 138 |
| 10 | 175 | 156 | 170 | 121 | 142 | 137 | 128 | 149 | 194 | 138 |
| 20 | 119 | 65 | 77 | 45 | 55 | 30 | 38 | 18 | 21 | 18 |
| 30 | 3 | 4 | 2 | 4 | 1 | 1 | 1 | 1 | | |

6. Where is your spouse permanently stationed? *Mark ONE.*

| | | | |
|-----|---|-----|------------------|
| 36 | Albany | 191 | New River |
| 10 | Barstow | 224 | Okinawa |
| 118 | Beaufort | 54 | Parris Island |
| 627 | Camp Lejeune | 250 | Quantico |
| 664 | Camp Pendleton | 93 | San Diego |
| 261 | Cherry Point | 142 | 29 Palms |
| 47 | Iwakuni | 111 | Washington, D.C. |
| 158 | Hawaii | 121 | Yuma |
| 189 | Miramar | | |
| 738 | Other location <u>inside</u> continental United States | | |
| 35 | Other location <u>outside</u> continental United States | | |

Please answer the remaining questions in terms of your **SITUATION AT THIS TIME** or your **EXPERIENCES AT YOUR LOCATION** unless the question asks you to consider a different period of time.

LIFE AS A WHOLE

1. First, which point on the scale below best describes how you feel about your life as a whole at this time? *Mark ONE.*

| | |
|------|-------------------------------|
| 36 | 1 Terrible |
| 92 | 2 Unhappy |
| 248 | 3 Mostly unhappy |
| 461 | 4 Neither unhappy nor pleased |
| 1288 | 5 Mostly pleased |
| 1414 | 6 Pleased |
| 567 | 7 Delighted |

RESIDENCE

Please answer the following questions about the place where you are now living.

1. Where are you and your spouse living? *Mark ONE.*

| | |
|------|--|
| 3520 | Together at the same location |
| 176 | Apart, at separate locations by choice (i.e., geographic bachelor) |
| 440 | Apart, at separate locations due to military requirements (e.g., spouse on deployment, unaccompanied tour, etc.) |

2. Which of the following best describes the place where you now live? *Mark ONE.*

| | |
|------|--|
| 1429 | Military housing on base |
| 274 | Military housing in the civilian community |
| 1172 | Personally owned housing in the civilian community |
| 1128 | Rented housing in the civilian community |
| 142 | Other |

3. How long would it take you to get to the nearest military installation or the one you use the most? *Mark ONE.*

| | |
|------|---|
| 1174 | Does not apply (e.g., live on base) |
| 1011 | Less than 15 minutes |
| 1221 | 15-30 minutes |
| 405 | More than 30 minutes, but less than an hour |
| 185 | 1-2 hours |
| 121 | More than 2 hours |

4. How often do you go to the nearest military installation or the one you use the most. *Mark ONE.*

| | |
|------|--|
| 1229 | I live on base |
| 66 | Never, no military installation nearby |
| 290 | Everyday |
| 644 | Several times a week |
| 868 | Once a week |
| 573 | Once a month |
| 242 | Several times a year |
| 145 | Once or twice a year |
| 68 | Have never visited |

5. Please darken the circle that best indicates how satisfied or dissatisfied you are with various aspects of your residence and community. *MARK A RESPONSE FOR EACH.*

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the ATTRACTIVENESS of your housing? | 175 | 277 | 406 | 568 | 531 | 1322 | 727 |
| b. the LAYOUT of your housing? | 126 | 227 | 407 | 580 | 636 | 1411 | 637 |
| c. the AMENITIES in your housing (e.g., appliances)? | 128 | 225 | 361 | 499 | 588 | 1481 | 705 |
| d. the PRIVACY of your housing? | 210 | 300 | 439 | 495 | 564 | 1264 | 727 |
| e. the AMOUNT OF SPACE (living & storage)? | 330 | 436 | 588 | 366 | 668 | 985 | 624 |
| f. the LOCATION of your housing? | 109 | 131 | 222 | 553 | 505 | 1556 | 912 |
| g. the CONDITION of your housing? | 210 | 300 | 441 | 430 | 579 | 1307 | 720 |
| h. the COST of your housing? | 223 | 258 | 400 | 810 | 482 | 1013 | 795 |
| i. the SAFETY of your housing / community? | 93 | 111 | 255 | 412 | 515 | 1559 | 1046 |
| j. the UTILITY SERVICES? | 97 | 154 | 306 | 663 | 533 | 1555 | 670 |
| k. the EMERGENCY SERVICES? | 72 | 74 | 135 | 1116 | 380 | 1478 | 694 |
| l. the PARKS and PLAYGROUNDS? | 249 | 303 | 407 | 842 | 561 | 1093 | 526 |
| m. your residence and community OVERALL, considering all aspects? | 83 | 171 | 383 | 556 | 747 | 1578 | 472 |

Comments on RESIDENCE:

RELOCATION

Please answer the following questions about your experiences in relocating (i.e., moving to a new duty station). This includes the relocation to your spouse's first duty station.

1. How many times have you relocated with your spouse?

| Relocation | |
|------------|-----|
| 0 | 862 |
| 1 | 710 |
| 2 | 511 |
| 3 | 399 |
| 4 | 264 |
| 5 | 170 |
| 6 | 129 |
| 7 | 68 |
| >7 | 183 |

Never, (skip to the LEISURE AND RECREATION section on the next page)

2. On your most recent relocation, which of the following best describes your family's decision in regard to military housing? *Mark ONE.*

| | |
|------|---|
| 450 | Military housing was not available |
| 796 | We did not apply for military housing |
| 1397 | We applied and accepted military housing |
| 109 | We applied and rejected military housing |
| 308 | We applied, but could not wait for assignment to military housing |
| 200 | Other |

3. Which of the following choices best describes the reason(s) why your family did NOT apply for military housing? *Mark ALL That Apply.*

| | |
|------|---|
| 1596 | Not applicable, we applied for military housing |
| 507 | Too long a wait to be assigned housing |
| 566 | Quality of military housing |
| 212 | Location of military housing |
| 296 | Privacy concerns |
| 122 | Quality of schools |
| 598 | Preferred to live off base |
| 369 | Other |

4. How satisfied were you with the following aspects of relocation? *MARK A RESPONSE FOR EACH.* (If the particular service or benefit has not been used, mark the circle in the first column "Does not apply".)

| How satisfied were you with: | Does not apply | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|----------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the RELOCATION ASSISTANCE SERVICES? | | 161 | 190 | 255 | 681 | 401 | 667 | 150 |
| b. the PAY AND ALLOWANCES received? | | 181 | 265 | 349 | 516 | 599 | 949 | 190 |
| c. the TEMPORARY LODGING (e.g., costs, condition, & convenience)? | | 284 | 319 | 289 | 436 | 314 | 521 | 144 |
| d. the MOVEMENT AND/OR STORAGE of your belongings? | | 312 | 324 | 389 | 401 | 439 | 749 | 172 |
| e. the process of FINDING NEW HOUSING? | | 270 | 298 | 394 | 625 | 462 | 675 | 133 |
| f. the AMOUNT OF NOTICE you had? | | 148 | 183 | 223 | 510 | 424 | 1120 | 334 |
| g. the TIME OF YEAR you relocated? | | 86 | 118 | 189 | 664 | 318 | 1234 | 450 |
| h. relocation OVERALL, considering all aspects? | | 85 | 218 | 412 | 642 | 679 | 949 | 135 |

5. On your most recent relocation, which of the following best describes what your family experienced in regard to the sponsorship program? *Mark ONE.*

| | |
|------|--|
| 457 | We requested and were assigned a sponsor |
| 671 | We were aware that sponsors were available however, we did not request one |
| 134 | We requested a sponsor, but were not assigned one |
| 1375 | We were not aware that sponsors were available |
| 511 | Other |

Comments on RELOCATION:

LEISURE AND RECREATION

Questions in this section have to do with the way you spend your leisure time and the recreational opportunities available to you.

- Below is a list of military programs and services available at many installations. Please indicate how often you (and the children, if you have any) have utilized each over the past year. **MARK A RESPONSE FOR EACH.** If a particular program is not available to you, please mark the circle in the first column "Not Available."

| | | Not available | Never | Occasionally | Several times a year | Several times a month | Several times a week | Daily |
|----|---|---------------|-------|--------------|----------------------|-----------------------|----------------------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. | LIBRARIES/ EDUCATION Programs | 267 | 1568 | 1081 | 432 | 480 | 153 | 51 |
| b. | FITNESS (Fitness Center, Gym, Pools, Courts, Playing Fields) | 199 | 1078 | 900 | 448 | 478 | 653 | 275 |
| c. | RECREATION (Recreation Programs, Campgrounds, Parks, Beaches, Bowling, Golf, Marina, Stables) | 233 | 779 | 1246 | 874 | 619 | 236 | 57 |
| d. | INFO, TICKETS, & TOURS | 218 | 1238 | 1477 | 900 | 166 | 24 | 12 |
| e. | SKILLS PROGRAMS (Arts & Crafts, Auto) | 365 | 2456 | 787 | 271 | 79 | 22 | 10 |
| f. | CLUB SYSTEM (Officers Club, SNCO Club, Enlisted Club) | 309 | 1841 | 1036 | 415 | 332 | 70 | 15 |
| g. | ATHLETICS (Youth Sports, Intramurals) | 347 | 2645 | 410 | 299 | 128 | 135 | 31 |

- Consider all leisure opportunities including off-base and on-base activities. Rate your satisfaction with each of the listed aspects of your leisure opportunities. **MARK A RESPONSE FOR EACH.**

| | | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|----|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. | the VARIETY of leisure activities available? | 141 | 270 | 398 | 1043 | 609 | 1158 | 377 |
| b. | the COST of leisure activities at this location? | 111 | 241 | 469 | 1264 | 683 | 975 | 213 |
| c. | your leisure time OVERALL, considering all aspects of leisure activities? | 110 | 239 | 326 | 1220 | 708 | 1142 | 241 |

SUPPORT SYSTEMS

Questions in this section have to do with your satisfaction with military community support programs and services.

- Below is a list of some military community services that are designed to help support you and your family. Rate your satisfaction with the support services you have utilized. **MARK A RESPONSE FOR EACH.** If you have not used one of the support services OR it is not available to you, please mark the circle in the first column "Does not apply."

| | | Does not apply | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|----|---|----------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| a. | personal financial management (e.g., briefings, workshops, counseling)? | 32 | 75 | 75 | 578 | 206 | 375 | 77 | |
| b. | legal services? | 58 | 87 | 115 | 542 | 300 | 745 | 170 | |
| c. | counseling (e.g., individual, marriage)? | 67 | 58 | 53 | 473 | 110 | 268 | 67 | |
| d. | new parenting skills? | 17 | 15 | 26 | 389 | 127 | 348 | 117 | |
| e. | family advocacy (e.g., prevention workshops, crisis counseling)? | 50 | 30 | 32 | 417 | 78 | 154 | 51 | |
| f. | Family Member Employment Assistance Program (e.g., job ready workshops, job referrals/job searches, career counseling)? | 153 | 163 | 163 | 440 | 176 | 264 | 58 | |
| g. | Exceptional Family Member Program? | 43 | 48 | 42 | 414 | 88 | 171 | 68 | |
| h. | Lifestyle Insights Networking Knowledge and Skills (L.I.N.K.S.) programs? | 30 | 46 | 46 | 470 | 103 | 285 | 191 | |
| i. | Key Volunteer Network (KVN) activities and services? | 158 | 149 | 164 | 575 | 252 | 565 | 239 | |
| j. | Spouses Leadership Seminar? | 45 | 30 | 25 | 427 | 47 | 167 | 101 | |
| k. | Chaplain support (e.g., CREDO, PREP)? | 44 | 40 | 47 | 429 | 121 | 379 | 173 | |
| l. | support services OVERALL, considering all the different aspects (i.e., do they do a good job supporting you)? | 102 | 139 | 185 | 1051 | 401 | 757 | 147 | |

HEALTH CARE

The items in the following section are all related to your family's health care (medical and dental) benefits.

1. What type of medical insurance/medical care does your family use? *Mark ALL That Apply.*

| | |
|------|--------------------------------|
| 1571 | Military medical facilities |
| 3452 | TRICARE Prime |
| 20 | TRICARE Extra |
| 414 | TRICARE Standard |
| 73 | TRICARE Remote |
| 76 | Group HMO |
| 23 | Group fee-for-service policy |
| 57 | Private HMO |
| 34 | Private fee-for-service policy |
| 122 | Other |

2. How long would it take you to get to a 24-hour **military** medical facility from your residence? *Mark ONE.*

| | |
|------|---|
| 1168 | Less than 15 minutes |
| 1482 | 15-30 minutes |
| 772 | More than 30 minutes, but less than an hour |
| 344 | 1-2 hours |
| 331 | More than 2 hours |

3. How long would it take you to get to a 24-hour **civilian** medical facility from your residence? *Mark ONE*

| | |
|------|---|
| 1715 | Less than 15 minutes |
| 1883 | 15-30 minutes |
| 419 | More than 30 minutes, but less than an hour |
| 43 | 1-2 hours |
| 20 | More than 2 hours |

4. Do you or any of your children or other dependent family members have special medical needs (e.g., disabilities and/or medical conditions requiring special care)? *Mark ALL That Apply.*

| | |
|------|--|
| 3497 | None have special needs |
| 260 | I have special needs |
| 396 | Child(ren) living with me |
| 21 | Child(ren) not living with me |
| 4 | Legal ward(s) living with me |
| 29 | Dependent parent(s) or other relative(s) |

5. Please use this scale to indicate how satisfied or dissatisfied you are with various aspects of the health care services you and your family use. *MARK A RESPONSE FOR EACH. If you have never used the particular benefit, please mark the circle in the first column "Does not apply."*

| How satisfied are you with: | | Does not apply | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|-----------------------------|--|----------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| a. | the HOURS the medical facility is open? | 192 | 141 | 270 | 361 | 567 | 576 | 1540 | 415 |
| b. | the QUALITY of TREATMENT by doctors and medical support staff? | 169 | 227 | 322 | 497 | 437 | 762 | 1247 | 387 |
| c. | the QUALITY of the OFFICE SUPPORT STAFF? | 284 | 183 | 289 | 455 | 751 | 713 | 1101 | 274 |
| d. | the AVAILABILITY of medical appointments? | 175 | 484 | 515 | 657 | 391 | 691 | 878 | 223 |
| e. | the ACCESS to an EMERGENCY CARE facility? | 391 | 264 | 277 | 334 | 537 | 575 | 1226 | 404 |
| f. | the RESPONSIVENESS of the TRICARE SERVICE CENTER? | 489 | 366 | 327 | 384 | 728 | 582 | 921 | 252 |
| g. | the EASE of filing claims? | 1610 | 298 | 245 | 220 | 666 | 274 | 563 | 169 |
| h. | the PROMPTNESS of payment of claims? | 1587 | 322 | 230 | 245 | 633 | 298 | 555 | 165 |
| i. | the OUT OF POCKET EXPENSES? | 1238 | 255 | 205 | 272 | 595 | 379 | 735 | 374 |
| j. | your family's MEDICAL CARE OVERALL, considering all aspects? | 135 | 186 | 332 | 472 | 536 | 811 | 1231 | 318 |

Comments on HEALTH CARE:

SEPARATION

This section deals with your spouse's separation from the family due to the Marine Corps' requirements.

1. As a Marine's spouse, you may see your husband or wife everyday for a period of time and then infrequently (e.g., a few times a month) at other times. Overall, how do you feel about the frequency with which you have seen your spouse since he/she has been a Marine?

| | |
|------|-------------------------------|
| 201 | 1 Terrible |
| 240 | 2 Unhappy |
| 519 | 3 Mostly unhappy |
| 826 | 4 Neither unhappy nor pleased |
| 1208 | 5 Mostly pleased |
| 739 | 6 Pleased |
| 336 | 7 Delighted |

2. During the past year, how many months has your spouse been away from home because of military duties?

| | |
|------|-------------------|
| 1341 | Less than 1 month |
|------|-------------------|

| Months | |
|--------|-----------------|
| 575 | 1 to 3 months |
| 525 | 3 to 5 months |
| 402 | 5 to 7 months |
| 259 | 7 to 9 months |
| 121 | 9 to 11 months |
| 109 | 11 to 12 months |

Comments on SEPARATION:

3. If your spouse's military duties took him/her away for 6 months or more, how capable do you feel you are to handle full responsibility for the following? *MARK A RESPONSE FOR EACH. If the particular issue is not relevant to you, please mark the circle in the first column "Does Not Apply."*

| | Does not apply | Not at all capable | Not so capable | Capable | Very capable | Extremely capable |
|---|----------------|--------------------|----------------|---------|--------------|-------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| a. Childcare | 1391 | 43 | 151 | 500 | 560 | 1381 |
| b. Family members' health | 622 | 18 | 71 | 756 | 855 | 1610 |
| c. Family finances including investments | 262 | 41 | 214 | 902 | 887 | 1612 |
| d. Managing the maintenance of your residence | 260 | 52 | 328 | 1138 | 887 | 1280 |
| e. Emotional or parenting matters | 449 | 59 | 360 | 1088 | 871 | 1108 |
| f. Safety of family members | 494 | 28 | 156 | 863 | 876 | 1459 |
| g. Transportation | 233 | 51 | 111 | 802 | 908 | 1799 |

4. Show how satisfied or dissatisfied you are with various aspects of separation. *MARK A RESPONSE FOR EACH. If your spouse has never been deployed or unaccompanied on an assignment, fill in the circles in the first column "Does not apply."*

| | Does not apply | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|----------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| How satisfied are you with: | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the AMOUNT OF CONTACT you have with your spouse during separations? | 610 | 239 | 392 | 425 | 447 | 718 | 972 | 260 |
| b. the PREDICTABILITY of your spouse's departures? | 607 | 315 | 438 | 463 | 661 | 585 | 804 | 162 |
| c. DEPLOYMENT SUPPORT services (briefs, Key Volunteer, etc.)? | 1288 | 311 | 269 | 229 | 711 | 367 | 651 | 203 |
| d. deployment/separation on your family life OVERALL? | 615 | 361 | 439 | 549 | 835 | 466 | 654 | 104 |

CHILDREN QUALITY OF LIFE

The next group of questions has to do with your relationships with your children. If you do not have children under age 18, skip to the next section, PAY AND BENEFITS.

1. As a couple, how many children do you have in each age group? *MARK A RESPONSE FOR EACH.*

| AGE GROUP OF CHILDREN | NUMBER OF CHILDREN IN AGE GROUP | | | | |
|-----------------------|---------------------------------|-----|----|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| a. Under 1 year | 654 | 13 | 1 | 0 | 0 |
| b. 1 to 3 years | 1090 | 107 | 6 | 0 | 0 |
| c. 4 to 6 years | 900 | 123 | 5 | 0 | 2 |
| d. 7 to 12 years | 788 | 346 | 49 | 1 | 0 |
| e. 13 to 18 years | 452 | 214 | 36 | 7 | 1 |

2. Next, in regard to the children who live with you, how satisfied are you with: *MARK A RESPONSE FOR EACH.*

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|---|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the ACTIVITIES AVAILABLE for the children (e.g., cost, variety, availability)? | 111 | 222 | 379 | 689 | 544 | 783 | 207 |
| b. the EDUCATION the child(ren) are receiving? | 108 | 160 | 229 | 751 | 379 | 859 | 408 |
| c. how the CHILD(REN) HANDLE(S) being a military child(ren)? | 37 | 62 | 169 | 793 | 407 | 1035 | 360 |
| d. the MILITARY ENVIRONMENT for raising children? | 60 | 125 | 244 | 640 | 514 | 982 | 286 |
| e. the OVERALL quality of life of the child(ren)? | 23 | 83 | 198 | 473 | 528 | 1229 | 379 |

If you do not have children who require childcare, skip to the following section, PAY AND BENEFITS.

3. Who is usually the primary care provider for your youngest child when you are not available? *Mark ONE.*

| | |
|-----|---|
| 238 | Military child development center |
| 70 | Base operated family home care program |
| 205 | Privately licensed facility |
| 93 | Civilian operated family home care |
| 28 | At home employee (nanny, au pair, etc.) |
| 371 | Relative or older siblings |
| 392 | Friend |
| 775 | Your spouse |
| 157 | Other |

4. Now please tell us how satisfied or dissatisfied you are with various aspects of childcare for your child(ren). *MARK A RESPONSE FOR EACH.*

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the AVAILABILITY of childcare? | 163 | 211 | 265 | 639 | 241 | 499 | 173 |
| b. the QUALIFICATIONS of the person(s) who care(s) for your child(ren)? | 57 | 56 | 108 | 701 | 240 | 624 | 352 |
| c. the COST of childcare? | 178 | 219 | 283 | 623 | 245 | 395 | 174 |
| d. the SAFETY of your child(ren) while they are with their childcare provider? | 40 | 33 | 73 | 641 | 226 | 696 | 401 |
| e. how your child(ren) HANDLE(S) being cared for by others? | 44 | 49 | 101 | 600 | 286 | 761 | 348 |
| f. the OVERALL quality of childcare received by your child(ren)? | 39 | 41 | 108 | 624 | 267 | 747 | 352 |

PAY AND BENEFITS

Now, we would like you to consider your family's financial situation as it relates to your quality of life.

1. Have any of the following things happened to you in the last year? *Mark ALL That Apply.*

| | |
|------|---|
| 1179 | Difficulty meeting monthly obligations |
| 84 | Indebtedness letter to your spouse's command |
| 38 | Repossession of something purchased |
| 47 | Bankruptcy |
| 158 | Crisis loan from military relief organization |
| 80 | Trouble over child support payments |
| 2772 | None of the above |

2. How much of your family's total income comes from your spouse's military pay? *Mark ONE.*

| | |
|------|----------------------------|
| 1821 | 100% |
| 910 | More than 75%, but not all |
| 1090 | Between 50% and 75% |
| 232 | Between 25% and 50% |
| 29 | 25% or less |

3. How much money does each of the following benefits save you? **MARK A RESPONSE FOR EACH.** *If the benefit is not available to you OR you do not use it, please mark the circle in the first column "Does not apply."*

| | | Does not apply | Nothing at all | A little | Some | Quite a bit | A great deal |
|----|------------------------------------|----------------|----------------|----------|------|-------------|--------------|
| a. | The BASE EXCHANGE saves us . . . | 538 | 739 | 1348 | 967 | 340 | 106 |
| b. | The COMMISSARY saves us . . . | 445 | 145 | 548 | 746 | 1314 | 826 |
| c. | MILITARY CHILDCARE saves us . . . | 3275 | 260 | 135 | 160 | 114 | 77 |
| d. | HEALTH CARE BENEFITS save us . . . | 164 | 102 | 234 | 470 | 1189 | 1830 |
| e. | MILITARY HOUSING saves us . . . | 2124 | 163 | 166 | 330 | 480 | 754 |

4. Please use this scale to indicate how satisfied or dissatisfied you are with various aspects of your current financial situation. **MARK A RESPONSE FOR EACH.**

| How satisfied are you with: | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|--|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. the money you have available for ESSENTIALS? | 87 | 224 | 416 | 479 | 786 | 1401 | 610 |
| b. the money you have available for EXTRAS? | 305 | 559 | 796 | 457 | 828 | 817 | 234 |
| c. the money you have available for SAVINGS? | 618 | 734 | 764 | 452 | 690 | 543 | 184 |
| d. your HOUSING ALLOWANCE in relation to your housing costs? | 406 | 507 | 620 | 853 | 595 | 709 | 250 |
| e. your current pay and benefits OVERALL? | 215 | 439 | 764 | 655 | 923 | 837 | 156 |

YOUR JOB/PROFESSIONAL DEVELOPMENT

Now, we would like you to consider your job and professional development and how these relate to your quality of life.

1. Which best describes your paid employment situation? *Mark ALL That Apply.*

| | |
|------|---|
| 32 | I am an active duty Marine |
| 13 | I am in the military (other than the Marine Corps) |
| 111 | I am employed by the Marine Corps |
| 221 | I am self-employed |
| 632 | I work in a civilian job part time |
| 1294 | I work in a civilian job full time |
| 1235 | I am unemployed by choice (e.g., retired, stay at home caregiver) |
| 258 | I am unemployed, but actively seeking full-time employment |
| 202 | I am unemployed, but actively seeking part-time employment |
| 373 | Other |

ANSWER THE NEXT SET OF QUESTIONS ONLY IF YOU ARE EMPLOYED. If you are NOT employed, please skip to question number 5 on the next page.

2. Which of the choices below best describes the reason you have a job? *Mark ALL That Apply.*

| | |
|------|---|
| 459 | To prepare for my next career; gain experience |
| 637 | To pursue interest in my career field |
| 1535 | To earn additional income for basic family expenses |
| 1260 | To earn additional income for extras |
| 934 | Independence/self-esteem |
| 600 | To occupy my time |
| 957 | I enjoy the work |
| 171 | Other |

Comments on PAY AND BENEFITS:

3. Which of the following best describes your current main job? *Mark ONE.*

| | |
|-----|-------------------------|
| 179 | Child Development |
| 284 | Clerical |
| 276 | Manager / Administrator |
| 226 | Teacher |
| 497 | Professional |
| 270 | Sales |
| 209 | Service |
| 475 | Other |

4. On average, how many hours do you work per week?

| | |
|------|--------------------|
| 112 | 10 Hours or Less |
| 254 | 11 to 20 Hours |
| 350 | 21 to 30 Hours |
| 1051 | 31 to 40 Hours |
| 344 | 41 to 50 Hours |
| 91 | 51 to 60 Hours |
| 44 | More than 60 Hours |

Comments on JOB / PROFESSIONAL DEVELOPMENT:

5. Please show how satisfied or dissatisfied you are with each of the following aspects of your current job and professional development. **MARK A RESPONSE FOR EACH.** *If the item does not apply to you, mark the circle in the first column "Does not apply."*

| How satisfied are you with: | | Does not apply | Completely dissatisfied | Dissatisfied | Somewhat dissatisfied | Neutral | Somewhat satisfied | Satisfied | Completely satisfied |
|-----------------------------|--|----------------|-------------------------|--------------|-----------------------|---------|--------------------|-----------|----------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| a. | your PAY AND BENEFITS? | 1098 | 173 | 281 | 331 | 268 | 504 | 582 | 161 |
| b. | your job in RELATION TO YOUR SKILLS? | 1034 | 95 | 156 | 170 | 343 | 410 | 836 | 345 |
| c. | the opportunity for PERSONAL GROWTH AND DEVELOPMENT in your job? | 1032 | 170 | 254 | 256 | 349 | 397 | 650 | 272 |
| d. | the JOB OPPORTUNITIES available to you? | 662 | 336 | 375 | 365 | 450 | 418 | 552 | 215 |
| e. | the EASE OF GETTING HIRED? | 789 | 248 | 287 | 260 | 483 | 398 | 629 | 267 |
| f. | the Marine Corps' assistance in HELPING YOU FIND A JOB? | 2176 | 313 | 226 | 112 | 354 | 71 | 110 | 23 |
| g. | the COST of educational advancement? | 1432 | 262 | 351 | 312 | 507 | 207 | 232 | 63 |
| h. | your employment situation OVERALL, considering all aspects? | 670 | 187 | 262 | 304 | 529 | 463 | 747 | 220 |

MARINE CORPS LIFE AND YOU

This section asks you to consider YOUR DESIRE to continue as a part of the Marine Corps.

1. Which of the following statements best describes YOUR DESIRE regarding a future with the Marine Corps? *Mark ONE.*

| | |
|------|--|
| 2169 | I would prefer my spouse remain in the Marine Corps until eligible for retirement. |
| 302 | My spouse is eligible to retire, but I would prefer him/her to stay in the Marine Corps. |
| 176 | I would prefer him/her to stay in the Marine Corps, but not until retirement. |
| 600 | I would prefer him/her to leave the Marine Corps as soon as he/she can. |
| 827 | I am not sure what I would prefer him/her to do. |

2. Please indicate how each aspect of your life (as listed below) influences YOUR DESIRE to remain a part of the Marine Corps. *MARK A RESPONSE FOR EACH.*

| Influence of: | Stay in USMC | | | No influence | | | Leave USMC |
|-----------------------------|--------------|-----|-----|--------------|-----|-----|------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| a. RESIDENCE | 789 | 354 | 360 | 1476 | 324 | 178 | 474 |
| b. RELOCATION | 614 | 311 | 350 | 1222 | 461 | 260 | 719 |
| c. LEISURE/RECREATION | 522 | 357 | 489 | 2088 | 172 | 81 | 184 |
| d. SUPPORT SYSTEMS | 507 | 370 | 517 | 1937 | 220 | 89 | 259 |
| e. HEALTH CARE | 1813 | 644 | 473 | 505 | 183 | 120 | 244 |
| f. SEPARATION | 178 | 105 | 164 | 1120 | 578 | 472 | 1327 |
| g. CHILDREN QUALITY OF LIFE | 661 | 415 | 417 | 1449 | 338 | 199 | 398 |
| h. PAY AND BENEFITS | 864 | 582 | 636 | 440 | 470 | 359 | 578 |
| i. YOUR JOB/CAREER | 345 | 174 | 197 | 2042 | 276 | 240 | 573 |

LIFE AS A WHOLE

Now, think once again about your life as a whole, considering all the different aspects of life that have been covered in this survey.

1. Please indicate how much you agree or disagree with the statements below. *MARK A RESPONSE FOR EACH.*

| | Completely disagree | | Disagree | | Somewhat disagree | | Neither agree nor disagree | | Somewhat agree | | Agree | | Completely agree | |
|---|---------------------|-----|----------|-----|-------------------|------|----------------------------|--|----------------|--|-------|--|------------------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | | | | |
| a. In most ways, my life is close to ideal. | 188 | 426 | 534 | 595 | 1092 | 964 | 244 | | | | | | | |
| b. The conditions of my life are excellent. | 140 | 414 | 658 | 612 | 1108 | 857 | 276 | | | | | | | |
| c. I am satisfied with my life. | 82 | 216 | 384 | 350 | 1087 | 1425 | 498 | | | | | | | |
| d. So far I have gotten the important things I want in life. | 105 | 257 | 382 | 363 | 975 | 1281 | 636 | | | | | | | |
| e. If I could live my life over, I would change almost nothing. | 212 | 400 | 542 | 425 | 835 | 981 | 482 | | | | | | | |

YOU ARE FINISHED!!

THANK YOU FOR YOUR PARTICIPATION.

Please return the survey immediately using the enclosed envelope.

Please provide any ADDITIONAL COMMENTS you may have:

APPENDIX D: COMPUTATION OF GLOBAL QOL ASSESSMENT

- This Appendix discusses the computation of the Life-As-a-Whole Composite, also referred to as the Global Quality of Life Assessment.

APPENDIX D: COMPUTATION OF GLOBAL QOL ASSESSMENT

The purpose of this appendix is to discuss the computation of the Life-As-a-Whole Composite, also referred to as the Global Quality of Life Assessment. The basic structure, as laid out in *White, Baker, and Wolosin (1999)* is as follows:

$$LAW\ Composite = Mean (LAW1, LAW2, LAW3, LAW4, Mean\ LCS, Mean\ SWL)$$

The LAW composite is not computed if 3 or more of the components are missing.

All the LAW components except LAW4 below are fully discussed in Kerce (1995). A brief description of each follows:

LAW1: Question 1 of the first Life As a Whole section of the survey instrument

First, which point on the scale below best describes how you feel about your life as a whole at this time?

- 1 Terrible
- 2 Unhappy
- 3 Mostly Happy
- 4 Neither unhappy nor pleased
- 5 Mostly Pleased
- 6 Pleased
- 7 Delighted

Life Characteristic Scale: Question 3 of the first Life As a Whole section of the survey instrument *(Take the mean of these 7 items measured on a five-point scale).*

Below are some words that can apply to how you feel about your life as a whole. For example, if you think your life is boring, blacken in the circle next to “boring”; if you think your life is very interesting, blacken in the circle next to “interesting.” If your life falls somewhere in between, blacken one of the circles in between to indicate how boring or interesting you think your life is. Blacken one circle for every line.

| | | | | | | |
|---------------|---|---|---|---|---|-------------|
| Boring | 1 | 2 | 3 | 4 | 5 | Interesting |
| Enjoyable | 5 | 4 | 3 | 2 | 1 | Miserable |
| Useless | 1 | 2 | 3 | 4 | 5 | Worthwhile |
| Friendly | 5 | 4 | 3 | 2 | 1 | Lonely |
| Full | 5 | 4 | 3 | 2 | 1 | Empty |
| Discouraging | 1 | 2 | 3 | 4 | 5 | Hopeful |
| Disappointing | 1 | 2 | 3 | 4 | 5 | Rewarding |

LAW2: Question 3 of the first Life As a Whole section of the survey instrument

Which of the following best describes how you think of your life at this time?

- 7 An ideal kind of life
- 6 What I want my life to be
- 5 The best kind of life I am able to have now
- 4 A good enough life for now
- 3 A tolerable life for now
- 2 An unsatisfactory kind of life
- 1 A miserable Life

LAW3: Question 1 of the second Life As a Whole section (last section) of the survey instrument

How satisfied are you with your life overall?

- 1 Completely dissatisfied
- 2 Dissatisfied
- 3 Somewhat dissatisfied
- 4 Neither dissatisfied nor satisfied
- 5 Mostly satisfied
- 6 Satisfied
- 7 Completely satisfied

LAW4: Question 3 of the second Life As a Whole section (last section) of the survey instrument

Compared to your own aims or goals how would you say that your life measures up now: matches your goal; fairly well; about half as well as your goal; fairly poorly; or not at all to WHAT YOU WANT?

| Please fill in the circle under the percentage that best describes how closely what you have now measures up to what you want for each of the areas named. | Not applicable/no opinion | Not at all | Fairly poorly | | Half as well as your goal | Fairly well | Matches your goal | |
|--|---------------------------|-----------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|-----------------------|
| | | 0% | 10% | 20% | 50% | 70% | 80% | 100% |
| Life as a Whole | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Satisfaction with Life Scale: Question 1 of the second Life As a Whole section of the survey instrument (Take the mean of these 5 items measured on a seven-point scale).

1. Please indicate how much you agree or disagree with each statement.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| | Completely disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Completely agree |
| a. | In most ways, my life is close to ideal. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. | The conditions of my life are excellent. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. | I am satisfied with my life. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. | So far, I have gotten the important things I want in life. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. | If I could live my life over, I would change almost nothing. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

APPENDIX E: GLOBAL QOL VALUES

- Included in this Appendix are copies of correspondence which document the actions of the study performer during the analysis phase of the study.

In the course of the analysis phase of the 2002 Quality of Life in the U.S. Marine Corps Study, the study performer constructed comparison graphs for the 1993, 1995, and 2002 studies. These graphs were to display the Global QoL scores and the Job satisfaction scores by pay grade.

It was discovered, in reviewing the data files from the previous studies supplied to the study performers, that the needed data was not there.

In order to resolve this issue, a meeting was arranged between a representative of the study performer's team and the study performer for the 1998 study. This meeting, which took place in June 2002, was also attended by a representative of the study sponsor.

Based upon information exchanged at this meeting, it appeared that the data originally supplied to the study performer was an early, and incomplete version of the 1998 study results.

Included in this Appendix are copies of the correspondence which document the actions of the study performer concerning this issue.

Decision Engineering Group

June 27, 2002

MCSS Management Branch (C453)
Studies and Analysis Division, MCCDC
Attn: Ms. Carol Lager
3300 Russell Road
Quantico, VA 22134

Dear Ms. Lager.

Enclosed please find a Memorandum from Dr. Joe Bolmarcich outlining the results of his review of the survey data from the *"Quality of Life in the Marine Corps: A Comparison Between 1993 and 1998"* by M.A. White, H.G. Baker, and D.G. Wobsin, NPRDC Technical Report TR 99-1, June 1999. According to Dr. Bolmarcich, the Global QOL by paygrade values in the 1998 QOL study report are correct. Dr. White has concurred in the findings and recommendations of Dr. Bolmarcich's assessment.

Dr. Bolmarcich's Memorandum should be read in its entirety to fully appreciate the value in reviewing the data of the earlier study. Without such a review, the results of the 2002 study may draw unwarranted concern for any lower response values of the Active Duty Marines who participated in the 2002 survey.

We believe the enclosed Memorandum completes the task assigned by the Contracting Officer in May to complete such an assessment. We are prepared to address the issue of the remaining activities on the 2002 Study contract schedule.

Sincerely,



Michael J. Quinlan
General Manager



MEMORANDUM

27 June 2002

To: Marine Corps Combat Development Command (C453)
Studies and Analysis Division
3300 Russell Road
Quantico VA 22134-5130
Attn: Mr. Michael Durnavitch

From: J. J. Bolmarcich

Subject: Global QOL Values from the 1998 Marine Corps QOL Study
Report and the 1998 Study Master Database

Reference: [a] "Quality of Life in the Marine Corps: A Comparison Between 1993 and 1998" by
M.A. White, H.G.Baker, and D.G.Wolosin, NPRDC Technical Report TR 99-1, June
1999

Summary

The Global QOL by-paygrade values in the 1998 QOL study report (reference [a]) are correct.

Background

In support of the conduct of the 2002 Marine Corps QOL study we were given two archived databases, in SPSS format, one representing the 1998 QOL study and the other representing the 1993 QOL study. We found this "government-provided data" somewhat incomplete in that the 1998 database was much smaller than the 1993, not only in the number of responses, which was expected, but also in the number of survey instrument questions which the archive held. The 1993 database seemed to provide all responses to all questions plus some interspersed reverse coding columns, some intermediate calculation columns, and some final composite measure columns — for a total of 779 columns. The 1998 database, archiving the results of essentially the same survey instrument, was similar but did not provide much more than the responses to domain satisfaction/happiness questions, personality variables, and other aspects needed for QOL calculations — for a total of

160 columns.

This 1998 "abbreviated" database had a dated title: "3 18 99 QOL MARINES.sav" with a file date of 26 January 2001, presumably the date it was archived in CDROM. We exported this database out of SPSS as an Excel spreadsheet so that we could write customized programs to extract specific information from it, as needed, in the trend analyses we were to conduct under the 2002 QOL study statement of work. Since not all values by paygrade were provided numerically in the 1998 QOL study report, for example, in the Job domain they were only reported graphically, we computed the average by-pay-grade domain satisfaction values (cognitive measures) using custom Visual Basic code.

We duplicated (to within .01) the by-paygrade domain satisfaction values in the report (both in the graphs and in Appendix D) except for the health domain (SATHLTH7 column). In fact, we found three suspicious columns in 1998 "abbreviated" database: (1) SATHLTH7 — since the overall health domain satisfaction value is in the fifth place of the multipart health satisfaction question not in the seventh, and two

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from the relationship with children domain: (2) **SATKIDS** — the cognitive measure is well out of place near the end (perhaps a late addition to correct an oversight), and (3) **FEELKIDS1** — the affective measure has over 1000 values of 8 where only responses coded from 1 to 7 should reside.

We then weighted the paygrade values by the Marine Corps paygrade population found in the 1998 QOL study report (up to rounding error). We could reconstruct the composite domain satisfaction values (cognitive measures) and the domain happiness values (affective measures) in the text of the 1998 QOL study report to within .01 for each domain, except for the health the children domain measures noted above.

Finally, the Global Quality of Life values by paygrade, Figure 29 of the 1998 QOL study report, are not supported by the 1998 "abbreviated" database; they are noticeably higher than paygrade averages drawn from the **GLB_QOL2** column of that database. This column is an appropriately computed average, as described in Appendix C of the 1998 Study report, of the six life-as-a-whole (LAW) components, but (1) the five-part SWL component is in itself improperly averaged (results in column **swl_fin**), and (2) the seven-part LCS component is both improperly reverse coded and improperly averaged (results in column **lcs_fin**). (Apparently, the three properly reverse-coded intermediary columns (**r_lifwh3/5/6**) for the LCS in the "abbreviated" database were ignored in the construction of **lcs_fin**.)

We were able to reconstruct the faulty **lcs_fin** column as follows: (1) improperly reverse code questions 2, 4, 5 by subtracting their values from 5 instead of from 6 — a common mistake, and (2) take the average to be the sum of all the responses (2, 4, 5 so reverse coded) but always divide by seven instead of by the number of valid responses. Similarly, the five-factor SWL

scale was always divided by 5 no matter the number of valid responses. (We note that the same kind of improper averaging exists in the 1993 QOL study database which structure points to an early exclusive use of full responses.) We repaired these errors, but still the Global QOL values by pay grade were about 10% short of those reported.

Through Decision Engineering, the prime contractor for the 2002 QOL study, we then asked the Marine Corps for guidance concerning how we should proceed given the internal inconsistencies between the 1998 "abbreviated" database the Marine Corps had provided to us and its lack of match to the 1998 QOL study report, especially to the critical Global QOLs.

Remedy

It is our understanding that the Marine Corps then placed an official request to Navy Personnel Research and Development Center to help resolve the issue we had surfaced. A meeting was held between Dr. White of NPRDC, Dr. Bolmarcich of QUANTICS, and a representative of the study sponsor, Major P. B. Baumgarten, USMC. At that meeting Dr. White indicated that he did not know the origin of the 1998 "abbreviated" database and offered to provide a copy of his master database from the 1998 QOL study. He also offered to review the Global QOL results in his master database and to compare his review with one that QUANTICS would conduct independently. The remainder of this memorandum discusses the results of QUANTICS' review of Dr. White's 1998 Master Database.

QUANTICS' 1998 Master Database Review

We have compared the 1998 Master Database, dated 4 December 1998, to the "abbreviated" version of 18 March 1999. Our general impression is that the "abbreviated" version, although later in date, was taken from an earlier version of the master database and independently analyzed. We are led to this conclusion firstly be-

cause the 1998 Master Database has fewer respondents than the "abbreviated" one:

- ◆ 36 E1 responses in the 1998 "abbreviated" database do not appear in the 1998 Master Database (E1 responses not used)
- ◆ 18 responses without paygrades in the 1998 "abbreviated" database do not appear in the 1998 Master Database (pay-grade weighting was needed)

Otherwise, all the SSN numbers match up. In addition, the 1998 Master Database has correct reverse coding in the LCS scale with the reverse-coded columns clearly distinguished (**newlife3**, **newlife5**, and **newlife6**). These columns contribute to the computation of the LCS composite which is properly averaged and deposited in column **newlife**. Also, the SWL scale is properly averaged and deposited in column **lifewhol**.

The 1998 Master Database also contains, at its far end, a column **life9** (= 8 - **lifewh9**) which reverse codes the third LAW question in order to facilitate the LAW composite computation. The "abbreviated" database copies column **lifewh9** to column **law2** without reversal at the far end for its LAW composite computation. We found column **lifewh9** to be negatively correlated with the other 5 LAW components, thus the reversal in the 1998 Master Database to **life9**, preliminary to performing the LAW composite, is surely correct, and the lack of reversal in the 1998 "abbreviated" database is surely wrong. (We note that the **lifewh9** column in the 1993 database needs no reverse coding.) Summarizing to this point, we find that three of the six LAW components in the 1998 "abbreviated" database, given to us by the Marine Corps to conduct the 2002 QOL study, are wrong. It is thus no surprise that we were unable to match the **GLB_QOL2** column of that database with the Global QOL graphs of the 1998 study report.

On the other hand, we find that all six LAW

components are properly represented in the 1998 Master Database. Also, the LAW composite deposited in the **qol** column of the 1998 Master Database is correctly computed using the procedure described in Appendix C of the 1998 Study report under "Computation". *Yet, the Global QOL averages which follow from that **qol** column are lower than the Global QOL values displayed in Figure 29 of the 1998 study report.*

There is a simple but subtle reason for this discrepancy: it is in the scaling of the six LAW components. In the 1993 QOL study all six were measured using a seven-point scale. The averaging was straightforward: add up the non-zero component values and divide by their number. The 1998 QOL study abridged the LCS scale to five points — an improvement which reduced the unwieldiness of its presentation in the survey instrument. So in order to compare the 1998 Global QOL values with those of 1993 the 1998 LCS component needs to be upscaled by 7/5. Exhibit 1 displays the result of applying 7/5 to the 1998 Master Database **newlife** column and recomputing each respondent's Global QOL. The overall Global QOL is 4.644, about ½% more than the 4.62 in the 1998 QOL study report.

Exhibit 1: 1998 Global QOL Values

| | |
|------------------|-------------|
| E2-E3 | 4.32 |
| E4-E5 | 4.63 |
| E6-E7 | 4.94 |
| E8-E9 | 5.31 |
| W1-W5 | 5.25 |
| O1-O3 | 5.28 |
| O4&Up | 5.30 |
| Avg. | 4.64 |

To our eyes the values in Exhibit 1 and the values displayed in Figure 29 of reference [a] are without notable distinction.

Conclusion

We believe that the 1998 "abbreviated" database, which the Marine Corps provided for the 2002 QOL study, is faulty. It uses improper averaging of the LCS and SWL scales and either fails to reverse or improperly reverses measurements which need reverse coding. We find that the **SATHLTH5** column of the 1998 Master Database supports the paygrade health domain satisfaction values in Table D3 of Appendix D of the 1998 study report but was mistakenly replaced by **SATHLTH7** in the 1998 "abbreviated" database. Also, we find that the 1993 Global QOLs used for comparisons in the 1998 QOL study were likely corrected for improper averaging.

The fault we find with the 1998 Master Database is that the **qol** column does not include the scale conversion for the LCS composite. We believe the 1998 working SPSS database, with the properly constructed **qol** column, simply failed to make the archiving process. (To complete our review we note that some **ptnrabl?** columns the 1998 Master Database have 9s where at most 7s are expected in addition to the 8s already noted.)

Recommendation

- (1) Accept the Global QOL values from the 1998 QOL study report.
- (2) Fix the 1998 Master Database **qol** column and use it to replace the 1998 "abbreviated" database as the official archive.

Decision Engineering Associates, LLC
... a veteran owned small business ...
17491 Jefferson Davis Highway
Dumfries, Virginia 22026
703-441-6538

May 9, 2002

Studies and Analysis Division
Marine Corps Combat Development Command (C 453)
Attn: Mr. Michael Durnavich
3300 Russell Road
Quantico, Virginia 22134-5130

Dear Mr. Durnavich,

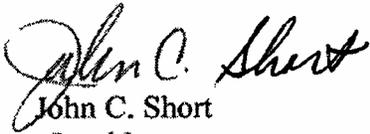
This letter refers to the ongoing Marine Corps Quality of Life Study which is being performed by Decision Engineering's study team. While analyzing data collected with the Quality of Life survey instrument, our subcontractor, QUANTICS, Inc. discovered what appears to be an irregularity in previous survey data collection and analysis efforts.

Dr. Joseph Bolmarcich of QUANTICS, Inc. found the 1998 survey scores higher than the data supported. This difference could affect the validity of the comparison of this year's data with that of the previous, 1998, survey data. It would create an inflated difference between the two sets of data and could cause an impression that the status of QOL responses showed a distinct degradation of respondent impressions whereas, in reality, the impressions might actually be somewhat similar.

It is possible for us to correct the 1998 data and reconstruct the findings, should you desire. Other actions are also possible. I feel it is important we present this matter to you and request our further action. An informal letter from Dr. Bolmarcich to me yesterday explained the situation, and is attached for your information.

I look forward to your advice and discussion.

Sincerely,


John C. Short
President

Encl: Copy of QUANTICS letter dated 8 May 2002



QUANTICS Letter QL 24 01

08 May 2002

To: Decision Engineering Associates, LLC
17491 Jefferson Davis Highway
Dumfries, VA 22026
Attn: Mr. John Short

From: J. J. Bolmarcich

Subject: QOL Study Report Guidance

In the preparation of results for presentation at the SME conference this date we constructed two comparison graphs between the 1993, 1998, and 2002 studies. These concerned the "Global Quality of Life" scores by pay grade and the Job Satisfaction scores by pay grade. These were structured to parallel two graphs in the 1998 QOL Study, the Job Satisfaction graph in an early section of the report and the Global Quality of Life graph in a latter section of the report which compared the respective scores by pay grade between the 1993 and 1998 QOL studies.

We sought for the data on which the graphs were based from the 1998 Study but did not find them. This was disconcerting because such comparisons are needed for the current study report in order to compare 2002 Study results with previous studies' results. The absence of the raw data would be an impediment — we might be reduced to extracting the data from the 1998 Study's graphs by caliper. So we brought up the SPSS-formatted data files from the 1998 Study, converted them to Excel, and constructed code to compute the scores of interest by pay grade — these were not in the SPSS file.

To assess whether we had the correct data, we looked at each domain and computed the average by-pay-grade domain satisfaction scores using the code we developed — the Job Satisfaction scores by pay grade matched the graph in the 1998 Study. Then we weighted the pay-grade scores by the fraction of pay-grade representation in the Marine Corps population reported by the 1998 Study. We successfully reconstructed the composite domain satisfaction scores reported in the text of the 1998 Study for each domain except for Health. We felt we had the correct data and used the Job Domain by-pay-grade satisfaction scores to draw the graph (we still estimated the 1993 comparisons by caliper.)

However, we failed to obtain the Global Quality of Life scores by pay grade from the same 1998 Study database. The numbers they presented in that graph were much higher than those in the GLB_QOL2 column of the database which contained the average of the six-factor Global QOL score composite as described in Appendix C of the 1998 Study report. We found an error in the factor representing the LCS scale (improperly reverse coding on three components) and a slight error in the SWL scale averaging; we fixed them. But still the average QOL scores by pay grade were about 10% short of those reported.

We were now concerned that we did not understand how the Global QOL components were assembled. So we went to the database for the 1993 study. We tried to reconstruct the 1993 Global QOL scores displayed in the 1998 Study graph and could not — but this was because the 1998 Study had graciously fixed an averaging error in the 1993 Study's QOL computation (the 1993 Study did not present such results by pay grade.) So we seem to understand the method but still cannot reconstruct the 1998 QOL values by pay grade.

Our question is which QOL data should we use for the 2002 Study comparisons — the QOL data as presented in the 1998 Study (which itself corrected the 1993 Study) or the correct computation of the 1998 QOL scores which we have performed?

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APPENDIX F: DOMAIN DATA

- This Appendix contains the data derived from the quality of life survey instruments. It is displayed by domain and includes the score for each aspect, as well as the Beta determined by regression analysis.

Appendix F

Domain Data from the 2002 Quality of Life in the U.S. Marine Corps Study

Base and Station Marines

| Residence | Beta | Score | Neighborhood | Beta | Score |
|---------------------------|-------|-------|---------------------------------|-------|-------|
| Attractiveness | 0.225 | 3.52 | Safety | 0.080 | 5.00 |
| Convenience of the Layout | 0.099 | 3.83 | Public Services | 0.064 | 4.81 |
| Convenience of Amenities | 0.098 | 3.45 | Appearance | 0.355 | 4.47 |
| Privacy | 0.105 | 2.91 | Friendliness of People | 0.153 | 4.53 |
| Amount of Space | 0.147 | 2.89 | Transportation Services | 0.055 | 3.78 |
| Location | 0.049 | 4.36 | Racial Mix | 0.050 | 4.81 |
| Comfort | 0.128 | 3.25 | Sense of Community | 0.108 | 4.08 |
| Condition | 0.204 | 3.60 | Availability of Retail Services | 0.118 | 4.49 |
| Cost | 0.102 | 4.99 | Length of Time to Work | 0.061 | 5.02 |
| Overall | 0.129 | 3.56 | Availability of Parking | 0.176 | 4.22 |
| | | | Overall | 0.122 | 4.52 |

| Leisure and Recreation | Beta | Score | Health | Beta | Score |
|-------------------------------|-------|-------|--------------------|-------|-------|
| Variety | 0.241 | 4.12 | Weight | 0.145 | 4.60 |
| Cost | 0.120 | 3.98 | Level of Energy | 0.220 | 4.62 |
| Facilities Provided | 0.278 | 4.09 | How Well You Sleep | 0.166 | 4.13 |
| Amount of Leisure Time | 0.432 | 3.62 | Endurance | 0.392 | 4.75 |
| Overall | 0.268 | 4.07 | Overall | 0.231 | 5.02 |

| Friends and Friendships | Beta | Score | Marriage / Intimate Relationship (Married) | Beta | Score |
|--------------------------------|-------|-------|---|-------|-------|
| Amount of Time You Socialize | 0.194 | 4.45 | Love and Understanding | 0.266 | 5.38 |
| Number of Marine Friends | 0.220 | 4.89 | Communication | 0.161 | 5.11 |
| Number of Civilian Friends | 0.154 | 4.57 | Conflict Resolution | 0.064 | 5.00 |
| Support and Encouragement | 0.488 | 5.10 | Support of Military Career | 0.058 | 5.22 |
| Overall | 0.264 | 5.09 | Compatibility of Interests | 0.146 | 5.35 |
| | | | Sexual Aspect | 0.360 | 5.38 |
| | | | Overall | 0.176 | 5.47 |

| Marriage / Intimate Relationship (Seriously Involved) | Beta | Score | Relationship with Your Children | Beta | Score |
|--|-------|-------|--|-------|-------|
| Love and Understanding | 0.260 | 5.69 | Education | 0.091 | 4.82 |
| Communication | 0.132 | 5.44 | Amount of Time With | 0.230 | 3.25 |
| Conflict Resolution | 0.114 | 5.38 | Quality of Time With | 0.000 | 4.23 |
| Support of Military Career | 0.052 | 5.42 | Activities Available | 0.416 | 4.19 |
| Compatibility of Interests | 0.179 | 5.84 | Childcare | 0.127 | 5.09 |
| Sexual Aspect | 0.337 | 5.78 | Military Environment | 0.173 | 4.04 |
| Overall | 0.179 | 5.82 | | | |

| Relationship with Other Relatives | Beta | Score | Income and Standard of Living (Without Children) | Beta | Score |
|--|-------|-------|---|-------|-------|
| Amount of Contact | 0.227 | 3.71 | Money for Essentials | 0.201 | 4.49 |
| Get Along With Each Other | 0.407 | 5.01 | Money for Extras | 0.260 | 3.27 |
| Support of Your Career | 0.344 | 5.63 | Money for Savings | 0.431 | 3.02 |
| Overall | 0.326 | 5.26 | Car | 0.051 | 4.93 |
| | | | Household Furnishings | 0.094 | 4.35 |
| | | | Overall | 0.207 | 3.55 |

Base and Station Marines

Income and Standard of Living

| (With Children) | Beta | Score |
|-----------------------|-------|-------|
| Money for Essentials | 0.187 | 4.55 |
| Money for Extras | 0.235 | 3.49 |
| Money for Savings | 0.355 | 3.15 |
| Car | 0.041 | 4.75 |
| Household Furnishings | 0.050 | 4.43 |
| Provide for Children | 0.142 | 4.14 |
| Overall | 0.168 | 3.70 |

| Yourself | Beta | Score |
|-----------------------|-------|-------|
| Get Along With Others | 0.103 | 5.48 |
| Progress Toward Goals | 0.145 | 4.60 |
| Physical Appearance | 0.233 | 5.03 |
| General Competence | 0.252 | 5.54 |
| Self Discipline | 0.287 | 5.61 |
| Overall | 0.204 | 5.55 |

| Military Job | Beta | Score |
|----------------------------|-------|-------|
| Peers and Coworkers | 0.050 | 4.37 |
| Pay and Benefits | 0.034 | 3.44 |
| Support and Guidance | 0.060 | 4.05 |
| Amount of Job Security | 0.000 | 5.13 |
| Growth and Development | 0.161 | 4.13 |
| Respect and Fair Treatment | 0.133 | 4.12 |
| Amount of Challenge | 0.042 | 4.49 |
| Feeling of Accomplishment | 0.274 | 4.49 |
| Leadership | 0.124 | 4.13 |
| Feedback | 0.059 | 4.31 |
| Amount of Responsibility | 0.195 | 4.81 |
| Overall | 0.103 | 4.36 |

| Global QOL | Beta | Score |
|--------------------------------|-------|-------|
| Residence | 0.078 | 3.70 |
| Neighborhood | 0.000 | 4.06 |
| Leisure and Recreation | 0.132 | 4.10 |
| Health | 0.045 | 4.90 |
| Friends and Friendships | 0.000 | 4.94 |
| Marriage/Intimate Relationship | 0.107 | 4.52 |
| Relations with Children | 0.048 | 4.84 |
| Relations with Relatives | 0.051 | 4.75 |
| Income and Standard of Living | 0.177 | 3.38 |
| Military Job | 0.200 | 3.99 |
| Yourself | 0.338 | 5.08 |
| Life as a Whole | 0.108 | 4.47 |

| Residence | Beta | Score |
|---------------------------|-------|-------|
| Attractiveness | 0.136 | 5.15 |
| Convenience of the Layout | 0.097 | 5.14 |
| Convenience of Amenities | 0.000 | 5.14 |
| Privacy | 0.100 | 5.02 |
| Amount of Space | 0.120 | 4.79 |
| Location | 0.101 | 5.18 |
| Comfort | 0.136 | 5.11 |
| Condition | 0.206 | 5.20 |
| Cost | 0.242 | 4.48 |
| Overall | 0.126 | 5.06 |

| Leisure and Recreation | Beta | Score |
|------------------------|-------|-------|
| Variety | 0.213 | 4.55 |
| Cost | 0.078 | 4.25 |
| Facilities Provided | 0.136 | 4.33 |
| Amount of Leisure Time | 0.616 | 3.15 |
| Overall | 0.261 | 3.80 |

| Friends and Friendships | Beta | Score |
|------------------------------|-------|-------|
| Amount of Time You Socialize | 0.211 | 3.70 |
| Number of Marine Friends | 0.160 | 4.67 |
| Number of Civilian Friends | 0.207 | 4.54 |
| Support and Encouragement | 0.484 | 4.96 |
| Overall | 0.266 | 4.77 |

Independent Duty Marines without Military Community Support

| | | |
|----------------------------|-------|------|
| Compatibility of Interests | 0.162 | 5.38 |
| Sexual Aspect | 0.403 | 5.23 |
| Overall | 0.173 | 5.45 |

| Marriage / Intimate Relationship (Seriously Involved) | Beta | Score |
|--|-------|-------|
| Love and Understanding | 0.208 | 5.59 |
| Communication | 0.242 | 5.40 |
| Conflict Resolution | 0.000 | 5.32 |
| Support of Military Career | 0.099 | 5.28 |
| Compatibility of Interests | 0.000 | 5.63 |
| Sexual Aspect | 0.490 | 5.69 |
| Overall | 0.173 | 5.68 |

| Relationship with Your Children | Beta | Score |
|--|-------|-------|
| Education | 0.000 | 5.10 |
| Amount of Time With | 0.209 | 3.08 |
| Quality of Time With | 0.000 | 3.93 |
| Activities Available | 0.418 | 4.01 |
| Childcare | 0.167 | 5.21 |
| Military Environment | 0.159 | 4.57 |

| Relationship with Other Relatives | Beta | Score |
|--|-------|-------|
| Amount of Contact | 0.253 | 3.88 |
| Get Along With Each Other | 0.413 | 4.96 |
| Support of Your Career | 0.366 | 5.58 |
| Overall | 0.344 | 5.17 |

| Income and Standard of Living | Beta | Score |
|--|-------|-------|
| Money for Essentials | 0.187 | 5.15 |
| Money for Extras | 0.235 | 4.21 |
| Money for Savings | 0.355 | 3.74 |
| Car | 0.050 | 5.11 |
| Household Furnishings | 0.041 | 4.86 |
| Provide for Children | 0.142 | 4.66 |
| Overall | 0.168 | 4.27 |

| Neighborhood | Beta | Score |
|---------------------------------|-------|-------|
| Safety | 0.129 | 5.16 |
| Public Services | 0.000 | 5.32 |
| Appearance | 0.312 | 5.22 |
| Friendliness of People | 0.132 | 5.00 |
| Transportation Services | 0.000 | 4.51 |
| Racial Mix | 0.036 | 4.89 |
| Sense of Community | 0.100 | 4.53 |
| Availability of Retail Services | 0.094 | 5.12 |
| Length of Time to Work | 0.094 | 5.09 |
| Availability of Parking | 0.168 | 5.14 |
| Overall | 0.117 | 5.17 |

| Military Job | Beta | Score |
|----------------------------|-------|-------|
| Peers and Coworkers | 0.056 | 4.87 |
| Pay and Benefits | 0.043 | 4.58 |
| Support and Guidance | 0.000 | 4.58 |
| Amount of Job Security | 0.000 | 5.45 |
| Growth and Development | 0.090 | 4.85 |
| Respect and Fair Treatment | 0.225 | 4.78 |
| Amount of Challenge | 0.064 | 5.37 |
| Feeling of Accomplishment | 0.386 | 4.94 |
| Leadership | 0.000 | 4.56 |
| Feedback | 0.113 | 4.75 |
| Amount of Responsibility | 0.199 | 5.35 |
| Overall | 0.107 | 4.76 |

| Health | Beta | Score |
|--------------------|-------|-------|
| Weight | 0.150 | 4.49 |
| Level of Energy | 0.254 | 4.39 |
| How Well You Sleep | 0.168 | 4.11 |
| Endurance | 0.384 | 4.49 |
| Overall | 0.239 | 4.82 |

| Global QOL | Beta | Score |
|--------------------------------|-------|-------|
| Residence | 0.054 | 4.77 |
| Neighborhood | 0.000 | 4.83 |
| Leisure and Recreation | 0.151 | 3.81 |
| Health | 0.000 | 4.84 |
| Friends and Friendships | 0.061 | 4.63 |
| Marriage/Intimate Relationship | 0.122 | 4.95 |
| Relations with Children | 0.044 | 5.11 |
| Relations with Relatives | 0.000 | 4.84 |
| Income and Standard of Living | 0.089 | 4.29 |
| Military Job | 0.287 | 4.37 |
| Yourself | 0.342 | 5.19 |
| Life as a Whole | 0.105 | 4.86 |

| Marriage / Intimate Relationship (Married) | Beta | Score |
|---|-------|-------|
| Love and Understanding | 0.221 | 5.42 |
| Communication | 0.165 | 5.15 |
| Conflict Resolution | 0.000 | 5.11 |
| Support of Military Career | 0.089 | 5.54 |

Independent Duty Marines without Military Community Support

| | | | | | |
|-----------------------------|-------|-------|---------------------------------|-------|-------|
| | | | Yourself | Beta | Score |
| | | | Get Along With Others | 0.056 | 5.74 |
| | | | Progress Toward Goals | 0.213 | 4.97 |
| | | | Physical Appearance | 0.234 | 5.06 |
| | | | General Competence | 0.198 | 5.72 |
| | | | Self Discipline | 0.332 | 5.66 |
| | | | Overall | 0.207 | 5.62 |
| Residence | Beta | Score | | | |
| Attractiveness | 0.172 | 4.86 | | | |
| Layout | 0.087 | 4.95 | | | |
| Amenities | 0.084 | 5.03 | | | |
| Privacy | 0.104 | 4.77 | | | |
| Amount of Space | 0.000 | 4.44 | | | |
| Location | 0.153 | 5.31 | | | |
| Condition | 0.135 | 4.82 | | | |
| Cost | 0.028 | 4.82 | | | |
| Safety | 0.134 | 5.41 | | | |
| Utilities Services | 0.057 | 5.14 | | | |
| Emergency Services | 0.047 | 5.23 | | | |
| Parks and Playgrounds | 0.160 | 4.60 | | | |
| Overall | 0.097 | 4.99 | | | |
| | | | Relocation | Beta | Score |
| | | | Relocation Assistance Services | 0.192 | 4.32 |
| | | | Pay and Allowances | 0.139 | 4.38 |
| | | | Temporary Lodging | 0.141 | 3.91 |
| | | | Movement/Storage | 0.236 | 4.17 |
| | | | Finding New House | 0.221 | 4.11 |
| | | | Amount of Notice | 0.165 | 4.77 |
| | | | Time of Year | 0.141 | 5.03 |
| | | | Overall | 0.181 | 4.53 |
| Support Systems | Beta | Score | | | |
| Financial Management | 0.000 | 4.59 | | | |
| Legal Services | 0.000 | 4.79 | | | |
| Counseling | 0.187 | 4.45 | | | |
| Parenting Skills | 0.000 | 5.03 | | | |
| Family Advocacy | 0.227 | 4.39 | | | |
| FMEAP | 0.114 | 3.92 | | | |
| EFMP | 0.156 | 4.42 | | | |
| LINKS | 0.110 | 4.77 | | | |
| KVN | 0.182 | 4.48 | | | |
| Spouses Leadership Seminar | 0.184 | 4.43 | | | |
| Chaplain Support | 0.000 | 4.89 | | | |
| Overall | 0.105 | 4.53 | | | |
| | | | Health Care | Beta | Score |
| | | | Hours Medical Facility is Open | 0.000 | 4.94 |
| | | | Quality of Treatment | 0.377 | 4.61 |
| | | | Quality of Office Support Staff | 0.079 | 4.57 |
| | | | Availability of Appointments | 0.093 | 4.01 |
| | | | Access to Emergency Care | 0.079 | 4.73 |
| | | | Responsiveness of TRICARE | 0.125 | 4.36 |
| | | | Ease of Filing Claims | 0.090 | 4.15 |
| | | | Promptness of Payments | 0.113 | 4.16 |
| | | | Out of Pocket Expenses | 0.203 | 4.59 |
| | | | Overall | 0.129 | 4.66 |
| Separation | Beta | Score | | | |
| Frequency | 0.277 | 4.42 | | | |
| Amount of Contact | 0.264 | 4.20 | | | |
| Predictability | 0.258 | 3.87 | | | |
| Deployment Support | 0.165 | 4.04 | | | |
| Readiness | 0.100 | 5.53 | | | |
| Overall | 0.213 | 3.67 | | | |
| | | | Children Quality of Life | Beta | Score |
| | | | Activities Available | 0.000 | 4.41 |
| | | | Education | 0.051 | 4.74 |
| | | | How Child Handles Military | 0.000 | 4.96 |
| | | | Military Environment | 0.268 | 4.81 |
| | | | Childcare | 0.519 | 5.12 |
| | | | Overall | 0.168 | 5.15 |
| Childcare | Beta | Score | | | |
| Availability | 0.083 | 4.22 | | | |
| Qualifications of Providers | 0.194 | 4.97 | | | |
| Cost | 0.041 | 4.07 | | | |
| Safety | 0.394 | 5.17 | | | |
| How Child Handles Care | 0.299 | 5.11 | | | |
| Overall | 0.202 | 5.12 | | | |
| | | | Pay and Benefits | Beta | Score |
| | | | Essentials | 0.199 | 4.89 |

Family Members (Spouse)

| | | |
|-------------------|-------|------|
| Extras | 0.337 | 3.86 |
| Savings | 0.151 | 3.33 |
| Housing Allowance | 0.278 | 3.95 |
| Overall | 0.241 | 4.06 |

| Job / Professional Development (Employed) | Beta | Score |
|--|-------|-------|
| Pay and Benefits | 0.254 | 4.25 |
| Relation to Your Skills | 0.153 | 4.94 |
| Growth and Development | 0.230 | 4.46 |
| Opportunities | 0.149 | 3.95 |
| Ease of Getting Hired | 0.172 | 4.30 |
| Help With Finding a Job | 0.000 | 3.01 |
| Educational Advancement | 0.145 | 3.47 |
| Overall | 0.158 | 4.37 |

| Job / Professional Development (Not Employed) | Beta | Score |
|--|-------|-------|
| Opportunities | 0.344 | 3.17 |
| Ease of Getting Hired | 0.217 | 3.25 |
| Help With Finding a Job | 0.204 | 3.03 |
| Educational Advancement | 0.164 | 3.33 |
| Overall | 0.232 | 3.49 |

| Global QOL | Beta | Score |
|------------------------------|-------|-------|
| Residence | 0.078 | 4.99 |
| Relocation | 0.045 | 4.53 |
| Leisure and Recreation | 0.053 | 4.56 |
| Support Systems | 0.071 | 4.53 |
| Health Care | 0.000 | 4.66 |
| Separation | 0.183 | 3.67 |
| Children Quality of Life | 0.183 | 5.15 |
| Pay and Benefits | 0.168 | 4.06 |
| Job/Professional Development | 0.152 | 4.37 |
| Childcare | 0.000 | 5.12 |
| Life as a Whole | 0.093 | 4.94 |

| Global QOL (With Children) | Beta | Score |
|---------------------------------------|-------|-------|
| Residence | 0.108 | 4.91 |
| Relocation | 0.000 | 4.55 |
| Leisure and Recreation | 0.043 | 4.53 |
| Support Systems | 0.091 | 4.55 |
| Health Care | 0.000 | 4.61 |
| Separation | 0.168 | 3.70 |
| Children Quality of Life | 0.202 | 5.16 |
| Pay and Benefits | 0.176 | 3.94 |
| Job/Professional Development | 0.128 | 4.38 |
| Childcare | 0.000 | 5.13 |
| Life as a Whole | 0.092 | 4.89 |

| Global QOL (Without Children) | Beta | Score |
|--|-------|-------|
| Residence | 0.000 | 5.12 |
| Relocation | 0.148 | 4.47 |
| Leisure and Recreation | 0.112 | 4.63 |
| Support Systems | 0.000 | 4.49 |
| Health Care | 0.000 | 4.73 |
| Separation | 0.278 | 3.68 |
| Pay and Benefits | 0.166 | 4.31 |
| Job/Professional Development | 0.198 | 4.34 |
| Life as a Whole | 0.113 | 4.99 |

Family Members (Spouse)

APPENDIX G: TERMS AND ABBREVIATIONS

- The abbreviations listed in this Appendix relate directly to this study. Some abbreviations are listed the way the study team used them in the tables, figures, and databases found in this report. They are recorded for purposes of clarity.

APPENDIX G: TERMS AND ABBREVIATIONS

| | |
|-------------------|---|
| ANOVA | Analysis of Variance |
| BEQ | Bachelor Enlisted Quarters |
| BOQ | Bachelor Officer Quarters |
| CFI | Comparative Fit Index |
| CONUS | Continental United States |
| D-T | Delighted-Terrible (Scale) |
| EQS | Equation Modeling System |
| FMEAP | Family Member Employment Assistance Program |
| FY | Fiscal Year |
| HQMC | Headquarters, U.S. Marine Corps |
| IDMwoMCS | Independent Duty Marines Without Military Community Support |
| KVN | Key Volunteer Network |
| LAW | Life as a Whole |
| L.I.N.K.S. | Lifestyle, Insights, Networking, Knowledge, and Skills Program |
| LCS | Life Characteristics Scale |
| MCFTB | Marine Corps Family Team Building |
| MCO | Marine Corps Order |
| MCS | Military Community Support |
| MDT | Multiple Discrepancy Theory |
| NCMIS | Navy Campus Management Information System |
| NPRDC | Navy Personnel Research and Development Center |
| NTIS | National Technical Information Service |
| OCONUS | Outside Continental United States |
| QoL | Quality of Life |
| SEM | Structural Equation Model |
| SRMSR | Standardized Root Mean Square Residual |
| SWL | Satisfaction With Life |
| USMC | United States Marine Corps |
| USPS | United States Postal System |