











Quality of Life (QoL) in the U.S. Marine Corps Study

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Includes Results from the Base and Station Marine, Independent Duty
Marine and Family Member Respondent Groups

Quality of Life (QoL) in the U.S. Marine Corps Study

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ABSTRACT

This report on the 2007 Quality of Life (QoL) in the U.S. Marine Corps Study describes the study and the associated survey used to determine the quality of life perceptions of both Active Duty Marines and their spouses. This is the fourth study of its kind commissioned by the Marine Corps; others were conducted in 1993, 1998 and 2002.

The study commenced in April 2007. The data for this study were collected by survey, primarily in October and November 2007. Thus, the data were collected after about 4.5 years of Marine Corps participation in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). A number of specific questions were added to the surveys in an attempt to gauge the impacts of those two operations on Marines and their families. The survey was anonymous: neither names nor social security numbers were collected from the participants in an effort to encourage frank and honest responses.

Four respondent groups, the first three of which together composed the overall group of Active Duty Marines, were selected to participate in this study: 1) Base and Station Marines, a subset that included members of the Operating Forces; 2) Independent Duty Marines; 3) Production Recruiters; and 4) Family Members (Marine spouses), who responded to their own, unique survey.

This is the third Marine Corps QoL study in which the Production Recruiters were studied as a separate respondent group; the results for that group have been published separately. It also is the second Marine Corps QoL study in which the Independent Duty Marines and Family Members were studied as separate groups; their results, along with those of the Base and Station Marines, are included in this volume.

Social Science research shows that people divide their lives into domains that can be evaluated separately. The 11 life domains in the Active Duty Marine survey assessed in this study were the same ones used in the three previous Marine Corps QoL studies:

Life Domains Examined in the 2007 Active Duty Marine Quality of Life Survey

- 1. Residence
- 2. Neighborhood
- 3. Leisure and Recreation
- 4. Health
- 5. Friends and Friendships
- 6. Marriage/Intimate Relationship

- 7. Relationship with Your Children
- 8. Relationship with Other Relatives
- 9. Income and Standard of Living
- 10. Military Job
- 11. Yourself

Overall, the Marine Corps appears to be maintaining happiness and satisfaction levels within the ranges reported in the three previous QoL studies. In fact, some improvements were seen in a number of areas, especially for the Family Members. That this has happened in the face of the significant changes in OPTEMPO and deployment frequency experienced by the Marine Corps since 2002 is a testament to the dedication and commitment of Marines and their spouses to serving their nation in this time of extended war against terror.

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EXECUTIVE SUMMARY

The objective of the 2007 Quality of Life (QoL) in the U.S. Marine Corps Study was to provide the Marine Corps with objective data that can be used to determine the impacts of initiatives instituted as a result of past QoL study efforts as well as the state of Marine perceptions and feelings about the quality of life in the Marine Corps.

ES.1 BACKGROUND

For many years, the U.S. Marine Corps (USMC) has stated clearly its view of the importance of the quality of life of its members. The Marine Corps has made a commitment since the early 1990s to studying the quality of life perceptions and satisfaction of its members and to applying remedies, where possible, to identified quality of life shortcomings. Since 1993, the Marine Corps has conducted a series of QoL studies designed to measure the perceptions, happiness, satisfaction, and aspirations of the Marine Corps community in various life domains.

This 2007 QoL Study has been preceded by three previous studies:

- The first Marine Corps QoL study, conducted in 1993 measured QoL perceptions of Active Duty Marines as a single group.
- The second Marine Corps QoL study, conducted in 1998, comprised an analysis somewhat similar to its predecessor, but concentrated on the assessment of the trends in perceptions of overall happiness and satisfaction for Active Duty Marines. This study assessed, for the first time, the specific quality of life perceptions of Marine Corps Production Recruiters.
- The third Marine Corps QoL study was conducted in 2002. It applied the general methodology used in the two previous QoL studies, compared its results with those studies, and performed trend analyses where applicable. While continuing to conduct a separate analysis of Production Recruiters, this study expanded its analytical base beyond that of the 1998 QoL Study to include as separate elements of the analysis two new demographic groups: Independent Duty Marines (a subset of the Active Duty Marines) and Family Members/spouses.

The Marine Corps has used the results of these previous QoL studies to make informed decisions regarding quality of life programs and funding. The 2007 QoL Study determined, through questionnaire distribution and response and trend analyses, a measure of the current quality of life perceptions and satisfaction of Active Duty Marines to support further program management refinement. This study also provides, for only the second time, the perspectives of Headquarters Marine Corps (HQMC)-defined Independent Duty Marines as a separate respondent group and the unique perspectives of family members (defined as Marine spouses) on their families' quality of life. (This is the third Marine Corps QoL study in which the Production Recruiters were studied as a separate respondent group; the results for that group have been published separately.) Note that it is the first Marine Corps QoL Study to measure quality of life perceptions since the start of the increased operational tempo (OPTEMPO) experienced by the

Quality of Life (QoL) in the U.S. Marine Corps Study Final Report

Marine Corps as a result of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF).

ES.2 METHODOLOGY

The data for this study were collected by survey, primarily in October and November 2007. Thus, the data were collected after about 4.5 years of Marine Corps participation in OIF and OEF. A number of specific questions were added to the surveys in an attempt to gauge the impacts of those two operations on Marines and their families. The survey was anonymous: Neither names nor social security numbers were collected from the participants in an effort to encourage frank and honest responses.

ES.2.1 Survey Instruments

The 2007 QoL Study was a dual effort planned to gain input from both Marines and their families/spouses about their quality of life. Two separate survey instruments were used, one for the Active Duty Marine respondents and one for Family Members/spouses. Each of the three previous studies of Marine Corps quality of life assessed the satisfaction and happiness of Active Duty Marines in 11 life domains and Life as a Whole. Those same 11 life domains, shown in Table ES-1, were used in the 2007 QoL Study survey instrument with only relatively minor modifications to the previous survey instrument. The most significant of these modifications were demographic questions added to address the impacts of the increased Marine Corps OPTEMPO since the events of 11 September 2001 and the ensuing conflicts in Afghanistan and Iraq.

Table ES-1. Life Domains Examined in the 2007 Active Duty Marine QoL Survey

	•	
Life Domains Examined		
Residence	Relationship with Your Children	
Neighborhood	Relationship with Other Relatives	
Leisure and Recreation	Income and Standard of Living	
Health	Military Job	
Friends and Friendships	Yourself	
Marriage/Intimate Relationship		

The Family Member survey instrument asked Marine spouses about themselves and their children. This survey instrument was very similar to that used in the 2002 QoL Study and also incorporated demographic questions added to address the impacts of the increased Marine Corps OPTEMPO since the initiation of the Global War on Terror. The 10 life domains considered in the Family Member survey are shown in Table ES-2.

Table ES-2. Life Domains Examined in the 2007 Family Member QoL Survey

Life Domains Examined

Residence
Relocation
Leisure and Recreation
Support Systems
(e.g., Marine Corps Community Services
(MCCS) Programs and Services)
Health Care

Separation
Children Quality of Life
Pay & Benefits
Your Job/Professional Development
Marine Corps Life & You
(Spouse Retention Desires)

Four respondent groups, the first three of which together composed the overall group of Active Duty Marines and responded to the Active Duty Marine survey, were selected to participate in this study: 1) Base and Station Marines, a subset that included members of the Operating Forces; 2) Independent Duty Marines (defined by HQMC);

3) Production Recruiters (published under separate cover); and 4) Family Members (Marine spouses), who responded using the Family Member survey.

ES.2.2 Survey Administration

The responses from the four respondent groups were collected in four distinct ways. These included:

- On-site collection of responses from Base and Station Marines at USMC installations by Survey Administration Teams composed of two members of the Study Team accompanied by a representative from each of the Study Sponsor (HQMC (M&RA)) and MCCDC OAD.
- 2) On-site collection of responses from Base and Station Marines at selected (generally smaller) USMC installations by Command-designated Base/Station points of contact (POCs). The Study Team mailed surveys and instructions to the POCs, who administered and returned the completed surveys by mail to the Study Team.
- 3) Mail-in collection of survey responses from Independent Duty Marines and Family Members. The survey appropriate to the recipient was mailed along with instructions, and returned via postage-paid, return envelope.
- 4) Collection of responses using a hybrid of the previous two methods in which the survey instruments and instructions were mailed to Recruiting Station POCs at each of the 48 Marine Corps Recruiting Stations and then administered/ distributed by those POCs to individual Production Recruiters who mailed their responses directly back to the Study Team.

The number of responses received from each of the four respondent groups is summarized in Table ES-3.

Table ES-3. Number of Survey Responses from the Four Respondent Groups

Number of Survey Responses			
Base and Station Marines 4,812 Family Members 2,1			
Independent Duty Marines	1,085	Production Recruiters (published under separate cover)	2,238

ES.2.3 Assessing Quality of Life

ES.2.3.1 Objective Measures of Quality of Life

Objective 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. 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.

ES.2.3.2 Subjective Measures of Quality of Life

In contrast to objective measures, subjective measures ask individuals to evaluate the circumstances of their lives. Subjective measures of quality of life are thought to consist of affective and cognitive components, as well as expectations (i.e., have/want components). The affective component is commonly operationalized as happiness. 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. The more cognitive component of quality of life is operationalized as satisfaction. Frequently subjective well-being is merely measured with an evaluation of satisfaction (e.g., "How satisfied are you with your life as a whole?"). Happiness and satisfaction appear to be very similar constructs but there are underlying differences, and they certainly were rated differently by the survey respondents. Conceptually, happiness is an appraisal of an individual's emotional experience, whereas satisfaction involves the comparison of objective conditions to some internal standards.

The practice of including both happiness and satisfaction measures in each life domain was continued in the 2007 QoL Study. Happiness-related/affective questions were measured on a seven-point Delighted-Terrible ("D-T") scale, with scores ranging from 1 ("Terrible") through 4 ("Neither Unhappy Nor Pleased") to 7 ("Delighted"). Satisfaction-oriented/cognitive questions, with sub-sections related to the respondents' satisfaction with various aspects of a life domain and overall satisfaction with that entire domain, were rated on a seven-point scale, ranging from 1 ("Completely Dissatisfied") through 4 ("Neutral") to 7 ("Completely Satisfied"). Quality of life was measured in each of the life domains and a Global Quality of Life composite score, based on the responses to six (for the Active Duty Marines) or three (for the Family Members) individual questions from the survey instruments, was generated. Global Quality of Life was measured on a seven point scale, with 7.0 representing the highest perceived quality of life, 4.0 representing a neutral perception, and 1.0 representing the lowest perceived quality of life.

ES.3 RESULTS OF THE ANALYSIS OF RESPONSES

Overall, the Marine Corps appears to be maintaining happiness and satisfaction levels within the ranges reported in the three previous QoL studies. In fact, some improvements were seen in a number of areas, especially for the Family Members. That this has happened in the face of the significant changes in OPTEMPO and deployment frequency experienced by the Marine Corps since 2002 is a testament to the dedication and commitment of Marines and their spouses to serving their nation in this time of the extended war against terror.

Summaries of survey responses are provided in separate sections below, one each for the Base and Station Marine, Independent Duty Marine, and Family Member respondents. Summaries focus on Global Quality of Life as well as Happiness and Satisfaction within each of the life domains examined.

ES.3.1 Base and Station Marines (Includes Members of the Operating Forces)

Figure ES-1 shows the scores for Global Quality of Life for 2007, as well as the 2002, 1998, and 1993 scores. The scores, ranging from 4.49 to 4.62 on 1-to-7 scale, are very similar and represent a somewhat positive perception of overall Quality of Life. A slight increase, by 0.06 was seen in 2007 from the 2002 score, raising the score to 4.56, solidly above neutral and the second-highest score ever calculated.

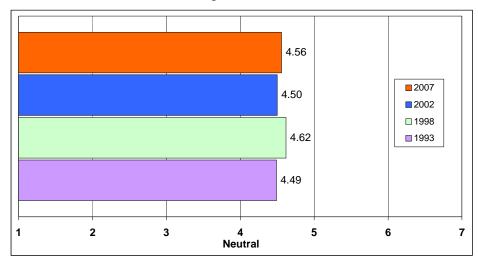


Figure ES-1. Trends in Global Quality of Life for the Base and Station Respondents

While the Global Quality of Life scores for 1993 and 1998 were taken directly from the text of the 2002 QoL Study Report, the Global Quality of Life score for 2002 was recalculated from the Government-furnished data provided to the Study Team. Applying the same rules and methodology to the 2002 respondent data as were applied to the 2007 data maximized the comparability between these two result sets.

Table ES-4 shows the life domain rankings, based on the happiness and satisfaction scores from this 2007 QoL Study. It is clear that happiness and satisfaction were weighted differently by the respondents. Satisfaction received a higher score in seven

of the 10 life domains in which a single happiness score was computed and happiness received a higher score in two of the 10; one life domain (Health) received the same score in both measures. In general, what could be characterized as 'family/personal relationship' life domains were rated the highest. Relationship with Your Children (when the opinions of the parents living with their children were considered), Marriage/Intimate Relationship, Relationship with Other Relatives, and Friends and Friendships, in that order, received the four highest mean happiness scores. The same four life domains received four of the five highest mean satisfaction scores (Yourself received the second highest score). The life domain with which the respondents were most displeased was Income and Standard of Living. That life domain received the second-lowest mean happiness score and the lowest mean satisfaction score. Both scores hovered around the neutral score of 4.0. Residence and Military Job also received generally low ratings in both happiness and satisfaction: The low scores in the Residence life domain primarily were due to the unhappiness and dissatisfaction of lower ranking enlisted personnel with the Bachelor Enlisted Quarters (BEQ).

Table ES-4. Overall Mean Happiness and Satisfaction Scores in Each of the Life Domains for the 2007 Base and Station Marine Respondents

Happiness		Satisfaction	
How Do You Feel about	Mean ¹	How Satisfied Are You Overall with:	Mean ²
Relationship with Your Children	6.06/4.23 ³	Marriage/Intimate Relationship	5.53
Marriage/Intimate Relationship	5.25	Yourself	5.41
Relationship with Other Relatives	4.92	Relationship with Your Children	5.29
Friends and Friendships	4.90	Relationship with Other Relatives	5.22
Health	4.88	Friends and Friendships	5.18
Leisure and Recreation	4.80	Health	4.88
Yourself	4.69	Your Neighborhood	4.66
Your Neighborhood	4.52	Military Job	4.50
Your Residence	4.22	Your Residence	4.24
Income and Standard of Living	4.10	Leisure and Recreation	4.18
Military Job	4.06	Income and Standard of Living	3.98

- 1. Affective/Happiness Scale: 1 = Terrible; 4 = Neither Unhappy Nor Pleased; 7 = Delighted
- 2. Cognitive/Satisfaction Scale: 1 = Completely Dissatisfied; 4 = Neutral; 7 = Completely Satisfied
- 3. First value represents the opinions of those parents living with their child(ren); second score represents the opinions of those parents <u>not</u> living with their children.

The data were divided into seven groups according the pay grade of the respondent. These Pay Grade Groups were: E-2/E-3, E-4/E-5, E-6/E-7, E-8/E-9, WO, O-1 to O-3 and O-4 to O-10. The two lowest groups generally had the lowest happiness and satisfaction scores across each of the life domains. The exception to this general rule was the Warrant Officers, who in several life domains (e.g., Health and Friends and Friendships) had either the lowest or relatively low averages, and the senior officers, for whom satisfaction with Friends and Friendships was relatively low. In contrast, Warrant Officers were found to be extremely satisfied with their jobs. The E-8/E-9 and O-4 to O-10 Pay Grade Groups generally were the most happy and satisfied overall.

Happiness and satisfaction scores, decomposed by the base or station to which the respondent was assigned, were compared in selected life domains. It was found that the larger bases/stations (e.g., Camp Pendleton, Camp Lejeune, Camp Butler and MCAGCC (Twentynine Palms)), to which are assigned more enlisted Marines in the lower Pay Grades Groups, generally received lower scores in happiness and satisfaction across the life domains examined. However, low scores also were seen in several life domains at MCAS Beaufort, MCB Hawaii and MCAS Iwakuni, all relatively small installations. However, MCAS Iwakuni also received high scores in both the Health and Marriage/Intimate Relationship life domains. Headquarters Battalion Henderson Hall and MCB Quantico generally received higher than average scores for both happiness and satisfaction, a reflection of the more-senior pool of Marines assigned to those installations.

In comparing the happiness and satisfaction scores for the six racial/ethnic groups considered in this study, happiness and satisfaction were found generally to be highest for the Blacks/African-Americans. However, the exception occurred in the Marriage/ Intimate Relationship life domain, where this subgroup was among the least happy and was the least satisfied. The Spanish/Hispanic population scored highly across the life domains with the exception of their satisfaction with their relationship with their children. The smaller racial/ethnic groups (i.e., Asian/Pacific Islander, Native American/Aleut/Eskimo, and "Other") generally had the lowest happiness and satisfaction scores, although a few exceptions existed. For example, the Asian/Pacific Islanders were highly satisfied with their relationships with other relatives and with their income and standard of living. The Native American/Aleut/Eskimo subgroup scored the highest in satisfaction with relationships with their children. Whites scored relatively low in their satisfaction with friends and friendships.

The female Base and Station respondents generally were found to be happier and more satisfied than their male counterparts. However, the females gave lower scores to Health, Marriage/Intimate Relationship and Military Job than the males. Ambiguity was found in the responses in the Friends and Friendships life domain, for which females responded as being more satisfied, but less happy, than the males.

Review of the results of the decomposition by marital/parental status showed that the respondents who had never been married were generally the least happy and satisfied, reflecting the general low pay grade mix in this subgroup. The subgroup, however, was found to be the most satisfied with their marriage/intimate relationship. In many life domains, respondents with children were generally happier and more satisfied than respondents without children, regardless of their current marital status. This trend was true in three of the four income and standard of living comparisons, indicating some degree of appreciation for the monetary considerations given to parents in the Marine Corps. Respondents <u>not</u> living with their children also were found to be significantly less happy than those living with their children.

In order to determine the factors that were key to the reported overall satisfaction with Global Quality of Life, multiple regression of satisfaction in the individual life domains on the Life as a Whole composite was performed for the Base and Station respondents.

The results are shown in Figure ES-2. The overall domain satisfaction responses are located vertically in relation to their influence on the Global Quality of Life assessment as indicated by the regression analysis.

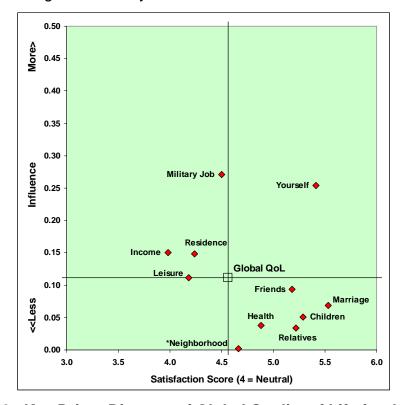


Figure ES-2. Key Driver Diagram of Global Quality of Life for the Base and Station Respondents

The four most influential life domains were Military Job, Yourself, Income and Standard of Living, and Residence. This was a slight re-ordering of the results from the 2002 QOL Study, which had found Yourself, Military Job, and Income and Standard of Living (in that order) to be the top three drivers. The influence of the Residence life domain increased markedly in the 2007 results: In 2002, Residence was only the sixth most influential life domain (less influential than Leisure and Recreation and Marriage/Intimate Relationship) and its influence fell below that of the overall composite. In 2002, Marriage/Intimate Relationship was the fifth most influential; however for 2007, Marriage/Intimate Relationship dropped below Friends and Friendships and Leisure and Recreation into seventh place in terms of influence.

Income and Standard of Living continued to provide a good opportunity for improvement in the Global Quality of Life of the Base and Station respondents, having the lowest satisfaction score, and the third highest influence. Residence also would provide some opportunity. The potential for Military Job and Yourself to influence Global Quality of Life was limited by their already (relatively) high satisfaction ratings (i.e., equal to or greater than the overall Global Quality of Life mean).

Figure ES-3 shows the trends in the overall mean affective/happiness scores across the 11 life domains for each of the four Marine Corps QoL studies, while Figure ES-4 is an equivalent graphic for the overall mean cognitive/satisfaction scores. No pronounced trend in either happiness or satisfaction could be discerned when the life domain scores for the Base and Station Marine respondents were examined. Between 2002 and 2007, mean happiness scores increased in five of the 11 life domains (Residence, Neighborhood, Marriage/Intimate Relationship, Income and Standard of Living (where the largest change in the mean score in any of the life domains, 0.26, occurred), and Military Job). Mean satisfaction scores increased in six of the 11 life domains (Residence, Neighborhood, Leisure and Recreation, Relationship with Your Children, Income and Standard of Living (where again the largest change in the mean score in any of the life domains, 0.35, occurred), and Military Job. The average mean happiness and mean satisfaction score increased by 0.032 and 0.073, respectively. Also, when the change in the Global Quality of Life score since 2002 was examined, a slight (0.06) increase was seen, raising that score to 4.56, solidly above neutral.

In many ways, the results for the Base and Station Marine respondents were good news: 4.5 years into OIF and OEF, the attitudes of Base and Station Marines regarding their quality of life do not appear to have changed to any great extent relative to those expressed in 2002, prior to the commencement of combat operations in Iraq and Afghanistan, and appear to have risen slightly. The same overall themes that were seen in earlier Marine Corps QoL studies – overall displeasure with the BEQ and the Bachelor's Officer Quarters (BOQ) and with income and standard of living, and lower levels of both happiness and satisfaction on the part of the lower-ranking enlisted Marines – were seen again in just about every life domain.

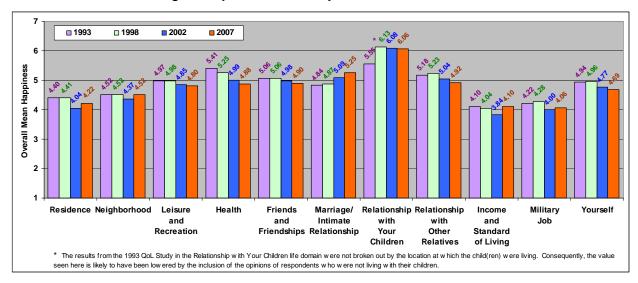


Figure ES-3. Trends in Overall Mean Happiness Scores in the 11 Life Domains:

Base and Station Marine Respondents

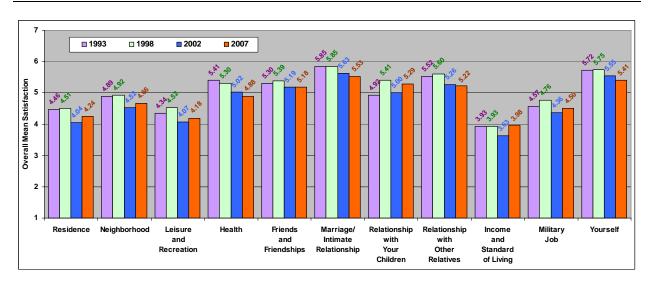


Figure ES-4. Trends in Overall Mean Satisfaction Scores in the 11 Life Domains:

Base and Station Marine Respondents

ES.3.2 Independent Duty Marines

The 2007 Global Quality of Life score for Independent Duty Marines was determined to be 4.76 on 1-to-7 scale. Figure ES-5 shows the Global Quality of Life scores for the 2007 Independent Duty Marine respondents, the 2002 Independent Duty Marine respondents and the 2007 Base and Station respondents. The score was higher than that found for the Base and Station respondents (4.56), but was a slight decline (by 0.15) from the 2002 quality of life score for the Independent Duty Marines. However, the difference was not considered to be significant by the criterion of this study. The score represented a generally positive perception of overall Quality of Life, one that was more positive than that of the Base and Station Marines.

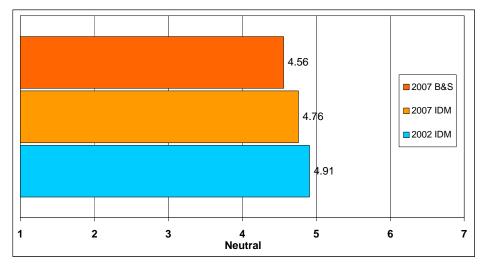


Figure ES-5. Comparison of Global Quality of Life for the 2007 Independent Duty

Marine Respondents with Other Selected Groups

UNCLASSIFIED

Quality of Life (QoL) in the U.S. Marine Corps Study Final Report

Table ES-5 shows the life domain rankings, based on the happiness and satisfaction scores from this 2007 QoL Study. Again it is clear that happiness and satisfaction were weighted differently by the respondents. Satisfaction received a higher score in seven of the 10 life domains in which a single happiness score was computed and happiness received a higher score in three of the 10. In general, what could be characterized as 'family/personal relationship' life domains again were rated the highest. Relationship with Your Children (when the opinions of the parents living with their child(ren) were considered), Marriage/Intimate Relationship, Relationship with Other Relatives, and Friends and Friendships, in that order, were included in the five highest mean happiness scores (Health received third highest happiness score, an increase in its relative position when compared with the Base and Station Marine respondents). The same four life domains received four of the five highest mean satisfaction scores (Yourself received the third highest satisfaction score, one step downward from the second-highest score given it by the Base and Station Marine respondents).

Again, Income and Standard of Living was the life domain with which the respondents were most displeased: That life domain received the second-lowest mean happiness score and the lowest mean satisfaction score. However, in contrast with what was seen for the Base and Station respondents, both scores were noticeably above the neutral score of 4.0, with the happiness score in the upper part of the 4-to-5 range (probably reflecting the more-senior mix of pay grades in the Independent Duty Marine respondent sample). Residence and Military Job also received generally low ratings.

When comparisons were made between the Independent Duty Marine and the Base and Station Marine respondents, a clear trend was seen: Mean happiness and satisfaction scores both overall and in every individual life domain were higher for the Independent Duty Marines. This likely was driven most strongly by the more-senior rank structure of that group.

Table ES-5. Overall Mean Happiness and Satisfaction Scores in Each of the Life Domains for the 2007 Independent Duty Marine Respondents

Happiness		Satisfaction	
How Do You Feel about	Mean ¹	How Satisfied Are You Overall with:	Mean ²
Relationship with Your Children	6.22/4.45 ³	Marriage/Intimate Relationship	5.63
Marriage/Intimate Relationship	5.50	Relationship with Your Children	5.63
Health	5.15	Yourself	5.51
Relationship with Other Relatives	5.08	Relationship with Other Relatives	5.36
Friends and Friendships	4.99	Friends and Friendships	5.19
Leisure and Recreation	4.87	Health	5.14
Yourself	4.86	Your Neighborhood	4.97
Your Residence	4.80	Your Residence	4.88
Your Neighborhood	4.76	Military Job	4.78
Income and Standard of Living	4.62	Leisure and Recreation	4.51
Military Job	4.34	Income and Standard of Living	4.35

- 1. Affective/Happiness Scale: 1 = Terrible; 4 = Neither Unhappy Nor Pleased; 7 = Delighted
- 2. Cognitive/Satisfaction Scale: 1 = Completely Dissatisfied; 4 = Neutral; 7 = Completely Satisfied
- 3. First value represents the opinions of those parents living with their child(ren); second score represents the opinions of those parents not living with their children.

One decomposition of the Independent Duty Marine respondent sample split them into two groups as a function of whether or not they lived within an hour or less of a military installation (defined as being with or without Military Community Support, or IDMw/MCS and IDMw/oMCS). Although the IDMw/oMCS subgroup was a major focus of the 2002 QoL Study, few major differences were found between the two subgroups. The IDMw/MCS were both slightly happier and slightly more satisfied than the IDMw/oMCS, although none of the differences were particularly significant. The only life domain in which the IDMw/oMCS were both happier and more satisfied was the Residence life domain. They also were happier, but less satisfied, with their Health than were the IDMw/MCS respondents.

In comparing the happiness and satisfaction scores for the seven Pay Grade Groups, the two lowest enlisted Pay Grade Groups generally had the lowest happiness and satisfaction scores in each of the life domains. The E-8/E-9 and O-4 to O-10 Pay Grade Groups again generally were the most happy and satisfied overall. However, notable differences were seen from the results for the Base and Station Marines. In that larger group, the E-2/E-3 Pay Grade Group almost invariably had the lowest scores, for both happiness and satisfaction, in any life domain. For the Independent Duty Marines, the incidence of lowest score was split about evenly between the E-2/E-3 and the E-4/E-5 Pay Grade Groups. Overall, however, the former subgroup had the lowest Global Quality of Life mean score, 4.34, compared with a score of 4.66 for the E-4.E-5 Pay Grade Group (the only other Pay Grade Group score below 5.0).

Of the six racial/ethnic groups considered in this study, the Black/African-American subgroup had the highest overall Global Quality of Life, but had only four of the highest mean happiness scores. The White and Asian/Pacific Islander subgroups each had the highest score in three of the life domains. The results for satisfaction were somewhat

different: The White subgroup had the highest mean satisfaction score in seven of the life domains, while the Black/African American and Asian/Pacific Islander subgroups each had the highest scores in three life domains. The small Native American/Aleut/Eskimo and "Other" subgroups generally had the lowest happiness and satisfaction scores with very few exceptions. They each had the lowest mean happiness scores in six life domains, but the Native American/Aleut/Eskimo subgroup was by far the least satisfied, having the lowest mean satisfaction score in nine life domains. These results generally agreed with those found for the Base and Station respondents: Black/ African Americans scored highly, while the smaller subgroups scored poorly. However, the high satisfaction levels of the White Independent Duty Marines were not seen for their Base and Station counterparts.

Comparing genders, the male Independent Duty Marine respondents generally were happier (in nine of the 12 life domain/decompositions) and more satisfied (in seven of the 11 life domains) than their female counterparts. However, the males gave lower scores to Neighborhood and Marriage/Intimate Relationship than the females. These results contradicted those for the Base and Station Marines, for whom the females had the higher Global Quality of Life score.

The scores from the decomposition by marital/parental status broke into two clear segments: Those respondents who were married, and those who were not. This dichotomy was much more pronounced than what was seen for the Base and Station respondents. Within the segments of the Independent Duty Marine sample, the respondents who were Married with Children were generally happier and more satisfied, while the members of the Divorced/Widowed/Separated with Children subgroup were the least happy and most dissatisfied. Parents were both happier and more satisfied than non-parents with their Income and Standard of Living in all cases, indicating at least some degree of appreciation for the monetary considerations given to parents in the Marine Corps. The Never Been Married subgroup stood out in one area: Their satisfaction with their intimate relationship.

In order to determine the factors that were key to the reported overall satisfaction with Global Quality of Life, multiple regression of the individual life domain satisfactions on the Life as a Whole composite was performed for the Independent Duty Marine respondents. The results are shown in the key driver diagram in Figure ES-6. The overall domain responses are located vertically in relation to their influence on the Global Quality of Life assessment as indicated by the regression analysis.

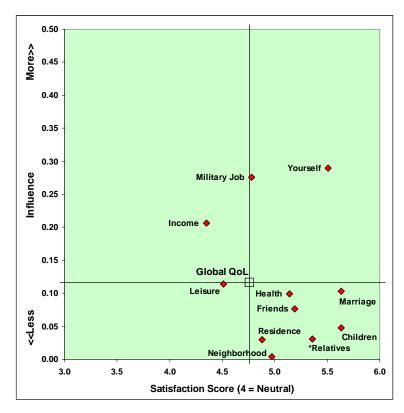


Figure ES-6. Key Drivers of Global Quality of Life for the Independent Duty

Marine Respondents

The three most influential life domains were Yourself, Your Military Job, and Income and Standard of Living. All the life domains except Income and Standard of Living and Leisure and Recreation had mean scores above the overall composite mean, indicating that the impact of improving satisfaction in all but those two life domains on improvements in Global Quality of Life might be limited. Income and Standard of Living provided the best opportunity for improvement in Global Quality of Life: It had both a mean satisfaction score less than that of the Global Quality of Life and a high influence. Leisure and Recreation provided another, but less powerful, opportunity for improvement: It had an influence level only slightly below that of the composite and a mean score below the composite mean, indicating that efforts to improve satisfaction in that life domain, specifically (based on the insights gained during the analysis of that domain) by increasing the amount of time available for leisure activities and, to a lesser extent, by reducing the cost of leisure activities, likely would lead to some substantive improvements in Global Quality of Life for the Independent Duty Marines.

Figure ES-7 shows the trends in the overall mean affective/happiness score across the 11 life domains and for each of the two Marine Corps QoL studies performed in which the Independent Duty Marines were treated as a separate respondent group, while Figure ES-8 is an equivalent graphic for the overall mean cognitive/satisfaction scores. Overall, a slight downward trend was seen. Between 2002 and 2007, mean happiness scores decreased in eight of the 11 life domains (Residence, Neighborhood, Leisure and Recreation, Friends and Friendships, Relationship with Your Children, Relationship

with Other Relatives, Military Job, and Yourself (where the largest change in mean happiness scores in any of the life domains, -0.25, occurred)). Mean satisfaction scores decreased in seven of the 11 life domains (Neighborhood, Leisure and Recreation, Health, Friends and Friendships, Marriage/Intimate Relationship, Relationship with Your Children and Yourself), although most of the decreases were very small (only one, a decrease of 0.14 in the Marriage/Intimate Relationship life domain, was greater than 0.10 in magnitude).

Thus, there appeared to be a slight overall downward movement in the perception of quality of life on the part of the Independent Duty Marines. This life domain trend-based assessment was supported by the Global Quality of Life score computed for the Independent Duty Marines: The 4.56 score computed from the 2007 data reflected a decline of 0.15 from the 2002 score. That small change ran counter to the results for the Base and Station respondents, where Global Quality of Life increased slightly.

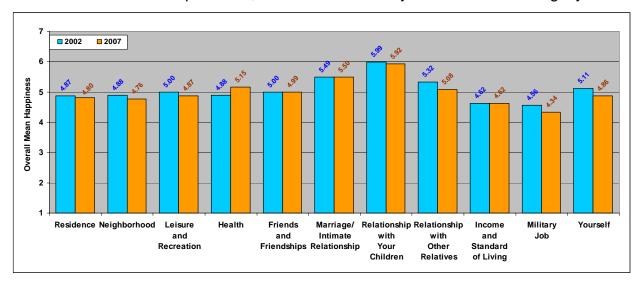


Figure ES-7. Trends in Overall Mean Happiness Scores in the 11 Life Domains: Independent Duty Marine Respondents

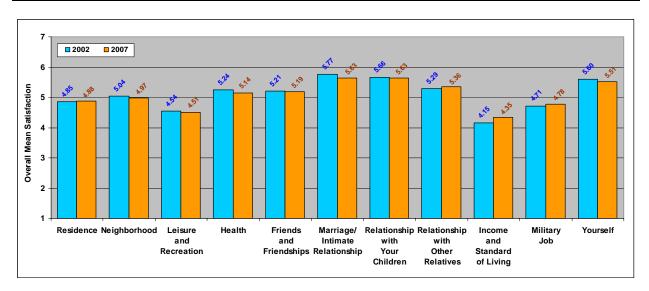


Figure ES-8. Trends in Overall Mean Satisfaction Scores in the 11 Life Domains: Independent Duty Marine Respondents

ES.3.3 Family Members

The 2007 Global Quality of Life score for Family Member respondents was determined to be 5.09 on a 1-to-seven scale. The score represented a positive perception of overall quality of life. This was a slight (+0.15) improvement in the perceived quality of life from 2002, which was calculated to be 4.94. See Figure ES-9. Only one life domain in the Family Member survey, Separation, contained a happiness question. All the others contained only satisfaction questions. The contrast between the happiness and satisfaction results in the Separation life domain will be discussed in some detail below.

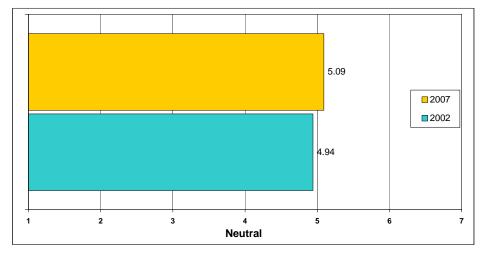


Figure ES-9. Trends in Global Quality of Life for the Family Member Respondents

Table ES-6 shows the ranking of the weighted overall mean satisfaction scores from the life domains in the Family Member survey). Contrary to the results seen for the two Active Duty Marine respondent groups, Residence received the highest satisfaction score from the Family Member respondents, one third of the way between "Somewhat"

Satisfied" and "Satisfied." Separation received the lowest score, and was the only life domain for which the mean satisfaction score was below "Neutral." Note also that Support Systems, while its overall mean score of 4.60 ranked it comfortably between "Neutral" and "Somewhat Satisfied," was the third-lowest ranking life domain.

Table ES-6. Overall Mean Satisfaction Scores in Each Life Domain for the 2007 Family Member Respondents

Satisfaction		
How Satisfied Are You Overall with:	Mean ¹	
Residence	5.31	
Children Quality of Life	5.23	
Health Care	5.00	
Your Job/Professional Development	4.78	
Relocation	4.75	
Leisure and Recreation	4.67	
Support Systems	4.60	
Pay & Benefits	4.43	
Separation	3.87	

^{1.} Cognitive/Satisfaction Scale: 1 = Completely Dissatisfied;

For the spouses of Marines in the seven Pay Groups, in general, satisfaction was lowest for the spouses of Marines in the E-2/E-3 Pay Grade Group: Mean satisfaction scores for this group were the lowest seen in seven of the nine life domains examined (this subgroup also had the lowest mean happiness score). In the other two life domains – Support Systems and Health Care – the lowest scores were seen for the spouses of Marines in the E-4/E-5 Pay Grade Group (with the spouses of Marines in the E-6/E-7 Pay Grade Group close behind). Overall, the spouses of Marines in the E-2/E-3 Pay Grade Group also had the lowest Global Quality of Life score.

Looking at the highest-scoring groups, the story was markedly different. The highest satisfaction scores were seen for the spouses of Warrant Officers in six life domains, while the spouses of members of the E-8/E-9 Pay Grade Group had the highest scores in three life domains (and also the highest happiness score in the Separation life domain). The spouses of Marines in the O-4 to O-10 Pay Grade Group had the highest score in one life domains (perhaps not surprisingly, Pay & Benefits). However, while they almost never were the highest scoring subgroup, the spouses of Marines in the O-4 to O-10 Pay Grade Group consistently ranked among the highest scoring subgroups in all/most of the life domains. That consistency no doubt contributed to the members of that subgroup having the highest Global Quality of Life score.

Comparing the satisfaction scores in selected life domains decomposed by the base or station to which the respondent's spouse was permanently assigned, several installations stood out on either end of the spectrum for having either a number of the highest or lowest scores. Headquarters Battalion Henderson Hall and MCB Quantico generally received higher than average scores for satisfaction (with the exception of

^{4 =} Neutral; 7 = Completely Dissatisfied

Health Care), a reflection of the more-senior pool of Marines assigned to those installations. On the other hand, MCAS Beaufort and MCRD Parris Island stood out for having received low ratings in multiple life domains.

Based on the results of the decomposition by parental status, the respondents with children were found to be more satisfied and, in the one life domain that measured it, happier than their childless cohorts. The biggest differences between the respondents with children and the respondents without children were found in the happiness and satisfaction with Separation. In both cases, the respondents with children were happier and more satisfied, and by fairly large margins. The Global Quality of Life composite score was computed for four groups, depending on whether the respondent was living with or without either their spouses and/or their children. Those Family Member respondents who were not living with their spouses were found to have essentially the same Global Quality of Life score regardless of whether they were living with or without children. The same was true for those Family Member respondents who were living with their spouses: Their Global Quality of Life scores were only slightly higher if they also were living with their children.

In order to determine the factors that were key to the reported overall satisfaction with Global Quality of Life, multiple regression of the individual life domain satisfactions on the Life as a Whole composite was performed for the Family Member respondents. This analysis was performed separately for respondent groups with and without children. The results are shown in two key driver diagrams. In these diagrams, the overall life domain responses are located vertically in relation to their influence on the Global Quality of Life assessment as indicated by the regression analysis. Any life domain having a negative correlation to the Composite Quality of Life and is marked with an asterisk.

Figure ES-10 is the diagram for the Family Member respondents with children. The three most influential domain satisfactions were satisfaction with Marine Pay & Benefits. Children Quality of Life, and Separation. Visual comparison with the 2002 QoL Study Report revealed that these three life domains also were found to be the top drivers in that study; however, the order of precedence was different (Separation was first, followed by Children Quality of Life). Noteworthy were the large decreases in influence for both the Separation and Your Job/Professional Development (shown as "Spouse Job") life domains in 2007. The least influential life domains were Childcare and Your Job/Professional Development. In the 2002 QoL Study, Childcare was one of two life domains with the lowest influence, but Your Job/Professional Development, as mentioned earlier, was much more influential in 2002 (the fourth most influential and a good opportunity for improvement) than in 2007. Separation and Marine Pay & Benefits represented the best opportunities for improvement in 2007, as they did in 2002. Aside from Your Job/Professional Development and Childcare (where the mean fell below that of the composite value in 2007), all other domains remained in the same quadrant of the diagram as in 2002.

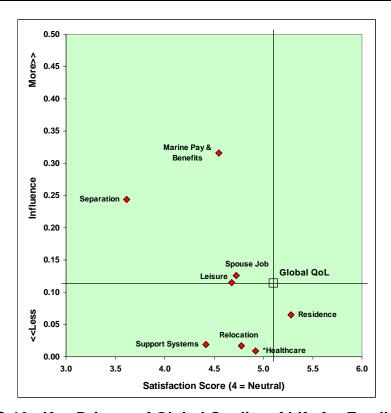


Figure ES-10. Key Drivers of Global Quality of Life for Family Member Respondents with Children

Figure ES-11 is the diagram for those Family Member respondents without children. For this subgroup of respondents, the top three most influential domain satisfactions were satisfaction with Marine Pay & Benefits, Separation and Your Job/Professional Development (again, shown as "Spouse Job"). Visual comparison with the 2002 QoL Study Report revealed that these three domains also were found to be the top drivers in that study; however the influence of Your Job/Professional Development was much lower in 2007 than in 2002 (being second highest in 2002 and third highest, and just barely above the composite influence, in 2007). The least influential life domains were Health Care, Relocation, and Support Systems. In 2002 Health Care, Support Systems and Residence showed the lowest influence, and Relocation had much more influence (the fourth most influential and a good opportunity for improvement). Their combination of high influence and low satisfaction scores made Separation and Marine Pay & Benefits the best opportunities for improvement in 2007; in 2002, Separation and Spouse Job provided the best opportunities for improvement. Aside from Relocation, the influence of which had dropped noticeably from above the composite mean to almost zero, all other domains remained in the same quadrant of the diagram as in 2002.

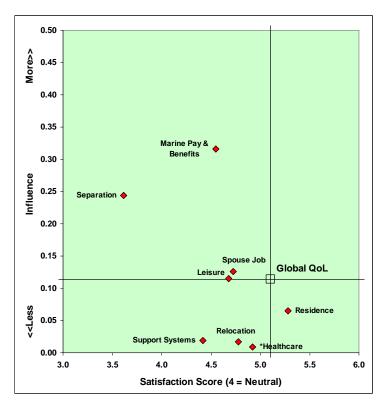


Figure ES-11. Key Drivers of Global Quality of Life for Family Member Respondents without Children

Figure ES-12 shows the trends in the overall mean cognitive/satisfaction scores across the Family Member life domains for both of the Marine Corps QoL studies that collected data on the Family Members as a separate respondent group. Between 2002 and 2007, mean satisfaction scores increased in each of the Family Member life domains, with the largest increases seen in the Your Job/Professional Development (0.40), Health Care (0.31) and Pay & Benefits (0.30) life domains. The only area in which scores decreased was in the happiness with Separation (shown in a unique color scheme in the figure to denote that it is an affective, and not a cognitive, measure). The mean happiness score decreased by 0.21, but remained above the "Neither Unhappy Nor Pleased" level. At the same time, the mean satisfaction in the Separation life domain increased by 0.16, although the score remained below "Neutral."

Thus, in general, there was an increase in the satisfaction of Family Members from 2002 to 2007, although none of the differences seen here had practical significance. An increase of 0.15 in the Global Quality of Life composite score also was seen, resulting in a value of 5.09.

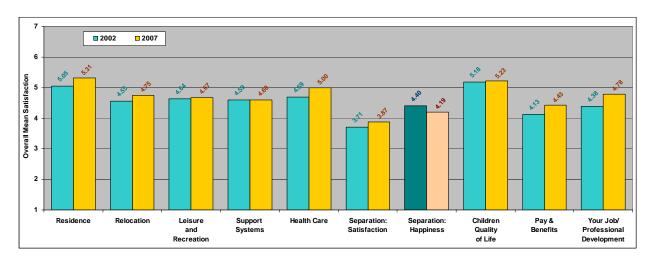


Figure ES-12. Trends in Overall Mean Happiness and Satisfaction Scores in the Family Member Life Domains

The dichotomy of decreasing happiness but increasing satisfaction with Separation from their spouses was examined in more detail. One question on the survey asked the respondents to indicate how many months their spouse had been away from home due to military duties over the past year. Responses ranged from 0 to 12 months (responses greater than 12 were set equal to 12) with the selection of "Less than 1 month" deemed to be half a month; the average amount of separation was calculated to be 4.10 months. Figure ES-13 plots the number of months the respondents were separated from their spouses against the total percentage of respondents who answered that they had been separated for that many months or more in the past year for both the 2002 and 2007 respondent groups. The amount of separation experienced by the 2007 Family Member respondents was greater than that experienced by the 2002 Family Member respondents. For example, 59.8 percent of the respondents in 2002 had been separated from their spouses for 1 month or more, while 71.2 percent of the respondents made the same claim in 2007. Similarly (as shown by the horizontal lines drawn to the vertical axis), 21.6 percent of the respondents in 2002 said they had been separated from their spouses for 6 months or more; the same response was given by 35.7 percent of the respondents in 2007, or 65 percent more respondents.

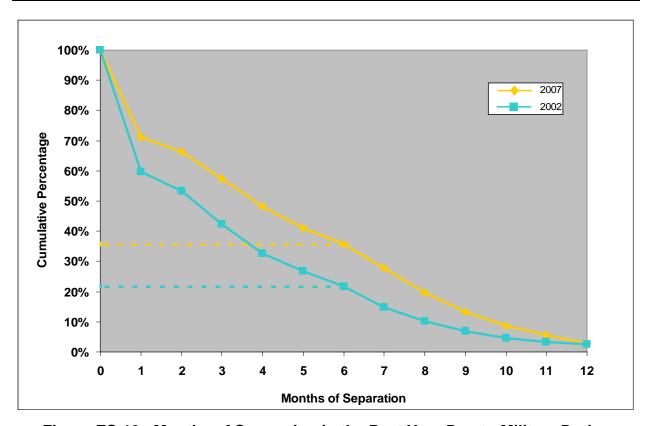


Figure ES-13. Months of Separation in the Past Year Due to Military Duties

Figure ES-14 displays the respondents' mean affective or happiness score plotted against average number of months separated from their spouse for both the 2002 and 2007 Family Member respondent groups. It is clear that the less time Family Member respondents spent separated from their spouses, the happier they were in both studies. However, the respondent who answered "Neither Unhappy nor Pleased" (the score of 4) in 2002 was separated from their spouse for an average of 3.26 months; the respondent who gave the same response in 2007 was separated from their spouse for an average of 4.78 months, an increase of almost 50 percent. That is, Family Member respondents in 2007 consistently reported levels of happiness equal to their counterparts in 2002 despite having spent more time separated from their spouses. From another perspective, as indicated in the figure, the average Family Member respondent in 2002 who had been separated from their spouse for 4 of the previous 12 months had an affective score of 3.21; the equivalent figure for a member of the 2007 Family Member respondent group was 4.49.

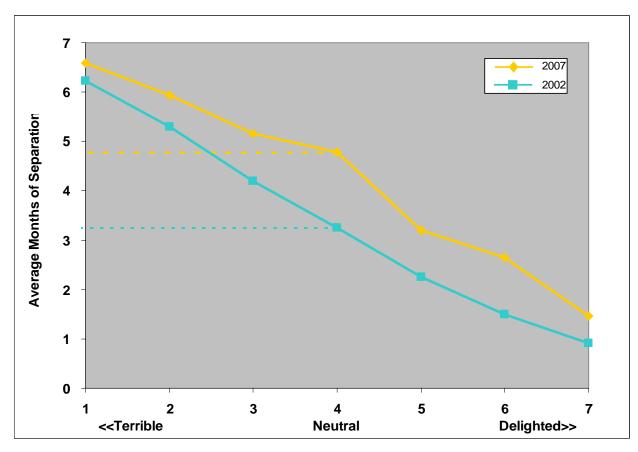


Figure ES-14. Happiness as a Function of the Average Number of Months of Separation in the Last Year for the Family Member Respondents

These results may help to explain the apparent conundrum seen in the trends in the happiness and satisfaction scores between 2002 and 2007: Happiness scores had declined from 4.40 to 4.19, while satisfaction scores climbed from 3.71 to 3.87. The former can be explained by the fact that Family Members were less happy when the amount of separation from their spouses increased. At the same time, the satisfaction scores may reflect the differences between the affective and cognitive components of quality of life. Whether Marine Corps spouses/Family Members were proud of the roles their spouses are playing in the Global War on Terror and, as a result, more satisfied with their lives despite the increased amount of separation they experienced in 2007 or whether they merely were resigned to the increasing frequency and duration of the separations they had to endure can not be ascertained from the collected data. However, that data can be interpreted to indicate a tolerance for/acceptance of the increased deployments and separations experienced by the Family Member respondents since the commencement of OIF/OEF.

1. STUDY BACKGROUND

1.1 INTRODUCTION AND REPORT ORGANIZATION

For many years, the U.S. Marine Corps (USMC), up to the level of the Commandant, has stated clearly its view of the importance of the quality of life (QoL) of its members. In order to earn the confidence of Marines and their families and to reinforce the belief that the Marine Corps is sincere in its efforts to work for their benefit, the Marine Corps has made a commitment since the early 1990s to studying the quality of life perceptions and satisfaction of its members and to applying remedies, where possible, to identified quality of life shortcomings. The Marine Corps has used the results of previous QoL studies to make informed decisions regarding quality of life programs and funding. The 2007 QoL Study determined, through questionnaire distribution and response and trend analyses, a measure of the current quality of life perceptions and satisfaction of Active Duty Marines to support further program management refinement. This study also provides, for only the second time, the unique perspectives of family members (defined as Marine spouses) on their families' quality of life. Note, however, that it is the first Marine Corps QoL Study performed since 2002, and thus was the first to measure quality of life perceptions since the start of the increased operational tempo (OPTEMPO) experienced by the Marine Corps as a result of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF).

Chapter 1 provides the background for this study, including information on the previous Marine Corps QoL studies. Conceptual definitions of quality of life, a brief discussion of the issues associated with assessing quality of life, and the objective and scope of the 2007 QoL Study are provided.

Chapter 2 presents the Sample Selection Plan and references an appendix containing the detailed derivation of the sample of Active Duty Marines and Family Members selected to receive surveys in this study. It also discusses the analytical treatment of the data from the three Active Duty Marine respondent groups (the Base and Station Marines (which includes Marines from the Operating Forces), the Independent Duty Marines and the Production Recruiters).

Chapter 3 contains a short discussion of the data collection effort, including the development of the final versions of both survey instruments, and the survey administration efforts. It also references an appendix containing much more detailed information on the Data Collection Plan, the Validation Test, and the survey administration effort. That appendix also includes observations and lessons learned from the survey administration effort.

Chapter 4 contains the findings from the analysis of the responses from the Base and Station Marines.

Chapter 5 contains the findings from the analysis of the responses from the Independent Duty Marines.

Chapter 6 contains the findings from the analysis of the responses of the Family Members.

Chapter 7 contains the results of the Structural Equation Modeling (SEM) analyses.

1.2 BACKGROUND

Since 1993, the Marine Corps has conducted a series of QoL studies designed to measure the perceptions, happiness, satisfaction, and aspirations of the Marine Corps community in various life domains. This 2007 QoL Study has been preceded by three previous studies:

- The first Marine Corps QoL study,¹ conducted in 1993 and hereafter referred to as the "1993 QoL Study," measured QoL perceptions of Active Duty Marines as a single group and resulted in 10 major findings, the most significant of which was the conclusion that perceived quality of life has real behavioral consequences and is essential to the organizational effectiveness of the Marine Corps. The basic survey instrument (i.e., the survey form or questionnaire that, with continuing modifications, essentially has been used in all four Marine Corps QoL studies) was developed, and that study was performed, by the Naval Personnel Research and Development Center (NPRDC).
- The second Marine Corps QoL study, conducted in 1998 and again conducted by NPRDC, comprised an analysis somewhat similar to its predecessor, but concentrated on the assessment of the trends in perceptions of overall happiness and satisfaction for Active Duty Marines. However, its focus was expanded to address separately, and for the first time, the specific quality of life perceptions of Marine Corps Production Recruiters, who were identified by the Marine Corps Recruiting Command (MCRC).

The results of the 1998 Study were delivered in two volumes. The first (hereafter referred to as the "1998 QoL Study" ²) focused on the QoL perceptions of Active Duty Marines who were not Production Recruiters and the second (hereafter referred to as the "1998 Production Recruiter QoL Study" ³) compared the QoL perceptions of a set of 1,876 Production Recruiters with those of their non-recruiter counterparts.

The findings of the 1998 QoL Study supported the conclusion that investments in programs related to quality of life had yielded improvements in Marine perceptions, happiness and satisfaction with their quality of life. Furthermore, the 1998 Production Recruiter QoL Study observed distinct differences in the QoL perceptions, happiness, and satisfaction of Marine Corps Production Recruiters in comparison with other Active Duty Marines.

 The third Marine Corps QoL study was conducted in 2002. It applied the general methodology used in the two previous QoL studies, compared its results with those

¹ Kerce, Elyse W. (1993). "Quality of Life in the U.S. Marine Corps," California: Navy Personnel Research and Development Center (NPRDC). Unclassified.

² 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: NPRDC. Unclassified.

³ 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: NPRDC. Unclassified.

studies, and performed trend analyses where applicable. While continuing to conduct a separate analysis of Production Recruiters, this study expanded its analytical base beyond that of the 1998 QoL Study to include as separate elements of the analysis two new demographic groups.

- The first new demographic group considered formally was Independent Duty Marines, a subset of the Active Duty Marines. The Independent Duty Marine population identified for analysis was further defined by Headquarters, Marine Corps (HQMC) as those Independent Duty Marines in assignments without military community support (designated as "IDMw/oMCS"). For the purposes of that study, the population of IDMw/oMCS was defined to include those Marines who indicated on their survey forms that they were not assigned to a base or station and who were at least 1 hour away from the nearest military installation.
 - Note that Independent Duty Marines are a subset of the Active Duty Marines and that they always had been included in the groups of respondents considered in the two earliest QoL studies. However, they were first considered as a separate group, and their perceptions, happiness and satisfaction measured, for the first time in the 2002 QoL Study. It is important to note that Production Recruiters without Military Community Support appeared to compose essentially two-thirds of the IDMw/oMCS,⁴ which were the focus of the analyses of the Independent Duty Marines. Thus, the respondent opinions considered in the IDMw/oMCS and the overall Production Recruiter samples appear to have overlapped greatly.⁵
- The second new demographic group considered was Family Members/spouses. These were included to enable Marine Corps decision-makers to better understand which issues were key to improving family satisfaction with military life (specifically Marine Corps life) and, ultimately, to enhancing the combat readiness of the Marine Corps. A completely separate survey form was used to capture the quality of life inputs of Family Members in the 2002 effort. A similar, but slightly modified, form was used in this 2007 QoL Study.

The results of the 2002 effort again were delivered in two volumes. The first volume (hereafter referred to as the "2002 QoL Study" ⁶) focused on the QoL perceptions of Active Duty Marines, IDMw/oMCS, and Family Members, and the second volume (hereafter referred to as the "2002 Production Recruiter QoL Study" ⁷) compared the QoL perceptions of a set of 2,768 Production Recruiters with those of their Base and

⁴ See pp. 3-66 to 3-68 of the 2002 QoL Study Report.

⁵ It is also essential to note that the 2002 QoL Study Report claimed (p. 3-4) that 83.8 percent of the population of Active Duty Marines was composed of Base and Station Marines (i.e., Marines, including members of the Operating Forces, formally assigned to one of 17 Marine Corps installations [e.g., Marine Corps bases (MCB), air stations (MCAS), logistics bases (MCLB) or recruit depots (MCRD)]), with the remainder made up of Independent Duty Marines (14.2 percent) and Production Recruiters (2.0 percent). Thus, the data for the Active Duty Marine cohort were not distinct from that of either the Independent Duty Marine cohort or the Production Recruiter cohort.

⁶ Decision Engineering Associates, LLC (2002). "2002 Quality of Life in the Marine Corps Study." Virginia. Unclassified.

⁷ Decision Engineering Associates, LLC (2002). "2002 Quality of Life in the Marine Corps Study – Production Recruiter Report." Virginia. Unclassified.

Station⁸ counterparts. The results of the 2002 QoL Study continued to validate the relationship between quality of life and organizational effectiveness, and served to further refine Marine Corps QoL efforts.

1.3 WHAT IS QUALITY OF LIFE AND HOW SHOULD IT BE MEASURED?9

1.3.1 What Is Quality of Life?

Although the related terminology may have varied over the years, quality of life long has been a concern of civilized societies. The concept of happiness (perhaps most famously captured in the Declaration of Independence's "pursuit of happiness" phrase) was prominent in political and philosophical discussion in the 18th and 19th Centuries.

Formal definitions of quality of life may be found in the social science literature. There have been many studies and papers published that 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 QoL Study used that conceptual definition, quoting *Dalkey and Rouke*: "...a person's sense of well being, his satisfaction or dissatisfaction with life, or his happiness or unhappiness." The 1993 QoL Study also quoted *Rice* (1984), who defined quality of life as "...the degree to which the experience of an individual's life satisfies that individual's wants and needs (both physical and psychological)." These conceptual definitions were used to guide the measurement of the QoL construct in each of the Marine Corps QoL studies, including this 2007 effort. They imply that, to measure quality of life accurately, it is necessary to address the issues of satisfaction, happiness, the extent to which a person's physical and psychological needs are met, and how these compare to a person's expectations.

1.3.2 Theoretical Approaches to Quality of Life Research

Two theories related to the measurement of quality of life informed the 2002 and, to varying degrees, earlier Marine Corps QoL Studies and will inform this 2007 QoL Study:

 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 original Marine Corps QoL survey instrument in 1993. 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

⁸ Note that the perceptions of the Base and Station Marines, and not of the Active Duty Marine composite discussed above, were used as the point of comparison.

⁹ Given the explicit proviso in the Statement of Work for the 2007 QoL Study that the Study Team was not to revalidate the literature and methodology utilized in the previous QoL studies, the Study Team performed little to no review of the social sciences literature and wishes to acknowledge that the text in this section is heavily influenced by/dependent on corresponding sections of the 1993 QoL Study Report and, especially, Chapter 1 of the 2002 QoL Study Report.

¹⁰ 1993 QoL Study Report, p. 7. Interestingly, the reference on page 7 is to "Dalke and Rourke (1971)," while the bibliography of that report (and this one) contains a reference to: Dalkey, N.C. & Rouke, D.L. (1973). The Delphi procedure and rating quality of life factors. In EPA, The Quality of Life Concept (pp. II-209-II-221) Washington, DC: Environmental Protection Agency.

¹¹ 1993 QoL Study Report, p. 7.

(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 (LAW) or Global Quality of Life), thus determining life satisfaction.

The strength of the Spillover Theory approach is in the utility of its findings. Dissatisfaction within life domains (e.g., Residence) can be identified and solutions can be created. This is very important when the purpose of a study is to allocate funding to specific life domains, such as is the case for the Marine Corps QoL studies. 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 Discrepancies Theory: In 1985, Alex C. Michalos put forth the Multiple
 Discrepancies Theory (MDT) framework (Michalos, 1985). This theory is a cognitive
 approach to evaluating quality of life which is based on the premise that satisfaction
 with life is a function of 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 3 years ago;
 - What one expects to have after 5 years;
 - What one deserves;
 - What one needs, and
 - What one wants.

Since its initial publication, MDT has been tested widely and is an accepted theory of individual satisfaction judgments (Mallard, Lance, & Michalos, 1997, as cited in the 2002 QoL Study Report, p. 1-3). It has been applied in diverse populations, including senior citizens (Michalos, 1986, as cited in the 2002 QoL Study Report, p. 1-3), government rehabilitation program clients (Gauthier, 1987, as cited in the 2002 QoL Study Report, p. 1-3), university staff members (Michalos, 1980, as cited in the 2002 QoL Study Report, p. 1-3) and most comprehensively in a global study of 18,032 college students from 39 countries (Michalos, 1991, as cited in the 2002 QoL Study Report, p. 1-3). 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, as cited in the 2002 QoL Study Report, p. 1-3).

The general idea expressed by MDT 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, that person would tend to perform the former action 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., a person cannot find a job with the necessary medical benefits), then one would tend to focus on a more realistic course of action, such as trying to limit one's own desires (Michalos, 1985, as cited in the 2002 QoL Study Report, p. 1-4). Figure 1-1 illustrates the MDT framework.

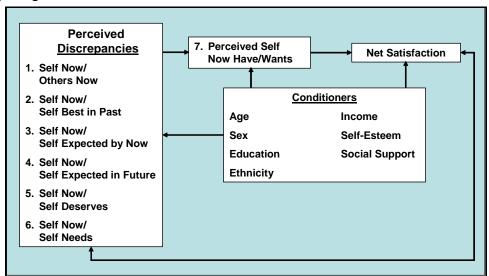


Figure 1-1. The Multiple Discrepancies Theory Framework¹²

The multiple discrepancies approach is designed to illuminate the psychological processes behind judgments of satisfaction with respect to various domains. It holds that 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 Marine Corps, etc.).

Understanding the expectations of the individuals involved can help determine whether or not the solution to the problem, and therefore efforts to maximize satisfaction, should involve modifying objective living conditions (e.g., providing better housing, more income, etc.) and/or managing expectations through education (e.g., providing 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 using only the MDT framework, the results would be limited since, when using this approach, respondents are not asked about specific

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¹² Adapted from the 2002 QoL Study Report, p. 1-4.

criteria related to particular domains (e.g., the privacy, appearance, and living space of their residence). Therefore, the collected data do not allow for specific recommendations about objective improvements.

The MDT approach was used in the 2002 QoL Study and was used in this 2007 QoL Study to complement the Spillover Theory approach in the analysis of the responses to both the Marine and the Family Member survey instruments. These approaches are frequently combined in QoL research (*Cohen, 2000, Lance, Mallard, & Michalos, 1995*, and *Schulz, 1995*, all as cited in the 2002 QoL Study Report, p. 1-5). The inclusion of discrepancy questions on the survey instruments allowed a more complete assessment of quality of life for Marines and Marine family members.

This addition also was useful for the SEM analysis. Human psychological processes are complex and involve a variety of interdependent and independent variables. Essentially, SEM analysis allows the examination of multiple relationships among multiple variables simultaneously in order to build a model of influences on Marine and family quality of life. With the addition of MDT items to the survey instruments, there were three indicators of domain-level quality of life (i.e., satisfaction, happiness, and the have-want discrepancy).

1.4 ISSUES IN ASSESSING QUALITY OF LIFE

1.4.1 Objective Measures of Quality of Life

Modern industrial societies have tended to equate standard of living with quality of life because increases in wealth are generally believed to allow people to buy greater well-being. For this reason, objective 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. Since objective indicators often can be gathered from official records; the collection of objective measures of quality of life often does not require the involvement of the individual to whom the records relate.

Objective indicators also can be indicators that require a respondent to describe, without subjectively evaluating, their living conditions. For example, when objectively evaluating their residence, a respondent might be asked about the age of, or the number of rooms in, his/her house; the acreage of the yard; or the number of people occupying the house (to compute persons 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* and *Cummins, 2000*, as cited in the 2002 QoL Study Report, p. 1-5). Thus, over reliance on objective indicators would result in a limited picture of quality of life.

1.4.2 Subjective Measures of Quality of Life

In contrast to objective measures, subjective measures ask individuals to evaluate the circumstances of their lives. Subjective measures of quality of life are thought to consist of affective and cognitive components, as well as expectations (i.e., have/want components).

The affective component is commonly operationalized ¹³ as <u>happiness</u>. 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. The more cognitive component of quality of life is operationalized as <u>satisfaction</u>. Most frequently in the literature ¹⁴ subjective well-being is merely measured with an evaluation of satisfaction (e.g., "How satisfied are you with your life as a whole?").

Happiness and satisfaction appear to be very similar constructs but there are underlying differences. Conceptually, happiness is an appraisal of an individual's emotional experience, whereas satisfaction involves the comparison of objective conditions to some internal standards (*Michalos, 1980*, as cited in the 2002 QoL Study Report, p. 1-6; and *Cheng, 1988*, as cited in the 1993 QoL Study Report, p. 9). *Campbell, et al. (1976), McKennell (1978)*, and *McKennell and Andrews (1980)* (all as cited in the 1993 QoL Study Report, p. 9) all made a similar distinction between satisfaction and affect: Satisfaction is tied to expectations and standards of comparison, while affect refers to an immediate feeling state that is not anchored to cognitive frames of references.

The 1993 QoL Study Report pointed out that research indicated that a given level of satisfaction can be associated with different affective states, indicating that happiness and satisfaction are two separate dimensions of well-being that can vary independently. The 1993 QoL Study results supported this contention because the life domains about which the respondents felt the most positive were not necessarily those with which they were most satisfied (as evidenced in Table 1-1, which reproduces salient parts of Table 79 of the 1993 QoL Study Report).

Table 1-1. Life Domain Rankings Based on Happiness and Satisfaction Scores from the 1993 QoL Study

Happiness		Satisfaction	
How Do You Feel about	Mean ¹	How Satisfied Are You Overall with:	Mean ²
Relationship with Your Children	5.55	Marriage/Intimate Relationship	5.85
Health	5.41	Yourself (Self-Development)	5.72
Relationship with Other Relatives	5.18	Relationship with Other Relatives	5.52
Friends and Friendships	5.06	Health	5.41
Leisure and Recreation	4.97	Friends and Friendships	5.30
Yourself (Self-Development)	4.94	Relationship with Your Children	4.92
Marriage/Intimate Relationship	4.84	Your Neighborhood	4.88
Your Neighborhood	4.52	Your Military Job	4.57
Your Residence	4.40	Your Residence	4.66
Your Military Job	4.22	Leisure and Recreation	4.33
Income and Standard of Living	4.10	Income and Standard of Living	3.93

^{1.} Happiness Scale: 1 = Terrible; 4 = Neither Unhappy Nor Pleased; 7 = Delighted

¹⁴ According to the 2002 QoL Study Report, p. 1-6.

¹³ The term used by Kerce in the 1993 QoL Study Report, p. 9.

2. Satisfaction Scale: 1 = Completely Dissatisfied; 4 = Neutral; 7 = Completely Satisfied

A classification scheme based on distinguishing types of satisfaction on the basis of the value of its affective component would result in the groups described in Table 1-2. ¹⁵ Each individual 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).

Table 1-2.	Different Levels of	Satisfaction	Can Be	Associated	with !	Different
		Affective Sta	tes			

Subgroup	Interpretation	Short Name
Satisfied – Happy	Satisfaction of Achievement	Achievers
Satisfied – Unhappy	Satisfaction of Resignation	Resigned
Dissatisfied - Happy	Dissatisfaction of Aspiration	Aspirers
Dissatisfied - Unhappy	Dissatisfaction of Frustration	Frustrated

As discussed previously in the section on MDT, additional indicators of subjective wellbeing are the comparisons individuals make between internal standards and objective living conditions. The most important discrepancy is between what one has and what one wants because the perceived gap between these two states serves as a mediator or a go-between for all other perceived gaps and net satisfaction.

In its full application, MDT measures seven discrepancies and relates them to happiness and satisfaction measures at the domain and global level. Four of the seven discrepancies presented earlier have been deemed most useful in the bulk of the research using MDT (*Michalos, 1985, 1986, 1991*, as cited in the 2002 QoL Study Report, p. 1-7). These are:

- 1) The have-want discrepancy,
- The have- previous best discrepancy,
- 3) The have- deserve discrepancy, and
- 4) The have- other discrepancy (where, in the case of this study, "other" is a civilian peer).

1.4.3 Directionality of the Life Domain and Global Quality of Life Relationships

In general, in the previous Marine Corps QoL studies, the models of influence showed the relationship between the life domains considered and Global Quality of Life to be a bottom-up construct. That is, Global Quality of Life was the result of some subjective

¹⁵ Adapted from p. 1-6 of the 2002 QoL Study Report.

weighting of satisfactions (and happiness) derived from the various life domains considered.

Much of the social indicators research investigating the predictability of overall life quality on the basis of the 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*, as cited in the 2002 QoL Study Report, p. 1-7). Figure 1-2 displays the bottom-up approach.

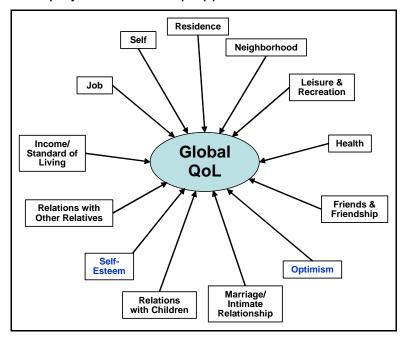


Figure 1-2. The Bottom-Up Model of Global Quality of Life

However, competing views of domain and overall life satisfaction relationships exist that have been taken into account in previous studies of Marine Corps quality of life, particularly in the 2002 QoL Study. The top-down model is one alternative. According to this model, overall life quality exerts influence on satisfaction in various life domains. Figure 1-3 displays this model, which is based on assuming that people's dispositions (stable individual differences) exert an inordinate amount of influence on how they evaluate objective life conditions. That is, it is assumed that 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 people in dramatically different living conditions report similar levels of happiness and satisfaction (*Mallard, Lance, & Michalos, 1997*, as cited in the 2002 QoL Study Report, p. 1-8).

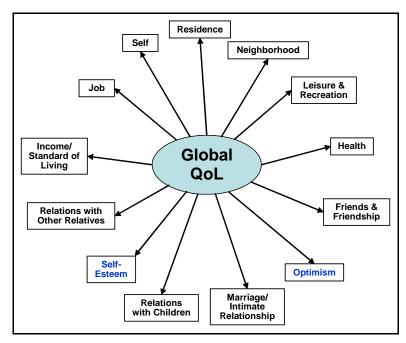


Figure 1-3. The Top-Down Model of Global Quality of Life

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 derived from some weighted combination of satisfaction in several life domains, and that it also causes satisfaction with specific life domains (*Lance, Lautenschlager, Sloan, & Varca, 1989*, as cited in the 2002 QoL Study Report, p. 1-8). Figure 1-4 displays the bi-directional model to Global Quality of Life.

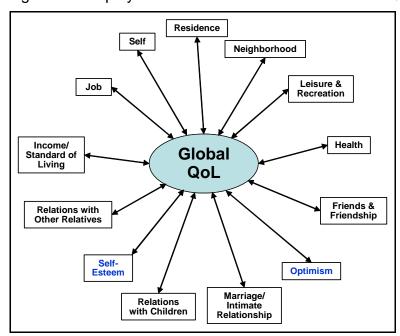


Figure 1-4. The Bi-Directional Model of Global Quality of Life

Four studies (*Headey, Veenhoven, & Wearing, 1991*; *Lance, Lautenschlager, Sloan, & Varca, 1989*; *Mallard, Lance, & Michalos, 1997*; and *Sloan, 1990*, all as cited in the 2002 QoL Study Report, p. 1-8) 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*, as cited in the 2002 QoL Study Report, p. 1-9). 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)*, as cited in the 2002 QoL Study Report, p. 1-9, 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).

1.4.4 Implications for the 2007 Marine Corps QoL Study

In general, past studies of Marine Corps quality of life supported a bottom-up model of the relationship between domain and overall quality of life. In the 1993 QoL Study, attempts were made in the structural equation modeling to allow relationships to be top-down, but it was determined that the bottom-up model had the best fit. In the 1998 QoL Study, it is not known whether alternative direction models were considered. The 2002 QoL Study, however, allowed for, and indeed found a limited number of, valid bi-directional relationships.

This 2007 QoL Study also allowed for bi-directional relationships in order to more accurately identify life domains for potential improvement. The goal was to identify domains which had a direct and significant impact on Global Quality of Life, reenlistment intentions, and Personal Readiness.

The possibility that the direction of the relationship between a life domain or personality trait (such as Self-Esteem or Optimism) and Global Quality of Life is top-down or bi-directional also necessitated the maintained inclusion of measures of personality disposition in both the 2007 Active Duty Marine and Family Member survey instruments, as was done in their 2002 counterparts. The role of key individual differences in the relationship between domain satisfaction and overall life satisfaction therefore could be assessed.

1.4.5 Overview of the Life Domains Examined and the Survey Instruments

As was its immediate predecessor, the 2007 QoL Study was a dual effort planned to gain input from both Marines and their families/spouses about their quality of life. Two separate survey instruments were used, one for the Active Duty Marine respondents and one for their Family Members/spouses. Each of the three previous studies of Marine Corps quality of life assessed the satisfaction and happiness of Active Duty Marines in 11 life domains and Life as a Whole. Those same 11 life domains, shown in Table 1-3, were used in the 2007 QoL Study survey instrument with only relatively minor modifications to the previous survey instrument. The most significant of these

¹⁶ 2002 QoL Study Report, p. 1-9.

modifications were demographic questions added to address the impacts of the increased Marine Corps OPTEMPO since the events of 11 September 2001 and the ensuing conflicts in Afghanistan and Iraq.

Table 1-3. The 11 Life Domains Examined in the 2007 Active Duty Marine Quality of Life Survey Instrument

Life Domains Examined		
Residence	Relationship with Your Children	
Neighborhood	Relationship with Other Relatives	
Leisure and Recreation	Income and Standard of Living	
Health	Military Job	
Friends and Friendships	Yourself	
Marriage/Intimate Relationship		

The survey instrument used to measure perceptions of Family Member quality of life asked Marine spouses about themselves and their children. This survey instrument also was very similar to that used in the 2002 QoL Study and also incorporated demographic questions added to address the impacts of the increased Marine Corps OPTEMPO since the initiation of the Global War on Terror. The 10 life domains considered in the Family Member survey are shown in Table 1-4.¹⁷

Table 1-4. The 10 Life Domains Examined in the 2007 Family Member Quality of Life Survey Instrument

Life Domains Examined				
Residence	Separation			
Relocation	Children Quality of Life			
Leisure and Recreation	Pay & Benefits			
Support Systems	Your Job/Professional Development			
(e.g., Marine Corps Community Services	Marine Corps Life & You			
(MCCS) Programs and Services)	(Spouse Retention Desires)			
Health Care				

1.5 OBJECTIVE OF THE 2007 QOL STUDY

The objective of the 2007 QoL Study was to perform a study to provide the Marine Corps with objective data that can be used to determine the impacts of initiatives instituted as a result of past QoL study efforts as well as the state of Marine perceptions and feelings about the quality of life in the Marine Corps. The 2007 QoL Study determined, through statistical quantification, the views of Marines and family members within the life domains (11 for the Marine survey and 10 for the Family Member survey) contained in the tables shown previously. This will enable the Study Sponsor to utilize these findings to program initiatives, establish funding priorities, and support broader Marine Corps goals of recruiting, retention and readiness.

¹⁷ Note that the responses to the single "Marine Corps Life and You" question were analyzed as part of the Global Quality of Life analysis for the Family Members, rather than as a separate life domain.

1.6 SCOPE OF THE 2007 OOL STUDY

The 2007 QoL Study focused on four (4) separate groups of respondents. They were:

- Active Duty Marines, composed primarily of Base and Station Marines (i.e., those Marines assigned to/stationed at USMC installations around the world and including members of the Operating Forces);
- Independent Duty Marines, both with and without Military Community Support (denoted IDMw/MCS and IDMw/oMCS, respectively), as defined by HQMC and including, among others, Marines training at non-USMC military schools (a subpopulation of the Active Duty Marines);
- 3) Production Recruiters both with and without Military Community Support (a subpopulation of both the Active Duty and the Independent Duty Marines that was identified by MCRC), ¹⁸ and;
- 4) Family Members (specifically, Marine spouses).

A representative sample of Active Duty Marines and Family Members, stratified by pay grade and location, was randomly selected to participate in the study (the selection of the sample is discussed later in this report).

The Study Team analyzed and compared quality of life for each selected respondent group. The Study Team also, wherever possible, developed, collected and presented trend data comparing the results of the 2007 QoL Study with those from prior QoL studies, with a focus on the most recent, 2002 QoL Study.

1.7 STUDY APPROACH – KEY ASSUMPTIONS

In conducting this study, the following key assumptions were acknowledged:

- The terrorist attacks of 11 September 2001 and the subsequent increased OPTEMPO of the Marine Corps as the result of the commencement of Operation Iraqi Freedom and Operation Enduring Freedom has had potentially major impacts on the perceptions of Marines and their spouses regarding their quality of life. Consequently, additional demographic questions would be added to both the Marine and Family Member survey instruments to try to assess the impacts of the increased rates of Marine deployment to theaters of conflict.
- Both the Government and the Study Team would be flexible regarding the conduct
 of site visits to Marine Corps installations to ensure that the proper mix of Marines
 would participate in the survey. This was an especially key assumption given the
 likely deployment of significant portions of the personnel in either I or II Marine
 Expeditionary Force (MEF) to Iraq during the originally planned period for the
 conduct of the on-site administration of the guestionnaires.
- No data from Marines in the E-1 pay grade or their spouses intentionally would be collected during the study.

¹⁸ As indicated here, Production Recruiters technically are part of the overall population of Independent Duty Marines. However, as discussed in detail in Chapter 2, this 2007 QoL Study focused on the Non-Production Recruiter Independent Duty Marines, so there was no overlap with the population of Production Recruiters.

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- The percentage of mail-in survey instruments returned to the Study Team would be smaller for lower-ranking enlisted Marines and their spouses than for Marines in other pay grades and their spouses based on the results seen in previous surveys. Consequently, an increase in the sampling rate for those lower pay grades using mail-in surveys was utilized.
- Family member participation in the survey would be adversely affected by a survey similar in length to that of the Active Duty Marine survey.
- The population of Production Recruiters would be identified by MCRC, and a census survey of Production Recruiters (i.e., 100 percent participation) would be attempted.

2. SAMPLE SELECTION AND ANALYSIS PLANS

2.1 INTRODUCTION

The development of the Sample Selection Plan was accomplished in two subtasks:

- 1) Secondary Data Research/Literature Search. This consisted of an in-depth review of the final reports and databases from the previous Marine Corps QoL studies. By specific limitation in its Statement of Work, the Study Team was constrained to conduct secondary data research and a literature search only to the degree necessary to prepare for the analysis effort associated with the conduct of the 2007 QoL Study and was not to re-validate the theoretical foundations or methodologies used in previous QoL studies.
- 2) Sample Selection. The Study Team performed an in-depth review of the sample selection methodologies used in previous QoL studies, especially the 2002 QoL Study, which (with its statistically-based consideration of four respondent groups) most closely matches the situation of this 2007 QoL Study. That work is the focus of this chapter.

2.2 OVERVIEW OF THE 2007 OOL STUDY SAMPLE SELECTION METHODOLOGY

The primary objective of this portion of the study was to provide a Sample Selection Plan (SSP), comprising the data and discussion in later sections of this chapter, consistent with those utilized in past USMC QoL studies, especially the 2002 QoL Study. This consistency was desired to allow trend analyses of various QoL factors to be performed during the subsequent data analysis efforts. The SSP contained recommendations on the size and composition of the random sample of Marines and Family Members to be contacted for this study. Its recommendations were based on Government-furnished data on the demographics of the Marine Corps (e.g., pay grades, marital status and duty locations of all current Marines) and the methodologies of previous studies, specifically the 2002 QoL Study. Since the Study Team was not to revalidate the literature or, as is more germane for this report, the methodology utilized in previous QoL studies, much of the more detailed and rigorous discussion that follows in the succeeding sections of this chapter is based heavily on the work done and techniques used to generate the 2002 sample of potential respondents.

2.3 DISCUSSION OF PAST SAMPLING METHODOLOGIES

2.3.1 The 1993 QoL Study

A great deal of effort was expended in the 1993 QoL Study Report describing the rationale behind and the generation of the survey instruments (i.e., the questionnaire that was distributed to the study respondents and the specific questions on it). However, little discussion was devoted to the methodology used to select the sample of potential respondents. The 1993 QoL Study Report does say, however, that

[a] representative sample of the active duty Marine Corps was randomly selected for participation in the study. The sample was stratified by location and pay grade, with E-1 personnel excluded ... Once the

sampling frame showing distribution by location and pay grade had been compiled, a random selection of individuals was made. A five percent sample was drawn from the three most populous [US]MC Bases at Camp Lejeune, Camp Pendleton, and Okinawa. A ten percent sample was drawn from all other groups.¹⁹

Marines stationed at remote locations or at locations with relative small populations were grouped together by function for sampling purposes. Examples of these functional groups included security forces, recruiters, student companies, etc. Each of these groups was then sampled at the 10 percent rate.²⁰

The 1993 QoL Study Report indicates²¹ that about 15,700 questionnaires were distributed, either *via* on-site administration or by mail, and that approximately 10,300 survey forms were completed.

As will be included in the discussion of the sampling methodology used in the 2002 survey, perhaps one of the most significant contributions of the 1993 QoL Study Report was the inclusion of information on the overall standard deviations of the responses in each of the 11 life domains. This permitted subsequent QoL studies, specifically the 2002 QoL Study and this 2007 QoL Study, to use a more statistically rigorous methodology (discussed later) to estimate the total number of respondents necessary to provide a given confidence in the study results.

2.3.2 The 1998 QoL Study

Information on the sample selection methodology used in the 1998 QoL Study was even less illuminating than that available from its predecessor. The Final Report for the 1998 QoL Study merely says that

[t]he 1998 survey used similar sampling techniques to the 1993 survey; both resulted in a stratified random sample with over-sampling in the lower pay grades. The 1993 survey sample contained 10,000 responses, while the 1998 survey sample was 4,200 Marines. This only indicated that the 1993 sample had a slightly smaller confidence interval than the 1998 sample. The 1998 sample was weighted so that the overall sample would reflect the current pay grade distribution of the entire Marine Corps. All 1998 data presented in this report reflects weighted data by pay grade. ²³

Unlike its predecessor report, no data on the actual number of respondents who provided valid questionnaires appear to be included anywhere in the 1998 QoL Study Report, and demographic data on the respondents are presented primarily as relative percentages. However, analysis of the database from the 1998 effort indicated that

¹⁹ Kerce, p. 18.

²⁰ *Ibid.*, p. 21.

²¹ *Ibid.*, Appendix B.

²² *Ibid.*, Table C-2.

²³ White, Baker and Wolosin, p. 6.

4,289 respondents were included in the analysis. It also appears²⁴ that about 510 of the responses came from Independent Duty Marines, despite the fact that the responses from that population group were not analyzed separately in the 1998 QoL Study. Note also that weighting of the overall sample was necessary to produce a data set roughly representative of the balance of pay grades in the Marine Corps. The need for such a weighting was attenuated somewhat by the more rigorous sample selection methodology introduced in the 2002 QoL Study. That more rigorous methodology also was employed to select the sample for this 2007 QoL Study.

The 1998 Production Recruiter QoL Study was based on 1,876 completed questionnaires from that community. However, since a census technique, which attempted to generate responses from the entire population of Production Recruiters, was used in 2002, that number had no impact on the subsequent Production Recruiter QoL studies.

It does appear, however, that the responses from the Production Recruiters were not mixed in any way into the pool of responses received from the non-Production Recruiter respondents. Thus, two completely disjoint sets of responses appear to have been generated and analyzed.

2.3.3 The 2002 QoL Study

Respondent inputs for the 2002 QoL Study were collected in February and March 2002. A representative sample of 4,803 Active Duty Marines assigned to bases and stations was selected randomly as potential respondents in the study. The Family Members selected as potential respondents also were selected randomly and were representative of spouses throughout the Marine Corps. As stated previously, the population of Independent Duty Marines in the 2002 QoL Study was defined by HQMC as those Marines in assignments without military community support, where for purposes of this study, "without Military Community Support" was defined to include those Marines who indicated on the survey they were not assigned to a base or station and who were at least 1 hour away from the nearest military installation. Surveys were administered on site to Active Duty ("Base and Station") Marines at 17 USMC installations (Marine Corps Bases, Air Stations, Recruit Depots and Logistics Bases) either by representatives of the 2002 Study Team or, at smaller facilities (i.e., the two MCRDs, the two MCLBs, and MCAS Iwakuni), by Command-designated Base/Station points of contact (POCs). Surveys were mailed to 6,500 Independent Duty Marines and 8,000 Family Members. At the end of the survey period, 4,698 surveys had been received from Base and Station Marines and 2,115 Independent Duty Marine surveys had been received (via mail) and processed, for a total of 6,813 surveys received and processed from non-Production Recruiter Active Duty Marines. Also 4,184 Family Member surveys were received (again via mail) and processed.

A total of 2,935 Production Recruiters comprised the population available to participate in the 2002 Production Recruiter QoL Study. From them, 2,802 surveys were completed and returned for analysis. However, a small number of the returned surveys

²⁴ *Ibid.*, p. 7.

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could not be read by the optical scanning equipment used to gather the results, so only 2,768 completed surveys were included in the analysis.²⁵

2.4 THE SAMPLE SELECTION PLAN FOR THE 2007 QOL STUDY

A detailed discussion of the statistical process and rationale used to generate the Sample Selection Plan used in the 2007 QoL Study is included in Appendix C.

2.4.1 Active Duty Marines

Table 2-1 displays the recommended maximum desired sample sizes, stratified by location/type of respondent and Pay Grade Group (i.e., E-2/E-3, E-4/E-5, E-6/E-7, E-8/E-9, Warrant Officers (WO), O-1 to O-3, and O-4 to O-10), that emerged from that process. Note that, as explained in the referenced appendix, the number of E-2/E-3 respondents was increased by 25 percent, based on the assumption that the percentage of returned mail-in survey instruments would be less for those lower ranking enlisted Marines.

Achieving a sample of actual respondents (as opposed to potential respondents, as is shown in the table) that is representative of the overall Marine Corps population for a given respondent group is always of utmost concern. As a practical matter, if the actual responses completed were to produce a sample for which the pay grade balance was far from representative, the solution would be to follow the method of the 1998 and 2002 QoL Studies and weight the responses by Pay Grade Group in order to produce a data set roughly representative of the balance of pay grades in the Marine Corps.

²⁵ 2002 Production Recruiter QoL Study Report, p. ES-2. Note, however, that this value is contradicted on p. 3-66 of the 2002 QoL Study Report, which indicates that 2,730 responses were received from Production Recruiters.

Table 2-1. Estimated Location/Pay Grade Group Populations and the Recommended Maximum Desired Sample Sizes for Each

				- 0/- 0		0-1 to	0-4 to	
Location/Group	E-2/E-3	E-4/E-5	E-6/E-7	E-8/E-9	WO	O-3	O-10	Total
Camp Pendleton	470	500	117	28	12	58	21	1,206
MCAS Miramar	80	136	42	8	4	24	10	304
MCRD San Diego ¹	73	55	48	5	1	9	3	194
MCAS Yuma	42	51	17	4	2	6	5	127
Marine Corps Air-Ground Combat Center (MCAGCC) (Twentynine Palms)	193	115	30	7	2	14	3	364
MCLB Barstow ¹	5	6	4	1	•	1	1	18
Camp Lejeune	491	400	105	28	10	48	17	1,099
MCAS New River	67	87	30	5	2	16	6	213
MCAS Cherry Point	86	115	36	9	4	18	9	277
MCAS Beaufort	35	54	18	3	2	7	3	122
MCRD Parris Island ¹	93	70	43	6	2	11	5	230
MCLB Albany ¹	4	19	10	4	1	4	4	46
MCB Quantico	25	66	29	10	9	54	27	220
Headquarters Battalion Henderson Hall	6	19	14	7	1	5	25	77
MCB Hawaii	76	71	22	6	2	10	7	194
MCAS Iwakuni ¹	94	56	24	6	3	8	3	194
Camp Butler	172	136	51	18	7	21	13	418
MCRC (District and below)	-	1,476	2,267	215	•	86	-	4,044
Others, Outside of Continental United States (CONUS) ¹	1,456	951	311	68	26	138	113	3,063
Others, Inside of CONUS (minus MCRC District & below) ¹	2,540	1,551	1,050	238	60	620	463	6,522
Unidentified	286	241	180	37	2	162	77	985
TOTAL	6,294	6,175	4,448	713	152	1,320	815	19,917

^{1.} Includes 25 percent over-sampling of the E-2/E-3 group.

A comment on the Production Recruiters is warranted here. As was the case in the 2002 Production Recruiter QoL Study, ²⁶ full participation of all Marine Corps Production Recruiters was the initial goal of the 2007 Production Recruiter QoL Study. That is, a census approach was desired. The Government-provided demographic data for the 2007 Production Recruiter QoL Study identified 4,044 Marines as Production Recruiters (as is shown in the table). A slight revision of that number up to 4,049 Production Recruiters was made once the POCs assigned at each Recruiting Station returned information on the number of Active Duty Marine personnel assigned to each of the 48 Recruiting Stations.

2.4.2 Discussion of the Family Member Survey

The Family Members selected to participate in the survey also were selected randomly with the intention of being representative of spouses throughout the Marine Corps. The selection was based on a Government-provided estimate that 45 percent of Marines are married. Using this percent figure and given that it was recommended that 19,009 Active Duty Marine surveys be distributed prior to the E-2/E-3 enhancement (which was discussed along with the generation of Table 2-1), the total number of Family Member surveys to be distributed was 8,554 (or 0.45 * 19,009).

The group of Family Members surveyed was selected based on the proportion of Active Duty Marines falling into each of the three survey administration groups shown in Table 2-2. When the pay grades of the spouses of the selected Family Member sample were compared to the pay grades of the total population of married Marines, the percentages were consistent; therefore, the sample of potential Family Member participants in this 2007 QoL Study was considered representative of the entire Marine Corps.

Means of Survey Administration to Active Duty Marines	Planned Number of Active Duty Marine Survey Recipients ¹	Projected Number of Associated Family Members/ Spouses ²	Projected Number of Family Member/ Spouse Responses ³
On-Site Administration by Study Team Personnel	4,621	2,079	416
Mail-In by Non- Production Recruiters ⁴	10,344	4,655	931
Mail-In by Production Recruiters	4,044	1,820	364
Total	19,009	8,554	1,711

Table 2-2. Size and Composition of the Family Member Sample

4. Includes both non-Production Recruiter Independent Duty Marines and Base and Station Marines assigned to the five Marine Corps installations (MCRDs, MCLBs, and MCAS Iwakuni) not visited by Study Team personnel.

^{1.} Prior to the 25 percent E-2/E-3 enhancement discussed in Appendix C.

^{2.} Assumes 45 percent of Marines are married (Government-furnished figure).

^{3.} Assumes a 20 percent response rate.

²⁶ As it was in the 1998 QoL Study. Note that in neither case were usable survey responses received from even 90 percent of the actual Production Recruiter populations.

2.5 ANALYTICAL TREATMENT OF THE ACTIVE DUTY MARINE RESPONDENT GROUPS

As mentioned previously, the 2002 QoL Study focused its analysis of the data collected in terms of both an Active Duty Marine composite and an Independent Duty Marine without Military Community Support composite. It was admitted that this increased significantly the complexity of the analysis effort.²⁷ As a result, and after considering the nature of the Active Duty Marine Corps population from which the data analyzed in this 2007 QoL Study would be collected, an alternative approach was proposed to, and accepted by, the Marine Corps. That alternative approach is discussed in this section.

As shown in Table 2-3, which was derived from the Government-furnished data provided to the Study Team in May 2007, Base and Station Marines (including those from the Operating Forces) made up the vast majority (over 81 percent) of the 2007 Marine Corps population (excluding E-1s). The non-Production Recruiter Independent Duty Marines made up the preponderance of the remainder, or 16.5 percent of the total Marine Corps population (excluding E-1s). The remaining 2.4 percent of the total Marine Corps population was composed of the ~4,000 Production Recruiters.

Population Group	Size	Percentage of the Total 2007 Marine Corps Population ¹
Base and Station Marines	138,496	81.17%
Non-Production Recruiter Independent Duty Marines	28,079	16.46%
Production Recruiters	4,044	2.37%
Marine Corps Total	170,619	100.00%

Table 2-3. Comparison of the Three Respondent Groups

As was done in both the 1998 and 2002 QoL Studies, the collected data were adjusted for pay grade imbalances in the respondent data received (due, for example, to the traditional under-responding of Marines in the E-2 and E-3 pay grades to mail-in surveys) when the analysis efforts were performed. The strategy weighted the results obtained from the different respondent groups by Pay Grade Group in an effort to generate quality of life averages that correctly represented the underlying Marine Corps populations.

Note, however, that in mathematical terms the three respondent groups, as defined here, are <u>disjoint</u> (i.e., have no members in common) and are <u>all-inclusive</u> in that the collection of the members of the three groups comprises the entire Active Duty Marine population of interest (i.e., all Marines, but excluding those in the E-1 pay grade). These properties provided a great deal of flexibility in the potential ways in which the collected data could be analyzed. The responses from each of the three disjoint groups could be looked at in isolation without the statistically confounding effects of comparing

^{1.} Excluding E-1s.

²⁷ See, for example, the discussion on pages 3-5 and 3-6 of the 2002 QoL Study Report.

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two populations with some common members. The grouping would allow Non-Production Recruiter Independent Duty Marines to be looked at either separately from or together with Production Recruiter respondents, who can be considered to be a special subset of the Independent Duty Marines. It also would allow the responses of Non-Production Recruiter Independent Duty Marines and Production Recruiters, both with and without Military Community Support, to be examined either separately or together, as appropriate based on the data collected. This flexibility could increase greatly the number of insights drawn from the collected data and, hence, the value of the 2007 QoL Study to the Marine Corps.

As a result of these properties, the recommendation was made to the Marine Corps to dispense with the use of both the Active Duty Marine composite (which combined response data from all three Active Duty Marine respondent groups) and the IDMw/oMCS composite (which combined response data from both the Non-Production Recruiter Independent Duty Marines and the Production Recruiters) that were used in the 2002 QoL Study. That recommendation was accepted.

As a result, for simplicity in the body of this report, the term "Independent Duty Marine" will refer to the members of the population of Non-Production Recruiter Independent Duty Marines. Thus, there was no overlap (or common members) of the populations of Independent Duty Marines and Production Recruiters, as defined in this Study.

2.6 ANALYSIS PLAN

The Analysis Plan used to guide the performance of this study was based on the 2002 QoL Study analysis plan. However, in contrast to the 2002 QoL Study Report and as was done in the 1993 QoL Study Report, the responses to a relatively large number of the non-affective and non-satisfaction questions also were analyzed in this 2007 QoL Study. As appropriate, discussion and graphics are provided that characterize the distribution of the responses to the questions analyzed, e.g., through extensive use of histograms of response distributions. For the first time, analysis of the responses of the Base and Station Marines by base/location was performed, giving insights into the variation of opinions at various Marine Corps installations²⁹.

A key change to the analyses contained in this 2007 QoL Study Report was the emphasis on practical, rather than statistical, significance. This concept was introduced in the 2002 QoL Study since it was expected that the statistical results from the QoL studies performed in different years would vary from each other, but it was rarely used in the reports from that study. The concept of practical significance is closely tied to the concept of effect size, a name given to a family of indices that measure the magnitude of a treatment effect. Unlike the significance tests that were the focus of past Marine Corps QoL studies, these indices are independent of sample size.

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²⁸ 2002 OoL Study Report, pp. 2-2 to 2-4.

²⁹ Base and Station respondents were explicitly instructed to respond regarding the "here and now," i.e., they were instructed to focus their responses on their feelings about the particular base/station at which they lived and/or worked at the time at which they completed the survey.

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Cohen's *d* statistic was used to determine practical significance. Cohen (1988) defined *d* as the difference between the means, μ_1 and μ_2 , divided by the standard deviation, σ , of either group. In practice, the pooled standard deviation is commonly used (Rosnow and Rosenthal, 1996). This is the root mean square of the two standard deviations (Cohen, 1988, p. 44), or the square root of the average of the squared standard deviations. That is:

$$d = (\mu_1 - \mu_2) / \sqrt{[(\sigma_1^2 + \sigma_2^2)/2]}$$

In this study, Cohen's *d* statistic of at least 0.5 was taken as the minimum necessary for a difference to be accorded practical significance.

A more detailed discussion of practical significance and Cohen's *d* statistic can be found in Appendix D, which includes in its entirety the Analysis Plan used to guide this study. It provides the methodologies for the analyses performed and discusses some key elements of the analysis methodology that were applied to multiple respondent groups (and hence which appear in multiple chapters of this report), such as the focus on practical significance. It also contains a description of the types of databases developed from the survey responses.

Another important point that resulted from the 2007 definition of the respondent groups should be discussed. When comparisons were made between the results from this 2007 QoL Study and the 2002 QoL Study, are presented and reviewed it is important to note that an identical weighting methodology was applied to both the 2002 and the 2007 data (using different, 2002- or 2007-specific weights, as appropriate). That is, since the 2002 QoL Study focused on the results for Active Duty Marine and IDMw/oMCS composites, the Study Team went back and re-analyzed much of the data from that earlier study to compute measures (such as overall mean happiness and satisfaction scores in each life domain) that were equivalent to those generated from the 2007 data collected for this study. The extra work generated by this effort was felt to be more than compensated for by the comparability provided in the measures examined.

3. SURVEY DEVELOPMENT AND ADMINISTRATION

3.1 INTRODUCTION

This chapter presents a short discussion of the data collection and survey development and administration efforts performed in support of the 2007 QoL Study. Much more detailed information, including schedules and detailed lessons learned and recommendations for performing future Marine Corps Quality of Life studies, is contained in Appendix E.

3.2 SURVEY INSTRUMENT DESIGN

To maximize consistency with past QoL studies (especially the most recent, 2002 QoL Study), the 2002 QoL Study survey instruments were used as starting points for the development of the 2007 Active Duty Marine and Family Member QoL survey instruments. As in the 2002 effort and to encourage candid responses, the surveys were designed to be anonymous with neither names nor social security numbers requested from the participants.

The vast majority of the 2002 survey questions and the formats of those questions were retained in the 2007 survey instruments. Recognized grammatical and spelling errors were corrected, and the response options to several questions (e.g., the question regarding the permanent duty station of the Marine or of the spouse of the Family Member and the health care options available) were updated to reflect the realities of 2007. A small number of questions were reformatted and/or more comprehensive instructions were included to make the questions easier to understand and answer. Similarly, the directions for answering a number of questions and the instructions for skipping parts of the survey (e.g., if certain conditions applied) were revised to make navigation through the survey instruments more straightforward.

The most significant changes to the initial 2007 survey instruments were the addition of questions related to deployment frequency as a result of the Marine Corps' participation in OIF and OEF. Active Duty Marines were asked how many times they had been deployed in support of OIF and/or OEF, how long it had been since their last deployment, and when they anticipated their next deployment. Family Members were asked similar questions related to their spouse's deployments. In addition, the Active Duty Marines were asked about their satisfaction with the amount of contact with their families, the predictability of the length of their deployment and the deployment support services received by their families during their last OIF/OEF-related deployment.

In addition to the Study Team-formulated candidate questions that were presented to the Government for consideration, the Study Team also solicited Government-desired changes to the survey instruments and incorporated these into revised survey instruments. For example, it was suggested that each survey instrument include questions on how the educational opportunities available to their children affected the respondents' plans to remain on active duty or their desire to remain a part of the Marine Corps. These versions of the surveys were submitted to the members of the Study Advisory Committee (SAC) for review, comment and further revision. The

resulting versions of the survey instruments were used in the Validation Test conducted in mid-September, 2007.

3.2.1 The 2007 Active Duty Marine Survey Instrument

The Active Duty Marine survey instrument contained a 28-question demographic section related to the respondents' background and career. The survey examined the same 11 life domains as in the three previous Marine Corps QoL survey efforts. These life domains, shown previously, are repeated in Table 3-1 for the convenience of the reader.

Table 3-1. Life Domains Examined in the 2007 Active Duty Marine Survey Instrument

Life Domains Examined			
Residence	Relationship with Your Children		
Neighborhood	Relationship with Other Relatives		
Leisure and Recreation Income and Standard of Livi			
Health	Military Job		
Friends and Friendships Yourself			
Marriage/Intimate Relationship			

The practice of including both happiness and satisfaction measures in each life domain was continued in the 2007 Active Duty Marine survey instrument. Generally, the first question in each life domain was a happiness-related/affective question, measured on a seven-point Delighted-Terrible ("D-T") scale, with scores ranging from 1 ("Terrible") through 4 ("Neither Unhappy Nor Pleased") to 7 ("Delighted"). Each life domain also included at least one satisfaction-oriented question, with sub-sections related to the respondents' satisfaction with various aspects of the life domain, as well as overall satisfaction with that entire domain. The satisfaction questions, as well as some others, also used a seven-point scale, ranging from 1 ("Completely Dissatisfied") through 4 ("Neutral") to 7 ("Completely Satisfied").

In addition to specific, domain-related questions and the happiness and satisfaction questions, each life domain asked the respondent about the impacts of that domain on their individual job performance and their intentions to reenlist. Also, six individual questions, divided into two, three-question sections of the survey (one section immediately before and one immediately after the life domain questions), addressed Life as a Whole (or Global Quality of Life) from both the affective and cognitive perspectives as well as from a have-want/Multiple Discrepancies Theory point of view. Note that the inclusion of the MDT-related question in the calculation of Global Quality of Life maintained a change made in the 2002 Active Duty Marine survey instrument. The MDT question was designed to determine the satisfaction of survey respondents with what they have versus what they want or, stated differently, their expectations within the various life domains.

3.2.2 The 2007 Family Member Survey Instrument

As in 2002, the Family Member survey instrument intentionally was kept much briefer (less than half the length) than its Active Duty Marine counterpart in an effort to limit apathy and fatigue on the part of the respondents and to encourage participation. It also began with a Background section asking the respondent about themselves and their Marine Corps spouse. It then examined the same 10 life domains (shown previously, but repeated in Table 3-2 for the convenience of the reader) as in the 2002 QoL Study.³⁰

Table 3-2. Life Domains Examined in the 2007 Family Member Survey Instrument

Life Domains Examined			
Residence	Separation		
Relocation	Children Quality of Life		
Leisure and Recreation	Pay & Benefits		
Support Systems	Your Job/Professional Development		
(e.g., MCCS Programs and Services)	Marine Corps Life & You		
Health Care	(Spouse Retention Desires)		

Similar to the Active Duty Marine survey, two parts of the Family Member survey (one immediately before and one immediately after the life domain questions) examined Life as a Whole/Global Quality of Life; however, for the Family Members only a single question was included in each of the two relevant parts of the survey, although both happiness and satisfaction with Life as a Whole/Global Quality of Life were explored. Important questions also included those related to the respondents' satisfaction within each life domain and items asking about overall desires and the influences of each life domain on the respondents' desires to remain part of the Marine Corps.

3.2.3 Validation Test of the 2007 QoL Survey Instruments

Prior to the actual survey administration effort, the Study Team wanted to exercise:

- Both survey instruments in order to assess their revised content (e.g., the OIF/OEF-related questions).
- The procedures for administering the surveys (e.g., the verbal instructions given to the participants) and for the optical scanning of the completed forms.

Two Validation Test sessions were conducted at Marine Corps Base (MCB) Quantico in September, 2007.

Each of the two sessions began with introductory remarks from the Study Sponsor, followed by specific instructions for taking the survey from the Study Team. The participants then were given the survey forms and the time to finish them completely. After the last survey was completed, an informal discussion with the participants sought to determine if any of the survey questions were confusing or needed rewording or if questions were not asked that should have been.

³⁰ Recall that the responses to the single "Marine Corps Life and You" question were analyzed as part of the Global Quality of Life analysis for the Family Members, rather than as a separate life domain.

Study Team, Study Sponsor and Marine Corps Combat Development (MCCDC) Operations Analysis Division (OAD) representatives then discussed the comments made (both verbally and written in the questionnaires), and agreed upon refinements to be made to the survey instruments (with the ultimate decisions made by the Study Sponsor). The Study Team then refined the survey instruments and distributed them for review and comment.

A number of modifications were made to each of the survey instruments, and to the introductory remarks made to the participants prior to their filling out the surveys. The completed surveys generated by the Validation Test also were optically scanned to determine the readability of the completed surveys by the equipment planned for use during the formal survey administration effort.

The Validation Test effort was deemed to have been very successful and well worth the resources expended, and recommends that performers of all future Marine Corps QoL studies be encouraged to perform a similar test. At the completion of the Validation Task, and with the approval of the Study Sponsor, the survey instruments for the 2007 Marine Corps QoL Study were finalized. They are included as Appendices F and G.

3.3 SURVEY ADMINISTRATION

The Study Team submitted its Data Collection Plan to the Government on 31 August 2007. That plan was used to guide the survey administration effort.

As in the 2002 QoL Study, three respondent groups of Active Duty Marines as well as Family Members were surveyed. The responses from the four respondent groups were collected in four distinct ways, as shown in Table 3-3. These included:

- On-site collection of responses from Base and Station Marines at USMC installations by Survey Administration Teams composed of two members of the Study Team accompanied by a representative from each of the Study Sponsor (HQMC (M&RA)) and MCCDC OAD. Two such teams simultaneously surveyed Marines on the East and West Coasts, with the Western Pacific (WESTPAC) trip occurring later.
- 2) On-site collection of responses from Base and Station Marines at selected (generally smaller) USMC installations by Command-designated Base/Station POCs. Data collection at five locations was planned to be administered by local Command-designated Base/Station POCs. This was done because of the small number of surveys required, the remote location of the installation, or personnel availability at these sites. The Study Sponsor randomly chose Marines to respond to the survey. The Study Team mailed surveys to each Commanddesignated Base/Station POC with instructions to administer them by a certain date and return them by mail to the Study Team.
- 3) Mail-in collection of survey responses from Independent Duty Marines and Family Members. The survey appropriate to the recipient was mailed along with instructions, a letter from the Commandant and the Sergeant Major of the Marine Corps, and a postage-paid, return envelope.

4) Collection of responses using a hybrid of the previous two methods in which the survey instruments and instructions were mailed to Recruiting Station POCs at each of the 48 Marine Corps Recruiting Stations and then administered/ distributed by those POCs to individual Production Recruiters who, to maintain anonymity, were to mail their responses directly back to the Study Team.

Table 3-3. The Respondent Groups and Planned Response Collection Mechanisms

Description	Specific Location and Planned Date(s) of Visit ¹	Means of Collection ²
Base and Statio	n Marines	
Metropolitan Washington,	1. MCB Quantico (9, 10, and 12 October)	Survey Administration Team
D.C., Area	2. Headquarters Battalion Henderson Hall (11 October)	ourvey Administration ream
	3. Camp Pendleton (15-18 and 25 October)	Survey Administration Team and Command-Designated Base/Station POC ³
	4. MCAS Miramar (24 and 25 October)	Command-Designated Base/Station POC ⁴
West Coast	5. MCAS Yuma (23 October)	
	6. MCAGCC (Twentynine Palms) (19 and 22 October)	Survey Administration Team
	7. MCLB Barstow	Command-Designated Base/Station POC
	8. MCRD San Diego	Command-Designated Base/Station 1 GC
	9. Camp Lejeune (15-17 and 19 October)	
	10. MCAS New River (18 October)	Survey Administration Team
East Coast	11. MCAS Cherry Point (22 and 23 October)	ourvey Administration ream
	12. MCAS Beaufort (24 October)	
	13. MCLB Albany	Command-Designated Base/Station POC
	14. MCRD Parris Island	Communa Designated Base/Otation 1 CC
WESTPAC	15. MCB Hawaii 13 and 14 November)	Survey Administration Team
WESTPAC	16. Camp Butler (7-9 November)	
17. MCAS Iwakuni		Command-Designated Base/Station POC
Independent Du	ty Marines ⁵	Individual Mail-In of Responses
Production Recruiters ⁵		Distribution by Recruiting Station POC with Individual Mail-In of Responses
Family Members ⁵		Individual Mail-In of Responses

- 1. All visits occurred during 2007.
- 2. Administration of all surveys to Base and Station Marines was planned to be done on-site at the installations to which those Marines were assigned.
- 3. Originally planned to be administered solely by Survey Administration Teams. See discussion in Appendix E.
- 4. Originally planned to be administered by Survey Administration Teams. See discussion in Appendix E.
- 5. Mail-in responses were accepted from early November 2007 to 15 April 2008 (and extension of 3 months over the originally-planned period to allow for delays in delivery and return).

4. ANALYSIS OF THE RESPONSES FROM THE BASE AND STATION MARINES.

4.1 INTRODUCTION

Base and Station Marines were defined as those Marines from whom responses were collected by on-site administration of the survey, either by representatives of the Study Team or by a Command-designated Base/Station POC. Base and Station Marines comprised about 81.2 percent of the Marine Corps at the time at which survey administration effort for this study was conducted.

The Base and Station respondent sample was defined as those Marines (including Marines in the Operating Forces) assigned to one of 17 Marine Corps installations around the world and whose completed surveys were returned to the Study Team in bulk from those installations, regardless of how the respondents answered Question #20 in the Background portion of the survey regarding their permanent duty station (as discussed later).

The organization of this chapter, as well as other key information such as a discussion of statistical and practical significance and the key driver diagrams, is presented in the Analysis Plan, included as Appendix D.

4.2 WEIGHTING OF THE BASE AND STATION RESPONDENT SAMPLE

Responses were collected from 4,812 Base and Station Marines. A concerted effort was made to collect the responses from a sample that would be representative of the total Marine Corps population by following the Sample Selection Plan (discussed earlier). This generally was successful, but it still was determined that weighting of the responses by the Pay Grade Group would be worthwhile. The Pay Grade Group-based weighting factors used, taken from Appendix H, are presented in Table 4-1 in the column labeled "Total Marine Corps (Weight)."

Table 4-1. Pay Grade Group-Based Weights Assigned to the 2007 Base and Station Respondent Sample

	Frac		
Pay Grade Group	Total Marine Corps (Weight)	Base and Station Respondent Sample	Ratio
E-2/E-3	0.36358	0.37636	0.966
E-4/E-5	0.36061	0.37636	0.958
E-6/E-7	0.13267	0.11492	1.154
E-8/E-9	0.03036	0.02869	1.058
WO	0.01156	0.01239	0.933
O-1 to O-3	0.06498	0.06027	1.078
O-4 to O-10	0.03624	0.03100	1.169
Total	100.0%	100.0%	

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The differences between the distribution of personnel in the seven Pay Grade Groups in the overall Marine Corps Base and Station population and in the Base and Station respondent sample appear relatively minor, as shown by the values in the "Ratio" column in the table. The ratios ranged from 0.933 (for the Warrant Officers) to 1.169 for the O-4 to O-10 Pay Grade Group. Thus, weighted and unweighted mean scores for the various measures discussed in this chapter likely differed only by small amounts.

In subsequent sections of this chapter, weighted mean scores are computed (e.g., for measures such as the overall mean happiness and satisfaction in a life domain, and the mean effect of a life domain on a respondent's intentions to reenlist and on their job performance), trend analyses are performed and comparisons are made for the entire group of Base and Station respondents. When comparisons are made between the results from this 2007 QoL Study and its immediate predecessor, the 2002 QoL Study, it is important to note that an identical weighting methodology was applied to both the 2002 and the 2007 data (using different, 2002- or 2007-specific weights, as appropriate) for the groups of Base and Station respondents from either study. The population weights applied to the 2002 data also are contained in Appendix H. While the results presented in the 2002 QoL Study Report were weighted, 31 a different weighting scheme than that applied here likely was used since some portions of that report examined an Active Duty Marine Composite that included inputs from all three types of Active Duty Marines. However, complete details of that weighting scheme could not be ascertained from the 2002 QoL Study Reports. Thus, while the numerical results from the 2002 data that will be presented in the subsequent sections of this report may not match the numerical results presented in the 2002 QoL Study Report exactly, 32 they do have the benefit of having been generated in exactly the same way as the values from the 2007 QoL Study and the specific weighting scheme used has been documented in the referenced appendix of this study. That comparability was felt to far out-weigh the benefits of matching the numerical values included in the 2002 QoL Study Report.

Data values from the 1993 and 1998 QoL Studies also have been presented whenever possible. No attempt was made to "update" those results in a manner similar to that done to the 2002 data in order to attain comparability. Thus, the earlier data were taken (and included in this report, whenever possible) as given/found in the final reports from those studies and were not manipulated or changed in any way. Appendix D of the 1998 QoL Study Report was an especially valuable source of data.³³

It is noted, however, that the 1998 non-Production Recruiter data, which included both Base and Station Marines and Independent Duty Marines, were weighted³⁴ by "pay grade"³⁵ (although, again, the specific methodology used is unknown). It is not believed

³² In fact, they generally differed by ± 0.10 or less on a scale of 1 to 7.

³¹ 2002 QoL Study Report, p. 3-5.

³³ Note, however, that appendix contained data only on domain satisfaction, and <u>not</u> happiness, by Pay Grade Group. Thus, the subsequent graphics in this report that show trends in the happiness of the Base and Station Marines by Pay Grade Group in each life domain generally do include results from only the 2002 and 2007 QoL Studies, while the analogous graphs of the trends in satisfaction include data from all four Marine Corps QoL studies.

³⁴ 1998 QoL Study Report, p. 6.

³⁵ 2002 QoL Study Report, p. 2-2.

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that the 1993 data, which were based on a much larger respondent base and which included all three Active Duty Marine respondent groups considered in this 2007 QoL Study, were weighted.³⁶

4.3 DEMOGRAPHICS OF THE BASE AND STATION RESPONDENT SAMPLE

This section characterizes the Base and Station respondent sample by a variety of personal demographics and career characteristics derived from their answers to the 28 questions in the Background section (comprising Personal and Career-related questions) of the Active Duty Marine survey (Appendix F).

Before the demographic data are presented, two points must be noted.

- Not all respondents answered every question and some of those that did answer either failed to provide valid answers (e.g., multiple responses to a single-answer question) or their answers could not be recognized during the optical scanning process. Thus, the data on the total number of responses seen in the graphics presented below vary: Only the respondents from whom valid data were collected for a specific question/set of questions generally were included in the discussion of the responses to that question/set of questions.
- Wherever appropriate, the respondent data were compared with data for the overall Marine Corps. The latter came from a "Demographics Update" produced by Marine Corps Community Services (hereafter referred to as the "December 2007 MCCS "Demographics Update"") and dated December, 2007, or from other Marine Corpsor Study Sponsor-supplied data.

Gender, Age and Race/Ethnicity. Table 4-2 shows the gender distribution of the respondents, based on the responses to Question #1.³⁷ Over 90 percent of the respondent sample was male, which is slightly below the overall Marine Corps figure of about 94 percent. Gender has been found to be associated with variance in global satisfaction and happiness ratings: In general, females tend to be more positive in their assessment of satisfaction and happiness with life as a whole. This world view was confirmed for Marines by the results of the 1993 and 2002 QoL Studies, which showed³⁸ that female Marines were slightly more positive in their assessments of life as a whole than were their male counterparts.

³⁷ Specific questions referred to in this demographics discussion all came from the Background section of the Active Duty Marine survey (Appendix F).

³⁶ No references to "weighting" or to a need to "adjust" the data for "imbalances" were found in the 1993 QoL Study Report. Page 6 of the 1998 QoL Study Report does refer to demographics "for the 1993 (unweighted) and 1998 (weighted) samples." Also, p. 2-3 of the 2002 QoL Study Report says 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."

³⁸ 1993 QoL Study Report, p. 114 and 2002 QoL Study Report, p. 3-53, respectively. Note that the former was related to a sample of all Active Duty Marines, while the latter was related to an Active Duty Marine composite.

Table 4-2. Gender Distribution of the Base and Station Respondents and of the Overall Marine Corps

		Percentage of		
		Base & Station	Overall	
	Count	Respondents	USMC*	
Male	4,311	90.4%	93.7%	
Female	457	9.6%	6.3%	
Total	4,768	100.0%	100.0%	

^{*} E-1s generally were excluded from the Base and Station respondent sample, but are included in the "Overall USMC" statistics (taken from p. 11 of December 2007 MCCS "Demographics Update").

Table 4-3 shows the age distribution of the respondents (based on the responses to Question #2), partitioned into the same seven ranges used in the 1993 and 2002 QoL Study Reports. The average age of the Base and Station respondents was 25 years and 3 months, only slightly older than that of the overall Marine Corps despite the fact that E-1s specifically were not targeted in the study's data collection effort.

Table 4-3. Age Distribution of the Base and Station Respondents and of the Overall Marine Corps

		Percentage of		
		Base & Station	Overall	
	Count	Respondents	USMC*	
17-20	1,018	21.5%	25%	
21-25	2,083	44.1%	42%	
26-30	776	16.4%	15.3%	
31-35	403	8.5%	8.5%	
36-40	283	6.0%	6.0%	
41-45	115	2.4%	2.5%	
46 & Above	47	1.0%	1.0%	
Total	4,725	100.0%	100.0%	
Average Age	-	25.24 Yrs	25.07 Yrs	

^{*} E-1s generally were excluded from the Base and Station respondent sample, but are included in the "Overall USMC" statistics (supplied by HQMC (MRC) to the Study Team on 7 April 2008).

As in the previous Marine Corps QoL surveys, race and ethnicity were addressed by two separate survey questions. The first (Question #3) asked whether the respondent were "of Spanish/Hispanic descent," and the second (Question #4) asked if he/she were a member of one of five racial groups (White, Black/African American, Asian/Pacific Islander, Native American/Aleut/Eskimo or "Other").

The treatment of the responses in the previous reports has varied. The 1993 QoL Study Report (page 25) included Spanish/Hispanic in a table of racial distribution statistics, but ignored the Asian/Pacific Islander and Native American/Aleut/Eskimo

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respondents, apparently including them in the "Other" data. The 2002 QoL Study Report (pp. 3-9 and 3-10) noted that 18 percent of the Base and Station respondents said they were of Spanish/Hispanic descent, but then presented a table that included only the five racial groups included in Question #4 (i.e., the table did not include Spanish/Hispanic as an option). That report then went on to discuss how the number of respondents who listed themselves as "Other" was large relative to all but the White group, and commented about mixed marriages and/or a reluctance to self-identify as a member of any racial group as possible causes of this occurrence.

This 2007 QoL Study desired to provide a breakdown of race/ethnicity that could be compared with the data in the December 2007 MCCS "Demographics Update," which contained Spanish/Hispanic as a distinct racial/ethnic group. To do this, it first was noted that 1,017 respondents (21.4 percent of the valid answers to Question #3) answered that they were Spanish/Hispanic. The responses of those 1,017 Marines to Question #4 then were examined. Of these Marines of interest, 621 (61.1 percent) answered "Other" when asked their race. These 621 Marines, who already had identified themselves as Spanish/Hispanic in Question #3, represented 86.1 percent of the 721 Marines who responded "Other" to Question #4. It is believed that this is the reason the "Other" category has continually grown over the series of Marine Corps QoL studies: Between 1993 and 2007, a growing percentage of respondents have been Spanish/Hispanic Marines who don't classify themselves as members of any of the four specific racial groups included in the racial group question. Thus, for the data presented below in Table 4-4, the 621 Marines who responded 1) that they were of Spanish/Hispanic descent and 2) that they were members of the "Other" racial group were classified as Spanish/Hispanic. Those 621 respondents represented 13.3 percent of the valid responses. Respondents who said they were Spanish/Hispanic, but who then selected any one of the four other racial groups included in Question #4, were included as members of the racial group with which they had identified.

Table 4-4. Race/Ethnicity of the Base and Station Respondents and of the Overall Marine Corps

		Percentage	of
		Base & Station	Overall
	Count	Respondents	USMC*
White	3,112	66.9%	68.3%
Black/African-American	563	12.1%	10.5%
Asian/Pacific Islander	179	3.8%	3.5%
Native American/Aleut/Eskimo	80	1.7%	1.6%
Spanish/Hispanic**	621	13.3%	12.1%
Other	100	2.1%	4.0%
Total	4,655	100.0%	100.0%

^{* &}quot;Overall USMC" statistics taken from p. 11 of December 2007 MCCS "Demographics Update," in which "Hispanic" was one of seven options listed. Note that data for "Asian" and "Native Hawaiian/Pacific Islander" groups were combined to match the categories used in the 2007 QoL survey.

Race and ethnicity are of interest because both the 1993 and 2002 QoL Studies found³⁹ that Blacks and Hispanics were somewhat more positive than Whites in their assessment of life as a whole.

Current Level of Education. Question #5 asked the respondents for their current level of education, and provided nine specific options, ranging from not having a high school diploma to having a doctoral or post-graduate degree, and "Other." The results are shown in Table 4-5.

^{**} A total of 1,017 respondents self-identified as "Spanish/Hispanic" on Question #3 of the 2007 QoL survey. Of those, 621 responded "Other" on Question #4. It is those respondents who are incl:uded here.

³⁹ 1993 QoL Study Report, p. 114 and 2002 QoL Study Report, p. 3-53, respectively. Again, the former was related to a sample of all Active Duty Marines, while the latter was related to an Active Duty Marine composite.

Table 4-5. Current Education Level of the Base and Station Respondents

		Number			Percent of
	Enlisted	Officer	Unknown	Total	Base & Station Respondents
No High School Diploma	33	1	1	35	0.74%
High School Equivalency (E.g., GED, Certificate of Completion)	90	0	1	91	1.93%
High School Diploma	2,105	13	35	2,153	45.69%
Less Than 1 Year of College	823	5	13	841	17.85%
1 or More Years of College, Non-Degree	823	21	13	857	18.19%
Associate's Degree	184	18	4	206	4.37%
Bachelor's Degree	118	283	9	410	8.70%
Master's Degree	15	76	5	96	2.04%
Doctoral or Professional Degree	1	10	0	11	0.23%
Other	9	2	1	12	0.25%
Total	4,201	429	82	4,712	100.0%

Slightly more than half of the 4,201 enlisted respondents had no more than a high school diploma or its equivalent. About 46 percent had done some undergraduate college work, up to having received a Bachelor's degree. About 86 percent of the officers held either Bachelor's or post-graduate degrees.

The 2002 QoL Study Report commented on how 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 percent of the variance in subjective well being can be accounted for by level of educational attainment (*Michalos, 1991*). 40

Marital and Accompanied Status. The marital status of the Base and Station respondents, based on the responses to Question #6, is summarized in Table 4-6.

Table 4-6. Marital Status of the Base and Station Respondents

		Percentage of
		Base & Station
	Count	Respondents
Never Been Married	2,077	43.7%
Married	2,316	48.8%
Married but Separated	169	3.6%
Divorced	185	3.9%
Widowed	3	0.1%
Total	4,750	100.0%

⁴⁰ Taken from 2002 QoL Study Report, p. 3-13.

While 48.8 percent of the sample was married, the equivalent figure of the overall Marine Corps (as contained on page 2 of the December 2007 MCCS "Demographics Update") is 45 percent. The difference likely was due to the limited number of E-1s (who, it is surmised, are less likely to be married) in the respondent sample. Thus, the sample looks like a reasonable approximation of the proportion of married to single Marines. Note that both the 1993 and 2002 QoL Studies found⁴¹ that married Marines tended to report higher quality of life than non-married Marines.

Table 4-7 shows the data on the dependent family members of the Base and Station respondents (based on the responses to Question #8). Note that since this was a "Mark all that apply" question, the total number of responses was greater than the total number of Base and Station respondents. Only about 39 percent of the sample had no dependents, a decrease from the nearly 52 percent that were in that category in the 2002 QoL Study sample, and that 61.1 percent were married.

Table 4-7. Depe	ndent Family M	lembers of the E	Base and Station	Respondents
•				

		Percentage of Base & Station
	Count	Responses
None	2,244	38.9%
Spouse (Non-Military)	1,557	27.0%
Dependent Child(ren) Living with Me	1,473	25.6%
Dependent Child(ren) Not Living with Me	408	7.1%
Legal Ward(s) Living with Me	22	0.4%
Dependent Parent(s) or Other Relative(s)	59	1.0%
Total	5,763	100.0%

When asked if they were accompanied by their family members on their assignment (Question #18), 78.8 percent of the married Base and Station respondents said that all or some of their dependent family members accompanied them (the equivalent figure from the 2002 QoL Study was 82.6 percent); only 4.9 percent said that they were permanently unaccompanied (the equivalent figure from the 2002 QoL Study was 4.6 percent). Among the non-married Base and Station respondents, 6.8 percent (166 of 2434) said they were accompanied by some or all of their dependents (the equivalent figure from the 2002 QoL Study was 5.0 percent). Perhaps more tellingly, however, when only the responses of the 357 divorced/separated/widowed respondents that could be called "formerly married" Marines were considered, 32.8 percent (117 of 357) said that they were accompanied by some or all of their dependent family members. Perhaps surprisingly, 85 of these 117 "formerly married" but accompanied Marines (72.6 percent) were males and only 32 were female.

The reasons for these changes, especially for the 25 percent decrease in the percentage of Marines with no dependents living with them and the 36 percent increase in the percentage of non-married Marines accompanied by dependents, are not known.

⁴¹ 1993 QoL Study Report, p. 114 and 2002 QoL Study Report, p. 3-54, respectively.

The number and percentage of formerly married Marines accompanied by family member dependents has never been reported in earlier Marine Corps QoL studies and, along with the gender breakdown of the members of that sub-group, may be of interest to Marine Corps decision makers.

A total of 306 of the 2,316 married Base and Station respondents (13.2 percent) responded to Question #19 by choosing one or more valid reasons for being a "geographic bachelor" by choice (i.e., it was not a requirement of their billet that they be unaccompanied). The two specific reasons given most frequently for choosing this status were their spouse's job and personal preference. Among the 148 married respondents who said that at least one of the reasons for being a geographic bachelor was their "Spouse's Job," only 19, or 12.8 percent, were married to another member of the military.

Spouse Employment. Table 4-8 shows the employment status (Question #7) of the spouses of the Base and Station respondents who said they were married or married but separated (Question #6). It can be seen that 10.9 percent of the married members in the sample had a military spouse. Of the married or separated respondents whose spouses were members of the military, 52.6 percent were female. Note also that somewhat more than 25 percent of the spouses of the married or separated Base and Station respondents were unemployed by choice.

Table 4-8. Employment Status of the Spouses of the Married/Separated Base and Station Respondents

	Count	Percentage of Base & Station Respondents
My Spouse Is in the Military	268	10.9%
My Spouse Is Self-Employed (for Pay) at Home	90	3.7%
My Spouse Works in a Civilian Job Part Time	316	12.9%
My Spouse Works in a Civilian Job Full Time	683	27.9%
My Spouse Is a Part-Time USMC Employee	27	1.1%
My Spouse Is a Full-Time USMC Employee	50	2.0%
My Spouse Is Unemployed by Choice	670	27.3%
My Spouse Is Unemployed but Actively Seeking Employment	348	14.2%
Total	2,452	100.0%

Parental Status. When asked if they had any children under the age of 21 that currently live with them (Question #9), 1,636 of the Base and Station respondents (or 35.1 percent of those who gave valid responses) reported having such children in their households. The average number of pre-school children in a household (Question #10), shown in Table 4-9, was 1.05, while the average number of school-aged children was 0.84, for a total of 1.89 children in the average respondents' household. These values were nearly identical to the equivalent figures from the 2002 QoL Study, which were 1.00 pre-school and 0.87 school-aged children per household, for an average of 1.87.

Table 4-9. Children of the Base and Station Respondents

Category	Average Number
Pre-School (5 Years or Less)	1.05
School Age (6 - 20 Years)	0.84
Average Number of Children	1.89

Enlisted/Officer Breakdown. Question #11 asked the respondents for their pay grade. While more detail on the responses to this question will be given later, Table 4-10 shows that enlisted Marines comprised 89 percent of the Base and Station respondent sample, and provided 90.8 percent of the valid responses. This compares well to the overall Marine Corps, which has 1.49 enlisted personnel per officer, or 89.5 percent enlisted personnel.⁴²

Table 4-10. Enlisted/Officer Breakdown of the Base and Station Respondents

		Percentage of					
		Base & Station	Valid				
	Count	Respondents	Responses				
Enlisted	4,286	89.1%	90.8%				
Officer	436	9.1%	9.2%				
Unknown	90	1.9%					
Total	4,812	100.0%	100.0%				

Service Demographics. A number of other demographic analyses were based on service-related variables, including those related to pay grade, assignment location, and length of service.

Table 4-11 shows several length of service-related measures. The average Base and Station respondent had spent about 1.5 years in his/her current pay grade (Question #12) and almost 5.5 years in the Marine Corps (Question #13). This latter figure was slightly greater than the 5.0 year average figure (shown on page 9 of the December 2007 MCCS "Demographics Update") for the entire Marine Corps, but that difference can be attributed to the intentional attempt to exclude E-1s (who generally have been in the Marine Corps for only a relatively short time) from the respondent sample. The average respondent had spent about 15 months in his/her current assignment (Question #17). This latter figure lends some confidence to the perceptions of the respondents regarding quality of life on the bases/stations to which they were assigned. That is, the average respondent had not just arrived on their base/station and can be expected to have given informed opinions on quality of life-related issues at their bases/stations.

⁴² December 2007 MCCS "Demographics Update," p. 8.

Table 4-11. Length of Service Demographics for the Base and Station Respondents

	Length of Service					
	In Pay Active In Current Grade Duty Assignment					
Months	17.6	65.1	15.1			
Years	1.47	5.43*	1.26			

^{*} USMC average is 5.0 years (taken from p. 9 of December 2007 MCCS "Demographics Update"). Note, however, that the 2007 QoL survey data shown here generally exclude E-1s, whose generally short time on active duty would lower the value seen here.

It was stated earlier that Question #11 asked the respondents for their pay grade. A simple breakdown of the results, aggregated by Pay Grade Group, was shown earlier during the discussion of the weighting of the respondent sample. Here, the responses to that question, broken down by Pay Grade Group were combined with those for Question #20, which asked the respondents where they were permanently stationed, to produce Table 4-12.

Table 4-12. Pay Grade Group and Location of the Base and Station Respondents

Location	E-2/E-3	E-4/E-5	E-6/E-7	E-8/E-9	WO	O-1 to O-3	O-4 to O-10	Ungraded	Total
MCB Camp Pendleton	337	474	96	17	12	44	13	11	1,004
MCAS Miramar	64	128	36	7	2	19	9	4	269
MCRD San Diego	52	42	26	8	2	6	1	3	140
MCAS Yuma	34	44	17	4	2	5	4	1	111
MCAGCC (Twentynine Palms)	131	97	28	5	2	9	3	8	283
MCLB Barstow	5	6	4	1	0	1	0	0	17
MCB Camp Lejeune	432	388	88	27	10	39	12	12	1,008
MCAS New River	57	80	23	5	2	17	6	1	191
MCAS Cherry Point	59	99	31	7	2	11	3	4	216
MCAS Beaufort	46	54	23	2	3	7	3	1	139
MCRD Parris Island	68	80	33	6	1	11	5	2	206
MCLB Albany	3	19	11	4	1	2	3	2	45
MCB Quantico	21	64	22	8	7	44	17	2	185
HQ Bn Henderson Hall	4	19	9	5	0	5	16	0	58
MCB Hawaii	51	66	23	6	0	7	6	8	167
MCAS Iwakuni	57	39	15	6	2	4	3	3	129
MCB Camp Butler	136	130	46	19	3	22	11	12	379
Unidentified Base/Station	113	88	24	7	2	8	7	16	265
Total	1,670	1,917	555	144	53	261	122	90	4,812

Several points must be made here. First, although they are not shown explicitly here, it must be remembered that E-1s were not knowingly sampled during the survey administration effort. However, the responses of a small number of E-1s (a total of only 77 surveys) were collected. These were included in the E-2/E-3 Pay Grade Group for analysis purposes, as has been done in earlier Marine Corps QoL studies. In addition, it can be seen that a total of 265 respondents (5.5 percent) gave ambiguous answers to Question #20. The majority of these (182 of the 265, or 69 percent) comprised blank, multiple or otherwise unreadable responses. However, some of the respondents (20) replied that they were assigned to one of the six Marine Corps recruiting districts, while

others (63) apparently mis-interpreted the intent of the question and responded that they were stationed either inside or outside of CONUS. Despite these ambiguities, and as stated in the introduction to this chapter, these respondents were treated as Base and Station Marines because their surveys had been collected from one of the 17 Marine Corps installations around the world at which on-site survey administration had been performed and from which completed surveys had been returned to the Study Team in bulk.

Career Intentions. Two questions asked the respondents about their career intentions. Question #14 asked about intentions/interests at the time when the respondent joined the Marine Corps. The respondents were asked to choose as many of the nine options (including "I'm Not Sure ..." and "Other") as were applicable. Question #15 asked the respondents to choose the one statement which best described their career intentions at the time of participating in the survey (note that "Medical Separation" was a new response option added to the 2007 QoL survey). A combination of the responses to these questions is shown in Table 4-13. Note that the rows in the table correspond to the responses to Question #14, the columns correspond to the responses to Question #15, and that the values in the table have been normalized to sum to 100 percent.

Table 4-13. Comparison of Career Intentions of the Base and Station Respondents at Time of Joining Marine Corps and at Time of Survey Completion

•								ı
	Which of th	ne Following		Question #1: s Best Desc	~ -	Career Intenti	ons at This	
		hich of the Following Statements Best Describes Your Career Intentions at This Time?						
Question #14: When You Joined the Marine Corps What Were Your Intentions/Interests? Mark ALL That Apply	I Intend To Remain in the Marine Corps until Eligible for Retirement	I Am Eligible for Retirement but Intend To Stay in	I Intend To Stay in but Not until Retirement	I'm Not Sure What I Intend To Do	I Intend To Leave the Marine Corps as Soon as I Can	I Intend To Remain on Active Duty but I Am Being Involuntarily Separated	Medical Separation	Total: Intentions at Time of Enlistment
I Intended To Remain in the Marine Corps until Eligible for Retirement	6.4%	0.3%	0.6%	1.8%	1.6%	0.1%	0.2%	11.0%
I Intended To Remain in the Marine Corps until I Could Earn Educational Benefits	2.8%	0.2%	1.5%	3.1%	3.0%	0.1%	0.1%	10.8%
I Intended To Remain in the Marine Corps until I Could Get the Training I Needed	1.7%	0.2%	1.0%	2.0%	1.4%	0.0%	0.1%	6.4%
I Was Interested in the Travel and Adventure	5.8%	0.6%	1.8%	4.9%	3.8%	0.1%	0.2%	17.2%
I Wanted To Find Out if I Had What It Takes To Be One of the Few and the Proud	4.0%	0.5%	1.5%	3.7%	2.8%	0.1%	0.2%	12.7%
I Wanted To Serve My Nation	6.3%	0.6%	2.0%	5.2%	4.3%	0.1%	0.2%	18.8%
I Wanted the Discipline the Marine Corps Provides	4.3%	0.3%	1.4%	3.5%	2.8%	0.1%	0.1%	12.6%
I'm Not Sure What I Intended	1.0%	0.1%	0.3%	1.1%	1.3%	0.0%	0.1%	3.8%
Other	1.7%	0.1%	0.7%	2.0%	1.9%	0.1%	0.1%	6.7%
Total: Current Intentions	34.2%	2.9%	10.8%	27.4%	22.9%	0.6%	1.3%	100.0%

The nine valid responses to Question #14 and the seven valid responses to Question #15 combined to give the 63 response options shown in the table. If the responses had been distributed uniformly over these 63 options, about 1.6 percent of the responses would have occurred in each cell in the table. To highlight the response combinations

that had been chosen with relatively "high" frequency, 11 cells that received at least twice as many responses as would have occurred had the responses been uniform (i.e., 3.2 percent or more) were highlighted. The entries in five of those cells have been marked by bold text to show that they received at least three times as many responses) as would have occurred had the responses been uniform (i.e., 4.8 percent or more).

When intentions at the time of joining the Marine Corps were examined, the 9 response options would each contain about 11.1 percent of the responses if the responses had been distributed uniformly. Instead four of the nine response options received 12.6 percent or more of the responses, while two others received about 11 percent. The most frequently chosen response options were the "serve my nation" (18.8 percent) and "travel and adventure" (17.2 percent) responses. The "few and the proud" and "discipline" options also were chosen with a relatively high frequency.

When current intentions were examined, three clear choices stood out: The "remain until eligible for retirement," "not sure" and "leave as soon as I can" options, in that order, were the three most frequently chosen responses. More than one-third of the respondents chose the first of those response options.

The single most frequently chosen response combination was the combination of an initial intent to remain until retirement and the current intention of remaining until retirement (6.4 percent). The second most frequently chosen response option was the combination of an initial desire to serve the nation and the current intention of remaining until retirement (6.3 percent). Neither of these may be surprising to persons experienced in Marine Corps career planning. The current intentions of those who joined the Marine Corps because of interest in earning educational benefits were fairly evenly divided between remaining until retirement (2.8 percent), getting out as soon as possible (3.0 percent) and uncertainty (3.1 percent). Among those who joined the Marine Corps because of an interest in travel and adventure, almost 53 percent more planned to remain until retirement (5.8 percent) than planned on getting out as soon as possible (3.8 percent). These last two results could be considered encouraging, because these two groups can be considered to have been less committed to the Marine Corps at the time at which they joined than the respondents in some of the other groups. Not unexpectedly, the same trend appeared for those respondents who joined the Marine Corps because they wanted to see if they could be one of the few and the proud, because they wanted to serve their nation and because they wanted discipline.

An attempt was made to determine the impacts of the Marine Corps' increased OPTEMPO, as epitomized by OIF/OEF deployments, on the respondents' current career intentions. Specifically, the responses to Question #15 were examined both for those respondents who had never participated in such deployments, and for those who had. The results are shown in Table 4-14. When reviewing the data in the table, it is essential to remember that many of the respondents without OIF/OEF deployment experience likely were younger Marines who had been in the Marine Corps for less time than their colleagues. Marines in their first enlistment period are less likely to be committed to a Marine Corps career than are those who have re-enlisted at least once and who, as a result of their longer time in service, are more likely to have experienced

an OIF/OEF deployment. Also that the percentages shown in the last row of this table do not match those shown in the analogous row of the previous table since slightly different sets of responses were used to select the data included in each table. That is, the values here show the results for those respondents who gave valid answers to both Question #15 and Question #23, while the values in the previous table show the results for those respondents who gave valid answers to both Question #15 and Question #14.

Table 4-14. Comparison of Current Career Intentions of Base and Station Respondents Who Have and Have Not Been Deployed as Part of OIF/OEF

	Which o	Question #15: Which of the Following Statements Best Describes Your Career Intentions at This Time?						
Question #23: How Many Times Have You Been Deployed in Support of Operation Enduring Freedom (OEF) and/or Operation Iraqi Freedom (OIF)?	Remain in the Marine Corps until	I Am Eligible for Retirement but Intend To Stay in	I Intend To Stay in but Not until	I'm Not Sure What I Intend To Do	Soon as I	I Intend To Remain on Active Duty but I Am Being Involuntarily Separated	Medical Separation	Percentage of Respondents with Given Number of OIF/OEF Deployments
0 (2,479 Responses)	26.0%	2.2%	10.9%	31.9%	26.4%	0.7%	1.8%	100.0%
1 or More (2,229 Responses)	39.7%	4.4%	9.2%	20.9%	24.3%	0.5%	1.1%	100.0%
Total: Current Intentions	32.5%	3.2%	10.1%	26.7%	25.4%	0.6%	1.5%	100.0%

The six response options highlighted in the table stood out as the most commonly chosen by both of the respondent groups considered here. About 26 percent of those respondents with no OIF/OEF deployment experience intended to remain in the Marine Corps until they are eligible for retirement. This compares with about 40 percent of those (most likely more-senior Marines) with OIF/OEF deployment experience. Uncertainty about career plans, as expressed in the "not sure" response option, was about 50 percent greater for the respondents without OIF/OEF experience, as might be expected since the respondents without OIF/OEF experience may likely be more junior than those with such experience. The percentage of the respondents who said that they intended to leave the Marine Corps as soon as possible was only slightly lower for the respondents with OIF/OEF experience.

If the percentages assigned to the first three response options (which could be considered to be favorable to the Marine Corps in that the respondents expressed an intention to remain in the Marine Corps at least for the present) are aggregated, it can be seen that about 39 percent of the respondents with no OIF/OEF deployment experience selected a favorable response. In contrast, 53 percent of the respondents with OIF/OEF experience expressed similar sentiments favorable to the Marine Corps. Perhaps most telling, however, are the values in the second column of data. These are the responses of the relatively small number of Base and Station respondents who were eligible for retirement but intended to remain in the Marine Corps. The experience and age differences implicit in the data in the other columns of this table likely were greatly attenuated in this group because, by definition, everyone in it was eligible for retirement and thus were likely to be fairly senior. It can be seen that the percentage of respondents with OIF/OEF experience who were eligible for retirement but who planned

to remain in the Marine Corps was twice as large as the percentage of respondents without OIF/OEF experience who were eligible for retirement but who planned to remain in the Marine Corps. This implies a level of commitment that argues against the belief that Marines are being driven out of the Marine Corps by their OIF/OEF deployment experiences and the frequency of those deployments.

The responses to these questions may not seem remarkable in isolation. That is, they could appear to be what might be expected by a subject matter expert in Marine Corps or military personnel issues. However, when considered in the context of the Marine Corps' ~4.5 years of participation in OIF/OEF, it could be argued that receiving intuitive or expected responses to these two questions, especially to Question #15, can be viewed as good news for the Marine Corps. That is, it could be reassuring to see that the Marine Corps' participation in OIF/OEF has not degraded the career intentions of the 2007 QoL survey respondents noticeably. It may be even more gratifying to see that, of the respondents who are eligible for retirement from the Marine Corps, the respondents with OIF/OEF experience are more likely than their counterparts without OIF/OEF experience to want to stay in the Marine Corps.

Deployment History. A number of the Background questions in the Active Duty Marine survey (#21 through #26) were related to the respondents' recent and extended deployment histories. Question #21 asked if the respondent were presently deployed. Only a very small number (less than 1 percent) responded positively, as would be expected for the Base and Station Marine sample.

Question #22 asked how many months *in toto* the respondents had been deployed in the last 12 months. The results for the Base and Station respondents are shown in Table 4-15. About one-third of the respondents said they had been deployed during the last 12 months.

Table 4-15. Deployment Time in the Last 12 Months for the Base and Station Respondents

	Count	Percentage
Not at All	3,067	65.1%
1-3 Months	368	7.8%
4-6 Months	430	9.1%
7-9 Months	776	16.5%
10-12 Months	73	1.5%
Total	4,714	100.0%

Questions #23 through #26 focused specifically on OIF/OEF deployments. Question #23 asked how many times the respondent had been deployed in support of OIF or OEF. The results are shown in Table 4-16.

Table 4-16. Number of Deployments in Support of OIF/OEF for the Base and Station Respondents

		Percentage of		
Number of		Base & Station	Overall	
Deployments	Count	Respondents ¹	USMC ²	
0	2,548	53.0%	48.5%	
1	1,314	27.3%	36.6%	
2	696	14.5%	13.1%	
3	215	4.5%	1.7%	
4+	39	0.8%	0.1%	
Total	4,812	100.0%	100.0%	

^{1.} Respondents were surveyed in October-November 2007.

E-1s and the 25,570 Marines deployed in OIF/OEF on that date.

It can be seen that 53.0 percent of the sample had never been deployed in support of OIF/OEF at the time the surveys were collected. This compares to an overall Marine Corps figure of 48.5 percent, based on data supplied to the Study Team by the Study Sponsor and current as of 7 March 2008. It should be noted that the respondent sample excluded the intentional collection of data from E-1s, who would be unlikely ever to have been deployed to OIF or OEF; thus the percentage of respondents with OIF/OEF deployment experience would be expected to rise. Also, since the sample should have included no Marines who were deployed to OIF/OEF at the time of the data collection, the data shown for the overall Marine Corps excluded the 25,570 Marines deployed in support of OIF/OEF on the 7 March date.

Question #24 asked the respondents how long it had been since their last OIF/OEF deployment. The results are shown in Table 4-17. The key numbers are given in the last two columns of the table, which exclude respondents who had never been on an OIF/OEF deployment or the small number who erroneously answered that they currently were deployed and which compare the distribution of the remaining responses to the Study Sponsor-supplied data for the entire Marine Corps. When interpreting these data, it is important to remember that the surveys were collected during October-November 2007, while the overall USMC data were current as of 7 March 2008. Thus, some of the respondents might have transitioned between the groups shown in the "Selected Subset" column in the intervening 4-5 months.

^{2.} HQMC-supplied data as of 7 March 2008. Percentages shown exclude

Table 4-17. Time Since Last Deployment in Support of OIF/OEF for the Base and Station Respondents

		Percentage		
		Station Res	spondents ¹	
			Overall	
	Count ²	Total	Subset ³	USMC⁴
Currently Deployed	14	0.3%		
0-3 Months	398	8.8%	17.3%	10.0%
3-6 Months	348	7.7%	15.1%	11.7%
6-9 Months	336	7.4%	14.6%	6.9%
9-12 Months	200	4.4%	8.7%	6.6%
12-18 Months	390	8.6%	16.9%	11.0%
18+ Months	629	13.8%	27.3%	31.2%
Does Not Apply	2,230	49.1%		
Total	4,545	100.0%	100.0%	100.0%

^{1.} Respondents were surveyed in October-November 2007.

Of note, at the time at which the survey data were collected, more than 44 percent of the "selected subset" of respondents had been home from OIF/OEF for at least 1 year. That percentage compared favorably to the 42 percent figure for the overall Marine Corps.

The respondents next were asked about the anticipated time to their next OIF/OEF deployment (Question #25). The results are shown in Table 4-18. While many (40.5 percent) of the respondents did not know, more than one-third anticipated another deployment within the next year.

^{2.} The 14 Marines who responded "Currently Deployed" when the 2007 QoL surveys were filled out are considered to have either mis-understood the question or to have answered erroneously. As a result, they were excluded from the "Selected Subset."

^{3.} Excludes Marines who responded "Currently Deployed" or "Does Not apply" (the latter presumably because they have never participated in an OIF/OEF deployment).

^{4.} Based on HQMC-supplied data as of 7 March 2008. Underlying data include only those Marines with OIF/OEF deployment experience, and percentages shown exclude E-1s and the 25,570 Marines deployed in OIF/OEF on that date.

Table 4-18. Time Until Next Deployment in Support of OIF/OEF for the Base and Station Respondents

	Count	Percentage
Don't Know	1,858	40.5%
0-3 Months	383	8.3%
3-6 Months	567	12.3%
6-9 Months	382	8.3%
9-12 Months	345	7.5%
12-18 Months	203	4.4%
18+ Months	151	3.3%
Never	704	15.3%
Total	4,593	100.0%

Question #26 asked the respondents about their level of satisfaction with three different aspects of their most recent OIF/OEF deployment. The results from those questions are discussed next.

Question #26a asked about satisfaction with the amount of family contact. The results are shown in Figure 4-1. It can be seen that, in general, the respondents were fairly well satisfied with this aspect of their most recent deployment. The average satisfaction score was 4.66, or two-thirds of the way between "Neutral" and "Somewhat Satisfied." Almost 58 percent of the respondents expressed some degree of satisfaction (i.e., responses of "Somewhat Satisfied," "Satisfied" or "Completely Satisfied"), while less than half as many (only 24.6 percent) expressed some degree of dissatisfaction (i.e., responses of "Somewhat Dissatisfied," "Dissatisfied" or "Completely Dissatisfied"). The "Satisfied" response, assigned a score of 6, was the most frequently chosen response.

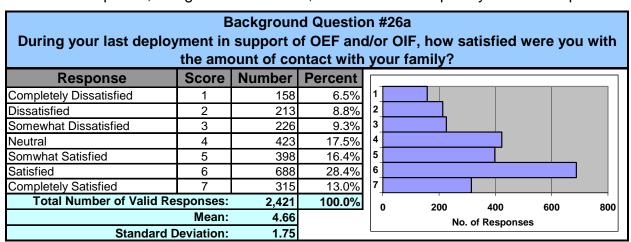


Figure 4-1. Satisfaction of the Base and Station Respondents Who Had Deployed to OIF/OEF with the Amount of Contact with Their Families

Question #26b asked about satisfaction with the predictability of the length of the deployment. The results are shown in Figure 4-2. The responses for this question, while again favorable (with an average satisfaction score of 4.44), were not as favorable

as those to the previous question. Here, only slightly more than half (50.7 percent) of the respondents expressed favorable opinions, while 26.8 percent expressed unfavorable opinions. Again, "Satisfied" was the most frequently chosen response.

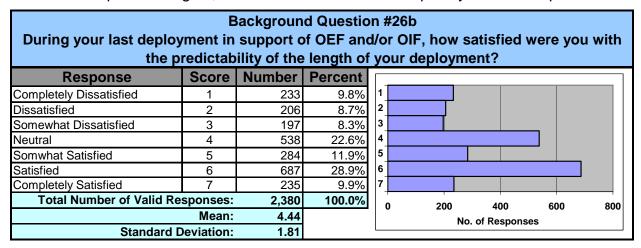


Figure 4-2. Satisfaction of the Base and Station Respondents Who Had Deployed to OIF/OEF with the Predictability of the Length of Their Most Recent Deployment

Question #26c asked about satisfaction with the deployment services received by the respondents' family. The results are shown in Figure 4-3. As was the case for the two previous and related questions, generally "Neutral" to "Satisfied" opinions were expressed on average to this aspect of the respondents' most recent OEF/OIF deployment: An average score of 4.33 was calculated. Both the overall satisfaction score and the percentage of respondents expressing favorable opinions (45.4 percent) were the lowest values seen for the three deployment-related questions. However, the percentage of respondents expressing unfavorable opinions was 26.1 percent, about on a par with the previous two questions, showing that the lower overall score was due to a higher percentage of respondents (28.6 percent) having chosen the "Neutral" response, which was now the most frequently chosen response.

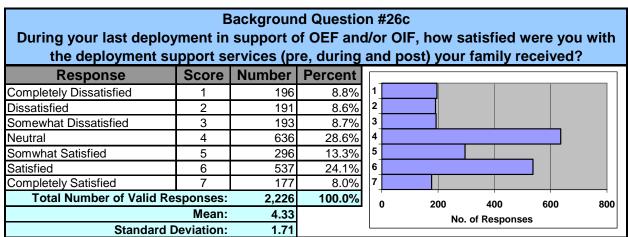


Figure 4-3. Satisfaction of the Base and Station Respondents Who Had Deployed to OIF/OEF with the Deployment Support Services Their Families Had Received

4.4 THE RESIDENCE LIFE DOMAIN

4.4.1 Happiness – Affective Evaluations of the Residence Life Domain

The weighted mean affective or happiness score (Question #1) for the Residence life domain for the Base and Station respondents in 2007 was 4.22, i.e., between "Neither Unhappy Nor Pleased" and "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-4. It can be seen that the highest percentage of respondents, 24.2 percent, were "Mostly Pleased" (a score of 5) with their residence, but a fairly large portion of respondents (31.7 percent) expressed some degree of unhappiness with their residence, lowering the average score.

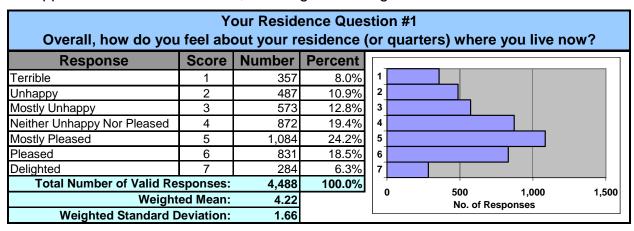


Figure 4-4. Distribution of the Overall Happiness Responses in the Residence Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Residence affective scores are shown in Figure 4-5.⁴⁴ The 2007 weighted mean Residence D-T score increased slightly (by 0.18) from the 2002 weighted score, but this increase had no practical significance, having a Cohen's *d* statistic of 0.11.

⁴³ The weighting of overall responses on selected questions (generally the affective (happiness), cognitive (satisfaction), job performance and plans to remain on active duty questions in each life domain) was discussed earlier in this chapter. Weighting was done based on the percentages of the overall Marine Corps population of Base and Station Marines in each of the seven Pay Grade Groups considered in this study.

⁴⁴ Note, for all the trend analysis graphics in this chapter, that the 2007 data comprised the weighted responses (as discussed previously, using the 2007 weights in Appendix H) of the Base and Station Marine respondents. The 2002 data comprised the weighted responses (using the 2002 weights in Appendix H) of the Base and Station Marines surveyed in that study. The 2002 values shown in the graphics are unlikely to equal the means reported for the Active Duty Marine Composite that was considered in the 2002 QoL Study. The 1998 values combined the results from Base and Station Marines and non-Production Recruiter Independent Duty Marines (although the latter were not explicitly called that in that analysis effort). The 1993 values combined the responses of over 10,000 Marines from all three Active Duty Marine respondent groups considered in this 2007 QoL Study. Also, wherever conflicts existed between the affective or cognitive scores in different QoL Study Reports, the data from the study in which the values were first reported was used. Thus, if the 1993 and 1998 Study Reports contained different values for a measure from the 1993 study, the value in the 1993 QoL Study Report was used.

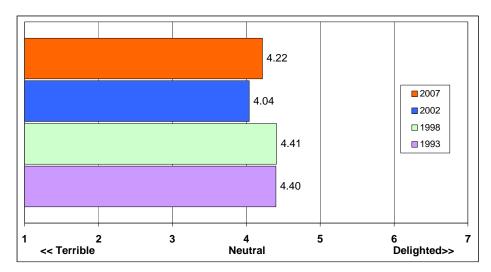


Figure 4-5. Trends in Overall Happiness in the Residence Life Domain for the Base and Station Respondents

Overall happiness in the Residence life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by Pay Grade Group, are shown in Table 4-19.

Table 4-19. Happiness with Residence by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,578	3.75	1.60
E-4/E-5	1,824	4.13	1.67
E-6/E-7	528	4.84	1.50
E-8/E-9	137	5.16	1.52
WO	53	5.21	1.21
O-1 to O-3	252	5.26	1.37
O-4 to O-10	116	5.28	1.26

The mean happiness scores increased with Pay Grade Group, but with diminishing increases for the officers of all ranks. The minimum happiness score, 3.75 (0.47 below the overall happiness score for this life domain and well below the "neutral" score of 4.0), was seen for the E-2/E-3 Pay Grade Group. The maximum happiness score, 5.28 (1.06 above the overall happiness score for this life domain), was seen for the O-4 to O-10 Pay Grade Group, although the differences between that score and the mean scores for the E-8/E-9, WO and O-1 to O-3 Pay Grade Groups were minimal. Note also that as the Pay Grade Group increased, the standard deviations, in general, decreased, indicating that Marines in the lower Pay Grade Groups had a broader variance in their individual happiness scores.

Overall happiness with the Residence life domain was examined by Pay Grade Group; the results are shown in Figure 4-6. Happiness increased in all but one of the seven Pay Grade Groups, the E-6/E-7 group, where it decreased by a negligible 0.03. The Pay Grade Group that experienced the largest increase between 2002 and 2007 was the Warrant Officers, for whom the affective mean increased by 0.59. However, this difference had no practical significance, based on a Cohen's *d* statistic of 0.44, outside the threshold used in this study for practical significance.

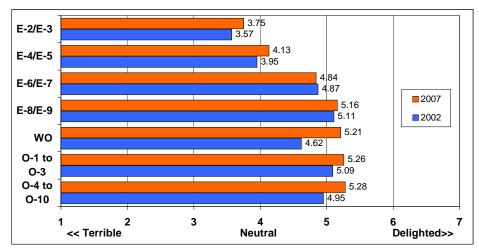


Figure 4-6. Trends in Happiness in the Residence Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by the base or station to which the respondent was assigned (for the 15 largest installations⁴⁵), are shown in Table 4-20. The mean happiness scores varied widely, from a minimum of 3.94 at Camp Butler (0.28 below the overall happiness score for this life domain) to a maximum of 5.36 for Headquarters Battalion Henderson Hall (1.14 above the overall happiness score for this life domain). The six bases/stations that scored below the overall mean happiness score for this life domain were (in ascending order) Camp Butler, MCB Hawaii, Camp Lejeune, MCAS lwakuni, the MCAGCC (Twentynine Palms) and Camp Pendleton. Note that this list, while it comprises only 6 of the 15 bases/stations considered here, contains the four largest bases/stations. It can be argued that the results from these larger bases/stations drove the overall results; however, the uniform appearance of the four large bases/stations in the list of lowest scoring bases/stations may be of interest. Also, note that MCAS lwakuni and MCB Hawaii scored below the overall mean of 4.22 and were not "large" bases/stations.

4-22

⁴⁵ Note that MCLB Albany and MCLB Barstow have been omitted due to the small number of Marine personnel surveyed at those locations. In fact, in all subsequent examinations of results that are presented on an installation-by-installation-basis, the two MCLBs will be omitted for this reason, without comment unless otherwise noted.

Table 4-20. Happiness with Residence by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	130	4.24	1.68
MCB Camp Butler	361	3.94	1.57
MCB Camp Lejeune	974	3.98	1.81
MCB Camp Pendleton	955	4.12	1.63
MCAS Cherry Point	208	4.56	1.60
MCB Hawaii	144	3.97	1.69
Headquarters Battalion Henderson Hall	56	5.36	1.41
MCAS Iwakuni	122	4.02	1.55
MCAS Miramar	248	4.77	1.48
MCAS New River	185	4.45	1.63
MCRD Parris Island	197	4.50	1.57
MCB Quantico	180	4.70	1.57
MCRD San Diego	129	4.72	1.44
MCAGCC (Twentynine Palms)	261	4.07	1.61
MCAS Yuma	111	4.75	1.41

Race/Ethnicity. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by race/ethnicity, are shown in Table 4-21. The range of scores was relatively compressed, with the minimum happiness score (3.84, or 0.38 below the overall happiness score for this life domain) seen for the small number of Native American/Aleut/Eskimo subgroup and the maximum happiness score (4.40, or 0.18 above the overall happiness score for this life domain) seen for the Black/African American subgroup. This difference had no practical significance (Cohen's *d* statistic of 0.34). The largest subgroup, Whites, scored just slightly above the overall mean, while the fast-growing Spanish/Hispanic subgroup scored 0.10 below the overall mean.

Table 4-21. Happiness with Residence by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,960	4.23	1.65
Black/African-American	531	4.40	1.67
Asian/Pacific Islander	168	4.12	1.71
Native American/Aleut/Eskimo	75	3.84	1.67
Spanish/Hispanic	593	4.12	1.69
Other	97	3.88	1.82

Gender. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by gender, are shown in Table 4-22. The average score for the female respondents was 4.53, or 0.31 above the overall happiness score for this life domain and 0.35 greater than that for the male respondents. The difference seen in the table had no practical significance (Cohen's *d* statistic of 0.21)

Table 4-22. Happiness with Residence by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,100	4.18	1.66
Female	429	4.53	1.69

Marital/Parental Status. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by marital/parental status, are shown in Table 4-23. The scores were relatively consistent across these subgroups with one exception: the Never Been Married subgroup, the mean happiness score for which was 3.58 (0.64 below the overall happiness score for this life domain although that difference had no practical significance (a Cohen's *d* statistic of 0.39)). Although not shown in the table, the Never Been Married subgroup was the only subgroup for which "Mostly Pleased" (assigned a score of 5) was not the most frequently chosen response. Instead, "Neither Unhappy Nor Pleased" (assigned a score of 4) was chosen by the largest number (480, or almost 25 percent) of the Never Been Married respondents. Perhaps more tellingly, 572 of the Never Been Married respondents chose the two lowest responses ("Terrible" and "Unhappy") while only 259 chose the two highest responses ("Pleased" and "Delighted").

Table 4-23. Happiness with Residence by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	107	4.73	1.50
Divorced/Widowed/Separated without Children	225	4.64	1.57
Married with Children	1,360	4.74	1.52
Married without Children	825	4.71	1.55
Never Been Married	1,965	3.58	1.62

Type of Housing. Residence Question #2 asked the respondents which of 13 options best described the place where they live. These 13 options were aggregated into seven general types of housing using the scheme shown in Table 4-24.

Table 4-24. Housing Options in the Active Duty Marine Survey and Their Mapping into General Types of Housing

in	Housing Options the Active Duty Marine Survey	Aggregated/General Type of Housing
1.	Bachelor Quarters (BEQ or BOQ)	BEQ/BOQ
2.	Privatized Bachelor Quarters on Base	BEQ/BOQ
3.	Privatized Bachelor Quarters in the Civilian Community	Military Housing in Civilian Community
4.	Military Housing on Base	Family Housing on Base
5.	Military Family Housing in the Civilian Community	Military Housing in Civilian Community
6.	Privatized Housing (Member Pays Rent) on Base (PPV)	Family Housing on Base
7.	Privatized Housing (Member Pays Rent) in the Civilian Community (PPV)	Military Housing in Civilian Community
8.	Personally-Owned Housing in the Civilian Community	Personally-Owned Housing
9.	Personally-Rented Housing in the Civilian Community	Rented Civilian Housing
10.	Shared Rental Housing in the Civilian Community	Shared Rental Housing
11.	Mobile Home	Other
12.	Aboard Ship	Other
13.	Other	Other

The means and standard deviations of the happiness scores for the Residence life domain, decomposed by general type of housing, are shown in Table 4-25.

Table 4-25. Happiness with Residence by Type of Housing for the Base and Station Respondents

Housing Type	Count	Mean	Std. Dev.
BEQ/BOQ	1,868	3.36	1.54
Family Housing on Base	815	4.40	1.55
Military Housing in Civilian Community	443	4.79	1.42
Personally-Owned Housing	548	5.68	1.10
Rented Civilian Housing	537	5.03	1.25
Shared Rental Housing	142	4.68	1.41
Other	104	3.54	1.56

The minimum happiness score for this decomposition was seen for the respondents living in the Bachelor's Enlisted Quarters (BEQ) or the Bachelor's Officers' Quarters (BOQ). The score of 3.36 was 0.86 below the overall happiness score for this life domain. To give a better feel for the opinions of the BEQ/BOQ respondents on this measure, Figure 4-7 shows a histogram of the responses to this question. It can be seen that, although the "neutral" response was the one most frequently chosen by the

respondents, the negative responses (scores of 1-3) were chosen by almost half of the respondents. In contrast, the favorable responses (scores of 5-7) were chosen by only 11.3 percent of the respondents.

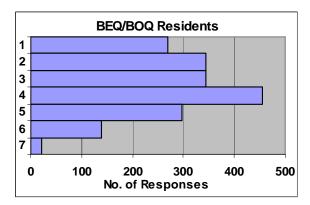


Figure 4-7. Responses to the Affective Residence Question for the BEQ/BOQ Residents in the Base and Station Respondent Sample

In contrast, the maximum happiness score for this decomposition was seen for the Personally-Owned Housing subgroup. The score of 5.68 was a 1.46 positive differential from the overall happiness score for this life domain.

4.4.2 Satisfaction – Cognitive Evaluations of the Residence Life Domain

The weighted mean cognitive or satisfaction score (Question #10j) in the Residence life domain for the Base and Station respondents in 2007 was 4.24, i.e., between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Residence life domain is shown in Figure 4-8. In the overall sample, the highest percentage of respondents, 23.1 percent, responded that they were "Satisfied" (a score of 6) with their residence overall, but, similar to what occurred on the affective measure, the one-third of the respondents who expressed some degree of dissatisfaction with their residence lowered the overall score on this measure.

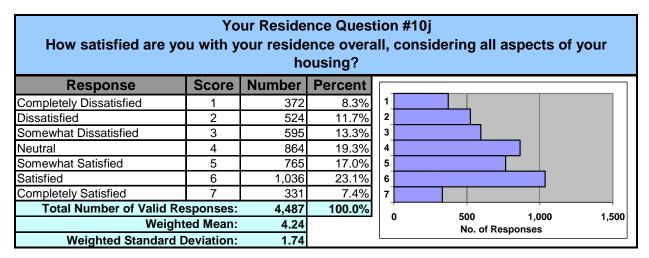


Figure 4-8. Distribution of the Overall Satisfaction Responses in the Residence Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Residence satisfaction scores are shown in Figure 4-9. The 2007 weighted mean satisfaction score for Residence increased slightly (by 0.20) from the 2002 weighted score, but this increase had no practical significance, since its Cohen's *d* statistic was only 0.11.

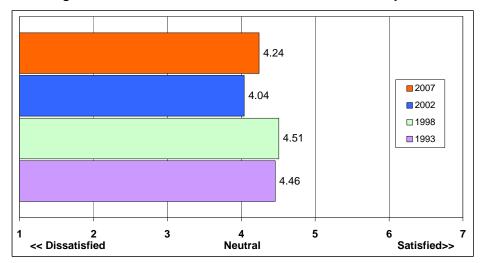


Figure 4-9. Trends in Overall Satisfaction in the Residence Life Domain for the Base and Station Respondents

Overall satisfaction in the Residence life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by Pay Grade Group, are shown in Table 4-26.

Table 4-26. Satisfaction with Residence by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,582	3.73	1.68
E-4/E-5	1,827	4.14	1.73
E-6/E-7	528	4.98	1.54
E-8/E-9	138	5.17	1.53
WO	52	5.33	1.32
O-1 to O-3	250	5.38	1.43
O-4 to O-10	110	5.35	1.36

The mean satisfaction score generally increased with Pay Grade Group but, as was the case with the happiness scores, with generally diminishing increases for the officers of all ranks. The minimum satisfaction score, 3.73 (0.51 below the overall satisfaction score for this life domain and well below the "Neutral" score of 4), was seen for the E-2/E-3 Pay Grade Group. However the difference between this score and the overall satisfaction mean had no practical significance (Cohen's *d* statistic of 0.30). The maximum satisfaction score, 5.38 (1.14 above the overall satisfaction score for this life domain), was seen for the O-1 to O-3 Pay Grade Group, although the differences between its score and those of the WO and O-4 to O-10 Pay Grade Groups were small. Note also that the standard deviations were, in general, inversely proportional to Pay Grade Group, indicating that Marines in the lower Pay Grade Groups had a broader variance in their individual satisfaction scores.

When the trends in overall satisfaction with the Residence life domain were examined by Pay Grade Group, as shown in Figure 4-10, increases were seen in every Pay Grade Group between the results from 2002 and those from 2007.

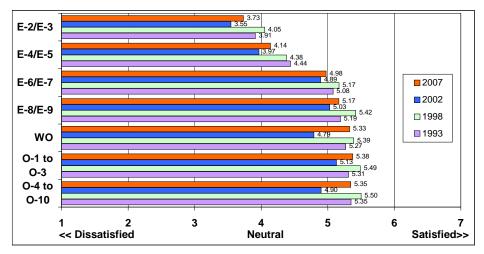


Figure 4-10. Trends in Satisfaction in the Residence Life Domain by Pay Grade Group for the Base and Station Respondents

However, when examined across the four Marine Corps QoL studies, it appears that the gains in satisfaction seen in the 2007 data were greater for the higher Pay Grade Groups. For the three officer Pay Grade Groups (i.e., Warrant Officer, O-1 to O-3, and

O-4 to O-10), the mean satisfaction scores reached their maxima in the 1998 QoL Study and their minima in the 2002 QoL Study. The scores increased in the 2007 QoL Study to be greater than or equal to the mean scores for the 1993 QoL Study. The WO Pay Grade Group is shown in Figure 4-11 as an example of this trend. The overall satisfaction scores for the enlisted Pay Grade Groups experienced more modest gains over the scores from the 2002 QoL Study, leaving their overall 2007 satisfaction scores lower than either the 1993 or 1998 scores. The scores for the E-4/E-5 Pay Grade Group are shown as an example of this trend.

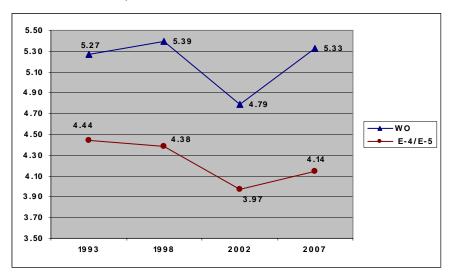


Figure 4-11. Trends in Satisfaction in the Residence Life Domain for Example Base and Station Respondent Officer and Enlisted Pay Grade Groups

Base/Station. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by the base/station to which the respondent was assigned (for the 15 largest installations), are shown in Table 4-27. The mean satisfaction scores varied widely, from a minimum of 3.90 at Camp Butler (0.34 below the overall satisfaction score for this life domain) to a maximum of 5.23 for Headquarters Battalion Henderson Hall (0.99 above the overall satisfaction score for this life domain). The six bases/stations that scored below the overall mean satisfaction score for this life domain were (in ascending order) Camp Butler, MCB Hawaii, MCAS lwakuni, Camp Lejeune, Camp Pendleton and the MCAGCC (Twentynine Palms). Note that this list, while it comprises only 6 of the 15 bases/stations considered here, contained the four largest bases/stations. It can be argued that the results from these larger bases/stations drove the overall results; however, the uniform appearance of these four bases/stations in the list of lowest scoring bases/stations may be of interest. Also, note that MCAS lwakuni and MCB Hawaii scored below the overall mean of 4.24 and were not "large" bases/stations.

Table 4-27. Satisfaction with Residence by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	133	4.31	1.86
MCB Camp Butler	360	3.90	1.68
MCB Camp Lejeune	935	4.03	1.90
MCB Camp Pendleton	970	4.07	1.70
MCAS Cherry Point	208	4.64	1.77
MCB Hawaii	162	3.96	1.68
Headquarters Battalion Henderson Hall	53	5.23	1.41
MCAS Iwakuni	126	3.97	1.71
MCAS Miramar	253	4.87	1.43
MCAS New River	186	4.49	1.73
MCRD Parris Island	199	4.55	1.64
MCB Quantico	178	4.83	1.60
MCRD San Diego	134	4.81	1.48
MCAGCC (Twentynine Palms)	268	4.13	1.65
MCAS Yuma	109	4.54	1.54

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by race/ethnicity, are shown in Table 4-28. The range of scores was relatively compressed, with the minimum satisfaction score (3.90, or 0.34 below the overall satisfaction score for this life domain) seen for the small number of Native American/Aleut/Eskimo respondents and the maximum happiness score (4.44, or 0.20 above the overall happiness score for this life domain) seen for the Black/African American subgroup. The largest subgroup, Whites, scored just slightly below the overall mean, while the fast-growing Spanish/Hispanic subgroup scored 0.05 below the overall mean. None of the differences seen here had any practical significance.

Table 4-28. Satisfaction with Residence by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,966	4.23	1.74
Black/African-American	529	4.44	1.74
Asian/Pacific Islander	167	4.24	1.78
Native American/Aleut/Eskimo	78	3.90	1.71
Spanish/Hispanic	593	4.19	1.74
Other	95	4.17	1.78

Gender. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by gender, are shown in Table 4-29. The average score for the female respondents was 4.61, or 0.37 above the overall satisfaction score for this life domain and 0.41 greater than that for the male respondents. The difference seen here had no practical significance (Cohen's *d* statistic of 0.23).

Table 4-29. Satisfaction with Residence by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,091	4.20	1.74
Female	439	4.61	1.79

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by marital/parental status, are shown in Table 4-30. The scores were relatively consistent across these subgroups with one notable exception: the Never Been Married subgroup, the mean satisfaction score for which was 3.58 (0.66 below the overall satisfaction score for this life domain). Although not shown in the table, the Never Been Married subgroup was the only subgroup for which "Satisfied" (assigned a score of 6) was not the most frequently chosen response. Instead, "Neutral" (assigned a score of 4) was chosen by the largest number (430, or almost 22 percent) of the Never Been Married respondents. Perhaps more tellingly, 936 of the Never Been Married respondents expressed some degree of dissatisfaction with their housing while only 593 expressed any degree of satisfaction. Note that the difference between the mean score for the Never Been Married subgroup was different, in terms of practical significance, from the means of all the other marital/parental subgroups, having Cohen's *d* statistics of 0.66 or greater.

Table 4-30. Satisfaction with Residence by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	108	4.75	0.00
Divorced/Widowed/Separated without Children	226	4.69	1.68
Married with Children	1,361	4.80	1.59
Married without Children	827	4.70	1.60
Never Been Married	1,959	3.58	1.70

Type of Housing. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by type of housing, are shown in Table 4-31. Note that only the opinions of those respondents who said that they lived in a particular type of housing were included in the results shown for that type of housing. The minimum satisfaction score for this decomposition was seen for the respondents living in the BEQ/BOQ. The score of 3.35 was 0.89 below the overall satisfaction score for this life domain. Over 53 percent of the overall group of respondents expressed some level of dissatisfaction with their housing, while only 24.5 percent expressed any level of satisfaction. The maximum satisfaction score, 5.83, was seen for the Personally-Owned Housing subgroup. This score was well into the "Somewhat Satisfied" to "Satisfied" range and was 1.59 above the overall satisfaction score for this life domain.

Table 4-31. Satisfaction with Residence by Type of Housing for the Base and Station Respondents

Housing Type	Count	Mean	Std. Dev.
BEQ/BOQ	1,821	3.35	1.61
Family Housing on Base	807	4.35	1.65
Military Housing in Civilian Community	446	4.84	1.48
Personally-Owned Housing	538	5.83	1.09
Rented Civilian Housing	521	4.99	1.33
Shared Rental Housing	138	5.07	1.34
Other	101	3.73	1.65

When mean satisfaction scores for Residence for the members of the 2007 Base and Station respondent sample living in military housing were compared to the mean satisfaction scores of their counterparts from the 2002 QoL Study (Figure 4-12), increases again could be seen for all types of housing considered. The largest increase was for Marines who lived in Military Housing in the Civilian Community, which increased by 0.74 over the value from 2002 and, with a score of 4.84, almost reached the "Somewhat Satisfied" level (a score of 5). However, despite this large numerical increase, the change had no practical significance, since the value of the Cohen's *d* statistic was 0.46, or below the threshold used in this study to determine practical significance.

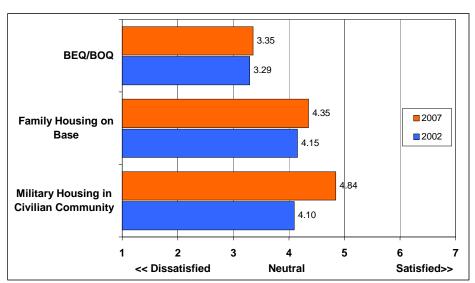


Figure 4-12. Satisfaction with Military Housing for the Base and Station Respondents

When mean satisfaction scores for this life domain for the members of the 2007 Base and Station respondent sample living in non-military housing were compared to the mean satisfaction scores for their counterparts from the 2002 QoL Study, slight increases could be seen (Figure 4-13) for all types of housing.

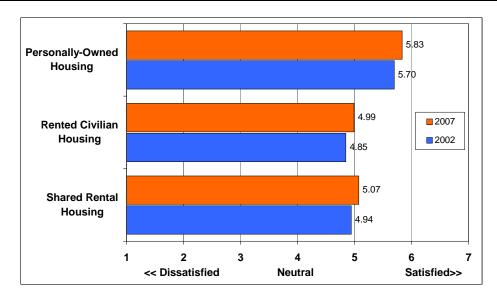


Figure 4-13. Satisfaction with Non-Military Housing for the Base and Station Respondents

In addition to asking the respondents about their overall satisfaction with their residence, Question #10 also asked about satisfaction with a series of nine separate facets of residence. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 4-14. Note that, since the overall mean satisfaction score was not the numerical average of the facet satisfaction scores shown here, it was possible (in this and for all the life domains that follow) for the values of all the facet means to be lower (or higher) than the overall satisfaction mean.

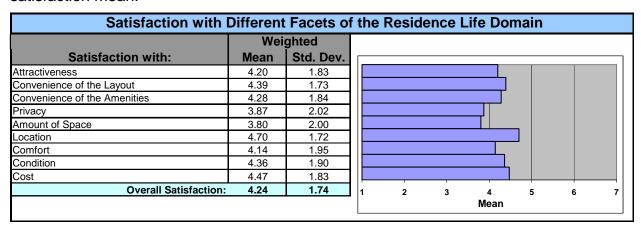


Figure 4-14. Satisfaction with Facets of Residence for the Base and Station Respondents

The two minimum mean scores (and the two highest standard deviations) were seen for Privacy and Amount of Space. Further analysis indicated that the reason for this was that there were major disparities in satisfaction for those residence facets between the different housing types. Figure 4-15 shows the histogram of responses for satisfaction

with Amount of Space.⁴⁶ It can be seen that 45.2 percent of the Base and Station respondent sample indicated some degree of dissatisfaction with the amount of space in their residence and 18.2 percent responded that they were "Completely Dissatisfied."

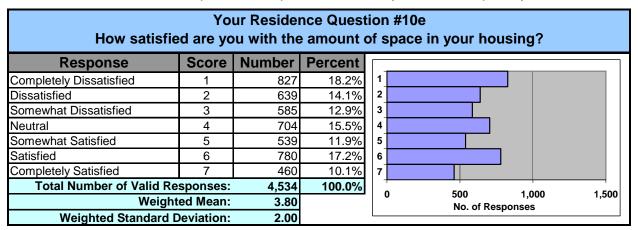


Figure 4-15. Satisfaction with Amount of Residence Space for the Base and Station Respondents

When Question #10e was examined by the type of housing in which the respondents resided, the minimum mean score, 2.74 for respondents living in the BEQ/BOQ, and the maximum mean score, 5.65 for respondents living in personally-owned housing, differed by 2.91. Not surprisingly, this difference had practical significance (Cohen's *d* statistic was 1.90). The mean scores among the different housing types indicated that Marines living in the BEQ/BOQ were much less satisfied with the amount of space in their housing when compared to the residents living in any other housing type.

Similar trends were seen when the facet of Privacy (Question #10d) was examined.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with residence for those Base and Station respondents living in military housing was performed. The results are shown in Figure 4-16. The relative range of the influence of the facets (as shown on the vertical scale) occurred over a somewhat compressed scale, with nearly all facet influence values falling in a range from 0.10 to 0.20 (only one facet, Location, fell outside - and below - this range). The results indicated that overall satisfaction with residence was most strongly influenced by satisfaction with the Condition of the housing and its Attractiveness, followed by (in decreasing order), the Comfort, the convenience of the Layout, and the amount of Space in and Cost of the housing. Note that these results are fairly similar to those seen in the 2002 QoL Study. Privacy and Amenities had influence values that were somewhat below those facets. Given the clustering of the influence values of these facets for the Residence life domain, the mean satisfaction scores also were an important consideration for analysis. In addition to being relatively strong influences on overall satisfaction, the Attractiveness, Comfort, and Space of the military housing also had mean satisfaction

⁴⁶ Note that weighted mean and standard deviation values are shown.

scores that fell below the overall mean satisfaction score, denoting that these facets had high potential as areas for improvement that could influence higher overall satisfaction with military residence for the Base and Station respondents. Privacy, which was a slightly less influential facet, had the lowest mean satisfaction score, and therefore also was considered a facet with high potential for improvement. Location of housing was the least influential facet by far and had the second highest mean score among the facets, indicating that this facet had the least potential as an improvement opportunity.

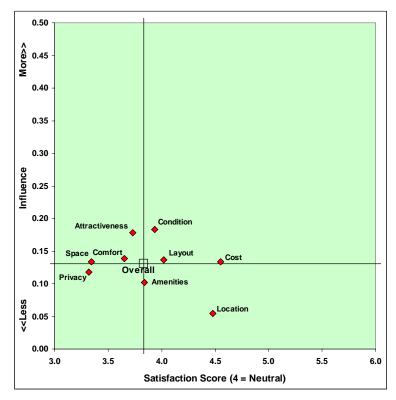


Figure 4-16. Key Driver Diagram for the Residence Life Domain for the Base and Station Respondents Living in Military Housing

4.4.3 Effect of Residence on Job Performance

Question #11 asked about the effect of housing on the respondents' job performance. A histogram of the responses to that question is shown in Figure 4-17.

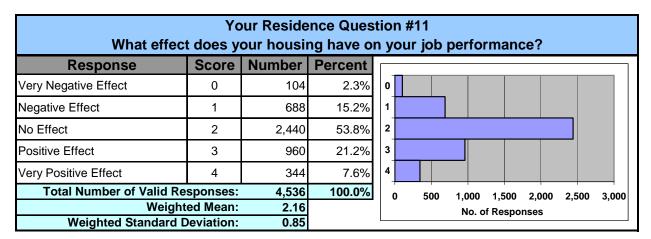


Figure 4-17. Effect of Residence on Job Performance for the Base and Station Respondents

The weighted mean score for this question was 2.16, falling at the lower end of the "No Effect" to "Positive Effect" range. More than half (53.8 percent) of the respondents answered that their residence had no effect on their job performance. However, more respondents (1,304, or 28.8 percent) said their housing had some degree of positive effect than said that their housing had some degree of negative effect (792, or 17.5 percent). Although not shown here, both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (1.97 and 2.15, respectively) below the overall mean for the question. Recall that these Marines tended to have the lowest happiness and satisfaction scores in this life domain.

4.4.4 Effect of Residence on Plans To Remain on Active Duty

Question #12 asked about the effect of housing on the respondents' plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-18.

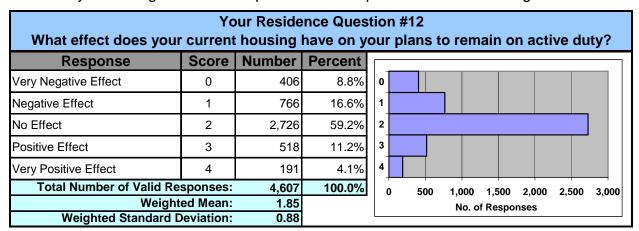


Figure 4-18. Effect of Residence on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 1.85, or slightly below "No Effect." The majority of the respondents, 59.2 percent, answered that their Residence had no effect

on their plans to remain on active duty. However, more respondents (1,172, or 25.4 percent) said their housing had a negative effect on their plans to remain on active duty than said that their housing had a positive effect (709, or 15.3 percent). Although not shown here, the E-2/E-3 Pay Grade Group had a mean score of 1.63, again less than the overall mean. Once again, since these Marines tended to have the lowest happiness and satisfaction scores in this life domain, the impact of those perceptions on their plans to remain on active duty may be cause for some concern.

Question #9 asked the respondents: "If quality housing were to be guaranteed upon reenlistment or at your next career decision point, would that influence your decision to remain in the Marine Corps?" The possibility did not appear to excite the respondents excessively: as shown in Table 4-32, 51.2 percent answered Yes, and 48.8 percent answered No.

Table 4-32. Influence on Career Plans of a Guarantee of Quality Housing for the Base and Station Respondents

	Count	Percent
Yes: A Guarantee of Quality Housing Would Influence My Career Plans	2,355	51.2%
No: A Guarantee of Quality Housing Would <u>Not</u> Influence My Career Plans	2,241	48.8%
Total	4,596	100.0%

4.4.5 Other, Life Domain-Specific Analyses

The responses to several other questions specific to the Residence life domain were examined. The results are presented below.

Question #2 asked the respondents to indicate the type of housing in which they resided. Table 4-33 shows the percentage of responses for each base/station to this question. The data show that, except for Headquarters Battalion Henderson Hall and MCAS New River, the most frequently used type of housing at each base/station was the BEQ/BOQ.

Table 4-33. Type of Housing by Base/Station for the Base and Station Respondents

Base/Station	BEQ/BOQ	Family Housing On Base	Military Housing in Civilian Community	Personally- Owned Housing	Civilian	Shared Rental Housing	Mobile Home	Other
MCAS Beaufort	33.1%	25.9%	9.4%	13.7%	10.1%	0.7%	0.0%	2.2%
MCB Camp Butler	56.7%	27.2%	4.5%	0.0%	3.7%	0.8%	0.0%	1.3%
MCB Camp Lejeune	44.5%	10.9%	6.3%	18.0%	10.6%	2.1%	1.0%	2.2%
MCB Camp Pendleton	37.3%	20.3%	10.3%	5.9%	13.9%	5.0%	0.4%	2.4%
MCAS Cherry Point	28.2%	14.8%	13.4%	23.1%	7.9%	3.7%	0.5%	3.7%
MCB Hawaii	40.7%	29.3%	3.6%	5.4%	11.4%	3.0%	0.0%	0.0%
Headquarters Battalion Henderson Hall	13.8%	8.6%	6.9%	27.6%	34.5%	5.2%	0.0%	0.0%
MCAS Iwakuni	60.5%	31.8%	1.6%	0.0%	2.3%	0.0%	0.0%	0.8%
MCAS Miramar	29.4%	5.9%	28.3%	8.9%	16.7%	5.6%	0.7%	0.7%
MCAS New River	28.3%	9.4%	5.8%	31.9%	10.5%	6.3%	2.1%	2.6%
MCRD Parris Island	29.6%	27.2%	10.7%	16.0%	8.7%	2.4%	0.0%	3.4%
MCB Quantico	25.9%	13.5%	10.3%	17.3%	25.4%	2.7%	0.5%	1.1%
MCRD San Diego	40.0%	5.7%	25.7%	10.7%	10.7%	2.1%	0.0%	2.9%
MCAGCC (Twentynine Palms)	50.2%	17.3%	9.5%	4.2%	9.9%	3.2%	0.0%	2.8%
MCAS Yuma	41.4%	21.6%	9.0%	14.4%	9.9%	2.7%	0.9%	0.0%

Question #4 asked the respondents living in civilian housing ⁴⁷ to provide the cost of their monthly rent or mortgage. The calculated overall mean response was \$1,326. Table 4-34 provides the mean cost per base/station for the respondents. The costs varied widely, from low of between \$950 and \$1,000 at MCAS Cherry Point, MCAGCC (Twentynine Palms), MCAS Iwakuni (but that was based on only three respondents) and MCAS New River, to highs of over \$2,000 for MCB Hawaii and Headquarters Battalion Henderson Hall.

⁴⁷ That is, who responded in Residence Question #2 that they lived in personally-owned or rented civilian housing or that they shared rental housing in the civilian community or lived in a mobile home.

Table 4-34. Average Monthly Rent or Mortgage Payment for the Base and Station Marines Living in Civilian Housing at Each Base/Station

Base/Station	Count	Mean
MCAS Beaufort	32	\$ 1,428
MCB Camp Butler	15	\$ 1,697
MCB Camp Lejeune	261	\$ 1,027
MCB Camp Pendleton	236	\$ 1,454
MCAS Cherry Point	71	\$ 958
MCB Hawaii	32	\$ 2,250
Headquarters Battalion Henderson Hall	39	\$ 2,222
MCAS Iwakuni	3	\$ 993
MCAS Miramar	80	\$ 1,597
MCAS New River	76	\$ 995
MCRD Parris Island	51	\$ 1,123
MCB Quantico	84	\$ 1,588
MCRD San Diego	31	\$ 1,809
MCAGCC (Twentynine Palms)	45	\$ 963
MCAS Yuma	31	\$ 1,166

Question #5 asked the respondents living in civilian housing to provide an indication of the percentage of their monthly rent or mortgage that was covered by the Basic Allowance for Housing (BAH). The histogram in Figure 4-19 shows the responses to that question. The calculated mean response was 4.04, essentially equivalent to the "100% of mortgage or rent" response. Thus, by this measure it appears that the BAH was adequate for the members of the Base and Station sample who lived in civilian housing. However, looked at another way, the data in the figure show that for 438 of the 1,067 respondents, or 41.0 percent, the BAH covered less than 100 percent of their mortgage or rent.

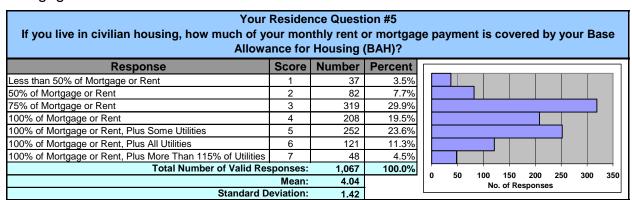


Figure 4-19. Adequacy of BAH for the Base and Station Marines Living in Civilian Housing

The mean response score for this question by base/station is shown in Table 4-35. Ignoring MCAS Iwakuni (the data set for which consisted of only three Marines), the maximum mean response score, 4.63 (or two-thirds of the way between the "100% of mortgage or rent" and "100% of mortgage or rent, plus some utilities" responses) was

seen for MCAS Miramar. The minimum mean response score, 3.19 (or only somewhat above the "75% of mortgage or rent" response) was seen for MCAS Yuma.

Table 4-35. Adequacy of BAH for the Base and Station Marines Living in Civilian Housing at Each Base/Station

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	32	3.81	1.40
MCB Camp Butler	15	4.14	1.29
MCB Camp Lejeune	261	3.98	1.34
MCB Camp Pendleton	236	3.93	1.51
MCAS Cherry Point	71	4.25	1.30
MCB Hawaii	32	4.38	1.58
Headquarters Battalion Henderson Hall	39	4.05	1.39
MCAS Iwakuni	3	5.00	0.00
MCAS Miramar	80	4.63	1.42
MCAS New River	76	3.97	1.33
MCRD Parris Island	51	3.88	1.42
MCB Quantico	84	3.90	1.29
MCRD San Diego	31	4.33	1.54
MCAGCC (Twentynine Palms)	45	4.26	1.63
MCAS Yuma	31	3.19	0.95

4.4.6 Conclusions for the Residence Life Domain for the Base and Station Respondents

Satisfaction and happiness in the Residence life domain generally improved in 2007 when compared with the results from the 2002 Study. Respondents residing in the BEQ/BOQ were, in general, much less satisfied with their residence than those living in any other type of housing. The reasons for dissatisfaction tended to be inadequate space and lack of privacy in their residences. As a result, privacy and space were two of the facets of domain satisfaction that could be changed to produce a more positive view of the Residence life domain. Those had low mean satisfaction scores and relatively high influence. Two other areas that could result in improved satisfaction include the attractiveness of the dwelling and its comfort. As in past Marine Corps QoL studies, Marines in lower Pay Grade Groups were typically less satisfied with their residence, especially unmarried Marines. Race/ethnicity and gender were not significant factors influencing satisfaction or happiness with Residence. The general dissatisfaction and unhappiness among lower ranking and/or unmarried Marines affected both their job performance and their plans to remain on active duty in a negative way, especially when compared to higher-ranking, married Marines who resided in personally-owned housing. There also was a disparity in the satisfaction and happiness scores due to the base/station of the respondents.

4.5 THE NEIGHBORHOOD LIFE DOMAIN

4.5.1 Happiness – Affective Evaluations of the Neighborhood Life Domain

The weighted mean affective or happiness score (Question #1) for the Neighborhood life domain for the Base and Station respondents in 2007 was 4.52, or half way between "Neither Unhappy Nor Pleased" and "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-20. It can be seen that the highest percentage of respondents, 31.5 percent, were "Neither Unhappy Nor Pleased" (a score of 4) with their neighborhood, but the large portion of respondents who answered positively (50.2 percent) raised the average score. Note that only 18.2 percent of the respondents expressed any level of unhappiness with their neighborhood.

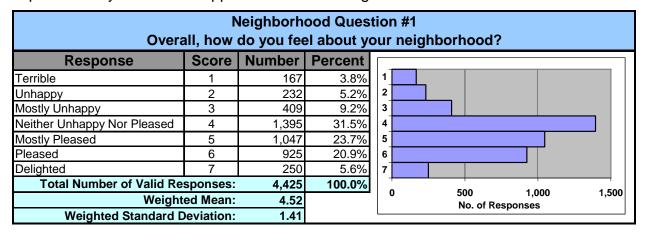


Figure 4-20. Distribution of the Overall Happiness Responses in the Neighborhood Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Neighborhood affective scores are shown in Figure 4-21. The weighted 2007 mean Neighborhood D-T score increased slightly (by 0.15) from the 2002 weighted score, reaching the level of the 1993 and 1998 QoL Studies. However, this increase had no practical significance, having a Cohen's *d* statistic of 0.11.

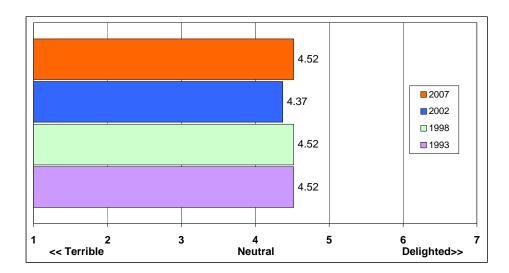


Figure 4-21. Trends in Overall Happiness in the Neighborhood Life Domain for the Base and Station Respondents

Overall happiness in the Neighborhood life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by Pay Grade Group, are shown in Table 4-36.

Table 4-36. Happiness with Neighborhood by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,529	4.21	1.36
E-4/E-5	1,808	4.40	1.39
E-6/E-7	530	4.98	1.31
E-8/E-9	138	5.24	1.33
WO	51	5.29	1.22
O-1 to O-3	249	5.22	1.20
O-4 to O-10	120	5.46	1.24

The most noticeable differences appeared in this decomposition. In general, as pay grade increased, overall happiness increased through the enlisted and WO Pay Grade Groups. The mean score for the officers in the O-1 to O-3 Pay Grade Group was slightly lower (by 0.07) than for the Warrant Officers and somewhat lower (by 0.24) than for the most senior officers. The minimum happiness score, 4.21 (0.31 below the overall happiness score for this life domain but still above the "neutral" score of 4.0), was seen for the E-2/E-3 Pay Grade Group. The maximum happiness score, 5.46 (0.94 above the overall happiness score for this life domain), was seen for the O-4 to O-10 Pay Grade Group. Note also that as the Pay Grade Group increased, the standard

deviations, in general, decreased, indicating that Marines in the lower Pay Grade Groups had a broader variance in their individual happiness scores.

When the trends in overall happiness with the Neighborhood life domain were examined by Pay Grade Group, as shown in Figure 4-22, increases generally were seen in every Pay Grade Group. Overall five of the seven Pay Grade Group scores increased between 2002 and 2007. The exceptions to the general trend of increases since 2002 were seen for the junior officers in the O-1 to O-3 Pay Grade Group, where happiness declined slightly to 5.22 (or by 0.11), a value that was still solidly in the "Somewhat Satisfied" range, and for the E-6/E-7 Pay Grade Group, where happiness was unchanged at 5.21, again a value that was solidly in the "Mostly Pleased" range. It also can be seen that the two lowest Pay Grade Groups had the lowest mean happiness scores across both time periods. None of the differences seen between the two studies had practical significance.

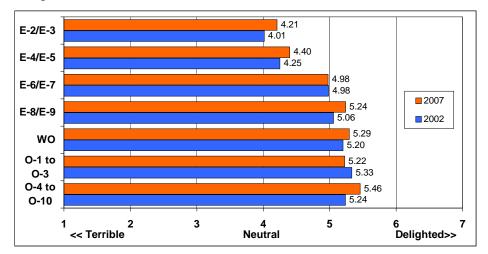


Figure 4-22. Trends in Happiness in the Neighborhood Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-37.

Table 4-37. Happiness with Neighborhood by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	128	4.65	1.42
MCB Camp Butler	344	4.45	1.30
MCB Camp Lejeune	942	4.42	1.47
MCB Camp Pendleton	925	4.35	1.43
MCAS Cherry Point	210	4.61	1.37
MCB Hawaii	152	4.48	1.22
Headquarters Battalion Henderson Hall	58	5.36	1.32
MCAS Iwakuni	124	4.45	1.17
MCAS Miramar	249	4.94	1.30
MCAS New River	180	4.74	1.25
MCRD Parris Island	200	4.89	1.28
MCB Quantico	178	5.04	1.27
MCRD San Diego	132	4.86	1.32
MCGACC (Twentynine Palms)	268	4.16	1.39
MCAS Yuma	110	4.56	1.21

The mean happiness scores varied widely, from a minimum of 4.16 at MCAGCC (Twentynine Palms) (0.36 below the overall happiness score for this life domain, but still falling into the "Neither Unhappy Nor Pleased" range) to a maximum of 5.36 for Headquarters Battalion Henderson Hall (0.84 above the overall happiness score for this life domain). MCB Quantico also had a mean happiness score (5.04) that fell into the "Mostly Pleased" range. These results are logical when it is recognized that roughly 60 percent of the respondent samples from both MCB Quantico and Headquarters Battalion Henderson Hall were E-6s or above and that 20 percent of those two samples lived in personally-owned housing (which received higher affective scores than other types of housing). In contrast, 50 percent of the MCAGCC sample both was in the two lowest Pay Grade Groups and lived in the BEQ/BOQ.

The six bases/stations that scored below the overall mean happiness score for this life domain were (in ascending order) MCAGCC (Twentynine Palms), Camp Pendleton, Camp Lejeune, Camp Butler, MCAS Iwakuni, and MCB Hawaii. Note that this list, while it comprises only 6 of the 15 bases/stations considered here, contains the four largest bases/stations.

Race/Ethnicity. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by race/ethnicity, are shown in Table 4-38. The range of scores was relatively compressed, with the minimum happiness score (4.26, or 0.26 below the overall happiness score for this life domain) seen for the Asian/Pacific Islander subgroup and the maximum happiness score (4.71, or 0.19 above the overall happiness score for this life domain) seen for the Black/African American subgroup. The mean score for the largest group, Whites, essentially was equal to the overall mean, while the fast-growing Spanish/Hispanic group scored a trivial 0.02 below the overall mean.

Table 4-38. Happiness with Neighborhood by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,916	4.51	1.38
Black/African-American	528	4.71	1.42
Asian/Pacific Islander	163	4.26	1.46
Native American/Aleut/Eskimo	74	4.36	1.36
Spanish/Hispanic	586	4.50	1.42
Other	93	4.29	1.47

Gender. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by gender, are shown in Table 4-39. It can be seen that the average score for the female respondents was 4.72, or 0.20 above the overall happiness score for this life domain and 0.23 greater than that for the male respondents. The difference seen here had no practical significance (Cohen's *d* statistic of 0.17).

Table 4-39. Happiness with Neighborhood by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,039	4.49	1.41
Female	425	4.72	1.30

Marital/Parental Status. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by marital/parental status, are shown in Table 4-40. The scores were relatively consistent across these subgroups with one notable exception: The Never Been Married subgroup, the mean happiness score for which, 4.16, was 0.36 below the overall happiness score for this life domain. This most likely resulted from the fact that Marines that have never been married typically are in the lower (and generally less satisfied with their neighborhood) pay grades. For example, 56 percent of the Base and Station respondents who had never been married were in the E-2/E-3 Pay Grade Group, while only 18 percent of the currently or previously married Marines were in that subgroup. In addition, housing type could have an effect on the responses, as about 79 percent of never-married Marines lived in the BEQ/BOQ; the equivalent figure for the currently or previously married Marines was 10 percent.

Table 4-40. Happiness with Neighborhood by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	108	4.69	1.51
Divorced/Widowed/Separated without Children	223	4.66	1.42
Married with Children	1,362	4.88	1.35
Married without Children	832	4.68	1.44
Never Been Married	1,890	4.16	1.32

Type of Housing. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by type of housing, are shown in Table 4-41.

Table 4-41. Happiness with Neighborhood by Type of Housing for the Base and Station Respondents

Housing Type	Count	Mean	Std. Dev.
BEQ/BOQ	1,751	4.03	1.29
Family Housing on Base	812	4.59	1.34
Military Housing in Civilian Community	442	4.76	1.41
Personally-Owned Housing	537	5.58	1.10
Rented Civilian Housing	527	4.81	1.42
Shared Rental Housing	140	4.86	1.28
Other	99	4.06	1.38

Only two of the subgroup scores fell below the overall happiness mean: The score for the small number of "Other" respondents (4.06, 0.46 below the overall mean) and, more importantly, the score for the BEQ/BOQ residents, the mean score for whom, 4.03, was 0.49 below the overall mean. In contrast, the other subgroups were all solidly in the 4.5 to 5.5 range, indicating at least some level of happiness with their neighborhoods. The subgroup with the highest mean happiness score comprised those respondents in personally-owned housing. The mean score for this subgroup, 5.58, was 1.06 above the overall average and the difference between this score and the score for the respondents in the BEQ/BOQ had a large practical significance (Cohen's *d* statistic of 1.29), indicating a meaningful disparity in the level of happiness reported by these two groups.

It should be noted that, while members of the two lowest Pay Grade Groups comprised 94 percent of the respondents living in the BEQ, only 61 percent of the respondents from those two Pay Grade Groups lived in the BEQ. That is, 39 percent of the Base and Station respondents in the E-2-to-E-5 pay grades did not live in the BEQ. Thus, programs designed to improve the neighborhoods surrounding the BEQ/BOQ or programs designed to assist lower-ranking Marines to find/afford other living arrangements might be beneficial to the satisfaction of the affected Marines.

4.5.2 Satisfaction – Cognitive Evaluations of the Neighborhood Life Domain

The weighted mean cognitive or satisfaction score (Question #3I) in the Neighborhood life domain for the Base and Station respondents in 2007 was 4.66, i.e., more than half way between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Neighborhood life domain is shown in Figure 4-23. In the overall sample, the two responses chosen by the highest percentages of respondents were "Neutral" (assigned a score of 4 and chosen by 27.4 percent of the Base and Station respondents) and "Satisfied" (assigned a score of 6 and chosen by 26.8 percent of the respondents). This bi-modal response was caused by a combination of the responses from the E-2/E-3 and E-4/E-5 Pay Grade Groups, which each had over 500 respondents (about 35 and 29

percent of those Pay Grade Groups, respectively) who were "Neutral" on this question, and the responses of the three officer Pay Grade Groups, in which about half of the respondents were "Satisfied" with their neighborhood.

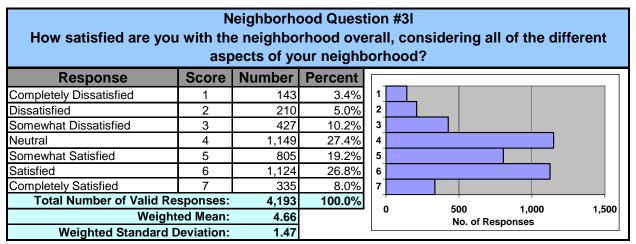


Figure 4-23. Distribution of the Overall Satisfaction Responses in the Neighborhood Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Neighborhood satisfaction scores are shown in Figure 4-24. The 2007 weighted mean satisfaction score for Neighborhood increased slightly (by 0.14) from the 2002 weighted score, but this increase had no practical significance, having a Cohen's *d* statistic of only 0.10.

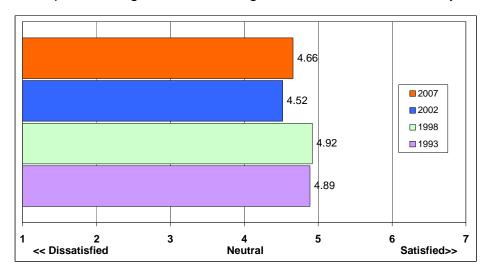


Figure 4-24. Trends in Overall Satisfaction in the Neighborhood Life Domain for the Base and Station Respondents

Overall satisfaction in the Neighborhood life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by Pay Grade Group, are shown in Table 4-42.

Table 4-42. Satisfaction with Neighborhood by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,434	4.35	1.47
E-4/E-5	1,717	4.55	1.44
E-6/E-7	510	5.21	1.38
E-8/E-9	128	5.36	1.27
WO	50	5.34	1.35
O-1 to O-3	240	5.31	1.27
O-4 to O-10	114	5.45	1.21

The mean satisfaction score increased with Pay Grade Group through the enlisted Pay Grade Groups and was fairly consistent for the officer Pay Grade Groups. The means for all the Pay Grade Groups fell between "Neutral" and "Satisfied," indicating that the respondents had generally positive perceptions of their satisfaction with their neighborhoods. The minimum satisfaction score, 4.35 (0.31 below the overall satisfaction score for this life domain and well above the "Neutral" score of 4), was seen for the E-2/E-3 Pay Grade Group. The maximum satisfaction score, 5.45 (0.79 above the overall satisfaction score for this life domain), was seen for the O-4 to O-10 Pay Grade Group, although the differences between this score and those of the WO and O-1 to O-3 Pay Grade Groups were small. Note also that the standard deviations in general diminished as rank increased, indicating that Marines in the lower Pay Grade Groups had a broader variance in their individual satisfaction scores.

When the trends in overall satisfaction with the Neighborhood life domain were examined by Pay Grade Group, as shown in Figure 4-25, increases generally were seen in every group between the results from 2002 and those from 2007. Overall five of the seven Pay Grade Group scores increased between 2002 and 2007, but the subgroup scores were still below the values from either the 1993 or 1998 QoL Studies. The two exceptions to the general trend of increases since 2002 were seen for the junior officers, where satisfaction declined slightly to 5.31 (or by 0.13), a value that was still solidly in the "Somewhat Satisfied" range, and for the E-6/E-7 Pay Grade Group, where satisfaction was unchanged at 5.21, again a value that was solidly in the "Somewhat Satisfied" range. It also can be seen that the two lowest Pay Grade Groups had the lowest mean satisfaction scores across the four studies. For this 2007 QoL Study, the differences between the scores of these two Pay Grade Groups and the scores of the other five Pay Grade Groups had practical significance (having a Cohen's d statistic of 0.66), but should not obscure the fact that an overall increase in satisfaction for the two lowest Pay Grade Groups occurred in the 2007 sample.

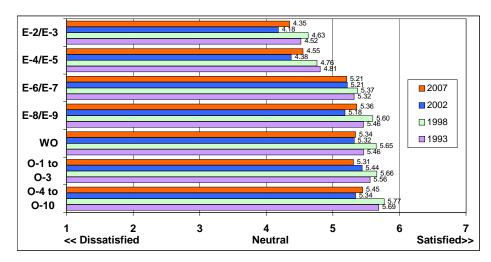


Figure 4-25. Trends in Satisfaction in the Neighborhood Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by the base/station to which the respondent was assigned (for the 15 largest installations), are shown in Table 4-43.

Table 4-43. Satisfaction with Neighborhood by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	127	4.82	1.59
MCB Camp Butler	327	4.61	1.40
MCB Camp Lejeune	869	4.61	1.49
MCB Camp Pendleton	880	4.41	1.45
MCAS Cherry Point	196	4.89	1.46
MCB Hawaii	146	4.68	1.42
Headquarters Battalion Henderson Hall	55	5.58	1.07
MCAS Iwakuni	121	4.83	1.39
MCAS Miramar	233	5.06	1.31
MCAS New River	165	4.87	1.39
MCRD Parris Island	195	4.87	1.38
MCB Quantico	177	5.05	1.34
MCRD San Diego	131	5.27	1.40
MCGACC (Twentynine Palms)	260	4.24	1.53
MCAS Yuma	106	4.81	1.36

The mean satisfaction scores varied widely, from a minimum of 4.24 at MCAGCC (Twentynine Palms) (0.42 below the overall satisfaction score for this life domain) to a maximum of 5.58 for Headquarters Battalion Henderson Hall (0.92 above the overall satisfaction score for this life domain). This variation in satisfaction seen by base/station had its root in the pay grades and types of housing of the respondents: MCAGCC (Twentynine Palms) had the majority of its respondents in the E-2/E-3 Pay Grade Group and living in BEQ/BOQ, whereas the majority of the respondents at

Headquarters Battalion Henderson Hall were in pay grades above E-6 and a large percentage of them lived in privately-owned housing.

Only four bases/stations scored below the overall mean satisfaction score for this life domain. They were (in ascending order) MCAGCC (Twentynine Palms), Camp Pendleton, Camp Lejeune and Camp Butler. Note that this list comprises the four largest Marine Corps installations.

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by race/ethnicity, are shown in Table 4-44. The range of scores was relatively compressed, with the minimum satisfaction score (4.37, or 0.29 below the overall satisfaction score for this life domain) seen for the small number of Native American/Aleut/Eskimo respondents and the maximum satisfaction score (4.93, or 0.27 above the overall happiness score for this life domain) seen for the Black/African American subgroup. The largest subgroup, Whites, scored just slightly below the overall mean, while the fast-growing Spanish/Hispanic group scored 0.07 above the overall mean.

Table 4-44. Satisfaction with Neighborhood by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,754	4.62	1.44
Black/African-American	505	4.93	1.47
Asian/Pacific Islander	156	4.54	1.49
Native American/Aleut/Eskimo	68	4.37	1.43
Spanish/Hispanic	564	4.73	1.56
Other	87	4.63	1.59

Gender. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by gender, are shown in Table 4-45. The average score for the female respondents was 4.89, or 0.23 above the overall satisfaction score for this life domain and 0.25 greater than that for the male respondents. The difference seen here had no practical significance (Cohen's *d* statistic of 0.17).

Table 4-45. Satisfaction with Neighborhood by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	3,825	4.64	1.47
Female	405	4.89	1.43

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by marital/parental status, are shown in Table 4-46. The scores were relatively consistent across these subgroups with one notable exception: the Never Been Married subgroup, the mean satisfaction score for which was 4.32 (0.46 lower than the next largest score of 4.78 found in the Married without Children group). Although not shown in the table, the Never Been Married

subgroup was the only subgroup for which "Satisfied" (assigned a score of 6) was not the most frequently chosen response. Instead, "Neutral" (assigned a score of 4) was chosen by the largest number (654, or 37.1 percent) of the Never Been Married respondents. However, only 21.9 percent of the Never Been Married respondents expressed some degree of dissatisfaction with their neighborhood, while almost twice as many (41.0 percent) expressed some degree of satisfaction.

Table 4-46. Satisfaction with Neighborhood by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	106	5.01	1.37
Divorced/Widowed/Separated without Children	212	4.90	1.46
Married with Children	1,310	5.00	1.42
Married without Children	795	4.78	1.46
Never Been Married	1,764	4.32	1.44

Type of Housing. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by type of housing, are shown in Table 4-47.

Table 4-47. Satisfaction with Neighborhood by Type of Housing for the Base and Station Respondents

Housing Type	Count	Mean	Std. Dev.
BEQ/BOQ	1,635	4.22	1.43
Family Housing on Base	787	4.75	1.45
Military Housing in Civilian Community	428	4.82	1.41
Personally-Owned Housing	517	5.70	1.08
Rented Civilian Housing	505	4.94	1.37
Shared Rental Housing	135	4.79	1.34
Other	92	4.14	1.52

With the exception of the small number of respondents in the "Other" subgroup, the minimum satisfaction score for this decomposition was seen for the respondents living in the BEQ/BOQ. The score of 4.22 was 0.44 below the overall satisfaction score for this life domain. As opposed to the results for satisfaction with residence, almost 54 percent of the respondents expressed some level of satisfaction with their neighborhood, while only 18.6 percent expressed any level of dissatisfaction. The maximum satisfaction score, 5.70, was seen for the subgroup living in personally-owned housing. This score was well into the "Somewhat Satisfied" to "Satisfied" range and was 1.04 above the overall satisfaction score for this life domain.

When mean satisfaction scores for the Neighborhood life domain for the members of the 2007 Base and Station respondent sample living in military housing were compared to the mean satisfaction scores of their counterparts from the 2002 QoL Study (Figure 4-26), increases were seen for all three types of housing considered. The largest increase was for Marines who lived in Military Housing in the Civilian Community, which

increased by 0.36 over the value from 2002 and, with a score of 4.82, almost reached the "Somewhat Satisfied" level.

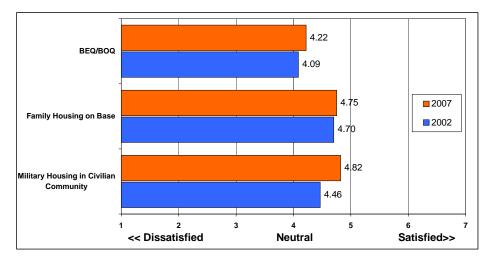


Figure 4-26. Satisfaction with Neighborhood (Military Residence) for the Base and Station Respondents

Figure 4-27 compares the mean satisfaction scores for the Neighborhood life domain for the members of the 2007 Base and Station respondent sample living in non-military housing and to the mean satisfaction scores for their counterparts from the 2002 QoL Study. Again, only the opinions of those respondents who said that they lived in a particular type of housing were included in the results shown for that type of housing. The score for personally-owned housing increased by 0.12 and the score for rented civilian housing increased by 0.04, while the score for shared rental housing decreased by 0.13 between the 2002 and the 2007 respondent samples. Note that for all three housing types, the 2002 scores were the lowest seen to that point; hence the score for shared rental housing for the 2007 Base and Station respondents was the lowest ever seen across the four Marine Corps QoL studies. No specific values could be found in any of the previous QoL studies to determine if the improvements seen in, and the scores computed from, the 2007 data exceeded the equivalent scores from the 1993 and 1998 QoL Studies. None of the differences seen here had any practical significance.

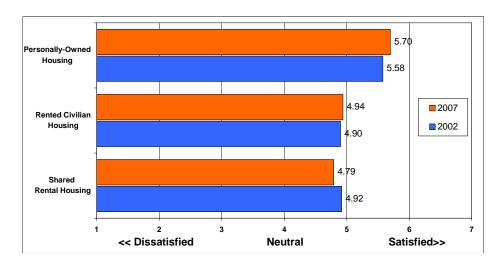


Figure 4-27. Satisfaction with Neighborhood (Non-Military Residence) for the Base and Station Respondents

No numerical mean values for the six housing types examined in the previous two graphics could be found in any of the previous QoL study reports to determine the equivalent scores from the 1993 and 1998 QoL Studies. However, the 2002 QoL Study Report, 48 indicated that the means from the two earliest studies exceeded the "Somewhat Satisfied" level (score of 5) for four of the six housing types.

Figure 4-28 shows the average satisfaction scores for the Base and Station respondents living in military housing on each base/station. When looking at the responses from the BEQ/BOQ residents, only one base/station, MCRD San Diego, scored above "Somewhat Satisfied." However five bases/stations (MCAS Beaufort, Camp Lejeune, Camp Pendleton, MCAS New River and MCAGCC (Twentynine Palms)) scored below the overall BEQ/BOQ satisfaction score of 4.22, placing them well below the overall domain satisfaction level (note that the 4.21 score received by MCAS Cherry Point was considered to be equivalent to the overall BEQ/BOQ satisfaction score). Satisfaction with family housing on each base/station also was examined. MCAS Miramar, MCAS Yuma, MCB Quantico and MCAS Iwakuni all scored above "Somewhat Satisfied." The satisfaction score for military housing in the civilian community, 4.82, was the highest of the scores for the three types of military housing but the data for only six bases/stations merited attention (i.e., included more than 10 responses. Of these bases/stations, two -- MCAGCC (Twentynine Palms) and MCAS Yuma – were scored well below the average.

⁴⁸ 2002 QoL Study Report, p. 3-19.

⁴⁹ Again, data are shown only where the opinions of more than 10 respondents were available.

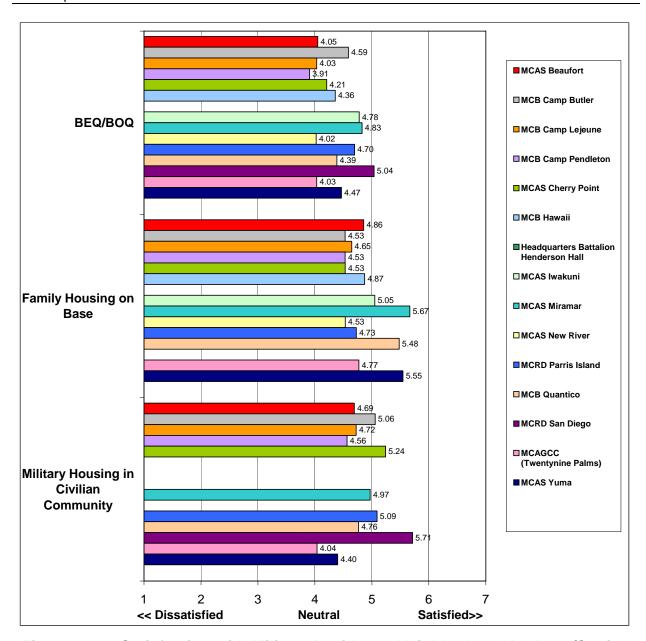


Figure 4-28. Satisfaction with Military Residence Neighborhood by Base/Station for the Base and Station Respondents

Figure 4-29 shows the average satisfaction scores for the Base and Station respondents living in non-military housing at each base/station. Recall that the satisfaction with their neighborhood expressed by the Base and Station respondents who lived in personally-owned housing was the highest of any type of residence. When looked at by individual base/station, however, noticeable differences can be seen: Although all the scores were in the "Somewhat Satisfied" to "Satisfied" range, satisfaction scores for personally-owned housing ranged from 5.17 at MCAGCC

⁵⁰ Note that data are shown only where the opinions of at least 10 respondents were available.

(Twentynine Palms) to 6.07 at Headquarters Battalion Henderson Hall. Rented civilian housing showed a much wider variety of satisfaction scores. Although most bases/stations received scores at or near the "Somewhat Satisfied" level, the scores for two bases/stations, MCAGCC (Twentynine Palms) and MCAS Yuma, were noticeably lower. Only four installations had at least 10 respondents in shared rental housing. Of these, MCAS Miramar was the only one to receive an average score below the overall score for satisfaction with shared rental housing.

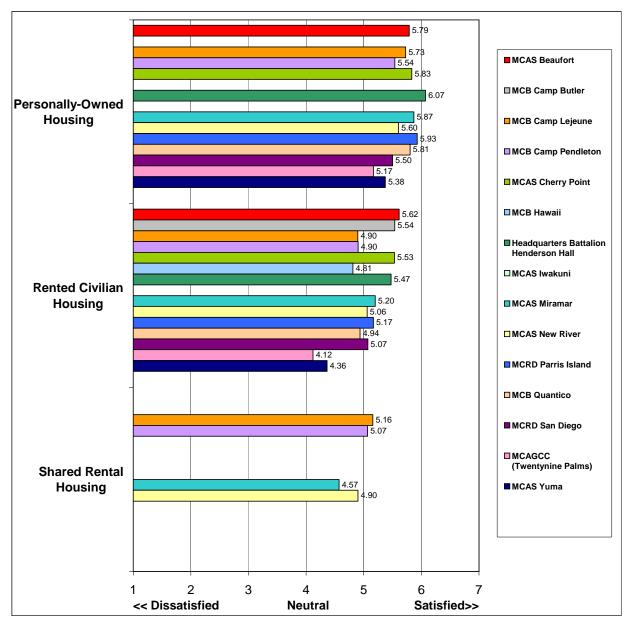


Figure 4-29. Satisfaction with Non-Military Residence Neighborhood by Base/Station for the Base and Station Respondents

In addition to asking the respondents about their overall satisfaction with their neighborhood, Question #3 also asked about satisfaction with a series of 11 separate

Quality of Life (QoL) in the U.S. Marine Corps Study Final Report

facets of neighborhood. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 4-30.

Satisfaction with Di	ferent F	acets of the	he Neig	ghbo	rhood	Life D	omain		
	Weighted								
Satisfaction with:	Mean	Std. Dev.							
Safety	5.04	1.52							
Public Services	4.94	1.56							
Appearance	4.67	1.63							
Conditions of Other Dwellings	4.59	1.57					Π		
Friendliness of People	4.67	1.50							
Transportation Services	4.04	1.54							
Racial Mix	4.82	1.42							
Sense of Community	4.24	1.54					_		
Availability of Retail Services	4.52	1.71							
Travel Time	4.98	1.75							
Availability of Parking	4.57	1.86							
Overall Satisfaction:	4.66	1.47	1	2	3	4	5	6	7
			· [Mean			

Figure 4-30. Satisfaction with Facets of Neighborhood for the Base and Station Respondents

The highest score, 5.04, was seen for safety. Further analysis indicated that the reason for this was that all the respondent groups felt safe in their neighborhood with most answering they were "Satisfied." The lowest satisfaction was seen for transportation services, for which a majority of the respondents answered "Neutral" while all other responses except "Satisfied" were chosen by less than 10 percent of the respondents.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with neighborhood for the Base and Station respondents was performed. The results are shown in Figure 4-31. The magnitudes of the influence factors ranged from about 0.0 to 0.25. Overall satisfaction with neighborhood was most strongly influenced by Appearance, followed by Parking, Conditions of Other Dwellings, Friendliness and Sense of Community. These five facets each had influences greater than that of the overall mean, and improvements in them would be expected to have the greatest impact on satisfaction in this life domain. They also are essentially the same facets as were found in the 2002 QoL Study to have the greatest degree of influence. The facet with the least amount of influence was Racial Mix.

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⁵¹ Note that due to the large number of facet satisfactions considered in this life domain, a slightly different form of the key driver diagram (one that uses a legend and does not place the facet satisfaction names in the diagram itself) has been used; however, the consistent scaling of the chart has been maintained.

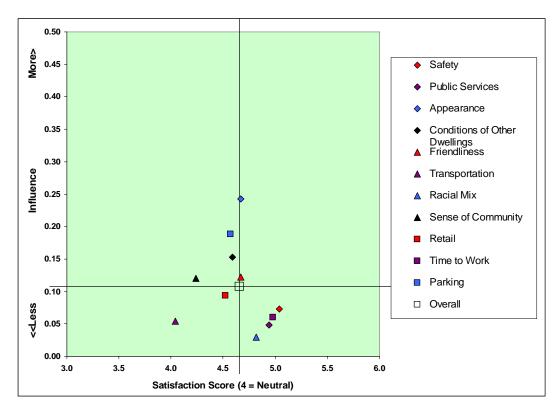


Figure 4-31. Key Driver Diagram for the Neighborhood Life Domain for the Base and Station Respondents

4.5.3 Effect of Neighborhood on Job Performance

Question #4 asked about the effect of the respondents' neighborhood on their job performance. A histogram of the responses to that question is shown in Figure 4-32.

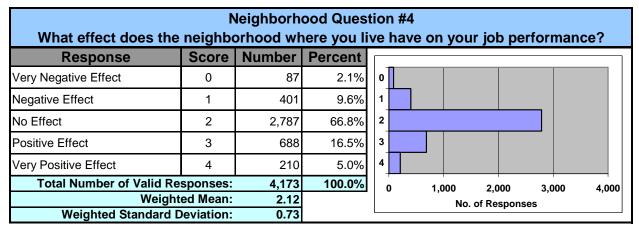


Figure 4-32. Effect of Neighborhood on Job Performance for the Base and Station Respondents

Overall, the neighborhood in which the respondents lived had a slight positive effect on job performance: The weighted mean score for this question was 2.12, falling at the lower end of the "No Effect" to "Positive Effect" range. Note that two-thirds of the

respondents answered that their neighborhood had no effect on their job performance. However, more respondents (916, or 21.6 percent) said their neighborhood had a positive effect than said that their neighborhood had a negative effect (499, or 11.7 percent). When broken down by housing type however, only those living in BEQ/BOQ claimed that their neighborhood had a detrimental effect (an average score of 1.95).

4.5.4 Effect of Neighborhood on Plans To Remain on Active Duty

Question #5 asked about the effect of the respondents' neighborhood on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-33.

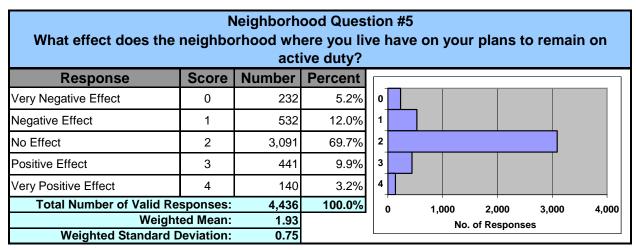


Figure 4-33. Effect of Neighborhood on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 1.93, or slightly below "No Effect." Almost 70 percent of the respondents said that their neighborhood had no effect on their plans to remain on active duty. However, more respondents (764, or 17.2 percent) said their neighborhood had a negative effect than said that their neighborhood had a positive effect (581, or 13.1 percent). Residents of the BEQ/BOQ had an average (and negative) score of 1.74. The respondents living in the remaining housing types all answered that their neighborhood had, at worst, no effect on their plans to remain on active duty.

Based on the fact that only those living in the BEQ/BOQ felt that their neighborhood had a negative effect on their plans to remain on active duty, those responses were broken down by base/station. The results are shown in Table 4-48. On only two bases/stations did the residents of the BEQ/BOQ feel that their neighborhood had a positive effect on their plans to remain on active duty: MCRD San Diego and MCB Quantico, while BEQ/BOQ residents at Camp Lejeune had the most negative feelings toward the effect of their neighborhood on their plans to remain on active duty.

Table 4-48. Effect of Neighborhood on Plans of Base and Station Respondents Living in the BEQ/BOQ To Remain on Active Duty by Base/Station

Base/Station	Mean	Std. Dev.
MCAS Beaufort	1.74	0.83
MCB Camp Butler	1.85	0.73
MCB Camp Lejeune	1.60	0.77
MCB Camp Pendleton	1.67	0.83
MCAS Cherry Point	1.70	0.80
MCB Hawaii	1.78	0.69
Headquarters Battalion Henderson Hall	1.75	0.46
MCAS Iwakuni	1.78	0.79
MCAS Miramar	1.89	0.76
MCAS New River	1.78	0.83
MCRD Parris Island	1.82	0.79
MCB Quantico	2.09	0.60
MCRD San Diego	2.20	1.01
MCGACC (Twentynine Palms)	1.71	0.87
MCAS Yuma	1.80	0.73

4.5.5 Conclusions for the Neighborhood Life Domain for the Base and Station Respondents

Both happiness and satisfaction increased for the Neighborhood life domain since 2002, but the changes had no practical significance. Respondents residing in the BEQ/BOQ were, in general, significantly less satisfied and less happy with their neighborhood than those living in any other type of housing. Marines living in non-military housing scored higher overall and at each location than those living in military housing, with few exceptions. Those respondents in lower Pay Grade Groups also rated their neighborhoods lower. These two effects are further accentuated because base/stations with the most respondents tended to receive lower scores due to higher fraction of respondents in the lower pay grades and/or living in the BEQ/BOQ. The other demographic decompositions considered (namely race/ethnicity, gender and marital/parental status) showed little to no variation when compared with the housing and Pay Grade Group decompositions. The general dissatisfaction and unhappiness with neighborhood among those living in the BEQ/BOQ affected both their job performance and their plans to remain on active duty in a negative way; with the respondents from only two of the 15 installations considered not claiming that their neighborhood had a negative effect on their plans to remain on active duty.

To improve satisfaction with this life domain, changes may be made in many different areas. While transportation services available had the lowest satisfaction score, it also had one of the lowest levels of influence. Thus, improving satisfaction with that facet of this domain may help change the overall domain satisfaction slightly although it is not likely to have a major impact. Instead, improvements in the appearance of the neighborhood, availability of parking, condition of other dwellings, friendliness of the people, and sense of community all had high influence factors and thus improvements in these facets could help improve domain satisfaction significantly.

4.6 THE LEISURE AND RECREATION LIFE DOMAIN

4.6.1 Happiness – Affective Evaluations of the Leisure and Recreation Life Domain

The weighted mean affective or happiness score (Question #1) for the Leisure and Recreation life domain for the Base and Station respondents in 2007 was 4.80, indicating that the Marines in the respondent sample were generally happy with their leisure and recreation activities. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-34. It can be seen that the highest percentage of respondents, 30.3 percent, were "Mostly Pleased" with their leisure and recreation activities, and that a large portion of the respondents (25.6 percent) responded that they were "Pleased." In contrast, only 16.8 percent of the respondents expressed any level of unhappiness with their leisure and recreation opportunities.

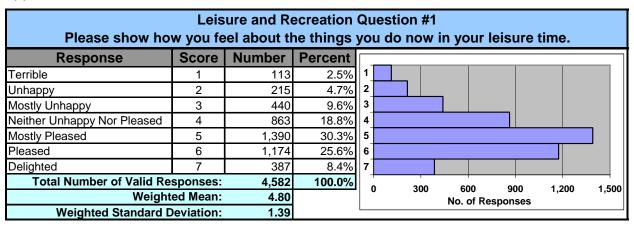


Figure 4-34. Distribution of the Overall Happiness Responses in the Leisure and Recreation Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Leisure and Recreation affective scores are shown in Figure 4-35. The 2007 weighted mean leisure and recreation D-T score decreased slightly (by 0.05, a difference of no practical significance, as calculated by Cohen's *d* statistic) from the 2002 weighted score. Although the 2007 value was the lowest seen in any of the four Marine Corps QoL Studies, none of the differences appear to have any practical significance.

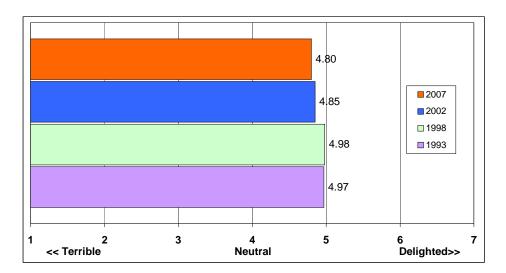


Figure 4-35. Trends in Overall Happiness in the Leisure and Recreation Life Domain for the Base and Station Respondents

Overall happiness in the Leisure and Recreation life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by Pay Grade Group, are shown in Table 4-49.

Table 4-49. Happiness with Leisure and Recreation by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,613	4.52	1.50
E-4/E-5	1,856	4.87	1.34
E-6/E-7	539	5.07	1.23
E-8/E-9	143	5.30	1.23
WO	53	5.08	1.14
O-1 to O-3	258	5.08	1.32
O-4 to O-10	120	5.19	1.16

In each of the enlisted and officer Pay Grade Groups, the mean happiness increased with increasing rank, although the score for the Warrant Officers, and indeed for all the officer Pay Grade Groups, was lower than that of the E-8/E-9 Pay Grade Group, which, with a score of 5.30, had the highest score. The E-2/E-3 Pay Grade Group had the lowest mean score, 4.52, but this was still halfway between being "Neither Unhappy Nor Pleased" and "Mostly Pleased." The difference between the highest and lowest mean scores was 0.78, which was deemed to have practical significance, having a Cohen's *d* statistic of 0.57. All Pay Grade Groups except the E-2/E-3 and E-4/E-5 groups had mean scores that fell between "Mostly Pleased" and "Pleased."

Figure 4-36 shows the trends in happiness between 2002 and 2007 across Pay Grade Groups for the Leisure and Recreation life domain. The mean scores in all but one of the seven Pay Grade Groups (the E-4/E-5 Pay Grade Group) increased and the O-1 to O-3 Pay Grade Group had the largest increase (0.25). However, this increase had no practical significance since the Cohen's *d* statistic was only 0.20. The change was smallest for the Warrant Officers.

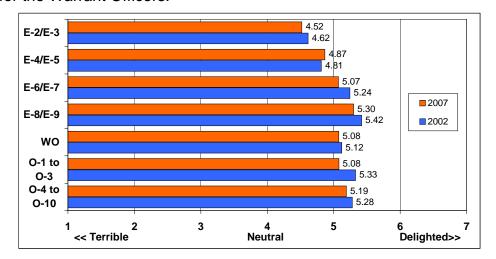


Figure 4-36. Trends in Happiness in the Leisure and Recreation Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-50.

Table 4-50. Happiness with Leisure and Recreation by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	132	4.73	1.41
MCB Camp Butler	372	4.85	1.34
MCB Camp Lejeune	973	4.72	1.43
MCB Camp Pendleton	981	4.84	1.40
MCAS Cherry Point	211	4.89	1.28
MCB Hawaii	161	5.03	1.32
Headquarters Battalion Henderson Hall	56	5.41	1.26
MCAS Iwakuni	127	4.85	1.24
MCAS Miramar	260	5.08	1.19
MCAS New River	187	4.91	1.33
MCRD Parris Island	200	4.76	1.48
MCB Quantico	180	5.09	1.24
MCRD San Diego	135	4.85	1.50
MCAGCC (Twentynine Palms)	276	4.37	1.56
MCAS Yuma	107	4.77	1.18

The mean happiness scores varied widely, from a minimum of 4.37 at MCAGCC (Twentynine Palms) (0.43 below the overall happiness score for this life domain, but still falling into the "Neither Unhappy Nor Pleased" range) to a maximum of 5.41 for Headquarters Battalion Henderson Hall (0.61 above the overall happiness score for this life domain). The Cohen's d statistic when calculated for these two means was 0.73, indicating practical significance due to this medium-to-large effect size between the responses for these two respondent samples. The Cohen's d statistics (0.51) calculated for MCB Quantico, the base with the second largest mean happiness score (5.09), and MCAS Miramar (5.08) also showed medium effect sizes (and thus, practical significance) when compared with MCAGCC (Twentynine Palms). The fourth installation that had a mean score above 5.00 was MCB Hawaii. Thus, as opposed to the Residence and Neighborhood life domains, in which the four largest bases/stations routinely appeared in the list of bases/stations with the lowest affective and cognitive scores (due mainly to the large numbers of E-2/E-3 respondents at those bases/stations), there was a mix of bases/installations with the highest affective scores in this life domain.

Race/Ethnicity. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by race/ethnicity, are shown in Table 4-51.

Table 4-51. Happiness with Leisure and Recreation by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std.Dev.
White	3,025	4.81	1.38
Black/African-American	545	4.86	1.42
Asian/Pacific Islander	167	4.77	1.40
Native American/Aleut/Eskimo	79	4.59	1.37
Hispanic/Spanish	605	4.76	1.46
Other	98	4.69	1.45

The range was very compressed, with the minimum happiness score (4.59, for the Native American/Aleut/Eskimo subgroup) and the maximum happiness score (4.86 for the Black/African American subgroup) varying by only 0.27, which equated to a small effect size of no practical significance. The mean score for the largest subgroup, Whites, essentially was equal to the overall mean, while the fast-growing Spanish/Hispanic subgroup scored a trivial 0.04 below the overall mean. The means of each of the racial/ethnic subgroups corresponded to a response between "Neither Unhappy Nor Pleased" and "Mostly Pleased."

Gender. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by gender, are shown in Table 4-52. The average score for the female respondents, 4.89, differed from that of the male respondents by only 0.10. This difference had no practical significance.

Table 4-52. Happiness with Leisure and Recreation by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,181	4.79	1.40
Female	443	4.89	1.36

Marital/Parental Status. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by marital/parental status, are shown in Table 4-53. The scores were relatively consistent across the subgroups. Even the Never Been Married subgroup had a mean happiness score, 4.60, which was only 0.20 below the overall happiness score for this life domain 0.23 below the next largest score of 4.83 from the Divorced/Widowed/Separated with Children group. Indeed, the means were clustered with a maximum difference of 0.38 between the minimum and the maxima. The Cohen's *d* statistic for the differences between the extremes was small (0.27), indicating that no practical significance existed.

Table 4-53. Happiness with Leisure and Recreation by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	111	4.83	1.33
Divorced/Widowed/Separated without Children	224	4.89	1.39
Married with Children	1,392	4.98	1.31
Married without Children	839	4.98	1.34
Never Been Married	2,010	4.60	1.46

4.6.2 Satisfaction – Cognitive Evaluations of the Leisure and Recreation Life Domain

The weighted mean cognitive or satisfaction score (Question #3e) in the Leisure and Recreation life domain for the Base and Station respondents in 2007 was 4.18, i.e., between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Leisure and Recreation life domain is shown in Figure 4-37.

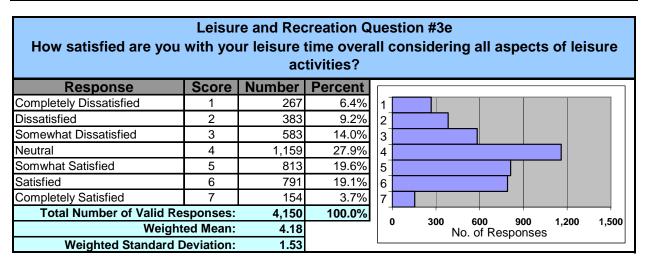


Figure 4-37. Distribution of the Overall Satisfaction Responses in the Leisure and Recreation Life Domain for the Base and Station Respondents

In the overall sample, the response chosen by the highest percentage of respondents was "Neutral" (assigned a score of 4 and chosen by 27.9 percent of the Base and Station respondents). A total of 1,758 respondents (42.4 percent) expressed some level of satisfaction with their leisure time, while only 1,233 respondents (29.6 percent) expressed some level of dissatisfaction with their leisure time

Trends over the four Marine Corps QoL studies in the mean Leisure and Recreation satisfaction scores are shown in Figure 4-38. The 2007 weighted mean satisfaction score for Leisure and Recreation increased slightly (by 0.11) from the 2002 weighted score, but remained less than the 1993 and 1998 scores. The increase from 2002 to 2007 had no practical significance, having a Cohen's *d* statistic of only 0.07.

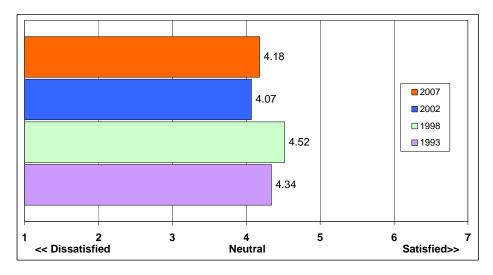


Figure 4-38. Trends in Overall Satisfaction in the Leisure and Recreation Life Domain for the Base and Station Respondents

Overall satisfaction in the Leisure and Recreation life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction

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according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by Pay Grade Group, are shown in Table 4-54.

Table 4-54. Satisfaction with Leisure and Recreation by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,433	3.92	1.58
E-4/E-5	1,697	4.08	1.47
E-6/E-7	490	4.62	1.45
E-8/E-9	127	5.03	1.32
WO	49	4.84	1.36
O-1 to O-3	244	4.51	1.57
O-4 to O-10	110	4.73	1.36

As seen for other measures, the mean satisfaction scores generally increased with pay grade through the enlisted Pay Grade Groups. The means for all the Pay Grade Groups were from slightly below "Neutral" to slightly above "Somewhat Satisfied," indicating a fairly wide range of opinions on the satisfaction with leisure activities. The minimum satisfaction score, 3.92 (0.26 below the overall satisfaction score for this life domain and below the "Neutral" score of 4), was seen for the E-2/E-3 Pay Grade Group. The maximum satisfaction score, 5.03 (0.85 above the overall satisfaction score for this life domain), was seen for the E-8/E-9 Pay Grade Group.

When the trends in overall satisfaction with the Leisure and Recreation life domain were examined by Pay Grade Group, as shown in Figure 4-39, ⁵² increases were seen, with one exception, in every group between the results from 2002 and those from 2007. The exception was the O-1 to O-3 Pay Grade Group, where satisfaction declined slightly to 4.51 (or by 0.14), a value that was still solidly in the "Neutral" to "Somewhat Satisfied" range. It also can be seen that the two lowest Pay Grade Groups had the lowest mean satisfaction scores across the two studies.

⁵² Note that numerical data on the respondents' satisfaction with the Leisure and Recreation life domain by Pay Grade Group were available from Appendix D of the 1998 QoL Study Report for each of the 10 other life domains. However, no such numerical data exist for the Leisure and Recreation life domain. Thus, trend analysis could only be performed with the data from the 2002 QoL Study.

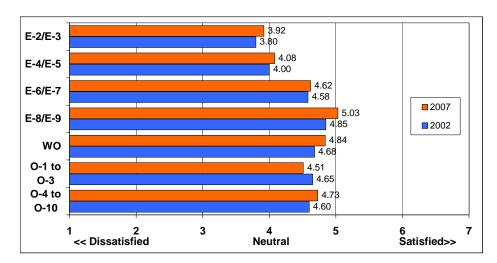


Figure 4-39. Trends in Satisfaction in the Leisure and Recreation Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by the base/station to which the respondent was assigned (for the 15 largest installations), are shown in Table 4-55.

Table 4-55. Satisfaction with Leisure and Recreation by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	118	3.99	1.54
MCB Camp Butler	336	4.42	1.50
MCB Camp Lejeune	880	4.03	1.51
MCB Camp Pendleton	858	4.10	1.52
MCAS Cherry Point	189	4.38	1.41
MCB Hawaii	147	4.50	1.51
Headquarters Battalion Henderson Hall	49	4.90	1.56
MCAS Iwakuni	118	4.68	1.55
MCAS Miramar	244	4.70	1.38
MCAS New River	168	4.16	1.46
MCRD Parris Island	180	3.92	1.47
MCB Quantico	170	4.58	1.50
MCRD San Diego	121	4.37	1.54
MCAGCC (Twentynine Palms)	254	3.54	1.61
MCAS Yuma	104	4.02	1.47

The mean satisfaction scores varied widely, from a minimum of 3.54 at MCAGCC (Twentynine Palms) (0.64 below the overall satisfaction score for this life domain and halfway between "Somewhat Dissatisfied" and "Neutral") to a maximum of 4.90 for Headquarters Battalion Henderson Hall (0.72 above the overall satisfaction score for this life domain). The value of the Cohen's *d* statistic for the scores of these two installations was 0.86, indicating a large effect size/difference of practical significance between the responses. Note that the scores for three bases/stations (MCAGCC

(Twentynine Palms), MCRD Parris Island and MCAS Beaufort) fell below the "Neutral" score of 4 and into the "Somewhat Dissatisfied" range.

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by race/ethnicity, are shown in Table 4-56. The range of scores was relatively compressed, with the minimum satisfaction score (3.82, or 0.36 below the overall satisfaction score for this life domain) seen for the small number of Native American/Aleut/Eskimo respondents and the maximum happiness score (4.38, or 0.20 above the overall happiness score for this life domain) seen for the Black/African American subgroup. The Cohen's *d* statistic between these two subgroups was 0.36, corresponding to a small-to-medium effect size/shift in group responses that was of no practical significance. The largest subgroup, Whites, scored just slightly below (0.02) the overall mean, as did the fast-growing Spanish/Hispanic group.

Table 4-56. Satisfaction with Leisure and Recreation by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,746	4.16	1.51
Black/African-American	489	4.38	1.52
Asian/Pacific Islander	160	4.09	1.50
Native American/Aleut/Eskimo	73	3.82	1.58
Hispanic/Spanish	540	4.16	1.60
Other	89	3.88	1.60

Gender. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by gender, are shown in Table 4-57. The average score for the female respondents was 4.31, or 0.13 above the overall satisfaction score for this life domain and only 0.16 greater than that for the male respondents. The difference seen here had no practical significance.

Table 4-57. Satisfaction with Leisure and Recreation by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	3,789	4.15	1.53
Female	398	4.31	1.51

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by marital/parental status, are shown in Table 4-58. The scores were relatively consistent across the subgroups: The means were tightly grouped with a maximum difference of 0.36. The maximum value of the Cohen's *d* statistic was 0.23, indicating only a small effect size. The Divorced/ Widowed/Separated without Children and the Married with Children subgroups had a higher percentage of "Mostly Pleased" or "Pleased" responses than the other subgroups.

Table 4-58. Satisfaction with Leisure and Recreation by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	104	4.27	1.56
Divorced/Widowed/Separated without Children	203	4.36	1.64
Married with Children	1,268	4.36	1.46
Married without Children	769	4.21	1.53
Never Been Married	1,800	4.00	1.55

In addition to asking the respondents about their overall satisfaction with their leisure and recreation activities, Question #3 also asked about satisfaction with a series of four separate facets of leisure and recreation. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 4-40. It can be seen that the satisfaction scores for the variety of leisure activities and the facilities provided for leisure activities had higher mean satisfaction scores than did the cost of leisure activities and amount of leisure time. None of the differences seen here were of practical significance.

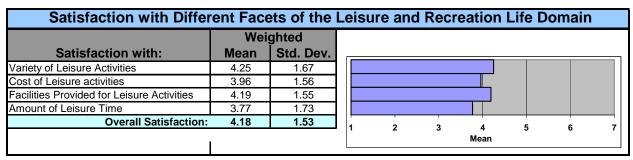


Figure 4-40. Satisfaction with Facets of Leisure and Recreation for the Base and Station Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with leisure and recreation for the Base and Station respondents was performed. The results are shown in Figure 4-41.

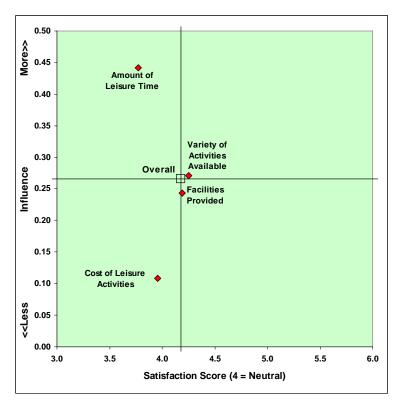


Figure 4-41. Key Driver Diagram for the Leisure and Recreation Life Domain for the Base and Station Respondents

The magnitudes of the facet satisfactions ranged from 0.108 for the Cost of Leisure Activities to 0.442 for Amount of Leisure Time. The results shown look remarkably like those from the 2002 QoL Study, with the exception that the positions of the two facets clustered near the overall domain satisfaction, Variety of Activities Available and Facilities Provided, have switched. Only Amount of Leisure Time appeared in the upper left quadrant, indicating that it had both the greatest degree of influence and a satisfaction level lower than the overall domain mean and, thus, that it is an area in which noticeable gains in satisfaction may be possible.

4.6.3 Effect of Leisure and Recreation on Job Performance

Question #6 asked about the effect of Leisure and Recreation on the respondents' job performance. A histogram of the responses to that question is shown in Figure 4-42.

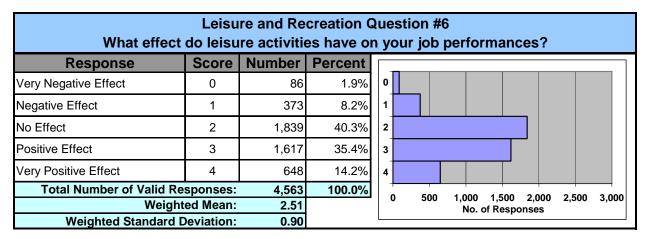


Figure 4-42. Effect of Leisure and Recreation on Job Performance for the Base and Station Respondents

Overall, leisure and recreation activities had a fairly positive effect on job performance: The weighted mean score for this question was 2.51, midway between "No Effect" and "Positive Effect." Note that the effect of this life domain on job performance was so positive that the number of respondents who said that their leisure and recreation activities had a "Very Positive Effect" on their job performance (648, or 14.2 percent) was more than 40 percent greater than the number who chose either of the two negative responses (459, or 10.1 percent).

4.6.4 Effect of Leisure and Recreation on Plans To Remain on Active Duty

Question #7 asked about the effect of the respondents' leisure and recreation activities on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-43.

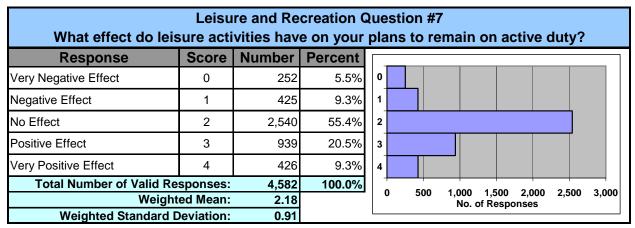


Figure 4-43. Effect of Leisure and Recreation on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 2.18, or slightly above "No Effect." Over 55 percent of the respondents said that their leisure and recreation activities had no effect on their plans to remain on active duty. However, about twice as many

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respondents (1,365, or 29.8 percent) said their leisure and recreation activities had some degree of positive effect than said that their leisure and recreation activities had some degree of negative effect (677, or 14.8 percent).

4.6.5 Other, Life Domain-Specific Analyses

The responses to a number of other questions specific to the Leisure and Recreation life domain were examined. The results are presented below.

Question #4 presented the respondents with a list of 36 activities that people might do in their spare time. It asked them to mark how often they had participated in each type of activity, with responses ranging on a six-point scale from "Never" and "Occasionally" to "Several Times a Week" and "Daily." It then asked the respondents who had answered either "Never" or "Occasionally" for an activity to pick the one main reason why they did not participate in that particular activity. Responses ranged from reasons that might be actionable or controllable by the Marine Corps, like "Not Available" and "Inadequate Facilities," to other reasons less likely to be controllable by the Marine Corps, like "Low Priority" and "No Interest."

The results, for the entire Base and Station respondent group, are shown in Figure 4-44. The center of the chart lists the 36 individual leisure activities considered. On the right are the average activity scores (ranging from "1" for "Never" to "6" for "Daily" and based on the frequency of the respondents' participation) for each activity, and on the left is the percentage of respondents who participated in an activity "Never" or "Occasionally" either because of "Inadequate Facilities" or because that activity was "Not Available."

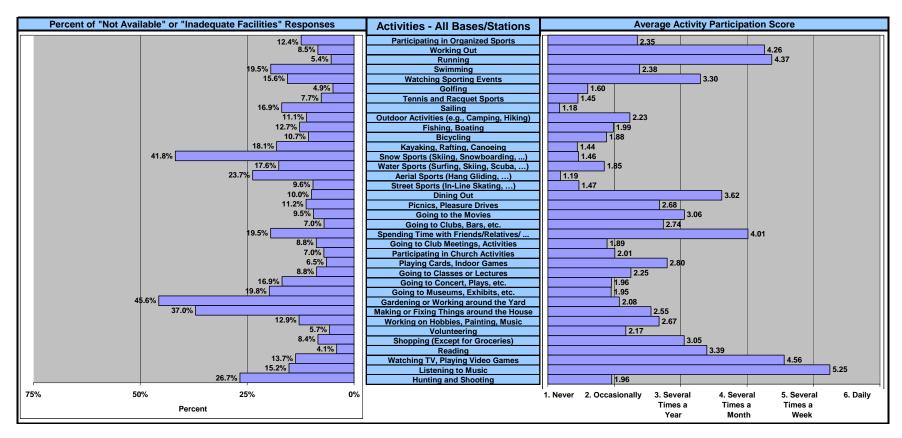


Figure 4-44. Frequency of Participation and Reasons for Not Participating in 36 Leisure and Recreation Activities for the Base and Station Respondents

To read this graphic, note that the most popular leisure time activity was listening to music; however, 15.2 percent of the respondents indicated that they were unable to listen to music because it was "not available" or because of "inadequate facilities." The two activities with the highest percentages of respondents who indicated an inability to participate in them were gardening or working around the yard and snow sports (skiing, snowboarding, cross-country), for which 45.6 and 41.8 percent of the respondents, respectively, indicated that their reason for not participating was either unavailability or inadequate facilities. The most popular activities were listening to music, watching TV and playing video games, running, working out, and spending time with friends and relatives. The least popular activities included sailing; aerial sports; kayaking, rafting and canoeing; tennis and racquet sports; snow sports; and street sports. The activities receiving the highest percentage of "Not Available" or "Inadequate Facilities" responses were gardening or working around the yard, snow sports, and street sports in the process of the

A series of charts for each of the 15 non-MCLB Marine Corps installations is included in Appendix I.

Question #5 asked the respondents to compare the level of enjoyment they received from their leisure and recreation activities at their current base/station to the enjoyment received from the activities at the other bases/stations where they had been stationed during their Marine Corps careers. The responses were scored on a seven-point scale ranging from 1 for "Much Less Enjoyable" to 7 for "Much More Enjoyable," with a score of 4 assigned to "About the Same." The results for each of the 15 bases/stations considered in this study are shown in Figure 4-45.

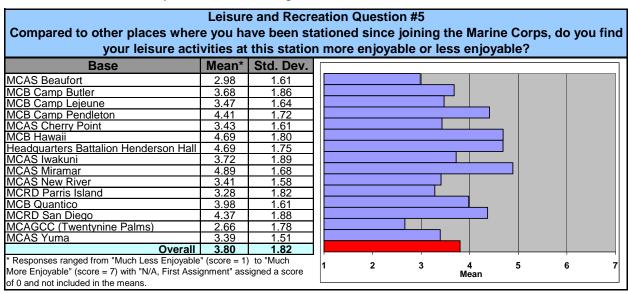


Figure 4-45. Comparison with Previous Level of Enjoyment of Leisure and Recreation Activities by Base/Station for the Base and Station Respondents

⁵³ Not surprisingly, the degree of non-participation in snow sports was increased by the 86 percent of the respondents from MCB Hawaii who said that they "Never" or only "Occasionally" participated in skiing or snowboarding.

Overall, the respondents felt that their current duty station was somewhat less enjoyable than their previous duty stations: The overall value for this measure was 3.80, which was 0.20 below the neutral value of 4.0. This relatively low score can be justified when it is recognized that an individual's current life situation, on a measure such as this, is likely to be worse than the optimum situation that particular individual has ever experienced.

Two installations stood out for having the lowest levels of enjoyment: MCAGCC (Twentynine Palms), which had the lowest score (2.66), and MCAS Beaufort, which had a score of 2.98. Both of these installations were ranked below "A Little Less Enjoyable." In contrast, five bases/stations received scores above 4.0, placing them on the "A Little More Enjoyable" side of neutral. These were (in descending order) MCAS Miramar (which received a score of 4.89), MCB Hawaii and Headquarters Battalion Henderson Hall (which had identical scores of 4.69), Camp Pendleton (4.41) and MCRD San Diego (4.37). The practical significance of the difference between MCAS Beaufort and MCRD San Diego was found to be large (Cohen's *d* statistic of 0.79).

4.6.6 Conclusions for the Leisure and Recreation Life Domain for the Base and Station Respondents

Base and Station respondents overall reported being neutral to slightly pleased with their leisure and recreation activities in both the affective and cognitive measures. Differences from the results of the 2002 QoL Study were minor, with the affective measure declining slightly and the cognitive score increasing slightly. Neither change was found to have any practical significance. The E-2/E-3 and E-4/E-5 Pay Grade Groups had the lowest mean affective and cognitive scores; the E-8/E-9 and O-4 to O-10 Pay Grade Groups rated their happiness and satisfaction the highest (along with the Warrant Officers, on the latter measure) of all the Pay Grade Groups.

One facet of satisfaction in this domain that could significantly improve overall domain satisfaction was the Amount of Leisure Time Available. This had both high influence and a low satisfaction score. The only other facet that had a low satisfaction score was the Cost of Leisure Activities; however, that facet had the lowest influence of the factors considered, so changes to it would be much less likely to result in substantial improvements in domain satisfaction.

Leisure and recreation activities were scored as having somewhat positive effects on job performance and somewhat less, but still positive, effects on plans to remain on active duty. Distinct differences were seen in the participation in and enjoyment gained from leisure and recreation activities on individual installations. With respect to enjoyment, MCAGCC (Twentynine Palms) and MCAS Beaufort received the lowest scores. Indeed, the respondents from MCAGCC (Twentynine Palms) rated that base as the lowest of the 15 installations considered here in every measure considered in this life domain.

4.7 THE HEALTH LIFE DOMAIN

4.7.1 Happiness – Affective Evaluations of the Health Life Domain

The weighted mean affective or happiness score (Question #1) for the Health life domain for the Base and Station respondents in 2007 was 4.88, toward the upper end of the "Neither Unhappy Nor Pleased" and "Mostly Pleased" range on the seven-point D-T scale and a generally positive assessment of their health. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-46. It can be seen that 66.1 percent of the Base and Station respondents answered they were in some way pleased with the state of their health, while only 18.2 percent were unhappy.

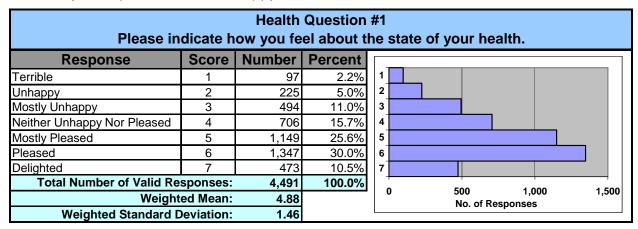


Figure 4-46. Distribution of the Overall Happiness Responses in the Health Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Health affective scores are shown in Figure 4-47. The 2007 weighted mean Health D-T score decreased slightly (by 0.11) from the 2002 weighted score, the fourth straight study in which the scores declined. However, the decrease from 2002 had no practical significance, having a Cohen's *d* statistic of 0.08.

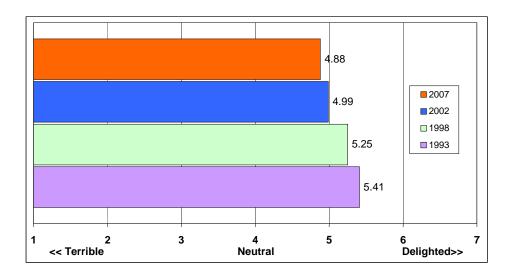


Figure 4-47. Trends in Overall Happiness in the Health Life Domain for the Base and Station Respondents

Overall happiness in the Health life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Health life domain, decomposed by Pay Grade Group, are shown in Table 4-59.

Table 4-59. Happiness with Health by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,577	4.74	1.54
E-4/E-5	1,832	4.86	1.41
E-6/E-7	525	5.03	1.41
E-8/E-9	138	5.06	1.31
WO	53	4.85	1.38
O-1 to O-3	251	5.51	1.12
O-4 to O-10	115	5.45	1.20

Some noticeable differences appeared within this decomposition. While all the subgroup scores were clustered near "Mostly Pleased," the mean scores in the enlisted Pay Grade Groups increased as pay grade increased. The E-2/E-3 Pay Grade Group had the lowest mean affective score of all the Pay Grade Groups -- 4.74, or 0.14 below the overall affective mean – but this was still close to "Mostly Pleased." While the E-8/E-9 Pay Grade Group had the highest mean affective score (5.06, or 0.18 above the overall affective mean), the difference between it and the E-2/E-3 mean score had no practical significance (a value of 0.22 for the Cohen's *d* statistic, a small effect size). The O-1 to O-3 Pay Grade Group had the highest mean affective score (5.51, or 0.63 above the overall affective mean) and the difference between this score and that of the

E-2/E-3 Pay Grade Group was of practical significance, having a Cohen's *d* statistic of 0.57, or a medium effect.

When the trends in overall happiness with the Health life domain were examined by Pay Grade Group, as shown in Figure 4-48, decreases generally were seen in every group between the results from 2002 and those from 2007. Overall six of the seven Pay Grade Group scores decreased between 2002 and 2007. The exception to the general trend of decreases since 2002 occurred for the senior officers in the O-4 to O-10 Pay Grade Group, where happiness increased slightly to 5.45 (or by 0.08). It also can be seen that the two lowest Pay Grade Groups and the Warrant Officers had the lowest mean happiness scores with responses ranking slightly below "Neither Unhappy Nor Pleased."

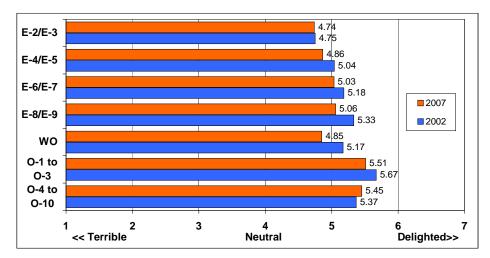


Figure 4-48. Trends in Happiness in the Health Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the happiness scores for the Health life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-60.

Table 4-60. Happiness with Health by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	132	4.92	1.30
MCB Camp Butler	353	5.25	1.34
MCB Camp Lejeune	956	4.77	1.53
MCB Camp Pendleton	971	4.78	1.46
MCAS Cherry Point	208	4.99	1.40
MCB Hawaii	151	5.08	1.47
Headquarters Battalion Henderson Hall	56	5.16	1.35
MCAS Iwakuni	118	5.25	1.26
MCAS Miramar	251	5.05	1.33
MCAS New River	183	4.89	1.39
MCRD Parris Island	192	4.85	1.40
MCB Quantico	182	5.10	1.39
MCRD San Diego	132	5.10	1.51
MCAGCC (Twentynine Palms)	270	4.85	1.44
MCAS Yuma	110	4.83	1.41

The mean scores for all bases/stations were clustered around "Mostly Pleased," ranging from a low of 4.77 at Camp Lejeune to a high of 5.25 at both Camp Butler and MCAS lwakuni. However, the differences between these extremes had no practical significance: Only a small-to-medium effect size (Cohen's *d* statistic of 0.34) existed.

Race/Ethnicity. The means and standard deviations of the happiness scores for the Health life domain, decomposed by race/ethnicity, are shown in Table 4-61. The "Other" and the Spanish/Hispanic respondents were happiest with their health, while the members of the Asian/Pacific Islander subgroup were the least happy. Only a small effect size was seen in the differences between the extremes, indicating that all the racial/ethnic groups considered in this study were equally pleased with the state of their health.

Table 4-61. Happiness with Health by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,975	4.87	1.44
Black/African-American	525	4.99	1.49
Asian/Pacific Islander	163	4.71	1.54
Native American/Aleut/Eskimo	74	4.76	1.46
Spanish/Hispanic	596	5.00	1.50
Other	94	5.00	1.44

Gender. The means and standard deviations of the happiness scores for the Health life domain, decomposed by gender, are shown in Table 4-62. Although the mean scores for the male and female respondents differ by 0.20, the differences had no practical significance.

Table 4-62. Happiness with Health by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,095	4.92	1.45
Female	435	4.72	1.54

Marital/Parental Status. The means and standard deviations of the happiness scores for the Health life domain, decomposed by marital/parental status, are shown in Table 4-63. The scores were relatively consistent across these subgroups. Only the Married with Children subgroup, whose mean happiness was the highest at 5.05, scored above "Mostly Pleased." In contrast the Divorced/Widowed/Separated with Children respondents had the lowest score (4.73). None of the differences seen here were of practical significance.

Table 4-63. Happiness with Health by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	113	4.73	1.53
Divorced/Widowed/Separated without Children	225	4.81	1.46
Married with Children	1,351	5.05	1.37
Married without Children	830	4.93	1.47
Never Been Married	1,967	4.82	1.49

4.7.2 Satisfaction – Cognitive Evaluations of the Health Life Domain

The weighted mean cognitive or satisfaction score (Question #9e) in the Health life domain for the Base and Station respondents in 2007 was 4.88, i.e., just short of "Somewhat Satisfied" on the seven-point satisfaction scale, and the same value as was seen for the affective measure. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Health life domain is shown in Figure 4-49. In the overall sample, the highest percentage of respondents, 33.7 percent, responded that they were "Satisfied" with their health overall. In contrast, only 19 percent of the respondents were dissatisfied with their health in any way.

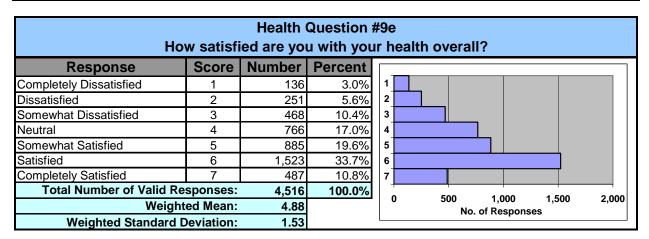


Figure 4-49. Distribution of the Overall Satisfaction Responses in the Health Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Health satisfaction scores are shown in Figure 4-50. The 2007 weighted mean satisfaction score for Health decreased slightly (by 0.14) from the 2002 weighted score, but this decrease had no practical significance, since its effect size was only 0.09 as calculated by Cohen's *d* statistic. Note that the values of the overall mean satisfaction score in this life domain have declined in each Marine Corps QoL study, and that this 2007 QoL Study is the first in which satisfaction with health dropped below "Somewhat Satisfied."

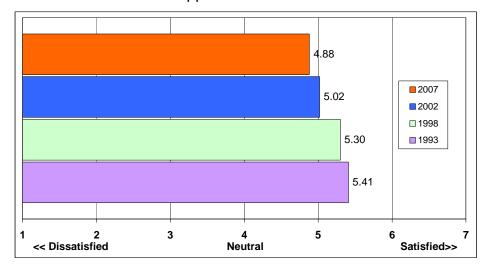


Figure 4-50. Trends in Overall Satisfaction in the Health Life Domain for the Base and Station Respondents

Overall satisfaction in the Health life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Health life domain, decomposed by Pay Grade Group, are shown in Table 4-64.

Table 4-64. Satisfaction with Health by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,594	4.80	1.60
E-4/E-5	1,832	4.85	1.51
E-6/E-7	530	5.04	1.47
E-8/E-9	139	5.11	1.37
WO	53	4.74	1.42
O-1 to O-3	251	5.25	1.28
O-4 to O-10	117	5.09	1.48

Tendencies similar to those seen for the affective measure for this life domain also were seen here. Again, all the subgroup scores were clustered near "Mostly Pleased" and the mean scores for the enlisted Pay Grade Groups increased as pay grade increased. Here, the Warrant Officers had the lowest mean score of all the Pay Grade Groups, but it was only 0.14 below the overall satisfaction mean. The O-1 to O-3 Pay Grade Group again had the highest mean (5.25), but the difference between it and that of the WO Pay Grade Group had no practical significance: Only a small-to-medium effect size was seen (Cohen's *d* statistic of 0.38).

When the trends in overall satisfaction with the Health life domain were examined by Pay Grade Group, as shown in Figure 4-51, it was seen across all the Pay Grade Groups that satisfaction in 2007 was lower than in any previous Marine Corps QoL study. Three Pay Grade Groups, E-2/E-3, E-4/E-5, and WO, each had mean scores below the "Somewhat Satisfied" level, and the latter group had the lowest score of any Pay Grade Group ever seen on this measure.

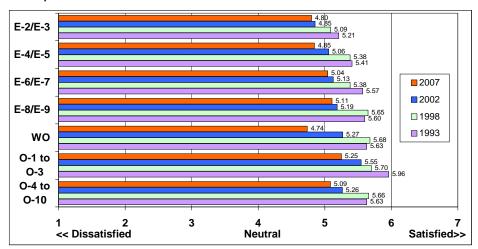


Figure 4-51. Trends in Satisfaction in the Health Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Health life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-65.

Table 4-65. Satisfaction with Health by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	134	5.01	1.38
MCB Camp Butler	361	5.20	1.43
MCB Camp Lejeune	953	4.75	1.57
MCB Camp Pendleton	971	4.77	1.57
MCAS Cherry Point	200	4.92	1.51
MCB Hawaii	163	4.91	1.50
Headquarters Battalion Henderson Hall	57	5.16	1.32
MCAS Iwakuni	127	5.26	1.31
MCAS Miramar	248	5.06	1.36
MCAS New River	185	4.84	1.65
MCRD Parris Island	197	4.87	1.53
MCB Quantico	180	5.13	1.46
MCRD San Diego	132	5.02	1.54
MCAGCC (Twentynine Palms)	274	4.96	1.41
MCAS Yuma	110	4.88	1.47

The mean scores of the two largest Marine Corps installations, Camp Lejeune and Camp Pendleton, were the lowest of the 15 installations considered, although they both tended toward the "Somewhat Satisfied" part of the spectrum of responses. The mean score from MCAS Iwakuni was the highest. There was no practical significance to the differences between the two extremes on this measure.

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Health life domain, decomposed by race/ethnicity, are shown in Table 4-66. No one subgroup deviated substantially from the overall mean satisfaction level. The Black/African-American subgroup was the most satisfied, scoring 0.20 above the overall mean, while the Asian/Pacific Islander subgroup scored 0.14 below that mean. None of the differences seen here had any practical significance.

Table 4-66. Satisfaction with Health by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,980	4.86	1.51
Black/African-American	535	5.08	1.51
Asian/Pacific Islander	171	4.74	1.58
Native American/Aleut/Eskimo	73	4.85	1.48
Spanish/Hispanic	595	4.92	1.56
Other	96	4.92	1.56

Gender. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by gender, are shown in Table 4-67. The female respondents rated their satisfaction with their health somewhat lower than did the male

respondents. However, the differences had no practical significance (Cohen's *d* statistic of 0.22).

Table 4-67. Satisfaction with Health by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,121	4.92	1.51
Female	437	4.57	1.61

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Health life domain, decomposed by marital/parental status, are shown in Table 4-68. Although none of the differences had any practical significance, it can be seen that the divorced/ widowed/separated Marines scored lower than married Marines, independent of the parental statuses within those marital groups. The Never Been Married Marines scored about mid-way between the other subgroups.

Table 4-68. Satisfaction with Health by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	110	4.74	1.62
Divorced/Widowed/Separated without Children	222	4.76	1.57
Married with Children	1,367	4.95	1.46
Married without Children	826	4.92	1.56
Never Been Married	1,981	4.87	1.54

In addition to asking the respondents about their overall satisfaction with their health, Question #9 also asked about satisfaction with a series of six separate facets of health. The weighted mean and standard deviation scores for each of these facets are shown in Figure 4-52. The lowest score as well as the highest standard deviation was seen in how satisfied the respondents were with how well they sleep. The weighted mean score for this facet was below the "Neutral" score of 4. All the other facets of health examined here had differences that showed no practical significance.

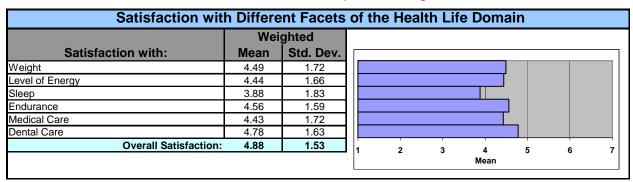


Figure 4-52. Satisfaction with Facets of Health for the Base and Station Respondents

To explore the issue of the dissatisfaction with sleep more fully, Figure 4-53 was created. A bi-modal distribution of responses can be seen: As many respondents said that they were "Satisfied" with how well they sleep as said that they were "Somewhat Dissatisfied." Essentially equal percentages of respondents expressed some level of dissatisfaction with how well they sleep (45.7 percent of the respondents) as expressed some level of satisfaction (40.4 percent), and relatively few respondents (only 13.9 percent) were "Neutral" on this issue. Also note that almost 77 percent as many respondents said they were "Completely Dissatisfied" with how well they sleep as said they were "Completely Satisfied."

Hov	w satisfi		Question and with how			you sle	eep?			
Response	Score	Number	Percent							
Completely Dissatisfied	1	539	11.9%	1						
Dissatisfied	2	714	15.8%	2						
Somewhat Dissatisfied	3	814	18.0%	3						
Neutral	4	631	13.9%	4						
Somewhat Satisfied	5	695	15.3%	5						
Satisfied	6	832	18.4%	6						
Completely Satisfied	7	305	6.7%	7						
Total Number of Valid Re	sponses:	4,530	100.0%			000	400	200	200	4.000
Weight	ed Mean:	3.88		'	,	200	400 No. of Re	600 sponses	800	1,000
Weighted Standard D	eviation:	1.83						- CP 0.13C3		

Figure 4-53. Satisfaction with Quality of Sleep for the Base and Station Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with health for the Base and Station respondents was performed. The results are shown in Figure 4-54. All six of the facet satisfactions considered here had mean scores lower than that of the overall mean. Satisfaction with Endurance had the greatest influence although Energy Level and Medical Care also had relatively large influences, i.e., greater than the overall mean, indicating that they would be aspects of health for which the greatest improvements in domain satisfaction could be possible. The facet with which there was the lowest level of satisfaction, as mentioned above, was with the amount of Sleep. Dental Care had the least influence by magnitude as well as being the only facet to be negatively correlated to the overall mean (as indicated by the asterisk in the diagram). The look of this diagram resembles that from the 2002 QoL Study relatively closely, with recognition of the addition of Medical Care and Dental Care, which had not been included in the 2002 QoL Study, to the regression.

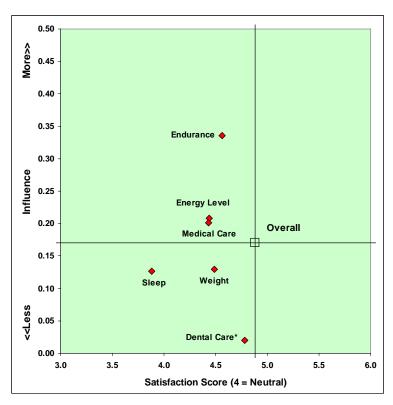


Figure 4-54. Key Driver Diagram for the Health Life Domain for the Base and Station Respondents

4.7.3 Effect of Health on Job Performance

Question #12 asked about the effect of the <u>respondents' state of health</u> on their job performance. In general and not unexpectedly, a Marine's health had a positive effect on their job performance, as can be seen in Figure 4-55. The weighted mean score for this question was 2.50, mid-way between "No Effect" and "Positive Effect." More than half (54.3 percent) of the respondents answered that their state of health had a positive effect on their job performance. However, both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (1.97 and 2.15, respectively) below the overall mean for this question. Since these Marines tended to have the lowest happiness and satisfaction scores in this domain, that result may be cause for some concern.

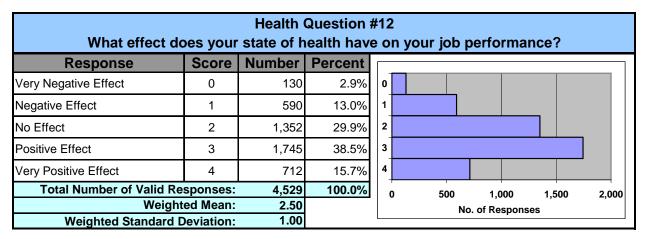


Figure 4-55. Effect of the Respondents' Health on Job Performance for the Base and Station Respondents

Question #17 asked about the effect of the <u>respondents' medical care</u> on their job performance. The results are shown in Figure 4-56. The weighted mean score for this question was 2.19, falling toward the lower end of the "No Effect" to "Positive Effect" range. Many more respondents answered that their medical care had a positive effect on their job performance (30.7 percent) than answered that it had a negative effect (16.2 percent). Although not shown here, the E-2/E-3 and E-4/E-5 Pay Grade Groups both had mean scores (2.15 and 2.11, respectively) below the overall mean for the question, although they were both in the positive range.

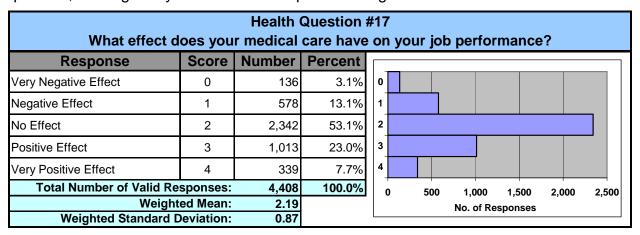


Figure 4-56. Effect of the Respondents' Medical Care on Job Performance for the Base and Station Respondents

Question #24 asked about the effect of the respondents' <u>dependent family members'</u> <u>state of health</u> on their job performance. The data were examined by base/station to see if there were any noticeable trends. The results are shown in Figure 4-57. The mean score for this question was 2.22, falling toward the lower end of the "No Effect" to "Positive Effect" range. Headquarters Battalion Henderson Hall had the highest score (2.73). The Cohen's *d* statistic showed that the difference between this value and the

overall mean on this question (2.22) had a medium effect size (a value of 0.53), and thus the difference had a practical significance.

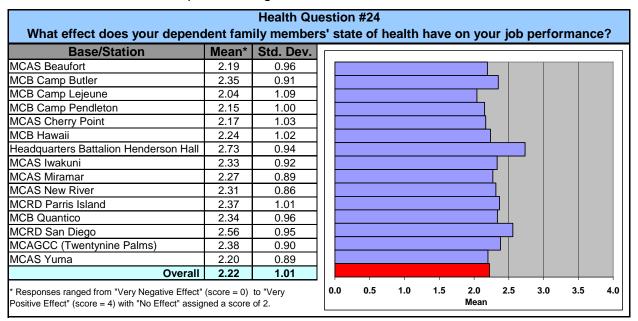


Figure 4-57. Effect of Dependents' State of Health on Job Performance for the Base and Station Respondents at Each Base/Station

Question #26 asked about the effect of the respondents' <u>dependent family members'</u> <u>medical care</u> on their job performance. Again, the data were examined by base/station to see if there were any noticeable trends. The results are shown in Figure 4-58. The mean score for this question, 2.24, was equivalent to that seen for several previous questions. Again, Headquarters Battalion Henderson Hall had the highest score (2.62). Here, however, the Cohen's *d* statistic for the difference between this value and the overall mean on this question (2.24) had a value of 0.43, or an effect size just below that needed to denote practical significance. None of the other installations (e.g., MCB Hawaii, MCRD San Diego) had differences that showed any practical significance.

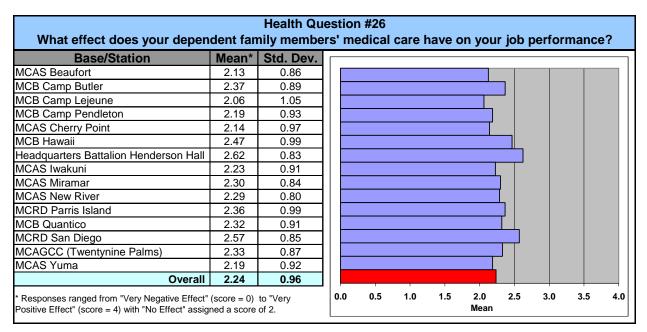


Figure 4-58. Effect of Dependents' Medical Care on Job Performance for the Base and Station Respondents at Each Base/Station

4.7.4 Effect of Health on Plans To Remain on Active Duty

Question #13 asked about the effect of the <u>respondents' state of health</u> on their plans to remain on active duty. The results are shown in Figure 4-59. The weighted mean score for this question was 2.17, falling toward the lower end of the "No Effect" to "Positive Effect" range. The majority of the respondents said that their health had "No Effect" on this measure. All Pay Grade Groups felt health had a positive effect on their plans to remain on active duty.

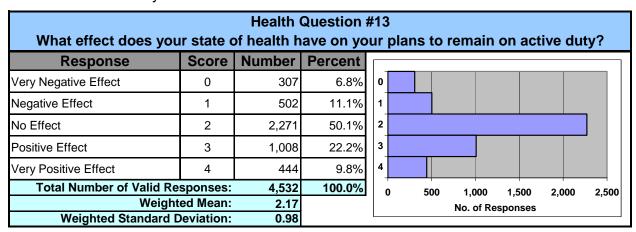


Figure 4-59. Effect of the Respondents' Health on Plans To Remain on Active Duty for the Base and Station Respondents

Question #18 asked about the effect of the <u>respondents' medical care</u> on their plans to remain on active duty. The results, shown in Figure 4-60, look very similar to those seen for Question #13, discussed immediately above.

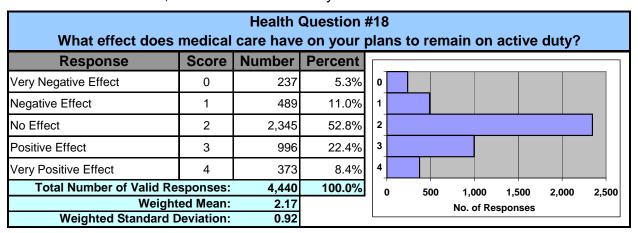


Figure 4-60. Effect of the Respondents' Medical Care on Plans To Remain on Active Duty for the Base and Station Respondents

Question #25 asked about the effect of the respondents' <u>dependent family members'</u> <u>state of health</u> on their plans to remain on active duty. The data were examined by base/station to see if there were any noticeable trends. The results are shown in Figure 4-61. The mean score for this question, 2.24, was equivalent to that seen for several previous questions. No one base/station stood out as having a large impact, either positive or negative, on the respondents' plans to remain on active duty.

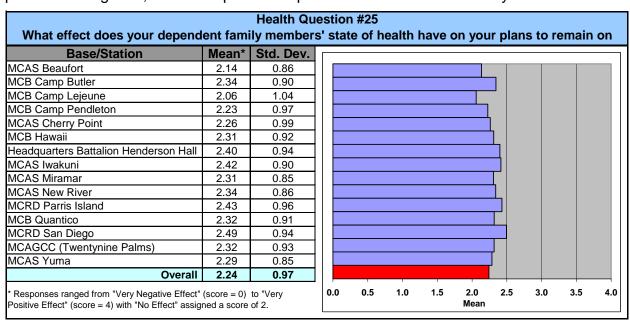


Figure 4-61. Effect of Dependents' State of Health on Plans To Remain on Active Duty for the Base and Station Respondents at Each Base/Station

Question #27 asked about the effect of the respondents' <u>dependent family members'</u> <u>medical care</u> on their job performance. Again, the data were examined by base/station to see if there were any noticeable trends. The results are shown in Figure 4-62. The mean score for this question, 2.23, was equivalent to that seen for similar questions. Headquarters Battalion Henderson Hall had the highest mean score, 2.53, of the individual bases/stations, but its difference from the overall mean was found to have no practical significance (Cohen's *d* statistic of 0.37).

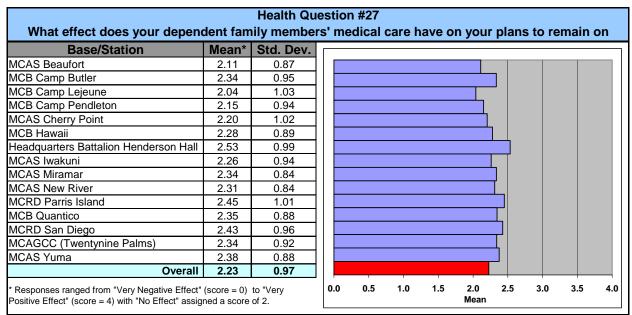


Figure 4-62. Effect of Dependents' Medical Care on Plans To Remain on Active Duty for the Base and Station Respondents at Each Base/Station

4.7.5 Other, Life Domain-Specific Analyses

The responses to a number of other questions specific to the Health life domain were examined. The results are presented below.

Question #6 asked the respondents to indicate if they were a smoker. The data, shown in Table 4-69, show that 31.9 percent of the Base and Station respondents said they smoke.

Table 4-69. Prevalence of Smoking in the Base and Station Respondents

	Count	Percent
Yes: I Smoke	1,483	31.9%
No: I Do Not Smoke	3,171	68.1%
Total	4,654	100.0%

Question #7 asked the respondents to indicate if they used smokeless tobacco. As shown in Table 4-70, 21.3 percent of the respondents said that they did.

Table 4-70. Use of Smokeless Tobacco by the Base and Station Respondents

	Count	Percent
Yes: I Use Smokeless Tobacco	991	21.3%
No: I Do Not Use Smokeless Tobacco	3,668	78.7%
Total	4,659	100.0%

Question #8 asked the respondents to indicate the frequency with which they drank alcohol. As shown in Figure 4-63, the majority of the respondents drank a few times per month or less (55.7 percent). Only 11.5 percent drank at least four times per week.

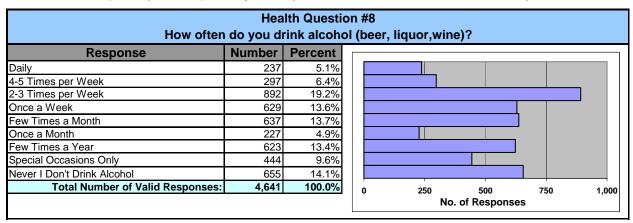


Figure 4-63. Frequency of Alcohol Use by the Base and Station Respondents

Questions #9f, #9g, #22 and #23 asked the respondents to indicate their satisfaction with their medical and dental care (4.34 and 4.78, respectively) and the medical and dental care of their dependents (4.33 and 4.10, respectively). The responses then were plotted against equivalent data from the 2002 QoL Study and included in Figure 4-64. All satisfaction levels expressed fell toward the lower end of the "Neutral" to "Somewhat Satisfied" range, with the exception of the Marine's dental care, which fell into the upper end of the range in both studies. The means for all the questions except satisfaction with dependent dental care (where the decline of 0.03 was trivial) increased since the 2002 QoL data were collected.

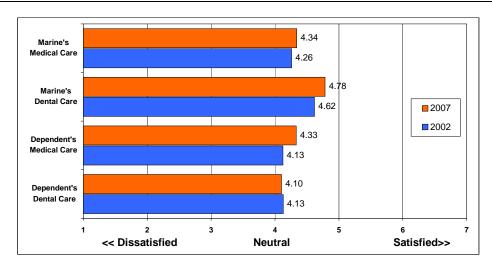


Figure 4-64. Overall Satisfaction with Medical and Dental Care for the Base and Station Respondents

Figure 4-65 shows the average satisfaction scores with medical and dental care and with dependents' medical and dental care for the Base and Station respondents at each instillation. A wide range of responses was seen for the results from the individual bases/stations.

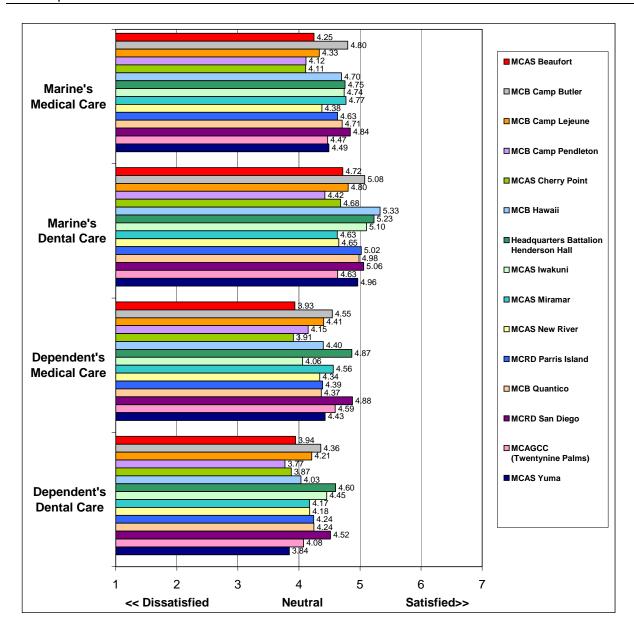


Figure 4-65. Overall Satisfaction with Medical and Dental Care by Base/Station for the Base and Station Respondents

• In the area of "Marine's Medical Care," for which the overall mean score was 4.34, the individual base/station scores ranged from 4.11 to 4.84. Camp Pendleton and MCAS Cherry Point had the two lowest scores (4.12 and 4.11, respectively), and MCAS Beaufort also scored below the overall mean. Seven installations, Camp Butler, MCB Hawaii, Headquarters Battalion Henderson Hall, MCAS Iwakuni, MCAS Miramar, MCB Quantico and MCRD San Diego, had mean scores more than 0.30 above the overall mean, and MCRD Parris Island had a mean score (4.63) that was 0.29 above the overall mean.

- In the area of "Marine's Dental Care," for which the overall mean score was 4.78, the individual base/station scores ranged from 4.42 to 5.33. Camp Pendleton stood out, not only for having the lowest score (4.42), but also because that score was 0.21 lower than the mean of the next lowest scoring base/station. Six bases Camp Butler, MCB Hawaii, Headquarters Battalion Henderson Hall, MCAS Iwakuni, MCRD Parris Island and MCRD San Diego --scored above "Somewhat Satisfied."
- In the area of "Dependent's Medical Care," for which the overall mean score was 4.33, the individual base/station scores ranged from 3.91 to 4.88 (the largest variation seen in any of the four measures considered here). Two installations, MCAS Beaufort and MCAS Cherry Point, scored below "Neutral" and two others, Camp Pendleton and MCAS Iwakuni, scored below the overall mean. Headquarters Battalion Henderson Hall and MCRD San Diego, had the highest scores (4.87 and 4.88, respectively), almost reaching the "Somewhat Satisfied" level.
- In the area of "Dependent's Dental Care," for which the overall mean score was 4.10, satisfaction was the lowest of the four decompositions portrayed in the graphic and the individual base/station scores ranged from 3.77 to 4.60. The scores of four bases/stations fell in the "Somewhat Dissatisfied" to "Neutral" range (MCAS Beaufort, Camp Pendleton, MCAS Cherry Point, and MCAS Yuma). Three bases/stations stood out for being rated as having the best dependent dental care: Headquarters Battalion Henderson Hall, MCAS Iwakuni and MCRD San Diego.

Thus, several trends were apparent. A number of bases/stations, most notably Headquarters Battalion Henderson Hall and MCRD San Diego, but also including Camp Butler, consistently received high marks across the four aspects of health care considered. MCAS Iwakuni received high marks in all but one area ("Dependent's Medical Care"), in which it received one of the lowest ratings. MCB Hawaii generally received high ratings across all four areas considered here, and MCRD Parris Island was rated highly for the medical and dental care provided to the Marines themselves, but was considered average for the care delivered to dependents.

Three bases/stations – MCAS Beaufort, Camp Pendleton and MCAS Cherry Point – were notable for the consistently low ratings they received.

Question #21 asked the respondents to indicate whether any of their dependent family members had special medical needs. The results are shown in Table 4-71. A large majority of the respondents (88.7 percent) indicated that they either had no dependent family members or that none of their dependents had special medical needs. Six percent of the respondents indicated that their spouses had special medical needs, and 4.1 percent said they had dependent children living with them who had such needs.

Table 4-71. Base and Station Respondents with Dependent Family Members with Special Medical Needs

Health Question #21 Which of your dependent family members, if any, has special medical needs (e.g., disabilities and or medical conditions requiring special care)?						
Response	Number	Percent*				
I Have No Dependent Family Members	2,149	44.7%				
None of My Dependent Family Members Have Special Needs	2,118	44.0%				
My Spouse	290	6.0%				
Dependent Child(ren) Living with Me	199	4.1%				
Dependent Child(ren) Not Living with Me	61	1.3%				
Legal ward(s) Living with Me	6	0.1%				
Dependent Parent(s) or Other Relative(s) 35 0.7%						
* Total does not sum up to 100% as respondents may have multiple with special medical needs.	e dependent fa	mily members				

4.7.6 Conclusions for the Health Life Domain for the Base and Station Respondents

Happiness and satisfaction with health decreased for the fourth straight Marine Corps QoL study, with both measures receiving overall scores of 4.88 out of 7, the first time both had a score with a value below 5 ("Somewhat Satisfied" and "Mostly Pleased," respectively). The decrease since the 2002 QoL Study in both happiness and satisfaction was not of practical significance although the continued decrease over the four studies is of note. As Pay Grade Group increased so did the score for Health with the noticeable exception of Warrant Officers, who rated their satisfaction and happiness at or near the lowest of all the Pay Grade Groups. Gender differences also were noticeable (although they had no practical significance) as the female respondents scored below the male respondents in both satisfaction and happiness. Race/ethnicity and marital/parental status had little to no effect on the opinions of the respondents regarding their health.

When looking at satisfaction with medical and dental care for the respondents and their dependents, Marines were, as a whole, the most satisfied with their own dental care and least satisfied with their dependent's dental care. The breakdown of the four types of health care by base/station showed noticeable differences across installations; leading to ratings of dependent medical and dental care below neutral at several installations.

Satisfaction with Endurance had the greatest influence on overall domain satisfaction, although Energy Level and Medical Care also had relatively large influences, i.e., greater than the overall mean, indicating that they would be aspects of health for which the greatest improvements in domain satisfaction could be possible. The facet with which there was the lowest level of satisfaction was amount of Sleep, but that facet also had a very low level of influence. The general satisfaction and happiness with the state of their health and health care for Marines and their dependents had somewhat positive effects on both job performance and plans to remain on active duty.

THE FRIENDS AND FRIENDSHIPS LIFE DOMAIN

4.8.1 Happiness – Affective Evaluations of the Friends and Friendships Life Domain

The weighted mean affective or happiness score (Question #1) for the Friends and Friendships life domain for the Base and Station respondents in 2007 was 4.90, i.e., close to, but just under, "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-66. More than half of the respondents (57.3 percent) chose "Mostly Pleased" and "Pleased" as their responses. Note that only 14.2 percent of the respondents indicated any unhappiness in this life domain.

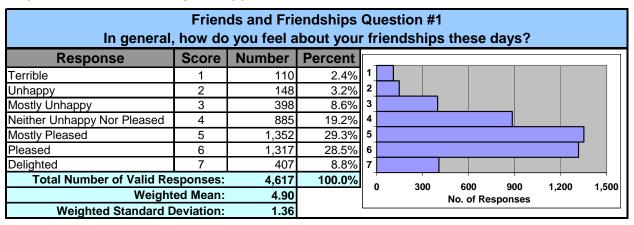


Figure 4-66. Distribution of the Overall Happiness Responses in the Friends and Friendships Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Friends and Friendships affective scores are shown in Figure 4-67. ⁵⁴ Between 2002 and 2007, the weighted mean affective score declined by a small amount (0.08), but this decline had no practical significance. Also note that the score on this measure, although the lowest for any of the four Marine Corps QoL studies, has remained relatively stable.

⁵⁴ The 1998 QoL Study Report gives the affective value for this life domain as 5.06 (p. 28). The 2002 QoL Study Report lists the same value as 5.09 (p. 3-28). The reason for the difference is unknown, but the latter value is shown here.

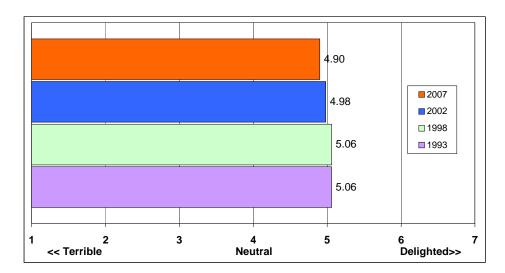


Figure 4-67. Trends in Overall Happiness in the Friends and Friendships Life Domain for the Base and Station Respondents

Overall happiness in the Friends and Friendships life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by Pay Grade Group, are shown in Table 4-72.

Table 4-72. Happiness with Friends and Friendships by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,623	4.80	1.47
E-4/E-5	1,877	4.92	1.33
E-6/E-7	544	4.96	1.25
E-8/E-9	142	5.28	1.13
WO	53	4.77	1.31
O-1 to O-3	256	5.11	1.13
O-4 to O-10	122	5.09	1.14

In general, the responses in each Pay Grade Group showed little difference, ranging only from 4.77 (0.13 below the overall mean for this measure) to 5.28 (0.38 above the overall mean), with the small number of Warrant Officers showing the lowest level of happiness with their friends and friendships. The difference between the two extreme scores was found to have no practical significance: The Cohen's *d* statistic for these two values was 0.42, or a less than medium effect size.

Figure 4-68 shows the mean affective scores for each Pay Grade Group for the Friends and Friendships life domain. The affective score in each Pay Grade Group declined since 2002. The minimum difference (0.10) occurred in the E-2/E-3 and E-3/E-4 Pay

Grade Groups, while the maximum difference (0.55) was found in the WO group. However, none of these changes had any practical significance.

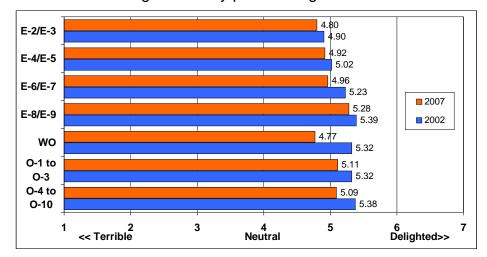


Figure 4-68. Trends in Happiness in the Friends and Friendships Life Domain by Pay Grade Group for the Base and Station Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by race/ethnicity, are show in Table 4-73. The distribution of scores was similar across each racial group, and the means were clustered just below the "Mostly Pleased" rating. The mean responses were tightly grouped, separated by a maximum difference of only 0.28. The Spanish/Hispanic subgroup had the highest mean, 4.98, while the Native American/Aleut/Eskimo group had the lowest, 4.70. This difference was found to have no practical significance (Cohen's *d* statistic of 0.19, or a small effect).

Table 4-73. Happiness with Friends and Friendships by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	3,044	4.92	1.31
Black/African-American	550	4.87	1.38
Asian/Pacific Islander	175	4.76	1.44
Native American/Aleut/Eskimo	77	4.70	1.45
Hispanic/Spanish	609	4.98	1.47
Other	99	4.71	1.55

Gender. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by gender, are shown in Table 4-74. Perceived happiness with friends and friendships did not seem to be correlated with gender. The mean response of the males was 4.91, while the mean response of the females was only 0.04 lower, 4.87.

Table 4-74. Happiness with Friends and Friendships by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,212	4.91	1.35
Female	445	4.87	1.42

Marital/Parental Status. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by marital/parental status, are show in Table 4-75. The Divorced/Widowed/Separated without Children subgroup had the largest mean happiness score, 5.03, while the Divorced/Widowed/Separated with Children subgroup had the smallest, 4.68. While the mean score for the latter subgroup appeared to be noticeably lower than the scores for the four other subgroups, these differences were found to have no practical significance: The value of the Cohen's *d* statistic for the two Divorced/Widowed/Separated subgroups (i.e., the subgroups with the most widely separated scores) was only 0.26, indicating a small effect size.

Table 4-75. Happiness with the Friends and Friendships by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	114	4.68	1.31
Divorced/Widowed/Separated without Children	229	5.03	1.39
Married with Children	1,399	4.95	1.23
Married without Children	845	4.96	1.37
Never Been Married	2,020	4.86	1.43

4.8.2 Satisfaction – Cognitive Evaluations of the Friends and Friendships Life Domain

The weighted mean cognitive or satisfaction score (Question #5e) in the Friends and Friendships life domain for the Base and Station respondents in 2007 was 5.18, or slightly above "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Friends and Friendships life domain is shown in Figure 4-69. The "Neutral" and "Satisfied" responses received the highest response frequencies, 20.3 and 38.2 percent, respectively.

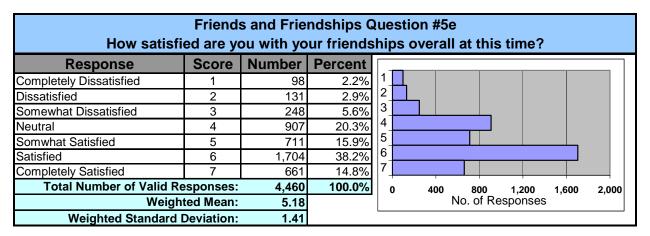


Figure 4-69. Distribution of the Overall Satisfaction Responses in the Friends and Friendships Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Friends and Friendships satisfaction scores are shown in Figure 4-70. It can be seen that the overall mean satisfaction scores in this life domain have been relatively stable since the first Marine Corps QoL Study in 1993 and that the weighted overall mean scores for 2007 and 2002 were nearly identical. In fact, there has not been an effect size of any practical significance in overall mean satisfaction calculated in the past three Marine Corps QoL studies (assuming standard deviation values on the order of those seen in this 2007 QoL Study).

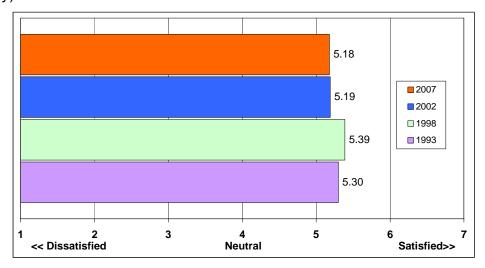


Figure 4-70. Trends in Overall Satisfaction in the Friends and Friendships Life Domain for the Base and Station Respondents

Overall satisfaction in the Friends and Friendships life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by Pay Grade Group, are shown in Table 4-76.

Table 4-76. Satisfaction with Friends and Friendships by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,539	5.16	1.49
E-4/E-5	1,829	5.22	1.38
E-6/E-7	531	5.11	1.40
E-8/E-9	139	5.44	1.29
WO	53	5.15	1.45
O-1 to O-3	253	5.23	1.21
O-4 to O-10	116	5.13	1.25

The mean satisfaction scores were clustered toward the lower end of the "Somewhat Satisfied" to "Satisfied" range, and none of the differences had any practical significance (maximum value of the Cohen's *d* statistic was 0.24, a small effect size). The E-8/E-9 Pay Grade Group had the largest mean, 5.44 (0.26 above the overall mean), while the E-6/E-7 Pay Grade Group had the smallest mean, 5.11, or 0.07 below the overall mean. Furthermore, there does not seem to be a correlation between the mean satisfaction scores and the Pay Grade Groups.

When the trends in overall satisfaction with the Friends and Friendships life domain were examined by Pay Grade Group, as shown in Figure 4-71, no clear trends were seen. Since 2002, the mean satisfaction scores for the E-6/E-7 and the three officer Pay Grade Groups have declined. However, the mean satisfaction scores for the E-2/E-3, E-4/E-5, and E-8/E-9 Pay Grade Groups have increased. However, the changes ranged from 0.01 for the E-4/E-5 Pay Grade Group to 0.19 for the E-6/E-7 Pay Grade Group, and none had any practical significance.

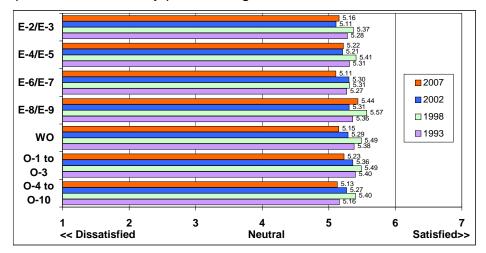


Figure 4-71. Trends in Satisfaction in the Friends and Friendships Life Domain by Pay Grade Group for the Base and Station Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by race/ethnicity, are shown in Table 4-77.

Table 4-77. Satisfaction with Friends and Friendships by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,946	5.14	1.39
Black/African-American	526	5.25	1.40
Asian/Pacific Islander	171	5.22	1.44
Native American/Aleut/Eskimo	77	5.12	1.52
Spanish/Hispanic	587	5.32	1.48
Other	92	5.10	1.60

The variation in the means was relatively compressed, as they ranged only between 5.10 and 5.32. The Spanish/Hispanic subgroup had the highest mean, while the small number of "Other" respondents had the lowest. There were no practical differences between any of the means.

Gender. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by gender, are shown in Table 4-78. Females had a slightly higher mean score, but there was no practical significance to the 0.09 difference.

Table 4-78. Satisfaction with Friends and Friendships by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,063	5.18	1.40
Female	438	5.27	1.47

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by marital/parental status, are shown in Table 4-79. The means were closely clustered, separated by a maximum of only 0.25, with the differences having no practical significance. As was the case for the affective measure in this life domain, the Divorced/Widowed/ Separated respondents with and without Children had the lowest and highest mean satisfaction scores, respectively.

Table 4-79. Satisfaction with Friends and Friendship by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	104	5.03	1.43
Divorced/Widowed/Separated without Children	224	5.28	1.53
Married with Children	1,367	5.15	1.35
Married without Children	823	5.20	1.42
Never Been Married	1,933	5.21	1.44

In addition to asking the respondents about their overall satisfaction with their friends and friendships, Question #5 also asked about satisfaction with a series of four separate facets of friends and friendships. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 4-72.

Satisfaction with Different Facets of the Friends and Friendships Life Domain									
	Wei	ghted							
Satisfaction with:	Mean	Std. Dev.							
Amount of Time To Socialize with Friends	4.57	1.62							
Number of Marine Corps Friends	5.05	1.46							
Number of Civilian Friends	4.71	1.62							
Support and Encouragement Received	5.18	1.41							
Overall Satisfaction:	5.18	1.41	1	2	3	4	5	6	7
	•	·				Mean			

Figure 4-72. Satisfaction with Facets of Friends and Friendships for the Base and Station Respondents

The minimum mean score of 4.57, corresponding to a response between "Neutral" and "Somewhat Satisfied," was given to the amount of time available to socialize with friends. The largest mean score of 5.18, corresponding to a response between "Somewhat Satisfied" and "Satisfied," was given to the support and encouragement received facet. The Cohen's *d* statistic for these means was 0.40, an effect size that not denoting practical significance. Note also that, although the overall satisfaction in this life domain had a mean score of 5.18, the scores for all the facets except the "Support and encouragement" facet were below that value. Thus, the Base and Station respondents seem to be more satisfied with the overall status of their friends and friendships than with all but one of the four individual facets explored in the satisfaction question.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with friends and friendships for the Base and Station respondents was performed. The results are shown in Figure 4-73. The magnitudes of the influences of the facet satisfactions ranged from 0.137 for Number of Civilian Friends to 0.497 for Support and Encouragement. This was identical to the 2002 results. However, the ordering of the other two facet satisfactions was reversed, so that in 2007 the influence of the Number of Marine Corps Friends was below that of Socialization Time. While Support and Encouragement was the only facet to have an influence greater than that of the overall mean, it also had a satisfaction score equivalent to that overall mean (and in the "Somewhat Satisfied" range), indicating that it might be difficult to achieve large increases in satisfaction in this life domain. This was bolstered by the fact that the least satisfaction was shown with Socialization Time, although the influence of that factor was relatively low and the satisfaction with it was relatively high (midway between "Neutral" and "Somewhat Satisfied").

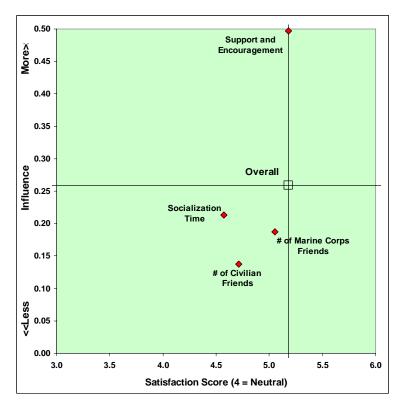


Figure 4-73. Key Driver Diagram for the Friends and Friendships Life Domain for the Base and Station Respondents

4.8.3 Effect of Friends and Friendship on Job Performance

Question #6 asked about the effect of Friends and Friendships on the respondents' job performance. A histogram of the responses to that question is shown in Figure 4-74.

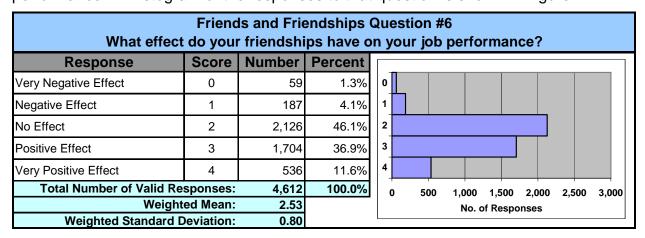


Figure 4-74. Effect of Friends and Friendships on Job Performance for the Base and Station Respondents

The weighted mean score for this question was 2.53, falling between "No Effect" and "Positive Effect." Most of the respondents (46.1 percent) indicated that their friends and friendships had "No Effect" on their job performance, and only 5.4 percent indicated any

degree of negative effect. In contrast, 48.5 percent of the respondents said that their friends and friendships had some degree of positive effect on their job performance. It was of note that no single type of friend, as defined in Question #2 (which asked the respondents to pick from among six types of "close friends" (including "fellow Marines at this location," "Marines who are stationed at other locations," "civilians in this area," "civilians 'back home'," "members of other military services," and "other")), appeared at a greater than average rate for responses of less than "No Effect" on Question #6. This indicates, for instance, that "civilians 'back home'" were not having a large negative effect on the respondents' job performance.

4.8.4 Effect of Friends and Friendships on Plans To Remain on Active Duty

Question #7 asked about the effect of friends and friendships on the respondents' plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-75.

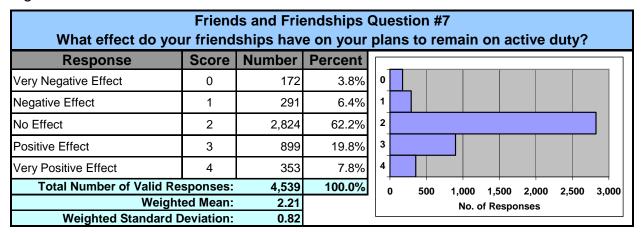


Figure 4-75. Effect of Friends and Friendships on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 2.21, slightly above "No Effect." The majority of the respondents, 62.2 percent, indicated that their friends and friendships had "No Effect" on their plans to remain on active duty. However, 10.1 percent of the Marines had friendships that had "Very Negative" or "Negative" effects on their plans to remain on active duty. When grouping responses by the results of Question #2, the overwhelming trend was that each category of friends had "No Effect" on the respondents' plans to remain on active duty. That is, friends who are civilians did not have an overwhelming negative or positive effect on future plans to remain in the Marine Corps.

4.8.5 Conclusions for the Friends and Friendships Life Domain for the Base and Station Respondents

Neither the overall mean happiness (affective) nor satisfaction (cognitive) scores changed in terms of practical significance since 2002, and the respondents in all demographic subgroups seemed to be pleased/satisfied with their relationships with their friends. As a result, there may be limited room for major improvement in

satisfaction in this life domain. The Support and Encouragement facet had by far the highest influence but also had a mean satisfaction score essentially equal to that of the overall domain mean satisfaction, limiting its ability to provide major improvements in domain satisfaction, but providing the best candidate area for such improvements. Coincidentally, the majority of the respondents felt that their friends and friendships have some degree of positive effect on their job performance and their plans to remain on active duty. Furthermore, when the responses to these two questions were broken down by the types of friends examined in Question #2, no one group had either a large negative or positive effect on job performance or plans to remain on active duty.

4.9 THE MARRIAGE/INTIMATE RELATIONSHIP LIFE DOMAIN

In contrast to many of the other life domains in the 2007 Active Duty Marine survey, Question #1 in the Marriage/Intimate Relationship life domain was not the affective (happiness) question. Instead, it asked whether the respondent, at the time at which the survey was completed, was 1) married, 2) involved in a serious intimate relationship but not married, or 3) not seriously involved with anyone. Respondents who were neither married nor involved in a serious intimate relationship were instructed to skip this life domain completely and to go to the Your Relationship with Your Children life domain. Those respondents who were married or involved in a serious intimate relationship were instructed to continue in the Marriage/Intimate Relationship life domain and to answer the affective question and the 12 others that followed. The results for Question #1 for the Base and Station respondents are shown in Figure 4-76.

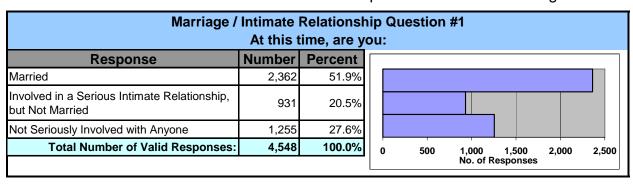


Figure 4-76. Relationship Status for the Base and Station Respondents

It is important to remember when reviewing the results from this life domain that appear below that <u>only</u> the responses from the 3,293 Base and Station respondents who said they were married (2,362) or involved in an intimate relationship (931) were included in the analyses that follow. No responses from any respondent who picked the "Not Seriously Involved with Anyone" option, but who then, in contradiction to the instructions to skip to the next life domain, answered any of the remaining 13 questions in the Marriage/Intimate Relationship life domain were included in the analyses that follow. In addition, only valid responses to Question #1 were considered: If the response to Question #1 could not be read by the optical scanner or was blank, any responses to the remaining 13 questions in this life domain were ignored.

It also is important to note one implication of the reversal of question order. In past Marine Corps QoL studies, the affective question in this life domain was answered by all respondents, before the respondents not involved with anyone were winnowed out of the sample used to analyze the succeeding questions. For this 2007 QoL Study, data from only those respondents who were married or who were involved in a serious intimate relationship were analyzed for the affective question. This change in the pool of respondents should be kept in mind when trends in the results of the affective question are reviewed.

The results from Question #1 were broken down by base/station in Table 4-80. Headquarters Battalion Henderson Hall stood out for having the largest percentage of married respondents (70.2 percent) and the lowest percentage of involved but not married (8.8 percent). MCAS lwakuni was also notable as it had the second lowest percentage of married respondents (43.2 percent; Camp Butler had only 42.1 percent) and the highest percentage of not involved in a serious intimate relationship or married respondents (42.4 percent). Camp Lejeune had the highest percentage of involved in a serious relationship but not married respondents (24.0 percent) and MCRD Parris Island had the lowest percentage of respondents who were not seriously involved with anyone.

Table 4-80. Relationship Status by Installation for the Base and Station Respondents

		Percentage			
Base/Station	Count	Married	Involved	Not Involved	
MCAS Beaufort	133	55.6%	16.5%	27.8%	
MCB Camp Butler	349	42.1%	22.1%	35.8%	
MCB Camp Lejeune	959	49.6%	24.0%	26.4%	
MCB Camp Pendleton	952	50.9%	19.6%	29.4%	
MCAS Cherry Point	208	59.6%	16.8%	23.6%	
MCB Hawaii	152	53.9%	21.1%	25.0%	
Headquarters Battalion Henderson Hall	57	70.2%	8.8%	21.1%	
MCAS Iwakuni	118	43.2%	14.4%	42.4%	
MCAS Miramar	257	52.5%	22.2%	25.3%	
MCAS New River	185	60.5%	16.8%	22.7%	
MCRD Parris Island	196	59.2%	15.8%	16.8%	
MCB Quantico	180	64.4%	17.2%	18.3%	
MCRD San Diego	129	52.7%	22.5%	24.8%	
MCAGCC (Twentynine Palms)	272	46.0%	19.9%	34.2%	
MCAS Yuma	109	58.7%	21.1%	20.2%	

4.9.1 Happiness – Affective Evaluations of the Marriage/Intimate Relationship Life Domain

The weighted mean affective or happiness score (Question #2) for the Marriage/Intimate Relationship life domain for the Base and Station respondents for 2007 was 5.25, between "Mostly Pleased" and "Pleased" on the seven-point D-T scale.

⁵⁵ Because the data from the 2002 QoL Study had been provided to the Study Team, the affective score from that study in this life domain was recalculated using the same methodology as that applied to the 2007 data.

A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-77. It can be seen that 74.0 percent of the Base and Station respondents answered that they were in some way happy with their marriage or intimate relationship, while only 16.3 percent were in some way unhappy.

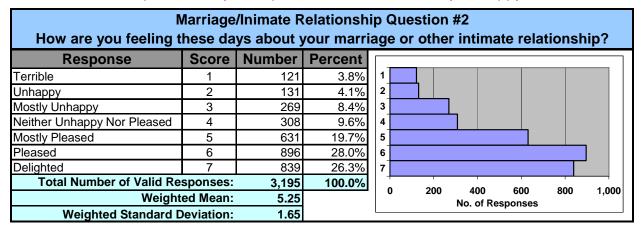


Figure 4-77. Distribution of the Overall Happiness Responses in the Marriage/Intimate Relationship Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Marriage/Intimate Relationship affective scores are shown in Figure 4-78. The 2007 weighted mean marriage/intimate relationship D-T score increased slightly (by 0.16) from the 2002 weighted score, the second study to have respondents average above "Mostly Pleased." However, the increase from 2002 did not have practical significance, having a Cohen's *d* statistic of 0.09. Despite this lack of practical significance, it is interesting to note that happiness with this life domain has shown consistent increases in each of the four Marine Corps QoL studies.

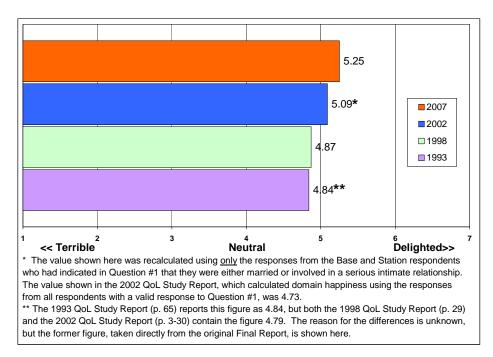


Figure 4-78. Trends in Overall Happiness in the Marriage/Intimate Relationship Life Domain for the Base and Station Respondents

Overall happiness in the Marriage/Intimate Relationship life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. The data from each decomposition were looked at separately for those respondents who were married and for those involved in a serious relationship but not married; however, the results for the married and the intimately involved subgroups were combined unless the separate results showed some differences of analytical interest. Each subgroup is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by Pay Grade Group, are shown in Table 4-81.

Table 4-81. Happiness with Marriage/Intimate Relationship by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	875	5.20	1.76
E-4/E-5	1,347	5.16	1.65
E-6/E-7	477	5.36	1.52
E-8/E-9	130	5.62	1.34
WO	47	5.34	1.32
O-1 to O-3	206	5.60	1.46
O-4 to O-10	113	5.55	1.38

The E-4/E-5 Pay Grade Group had the lowest mean affective score of all the Pay Grade Groups (5.16, or 0.09 below the overall affective mean) but this was still above "Mostly Pleased." The E-8/E-9 Pay Grade Group had the highest mean affective score (5.62, or 0.37 above the overall affective mean). None of the differences seen here had any practical significance. Perhaps the most interesting thing to notice is that, when only those Marines who were married or involved in a serious intimate relationship were considered, the E-2/E-3 Pay Grade Group no longer included the largest number of respondents and no longer had the lowest score on a measure.

When the trends in overall happiness with the Marriage/Intimate Relationship life domain were examined by Pay Grade Group, as shown in Figure 4-79, no clear trend seemed to emerge. Increases were seen in the two lowest enlisted Pay Grade Groups (E-2/E-3 and E-4/E-5) and also in the highest enlisted Pay Grade Group (E-8/E-9, which, in 2007 had the highest affective score). The other four Pay Grade Group scores decreased between 2002 and 2007. Although the Warrant Officers had the largest change in value between 2002 and 2007 (an increase of 0.32), this increase had no practical significance, possessing a Cohen's *d* statistic of 0.20.

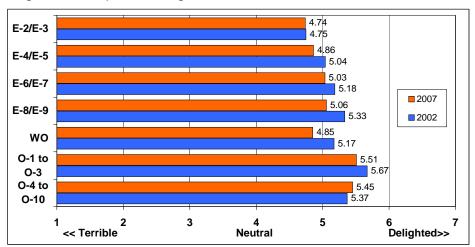


Figure 4-79. Trends in Happiness in the Marriage/Intimate Relationship Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-82.

Table 4-82. Happiness with Marriage/Intimate Relationship by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	96	5.28	1.51
MCB Camp Butler	220	5.35	1.69
MCB Camp Lejeune	694	5.16	1.73
MCB Camp Pendleton	664	5.25	1.61
MCAS Cherry Point	155	5.48	1.41
MCB Hawaii	114	5.14	1.66
Headquarters Battalion Henderson Hall	45	5.56	1.31
MCAS Iwakuni	68	5.66	1.38
MCAS Miramar	189	5.21	1.53
MCAS New River	140	5.29	1.56
MCRD Parris Island	153	5.33	1.81
MCB Quantico	146	5.40	1.50
MCRD San Diego	95	5.53	1.60
MCAGCC (Twentynine Palms)	175	5.09	1.73
MCAS Yuma	87	5.31	1.50

The mean scores for all the bases/stations were grouped above "Mostly Pleased." MCAS Iwakuni had the highest mean score (5.66) and MCAGCC (Twentynine Palms) had the lowest (5.09). However, none of the differences shown here had any practical significance.

Race/Ethnicity. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by race/ethnicity, are shown in Table 4-83. The "Other" respondents were happiest (5.45) with their marriage or intimate relationship, while the members of the Native American/Aleut/Eskimo subgroup were the least happy (4.93). None of the differences seen here had any practical significance, but it is interesting to note the relatively low score on this measure for the Black/African-American subgroup.

Table 4-83. Happiness with Marriage/Intimate Relationship by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,083	5.35	1.62
Black/African-American	423	4.99	1.67
Asian/Pacific Islander	115	5.38	1.54
Native American/Aleut/Eskimo	55	4.93	1.60
Spanish/Hispanic	408	5.16	1.68
Other	62	5.45	1.50

Gender. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by gender, are shown in Table 4-84. Note that the data are shown separately for the married respondents and for those that were involved in an intimate relationship. The mean scores for male and

female respondents who are involved or married differed only slightly from the overall mean (a maximum differential of 0.24). It also is noteworthy that, although none of the differences seen here had practical significance, married men were slightly happier than married women (but only by 0.06), but the women involved in intimate relationships were happier than the men who were involved in such relationships (by 0.27).

Table 4-84. Happiness with Marriage and Intimate Relationships by Gender for the Base and Station Respondents

Married			Involve	d in Inti	mate Re	lationship	
Gender Count Mean Std. Dev.			Gender	Count	Mean	Std. Dev.	
Male	2,111	5.28	1.63	Male	764	5.22	1.64
Female	205	5.22	1.82	Female	142	5.49	1.40

Marital/Parental Status. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by marital/parental status, are shown in Table 4-85. The respondents in the divorced/widowed/ separated subgroup, regardless of their parental status, scored significantly lower than any other group: The minimum value of the Cohen's *d* statistic for these differences was 0.87.

Table 4-85. Happiness with Marriage/Intimate Relationship by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	79	3.58	2.08
Divorced/Widowed/Separated without Children	145	3.56	2.24
Married with Children	1,380	5.42	1.41
Married without Children	825	5.51	1.57
Never Been Married	755	5.25	1.61

4.9.2 Satisfaction – Cognitive Evaluations of the Marriage/Intimate Relationship Life Domain

The mean cognitive or satisfaction score (Question #13g) in the Marriage/Intimate Relationship life domain for the Base and Station respondents for 2007 was 5.53, i.e., halfway between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale and slightly above the value seen for the affective measure. A histogram of the responses to the satisfaction question as well as the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Marriage/Intimate Relationship life domain are shown in Figure 4-80. In the overall sample 76.9 percent of the respondents said they were in some way satisfied with their marriage or intimate relationship. Only 13.5 percent were in some way dissatisfied.

⁵⁶ Note that the only respondents considered here, as elsewhere in this life domain, were those who had responded that they were either married or involved in a serious intimate relationship. Thus, the 979 non-married respondents included here had admitted to being involved in a serious intimate relationship in Question #1.

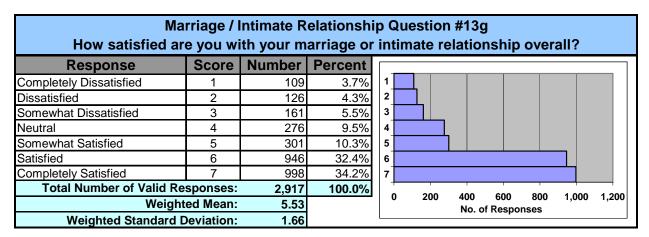


Figure 4-80. Distribution of the Overall Satisfaction Responses in the Marriage/Intimate Relationship Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Marriage/Intimate Relationship satisfaction scores are shown in Figure 4-81. The weighted 2007 mean satisfaction score in this life domain decreased slightly (by 0.10) from the 2002 weighted score, but this decrease had no practical significance, since its effect size was only 0.02 (very small) as calculated by Cohen's *d* statistic. Note that the values of the overall mean satisfaction score in this life domain have declined or remain the same in each subsequent Marine Corps QoL study, although none of the differences seen had any practical significance.

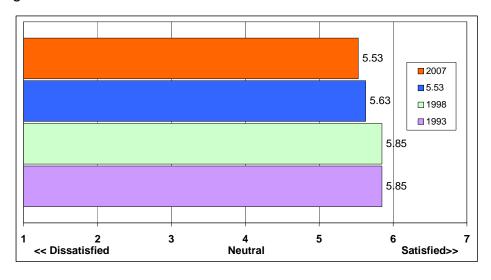


Figure 4-81. Trends in Overall Satisfaction in the Marriage/Intimate Relationship Life Domain for the Base and Station Respondents

Overall satisfaction in the Marriage/Intimate Relationship life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. As was done before, the data in each decomposition were looked at separately for those respondents who

were married as well as for those involved in a serious relationship but not married; but the results for the two subgroups were combined unless otherwise noted. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by Pay Grade Group, are shown in Table 4-86.

Table 4-86. Satisfaction with Marriage/Intimate Relationship by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	814	5.67	1.68
E-4/E-5	1,241	5.42	1.70
E-6/E-7	423	5.42	1.60
E-8/E-9	109	5.49	1.61
WO	42	5.57	1.45
O-1 to O-3	193	5.83	1.28
O-4 to O-10	95	5.48	1.58

All the subgroup scores were clustered between "Mostly Pleased" and "Pleased" and there was no trend across the Pay Grade Groups. The O-1 to O-3 Pay Grade Group had the highest mean (5.83), and the E-4/E-5 and E-6/E-7 had the lowest score (5.42). None of the differences shown here had any practical significance.

The trends in the overall satisfaction with the Marriage/Intimate Relationship life domain were examined by Pay Grade Group and are shown in Figure 4-82. Only the E-2/E-3 Pay Grade Group, the score for which increased by 0.08 since 2002, did not have the lowest satisfaction score ever recorded on this measure. None of the differences seen here between the 2002 and 2007 scores had any practical difference.

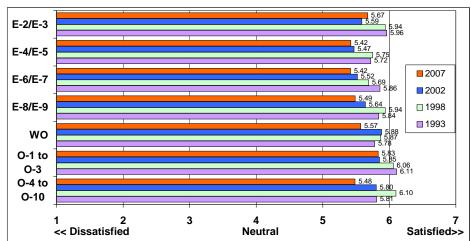


Figure 4-82. Trends in Satisfaction in the Marriage/Intimate Relationship Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-87.

Table 4-87. Satisfaction with Marriage/Intimate Relationship by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	86	5.40	1.68
MCB Camp Butler	193	5.52	1.78
MCB Camp Lejeune	659	5.47	1.75
MCB Camp Pendleton	621	5.56	1.58
MCAS Cherry Point	152	5.80	1.36
MCB Hawaii	101	5.54	1.60
Headquarters Battalion Henderson Hall	42	5.19	1.67
MCAS Iwakuni	40	5.83	1.47
MCAS Miramar	171	5.54	1.49
MCAS New River	133	5.65	1.49
MCRD Parris Island	118	5.48	1.75
MCB Quantico	139	5.60	1.58
MCRD San Diego	82	5.48	1.77
MCAGCC (Twentynine Palms)	169	5.38	1.74
MCAS Yuma	85	5.48	1.59

The scores all ranged between "Somewhat Satisfied" and "Satisfied." The installation with the highest satisfaction score (as was the case for the affective score) was MCAS lwakuni, with a score of 5.83. The base with the lowest score was Headquarters Battalion Henderson Hall, with a score of 5.19. None of the differences seen here had any practical significance.

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by race/ethnicity, are shown in Table 4-88. No one subgroup deviated substantially from the overall mean satisfaction level. The Black/African-American subgroup was the least satisfied (5.26, or 0.27 below the overall mean), while the White subgroup was the most satisfied (5.60, or 0.07 above the overall mean). None of the differences seen here had any practical significance, but it again is interesting to note the low score on this measure for the Black/African-American subgroup.

Table 4-88. Satisfaction with Marriage/Intimate Relationship by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	1,902	5.60	1.62
Black/African-American	382	5.26	1.76
Asian/Pacific Islander	106	5.42	1.84
Native American/Aleut/Eskimo	48	5.38	1.81
Spanish/Hispanic	378	5.53	1.56
Other	56	5.59	1.56

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Gender. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by gender, are shown in Table 4-89. Note that the data are shown separately for the married respondents and for those that were involved in an intimate relationship. While men were more satisfied than women when married, the reverse occurred for those who were involved in a serious intimate relationship but not married. It is important to note that, although none of the differences seen here had any practical significance, those respondents who were involved but not married were more satisfied with their relationship than those that were married.

Table 4-89. Satisfaction with Marriage and Intimate Relationships by Gender for the Base and Station Respondents

Married			Involve	d in Inti	mate Re	lationship	
Gender Count Mean Std. Dev.				Gender	Count	Mean	Std. Dev.
Male	1,912	5.42	1.67	Male	710	5.79	1.51
Female	184	5.33	1.94	Female	138	5.91	1.43

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by marital/parental status, are shown in Table 4-90.⁵⁷ It can be seen that the divorced/widowed/separated Marines, regardless of their parental status, were much less satisfied than any other subgroup of respondents. In fact, all of the differences seen between these two subgroups and the respondents who either were married or who had never been married had practical significance. The Never Been Married Marines were the most satisfied subgroup.

Table 4-90. Satisfaction with Marriage/Intimate Relationship by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	75	4.29	2.14
Divorced/Widowed/Separated without Children	134	4.23	2.35
Married with Children	1,246	5.47	1.55
Married without Children	749	5.73	1.55
Never Been Married	709	5.82	1.51

In addition to asking the respondents about their overall satisfaction with their marriage or intimate relationship, Question #13 also asked about satisfaction with a series of six separate facets of this life domain. The weighted mean and standard deviation scores for each of these facets are shown in Figure 4-83. The lowest score was seen for how Conflicts Are Resolved (5.10), while the highest was in Compatibility of Interests (5.53). All facets had a mean at or below the overall satisfaction but still above "Somewhat Satisfied." None of the differences seen here had any practical significance.

⁵⁷ Note that the only respondents considered here, as elsewhere in this life domain, were those who had responded that they were either married or involved in a serious intimate relationship. Thus, the 918 non-married respondents included here had admitted to being involved in a serious intimate relationship in Question #1.

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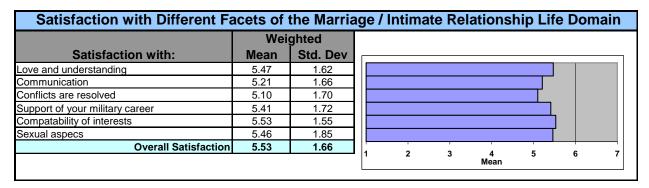


Figure 4-83. Satisfaction with Facets of Marriage/Intimate Relationship for the Base and Station Respondents

To look for the existence of any differences in satisfaction with the six facets of this life domain between the married and the involved but not married respondents, Table 4-91 was created. It can be seen that the weighted mean satisfaction scores for those respondents who were involved but not married were higher than the scores for the married respondents with one exception, the facet of Communication. Note, however, that none of the differences between mean scores for the married and the involved but not married respondents in any facet of satisfaction or between the two overall satisfaction means had any practical significance.

Table 4-91. Satisfaction with Facets of Marriage/Intimate Relationship for the Base and Station Respondents

Facet of	M	arried	Involved		
Satisfaction	We	eighted	Weighted		
Satisfaction	Mean	Std. Dev.	Mean	Std. Dev.	
Love and Understanding	5.40	1.67	5.60	1.53	
Communication	5.35	1.69	5.31	1.60	
Conflicts Are Resolved	5.12	1.72	5.27	1.61	
Support of Career	5.00	1.74	5.50	1.65	
Compatability of Interests	5.33	1.60	5.84	1.33	
Sexual Aspects	5.37	1.87	5.75	1.68	
Overall	5.40	1.72	5.72	1.51	

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with marriage/intimate relationship for the Base and Station respondents was performed. The results are shown in Figure 4-84. The magnitudes of the influence of the facet satisfactions ranged from 0.067 to 0.362. The facet with the greatest influence was Sexual Aspect, followed by Love and Understanding. These were the only two facet satisfactions that had more influence than the overall domain satisfaction and, since both had mean satisfaction scores somewhat lower than that of the overall domain satisfaction, both may present areas where improvements in domain satisfaction may be possible. The facet with the least amount of influence was Support of Marine Corps. Comparison of the results shown here with those from the 2002 QoL

Study was made difficult because the textual description of the results did not appear to match the associated graphics.

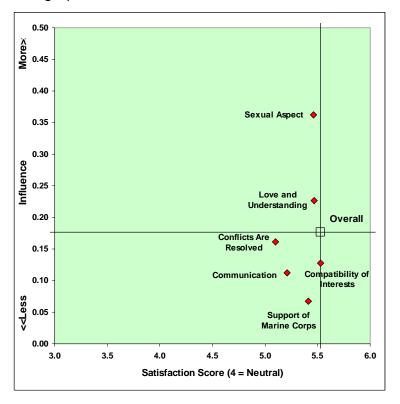


Figure 4-84. Key Driver Diagram for the Marriage/Intimate Relationship Life Domain for the Base and Station Respondents

4.9.3 Effect of the Marriage/Intimate Relationship Life Domain on Job Performance

Question #4 asked about the effect of the respondents' marriage or intimate relationship on their job performance. In general and not unexpectedly, a Marine's marriage or intimate relationship had a positive effect on their job performance, as can be seen in Figure 4-85.

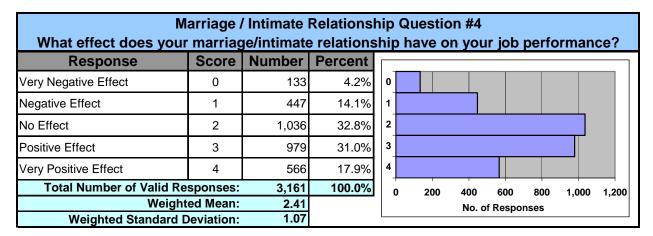


Figure 4-85. Effect of Marriage/Intimate Relationship on Job Performance for the Base and Station Respondents

The weighted mean score for this question was 2.41, falling almost halfway between "No Effect" to "Positive Effect." Just under half (48.9 percent) of the respondents answered that their marriage or intimate relationship had a positive effect on their job performance. In contrast, only 18.3 percent of the respondents said their marriage or intimate relationship had a negative effect on their job performance.

4.9.4 Effect of the Marriage/Intimate Relationship Life Domain on Plans To Remain on Active Duty

Question #5 asked about the effect of the respondents' marriage or intimate relationship on their plans to remain on active duty. The results for the married respondents and the involved but not married respondents were considered separately.

Figure 4-86 shows the results for the married respondents. The weighted mean score on this question for those who were married was 2.05, slightly above "No Effect." Here a larger portion answered that their marriage had a positive effect (35 percent) than a negative effect (25 percent) on their plans to remain on active duty.

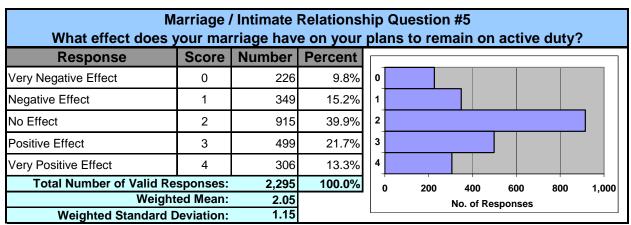


Figure 4-86. Effect of Marriage on Plans To Remain on Active Duty for the Base and Station Respondents

Figure 4-87 shows the results for the involved but not married respondents. In contrast to the results from the married respondents, the weighted mean score for this question when looking only at those involved in an intimate relationship but not married, was 1.77, falling between "Negative Effect" and "No Effect." A large portion (42.9 percent) of the respondents answered that their intimate relationship had a negative effect on their plans to remain on active duty while only 23.7 percent answered that their intimate relationship had a positive effect.

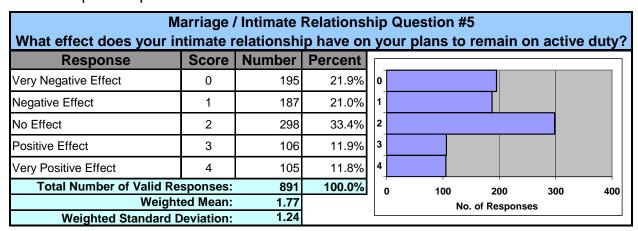


Figure 4-87. Effect of an Intimate Relationship on Plans To Remain on Active Duty for the Base and Station Respondents

4.9.5 Other, Life Domain-Specific Analyses

The responses to a number of other questions specific to the Marriage/Intimate Relationship life domain were examined. The results are presented below.

Question #3 asked the respondents to indicate how satisfied they thought they would be with their marriage or intimate relationship if they were not in the Marines. Figure 4-88 shows the responses to this question for each base/station. The mean satisfaction score for this question was 5.72, which fell toward the upper end of the "Somewhat Satisfied" to "Satisfied" range. That satisfaction score was only 0.19 higher than the overall weighted mean satisfaction score for this life domain (5.53), and this difference had no practical significance, having a Cohen's *d* statistic of 0.12. The respondents from almost every base/station said that they thought they would be more satisfied with their marriage/intimate relationship if they were not in the Marine Corps. The two exceptions to this statement were the respondents from MCAS Cherry Point and MCAS Miramar.

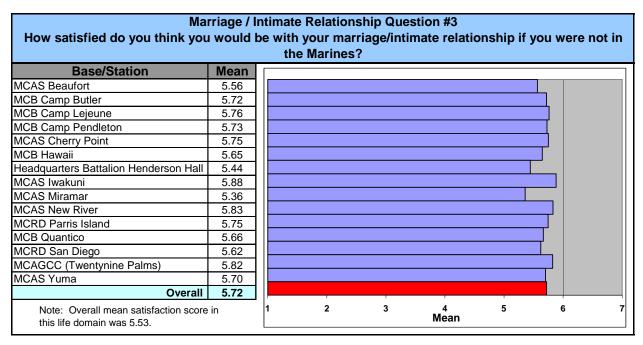


Figure 4-88. Expected Satisfaction with Marriage/Intimate Relationship if the Respondent Were Not in the Marine Corps for the Base and Station Respondents

Question #6 asked the respondents to indicate how well they thought the Marine Corps accommodated the demands of their marriage/intimate relationship. The resulting data, shown in Figure 4-89, are shown on a scale of "Extremely Poorly" (assigned a score of 0) to "Extremely Well" (assigned a score of 4). The average weighted score for this question was 1.71, which fell in the lower half of the possible range, i.e., between "Very Poorly" and "So, So." A total of only 21.3 percent of the Base and Station respondents felt that the Marine Corps did a good job of accommodating their marriage or intimate relationship, while 34.9 percent felt the Marine Corps did either extremely or very poorly in this regard.

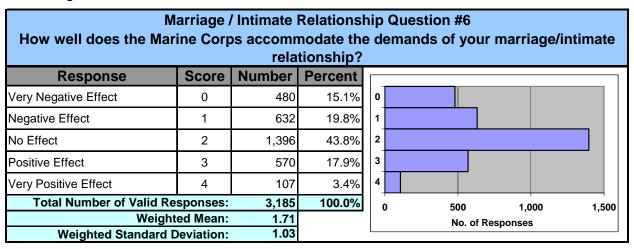


Figure 4-89. Degree to Which the Marine Corps Accommodates the Marriage/Intimate Relationship of the Base and Station Respondents

Question #14 asked the respondents to indicate how capable they thought their spouse or partner would be in taking responsibility for various aspects of life if military duties took the respondent away for 6 or more months. The data were scored on a scale of "Not at all capable" (assigned a score of 0) to "Extremely capable" (assigned a score of 4) in Figure 4-90. The respondents had the most confidence (a score of 3.06) in the capability of their spouse/partner to take full responsibility for childcare, although that area had the fewest number of respondents that did not pick "Not applicable" as their response. The respondents had the least confidence (a score of 2.39) in the capabilities of their spouse/partner to handle their investments, although the rating assigned was above "Capable."

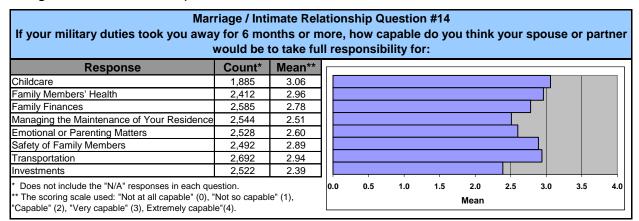


Figure 4-90. Capabilities of the Spouses/Partners of the Base and Station Respondents

4.9.6 Conclusions for the Marriage/Intimate Relationship Life Domain for the Base and Station Respondents

Since the 2002 QoL Study was performed, happiness increased while satisfaction decreased for the Marriage/Intimate Relationship life domain, but the changes had no practical significance. Decomposing the responses by the demographic groups considered in this study (i.e., Pay Grade Group, base/station, race/ethnicity, gender, and marital/parental status) showed that divorce/widowed/separated respondents were markedly less happy and less satisfied with their marriage or intimate relationship than were the other respondents. Also, males and females responded to the affective and cognitive questions differently, depending on whether they were married or involved in an intimate relationship, but no clear trends existed across the two types of questions. Married respondents tended to be happier, but those respondents who had never been married were more satisfied with this life domain. Two facets in which improvements in satisfaction might help improve satisfaction in this life domain were Sexual Aspect and Love and Understanding. Both had high influence factors and mean satisfaction scores slightly below the overall mean domain satisfaction score.

While marriage and intimate relationships tended to have largely a positive influence on job performance, the effect on plans to remain on active duty was negative for those involved in a serious relationship but not married and had only a slight positive effect for

those who were married. In general, the respondents believed that they would be somewhat more satisfied with their marriage/intimate relationship if they were not in the Marine Corps and that the Marine Corps had done a less than "So, So" job in accommodating the demands of their marriage/intimate relationship.

4.10 THE RELATIONSHIP WITH YOUR CHILDREN LIFE DOMAIN

4.10.1 Happiness – Affective Evaluations of the Relationship with Your Children Life Domain

Following the convention of the 2002 QoL Study Report, values for the overall affective (happiness) measure in the Your Relationship with Your Children life domain were computed separately for the respondents living with their children in their household and for the respondents <u>not</u> living with their children in their household.

The weighted mean affective or happiness score for the Your Relationship with Your Children life domain for those Base and Station respondents living with their children (Question #2) in 2007 was 6.06, corresponding very closely to a response of "Pleased" on the seven-point D-T scale. The weighted mean affective or happiness score for the Your Relationship with Your Children life domain for those Base and Station respondents not living with their children (Question #3) in 2007 was substantially lower, 4.23. Histograms of the responses to the affective questions with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain are shown in Figure 4-91 and in Figure 4-92. Note the relatively small number of respondents to each of the two questions (compared with the 4,000+ responses seen in other life domains) and that the scales in the two histograms differ because of the three-fold greater number of respondents living with their children.

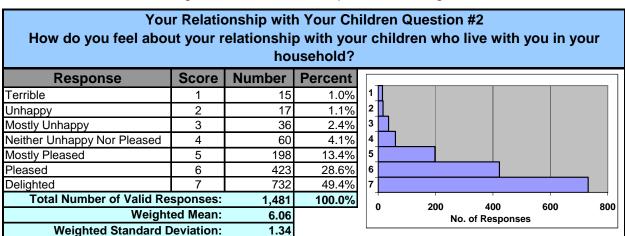


Figure 4-91. Distribution of the Overall Happiness Responses in the Your Relationship with Your Children Life Domain for Base and Station Respondents Living with Their Children

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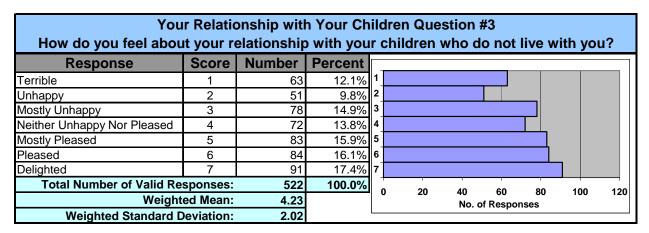


Figure 4-92. Distribution of the Overall Happiness Responses in the Your Relationship with Your Children Life Domain for Base and Station Respondents

Not Living with Their Children

When the mean result for those respondents living with their children was compared with the mean result for the respondents <u>not</u> living with their children, a difference with practical significance was seen, as evidenced by the Cohen's *d* statistic of 1.07. This large effect size indicates that the respondents were happier with their relationship with their children when the children were living in the respondents' household.

Trends over the four Marine Corps QoL studies in the mean Your Relationship with Your Children affective scores for those respondents living with their children are shown in Figure 4-93. It can be seen that the changes in the mean happiness of those respondents living with their children had no practical significance from the 2002 weighted level of 6.08 or from the 1998 level. Note that the 1993 value, taken from the final report of that study,⁵⁸ is likely not to be equivalent to the other values shown in the graphic because the 1993 QoL Study did not compute separate overall mean affective scores based on the living arrangements of the children.

⁵⁸ The actual value of the overall affective score in this life domain in the 1993 QoL Study Report was difficult to determine with certainty. The two sources of values for that score in that report are: 1) the textual discussion of each life domain and Table 79 (p. 138 of that report and reproduced as Table 1-1 of this report) that ranks the values of the overall affective and cognitive scores from each of the 11 life domains. In the case of this life domain, no overall values were given in the text, so Table 79 was the only source of data for the overall affective mean. That table gave values of 5.55 for the overall affective mean and 4.92 for the overall cognitive mean.

However, Table C-2 in Appendix C, which shows the "Means and Standard Deviations for Questionnaire Satisfaction Ratings," shows the overall cognitive mean as 5.55. This latter value was repeated as the overall cognitive score in the 1998 and 2002 QoL Study Reports, on p. 30 and p. 3-34, respectively (it is interesting to note that neither report contained a value for the overall affective mean, the only such omission in any of the 11 life domains). Also, in both the 1998 and 2002 QoL Studies and, as will be seen, in this 2007 QoL Study, the overall affective mean in this life domain was <u>larger</u> than the overall cognitive mean. That three-study trend led to the belief that Table 79, and not Table C-2 (or the 1998 or 2002 QoL Study Reports), contained the correct data. As a result, an overall affective mean score of 5.55 is shown in the figure here.

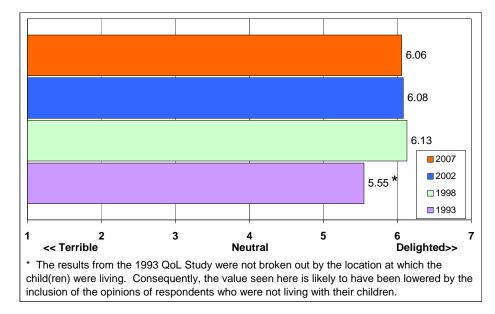


Figure 4-93. Trends in Overall Happiness in the Your Relationship with Your Children Life Domain for Base and Station Respondents Living with Their Children

Neither the 1993 nor the 1998 QoL Studies calculated the affective mean scores for those respondents <u>not</u> living with their children. Thus, only the 2002 and 2007 data for those respondents could be compared. Those data are shown in Figure 4-94. Again, the change in the mean happiness score since 2002 for those respondents <u>not</u> living with their children had no practical significance, having increased by only 0.13.

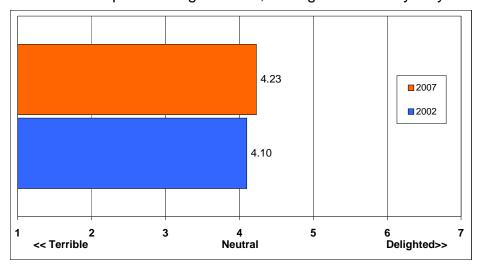


Figure 4-94. Trends in Overall Happiness in the Your Relationship with Your Children Life Domain for Base and Station Respondents Not Living with Their Children

Overall happiness in the Your Relationship with Your Children life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in

happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by Pay Grade Group and child residence, are shown in Table 4-92.

Table 4-92. Happiness with Your Relationship with Your Children by Pay Grade Group and Child Residence for the Base and Station Respondents

Pay Grade Group	Childre	Children with Respondent			Children Not with Respondent		
ray Grade Group	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	
E-2/E-3	166	5.96	1.60	98	4.19	2.09	
E-4/E-5	592	6.13	1.21	191	3.90	2.01	
E-6/E-7	392	6.11	1.15	135	4.40	1.92	
E-8/E-9	102	6.19	0.86	46	4.91	1.71	
WO	41	5.85	1.28	15	4.60	1.99	
O-1 to O-3	102	6.13	1.02	17	5.18	1.59	
O-4 to O-10	86	6.30	0.88	20	5.50	1.28	

When looking at the respondents living with their children, the Warrant Officers had the lowest average happiness score of 5.85, followed by the E-2/E-3 Pay Grade Group with a mean of 5.96. The E-2/E-3 and WO Pay Grade Groups means corresponded to a response slightly below "Pleased." The other Pay Grade Groups had means above 6, corresponding to responses between "Pleased" and "Delighted." None of the differences seen here for the respondents living with their children had any practical significance.

When looking at the mean affective score for the respondents <u>not</u> living with their children, there were many differences with practical significance between the O-4 to O-10 Pay Grade Group and the others: Only the differences with the E-8/E-9 and O-1 to O-3 Pay Grade Groups were found not to have at least a medium effect size.

In general, for both respondents living with their children and those <u>not</u> living with their children, the mean affective score was loosely correlated with pay grade. The three groups with the largest differences (in decreasing order) were the E-4/E-5, E-2/E-3, and E-6/E-7 Pay Grade Groups, with differences of 2.23, 1.77, and 1.71, respectively (see Figure 4-95). When comparing the differences in the means within the Pay Grade Groups but across the two children's residence groups, all the differences seen had practical significance and there was much less variation in the Pay Grade Group scores for the respondents living with their children.

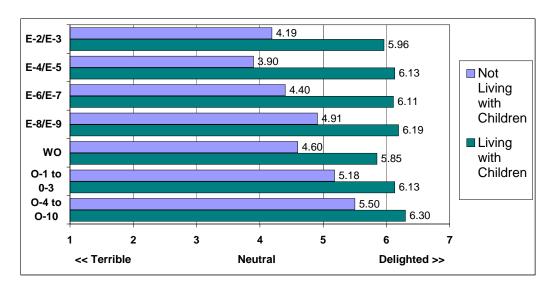


Figure 4-95. Happiness with Your Relationship with Your Children Comparing Base and Station Respondents Living with and Not Living with Their Children by Pay Grade Group

Overall happiness with the Your Relationship with Your Children life domain also was examined by Pay Grade Group for those respondents living with their children. The results are shown in Figure 4-96. The only Pay Grade Group that had a significant difference between 2002 and 2007 were the Warrant Officers, for whom the affective mean had declined by 0.53 since 2002. This difference had practical significance, based on the Cohen's *d* statistic of 0.75.

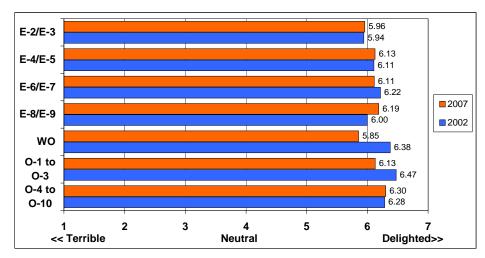


Figure 4-96. Trends in Happiness in the Your Relationship with Your Children Life Domain by Pay Grade Group for Base and Station Respondents Living with Their Children

Overall happiness with the Your Relationship with Your Children life domain was examined by Pay Grade Group for those respondents <u>not</u> living with their children. The results are shown in Figure 4-97. Two Pay Grade Groups underwent noticeable changes, both of which were positive, since 2002. The mean affective score for the

E-2/E-3 Pay Grade Group increased by 0.45, but this had no practical significance as its Cohen's *d* statistic of 0.22 indicated only a small effect size. The second Pay Grade Group with a large change in mean scores was the O-1 to O-3 Pay Grade Group in which the mean affective score increased by 1.08. This equated to a Cohen's *d* statistic of 0.58, indicating a medium effect size and a difference of practical significance.⁵⁹

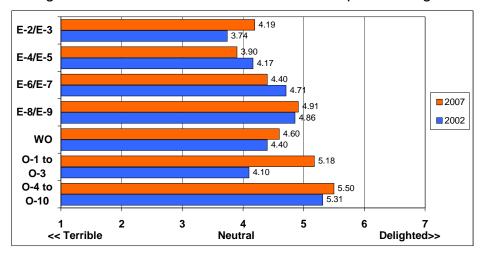


Figure 4-97. Trends in Happiness in the Your Relationship with Your Children Life Domain by Pay Grade Group for Base and Station Respondents Not Living with Their Children

Race/Ethnicity. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by race/ethnicity and child residence, are shown in Table 4-93.

Table 4-93. Happiness with Your Relationship with Your Children by Race/Ethnicity and Child Residence for the Base and Station Respondents

Race/Ethnicity	Childr	en with R	espondent	Children Not with Respondent			
Race/Ethilicity	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	
White	940	6.10	1.20	279	4.34	1.97	
Black/African-American	247	6.17	1.17	129	4.43	1.99	
Asian/Pacific Islander	47	5.98	1.39	19	4.63	2.06	
Native American/Aleut/Eskimo	25	5.84	1.21	8	3.63	1.85	
Spanish/Hispanic	169	6.17	1.29	70	3.84	2.08	
Other	27	6.07	1.36	9	4.11	2.15	

When looking at the respondents living with their children, the Spanish/Hispanic and the Black/African-American subgroups had the highest overall happiness mean (6.17) while the Native American/Aleut/Eskimo subgroup had the lowest mean (5.84). This maximum difference had no practical significance.

⁵⁹ Note that the large difference in means equated to only a medium effect size because the standard deviations of the means were relatively large due the small number of respondents in this Pay Grade Group. For example, only 20 and 17 respondents were included in the 2002 and 2007 data, respectively.

When looking at the mean affective score for the respondents <u>not</u> living with their children, the Asian/Pacific Islander racial/ethnic subgroup had the highest overall mean (4.63) while the Native American/Aleut/Eskimo subgroup had the lowest mean (3.63) (although it should be noted that this mean was based on only eight responses). This difference had no practical significance.

Comparing the respondents living with their children with the respondents <u>not</u> living with their children, it again could be seen that the former group was significantly more happy than the latter group. In fact, when comparing the differences in the means within the subgroups but across the two children's residence groups, all the differences were found to have practical significance. The Native American/Aleut/Eskimo subgroup was the least happy in both categories.

Gender. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by gender and child residence, are shown in Table 4-94. Neither of the gender differences seen here had any practical significance (Cohen's *d* statistics of 0.29 and 0.21 were found). However, when comparing the differences in the means within the gender groups but across the two children's residence groups, both differences had practical significance.

Table 4-94. Happiness with Your Relationship with Your Children by Gender and Child Residence for the Base and Station Respondents

Gender	Childr	en with R	espondent	Children Not with Respondent			
Coun		Mean Std. Dev.		Count Mean		Std. Dev.	
Male	1,348	6.07	1.22	497	4.26	2.00	
Female	144	6.40	0.98	29	4.66	1.86	

Marital/Parental Status. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by marital/parental status and child residence, are shown in Table 4-95. Note that only three of the marital/parental status subgroups were relevant here (i.e., the groups without children were not considered).

Table 4-95. Happiness with Your Relationship with Your Children by Marital/Parental Status and Child Residence for the Base and Station Respondents

Marital/Parental Status	Childr	en with R	espondent	Children Not with Respondent			
Walital/Falelital Status	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	
Divorced/Widowed/Separated with Children	84	5.75	1.64	45	4.22	2.01	
Married with Children	1,305	6.20	1.05	239	4.46	1.97	
Never Been Married	43	5.23	2.11	69	4.03	2.08	

When looking at the respondents living with their children, the means appear relatively diverse. However, the difference between the means of the married and the divorced/widowed/separated subgroups did not have any practical significance. The difference between the means of the Never Been Married and the Married with Children subgroups had a medium effect size, and thus, practical significance.

When looking at the mean affective scores for the respondents <u>not</u> living with their children, no significant differences between the means were found. The means were clustered around the overall affective mean of 4.23 for this measure.

For both respondents living with their children and those <u>not</u> living with their children, the Married with Children subgroup had the highest means regardless of where their children lived and the Never Been Married subgroup had the lowest. When comparing the differences in the means within the marital/parental status groups but across the two children's residence groups, all the differences had practical significance.

4.10.2 Satisfaction – Cognitive Evaluations of the Relationship with Your Children Life Domain

The weighted mean cognitive or satisfaction score (Question #6e) in the Relationship with Your Children life domain for the Base and Station respondents in 2007 was 5.29, i.e., between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Your Relationship with Your Children life domain is shown in Figure 4-98. The two most frequently chosen responses were "Satisfied" and "Completely Satisfied," which together were chosen by almost two-thirds of the respondents. Note that only 12.6 percent of the respondents indicated some level of dissatisfaction with the overall relationship with their children.

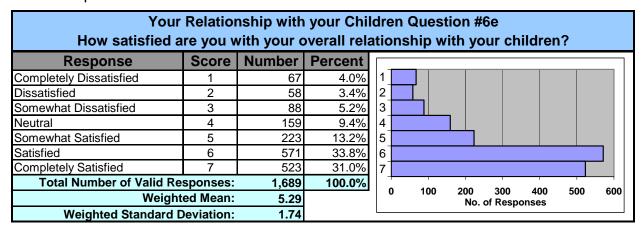


Figure 4-98. Distribution of the Overall Satisfaction Responses in the Your Relationship with Your Children Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean overall satisfaction in the Your Relationship with Your Children life domain are shown in Figure 4-99.⁶⁰ It can be

⁶⁰ The actual value of the overall cognitive score in this life domain in the 1993 QoL Study Report was difficult to determine with certainty. The three sources of values for the overall cognitive score in that report are: 1) the textual discussion of each life domain, 2) Table 79 (p. 138 of that report and reproduced as Table 1-1 of this report) that ranks the values of the overall affective and cognitive scores from each of the 11 life domains, and 3) Table C-2 in Appendix C, which shows the "Means and Standard Deviations for Questionnaire Satisfaction Ratings." In the case of this life domain, no overall values were given in the text, so Tables 79 and C-2 were the only sources of data for

seen that the weighted overall satisfaction in 2007, 5.29, increased by 0.29 from the 2002 weighted level of 5.00. However this was not a significant change as evidenced by the Cohen's *d* statistic of 0.16.

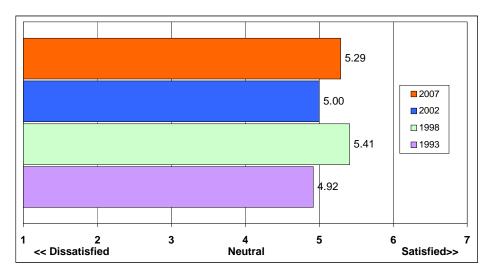


Figure 4-99. Trends in Overall Satisfaction in the Your Relationship with Your Children Life Domain for the Base and Station Respondents

Overall satisfaction in the Your Relationship with Your Children life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by Pay Grade Group, are shown in Table 4-96.

the overall cognitive mean. The former gave values of 5.55 for the overall affective mean and 4.92 for the overall cognitive mean, while the latter gave 5.55 as the value for the overall cognitive mean. This latter value was repeated as the overall cognitive score in the 1998 and 2002 QoL Study Reports, on p. 30 and p. 3-34, respectively. However, in both the 1998 and 2002 QoL Studies and, as will be seen, in this 2007 QoL Study, the overall affective mean in this life domain was <u>larger</u> than the overall cognitive mean. That three-study trend led to the belief that Table 79, and not Table C-2 (or the 1998 or 2002 QoL Study Reports), contained the correct data. As a result, an overall cognitive mean score of 4.92 is shown in the figure here.

Table 4-96. Satisfaction with Your Relationship with Your Children by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	233	4.81	1.94
E-4/E-5	680	5.52	1.64
E-6/E-7	423	5.64	1.49
E-8/E-9	110	5.78	1.34
WO	44	5.55	1.32
O-1 to O-3	108	5.80	1.25
O-4 to O-10	91	5.71	1.21

The mean of the E-2/E-3 Pay Grade Group (4.81) was the only one that fell below the "Somewhat Satisfied" level. The low mean score for that pay grade group dragged down the overall mean: The other six pay grade groups all had means at least 0.23 greater than the overall mean. This was caused by the weighting scheme used to calculate the overall mean. The Pay Grade Group with the next lowest mean was the E-4/E-5 Pay Grade Group, which had a mean of 5.52, or 0.71 greater than the mean of the E-2/E-3 Pay Grade Group. However, this difference had no practical significance: The Cohen's *d* statistic was only 0.40, a small-to-medium effect size. In fact, it was not until the mean of the E-2/E-3 Pay Grade Group was compared to the mean of the O-4 to O-10 Pay Grade Group (5.71) that any practical significance was seen in the difference (Cohen's *d* was 0.56 for this comparison, a medium effect size).

When the trends in overall satisfaction with the Your Relationship with Your Children life domain were examined by Pay Grade Group, as shown in Figure 4-100, it was apparent that the WO Pay Grade Group had the largest change since 2002. However, this decrease had no practical significance, since it had a Cohen's *d* statistic of only 0.44. The largest increase in satisfaction occurred in the E-4/E-5 Pay Grade Group, which saw an increase 0.43; however, this also had no practical significance, since it had a Cohen's *d* statistic of only 0.24. The Pay Grade Group that had the highest level of satisfaction in 2007 (mean score of 5.80) was the O-1 to O-3 group.

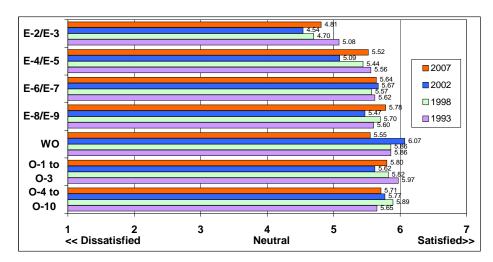


Figure 4-100. Trends in Satisfaction in the Your Relationship with Your Children Life Domain by Pay Grade Group for the Base and Station Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by race/ethnicity, are shown in Table 4-97. The means for every subgroup were greater than the overall satisfaction mean. This was the result of a combination of the weighting the overall mean by Pay Grade Group and the low satisfaction scores of the E-2/E-3 Pay Grade Group. The Native American/Aleut/Eskimo subgroup had the highest mean, 5.69. The Spanish/Hispanic subgroup had the lowest mean, 5.37. None of the differences seen here had any practical significance.

Table 4-97. Satisfaction with Your Relationship with Your Children by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	1,048	5.53	1.57
Black/African-American	292	5.42	1.65
Asian/Pacific Islander	56	5.59	1.55
Native American/Aleut/Eskimo	26	5.69	1.76
Spanish/Hispanic	206	5.37	1.77
Other	30	5.47	1.68

Gender. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by gender, are shown in Table 4-98. In an analog to what was seen in the race/ethnicity decomposition, the means of both genders were greater than the overall satisfaction mean. The difference seen here between the genders had no practical significance.

Table 4-98. Satisfaction with Your Relationship with Your Children by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	1,539	5.45	1.63
Female	161	5.83	1.38

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by marital/parental status, are shown in Table 4-99.

Table 4-99. Satisfaction with Your Relationship with Your Children by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	102	5.25	1.73
Married with Children	1,286	5.85	1.26
Never Been Married	102	4.37	2.04

Differences of at least 0.60 can be seen in the means here. When the Never Been Married subgroup was compared to the Divorced/Widowed/Separated with Children group, the Cohen's *d* statistic was 0.47 or slightly below the threshold used in this study to determine practical significance. Comparing the least and greatest means (from the Never Been Married and Married with Children groups respectively) led to a Cohen's *d* statistic of 0.87, a large effect size indicative of practical significance. Thus, the extremes of the subgroup means for the marital/parental status decomposition showed practical significance with a medium-to-large effect size. Neither of the other two possible comparisons had practical significance.

In addition to asking the respondents about their overall satisfaction with their relationship with their children, Question #6 also asked about satisfaction with a series of four separate facets of those relationships. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 4-101.

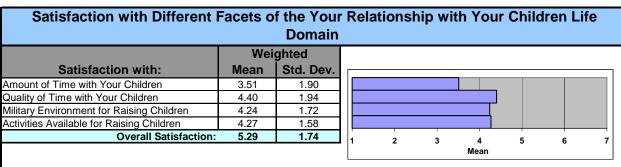


Figure 4-101. Satisfaction with Facets of Your Relationship with Your Children for the Base and Station Respondents

The facet means ranged from 3.51 (Amount of Time with Your Children), corresponding to a response between "Somewhat Dissatisfied" and "Neutral," to 4.40 (Quality of Time with Your Children), corresponding to a response between "Neutral" and "Somewhat Satisfied." Thus, although the respondents expressed some degree of dissatisfaction regarding the amount of time they could spend with their children, they indicated some degree of satisfaction with the quality of the time spent with their children. However, this difference had no practical significance, as it had a Cohen's *d* statistic of 0.46.

The overall mean satisfaction level was 0.89 larger than the highest mean seen for the four facets considered here, but this difference had no practical significance since its Cohen's *d* statistic was only 0.48, or slightly below the threshold used in this study to determine practical significance. The differences between the other three facet means and the overall mean satisfaction score all had practical significance.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with the relationship with their children for the Base and Station respondents was performed. The results are shown in Figure 4-102.

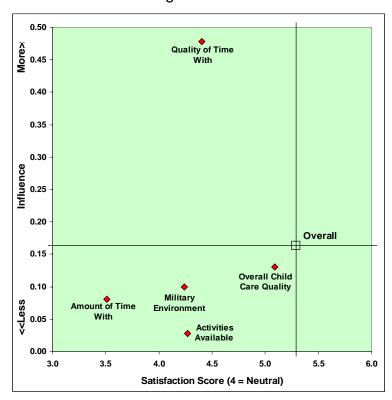


Figure 4-102. Key Driver Diagram for the Relationship with Your Children Life Domain for the Base and Station Respondents

The magnitudes of the influences of the facets ranged from 0.028 for Activities Available to 0.478 for Quality of Time With their children. It was clear where the Base and Station respondents placed their emphasis in this life domain: Quality of Time was by far the most influential of the factors and, at the same time, was an area where satisfaction was

below that of the overall domain mean. Quality of Time also was the only facet that had more influence than the overall domain mean. This indicates an area where the opportunity for large increases in domain satisfaction may be possible.

It is also interesting to note that the results from the 2007 QoL survey shown here bear no resemblance to those from the 2002 QoL Study. In that earlier study, the least and most influential facets were the exact opposites of the ones seen in 2007: That is, Quality of Time was the least influential facet and Activities Available was the most influential. It appears that the Base and Station respondents have reordered their priorities in this area of their lives significantly.

4.10.3 Effect of the Relationship with Your Children Life Domain on Job Performance

Question #11 asked about the effect of the respondents' relationship with their children on their job performance. A histogram of the responses to that question is shown in Figure 4-103.

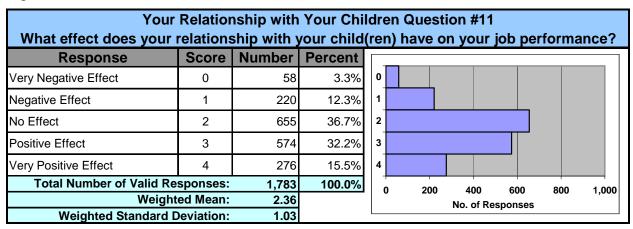


Figure 4-103. Effect of Your Relationship with Your Children on Job Performance for the Base and Station Respondents

Overall, the relationship with their children had a somewhat positive effect on the respondents' job performance: The weighted mean score for this question was 2.36, between the "No Effect" and "Positive Effect" responses. A majority of the respondents (68.9 percent) responded either "No Effect" or "Positive Effect," and only 15.6 percent indicated that their relationship with their children had any degree of negative effect.

4.10.4 Effect of the Relationship with Your Children Life Domain on Plans To Remain on Active Duty

Question #12 asked about the effect of the respondents' relationship with their children on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-104.

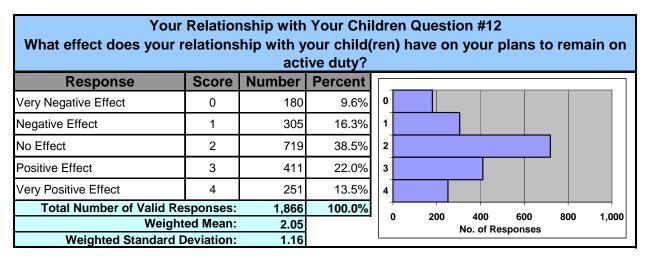


Figure 4-104. Effect of Your Relationship with Your Children on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 2.05, or just slightly above "No Effect." However, only a relatively small percentage of the respondents (38.5 percent) said that their relationship with their children had no effect on their plans to remain on active duty. Almost as large a fraction of the respondents, 35.5 percent said their relationship with their children had some degree of positive effect, and 25.9 percent indicated that their relationship with their children had a negative effect on their plans to remain on active duty.

In a related issue, Question #13 asked about the effect of the overall educational opportunities available to the respondents' children on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-105.

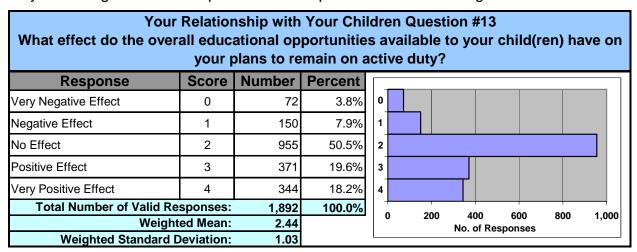


Figure 4-105. Effect of Their Children's Educational Opportunities on the Respondents' Plans To Remain on Active Duty for the Base and Station Respondents

Here, the weighted mean score was 2.44, or 0.39 higher than the score seen in the discussion of the other 'remain on active duty' question. Note that a majority of the

respondents indicated that the educational opportunities available to their children had "No Effect" on their plans to remain on active duty. While only 11.7 percent of the respondents indicated that the educational opportunities available to their children had any degree of negative on their plans to remain on active duty, more than three times as many respondents, 37.8 percent, indicated that this issue had some degree of positive effect on their plans.

4.10.5 Other, Life Domain-Specific Analyses

The responses to a number of other questions specific to the Your Relationship with Your Children life domain were examined. The results are presented below.

Question #5 asked the respondents to indicate, if they had school age children, their satisfaction with the education that their children were receiving using the standard seven-point satisfaction scale. Figure 4-106 shows the histogram of responses. The average satisfaction score was 4.92, just slightly below "Somewhat Satisfied." The most frequently chosen response was "Satisfied" (40.8 percent), and 72.2 percent of the respondents indicated some level of satisfaction with their children's schools, while only 17.9 percent indicated any level of dissatisfaction.

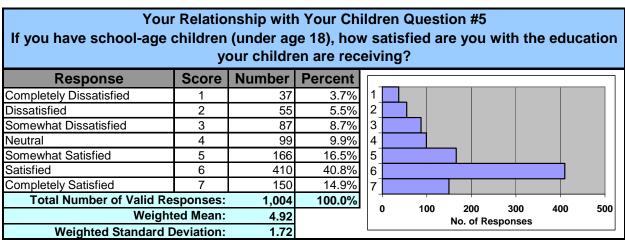


Figure 4-106. Satisfaction with Their Children's Education for the Base and Station Respondents

The responses to Question # 5 also were decomposed by base/station. The results are presented in Figure 4-107. Three bases/stations stood out for having unweighted mean scores noticeably lower than the overall unweighted average: MCB Hawaii (3.63), MCAGCC Twentynine Palms (4.35), and MCAS Yuma (4.76). Note that these three bases/stations, which comprised only about 12 percent of the population of parents who responded to this question, also comprised about 23 percent of the

⁶¹ Note that the total number of valid responses, and the values of the overall mean and standard deviation in the first figure, does not match exactly the summary data provided in the second figure. This occurred for several reasons:

1) The first figure included data from <u>all</u> Base and Station respondents, even those for whom a specific base/station could not be identified and those assigned to one of the two MCLBs; the second figure only included data from the 15 specific bases/stations enumerated in the graphic; and 2) The mean values in the first chart were weighted by the overall population distribution of Base and Station Marines in the Marine Corps.

respondents who expressed some level of dissatisfaction with their children's' education. The difference between the mean score for MCB Hawaii and the mean score for the 15 bases/stations had practical significance (Cohen's *d* statistic of 0.86, indicating a large effect size), and the difference between that score and the overall mean score seen in the earlier figure also had practical significance (Cohen's *d* statistic of 0.71, or a medium-large effect). The mean score for MCAGCC Twentynine Palms had practical significance only when compared with the mean for the 15 bases/stations (Cohen's *d* statistic of 0.50, just at the threshold for practical significance in this study). Thus, the parents at both MCB Hawaii and MCAGCC (Twentynine Palms) were significantly less satisfied with the education their children were receiving than the other Base and Station parents.

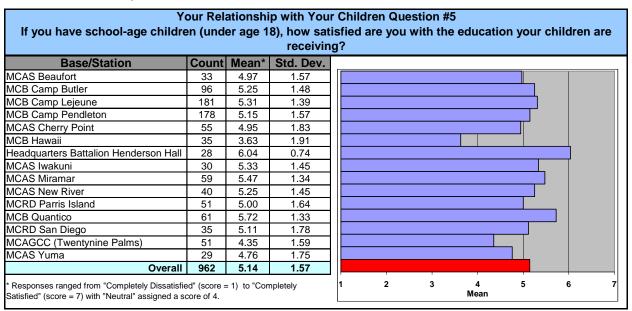


Figure 4-107. Satisfaction with Their Children's Education by Base/Station for the Base and Station Respondents

On the other end of the educational spectrum, the two bases/stations with the largest means were Headquarters Battalion Henderson Hall (6.04) and MCB Quantico (5.72). The difference between the mean score for Headquarters Battalion Henderson Hall and the mean score for the 15 bases/stations had practical significance (Cohen's *d* statistic of 0.73, indicating a medium-large effect size) and the difference between that score and the overall mean score seen in the earlier figure also had practical significance (Cohen's *d* statistic of 0.85, or a large effect). The mean score for MCB Quantico had practical significance only when compared with the overall mean score seen in the earlier figure (Cohen's *d* statistic of 0.52, a medium effect size). Thus, the parents at both Headquarters Battalion Henderson Hall and MCB Quantico were significantly more satisfied with the education their children were receiving than the other Base and Station parents.

Question #7 asked the respondents to indicate the usual primary care provider for their youngest child while the respondent was on duty. The results are shown in Figure

4-108. It was evident from the histogram that a majority, 51.1 percent of the respondents, relied on their spouses to watch their youngest child while they were on active duty. Two other types of primary care providers that were frequently cited were "Military Child Development Center" (13.4 percent) and a "Private Licensed Facility" (12.0 percent).

Your Relationship with Your Children Question #7 Who is usually the primary care provider for your youngest child while you are on duty?							
Response	Score	Number	Percent				
Private Licensed Facility	1	161	12.0%				
Civilian-Operated Family Home Care	2	76	5.7%				
At-Home Employee	3	14	1.0%				
Relative or Older Siblings	4	48	3.6%				
Friend	5	39	2.9%				
Your Spouse	6	686	51.1%				
Military Child Development Center	7	180	13.4%				
Base-Operated Family Home Care Program	8	39	2.9%				
Other	9	99	7.4%				
Total Number of Valid Re	sponses:	1,342	100.0%	0 100 200 300 400 500 600 70			
				No. of Responses			

Figure 4-108. Primary Care Providers for the Base and Station Respondents' Youngest Child while on Duty

Question #8 asked the respondents to indicate their one most critical childcare requirement. The results, decomposed by bases/stations are in Table 4-100. The most frequently indicated childcare needs were occasional babysitting and all day care for pre-school children, which were chosen by 25.6 and 23.2 percent, respectively, of the respondents. The least frequently indicated childcare needs were extended care for several days, special needs childcare, and overnight care, which were chosen by 1.6, 2.5, and 3.1 percent, respectively, of the respondents.

Table 4-100. Base/Station Decomposition of the One Most Critical Childcare Requirement for the Base and Station Respondents

Your Relationship with Your Children Question #8 What is your ONE most critical childcare requirement?									
Bases/Stations	Count	Occasional Babysitting	All Day Care for Pre-School Child	Before and/or After School	Overnight Care	Extended Care for Several Days	Access to Care at Any Time	Special Needs Childcare	Other
MCAS Beaufort	50	22.0%	24.0%	20.0%	6.0%	4.0%	10.0%	0.0%	14.0%
MCB Camp Butler	84	29.8%	28.6%	13.1%	4.8%	1.2%	9.5%	3.6%	9.5%
MCB Camp Lejeune	241	21.6%	23.2%	10.0%	5.0%	2.1%	17.8%	1.7%	18.7%
MCB Camp Pendleton	256	25.0%	21.9%	10.9%	1.6%	2.0%	14.1%	2.3%	22.3%
MCAS Cherry Point	60	31.7%	21.7%	11.7%	5.0%	0.0%	5.0%	5.0%	20.0%
MCB Hawaii	46	32.6%	13.0%	17.4%	2.2%	0.0%	10.9%	6.5%	17.4%
Headquarters Battalion Henderson Hall	25	20.0%	36.0%	16.0%	0.0%	0.0%	12.0%	4.0%	12.0%
MCAS Iwakuni	29	13.8%	13.8%	3.4%	3.4%	0.0%	31.0%	0.0%	34.5%
MCAS Miramar	77	32.5%	22.1%	7.8%	0.0%	1.3%	14.3%	3.9%	18.2%
MCAS New River	47	40.4%	23.4%	6.4%	0.0%	2.1%	8.5%	2.1%	17.0%
MCRD Parris Island	77	19.5%	23.4%	9.1%	2.6%	0.0%	27.3%	2.6%	15.6%
MCB Quantico	59	28.8%	32.2%	3.4%	0.0%	0.0%	8.5%	1.7%	25.4%
MCRD San Diego	43	25.6%	18.6%	11.6%	7.0%	4.7%	9.3%	2.3%	20.9%
MCAGCC (Twentynine Palms)	61	24.6%	19.7%	14.8%	4.9%	1.6%	19.7%	1.6%	13.1%
MCAS Yuma	38	31.6%	21.1%	7.9%	0.0%	0.0%	18.4%	5.3%	15.8%
Overall	1,236	25.6%	23.2%	10.8%	3.1%	1.6%	14.7%	2.5%	18.4%

When the needs at individual bases/stations were examined, no particular trend stood out. Occasional babysitting was a frequently desired requirement at MCAS New River. All day care for pre-school children was chosen frequently by respondents at Headquarters Battalion Henderson Hall and MCB Quantico, the two bases in the Washington, D.C., metropolitan area. Respondents from MCAS Beaufort indicated an above-the-average need for before/after school care and extended care for several days. They were joined in the latter by the respondents from MCRD San Diego, who also expressed a need for overnight care. Respondents from MCAS Iwakuni and MCRD Parris Island expressed a need for 24-hour access to care, and the respondents from MCB Hawaii expressed a requirement for special needs childcare.

Questions #9 asked the respondents about their satisfaction with aspects of childcare. A histogram comparing the three facets of childcare and the overall satisfaction with childcare for the 456 respondents who had indicated that they used professional childcare (i.e., responses 1, 2, 7 and 8 to Question #7) is shown in Figure 4-109.

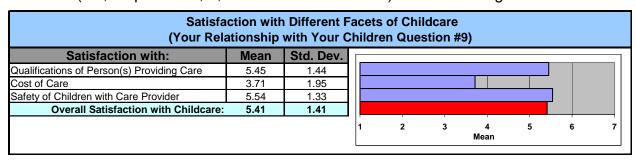


Figure 4-109. Satisfaction with Facets of Professional Childcare for the Base and Station Respondents

The overall satisfaction with childcare of the users of professional childcare was 5.41, corresponding to a response almost halfway between "Neutral" and "Somewhat

Satisfied" on the seven-point satisfaction scale. The facet with by far the smallest mean (3.71, corresponding to a below-"Neutral" response) was "Cost of Care." The value of the Cohen's *d* statistic comparing the mean for "Cost of Care" with the overall mean satisfaction level was 1.00, indicating a difference with practical significance. The means of "Qualifications of Person(s) Providing Care" and "Safety of Children with Care Provider" were much closer to the mean overall satisfaction, and no differences of practical significance were found.

The overall satisfaction with childcare (again, only for the users of professional childcare), decomposed by base/station, is shown in Figure 4-110.

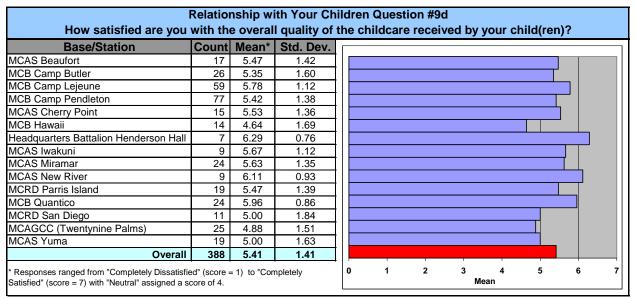


Figure 4-110. Satisfaction with Overall Quality of Professional Childcare by Base/Station for the Base and Station Respondents

It can be seen that the number of responses from some of the bases/stations was fairly small (e.g., less than 10 for Headquarters Battalion Henderson Hall, MCAS Iwakuni and MCAS New River). Also note that the overall total of 388 is greater than the sum of 355 users of professional childcare at the 15 bases/stations shown here since other locations (such as the two MCLBs) and other respondents (e.g., those whose base/station could not be determined) were included in the overall total.

The range of responses was fairly broad. The satisfaction scores ranged from a low of 4.64 for MCB Hawaii to a high of 6.29 at Headquarters Battalion Henderson Hall (this difference was of practical significance, having Cohen's *d* statistic of 1.26). Satisfaction with professional childcare also was high at MCAS New River (6.11) and MCB Quantico (5.96). In addition to MCB Hawaii, it was relatively low at MCAGCC (Twentynine Palms) (4.88) and MCRD San Diego and MCAS Yuma (both 5.00).

⁶² The relatively small number of respondents from some of the bases/stations should be kept in mind when reviewing the discussion of this and the other graphics related to this question.

Overall satisfaction with the three facets of childcare addressed in Question #9 is included in the following three figures.

Figure 4-111 shows the decomposition by base/station of satisfaction with the qualifications of the persons caring for the respondents' children (again only the opinions of the users of professional childcare were included in this assessment).

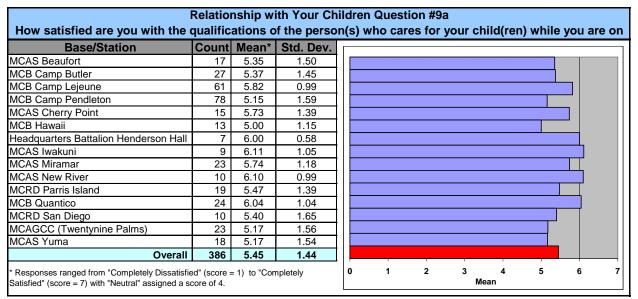


Figure 4-111. Satisfaction with the Qualifications of Person Caring for the Respondents' Children by Base/Station for the Base and Station Respondents

While overall satisfaction with this facet of childcare was relatively high (5.45), several bases/stations scored noticeably lower than that level. Again, MCB Hawaii had the lowest score (5.00), but Camp Pendleton (5.15), and MCAGCC (Twentynine Palms) and MCAS Yuma (both with satisfaction scores of 5.17) also received relatively low marks. On the other end of the spectrum, MCAS lwakuni (6.11) received the highest satisfaction. Also rated above the "Satisfied" level were MCAS New River (6.10), Headquarters Battalion Henderson Hall (6.00) and MCB Quantico (6.04). Camp Lejeune (5.82), MCAS Miramar (5.74) and MCAS Cherry Point (5.73) also scored above the overall mean, showing that some of the larger Marine Corps bases/stations were scored highly on this measure.

Figure 4-112 shows the satisfaction with cost of professional childcare, decomposed by base/station.

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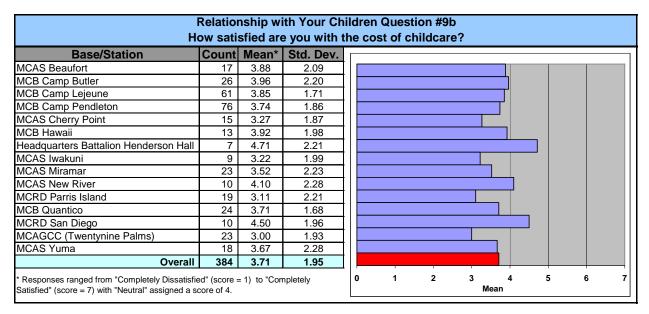


Figure 4-112. Satisfaction with the Cost of Professional Childcare by Base/Station for the Base and Station Respondents

This was the facet of professional childcare with which the respondents were least satisfied: The overall mean for this question (3.71) fell below the "Neutral" score of 4. The cost of professional childcare at MCAGCC (Twentynine Palms) received a score of 3.00, or "Somewhat Dissatisfied" and MCRD Parris Island (3.11), MCAS Iwakuni (3.22) and MCAS Cherry Point (3.27) also were scored close to the "Somewhat Dissatisfied" level. The highest score was received by Headquarters Battalion Henderson Hall (4.71), while MCRD San Diego (4.50) and MCAS New River (4.10) also received scores above the "Neutral" level. Interestingly, while MCAS Iwakuni received a relatively low score, the other two OCONUS bases (Camp Butler and MCB Hawaii) received relatively high scores (3.96 and 3.92, respectively, both of which were above the overall mean score for this question). The high score for this facet at MCB Hawaii is notable, as it was out of character with the relatively low ratings of that base both on the other two facets of satisfaction with childcare and on overall satisfaction.

The respondents also were asked about their satisfaction with the safety of their children while at the professional childcare provider. The results, decomposed by base/station, are shown in Figure 4-113.

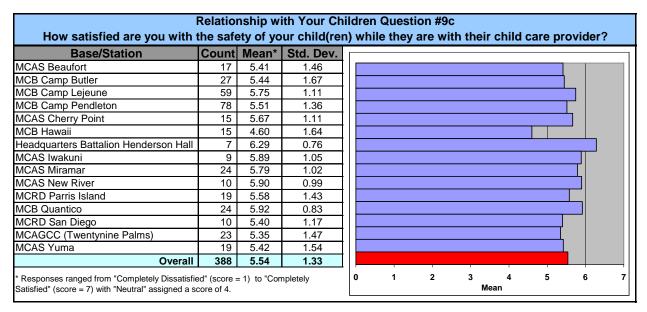


Figure 4-113. Satisfaction with the Safety of Children While at the Professional Childcare Provider by Base/Station for the Base and Station Respondents

The overall mean satisfaction on this important measure was relatively high (5.54, or midway between "Somewhat Satisfied" and "Satisfied." However, MCB Hawaii was notable for the relatively low score that it received (4.60). Although this score, in absolute terms, was still more than halfway between "Neutral" and "Somewhat Satisfied," it was so low that the Cohen's *d* statistic computed when comparing that mean score with the mean score of the next lowest scoring installation (MCAGCC (Twentynine Palms)) was 0.48, barely missing the threshold for practical significance as used in this study. A number of bases/stations received scores above the overall mean, with Headquarters Battalion Henderson Hall (6.29, or above "Satisfied") receiving the highest score.

4.10.6 Conclusions for the Relationship with Your Children Life Domain for the Base and Station Respondents

The affective scores (from both respondents living with their children and those who were <u>not</u>) have not changed significantly since 2002. However, the affective means for the respondents living with their children were significantly higher than the affective means for the respondents <u>not</u> living with their children. These differences were maintained across all the other demographic subgroups examined (i.e., Pay Grade Group, race/ethnicity, and gender). The cognitive measure also showed no changes of practical significance between 2002 and 2007. Decomposing this measure by Pay Grade Group and marital/parental status showed some significant differences between the subgroups. Specifically, the differences between the lowest and highest mean scores for each of the two decompositions were found to have practical significance.

Although satisfaction in this life domain was relatively high, all the facets of satisfaction examined in this study could be considered areas for improvement since they all had satisfaction scores lower than the mean domain satisfaction score. Perhaps the best

candidate for improvement was Quality of Time with children since that facet had by far the highest influence and a relatively low satisfaction score. In contrast, the Amount of Time with children had the lowest mean satisfaction score but a relatively low influence.

The respondents' relationships with their children had a somewhat positive effect on the job performance of the respondents, but almost no effect on their plans to remain on active duty. The overall educational opportunities available to their children had a much greater impact on the respondents' plans to remain on active duty, and the Base and Station respondents, as a whole, seemed satisfied with the education their children were receiving. Exceptions to the latter were seen, however, at MCB Hawaii and MCAGCC (Twentynine Palms).

4.11 THE YOUR RELATIONSHIP WITH OTHER RELATIVES LIFE DOMAIN

4.11.1 Happiness – Affective Evaluations of the Relationship with Other Relatives Life Domain

The weighted mean affective or happiness score (Question #1) for the Your Relationship with Other Relatives life domain for the Base and Station respondents in 2007 was 4.92, i.e. only slightly below "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-114. It can be seen that 53.5 percent of the respondents indicated that they were either "Mostly Pleased" or "Pleased" with this aspect of their life, and another 12.5 percent were "Delighted." Only 16.3 percent of the respondents indicated some degree of displeasure.

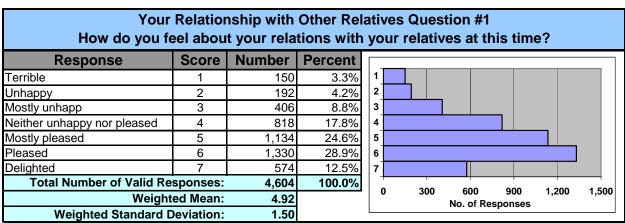


Figure 4-114. Distribution of the Overall Happiness Responses in the Your Relationship with Other Relatives Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean D-T scores for the Your Relationship with Other Relatives life domain are shown in Figure 4-115. The weighted mean dropped slightly to a value of 4.92 in 2007 from 5.04 in 2002. This change did not have any practical significance, having a Cohen's *d* statistic of 0.08.

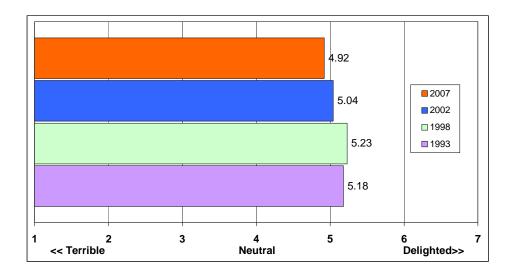


Figure 4-115. Trends in Overall Happiness in the Your Relationship with Other Relatives Life Domain for the Base and Station Respondents

Overall happiness in the Your Relationship with Other Relatives life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Your Relationship with Other Relatives life domain, decomposed by Pay Grade Group, are shown in Table 4-101. The mean happiness scores increased with Pay Grade Group for the enlisted Pay Grade Groups, but no consistent trend was seen for the officer Pay Grade Groups. The minimum happiness score of 4.83 (only 0.09 below the overall mean score for this life domain) was seen for the E-2/E-3 Pay Grade Group. The maximum happiness score, 5.30 (0.38 above the overall mean score) was seen for the E-8/E-9 and O-1 to O-3 Pay Grade Groups. The differences between the minimum and the two maxima had Cohen's *d* statistics of 0.32, or only small effect sizes.

Table 4-101. Happiness with Your Relationship with Other Relatives by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,611	4.83	1.58
E-4/E-5	1,881	4.91	1.46
E-6/E-7	543	4.97	1.48
E-8/E-9	141	5.30	1.30
WO	53	5.06	1.49
O-1 to O-3	255	5.30	1.15
O-4 to O-10	120	5.08	1.37

Figure 4-116 shows the mean affective scores decomposed by Pay Grade Group for the Relationship with Other Relatives life domain. Happiness went up in every Pay

Grade Group, with the largest increase seen for the O-4 to O-10 Pay Grade Group. However, none of the changes seen had any practical significance.

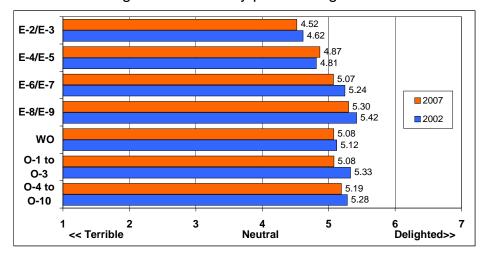


Figure 4-116. Trends in Happiness in the Your Relationship with Other Relatives Life Domain by Pay Grade Group for the Base and Station Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Your Relationship with Other Relatives life domain, decomposed by race/ethnicity, are shown in Table 4-102. The minimum mean score was 4.67, or 0.25 below the overall happiness mean, for the small number of respondents in the Native American/Aleut/Eskimo subgroup. There was no practical significance to the difference between the overall mean and this minimum mean (Cohen's *d* statistic was only 0.16). The maximum mean seen was 5.02 for the Spanish/Hispanic subgroup. Again, there was no practical significance to the difference between either the Spanish/Hispanic subgroup and the overall mean (Cohen's *d* statistic of 0.07), or between the means for the maximum and minimum subgroups (Cohen's *d* statistic of 0.22).

Table 4-102. Happiness with Your Relationship with Other Relatives by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	3,037	4.92	1.45
Black/African-American	544	4.94	1.54
Asian/Pacific Islander	174	4.97	1.52
Native American/Aleut/Eskimo	79	4.67	1.68
Spanish/Hispanic	608	5.02	1.55
Other	100	4.74	1.57

Gender. The means and standard deviations of the happiness scores for the Relationship with Other Relatives life domain, decomposed by gender, are shown in Table 4-103. Perceived happiness with the respondents' relationship with other relatives did not seem to be correlated with gender. The mean response of the males and females differed by only 0.23, a difference that had no practical significance (Cohen's *d* statistic of 0.16).

Table 4-103. Happiness with Your Relationship with Other Relatives by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,199	4.91	1.49
Female	445	5.14	1.45

Marital/Parental Status. The means and standard deviations of the happiness scores for the Your Relationship with Other Relatives life domain, decomposed by marital/parental status, are shown in Table 4-104. The means were clustered together, ranging from 4.82 for the Divorced/Widowed/Separated with Children subgroup to 5.09 for the Married without Children subgroup, and they corresponded with a response of "Mostly Pleased." The Cohen's *d* statistic of 0.19 for the difference between the maximum and minimum means indicated only a small difference between the subgroups.

Table 4-104. Happiness with Your Relationship with Other Relatives by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	114	4.82	1.46
Divorced/Widowed/Separated without Children	229	4.90	1.48
Married with Children	1,394	4.95	1.43
Married without Children	838	5.09	1.42
Never Been Married	2,021	4.87	1.56

4.11.2 Satisfaction – Cognitive Evaluations of the Relationship with Other Relatives Life Domain

The weighted mean cognitive or satisfaction score (Question #5d) in the Your Relationship with Other Relatives life domain for the Base and Station respondents in 2007 was 5.22, i.e., between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Your Relationship with Other Relatives life domain is shown in Figure 4-117. The greatest percentage of respondents (36.6 percent) was "Satisfied" with this aspect of their lives, while only 11.8 percent of the respondents indicated some level of dissatisfaction.

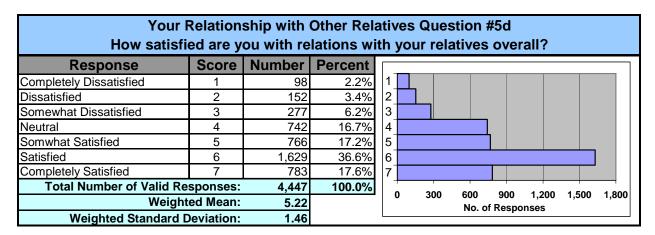


Figure 4-117. Distribution of the Overall Satisfaction Responses in the Your Relationship with Other Relatives Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean satisfaction scores in the Your Relationship with Other Relatives life domain are shown in Figure 4-118. The weighted 2007 overall satisfaction score decreased by 0.04 from the 2002 weighted level, a change that had no practical significance and which remained well below the levels found in the 1993 and 1998 QoL Studies.

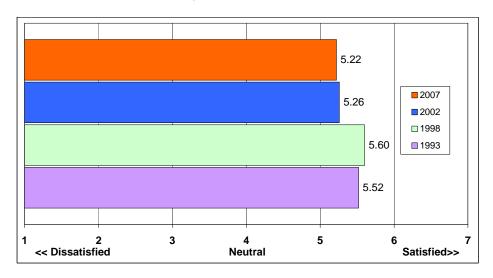


Figure 4-118. Trends in Overall Satisfaction in the Your Relationship with Other Relatives Life Domain for the Base and Station Respondents

Overall satisfaction in the Your Relationship with Other Relatives life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by Pay Grade Group, are shown in Table 4-105. The O-1 to O-3 Pay Grade Group had the maximum

mean of 5.43, while the WO Pay Grade Group had the lowest mean of 4.83. However, neither of these two scores showed a difference of practical significance when compared to the overall mean. Even the difference between the two extremes had a Cohen's *d* statistic of only 0.43, indicating a small-to-medium effect size.

Table 4-105. Satisfaction with Your Relationship with Other Relatives by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,554	5.21	1.54
E-4/E-5	1,806	5.24	1.41
E-6/E-7	533	5.22	1.42
E-8/E-9	135	5.33	1.35
WO	52	4.83	1.53
O-1 to O-3	251	5.43	1.26
O-4 to O-10	116	5.22	1.31

When the trends in overall satisfaction with the Your Relationship with Other Relatives life domain were examined by Pay Grade Group, as shown in Figure 4-119, it was seen that the WO Pay Grade Group, with a mean score decreased by 0.64 since 2002, was the Pay Grade Group with the largest change in its satisfaction level. However, even this seemingly large numerical drop represented a Cohen's *d* statistic of 0.44. Changes in satisfaction from the 2002 values in the other Pay Grade Groups had no practical significance.

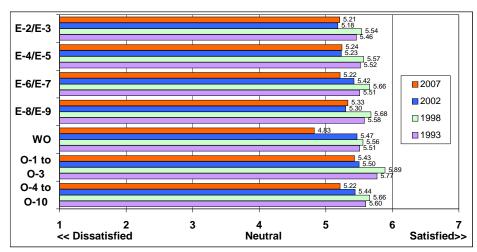


Figure 4-119. Trends in Satisfaction in the Your Relationship with Other Relatives Life Domain by Pay Grade Group for the Base and Station Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by race/ethnicity, are shown in Table 4-106. The means were closely grouped, separated by a maximum difference of only 0.15, and were clustered somewhat above the "Somewhat Satisfied" level. The racial/ethnic subgroup with the largest mean was the "Other" subgroup, with a mean of 5.28, while the racial/ethnic group with the lowest mean was the

Black/African-American subgroup, with a mean of 5.13. None of the differences between the different groups were found to have any practical significance.

Table 4-106. Satisfaction with Your Relationship with Other Relatives by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,934	5.25	1.42
Black/African-American	525	5.13	1.50
Asian/Pacific Islander	167	5.27	1.45
Native American/Aleut/Eskimo	77	5.16	1.49
Spanish/Hispanic	595	5.27	1.48
Other	94	5.28	1.57

Gender. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by gender, are shown in Table 4-107. The females rated their satisfaction with this aspect of their lives higher than did the males, but the difference seen (0.09) had no practical significance.

Table 4-107. Satisfaction with Your Relationship with Other Relatives by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,054	5.23	1.44
Female	431	5.32	1.47

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by marital/parental status, are shown in Table 4-108. The mean scores for this decomposition were quite similar (with differences ranging over only 0.29) and were in the lower portion of the "Somewhat Satisfied" to "Satisfied" range. The Divorced/Widowed/Separated with Children subgroup had the lowest mean of 5.05 while the Married without Children subgroup had the largest mean of 5.34. This difference had a Cohen's *d* statistic of only 0.20, a small effect size.

Table 4-108. Satisfaction with Your Relationship with Other Relatives by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	105	5.05	1.40
Divorced/Widowed/Separated without Children	223	5.19	1.44
Married with Children	1,348	5.21	1.38
Married without Children	825	5.34	1.43
Never Been Married	1,938	5.24	1.50

In addition to asking the respondents about their overall satisfaction with their relationships with their other relatives, Question #5 also asked about satisfaction with a series of three separate facets of this life domain. The weighted mean and standard

deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 4-120.

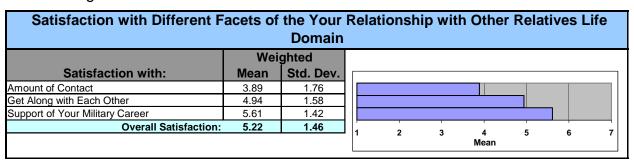


Figure 4-120. Satisfaction with Facets of Your Relationship with Other Relatives for the Base and Station Respondents

It was evident that the respondents were the least satisfied with the amount of contact with their relatives, the satisfaction for which was rated below "Neutral." The difference between this mean and the overall mean satisfaction in this life domain had a Cohen's d statistic of 0.82, a large effect size that had practical significance. However, despite this lack of contact, the mean response for satisfaction with the support given to the respondents' military careers by their relatives was scored toward the higher end of the "Somewhat Satisfied" to "Satisfied" range, and the mean satisfaction with how well the respondents and their relatives "Get Along with Each Other" corresponded to a response just below "Somewhat Satisfied." There was no practical significance in the differences seen between the mean scores of either of the latter two facets of satisfaction and the overall satisfaction with this life domain, as the two Cohen's d statistics both corresponded to small effect sizes.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with relationship with other relatives for the Base and Station respondents was performed. The results are shown in Figure 4-121. The magnitudes of the influence factors ranged from 0.225 for Amount of Contact to 0.404 for Getting Along. The diagram shown here looked remarkably similar to the analogous diagram generated from the 2002 data. Getting Along again had the greatest influence and a slightly lower satisfaction rating than the overall domain satisfaction, indicating that it might be an area where satisfaction in this life domain can be improved. Amount of Contact had by far the lowest level of satisfaction, but also the lowest influence.

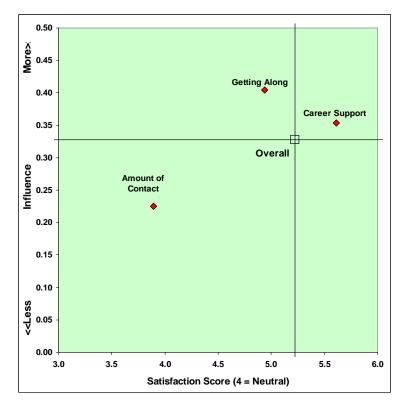


Figure 4-121. Key Driver Diagram for the Relationship with Other Relatives Life Domain for the Base and Station Respondents

4.11.3 Effect of the Relationship with Other Relatives Life Domain on Job Performance

Question #6 asked about the effect of their relationship with other relatives on the respondents' job performance. A histogram of the responses to that question is shown in Figure 4-122. The weighted mean score, 2.26, corresponded to a response in the lower portion of the "No Effect" to "Positive Effect" range. Nearly 60 percent of the respondents indicated that their relationship with other relatives had no effect on their job performance, but 30.4 percent indicated that their relationship with other relatives had some degree of positive effect. Only 9.6 percent of the respondents indicated any degree of negative effect on this measure for this life domain.

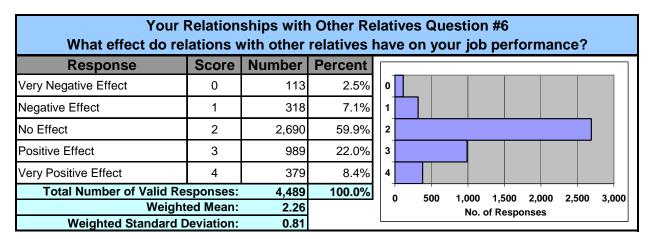


Figure 4-122. Effect of Your Relationship with Other Relatives on Job Performance for the Base and Station Respondents

4.11.4 Effect of the Relationship with Other Relatives Life Domain on Plans To Remain on Active Duty

Question #7 asked about the effect of the respondents' relationship with other relatives on the respondents' plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-123. The weighted mean score was 1.95, corresponding to a response just slightly below "No Effect." Similar to the Job Performance question discussed previously, a majority of the respondents, 61.6 percent, indicated that their relationship with other relatives had "No Effect" on their plans to remain on active duty. However, here there was more balance between the respondents who said this life domain had negative and positive impacts on their plans to remain on active duty: 20.8 percent of the respondents (a little more than two times as many when compared with the similar category on the Job Performance question) indicated that their relationship with other relatives had some level of negative effect on their active duty plans, while only 17.6 percent indicated some level of positive effect.

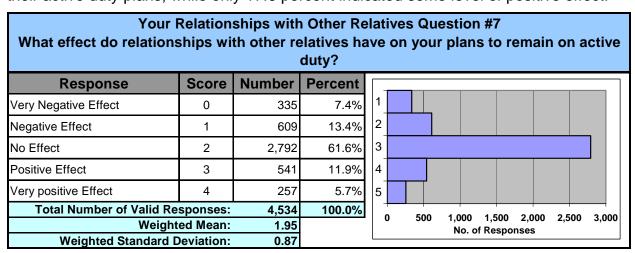


Figure 4-123. Effect of Your Relationship with Other Relatives on Plans To Remain on Active Duty for the Base and Station Respondents

4.11.5 Conclusions for the Relationship with Other Relatives Life Domain for the Base and Station Respondents

Happiness and satisfaction in the Your Relationship with Other Relatives life domain decreased in 2007 when compared with the results from the 2002 Study, but the changes had no practical significance. Decomposing the responses by Pay Grade Group, race/ethnicity, gender, and marital/parental status did not result in any significant deviations from the overall affective score. Similarly to the affective question, comparing the cognitive evaluation by race/ethnicity, gender, and marital/parental status did not result in any significant deviations from the overall satisfaction level. However, decomposing by Pay Grade Group did result in one difference, specifically for the Warrant Officers, which nearly had practical significance. The majority of the respondents indicated that this life domain had "No Effect" on job performance or on their plans to remain on active duty. However, twice as many respondents indicated this life domain had some level of negative effects on their plans to remain on active duty than it did on their job performance. To improve satisfaction in this life domain, improvements in the facet of Getting Along with relatives showed the most promise: It had the largest influence factor and a mean score lower than that of the overall domain satisfaction mean.

4.12 THE INCOME AND STANDARD OF LIVING LIFE DOMAIN

4.12.1 Happiness – Affective Evaluations of the Income and Standard of Living Life Domain

The weighted mean affective or happiness score (Question #1) for the Income and Standard of Living life domain for the Base and Station respondents in 2007 was 4.10, i.e., slightly above "Neither Unhappy Nor Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-124. A near majority of the respondents, 46.5 percent, were either "Neither Unhappy Nor Pleased" or "Mostly Pleased" with their standard of living, but a fairly large portion of respondents (33.6 percent) expressed some degree of unhappiness with their standard of living, lowering the average score.

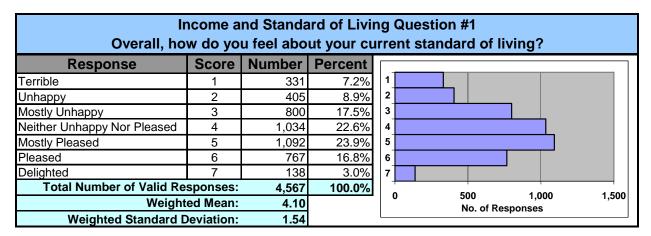


Figure 4-124. Distribution of the Overall Happiness Responses in the Income and Standard of Living Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Income and Standard of Living D-T affective scores are shown in Figure 4-125. The 2007 weighted mean Income and Standard of Living D-T score increased by 0.26 from the 2002 weighted score, but this increase had no practical significance, having a Cohen's *d* statistic of 0.17. Note that the 2007 score also tied the highest ever seen on this measure, matching the score from the 1993 QoL Study.

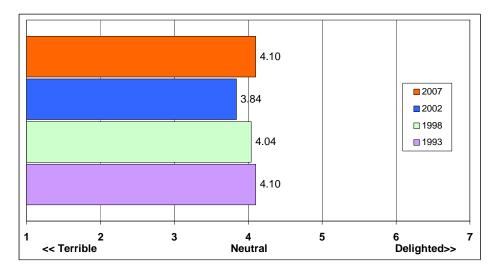


Figure 4-125. Trends in Overall Happiness in the Income and Standard of Living Life Domain for the Base and Station Respondents

Overall happiness in the Income and Standard of Living life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by Pay Grade Group, are shown in Table 4-109.

Table 4-109. Happiness with Income and Standard of Living by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,605	3.67	1.52
E-4/E-5	1,854	3.98	1.50
E-6/E-7	542	4.60	1.33
E-8/E-9	140	5.23	1.21
WO	52	4.94	1.14
O-1 to O-3	254	5.12	1.16
O-4 to O-10	120	5.41	1.07

The mean happiness scores increased within both the enlisted and officer Pay Grade Groups as pay grade increased. The minimum happiness score, 3.67 (0.43 below the overall happiness score for this life domain and well below the "neutral" score of 4.0), was seen for the E-2/E-3 Pay Grade Group; the difference between this score and the overall mean had no practical significance (Cohen's *d* statistic of 0.28). The maximum happiness score, 5.41 (1.31 above the overall happiness score for this life domain), was seen for the O-4 to O-10 Pay Grade Group; the difference between this score and the overall mean had a large practical significance (Cohen's *d* statistic of 0.99). Note also that as the Pay Grade Group increased, the standard deviations, in general, decreased, indicating that Marines in the lower Pay Grade Groups were less consistent in their individual happiness scores.

Overall happiness with the Income and Standard of Living life domain was examined by Pay Grade Group; the results are shown in Figure 4-126. Happiness increased in all Pay Grade Groups except for the E-6/E-7 Pay Grade Group, and the WO Pay Grade Group had the largest increase (0.59) between 2002 and 2007. However, this difference had no practical significance, based on its Cohen's *d* statistic of 0.39.

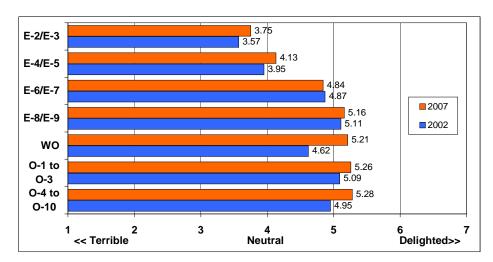


Figure 4-126. Trends in Happiness in the Income and Standard of Living Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-110. The results corresponded with the demographics of the Marine Corps population assigned and the respondents sampled at each installation. The three bases/stations with the lowest scores (MCAGCC (Twentynine Palms), Camp Lejeune and Camp Pendleton) – each of which scored below "Neither Unhappy Nor Pleased" – all had a large proportion of respondents from the lower pay grades, reflecting the population of Marines assigned to those bases. The base/station with the highest happiness score, Headquarters Battalion Henderson Hall – which had a mean score above the "Mostly Pleased" range – has a population, and a corresponding respondent sample, with a higher than normal proportion of members from higher pay grades. Also, note that MCAS Beaufort scored below the overall mean of 4.10.

Table 4-110. Happiness with Income and Standard of Living by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	131	4.02	1.56
MCB Camp Butler	366	4.16	1.53
MCB Camp Lejeune	963	3.88	1.57
MCB Camp Pendleton	977	3.89	1.50
MCAS Cherry Point	204	4.34	1.43
MCB Hawaii	164	4.40	1.48
Headquarters Battalion Henderson Hall	58	5.09	1.16
MCAS Iwakuni	127	4.31	1.53
MCAS Miramar	264	4.42	1.42
MCAS New River	189	4.24	1.50
MCRD Parris Island	201	4.38	1.47
MCB Quantico	180	4.64	1.42
MCRD San Diego	134	4.52	1.58
MCAGCC (Twentynine Palms)	276	3.87	1.49
MCAS Yuma	108	4.20	1.33

Race/Ethnicity. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by race/ethnicity, are shown in Table 4-111. The range of scores was relatively compressed, with the minimum happiness score (3.70, or 0.40 below the overall happiness score for this life domain) seen for the small number of Native American/Aleut/Eskimo subgroup and the maximum happiness score (4.28, or 0.18 above the overall happiness score for this life domain) seen for the Black/African American subgroup. These differences had no practical significance (Cohen's *d* statistic of 0.32). The largest subgroup, Whites, scored just slightly below the overall mean, while the fast-growing Spanish/Hispanic subgroup scored 0.05 above the overall mean.

Table 4-111. Happiness with Income and Standard of Living by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	3,024	4.08	1.52
Black/African-American	536	4.28	1.47
Asian/Pacific Islander	172	4.08	1.58
Native American/Aleut/Eskimo	77	3.70	1.54
Spanish/Hispanic	600	4.15	1.58
Other	99	3.77	1.68

Gender. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by gender, are shown in Table 4-112. The average score for the female respondents was 4.40, or 0.30 above the overall happiness score for this life domain and 0.34 greater than that for the male respondents. The differences seen here had no practical significance.

Table 4-112. Happiness with Income and Standard of Living by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,164	4.06	1.54
Female	441	4.40	1.49

Marital/Parental Status. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by marital/parental status, are shown in Table 4-113. The mean scores were highest for married Marines, decreased for divorced/widowed/separated Marines, and decreased more sharply for never-married Marines. Note that the happiness of the Marines with children with their income and standard of living was higher than that of Marines without children, independent of the current marital status of those Marines, although the differences seen had no practical significance within each marital group. The Never Been Married subgroup had a mean happiness score of 3.67, or 0.43 below the overall happiness score for this life domain but that difference had no practical significance (Cohen's d statistic of 0.28). Although not shown in the table, the Never Been Married subgroup was the only subgroup for which "Mostly Pleased" was not the most frequently chosen response. Instead, "Neither Unhappy Nor Pleased" was chosen by the largest number (513, or almost 26 percent) of the Never Been Married respondents. Perhaps more tellingly, 460 of the Never Been Married respondents chose the two lowest responses ("Terrible" and "Unhappy"), while only 239 chose the two highest responses ("Pleased" and "Delighted").

Table 4-113. Happiness with Income and Standard of Living by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	112	4.18	1.40
Divorced/Widowed/Separated without Children	224	4.08	1.54
Married with Children	1,383	4.55	1.42
Married without Children	841	4.36	1.49
Never Been Married	1,996	3.67	1.52

4.12.2 Satisfaction – Cognitive Evaluations of the Income and Standard of Living Life Domain

The weighted mean cognitive or satisfaction score (Question #10g) in the Income and Standard of Living life domain for the Base and Station respondents in 2007 was 3.98, just slightly under "Neutral" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Income and Standard of Living life domain is shown in Figure 4-127. The responses from the overall sample were distributed fairly evenly over many of the seven response options, with the highest percentage of respondents, 19.0 percent, responding that they were "Somewhat Satisfied" with their current financial situation overall. Note that there were only slight differences in the percentages of Marines who responded that they were "Somewhat

Dissatisfied," "Neutral," "Somewhat Satisfied," or "Satisfied" with their financial situation. That is, the percentages of respondents were relatively consistent for scores 3 through 6.

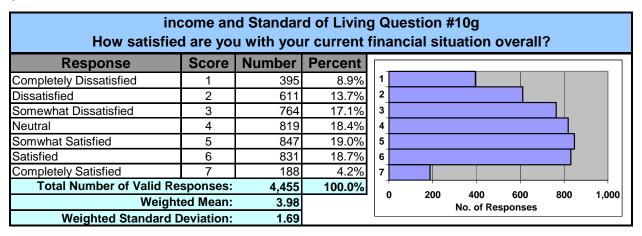


Figure 4-127. Distribution of the Overall Satisfaction Responses in the Income and Standard of Living Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Income and Standard of Living satisfaction scores are shown in Figure 4-128. The 2007 weighted mean satisfaction score for Income and Standard of Living increased by 0.35 from the 2002 weighted score, but this increase had no practical significance, having a Cohen's *d* statistic of 0.20. Note, however, that it was the highest mean cognitive score ever computed for this life domain.

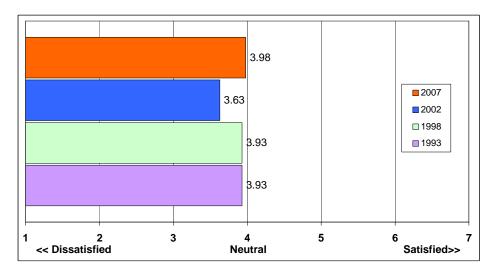


Figure 4-128. Trends in Overall Satisfaction in the Income and Standard of Living Life Domain for the Base and Station Respondents

Overall satisfaction in the Income and Standard of Living life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, base/station to which the respondent was

assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by Pay Grade Group, are shown in Table 4-114.

Table 4-114. Satisfaction with Income and Standard of Living by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,539	3.51	1.65
E-4/E-5	1,827	3.93	1.64
E-6/E-7	532	4.36	1.62
E-8/E-9	139	5.04	1.30
WO	51	4.71	1.53
O-1 to O-3	252	5.01	1.43
O-4 to O-10	115	5.40	1.17

As was the case for the affective measure, the mean satisfaction scores increased within both the enlisted and officer Pay Grade Groups as pay grade increased. The minimum satisfaction score, 3.51 (0.47 below the overall satisfaction score for this life domain and well below the "neutral" score of 4.0), was seen for the E-2/E-3 Pay Grade Group. However the difference between this score and the overall satisfaction mean had no practical significance (Cohen's *d* statistic of 0.28). The maximum happiness score, 5.40 (1.42 above the overall satisfaction score for this life domain), was seen for the O-4 to O-10 Pay Grade Group. The difference from the overall mean satisfaction score did have practical significance for this Pay Grade Group (the Cohen's *d* statistic was 0.98, indicating a large effect size). Note also that the standard deviations were, in general, inversely proportional to Pay Grade Group within the enlisted and officer groups, indicating that Marines in the lower Pay Grade Groups had a broader variance in their individual satisfaction scores.

When the trends in overall satisfaction with the Income and Standard of Living life domain was examined by Pay Grade Group, as shown in Figure 4-129, increases were seen in every Pay Grade Group between the results from 2002 and those from 2007. For the 2007 Study, five of the seven Pay Grade Groups (E-4/E-5, E-6/E-7, E-8/E-9, WO, and O-4 to O-10) recorded the highest mean score for satisfaction in this life domain ever seen in the four Marine Corps QoL studies. The mean score for the WO Pay Grade Group increased the most, from 4.14 in 2002 to 4.71 in 2007, but this increase had no practical significance, having a Cohen's *d* statistic of 0.36. Other Pay Grade Groups experienced similar, although slightly smaller, gains in 2007.

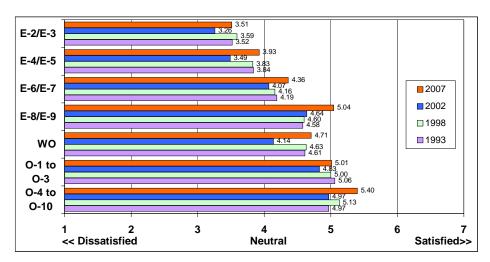


Figure 4-129. Trends in Satisfaction in the Income and Standard of Living Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by the base/station to which the respondent was assigned, are shown in Table 4-115. The mean satisfaction scores varied widely, from a minimum score of 3.65 at Camp Pendleton (0.33 below the overall satisfaction score for this life domain) to a maximum satisfaction score of 5.11 for Headquarters Battalion Henderson Hall (1.13 above the overall satisfaction score for this life domain). The five bases/stations that scored below the overall mean satisfaction score for this life domain were (in ascending order) Camp Pendleton, MCAGCC (Twentynine Palms), Camp Lejeune, MCAS Beaufort, and MCAS Yuma. Note that this list, while it comprises only 5 of the 15 bases/stations considered here, contained three of the largest bases/stations. It can be argued that the results from the three larger bases/stations drove the overall results, since the respondent groups from those installations included so many of the relatively dissatisfied members of the two lower Pay Grade Groups. However, note that MCAS Yuma and MCAS Beaufort scored slightly below the overall mean of 3.98 and were not "large" bases/stations.

Table 4-115. Satisfaction with Income and Standard of Living by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	131	3.91	1.73
MCB Camp Butler	360	4.27	1.65
MCB Camp Lejeune	941	3.88	1.74
MCB Camp Pendleton	946	3.65	1.64
MCAS Cherry Point	200	4.21	1.59
MCB Hawaii	161	4.17	1.62
Headquarters Battalion Henderson Hall	56	5.11	1.55
MCAS Iwakuni	127	4.41	1.62
MCAS Miramar	259	4.17	1.62
MCAS New River	183	4.03	1.65
MCRD Parris Island	199	4.29	1.65
MCB Quantico	177	4.30	1.61
MCRD San Diego	128	4.40	1.58
MCAGCC (Twentynine Palms)	264	3.81	1.69
MCAS Yuma	106	3.92	1.56

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by race/ethnicity, are shown in Table 4-116. The range of scores was relatively compressed, with the minimum satisfaction score (3.61, or 0.37 below the overall satisfaction score for this life domain) seen for the small number of Native American/Aleut/Eskimo respondents and the maximum happiness score (4.17, or 0.19 above the overall happiness score for this life domain) seen for the Asian/Pacific Islander subgroup. The largest subgroup, Whites, scored just slightly below the overall mean, while the fast-growing Spanish/Hispanic subgroup scored slightly above the overall mean. None of the differences seen here had any practical significance.

Table 4-116. Satisfaction with Income and Standard of Living by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,953	3.97	1.69
Black/African-American	524	4.08	1.66
Asian/Pacific Islander	168	4.17	1.64
Native American/Aleut/Eskimo	76	3.61	1.66
Spanish/Hispanic	582	3.99	1.68
Other	90	3.89	1.57

Gender. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by gender, are shown in Table 4-117. The average score for the female respondents was 4.27, or 0.29 above the overall satisfaction score for this life domain and 0.32 greater than that for the male respondents. This difference had no practical significance.

Table 4-117. Satisfaction with Income and Standard of Living by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,056	3.95	1.68
Female	440	4.27	1.68

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by marital/parental status, are shown in Table 4-118. The mean scores were highest for married Marines, decreased for the divorced/separated/widowed Marines, and decreased even further for those Marines that have never been married. The trend seen in the affective question for parental status was less apparent on this cognitive question, but it still appeared that parents, whatever their marital status, were at least as satisfied with their financial situation as the married or divorced/widowed/separated Marines who were not parents.

Table 4-118. Satisfaction with Income and Standard of Living by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	112	3.85	1.55
Divorced/Widowed/Separated without Children	222	3.86	1.69
Married with Children	1,363	4.30	1.67
Married without Children	822	4.13	1.67
Never Been Married	1,928	3.73	1.65

The mean satisfaction score for the Never Been Married subgroup, was 3.73 (0.25 below the overall satisfaction score for this life domain). However, none of the differences seen here had any practical significance. Although not shown in the table, the Never Been Married subgroup was the only subgroup for which "Mostly Pleased" or "Pleased" was not the most frequently chosen response. Instead, "Neither Unhappy Nor Pleased" was chosen by the largest number (414, or almost 20 percent) of the Never Been Married respondents. Perhaps more tellingly, 523 of the Never Been Married respondents expressed some degree of dissatisfaction with their financial situation, while only 329 expressed any degree of satisfaction.

In addition to asking the respondents about their overall satisfaction with their financial situation, Question #10 also asked about satisfaction with a series of six separate facets of standard of living. The weighted mean and standard deviation scores for each of these facets are shown in Figure 4-130.

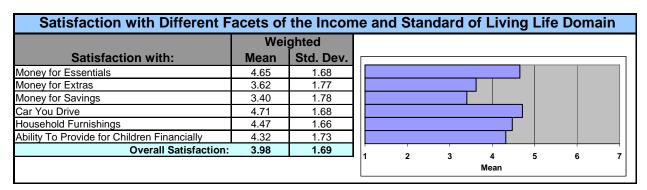


Figure 4-130. Satisfaction with Facets of Income and Standard of Living for the Base and Station Respondents

The two minimum mean scores (and the two highest standard deviations) were seen for Money for Extras and Money for Savings. Further analysis indicated that the reason for this was that there were large disparities in satisfaction between the different Pay Grade Groups for those facets of this life domain. Figure 4-131 shows the histogram of responses for satisfaction with Money for Savings. Not only did a majority (54.1 percent) of the Base and Station respondent sample indicated some degree of dissatisfaction with the amount of money they had available for savings, but the option chosen by the largest number of respondents, 18.8 percent, was "Completely Dissatisfied."

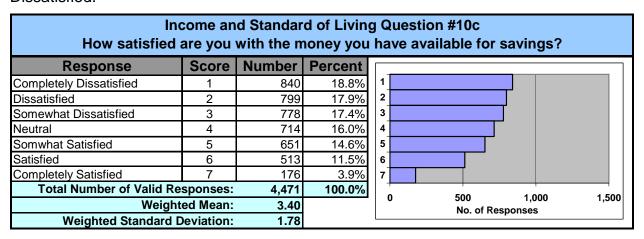


Figure 4-131. Satisfaction with Amount of Income Available for Savings for the Base and Station Respondents

When the responses to this question (#10c) were examined by Pay Grade Group, the minimum mean score, 3.10, was seen for the respondents in the E-2/E-3 Pay Grade Group, and the maximum mean score, 4.77, was seen for the respondents in the O-4 to O-10 Pay Grade Group. This disparity among the different Pay Grade Groups indicated that lower ranking Marines were much less satisfied with the money they have for savings than were their higher ranking counterparts. Similar trends were seen when the facet of Money for Extras (Question #10b) was examined.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with income and standard of living for those Base and Station respondents with children was performed. The results are shown in Figure 4-132. The results indicated that overall satisfaction with Income and Standard of Living was most strongly influenced by satisfaction with Money for Extras and Money for Savings, followed by satisfaction with the Ability To Provide for Children. In addition to having a stronger influence on overall satisfaction, Money for Extras and Money for Savings also had mean satisfaction scores that fell well below the overall mean satisfaction score for the Base and Station respondents with children, denoting that these facets had relatively high potential as areas for improvement that could influence higher overall satisfaction with the financial situation for those respondents. These two facets of income and standard of living also were the most influential in the 2002 QoL Study results, although their order of priority was reversed. All other facets had mean satisfaction scores that were above the overall mean, and thus showed less opportunity for improving satisfaction. The ability to provide for children had the third highest influence, but also was scored relatively highly, indicating that its ability to improve quality of life in this life domain may be limited.

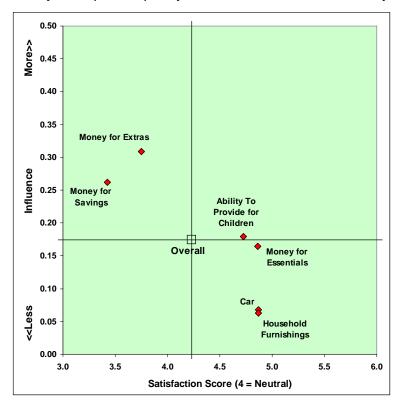


Figure 4-132. Key Driver Diagram for the Income and Standard of Living Life Domain for the Base and Station Respondents with Children

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with income and standard of living for those Base and Station respondents without children was performed. The results are shown in Figure 4-133.

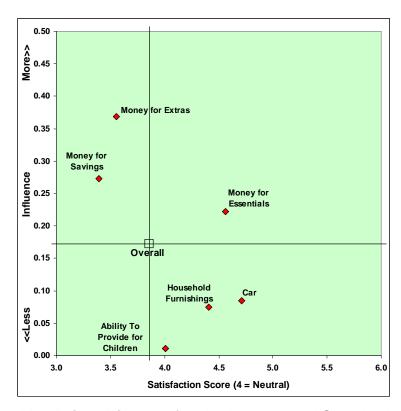


Figure 4-133. Key Driver Diagram for the Income and Standard of Living Life Domain for the Base and Station Respondents without Children

In general, the results were somewhat similar to the results derived for the Base and Station respondents with children, and indicated that overall satisfaction in this life domain again was most strongly influenced by satisfaction with Money for Extras and Money for Savings, although the influence values were slightly higher for the Base and Station respondents without children. Satisfaction with Money for Essentials had a stronger influence for the Base and Station respondents without children than for those respondents with children. Not unexpectedly, the satisfaction with the Ability To Provide for Children was by far the least influential facet for this subgroup, for which it had little applicability ⁶³. In addition to having a stronger influence on overall satisfaction, the Money for Extras and Money for Savings facets also had mean satisfaction scores that fell well below the overall mean satisfaction score, denoting that these facets had relatively high potential as areas for improvement that could influence higher overall satisfaction with the financial situation for Base and Station respondents without children. All other facets of satisfaction had mean scores that were above the overall mean.

⁶³ Note that the absolute value of the beta weights is shown in the Key Driver Diagram as the influence value. The actual calculated value for the Ability To Provide for Children facet from the regression analysis was -0.011, indicating an inverse relationship. However, the effect of this facet was extremely marginal due to the small magnitude of the influence value.

Money for Extras and Money for Savings also were the most influential in the 2002 QoL Study results, although their order of priority was reversed; the influence of Money for Essentials has increased noticeably since 2002, rising above that of the overall mean.

4.12.3 Effect of Income and Standard of Living on Job Performance

Question #11 asked about the effect of the respondents' financial situations on their job performance. A histogram of the responses to that question is shown in Figure 4-134.

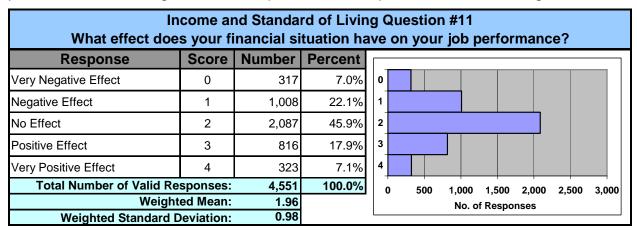


Figure 4-134. Effect of Income and Standard of Living on Job Performance for the Base and Station Respondents

The weighted mean score for this question was 1.96, just slightly below "No Effect" on the five point scale. Nearly half (45.9 percent) of the respondents answered that their financial situation had no effect on their job performance. However, more respondents (1,325, or 29.1 percent) said their financial situation had a negative effect than said that their financial situation had a positive effect (1,139, or 25.0 percent). Both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (1.75 and 1.92, respectively) somewhat below the overall mean for the question. Recall that these Marines tended to have the lowest happiness and satisfaction scores in this life domain.

4.12.4 Effect of Income and Standard of Living on Plans To Remain on Active Duty

Question #12 asked about the effect of the respondents' financial situations on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-135.

Income and Standard of Living Question #12 What effect does your financial situation have on your plans to remain on active duty?											
Response	Score	Number	Percent								
Very Negative Effect	0	741	16.2%	0							
Negative Effect	1	970	21.2%	1							
No Effect	2	1,601	35.0%	2							
Positive Effect	3	843	18.4%	3							
Very Positive Effect	4	415	9.1%	4							
Total Number of Valid Re	sponses:	4,570	100.0%)	500	1.000	1.500	2,000	2,500	3,000
Weight	ted Mean:	1.82			2,300						
Weighted Standard I	Deviation:	1.17		<u> </u>							

Figure 4-135. Effect of Income and Standard of Living on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 1.82, or somewhat below "No Effect." The response chosen by the largest number of respondents was "No Effect," which was chosen by 35.0 percent of the respondents. More respondents (1,711, or 37.4 percent) said their financial situation had a negative effect on their plans to remain on active duty than said that their financial situation had a positive effect (1,258, or 27.5 percent). Again, the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (1.56 and 1.78, respectively) less than the overall mean. Once again, since these Marines tended to have the lowest happiness and satisfaction scores in this life domain, the impact of those perceptions on their plans to remain on active duty may be cause for some concern.

4.12.5 Other, Life Domain-Specific Analyses

The responses to a number of other questions specific to this life domain were examined. The results are presented below.

Question #2 asked the respondents if they had experienced any of a set of financial hardships since arriving at their present duty location. Table 4-119 shows the percentage of responses to each hardship for the 2007 Base and Station respondent sample, as well as response percentages from previous Marine Corps QoL studies.⁶⁴

⁶⁴ Data for previous Marine Corps QoL studies was taken from Table 3-12 on p. 3-41 of the 2002 QoL Study Report.

Table 4-119. Financial Hardships Experienced by Base and Station Respondents in Each Marine Corps QoL Study

	Percentage Who Experienced			
Financial Hardship	1993	1998	2002	2007
Difficulty Meeting Monthly Obligations	*	*	*	28.84%
Letter of Indebtedness to Your Command	4.8%	7.6%	7.2%	3.39%
Reposession of Something Purchased	1.4%	1.7%	2.2%	1.72%
Bankruptcy	1.1%	1.2%	1.4%	0.73%
Crisis Loan from Military Relief	8.3%	6.7%	5.4%	3.56%
Trouble over Child Support Payments	2.1%	2.8%	3.1%	2.14%
None of the Above	85.7%	83.0%	84.6%	63.50%

^{*} This response was not included in the Active Duty Marine survey instrument prior to 2007.

At first glance, the responses for 2007 appear alarming: Only 63.50 percent of the Base and Station respondents in 2007 answered that they had experienced none of the financial hardships listed in Question #2, while the equivalent figures for the earlier Marine Corps QoL studies all were about 84 percent. However, when the "Difficulty meeting monthly obligations" responses are combined with the "None of the Above responses," as was implicitly done in the previous QoL studies, the percentage for the 2007 data rises to 92.34 percent. Thus, the results from 2007 actually look favorable when compared on a consistent basis.

The percentage of responses to all other financial hardships that had been listed as selections in the previous Marine Corps QoL studies, remained relatively low: The percentages were halved for several responses – e.g., for letters of indebtedness and bankruptcies – from those seen in the 2002 QoL Study. The financial hardship added to Question #2 for the 2007 QoL Study, "Difficulty Meeting Monthly Obligations." was selected by 28.8 percent of the respondents, by far the most frequently chosen financial hardship among Base and Station Marine respondents.

An attempt was made to see if Marines at any single base/station or group of bases/stations were more likely to hold second (civilian) jobs primarily for financial reasons.

Question #4 asked the respondents if they had such a job, and Question #5 asked them to select from a list of options the main reason why they had that second job. Table 4-120 shows the number or respondents who indicated that they had a second (civilian) job at each base/station, the number of respondents that selected Option 3 ("To earn additional income"), the number of respondents who selected Option 6 ("To meet financial obligations"), and the percentage of respondents to the question who selected either Option 3 or Option 6.⁶⁵

⁶⁵ These two options were the focus of this analysis because it was believed they indicated a financial need for the job, rather than a desire to fill spare time, gain career training, etc. However, it is recognized that Option 3, "To earn additional income," may have been chosen by many respondents who merely wanted, rather than needed, the extra income provided.

Table 4-120. Percentage of Base and Station Respondents with a Second Job To Earn Additional Income or To Meet Financial Obligations

Number of Respondents Indicating

		Number of Respo		
		Main Reason for	Second Job Was:	
	Number of			
	Respondents	To Earn	To Meet	Percentage
	Indicating	Additional	Financial	Selecting
	They Held a	Income	Obligations	Option 3 or
Base/Station	Second Job	(Option 3)	(Option 6)	Option 6
MCAS Beaufort	19	11	6	89.5%
MCB Camp Butler	12	7	0	58.3%
MCB Camp Lejeune	86	35	25	69.8%
MCB Camp Pendleton	121	60	32	76.0%
MCAS Cherry Point	21	12	6	85.7%
MCB Hawaii	13	5	3	61.5%
Headquarters Battalion Henderson Hall	13	9	2	84.6%
MCAS Iwakuni	11	7	0	63.6%
MCAS Miramar	20	11	3	70.0%
MCAS New River	15	12	1	86.7%
MCRD Parris Island	22	9	4	59.1%
MCB Quantico	28	16	7	82.1%
MCRD San Diego	17	7	0	41.2%
MCAGCC (Twentynine Palms)	16	9	4	81.3%
MCAS Yuma	14	4	7	78.6%

The majority of the respondents at every base/station (with the exception of MCRD San Diego) who indicated they had a second job selected either Option 3 or Option 6, indicating that the main reason for having that second job was likely to be some degree of financial need.

Although not shown in the table, the highest percentage of respondents from any base/station who answered Question #5 (thereby indicating that they had a second job) was at Headquarters Battalion Henderson Hall, where 22.4 percent of the respondents from that base indicated that they held a second job. Also, noteworthy for responding to Question #5 were the respondents from MCB Quantico (15.1 percent) and MCAS Beaufort (13.7 percent). Out of the respondents who answered Question #5, more than half were in the E-2/E-3 or E-4/E-5 Pay Grade Groups. Note also that only about one-third of the respondents to Question #5 chose Option 6, clearly indicating the need for the second job to meet their financial obligations.

Question #7 asked the respondents to select how much money certain Marine Corpsprovided benefits saved them by choosing one of the following answers: "Does Not Apply," "Nothing at All," "A Little," "Some," "Quite a Bit," or "A Great Deal." Table 4-121 shows the percentage of respondents at each base/station who answered that these amenities or benefits saved them either "Quite a Bit" or "A Great Deal," which will be collectively referred to as the percentage of respondents who 'reported favorably' on a benefit. The results for each of the five benefits will be discussed in turn.

Table 4-121. Percentages of Base and Station Respondents Who Save "Quite a Bit' or "A Great Deal" Using Marine Corps Benefits and Amenities (by Base/Station)

	Percentage of Respondents Answering That These Aspects Save Them "Quite a Bit" or "A Great Deal"				
Base/Station	Base Exchange	Commissary	Military Childcare	Health Care Benefits	Military Housing
MCAS Beaufort	3.8%	24.8%	22.9%	60.5%	14.6%
MCB Camp Butler	13.4%	26.7%	14.5%	59.8%	34.9%
MCB Camp Lejeune	8.6%	20.5%	23.9%	54.9%	16.0%
MCB Camp Pendleton	10.5%	25.1%	22.7%	51.8%	16.3%
MCAS Cherry Point	8.0%	21.8%	11.5%	62.2%	14.7%
MCB Hawaii	19.0%	48.8%	25.6%	60.4%	27.0%
Headquarters Battalion Henderson Hall	12.3%	49.1%	27.3%	61.4%	7.0%
MCAS Iwakuni	8.6%	28.1%	12.0%	55.6%	38.6%
MCAS Miramar	13.6%	33.7%	31.6%	64.2%	22.8%
MCAS New River	9.1%	22.3%	24.1%	68.5%	12.4%
MCRD Parris Island	7.0%	21.5%	15.7%	63.5%	17.4%
MCB Quantico	6.6%	33.9%	25.9%	71.6%	14.8%
MCRD San Diego	18.5%	29.3%	24.2%	54.5%	24.6%
MCAGCC (Twentynine Palms)	8.3%	27.4%	25.4%	62.2%	25.0%
MCAS Yuma	5.4%	23.4%	11.1%	65.8%	18.0%

- The Base Exchange saved from 3.8 percent to 19.0 percent of the respondents "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting favorably on this benefit were at MCAS Beaufort (percentage given above), MCAS Yuma (5.4 percent) and MCB Quantico (6.6 percent). The highest percentages of respondents reporting favorably on this benefit were at MCB Hawaii (percentage given above), MCRD San Diego (18.5 percent), MCAS Miramar (13.6 percent) and Camp Butler (13.4 percent). Perhaps surprisingly given how highly MCB Hawaii and Camp Butler were rated, only 8.6 percent of the respondents reported favorably on this benefit at MCAS Iwakuni, the other OCONUS installation.
- The Commissary saved from 20.5 percent to 49.1 percent of the respondents "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting favorably on this benefit were at Camp Lejeune (percentage given above), MCRD Parris Island (21.5 percent) and MCAS Cherry Point (21.8 percent). The highest percentages of respondents reporting favorably on this benefit were at Headquarters Battalion Henderson Hall (percentage given above), and MCB Hawaii (48.8 percent).
- Military Childcare was treated somewhat differently from the other benefits/amenities examined in this question since many respondents e.g., non-parents (who were instructed to answer "Does not apply"), did not take advantage of that option: Utilization ranged only from about 15 percent at MCAS Miramar and MCB Quantico to about 27 percent at MCRD Parris Island and MCAS Beaufort. To get a better perspective on the opinions of the respondents who did take advantage of this option, the percentages shown in the table were computed using only the opinions of the respondents who gave a valid response other than "Does not apply." The number of such "applicable" respondents ranged from 11 at Headquarters Battalion Henderson Hall (MCAS Iwakuni had the second smallest number of applicable

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respondents, 25) to 207 at Camp Pendleton (Camp Lejeune had the second larges number of applicable respondents, 176⁶⁶).

Using these criteria, the 15 bases/stations broke down into four groups. At the lowest end were three bases/stations (MCAS Yuma, MCAS Cherry Point and MCAS Iwakuni) at which only 11 to 12 percent of the applicable respondents reported favorably on Military Childcare. The second group comprised Camp Butler and MCRD Parris Island, at which from 14.5 to about 16 percent of the applicable respondents reported favorably on Military Childcare. The third group comprised nine bases/stations at which the number of applicable respondents who reported favorably on Military Childcare ranged from almost 23 percent to just over 27 percent. At the top of the list was MCAS Miramar, where 31.6 percent of the applicable respondents reported favorably on Military Childcare.

- Health Care Benefits saved from 51.8 percent to 71.6 percent of the respondents
 "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting
 favorably on this benefit were at Camp Pendleton (percentage given above), MCRD
 San Diego (54.5 percent) and Camp Lejeune (54.9 percent). The highest
 percentages of respondents reporting favorably on this benefit were at MCB
 Quantico (percentage given above), MCAS New River (68.5 percent), and MCAS
 Yuma (65.8 percent).
- Military Housing saved from 7.0 percent to 38.6 percent of the respondents "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting favorably on this benefit were at Headquarters Battalion Henderson Hall (percentage given above), which was chosen by only about half as many respondents (on a percentage basis) as the next lowest installation, MCAS New River (12.4 percent). MCAS Beaufort, MCAS Cherry Point and MCB Quantico all received favorable reports from between 14.6 percent and 14.8 percent of the respondents from those installations. The highest percentages of respondents reporting favorably on this benefit were at MCAS lwakuni (percentage given above), Camp Butler (34.9 percent), MCB Hawaii (27.0 percent), MCAGCC (Twentynine Palms) (25.0 percent), and MCRD San Diego (24.6 percent).

When looked at in the aggregate, several insights could be drawn. MCAS Cherry Point was among the lowest-ranked bases/stations in terms of the percentages of respondents each base/station reporting favorably on a benefit for three of the five benefits considered and was never among the highest-ranked bases/stations. Camp Lejeune suffered a similar fate: It was among the lowest-ranked bases/stations on two of the five benefits and never was among the highest-ranked. MCAS Beaufort, MCB Quantico and MCAS Yuma also were among the lowest-ranked bases/stations on two of the five benefits, but were among the highest-ranked on one of the benefits. On the other end of the spectrum, MCB Hawaii was among the highest-ranked bases/stations

⁶⁶ It is interesting to note in the graphics and discussion that accompanied the analysis of the responses to Questions #7 and #9 in the Relationship with Your Children life domain (presented earlier), that only from 7 to 77 of the respondents from the 15 bases/stations considered said they used professional childcare, which comprised both civilian and military options and which, thus, should have been expected to result in larger pools of respondents than were seen here.

on four of the five benefits considered here. MCRD San Diego was among the highest-ranked bases/stations on three of the five benefits considered, but also was among the lowest-ranked on one of the five benefits. Camp Butler was among the highest-ranked bases/stations on two of the five benefits considered, but also was among the lowest-ranked on one of the five benefits.

Question #8 asked the respondents to select where they shopped for food. Figure 4-136 shows the percentage of responses for each food shopping location selection. The distribution of responses was relatively balanced between civilian stores and the commissary, but with a slightly higher use of the commissary.

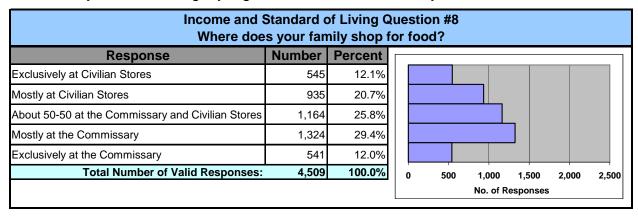


Figure 4-136. Commissary Patronage by the Base and Station Respondents

Question #9 asked the respondents to select where they shopped for clothing, personal items, and household items. Figure 4-137 shows the percentage of responses for each shopping location selection. A total of 67.5 percent of the respondents answered that they shopped mostly or exclusively at civilian stores for these items. The equivalent figure for the Exchange was only 12.2 percent.

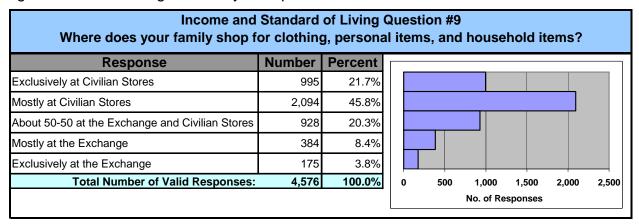


Figure 4-137. Exchange Patronage by the Base and Station Respondents

4.12.6 Conclusions for the Income and Standard of Living Life Domain for the Base and Station Respondents

Satisfaction and happiness with income and standard of living for the Base and Station Marines generally improved, in 2007 when compared with the 2002 Study (and, indeed with either of the earlier Marine Corps QoL studies), but have, in general, been relatively consistent in all four Marine Corps QoL studies, ranking at or near the neutral level. Respondents in the lower Pay Grade Groups were, in general, significantly less satisfied with their income and standard of living than their higher-ranking counterparts. Two sources of dissatisfaction were a perceived lack of money for savings and for extras. There also were indications that about one-quarter of the respondents had a difficult time meeting their monthly financial obligations. Marital status also seemed to be a factor in satisfaction and happiness with income and standard of living: Respondents who had never been married were more negative in their responses than other Marines and Marines with children were happier and more satisfied than their counterparts without children, regardless of their current marital status. This is logical, since a greater percentage of respondents who had never been married were in lower Pay Grade Groups. Race/ethnicity and gender were not significant factors influencing satisfaction or happiness with income and standard of living. Two facets of this life domain showed promise in improving domain satisfaction for respondents both with and without children: Money for Extras and Money for Savings. Both had low satisfaction scores and high influence, making them the best area for improvement. The general dissatisfaction and unhappiness among Marines in the lower Pay Grade Groups affected both their job performance and their plans to remain on active duty in a negative way, especially the latter.

With respect to the benefits Marines receive, the responses were very location-dependent, but indicated that health care benefits are of great help to Marines' financial situation. Shopping for food at the USMC commissary seemed to be a source of savings for some Marines.

4.13 THE MILITARY JOB LIFE DOMAIN

4.13.1 Happiness – Affective Evaluations of the Military Job Life Domain

The weighted mean affective or happiness score (Question #1) for the Military Job life domain for the Base and Station respondents in 2007 was 4.06, slightly above "Neither Unhappy Nor Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-138. It can be seen that 42.3 percent of the Base and Station respondents answered they were in some way happy with the state of their job, slightly more than the 34.8 percent who were unhappy.

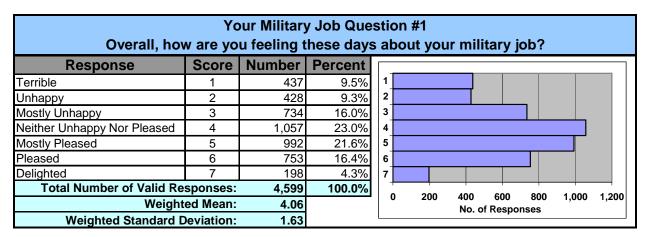


Figure 4-138. Distribution of the Overall Happiness Responses in the Military Job
Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Military Job affective scores are shown in Figure 4-139. The 2007 weighted mean D-T score increased slightly (by 0.06) from the 2002 weighted score, similar to the magnitude of the increase seen in the 1998 QoL Study over 1993 QoL Study. However, the increase from 2002 was not of practical significance, having a Cohen's *d* statistic of 0.04.

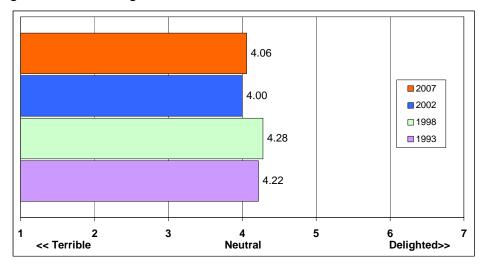


Figure 4-139. Trends in Overall Happiness in the Military Job Life Domain for the Base and Station Respondents

Overall happiness in the Military Job life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by Pay Grade Group, are shown in Table 4-122.

Table 4-122. Happiness with Military Job by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,622	3.76	1.66
E-4/E-5	1,870	3.94	1.57
E-6/E-7	535	4.46	1.58
E-8/E-9	143	5.08	1.33
WO	53	4.77	1.49
O-1 to O-3	256	4.57	1.47
O-4 to O-10	120	4.92	1.39

Some noticeable differences appeared within this decomposition. The subgroup scores ranged widely, from below "Neither Unhappy Nor Pleased" for the E-2/E-3 Pay Grade Group to above "Mostly Pleased" for the E-8/E-9 Pay Grade Group. The mean scores in the enlisted Pay Grade Groups increased with pay grade, but there was no clear trend for the officer Pay Grade Groups. The E-2/E-3 Pay Grade Group had the lowest mean affective score (3.76, or 0.30 below the overall affective mean), while the E-8/E-9 Pay Grade Group had the highest mean affective score (5.08, or 1.02 above the overall affective mean). This difference had a practical significance, with a Cohen's *d* statistic of 0.88, indicating a large effect size.

When the trends in overall happiness with the Military Job life domain were examined by Pay Grade Group, as shown in Figure 4-140, increases generally were seen between the results from 2002 and those from 2007. Overall five of the seven Pay Grade Group scores increased between 2002 and 2007; however, scores for the E-2/E-3 and E-4/E-5 Pay Grade Groups were still below "Neither Unhappy Nor Pleased." The two exceptions to the general trend of increases since 2002 were seen for the E-6/E-7 and O-1 to O-3 Pay Grade Groups, where happiness declined slightly (to 4.57 and 4.46, respectively), values that were still solidly about halfway between "Neither Unhappy Nor Pleased" and "Mostly Pleased." Only the E-8/E-9 Pay Grade Group had a score above "Mostly Pleased." It also can be seen that the two lowest Pay Grade Groups had the lowest mean happiness scores. Although none of the changes seen here had practical significance (all the differences had Cohen's *d* statistics below 0.1), this should not obscure the fact that an overall increase in happiness for the two lowest Pay Grade Groups occurred in the 2007 sample.

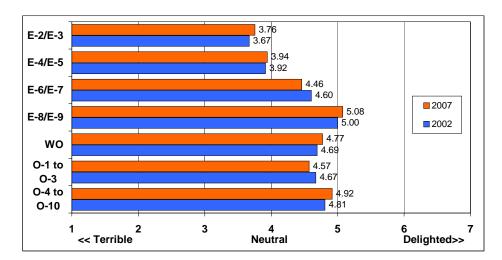


Figure 4-140. Trends in Happiness in the Military Job Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-123.

Table 4-123. Happiness with Military Job by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	136	4.13	1.54
MCB Camp Butler	369	4.04	1.65
MCB Camp Lejeune	975	3.86	1.64
MCB Camp Pendleton	982	3.84	1.64
MCAS Cherry Point	210	4.20	1.49
MCB Hawaii	164	4.26	1.53
Headquarters Battalion Henderson Hall	57	4.81	1.42
MCAS Iwakuni	127	4.22	1.62
MCAS Miramar	261	4.31	1.57
MCAS New River	186	4.40	1.48
MCRD Parris Island	200	4.01	1.61
MCB Quantico	180	4.66	1.60
MCRD San Diego	135	4.36	1.66
MCAGCC (Twentynine Palms)	276	3.84	1.60
MCAS Yuma	109	4.32	1.48

The mean scores for all bases/stations generally were clustered around "Neither Unhappy Nor Pleased," although Headquarters Battalion Henderson Hall and MCB Quantico scored noticeably higher. Three locations scored lower than "Neither Unhappy Nor Pleased:" Camp Lejeune (3.86), Camp Pendleton (3.84) and MCAGCC (Twentynine Palms) (3.84), although none of the differences of these means had any practical significance when compared with the overall affective mean. Camp Butler (4.04) and MCRD Parris Island (4.01) also scored slightly below the overall affective

mean. The difference in the 4.81 mean for Headquarters Battalion Henderson Hall and the overall affective mean just barely had practical significance: Its Cohen's *d* statistic was 0.49, indicating a medium effect size.

Race/Ethnicity. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by race/ethnicity, are shown in Table 4-124. The "Other" and the Asian/Pacific Islander respondents were least happy with their military job, while the members of the Black/African-American subgroup were the happiest. Only a small effect size was seen in the differences between the extremes, indicating that all the racial/ethnic groups considered in this study were equally happy with their military job.

Table 4-124. Happiness with Military Job by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	3,031	4.02	1.61
Black/African-American	540	4.21	1.62
Asian/Pacific Islander	174	3.91	1.66
Native American/Aleut/Eskimo	78	4.06	1.54
Spanish/Hispanic	612	4.06	1.67
Other	99	3.74	1.80

Gender. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by gender, are shown in Table 4-125. The mean scores for the male and female respondents differed by only 0.04, too small to be of practical significance.

Table 4-125. Happiness with Military Job by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,196	4.05	1.63
Female	444	4.01	1.66

Marital/Parental Status. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by marital/parental status, are shown in Table 4-126. The scores were relatively consistent across these subgroups, with a maximum mean of 4.41 for the Married with Children subgroup. In contrast, the Never Been Married respondents had the lowest score (3.82), a differential of 0.24 below the overall mean. None of the differences seen here had any practical significance.

Table 4-126. Happiness with Military Job by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	114	4.19	1.69
Divorced/Widowed/Separated without Children	228	3.90	1.75
Married with Children	1,392	4.41	1.55
Married without Children	836	4.03	1.67
Never Been Married	2,021	3.82	1.61

4.13.2 Satisfaction – Cognitive Evaluations of the Military Job Life Domain

The mean cognitive or satisfaction score (Question #14n) in the Military Job life domain for the Base and Station respondents in 2007 was 4.50, i.e., exactly halfway between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Military Job life domain is shown in Figure 4-141. The highest percentage of respondents, 28.1 percent, responded that they were "Satisfied" with their military job overall. Note also that only 22.5 percent of the respondents were dissatisfied with their job in any way.

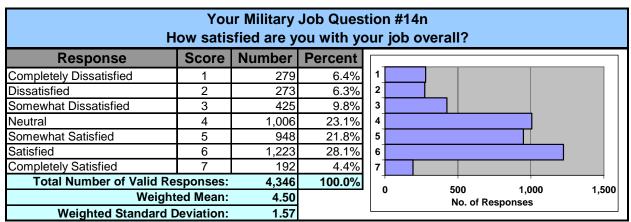


Figure 4-141. Distribution of the Overall Satisfaction Responses in the Military Job Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Military Job satisfaction scores are shown in Figure 4-142. The 2007 weighted mean satisfaction score for Military Job increased by 0.14 from the 2002 weighted score, but this increase had no practical significance, since its effect size was small (Cohen's *d* statistic was only 0.10).

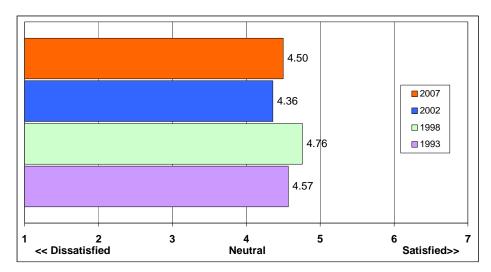


Figure 4-142. Trends in Overall Satisfaction in the Military Job Life Domain for the Base and Station Respondents

Overall satisfaction in the Military Job life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, the base/station to which the respondent was assigned, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by Pay Grade Group, are shown in Table 4-127.

Table 4-127. Satisfaction with Military Job by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,485	4.17	1.64
E-4/E-5	1,787	4.38	1.50
E-6/E-7	518	5.01	1.40
E-8/E-9	137	5.41	1.23
WO	52	5.38	1.21
O-1 to O-3	252	5.12	1.24
O-4 to O-10	115	5.28	1.28

Tendencies similar to those seen for the affective measure for this life domain also were seen here. However, most of the subgroup scores, with the exceptions of the two lower enlisted Pay Grade Groups, were clustered near "Somewhat Satisfied." The E-2/E-3 and E-4/E-5 Pay Grade Groups again had the lowest means score of all the Pay Grade Groups, but were only 0.33 and 0.12, respectively, below the overall satisfaction mean. The WO Pay Grade Group had the highest mean (5.41), and the differences between its mean score and the means from the E-2/E-3 and E-4/E-5 Pay Grade Groups had practical significance (Cohen's *d* statistics were 0.86 and 0.75, respectively).

When the trends in the overall satisfaction with the Military Job life domain were examined by Pay Grade Group, as shown in Figure 4-143, it was seen across all the Pay Grade Groups that satisfaction in 2007 was about the same or higher than it had been in 2002. Only two Pay Grade Groups, E-2/E-3 and E-4/E-5, had mean scores below the "Somewhat Satisfied" level, pulling down the overall satisfaction mean.

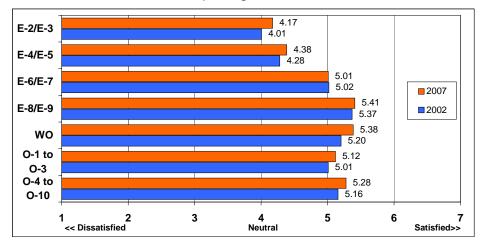


Figure 4-143. Trends in Satisfaction in the Military Job Life Domain by Pay Grade Group for the Base and Station Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by the base or station to which the respondent was assigned, are shown in Table 4-128.

Table 4-128. Satisfaction with Military Job by Installation for the Base and Station Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	128	4.29	1.42
MCB Camp Butler	354	4.49	1.64
MCB Camp Lejeune	902	4.33	1.61
MCB Camp Pendleton	925	4.35	1.53
MCAS Cherry Point	201	4.62	1.47
MCB Hawaii	159	4.56	1.44
Headquarters Battalion Henderson Hall	53	5.06	1.25
MCAS Iwakuni	122	4.75	1.45
MCAS Miramar	248	4.72	1.56
MCAS New River	174	4.76	1.30
MCRD Parris Island	191	4.61	1.58
MCB Quantico	179	5.01	1.49
MCRD San Diego	129	4.95	1.58
MCAGCC (Twentynine Palms)	265	4.38	1.62
MCAS Yuma	106	4.85	1.23

The mean scores of MCAS Beaufort and of the two largest Marine Corps installations (Camp Lejeune and Camp Pendleton) were the lowest of the 15 installations

considered, although the scores all were above the "Neutral" part of the spectrum of responses. The mean scores for Headquarters Battalion Henderson Hall and MCB Quantico were the highest. There was a difference with practical significance, of medium effect size, for the means of the two extremes seen in the table.

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by race/ethnicity, are shown in Table 4-129. Only Native American/Aleut/Eskimo and "Other" subgroups deviated substantially from the overall mean satisfaction level scoring 0.23 and 0.20, respectively, below the overall mean for this question. The Black/African-American subgroup was the most satisfied, scoring 0.20 above the overall mean. None of the differences seen here had any practical significance.

Table 4-129. Satisfaction with Military Job by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,875	4.46	1.54
Black/African-American	521	4.70	1.52
Asian/Pacific Islander	171	4.42	1.58
Native American/Aleut/Eskimo	70	4.27	1.50
Spanish/Hispanic	561	4.54	1.59
Other	92	4.30	1.75

Gender. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by gender, are shown in Table 4-130. The female respondents rated their satisfaction with their military job somewhat lower than did the male respondents. However, the differences had no practical significance.

Table 4-130. Satisfaction with Military Job by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	3,958	4.50	1.56
Female	427	4.48	1.49

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by marital/parental status, are shown in Table 4-131. It can be seen that those Marines with children, regardless of their marital status, rated their satisfaction with their job substantially higher than those without children. In fact, the Divorced/Widowed/Separated without Children Marines had the lowest ratings, although they were essentially equivalent to those from the Never Been Married Marines. None of the differences seen here had any practical significance.

Table 4-131. Satisfaction with Military Job by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	108	4.68	1.45
Divorced/Widowed/Separated without Children	213	4.28	1.67
Married with Children	1,330	4.92	1.42
Married without Children	804	4.35	1.57
Never Been Married	1,891	4.29	1.57

In addition to asking the respondents about their overall satisfaction with their military job, Question #14 also asked about satisfaction with a series of 12 separate facets of their job. The weighted mean and standard deviation scores for each of these facets are shown in Figure 4-144. The lowest score as well as the highest standard deviation was seen in how satisfied the respondents were with pay and benefits. This was the only facet that scored below the "Neutral" score of 4, due to low scores among the E-2/E-3 and E-4/E-5 Pay Grade Groups. The amount of job security scored the highest of all facets (5.35) and was the only facet with an average above "Somewhat Satisfied." Not unexpectedly, given the results seen for the Income and Standard of Living life domain, pay and benefits scored the lowest.

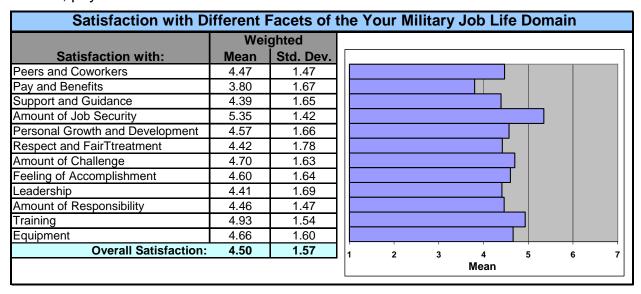


Figure 4-144. Satisfaction with Facets of Military Job for the Base and Station Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with military job for the Base and Station respondents was performed. The results are shown in Figure 4-145. Note that, as was the case for the Neighborhood life domain, the large number of facet satisfactions included in the regression required the use of a slightly different form of the key driver diagram (one that uses a legend and does not place the facet satisfaction names in the diagram itself) has been used; however, the consistent scaling of the chart has been maintained.

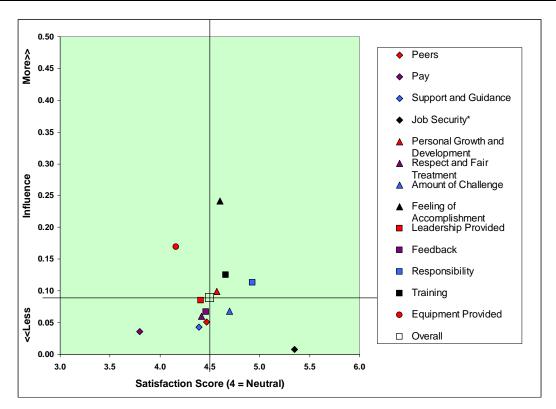


Figure 4-145. Key Driver Diagram for the Military Job Life Domain for the Base and Station Respondents

The magnitudes of the facet satisfactions ranged from a low of 0.008 for Job Security ⁶⁷ to a high of 0.241 for Feeling of Accomplishment, just as was the case in the 2002 QoL Study. Equipment Provided was the second largest driver and the second lowest-scoring facet, showing that this might be an area where improvements in job satisfaction might be most likely to be achieved. Other facets with influences greater than that of the overall domain mean were Training, Responsibility, and Personal Growth and Development. All three of these facets had higher satisfaction scores than the overall domain mean, indicating that it is still important to maintain, if not improve, satisfaction in these areas.

4.13.3 Effect of Military Job on Job Performance

Due to the subject of this life domain, this question was irrelevant and was not asked.

4.13.4 Effect of Military Job on Plans To Remain on Active Duty

Question #17 asked about the effect of their military job on the respondents' plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-146.

⁶⁷ In actuality, the beta weight for this facet was negative, implying a slight negative correlation between that facet and overall domain satisfaction.

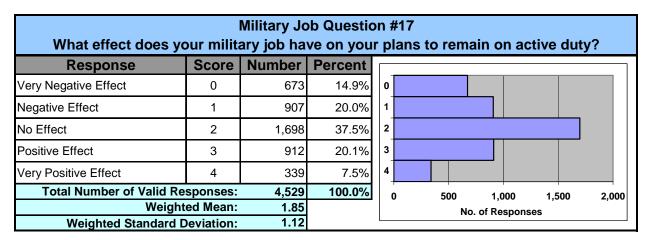


Figure 4-146. Effect of Military Job on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 1.85, falling below "No Effect." The distribution of responses to the question was interesting. The most frequently chosen response, as it often was, was "No Effect." "Negative Effect" and "Positive Effect" were chosen almost exactly the same number of times. However, the overall score was tilted downward by the responses at the two extremes, where about twice as many respondents said that their military job had a "Very Negative Effect" on their plans to remain on active duty than said that their job had a "Very Positive Effect."

4.13.5 Other, Life Domain-Specific Analyses

The responses to a number of other questions specific to the Military Job life domain were examined. The results are presented below.

Question #2 asked the respondents to indicate how many hours they worked in a typical week. Figure 4-147 shows the responses to that question. Note that only those responses between 20 and 126 hours per week were considered valid and included in the calculations. Almost none of the respondents claimed to work less than 40 hours per week. The valid responses were distributed fairly evenly among the other ranges considered, although the greatest number of respondents (1,309, or 30.3 percent) said that they worked between 51 and 60 hour per week.

Your Military Job Question #2 In a normal work week, how many hours do you work on your military job?							
Response*	Number	Percent					
<40 Hours	106	2.5%	6				
40 to 45 Hours	989	22.9%	6				
46 to 50 Hours	959	22.2%	6				
51 to 60 Hours	1,309	30.3%	6				
>60 Hours	955	22.1%	6				
Total Number of Valid Responses:	4,318	100.0%	6 0 500 1,000 1,5				
* Responses ranged from 0 to 999 hours between 20 and 126 hours inclusive we	•	•	No. of Responses				

Figure 4-147. Average Number of Hours Worked Each Week by the Base and Station Respondents

When looked at in terms of the average number of hours worked per week, these data continued the trend seen in the three previous Marine Corps QoL studies: The Base and Station respondents were working longer each week. The results are shown in Figure 4-148.⁶⁸

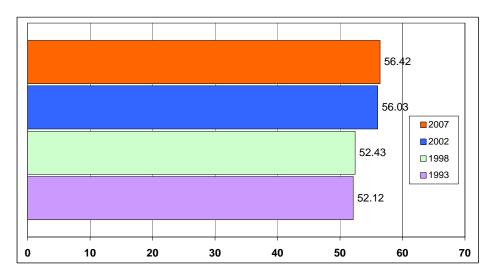


Figure 4-148. Overall Average Number of Hours Worked Each Week by the Base and Station Respondents

When the results were examined in terms of the number of days in the average work week (Question #3), the results showed little change. See Figure 4-149.⁶⁹

⁶⁸ The results for 1993 and 1998 were taken from p. 3-45 of the 2002 QoL Study Report. That reference also reported that the equivalent value for 2002 was 54.97 hours/week. However, when the data from the 2002 survey were treated in the same way as the data from the 2007 survey (i.e., only responses between 20 and 126 hours were considered valid), the result increased to the 56.03 value seen in the figure.

⁶⁹ Again, the results for 1993 and 1998 were taken from p. 3-45 of the 2002 QoL Study Report. That reference also reported that the equivalent value for 2002 was 5.17 days/week. However, when the data from the 2002 survey

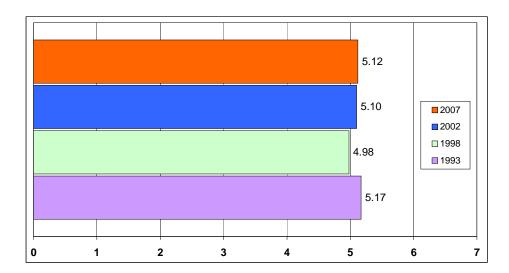


Figure 4-149. Overall Average Number of Days Worked Each Week by the Base and Station Respondents

Question #4 asked the respondents to indicate how well their Marine Corps training prepared them for their present job. Figure 4-150 shows the responses to that question. Only 8.3 percent of the respondents thought that their training was not pertinent to their current work. The most common response (38.9 percent) was that respondents thought that their training prepared them "Pretty Well" for their present job.

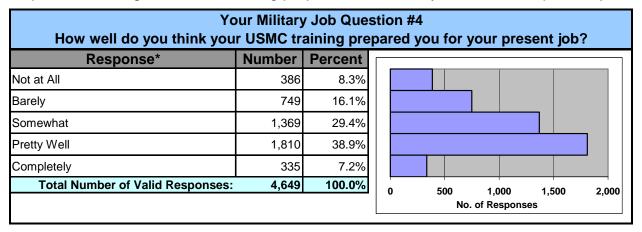


Figure 4-150. Self-Evaluation of Adequacy of Training by the Base and Station Respondents

Question #10 asked the respondents how much time they had taken off from duty during the past month for a set of six personal reasons. The respondents were instructed to include time when they arrived late or left early, but not to include scheduled leave time.

were treated in the same way as the data from the 2007 survey (i.e., only responses between 20 and 126 hours were considered valid), the result decreased to the 5.10 value seen in the figure.

⁷⁰ Adequacy of training is also a component of the Personal Readiness composite variable used in the SEM analysis discussed later in this report.

Question #10a asked about time off duty for non-duty-related education (see Figure 4-151). The majority of the respondents (89.2 percent) said they had taken no time off duty for education. Only 2 percent of the respondents said they had missed 1 or more days of duty for educational reasons.

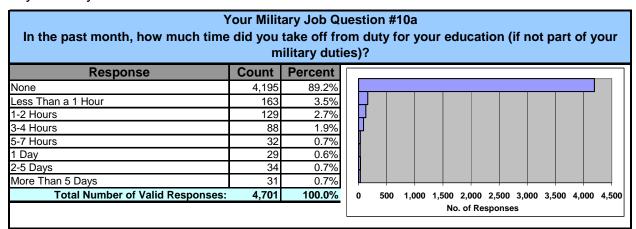


Figure 4-151. Time Off Duty for Education for the Base and Station Respondents

Question #10b asked about time off duty due to transportation problems (see Figure 4-152). The majority of the respondents (85.5 percent) said they had taken no time off duty due to transportation problems. Only 1.8 percent of the respondents said they had missed 1 or more days of duty because of transportation problems.

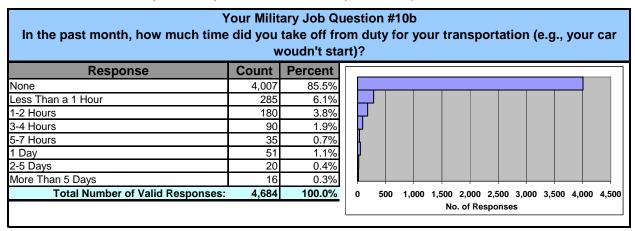


Figure 4-152. Time Off Duty Due to Transportation Problems for the Base and Station Respondents

Question #10c asked about time off duty for pregnancy reasons (see Figure 4-153). The majority of the respondents (91.9 percent) answered that they had taken no time off duty for pregnancy-related reasons. Only 3.2 percent of the respondents said they had missed 1 or more days of duty due to pregnancy-related issues.

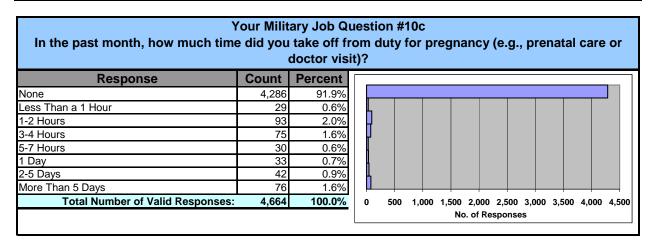


Figure 4-153. Time Off Duty for Pregnancy for the Base and Station Respondents

Question #10d asked about time off duty for health reasons (see Figure 4-154). The majority of the respondents (62 percent) said they had taken no time off duty for health reasons in the past month. In contrast to the previous questions, a fairly high percentage (12.4 percent) of the respondents said they had missed 1 or more days of duty due to health reasons.



Figure 4-154. Time Off Duty for Health Reasons for the Base and Station Respondents

Question #10e asked about time off duty for personal business (see Figure 4-155). The majority of the respondents (69.7 percent) said they had taken no time off duty for personal business. Only 4.8 percent of the respondents said they had missed 1 or more days of duty for personal business.

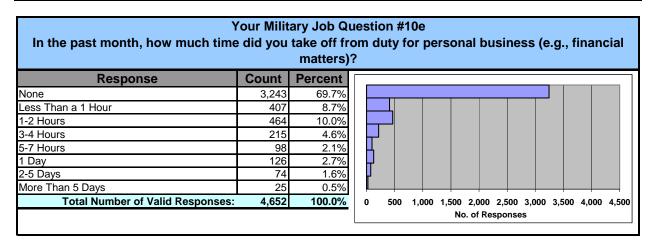


Figure 4-155. Time Off Duty for Personal Business for the Base and Station Respondents

Question #10f asked about time off duty for other personal reasons (see Figure 4-156). The majority of the respondents (65.5 percent) said they had taken no time off duty for personal reasons. Only 8.7 percent of the respondents said they had missed 1 or more days of duty for other personal reasons.

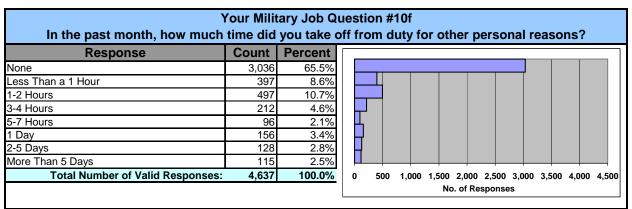


Figure 4-156. Time Off Duty for Other Personal Reasons for the Base and Station Respondents

Question #11 asked the respondents how much time they had taken off duty during the past month for a set of five family reasons. As was the case for Question #10, the respondents were instructed to include time when they arrived late or left early, but not to include scheduled leave time. Note that 1,437 members of the Base and Station sample were not included in the results shown below since they responded "Do not have family with me" and were instructed to skip this question.

Question #11a asked about time off duty to care for children (see Figure 4-157). The majority of the respondents (76.8 percent) said they had taken no time off duty to care for children. Only 8.0 percent of the respondents said they had missed 1 or more days of duty to care for children.

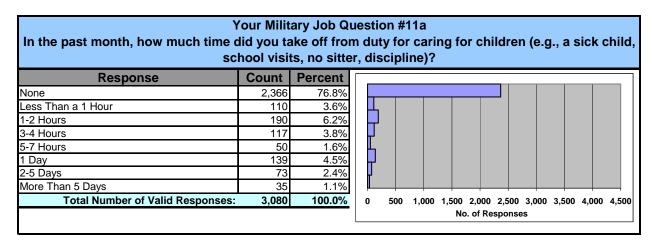


Figure 4-157. Time Off Duty To Care for Children for the Base and Station Respondents

Question #11b asked about time off duty to help their spouse (see Figure 4-158). The majority of the respondents (77.3 percent) said they had taken no time off duty to help their spouse. Only 7.6 percent of the respondents said they had missed 1 or more days of duty helping their spouse.

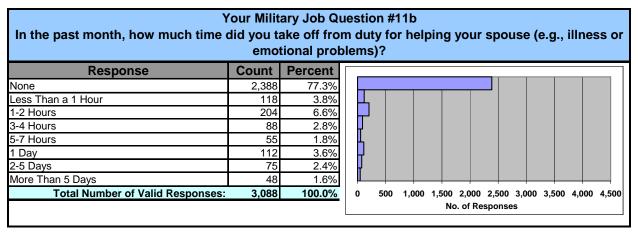


Figure 4-158. Time Off Duty To Help a Spouse for the Base and Station Respondents

Question #11c asked about time off duty for family business (see Figure 4-159). The majority of the respondents (78.9 percent) said they had taken no time off duty for family business. Only 4.4 percent of the respondents said they had missed 1 or more days of duty due to family business.

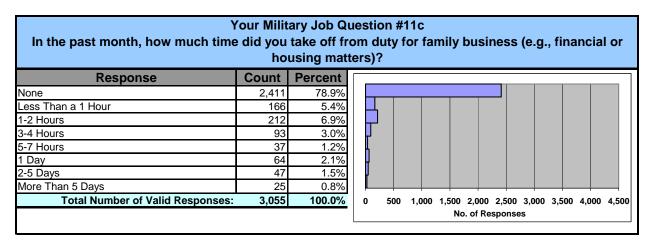


Figure 4-159. Time Off Duty for Family Business for the Base and Station Respondents

Question #11d asked about time off duty for family transportation (see Figure 4-160). The majority of the respondents (84.5 percent) said they had taken no time off duty for family transportation. Only 2.8 percent of the respondents said they had missed 1 or more days of duty for family transportation.

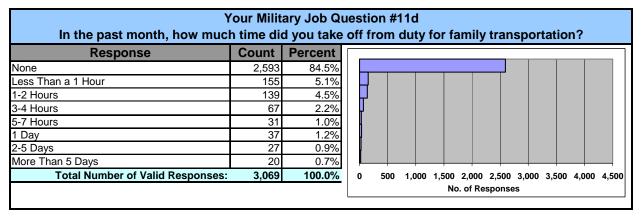


Figure 4-160. Time Off Duty for Family Transportation for the Base and Station Respondents

Question #11e asked about time off duty for other family matters (see Figure 4-161). The majority of the respondents (78.3 percent) said they had taken no time off duty for other family matters. Only 6.3 percent of the respondents said they had missed 1 or more days of duty for other family matters.

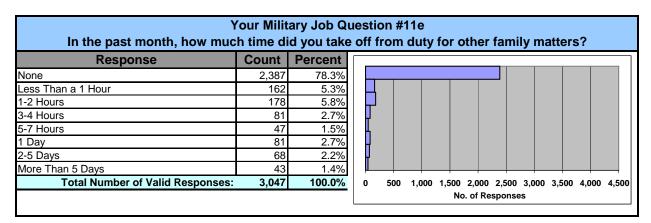


Figure 4-161. Time Off Duty for Family Matters for the Base and Station Respondents

Question #12 asked the respondents about the provisions they may have made for a short-notice deployment. A histogram of the "No" responses to this question is shown in Figure 4-162. Notice that, given that the "N/A" option eliminated those respondents for whom a given action/provision was unnecessary, the "No" responses are important because they indicated the number of respondents that were likely to need to take action on each provision included in the question. The numbers are highlighted in the figure to draw attention to them.

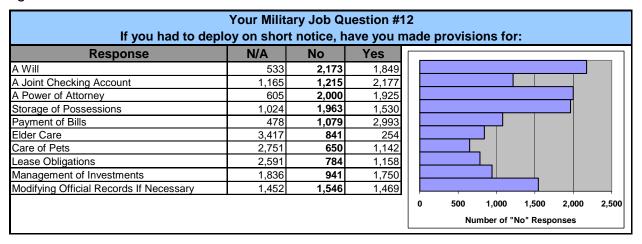


Figure 4-162. Preparations for Short-Notice Deployment by the Base and Station Respondents

The three provisions with the highest number of negative responses (each were selected about 2,000 times) were a will (2,173 selections), a power of attorney (2,000 selections) and storage of possessions (1,963 selections). Another option that many respondents needed to perform was modifying official records (1,546 selections). Even the provision that was selected the fewest number of times (care of pets, which was selected 650 times) was chosen by about 14 percent of the members of the Base and Station respondent group.

Question #13 asked about the personal commitment of the respondents to the Marine Corps, referred to as their "Organizational Commitment." This measure has been addressed explicitly in all three previous Marine Corps QoL study reports. The Organizational Commitment composite variable comprised a battery of 11 separate subquestions, each measured on a seven-point scale from "Completely Disagree" to "Completely Agree." Such a battery can be applied either by averaging the responses to the individual sub-questions from each respondent (as was done in the SEM analyses discussed later), or by displaying how each aspect of the battery was scored.

The latter was done to create Figure 4-163,⁷² where the results for the 2007 Base and Station respondents were compared with those of the 2002 Base and Station respondents on 10 of the 11 sub-questions. One sub-question was deleted because a factor analysis performed on the 11 sub-questions indicated that "Most things in life are more important than work" (when reverse-coded to give negative responses a larger score) had consistently low correlation with the other sub-questions. That sub-question was deleted from both the 1998 and 2002 QoL Study Reports for the same reason.

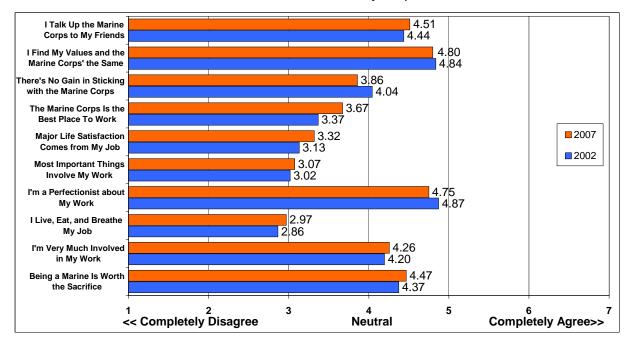


Figure 4-163. Organizational Commitment of the Base and Station Respondents

When reviewing the results shown in the figure, it can be seen that most questions saw results very similar to those from 2002. Although the magnitudes of none of the

⁷¹ Organizational Commitment is also a component of the Personal Readiness composite variable used in the SEM analysis discussed later in this report.

⁷² Note that the sub-questions' statements were reworded for brevity in the figure.

changes were great, the mean values for two questions did decrease: "I find my values and the Marine Corps' are the same" and "I'm a perfectionist about my work."

Question #16 asked about the frequency of seven potential problems on the job⁷⁴ in the past month, giving the respondents five response options ranging from "None of the time" to "All of the time." The respondents were divided into those who previously had been deployed in support of OIF/OEF and those who had not. The results for each subquestion are discussed below. Note that the table includes a column showing the differences between the percentages of respondents with and without OIF/OEF experience that chose each response option. Thus, negative values indicate that a higher percentage of the respondents without OIF/OEF experience chose a particular response option than did those with OIF/OEF experience.

Table 4-132 addresses the frequency with which the respondents' mind was not on the job. It can be seen that the respondents who had been deployed in support of OIF/OEF said they did not have their minds on the job somewhat less frequently than those respondents who had never been deployed in support of OIF/OEF. This is shown by the negative values in the upper rows of the "Difference in Percentages" column in the table. That is, the respondents with deployment experience reported having a somewhat higher level of focus while on their jobs.

Table 4-132. Frequency of Job Problems - Mind Not on Job (#16a) - for the Base and Station Respondents

	OIF/0				
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percentages	
All of the Time	99	4.5%	142	5.8%	-1.3%
Most of the Time	268	12.2%	324	13.2%	-1.0%
Some of the Time	795	36.1%	924	37.6%	-1.5%
A Little of the Time	801	36.4%	770	31.4%	5.0%
None of the Time	238	10.8%	295	12.0%	-1.2%
Total	2,201	100.0%	2,455	100.0%	0.0%

Table 4-133 addresses the frequency with which the respondents admitted they had lost their temper. Those respondents with OIF/OEF deployment experience seem to have lost their temper slightly more often than those respondents without OIF/OEF deployment experience. That is, the respondents with OIF/OEF deployment experience reported being slightly worse off than those without such experience.

⁷⁴ Job problems are also a component of the Personal Readiness composite variable used in the SEM analysis discussed later in this report.

⁷³ Note that the average response in 2007 to the question "There's No Gain in Sticking with the Marine Corps" was 0.18 lower than the average response in 2002. However, since this was a negatively-worded question, that decrease in agreement with the statement represented an increase in the organizational commitment of the respondents.

Table 4-133. Frequency of Job Problems - Loss of Temper (#16b) - for the Base and Station Respondents

	OIF/C				
	WITH Ex	WITH Experience		Experience	Difference in
Response	Number	Percent	Number Percent		Percentages
All of the Time	74	4.6%	97	4.4%	0.2%
Most of the Time	157	9.8%	207	9.4%	0.4%
Some of the Time	436	27.3%	570	25.9%	1.3%
A Little of the Time	475	29.7%	648	29.5%	0.2%
None of the Time	458	28.6%	678	30.8%	-2.2%
Total	1,600	100.0%	2,200	100.0%	0.0%

Table 4-134 addresses the frequency with which the respondents accomplished less than they would have liked. The differences seen between the two groups seem trivial.

Table 4-134. Frequency of Job Problems - Accomplished Less Than Desired (#16c) - for the Base and Station Respondents

	OIF/0				
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Number Percent	
All of the Time	93	4.2%	105	4.3%	-0.1%
Most of the Time	276	12.6%	298	12.2%	0.4%
Some of the Time	728	33.3%	808	33.2%	0.1%
A Little of the Time	779	35.6%	824	33.8%	1.8%
None of the Time	313	14.3%	402	16.5%	-2.2%
Total	2,189	100.0%	2,437	100.0%	0.0%

Table 4-135 addresses the frequency with which the respondents were not at their best. For this measure, the respondents with OIF/OEF deployment experience reported a slightly lower frequency of this problem, as indicated by the negative values in the upper rows of the "Difference in Percentages" column in the table. That is, the respondents with OIF/OEF deployment experience reported being slightly better off than those without such experience.

Table 4-135. Frequency of Job Problems - Not at Your Best (#16d) - for the Base and Station Respondents

	OIF/0				
	WITH Ex	WITH Experience		Experience	Difference in
Response	Number	Percent	Number Percent		Percentages
All of the Time	59	2.7%	99	4.1%	-1.4%
Most of the Time	162	7.4%	203	8.4%	-0.9%
Some of the Time	605	27.7%	685	28.2%	-0.5%
A Little of the Time	1012	46.3%	1078	44.4%	2.0%
None of the Time	347	15.9%	365	15.0%	0.9%
Total	2,185	100.0%	2,430	100.0%	0.0%

Table 4-136 addresses the frequency with which the respondents admitted that they were more likely to make mistakes. Again, the respondents with OIF/OEF deployment experience reported somewhat less likely to make mistakes, as indicated by the negative values in the upper rows of the "Difference in Percentages" column in the table and the larger value in the "None of the time" response. That is, the respondents with OIF/OEF deployment experience reported being better off than those without such experience.

Table 4-136. Frequency of Job Problems - More Likely To Make Mistakes (#16e) - for the Base and Station Respondents

	OIF/C	ience				
	WITH Experience WITHOU			Experience	Difference in	
Response	Number	Percent	Number	Percentages		
All of the Time	40	1.8%	55	2.3%	-0.4%	
Most of the Time	72	3.3%	121	5.0%	-1.7%	
Some of the Time	338	15.5%	502	20.7%	-5.2%	
A Little of the Time	1093	50.1%	1133	46.8%	3.3%	
None of the Time	639	29.3%	610	25.2%	4.1%	
Total	2,182	100.0%	2,421	100.0%	0.0%	

Table 4-137 addresses the frequency with which the respondents had their performance criticized by their co-workers. Once again, the respondents with OIF/OEF deployment experience reported less likelihood of having had their performance criticized, as indicated by the negative values in the upper rows of the "Difference in Percentages" column in the table and the larger value in the "None of the Time" response. That is, the respondents with OIF/OEF deployment experience reported being better off than those without such experience.

Table 4-137. Frequency of Job Problems – Performance Criticized by Co-Workers (#16f) - for the Base and Station Respondents

	OIF/0	ience				
	WITH Ex	perience	WITHOUT	Experience	Difference in	
Response	Number	Percent	Number	Percentages		
All of the Time	111	5.1%	160	6.6%	-1.5%	
Most of the Time	107	4.9%	214	8.8%	-3.9%	
Some of the Time	297	13.5%	440	18.1%	-4.5%	
A Little of the Time	597	27.2%	680	27.9%	-0.7%	
None of the Time	1081	49.3%	941	38.6%	10.6%	
Total	2,193	100.0%	2,435	100.0%	0.0%	

Table 4-138 addresses the frequency with which the respondents had problems with a superior. The respondents with OIF/OEF deployment experience reported a slightly lower frequency of problems with their superiors, as indicated by the negative values in the upper rows of the "Difference in Percentages" column in the table. That is, the respondents with OIF/OEF deployment experience reported being somewhat better off than those without such experience.

Table 4-138. Frequency of Job Problems – Problems with a Superior (#16g) - for the Base and Station Respondents

	OIF/OEF Deployment Experience						
	WITH Experience WITHOUT E			Experience	Difference in		
Response	Number	Percent	Number	Percentages			
All of the Time	139	6.3%	170	7.0%	-0.7%		
Most of the Time	171	7.8%	197	8.2%	-0.4%		
Some of the Time	371	16.9%	431	17.8%	-0.9%		
A Little of the Time	485	22.1%	547	22.6%	-0.5%		
None of the Time	1,027	46.8%	1,072	44.4%	2.5%		
Total	2,193	100.0%	2,417	100.0%	0.0%		

Question #18 asked the respondents to pick the one best thing about being a Marine from a list of seven specific and one generic (i.e., "Other") response options. The results are shown in Figure 4-164. The two most frequently chosen options were "... To Serve Your Country" and to be one of the "Few and the Proud," each of which was chosen by 20+ percent of the respondents. The least frequently chosen options were "Pay and Benefits," "Retirement Options," and "Adventure and Excitement."

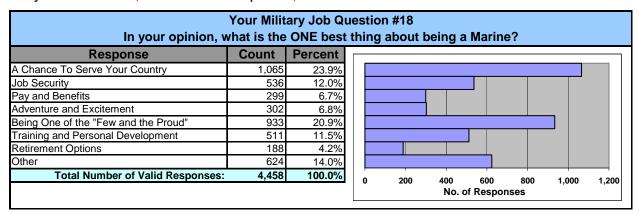


Figure 4-164. Best Thing about Being a Marine for the Base and Station Respondents

4.13.6 Conclusions for the Military Job Life Domain for the Base and Station Respondents

Satisfaction and happiness in the Military Job life domain generally improved in 2007 when compared with the results from the 2002 QoL Study. Respondents in the E-2/E-3 and E-4/E-5 Pay Grade Groups were, in general, noticeably less satisfied with their job than those in higher pay grades. Race/ethnicity, gender and marital/parental status had little to no effect on the opinions regarding the respondents' job. Some differences were seen across the 15 bases/stations considered, but these most likely were driven by other variables, such as differences in the pay grade balance, than the installations themselves. In general, respondents rarely took off from duty more than a few hours each month for either personal or family reasons. The frequency with which the respondents admitted to having had problems on the job appeared to be lower for those

respondents who had previously been deployed in support of OIF/OEF than for those with no OIF/OEF deployment experience.

Satisfaction in this life domain was influenced strongly by several different factors. The most promising area of potential improvement was Equipment Provided, since this had the second highest influence factor and a satisfaction value lower than that of the mean domain satisfaction score.

4.14 THE YOURSELF LIFE DOMAIN

4.14.1 Happiness – Affective Evaluations of the Yourself Life Domain

The mean affective or happiness score (Question #1) for the Yourself life domain for the Base and Station respondents in 2007 was 4.69, i.e., between "Neither Unhappy Nor Pleased" and "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in this life domain is shown in Figure 4-165. It can be seen that the highest percentage of respondents, 27.7 percent, were "Mostly Pleased" with their standard of living and that 26.2 percent were "Pleased." Only 20.3 percent of the respondents expressed some degree of unhappiness; a much higher percentage of respondents, 61.3 percent, expressed some degree of happiness.

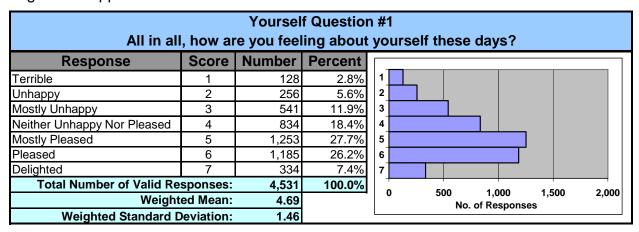


Figure 4-165. Distribution of the Overall Happiness Responses in the Yourself Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Yourself D-T scores are shown in Figure 4-166. The 2007 weighted mean Yourself D-T score decreased slightly (by 0.08) from the 2002 weighted score, but this decrease had no practical significance, having a Cohen's *d* statistic of 0.06.

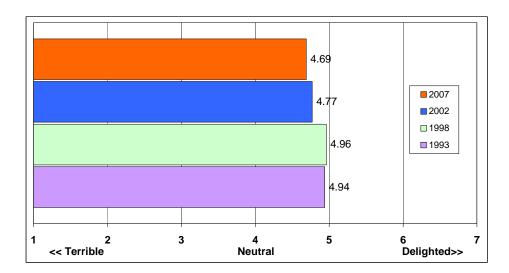


Figure 4-166. Trends in Overall Happiness in the Yourself Life Domain for the Base and Station Respondents

Overall happiness in the Yourself life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by Pay Grade Group, are shown in Table 4-139.

Table 4-139. Happiness with Yourself by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,584	4.37	1.54
E-4/E-5	1,848	4.72	1.41
E-6/E-7	534	5.07	1.30
E-8/E-9	142	5.48	1.08
WO	51	4.96	1.46
O-1 to O-3	253	5.17	1.09
O-4 to O-10	119	5.24	1.16

The mean happiness scores increased with Pay Grade Group through both the enlisted and officer groups. The minimum happiness score, 4.37 (0.32 below the overall happiness score for this life domain), was seen for the E-2/E-3 Pay Grade Group. The maximum happiness score, 5.48 (0.79 above the overall happiness score for this life domain), was seen for the E-8/E-9 Pay Grade Group. Note also that standard deviations, in general, decreased as the mean scores (and pay grade) increased, and that Marines in the E-2/E-3, E-4/E-5, and WO Groups had a broader variance in their individual happiness scores.

Overall happiness with the Yourself life domain was examined by Pay Grade Group; the results are shown in Figure 4-167. Happiness decreased in each of the seven Pay

Grade Groups and the Pay Grade Group that experienced the largest decrease between 2002 and 2007 was the Warrant Officers, for whom the affective mean decreased by 0.26. However, that difference had no practical significance.

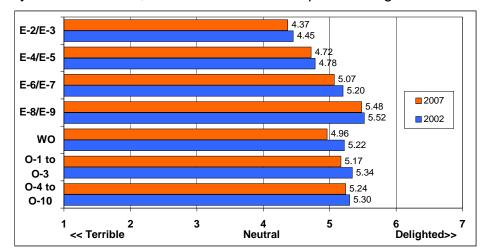


Figure 4-167. Trends in Happiness in the Yourself Life Domain by Pay Grade Group for the Base and Station Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by race/ethnicity, are shown in Table 4-140. The range of scores was relatively compressed, with the minimum happiness score (4.44, or 0.25 below the overall happiness score for this life domain) seen for the Asian/Pacific Islander subgroup and the maximum happiness score (4.94, or 0.25 above the overall happiness score for this life domain) seen for the Black/African American subgroup. The largest group, Whites, scored just slightly below the overall mean, while the fast-growing Spanish/Hispanic group scored 0.06 above the overall mean. None of the differences seen here had any practical significance.

Table 4-140. Happiness with Yourself by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,993	4.68	1.42
Black/African-American	532	4.94	1.44
Asian/Pacific Islander	170	4.44	1.45
Native American/Aleut/Eskimo	75	4.56	1.37
Spanish/Hispanic	604	4.75	1.55
Other	98	4.56	1.57

Gender. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by gender, are shown in Table 4-141. The average score for the female respondents was only 0.07 greater than that for the male respondents, whose average score was equal to the overall happiness score. The difference seen here had no practical significance.

Table 4-141. Happiness with Yourself by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	4,130	4.69	1.46
Female	446	4.76	1.41

Marital/Parental Status. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by marital/parental status, are shown in Table 4-142. The mean scores were highest for married Marines, decreasing slightly for divorced Marines, and decreasing somewhat further for those Marines that had never been married. The Never Been Married subgroup had the minimum mean score, 4.47 or 0.22 below the overall happiness score for this life domain). None of the differences seen here had any practical significance. Although not shown in the table, the Never Been Married subgroup was the only subgroup for which "Pleased" (a score of 6) was not the most frequently chosen response. Instead, "Mostly Pleased" (a score of 5) was chosen by the largest number (513, or almost 25 percent) of the Never Been Married respondents.

Table 4-142. Happiness with Yourself by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	111	4.54	1.58
Divorced/Widowed/Separated without Children	231	4.70	1.54
Married with Children	1,371	4.99	1.31
Married without Children	836	4.84	1.43
Never Been Married	1,976	4.47	1.49

4.14.2 Satisfaction – Cognitive Evaluations of the Yourself Life Domain

The weighted mean cognitive or satisfaction score (Question #5f) in the Yourself life domain for the Base and Station Respondents in 2007 was 5.41, between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Base and Station respondent sample in the Yourself life domain is shown in Figure 4-168. In the overall sample, by far the highest percentage of respondents, 45.3 percent, responded that they were "Satisfied" with themselves overall. The next highest percentage was the 21.0 percent of the respondents who answered that they were "Somewhat Satisfied." A total of 80.1 percent of the respondents indicated some degree of satisfaction with themselves, in stark contrast to the 6.5 percent of the respondents who indicated some degree of dissatisfaction with themselves.

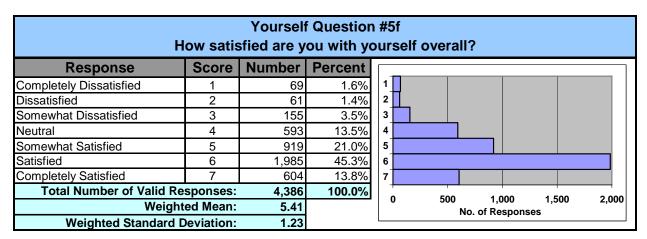


Figure 4-168. Distribution of the Overall Satisfaction Responses in the Yourself Life Domain for the Base and Station Respondents

Trends over the four Marine Corps QoL studies in the mean Yourself satisfaction scores are shown in Figure 4-169. The 2007 weighted mean satisfaction score for Yourself decreased slightly (by 0.14) from the 2002 weighted score, but this decrease had no practical significance, having a Cohen's *d* statistic of 0.12.

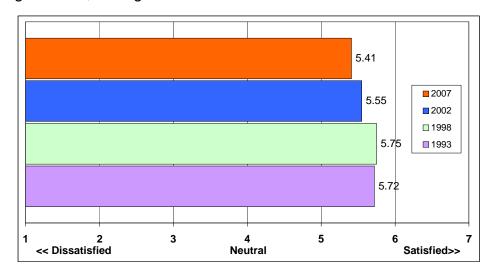


Figure 4-169. Trends in Overall Satisfaction in the Yourself Life Domain for the Base and Station Respondents

Overall satisfaction in the Yourself life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by Pay Grade Group, are shown in Table 4-143.

Table 4-143. Satisfaction with Yourself by Pay Grade Group for the Base and Station Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	1,529	5.20	1.38
E-4/E-5	1,784	5.45	1.16
E-6/E-7	526	5.67	1.06
E-8/E-9	135	5.86	0.84
WO	52	5.52	1.09
O-1 to O-3	243	5.62	0.87
O-4 to O-10	117	5.57	1.09

The mean satisfaction scores within the enlisted Pay Grade Groups increased monotonically with Pay Grade Group, while the mean satisfaction scores for the officer Pay Grade Groups fell slightly below the E-6/E-7 and E-8/E-9 scores. The minimum satisfaction score, 5.20 (0.21 below the overall satisfaction score for this life domain but above the "Somewhat Satisfied" score of 5), was seen for the E-2/E-3 Pay Grade Group. The maximum satisfaction score, 5.86 (0.45 above the overall satisfaction score for this life domain), was seen for the E-8/E-9 Pay Grade Group. This difference had a Cohen's *d* statistic of 0.58, indicating a medium effect size and practical significance. Corresponding with the overall satisfaction data in this domain, the standard deviations within each Pay Grade Group in general were relatively low and decreased as the mean scores increased. Marines in the E-2/E-3 Pay Grade Group had the broadest variance in their individual satisfaction scores.

When the trends in overall satisfaction with the Yourself life domain were examined by Pay Grade Group, as shown in Figure 4-170, slight decreases were seen in every Pay Grade Group between the results from 2002 and those from 2007, with the greatest decrease in the WO Pay Grade Group, which decreased from a score of 5.90 in the 2002 Study to a score of 5.52 in 2007. However, this decrease had no practical significance, having a Cohen's *d* statistic of 0.38. For most Pay Grade Groups, the 1998 mean satisfaction scores remained the maxima among the studies.

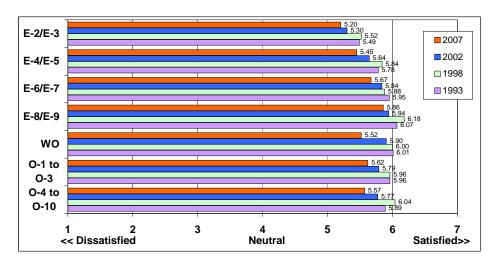


Figure 4-170. Trends in Satisfaction in the Yourself Life Domain by Pay Grade Group for the Base and Station Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by race/ethnicity, are shown in Table 4-144. The range of scores was relatively compressed, with the minimum satisfaction score (5.22, or 0.19 below the overall satisfaction score for this life domain) seen for the small number of Native American/Aleut/Eskimo respondents and the maximum Satisfaction score (5.63, or 0.22 above the overall satisfaction score for this life domain) seen for the Black/African-American subgroup. This difference had no practical significance. The largest subgroup, Whites, scored just slightly below the overall mean, while the fast-growing Spanish/Hispanic group scored slightly above the overall mean.

Table 4-144. Satisfaction with Yourself by Race/Ethnicity for the Base and Station Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	2,884	5.38	1.20
Black/African-American	521	5.63	1.17
Asian/Pacific Islander	168	5.27	1.29
Native American/Aleut/Eskimo	77	5.22	1.23
Spanish/Hispanic	583	5.50	1.27
Other	94	5.31	1.35

Gender. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by gender, are shown in Table 4-145. The average score for the female respondents was 5.50, or 0.09 greater than that for the male respondents, whose rounded average score was equal to the overall satisfaction score. This difference had no practical significance.

Table 4-145. Satisfaction with Yourself by Gender for the Base and Station Respondents

Gender	Count	Mean	Std. Dev.
Male	3,994	5.41	1.23
Female	437	5.50	1.17

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by marital/parental status, are shown in Table 4-146. The range of scores was relatively compressed, with the minimum satisfaction score (5.29, or 0.12 below the overall satisfaction score for this life domain) seen for the Never Been Married subgroup and the maximum satisfaction score (5.56, or 0.15 above the overall happiness score for this life domain) seen for the Married with Children subgroup. This difference had no practical significance. Corresponding with the overall satisfaction data in this domain, the majority of Marines in all marital/parental status subgroups responded that they were "Somewhat Satisfied" to "Satisfied" with themselves. Although the Never Been Married subgroup had the lowest mean score among the marital/parental status subgroups, 75.6 percent of those Marines indicated some degree of satisfaction with themselves.

Table 4-146. Satisfaction with Yourself by Marital/Parental Status for the Base and Station Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	110	5.40	1.26
Divorced/Widowed/Separated without Children	223	5.41	1.33
Married with Children	1,338	5.56	1.07
Married without Children	811	5.47	1.23
Never Been Married	1,903	5.29	1.29

In addition to asking the respondents about their overall satisfaction with themselves, Question #5 also asked about satisfaction with a series of five separate facets of the Yourself life domain. The weighted mean and standard deviation scores for each of these facets are shown in Figure 4-171.

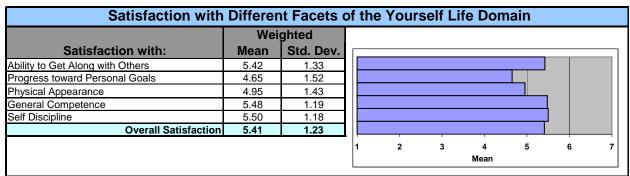


Figure 4-171. Satisfaction with Facets of Yourself for the Base and Station Respondents

The two minimum mean scores (which also had the two highest standard deviations) were seen for Progress toward Personal Goals and Physical Appearance. Further analysis indicated that the reason for this was that there were disparities in satisfaction among the different Pay Grade Groups for those two facets. Figure 4-172 shows the histogram of responses for satisfaction with Progress toward Personal Goals. It can be seen that 21.8 percent of the Base and Station respondent sample indicated some degree of dissatisfaction with the progress they were making toward their personal goals.

Yourself Question #5b How satisfied are you with your progress toward your personal goals?										
Response	Score	Number	Percent							
Completely Dissatisfied	1	177	4.0%	1						
Dissatisfied	2	292	6.5%	2						
Somewhat Dissatisfied	3	503	11.3%	3						
Neutral	4	785	17.6%	4						
Somewhat Satisfied	5	1,210	27.1%	5						
Satisfied	6	1,174	26.3%	6						
Completely Satisfied	7	327	7.3%	7						
Total Number of Valid Re	sponses:	4,468	100.0%	1				4 000	4 500	0.000
Weighted Mean: 4.65			(,	5	00 No	1,000 of Respon	1,500	2,000	
Weighted Standard I	Deviation:	1.52					110.	or respon	1303	

Figure 4-172. Satisfaction with Progress toward Personal Goals for the Base and Station Respondents

When Question #5b was examined by Pay Grade Group, the minimum mean score, 4.44, was seen for the respondents in the E-2/E-3 Pay Grade Group, while respondents in the E-8/E-9, O-1 to O-3, and O-4 to O-10 Pay Grade Groups all had scores of 5.12 or greater. This disparity in mean scores among the different Pay Grade Groups indicated that lower-ranking Marines were less satisfied with the progress they were making toward their personal goals when compared with their higher-ranking counterparts. Similar trends were seen when the facet of Physical Appearance (Question #5c) was examined.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction in the Yourself life domain for the Base and Station respondents was performed. The results are shown in Figure 4-173.

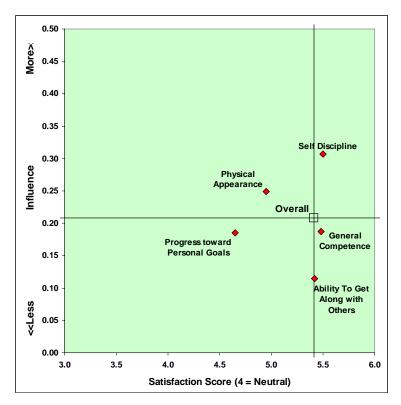


Figure 4-173. Key Driver Diagram for the Yourself Life Domain for the Base and Station Respondents

The results indicated that overall satisfaction with one's self was most strongly influenced by satisfaction with one's Self Discipline and Appearance. Less influential were (in decreasing order) General Competence, Progress toward Personal Goals, and the Ability To Get Along with Others. These results were very similar to those seen in the 2002 QoL Study, with the exception that the influence of General Competence had diminished noticeably. Given the density of the influence values of these facets for the Yourself domain, the mean satisfaction scores for these facets also were an important consideration for analysis. In addition to having a relatively strong influence on overall satisfaction, the Appearance facet also had a mean satisfaction score that fell below the overall mean satisfaction score, denoting that this facet had relatively high potential as an area for improvement. Progress toward Personal Goals, a somewhat less influential facet, had the lowest mean satisfaction score, and also was considered to be a facet with high potential for improvement. One's Ability To Get Along with Others was the least influential facet and had a relatively high mean score, indicating that this facet had the least potential as an improvement opportunity in this life domain.

4.14.3 Effect of the Yourself Life Domain on Job Performance

Question #8 asked about the effect of the respondents' personal development on the respondents' job performance. A histogram of the responses to that question is shown in Figure 4-174.

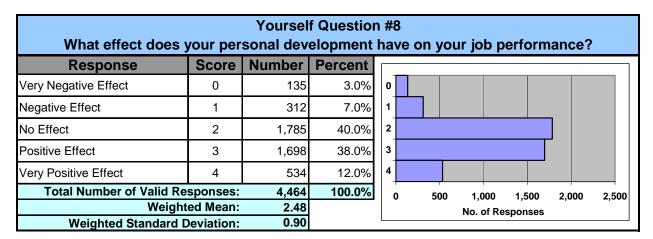


Figure 4-174. Effect of Personal Development on Job Performance for the Base and Station Respondents

The weighted mean score for this question was 2.48, midway between "No Effect" and "Positive Effect" on the five-point scale. Almost equal (and large) percentages of the respondents answered that their personal development had either "No Effect" or a "Positive Effect" (40.0 and 38.0 percent, respectively) on their job performance. Also, half of the respondents said their personal development had some degree of a positive effect while only 10.0 percent expressed some level of negative effect. Both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (2.32 and 2.47, respectively) slightly below the overall mean for the question.

4.14.4 Effect of the Yourself Life Domain on Plans To Remain on Active Duty

Question #9 asked about the effect of the respondents' personal development on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 4-175.

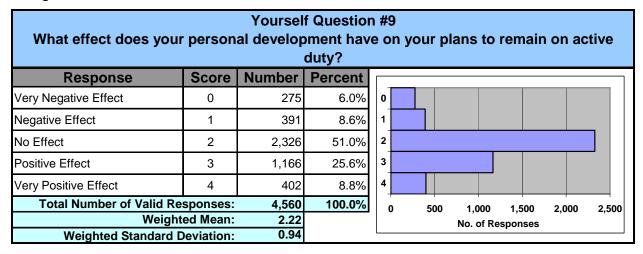


Figure 4-175. Effect of Personal Development on Plans To Remain on Active Duty for the Base and Station Respondents

The weighted mean score for this question was 2.22, between "No Effect" and "Positive Effect" on the five-point scale. The majority of the respondents, 51.0 percent, answered that their personal development had no effect on their plans to remain on active duty. However, more respondents (1,568, or 34.4 percent) said their personal development had some degree of a positive effect on their plans to remain on active duty than said that their personal development had some degree of a negative effect (666, or 14.6 percent). Also, the E-2/E-3 and E-4/E-5 Pay Grade Groups, with mean scores of 2.04 and 2.19, respectively, again scored this measure slightly less than the overall mean.

4.14.5 Other, Life Domain-Specific Analyses

Question #4 asked respondents to select from a list of educational benefits/academic accomplishments which of those benefits they had used since joining the Marine Corps. Figure 4-176 shows the number of affirmative responses for each academic accomplishment, as well as a percentage computed by dividing the number of affirmative responses by the Base and Station respondent sample size (4,812).

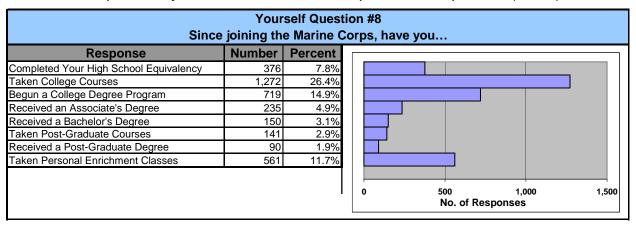


Figure 4-176. Educational Accomplishments of the Base and Station Respondents since Joining the Marine Corps

The highest number of respondents, 1,272, answered that they had "Taken college courses"; however, only 719 answered that they had begun a college degree program. Even fewer respondents had received degrees based on their college work. The minimum number of responses for this question, 90, was for respondents indicating that they had received a post-graduate degree since joining the Marine Corps. Of note was the number of respondents, 376 (7.8 percent of the Base and Station respondent sample) who indicated that they had completed their high school equivalency since joining the Marine Corps.

Question #6 and Question #12 in the Yourself Domain asked respondents a set of questions designed to measure their Optimism and Self-Esteem, respectively. For Question #6 (Optimism), respondents were asked to provide an answer on a seven-point scale from "Completely Disagree" to "Complete Agree" to 12 statements (such as "In uncertain times, I usually expect the best" and "I'm always optimistic about my future") that dealt with the respondents' outlook on life. This composite variable was calculated in each of the three previous Marine Corps QoL studies. For Question #12

(Self-Esteem), respondents were asked to provide an answer on a four-point scale from "Strongly Disagree" to "Strongly Agree" to 10 statements (such as "I feel that I have a number of good qualities" and "I take a positive attitude toward myself") that dealt with a respondent's self-esteem. This composite variable was first calculated in the 2002 QoL Study.

After rescaling the responses from Question #12 to a seven-point scale and after reverse coding the responses to Questions #6c, #6h, #6i and #6l and to Questions #12c, #12e, #12h, #12i, and #12j so that "better" responses (i.e., those expressing higher optimism or self-esteem) received higher scores, weighted mean values for the two composites were calculated. Figure 4-177 shows the weighted mean Optimism and Self-Esteem scores for 2007, as well as the weighted mean values derived from the data used in the 2002 QoL Study. To the weighted values from 2002 and 2007 varied only slightly, with the Optimism score increasing by 0.17 to a value of 4.52 and the Self-Esteem score decreasing by 0.07 to a value of 5.43. Neither change had any practical significance.

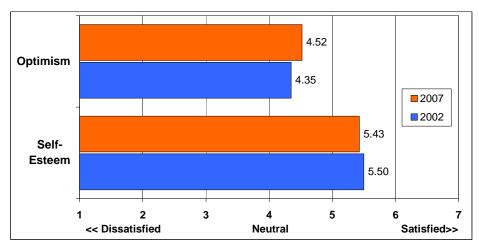


Figure 4-177. Normalized Optimism and Self-Esteem Scores for the 2002 and 2007 Base and Station Respondents

4.14.6 Conclusions for the Yourself Life Domain for the Base and Station Respondents

Happiness and satisfaction in the Yourself domain remained relatively high in 2007. Although disparities existed between lower Pay Grade Groups (E-2/E-3 and E-4/E-5) and the rest of the Base and Station respondent sample that indicated lower happiness

⁷⁵ The 2002 Optimism and Self-Esteem values shown in the figure were calculated using the method described in the text above, which was applied to data mined from Government-provided 2002 QoL Study databases. The Optimism value calculated for 2002 using this method appeared to correspond closely with the value in Figure 3-31 (on p. 3-49) of the 2002 QoL Study Report; however, the calculated Self-Esteem value did not match that figure (which showed no specific numerical values, but which portrayed a Self-Esteem value of ~4.5-4.6). Despite repeated attempts, no scheme that approximated the value seen in the 2002 QoL Study Report was discovered. ⁷⁶ A value of 4.6 was found (p. 102) in the 1993 QoL Study Report for the Optimism composite variable. No numerical value could be found the 1998 QoL Study Report, although it was commented that "Marines seem to be fairly optimistic, more so today than in 1993" (1998 QoL Study Report, p. 24).

and satisfaction in these subgroups, the differences were less significant than those seen in some of the other life domains examined in this study. The respondents' level of satisfaction with the progress they were making towards their personal goals was a major factor in the lower satisfaction scores in the lower Pay Grade Groups. It also was a key driver in satisfaction in this life domain. Physical Appearance also was a major influence on satisfaction in this life domain: It had the second highest influence factor and the second-lowest satisfaction score. The majority of Base and Station respondents indicated that their own personal development had a positive effect on their job performance, but that it had less effect on their plans to remain on active duty. Optimism and Self-Esteem scores were consistent with past studies. No significant differences in satisfaction or happiness with self were identified when examined by race/ethnicity or gender.

4.15 LIFE AS A WHOLE OR GLOBAL QUALITY OF LIFE FOR THE BASE AND STATION RESPONDENTS

Life as a Whole/Global Quality of Life for the Base and Station respondents was assessed using the responses to a composite of six separate questions -- three that appeared in the Life as a Whole section at the beginning of the survey instrument (immediately after the Background section and preceding the Residence life domain) and three that appeared in the Life as a Whole section at the end of the survey instrument (immediately following the Yourself life domain). It also included responses to selected questions (e.g., effect on job performance and plans to remain on active duty) in each of the 11 life domains of the Active Duty Marine survey. The analyses performed included an assessment of Global Quality of Life and Measures of Military Importance.

4.15.1 Assessment of Global Quality of Life and Trend Analyses

4.15.1.1 *Methodology*

Summaries of the responses to each of the six individual Life as a Whole questions are provided in Appendix J.

The Global Quality of Life assessment for the 2007 QoL Study employed a methodology similar to the methodology used in 2002, creating a Life as a Whole composite from the responses to the six questions in Table 4-147.

Table 4-147. Life as a Whole Questions in the Active Duty Marine Survey

Question	Question Statement
Part 1, #1	Life as a Whole Affective Question: First, which point on the scale below best describes how you feel about your life as a whole at this time? (Used seven-point D-T scale.)
Part 1, #2	Life Characteristics Scale (LCS): 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. (Seven-part question with five response options to each part.)
Part 1, #3	Index of Well Being (IWB): Which of the following best describes how you think of your life at this time? (Single response question with seven response options.)
Part 2, #1	Satisfaction with Life (SWL): Please indicate how much you agree or disagree with each statement. (Five-part question with seven response options, ranging from "Completely Disagree" to "Completely Agree," for each part.)
Part 2, #2	Life as a Whole Cognitive Question: How satisfied are you with your life overall? (Used seven-point satisfaction scale.)
Part 2, #3	Multiple Discrepancies Theory-Based Question: Compared to your own goals, how does your life measure up to WHAT YOU WANT? (Twelve-part question, with the last part, 3L, entitled "Life as a Whole." Eight response options, ranging from "Not Applicable" to 'Matches My Goals Exactly," to each part.)

The Life as a Whole Composite was calculated as the average of the mean respondent scores for each of the six questions shown above. The mean respondent scores for each part of the multi-part LCS and SWL questions were averaged to provide input values for use in the composite. As was done in the 2002 QoL Study, which introduced the MDT-based question into the LAW composite, only the final part (3L) of that 12-part question (LAW Part 2 #3) was used in calculating the composite. Thus, the calculation can be summarized as:

LAW Composite =

Mean (LAW 1-1, Mean LCS, LAW 1-3, Mean SWL, LAW 2-2, LAW 2-3L)

The responses from the respondent sample were weighted by Pay Grade Group, as described in Section 4.1, in order to calculate the applicable means. In order to be included in the composite calculation, each respondent had to provide a valid response to more than two-thirds of the questions comprising the composite. That is, across the six questions, each respondent had to provide a valid answer to at least five of the questions. (A valid response was one where the respondent did not leave the question blank or fill in more than one response to questions requiring selection of a single response.) For the two multi-part questions, each respondent had to provide a valid

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answer to more than two-thirds of the parts of the individual questions' in order for that response to be considered as a valid response to the overall question. Using these criteria, 77 4,500 of the total of 4,812 Base and Station respondents (93.5 percent) provided the requisite number of valid responses to the six questions to be included in the Life as a Whole composite calculation.

The Life as a Whole Composite was calculated on a seven-point scale. The Life as a Whole questions that employed a different scale (e.g., the Life Characteristics Scale question employed a five-point scale) were re-scaled to a consistent seven-point range using a conversion formula in order to provide direct comparability to seven-point questions. The conversion formula used was:

$$S_7 = \frac{(S_7 \max - S_7 \min)(S - S \min)}{(S \max - S \min)} + S_7 \min$$

Where S represents the Score on the original (e.g., five-point) scale and S_7 is the recalculated score on the seven-point scale. The minimum scores were typically "1," simplifying the calculation. For example, for conversion from a five-point scale to the seven-point scale, the equation reduces to:

$$S_7 = 1.5(S_5 - 1) + 1$$

where S_5 represents the original score on a five-point scale. 78

In addition to the re-scaling described above, responses also were reverse-coded when necessary to ensure that larger scores were "better." In other words, reverse coding was used to ensure higher values reflected a higher perceived quality of life. For example, Question #2b of Life as a Whole Part 1 (the LCS question) asked the respondents to indicate their perception of their lives on a scale of 1=Enjoyable through 5=Miserable. In this case, the responses were reverse-coded and re-scaled so that Enjoyable was scored as 7 and Miserable was scored as 1, and the middle (neutral) part of the range scored as 4.

Cronbach's Alpha was calculated to assess the internal consistency of using the combination of the six Life as a Whole questions as a single uni-dimensional construct for measuring Global Quality of Life. The calculated statistic of this statistic for the 2007 Base and Station respondent sample was 0.87 for the collection of valid responses to

⁷⁷ The criteria used in this 2007 QoL Study apparently were much stricter than those used in the 2002 QoL Study. The Final Report from the latter study (see p. D-2 of the 2002 QoL Study Report) included an equation somewhat similar to that given earlier for the LAW Composite, and then stated that the "LAW composite [was] not computed if 3 or more of the components are missing."

⁷⁸ Note that this re-scaling scheme was a linear function resulting in scores ranging from 1 to 7, as was desired since it was how the other variable scores included in the composite were scaled. It was not equivalent to merely multiplying the scores from the five-point scale by 7/5. Although it has been impossible for the Study Team to recreate exactly what was done in the analysis of the data from the 2002 QoL Study, there are indications in the Final Report from that study that the simple multiplication may have been performed (see p. E-6 of the 2002 QoL Study Report). Such a scheme would have resulted in scores ranging from 1.4 to 7, with a mid-point of 4.2, artificially raising the re-scaled scores reported.

the six Life as a Whole questions, slightly below the 0.90 value from the 2002 QoL Study but essentially equivalent to the 0.87 and 0.88 values seen in the 1983 and 1998 QoL Studies, respectively. A value of 0.70 or higher is generally considered acceptable in social science research applications. With a Cronbach's Alpha of 0.87, the sixquestion Life as a Whole composite provided adequate internal consistency in serving as a metric for Global Quality of Life.

4.15.1.2 Results and Analysis

Using the methodology described above for calculating the Life as a Whole composite, the weighted 2007 Global Quality of Life score was determined to be 4.56. Figure 4-178 shows the weighted Global Quality of Life score for 2007, as well as the 2002, 1998, and 1993 scores. The scores, ranging from 4.49 to 4.62, are very similar and represent a slightly positive perception of overall Global Quality of Life.

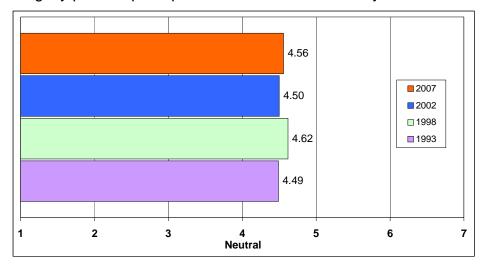


Figure 4-178. Trends in Global Quality of Life for the Base and Station Respondents

The Global Quality of Life scores for 1993 and 1998 were taken directly from the text of the 2002 QoL Study Report. Note that the weighted Global Quality of Life score for 2002 was re-calculated from the raw, Government-furnished 2002 data provided to the Study Team, in accordance with the methodology set forth in Section 4.14.1.1 above, and does not match the value included in the Final Report for that earlier study. Applying the same rules and methodology to the 2002 Base and Station respondent data as were applied to the 2007 data maximized the comparability between these two result sets. Of the 4,698 responses in the 2002 survey, 4,466 responses (95.1 percent) met the two-thirds valid answer criteria of the 2007 methodology and were included in the recalculation of the 2002 Global Quality of Life.

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⁷⁹ See p. 3-52 of the 2002 QoL Study Report.

As explained in Section 4.1.1 all the 2002 scores included in this report were recalculated using the same weighting methodology as was applied to the 2007 data in order to maximize the comparability of the numbers reported for these two studies. This recalculation almost invariably resulted in changes, so the reader is reminded that the 2002 scores seen in this report are unlikely to match those in the original 2002 QoL Study Report.

4.15.2 Analysis by Demographic Subgroup

Global Quality of Life for the Base and Station respondents also was analyzed by decomposing the respondent data into subgroups to examine differences according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each will be discussed in turn.

4.15.2.1 Pay Grade Group

All Pay Grade Groups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life. Figure 4-179 shows the Global Quality of Life assessment for the Base and Station respondents by Pay Grade Group.

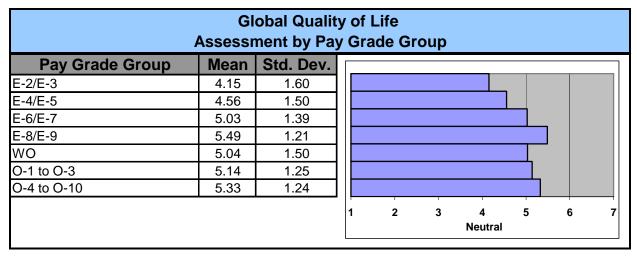


Figure 4-179. Global Quality of Life by Pay Grade Group for the Base and Station Respondents

The Global Quality of Life score was highest for the E-8/E-9 Pay Grade Group, 5.49, and lowest for the E-2/E-3 Pay Grade Group, 4.15. The E-2/E-3 Pay Grade Group appeared to be much less satisfied with their Global Quality of Life than the other Pay Grade Groups. While the difference from the 4.56 Global Quality of Life score seen for the E-4/E-5 respondents had no practical significance (Cohen's *d* statistic of 0.26), for all other comparisons the differences between the score of the E-2/E-3 Pay Grade Group and the scores of the other Pay Grade Groups all had practical significance, with the Cohen's *d* statistic ranging from 0.57 (medium effect size when comparing the E-2/E-3 to WO Pay Grade Groups) to 0.94 (large effect size when comparing the E-2/E-3 and E-8/E-9 Pay Grade Groups). Comparisons of scores between other pairs of Pay Grade Groups showed no other differences that had practical significance.

The breakdown of Global Quality of Life scores by Pay Grade Group for both 2007 and 2002 are shown in Figure 4-180. The results were very similar across the two studies and reflected very little difference between the scores for each Pay Grade Group. Overall, the E-2/E-3 Pay Grade Group showed the lowest quality of life score and the E-8/E-9 Pay Grade Group showed the highest.

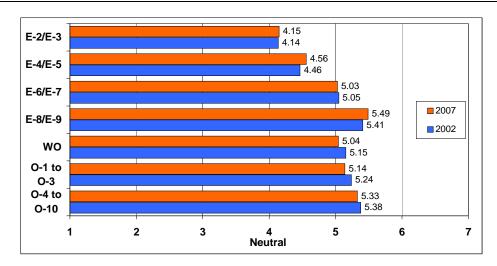


Figure 4-180. Trends in Global Quality of Life by Pay Grade Group for the Base and Station Respondents

4.15.2.2 Race/Ethnicity

All racial/ethnic groups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 4-181. The Black/African-American subgroup had the highest overall score of 4.75. The "Other" group had the lowest score of 4.30. The difference between these two extremes had no practical significance (Cohen's *d* statistic was 0.28).

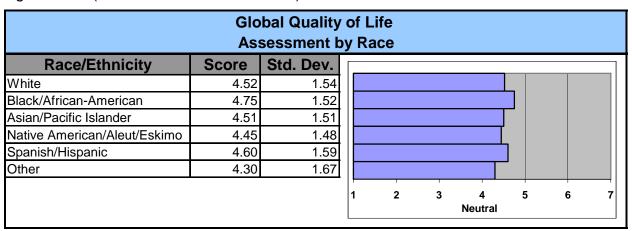


Figure 4-181. Global Quality of Life by Race/Ethnicity for the Base and Station Respondents

These scores are similar to the Global Quality of Life scores seen for the race/ethnicity decomposition in the three previous three Marine Corps QoL studies.⁸¹ The graph of results from the 2002 report also showed scores in the range of 4.5 with slightly higher results for the "Black" group and slightly lower scores for the "Other" group.

⁸¹ See Figure 3-35 on p. 3-53 of the 2002 QoL Study Report. That graphic contained only the "White," "Black," "Hispanic" and "Other" subgroups and no specific numerical values were given for the data in the figure.

Figure 4-182 shows the breakdown of Global Quality of Life scores by race/ethnicity for both the 2002 and 2007 QoL Studies. The responses for 2002 were re-categorized into the same race/ethnicity groups used in 2007 and the scores recalculated from the raw 2002 survey data to maximize comparability. The greatest differences in scores were seen in the Native American/Aleut/Eskimo, Other, and Asian/Pacific Islander groups. However, based on Cohen's *d* calculations (0.19, 0.15, and 0.14, respectively), the differences had no practical significance.

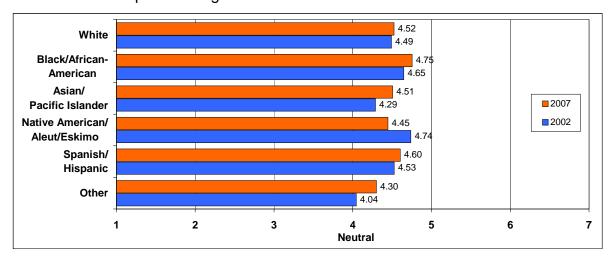


Figure 4-182. Trends in Global Quality of Life by Race/Ethnicity for the Base and Station Respondents

4.15.2.3 Gender

Both genders indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 4-183. The female respondents had the higher Global Quality of Life score at 4.73, or 0.19 higher than the male score of 4.54. This difference did not have practical significance (Cohen's *d* statistic was 0.13). Note that these scores are very similar to the analogous scores from the three previous Marine Corps QoL studies.⁸²

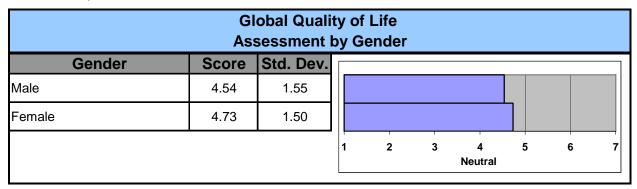


Figure 4-183. Global Quality of Life by Gender for the Base and Station Respondents

 $^{^{82}}$ See Figure 3-34 on p. 3-53 of the 2002 QoL Study Report.

Figure 4-184 shows the breakdown of Global Quality of Life scores by Gender for both 2002 and 2007. The scores for 2002 were recalculated from the raw 2002 survey data to maximize comparability. The scores for both males and females were slightly higher in 2007; however, based on Cohen's *d* calculations (0.03 in both cases), the differences had no practical significance.

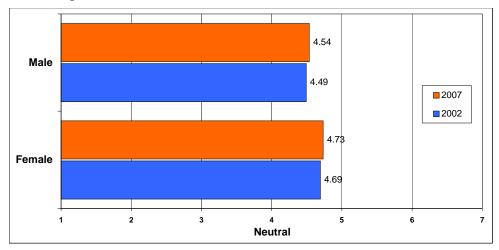


Figure 4-184. Trends in Global Quality of Life by Gender for the Base and Station Respondents

4.15.2.4 Marital/Parental Status

Respondents in all Marital/Parental Status groups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 4-185. The Married with Children subgroup had the highest Global Quality of Life score at 4.98 and the Never Been Married subgroup had the lowest at 4.22. The difference between these two subgroups had practical significance, as indicated by the calculated Cohen's *d* statistic of 0.51 (medium effect size). None of the other differences between other Marital/Parental status subgroups had practical significance.

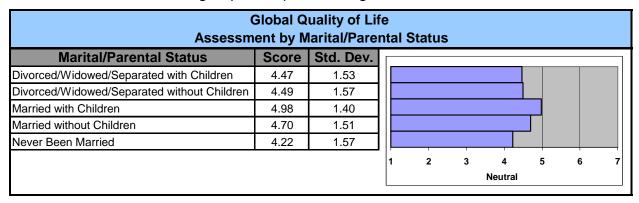


Figure 4-185. Global Quality of Life by Marital/Parental Status for the Base and Station Respondents

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These scores appear to be similar to the Marital Status Global Quality of Life scores and patterns from the previous three Marine Corps QoL studies, based on data reported in the 2002 QoL Study Report.⁸³

Figure 4-186 shows the breakdown of Global Quality of Life scores by Marital/Parental Status for both 2002 and 2007. The responses for 2002 were re-categorized into the same Marital/Parental Status groups used in 2007 and the scores recalculated from the raw 2002 survey data to maximize comparability. Based on Cohen's *d* calculations (less than 0.1 in all cases), the differences between 2002 and 2007 results had no practical significance.

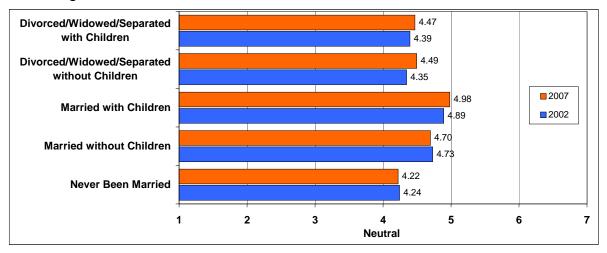


Figure 4-186. Trends in Global Quality of Life by Marital/Parental Status for the Base and Station Respondents

4.15.3 Key Drivers of Global Quality of Life

In order to determine the factors that were key to the reported overall satisfaction with Global Quality of Life, multiple regression of satisfaction in the individual life domains on the Life as a Whole composite was performed for the Base and Station respondents. The results are shown in Figure 4-187. The overall domain satisfaction responses are located vertically in relation to their influence on the Global Quality of Life assessment as indicated by the regression analysis. Note that Neighborhood had a very small, negative correlation with/influence on the Global Quality of Life and was therefore marked with an asterisk (since the magnitude of the influence is shown in the figure).

⁸³ See Figure 3-36 on p. 3-54 of the 2002 QoL Study Report. That graphic contained the "Never Married," "Married w/Children," "Married w/o Children," and "Divorced/Separated" subgroups and no specific numerical values were given for the data in the figure.

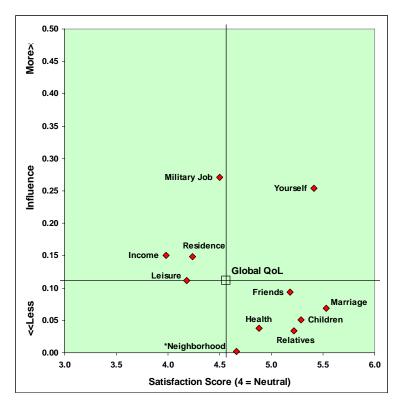


Figure 4-187. Key Driver Diagram of Global Quality of Life for the Base and Station Respondents

The four most influential life domains were Military Job, Yourself, Income and Standard of Living, and Residence. This was a slight re-ordering of the results from the 2002 QOL Study, which had found Yourself, Military Job, and Income and Standard of Living (in that order) to be the top three drivers. The influence of the Residence life domain increased markedly in the 2007 results: In 2002, Residence was only the sixth most influential life domain (less influential than Leisure and Recreation and Marriage/Intimate Relationship) and its influence fell below that of the overall composite. In 2002, Marriage/Intimate Relationship was the fifth most influential; however for 2007, Marriage/Intimate Relationship dropped below Friends and Friendships and Leisure and Recreation into seventh place in terms of influence.

Income and Standard of Living continued to provide a good opportunity for improvement in the Global Quality of Life of the Base and Station respondents, having the lowest satisfaction score, and the third highest influence. Residence also would provide some opportunity. The potential for Military Job and Yourself to influence Global Quality of Life was limited by their already (relatively) high satisfaction ratings (i.e., equal to or greater than the overall Global Quality of Life mean).

Collectively, all the domain satisfactions, except Neighborhood and Residence, fell within the same quadrant of the key driver diagram as in 2002. Also note that while Yourself had been by far the most influential life domain in 2002, its influence in 2007, while still high, had been reduced noticeably.

4.15.4 Measures of Military Importance

Each life domain section of the 2007 QoL survey instrument, except for the Military Job and Health domains, included two questions that reported the extent to which the topic of the life domain impacted 1) the respondents' intentions to remain on active duty, and 2) the respondents' job performance.⁸⁴ The respondents were given five response options, ranging from "Very Positive Effect" to "Very Negative Effect."

The results of these questions were presented individually in the analysis of the results of each individual life domain. Here they are considered as a group to give a better overall view of these topics for the Base and Station respondent sample.

In addition, the Retention Analysis presents the results from two questions that inquired about the respondents' retention intentions.

4.15.4.1 Plans To Remain on Active Duty

Plans to remain on active duty were assessed based on the responses to 15 questions taken from the individual life domain sections of the survey. Table 4-148 lists the life domains (taken from the 2007 Active Duty Marine QoL survey instrument in Appendix F), lists the particular questions applicable to this analysis, and relates these questions to the summary titles used in Figure 4-188, which shows the results of this assessment for each of the pertinent questions. Each of these questions contained five response options ranging from "Very Negative Effect" to "Very Positive Effect."

Table 4-148. Questions Addressing Intentions To Remain on Active Duty in the 2007 QoL Survey

Life Domain	Question #	Figure Summary Title
Your Residence	12	Residence
Your Neighborhood	5	Neighborhood
Leisure and Recreation	7	Leisure and Recreation
Health	13	Health - Your State
Health	18	Health - Your Medical Care
Health	25	Health - Family State
Health	27	Health - Family Medical Care
Friends and Friendships	7	Friends and Friendships
Marriage/Intimate Relationship	5	Marriage/Intimate Relationship
Your Relationship with Your Children	12	Relationship with Your Children
Your Relationship with Your Children	13	Children's Educational Opportunities
Your Relationship with Other Relatives	7	Relationship with Other Relatives
Income and Standard of Living	12	Income and Standard of Living
Your Military Job	17	Your Military Job
Yourself	9	Yourself

⁸⁴ Note that the Health life domain also had analogous questions related to the state of the health of the respondent's family and the effect of both the respondent's and their family's healthcare, while the job performance question was not appropriate for the Military Job life domain.

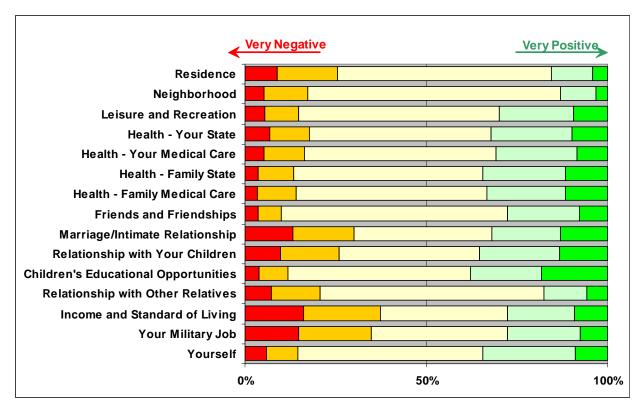


Figure 4-188. Reported Effect on Intentions To Remain on Active Duty for the Base and Station Respondents

A number of different insights can be drawn from the figure.

• Positive Impacts. The responses were considered in terms of positive impact on plans to remain on active duty (i.e., the total percentages of respondents who answered either "Very Positive Effect" or "Positive Effect"). By this measure, nine of the 15 questions/life domains (Leisure and Recreation, the four Health-related questions, Marriage/Intimate Relationship, Relationship with Your Children, Children's Educational Opportunities and Yourself) could be said to have had positive impacts because more than 30 percent of the respondents chose the two favorable responses to the applicable questions. These 'strongly positive' impacts ranged from the Leisure and Recreation life domain (29.8 percent positive responses⁸⁵) to the Children's Educational Opportunities question (a new question for 2007 with 37.8 percent positive responses). Very high percentages of positive responses also were seen for the Relationship with Your Children (35.2 percent), Yourself (which had the largest positive impact in the 2002 QoL Study, 34.3 percent) and Health - Family State (34.3 percent) questions/life domains.

⁸⁵ Note that the percentages quoted in this section of the report may not match the percentages included in the individual histograms showing the results of the Effect on Plans To Remain on Active Duty questions and included in the individual life domains because the data presented here include <u>all</u> valid responses to the questions, while the data presented in the life domain analyses was weighted by Pay Grade Group, and thus excluded any respondents for whom a pay grade could not be determined.

- Negative Impacts. The responses were considered in terms of negative impact on plans to remain on active duty (i.e., the total percentages of respondents who answered either "Very Negative Effect" or "Negative Effect"). By this measure, five of the 15 questions/life domains (Residence, Marriage/Intimate Relationship, Relationship with Your Children, Income and Standard of Living, and Your Military Job) could be said to have had negative impacts because more than 25 percent of the respondents chose the two unfavorable responses to the applicable questions. These 'strongly negative' impacts ranged from the Income and Standard of Living Life Domain (which also had the largest negative impact in the 2002 QoL Study, 37.4 percent) to the Residence life domain (25.4 percent negative responses). Very high percentages of negative responses also were seen for Your Military Job (34.9 percent) and Marriage/Intimate Relationship (30.0 percent) life domains.
- Polarizing Impacts. These were defined as questions/life domains for which less than 50 percent of the respondents chose the "No Effect" response. By this measure, four of the 15 questions/life domains -- Marriage/Intimate Relationship (38.1 percent), Relationship with Your Children (38.8 percent), Income and Standard of Living (35.0 percent) and Your Military Job (37.5 percent) -- qualified as having polarizing impacts. Of these four questions/life domains,
 - Two (Income and Standard of Living and Your Military Job) had negative effects on the respondents' plans to remain on active duty. The overall scores on the applicable questions were 1.82 and 1.85, respectively, on a scale of 0-to-4, the lowest scores seen (the Residence life domain also received a score of 1.85).
 - Two others had only very slight effects on the respondents' plans to remain on active duty. Relationship with Your Children had an overall score of 4.08 on the 1-to-7 scale. Marriage/Intimate Relationship also trended in neither direction: The overall score in this life domain was 3.97 on the 1-to-7 scale. Note that both of these life domains had been mentioned previously for having a large number of both positive and negative responses.
- The highest score, 2.44, on the 0-to-4 scale was seen for the Children's Educational Opportunities question.
- The lowest score, 1.82, was seen for the Income and Standard of Living life domain.

4.15.4.2 *Job Performance*

Impact on job performance was assessed based on the responses to 13 questions taken from the individual life domain sections of the survey. Table 4-149 lists the life domains (again as named in the 2007 QoL survey itself), the particular questions applicable to this analysis, and relates these questions to the summary titles used in Figure 4-189, which shows the results of this assessment for each of the pertinent questions. As discussed in previous sections, each of these questions contained five response options ranging from "Very Negative Effect" to "Very Positive Effect."

Table 4-149. Survey Questions Addressing Job Performance in the 2007 QoL Survey

Survey Section	Question #	Figure Summary Title
Your Residence	11	Residence
Your Neighborhood	4	Neighborhood
Leisure and Recreation	6	Leisure and Recreation
Health	12	Health - Your State
Health	17	Health - Your Medical Care
Health	24	Health - Family State
Health	26	Health - Family Medical Care
Friends and Friendships	6	Friends and Friendships
Marriage/Intimate Relationship	4	Marriage/Intimate Relationship
Your Relationship with Your Children	11	Relationship with Your Children
Your Relationship with Other Relatives	6	Relationship with Other Relatives
Income and Standard of Living	11	Income and Standard of Living
Yourself	8	Yourself

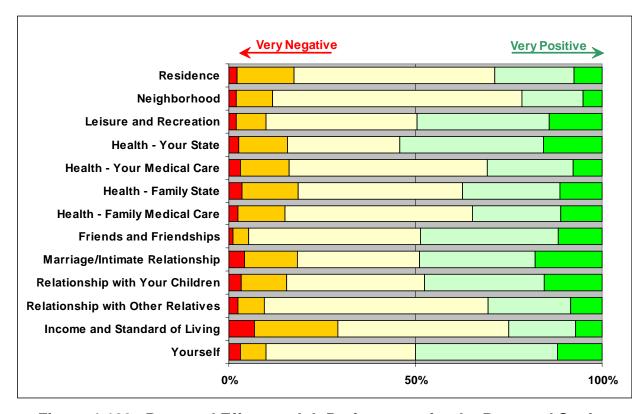


Figure 4-189. Reported Effect on Job Performance for the Base and Station Respondents

A number of different insights can be drawn from the figure.

- Positive Impacts. The responses were considered in terms of positive impact on job performance (i.e., the total percentages of respondents who answered either "Very Positive Effect" or "Positive Effect"). By this measure, six of the 13 questions/life domains (Leisure and Recreation, Health Your State, Friends and Friendships, Marriage/Intimate Relationship, Relationship with Your Children, and Yourself) had strong positive impacts because from 48.6 to 54.3 percent⁸⁶ of the respondents chose the two favorable responses to the applicable questions. Very high percentages of positive responses also were seen for Health Your Medical Care, Health Family State, Health Family Medical Care, and Relationship with Other Relatives questions/life domains. (In the 2002 QoL Study, "State of Health" essentially was tied with "Leisure/Recreation" in terms of the greatest positive impact.)
- Negative Impacts. The responses were considered in terms of negative impact on
 job performance (i.e., the total percentages of respondents who answered either
 "Very Negative Effect" or "Negative Effect"). By this measure, only the Income and
 Standard of Living life domain, which had 29.1 percent negative responses, could be
 said to have had negative impacts. (In the 2002 QoL Study, "Financial Status" also
 had the largest negative impact.)
- Polarizing Impacts. These were defined as questions/life domains for which less than 50 percent of the respondents chose the "No Effect" response. By this definition, eight of the 13 questions/life domains qualified as having polarizing impacts. However, in general this occurred because the respondents gave such generally positive responses to so many questions/life domains (i.e., the 10 mentioned earlier in the discussion of Positive Impacts), that by default these questions/life domains fell into this category. Only one life domain, Income and Standard of Living, for which 25.0 percent of the respondents answered positively and 29.1 percent of the respondents answered negatively, could be considered to have been truly "polarizing" on the question of its effect on job performance.
- The highest weighted score, 2.53, on the 0-to-4 scale was seen for the Friends and Friendships life domain, although two other questions/life domains Leisure and Recreation and Health Your State were close behind with scores of 2.51.
- The lowest weighted score, 1.96, (very close to neutrality) was seen for the Income and Standard of Living life domain.

4.15.4.3 Retention Analysis

Two questions in the 2007 QoL survey, which differed in how they allowed the respondents to answer, were related directly to retention intentions.

⁸⁶ Note that the percentages quoted in this section of the report may not match the percentages included in the individual histograms showing the results of the Effect on Job Performance questions and included in the individual life domains because the data presented here include <u>all</u> valid responses to the questions, while the data presented in the life domain analyses was weighted by Pay Grade Group, and thus excluded any respondents for whom a pay grade could not be determined.

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The first question, Question #15 in the Background section, was common to all three prior Marine Corps QoL studies and asked the respondents to answer by picking which of seven statement options, summarized in Figure 4-190,⁸⁷ best described their career intentions. Social scientists believe that behavior intentions are reliable and valid predictors of actual behavior based on the results of several longitudinal studies.⁸⁸

Background Question #15 Which of the following statements best describes your career intentions at this time?											
Response	Number	Percent									
I Intend To Remain in the Marine Corps until Eligible for Retirement	1,528	32.5%									
I Am Eligible for Retirement but Intend To Stay In	153	3.2%									
I Intend to Stay in but Not until Retirement	476	10.1%									
I Am Not Sure What I Intend To Do	1,256	26.7%									
I Intend To Leave the Marine Corps as Soon as I Can	1,196	25.4%									
I Intend To Remain on Active Duty, but I Am Being Involuntarily Separated	29	0.6%									
Medical Separation	70	1.5%									
Total Number of Valid Responses:	4,708	100.0%	0	500	1.000	1.500	2,000				
					o. of Respon	,	_,,000				

Figure 4-190. Retention Analysis: Responses to Background Question #15 by the Base and Station Respondents

The most frequently selected response was "I intend to remain in the Marine Corps until eligible for retirement," with 32.5 percent of the respondents selecting this response. A total of 25.4 percent of the respondents selected the "I intend to leave the Marine Corps as soon as I can" response. The least selected response was "I intend to remain on active duty but I am being involuntarily separated," with 0.6 percent of the respondents selecting this response. "Medical Separation," a new option added to the 2007 QoL survey, was selected by 1.5 percent of the respondents.

For purposes of comparison, the data shown above from the 2007 respondents were grouped into the five categories used in the 2002 survey analysis. To reproduce the 2002 grouping, the first two response options in the figure immediately above were combined and the last two response options were combined. The re-categorized responses are shown in Figure 4-191.

88 1993 QoL Study Report, p. 127.

⁸⁷ Note that the percentages shown here do not match those shown in the Background section of this report for the comparison of Background Questions #14 and #15 because the earlier graphic required valid responses to both Questions #14 and #15, whereas the data here required only valid responses to Question #15.

Background Question #15 Which of the following statements best describes your career intentions at this time?											
Response	Number	Percent									
Remain until Retirement or Already Eligible and Intend To Stay in	1,681	35.7%									
Stay in but Not until Retirement	476	10.1%									
Not Sure What I Intend To Do	1,256	26.7%]					
Intend To Leave as Soon as Possible	1,196	25.4%									
Other (Involuntary Separation)	99	2.1%									
Total Number of Valid Responses:	4,708	100.0%	0	500	1,000	1,500	2,000				
·		N	o. of Respons	ses							

Figure 4-191. Retention Analysis: Responses of the Base and Station Respondents on Background Question #15 Using the 2002 Categories

Table 4-150 shows the re-categorized 2007 data along with the results from the previous three Marine Corps QoL studies. The option "I intend to leave as soon as possible" had the largest change since 2002, decreasing from 28.3 percent in 2002 to 25.4 percent in 2007, its lowest value in any of the four Marine Corps QoL studies. The response option "Not sure what I intend to do" showed the largest increase from 2002, climbing from 24.4 percent to 26.7 percent, the largest percentage seen for that option in any of the four Marine Corps QoL surveys.

Table 4-150. Retention Comparisons across the Four Marine Corps QoL Studies

Which of the Following Statements Best Describes Your Career Intentions at This Time?									
	1993	1998	2002	2007					
Remain until Retirement or Already Eligible and Intend To Stay in	40.8%	35.0%	35.3%	35.7%					
Stay in but Not until Retirement	7.7%	9.4%	11.1%	10.1%					
Not Sure What I Intend To Do	21.3%	26.5%	24.4%	26.7%					
Intend To Leave as Soon as Possible	27.5%	28.6%	28.3%	25.4%					
Other (Involuntary Separation)	2.7%	0.4%	1.0%	2.1%					

The second retention-related question, Question #11 in the Yourself life domain, was first used in the 2002 QoL Study. It asked the respondents to indicate how much they agreed or disagreed with the statement:

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

The respondents then answered by selecting the point on a "continuous" seven-point scale (i.e., darkening one of seven circles between the two extreme values) that best represented the intensity of their retention intentions. The options ranged from a circle labeled "Completely Disagree" (assigned a score of 1) to a circle labeled "Completely Agree" (assigned a score of 7). The center circle was labeled "Neutral."

The results for this second retention-related question are shown graphically by Pay Grade Group in Figure 4-192. The percentage of respondents in each Pay Grade Group who selected each of the individual circles is shown using a color scale between

⁸⁹ Data taken from Table 3-13 on p. 3-60 of the 2002 QoL Study Report.

the two extreme responses. The E-2/E-3 Pay Grade Group showed the greatest disagreement with the statement: 59.2 percent of the respondents in that Pay Grade Group expressed some level of disagreement (i.e., darkened a circle to the left of the neutral option). The E-8/E-9 and the O-4 to O-10 Pay Grade Groups agreed the most with the statement: 88.9 percent and 89.0 percent, respectively, expressed some level of agreement (i.e., darkened a circle to the right of the neutral option).

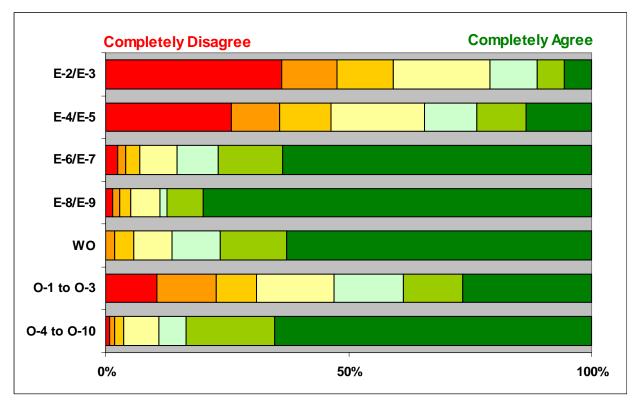


Figure 4-192. Retention Intentions of the Base and Station Respondents by Pay Grade Group (Yourself Question #11)

Based upon a visual inspection of Figure 3-40 in the 2002 QoL Study Report, the 2007 results demonstrated a pattern of responses similar to those generated in the 2002 QoL Study. However, several broad statements regarding differences can be made. The level of disagreement with the statement seems to have diminished, or at worst stayed constant, across all the Pay Grade Groups. For example, 47.7 percent of the respondents in the E-2/E-3 Pay Grade Group in 2007 selected one of the options expressing most disagreement; in 2002, that figure was over 50 percent. None of the Warrant Officers in 2007 selected the "Completely Disagree" option; in 2002, a small (perhaps 5 percent) fraction selected that response. The percentage of the O-4 to O-10 Pay Grade Group expressing any level of disagreement also declined noticeably in 2007 relative to that seen in 2002.

Figure 4-193 shows the overall grouping of the responses (also weighted by Pay Grade Group) for Yourself Question #11. The figure shows three response spikes, one at each extreme and one in the middle (neutral). This grouping resulted in a weighted

mean calculation of almost exactly neutral, although the high weighted standard deviation (2.26) reflects the large number of respondents at both extremes.

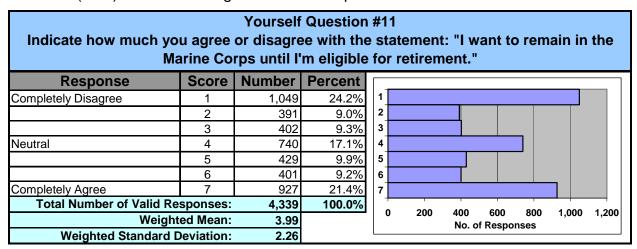


Figure 4-193. Base and Station Respondent Retention Intentions Overall (Yourself Question #11)

4.15.5 Conclusions for Life as a Whole/Global Quality of Life for the Base and Station Respondents

Overall the Global Quality of Life assessment for the Base and Station Marine respondents in 2007 did not show any large divergence from the assessments of the previous three Marine Corps QoL studies. This included trends by Pay Grade Group, as well as other demographic groups. Measures of military performance also were very similar to the results of the previous Marine Corps QoL studies, including the determination of which life domain had the greatest positive and negative impacts on plans to remain on active duty and job performance. A key finding in this area was that Children's Educational Opportunities, a new retention-related question added to the survey for 2007, had the greatest positive effect on intentions to remain on active duty. The retention intention results, especially when it is remembered that they were collected after 4.5 years of Marine Corps commitments to both OIF and OEF, were encouraging: The career intentions of the Base and Station survey respondents do not appear to have degraded noticeably since the conduct of the 2002 QoL Study, and in some ways actually appear to have improved.

The life domain with the greatest influence on Global Quality of Life for the Base and Station respondents was the Military Job domain. Yourself, Income and Standard of Living, and Residence followed as the other major influences on Global Quality of Life. All of these would provide possible areas for improvement. However, both Military Job and Yourself had satisfaction scores equivalent to or greater than that of the mean Global Quality of Life. Thus, the life domains with the most promise for improving Global Quality of Life for the Base and Station Marine respondents were Income and Standard of Living and Residence, both of which had relatively strong influence and satisfaction scores below the mean Global Quality of Life.

4.16 SUMMARY OF THE RESPONSES OF THE BASE AND STATION MARINES

The opinions of the Base and Station Marines are summarized in the following graphics.

Table 4-151 shows the life domain rankings, based on the overall weighted mean happiness and satisfaction scores from this 2007 QoL Study. It is clear that happiness and satisfaction were scored differently by the respondents. Satisfaction received a higher score in seven of the 10 life domains in which a single happiness score was computed and happiness received a higher score in two of the 10; one life domain (Health) received the same score in both measures. In general, what could be characterized as 'family/personal relationship' life domains were rated the highest. Relationship with Your Children (when the opinions of the parents living with their children were considered), Marriage/Intimate Relationship, Relationship with Other Relatives, and Friends and Friendships, in that order, received the four highest mean happiness scores. The same four life domains received four of the five highest mean satisfaction scores (Yourself received the second highest satisfaction score).

Table 4-151. Overall Weighted Mean Happiness and Satisfaction Scores in Each of the Life Domains for the 2007 Base and Station Marine Respondents

Happiness		Satisfaction				
How Do You Feel about	Mean ¹	How Satisfied Are You Overall with:	Mean ²			
Relationship with Your Children	6.06/4.23 ³	Marriage/Intimate Relationship	5.53			
Marriage/Intimate Relationship	5.25	Yourself	5.41			
Relationship with Other Relatives	4.92	Relationship with Your Children	5.29			
Friends and Friendships	4.90	Relationship with Other Relatives	5.22			
Health	4.88	Friends and Friendships	5.18			
Leisure and Recreation	4.80	Health	4.88			
Yourself	4.69	Your Neighborhood	4.66			
Your Neighborhood	4.52	Military Job	4.50			
Your Residence	4.22	Your Residence	4.24			
Income and Standard of Living	4.10	Leisure and Recreation	4.18			
Military Job	4.06	Income and Standard of Living	3.98			

- 1. Affective/Happiness Scale: 1 = Terrible; 4 = Neither Unhappy Nor Pleased; 7 = Delighted
- 2. Cognitive/Satisfaction Scale: 1 = Completely Dissatisfied; 4 = Neutral; 7 = Completely Satisfied
- 3. First value represents the opinions of those parents living with their child(ren); second score represents the opinions of those parents <u>not</u> living with their children.

It can be seen that Income and Standard of Living was the life domain with which the respondents were most displeased: That life domain received the second-lowest weighted mean happiness score and the lowest weighted mean satisfaction score. Both scores hovered around the neutral score of 4.00. Within the individual life domains, the biggest differences between happiness and satisfaction were seen in the Relationship with Your Children domain (in which the weighted mean happiness score was either 0.77 higher or 1.06 lower than the weighted mean satisfaction score, depending on whether the respondents were or were not living with their children, respectively). Other large differences occurred in the Yourself life domain (where the mean satisfaction score was 0.72 higher) and the Leisure and Recreation life domain (in which the mean satisfaction score was 0.62 lower).

Table 4-152 compares the happiness and satisfaction scores for the seven Pay Grade Groups. It was found that the two lowest enlisted Pay Grade Groups generally had the lowest happiness and satisfaction scores across each life domain. The exception to this general rule was the Warrant Officers, who in several life domains (e.g., Health and Friends and Friendships) gave either the lowest or relatively low averages and the senior officers, for whom satisfaction with Friends and Friendships was relatively low. In contrast, Warrant Officers were found to be extremely satisfied with their jobs, with an above average mean score of 5.38. The most-senior enlisted and commissioned officer Pay Grade Groups were found to be generally happy and satisfied overall.

Table 4-152. Overall Mean Happiness and Satisfaction Scores for the Base and Station Respondents in the 11 Life Domains – by Pay Grade Group

			•					,	•		•		
	Overall Mean Affective (Happiness) Scores												
Pay Grade Group	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship		ship with Children Children Not Living with Respondent	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
E-2/E-3	3.75	4.21	4.52	4.74	4.80	5.20	5.96	4.19	4.83	3.67	3.76	4.37	4.15
E-4/E-5	4.13	4.40	4.87	4.86	4.92	5.16	6.13	3.90	4.91	3.98	3.94	4.72	4.56
E-6/E-7	4.84	4.98	5.07	5.03	4.96	5.36	6.11	4.40	4.97	4.60	4.46	5.07	5.03
E-8/E-9	5.16	5.24	5.30	5.06	5.28	5.62	6.19	4.91	5.30	5.23	5.08	5.48	5.49
wo	5.21	5.29	5.08	4.85	4.77	5.34	5.85	4.60	5.06	4.94	4.77	4.96	5.04
O-1 to O-3	5.26	5.22	5.08	5.51	5.11	5.60	6.13	5.18	5.30	5.12	4.57	5.17	5.14
O-4 to O-10	5.28	5.46	5.19	5.45	5.09	5.55	6.30	5.50	5.08	5.41	4.92	5.24	5.33
Overall	4.22	4.52	4.80	4.88	4.90	5.25	6.06	4.23	4.92	4.10	4.06	4.69	4.56
							(Satisfaction	n) Scores					
Pay Grade Group	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship		ship with Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
E-2/E-3	3.73	4.35	3.92	4.80	5.16	5.67	4	.81	5.21	3.51	4.17	5.20	4.15
E-4/E-5	4.14	4.55	4.08	4.85	5.22	5.42	5	.52	5.24	3.93	4.38	5.45	4.56
E-6/E-7	4.98	5.21	4.62	5.04	5.11	5.42	5.64		5.22	4.36	5.01	5.67	5.03
E-8/E-9	5.17	5.36	5.03	5.11	5.44	5.49	5.78		5.33	5.04	5.41	5.86	5.49
wo	5.33	5.34	4.84	4.74	5.15	5.57	5.55		4.83	4.71	5.38	5.52	5.04
O-1 to O-3	5.38	5.31	4.51	5.25	5.23	5.83	5	.80	5.43	5.01	5.12	5.62	5.14
O-4 to O-10	5.35	5.45	4.73	5.09	5.13	5.48		.71	5.22	5.40	5.28	5.57	5.33
Overall	4.24	4.66	4.18	4.88	5.18	5.53	5	.29	5.22	3.98	4.50	5.41	4.56

Table 4-153 compares the happiness and satisfaction scores in selected life domains decomposed by the base or station to which the respondent was assigned. It shows that the larger bases/stations (e.g., Camp Pendleton, Camp Lejeune, Camp Butler and MCAGCC (Twentynine Palms)), to which are assigned more enlisted Marines in the lower Pay Grades Groups, generally received lower scores in happiness and satisfaction across the life domains in which this decomposition was examined. However, low scores also were seen in several life domains at MCAS Beaufort, MCB Hawaii and MCAS Iwakuni, all relatively small installations. However, MCAS Iwakuni also received high scores in both the Health and Marriage/Intimate Relationship life domains. Headquarters Battalion Henderson Hall and MCB Quantico generally received higher than average scores for both happiness and satisfaction, a reflection of the more-senior pool of Marines assigned to those installations.

Table 4-153. Overall Mean Happiness and Satisfaction Scores for the Base and Station Respondents in Selected Life Domains – by Base/Station

					- J = 3.2 3. 3			
	Overall Mea	n Affective (Ha	appiness) S	Scores				
Base/Station	Residence	Neighborhood	Leisure and Recreation	Health	Marriage/ Intimate Relationship	Income and Standard of Living	Military Job	
MCAS Beaufort	4.24	4.65	4.73	4.92	5.28	4.02	4.13	
MCB Camp Butler	3.94	4.45	4.85	5.25	5.35	4.16	4.04	
MCB Camp Lejeune	3.98	4.42	4.72	4.77	5.16	3.88	3.86	
MCB Camp Pendleton	4.12	4.35	4.84	4.78	5.25	3.89	3.84	
MCAS Cherry Point	4.56	4.61	4.89	4.99	5.48	4.34	4.20	
MCB Hawaii	3.97	4.48	5.03	5.08	5.14	4.40	4.26	
Headquarters Battalion Henderson Hall	5.36	5.36	5.41	5.16	5.56	5.09	4.81	
MCAS Iwakuni	4.02	4.45	4.85	5.25	5.66	4.31	4.22	
MCAS Miramar	4.77	4.94	5.08	5.05	5.21	4.42	4.31	
MCAS New River	4.45	4.74	4.91	4.89	5.29	4.24	4.40	
MCRD Parris Island	4.50	4.89	4.76	4.85	5.33	4.38	4.01	
MCB Quantico	4.70	5.04	5.09	5.10	5.40	4.64	4.66	
MCRD San Diego	4.72	4.86	4.85	5.10	5.53	4.52	4.36	
MCAGCC (Twentynine Palms)	4.07	4.16	4.37	4.85	5.09	3.87	3.84	
MCAS Yuma	4.75	4.56	4.77	4.83	5.31	4.20	4.32	
Overall	4.22	4.52	4.80	4.88	5.25	4.10	4.06	
Overall Mean Cognitive (Satisfaction) Scores								
Page/Station	Dagidanaa	Noighborhood	Leisure	Hoolth	Marriage/	Income and	Military	

01	erall Mean	Cognitive (Sa	tisfaction)	Scores			
Base/Station	Residence	Neighborhood	Leisure and Recreation	Health	Marriage/ Intimate Relationship	Income and Standard of Living	Military Job
MCAS Beaufort	4.31	4.82	3.99	5.01	5.40	3.91	4.29
MCB Camp Butler	3.90	4.61	4.42	5.20	5.52	4.27	4.49
MCB Camp Lejeune	4.03	4.61	4.03	4.75	5.47	3.88	4.33
MCB Camp Pendleton	4.07	4.41	4.10	4.77	5.56	3.65	4.35
MCAS Cherry Point	4.64	4.89	4.38	4.92	5.80	4.21	4.62
MCB Hawaii	3.96	4.68	4.50	4.91	5.54	4.17	4.56
Headquarters Battalion Henderson Hall	5.23	5.58	4.90	5.16	5.19	5.11	5.06
MCAS Iwakuni	3.97	4.83	4.68	5.26	5.83	4.41	4.75
MCAS Miramar	4.87	5.06	4.70	5.06	5.54	4.17	4.72
MCAS New River	4.49	4.87	4.16	4.84	5.65	4.03	4.76
MCRD Parris Island	4.55	4.87	3.92	4.87	5.48	4.29	4.61
MCB Quantico	4.83	5.05	4.58	5.13	5.60	4.30	5.01
MCRD San Diego	4.81	5.27	4.37	5.02	5.48	4.40	4.95
MCAGCC (Twentynine Palms)	4.13	4.24	3.54	4.96	5.38	3.81	4.38
MCAS Yuma	4.54	4.81	4.02	4.88	5.48	3.92	4.85
Overall	4.24	4.66	4.18	4.88	5.53	3.98	4.50

Table 4-154 compares the happiness and satisfaction scores for the six racial/ethnic groups considered in this study. The happiness and satisfaction were generally the highest for the Blacks/African-Americans. However, the exception to this trend occurred in the Marriage/Intimate Relationship life domain, where this subgroup was among the least happy and was the least satisfied of the subgroups. The Spanish/Hispanic population scored highly across the life domains with the exception of their satisfaction with their relationship with their children. The smaller racial/ethnic groups (Asian/Pacific Islander, Native American/Aleut/Eskimo, and "Other") generally had the lowest happiness and satisfaction scores, although a few exceptions to this rule did exist. For example, the Asian/Pacific Islanders were highly satisfied with their relationship with other relatives and with their income and standard of living. The Native American/

Aleut/Eskimo subgroup scored the highest in satisfaction with relationships with their children. Whites scored relatively low in their satisfaction with friends and friendships.

Table 4-154. Overall Mean Happiness and Satisfaction Scores for the Base and Station Respondents in the 11 Life Domains – by Racial/Ethnic Group

•								•					
				(Overall Meai	n Affective (H	lappiness) S	cores					
Race/Ethnicity	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship		ship with Children Children Not Living with Respondent	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
White	4.23	4.51	4.81	4.87	4.92	5.35	6.10	4.34	4.92	4.08	4.02	4.68	4.52
Black/African- American	4.40	4.71	4.86	4.99	4.87	4.99	6.17	4.43	4.94	4.28	4.21	4.94	4.75
Asian/ Pacific Islander	4.12	4.26	4.77	4.71	4.76	5.38	5.98	4.63	4.97	4.08	3.91	4.44	4.51
Native American/ Aleut/Eskimo	3.84	4.36	4.59	4.76	4.70	4.93	5.84	3.63	4.67	3.70	4.06	4.56	4.45
Spanish/Hispanic	4.12	4.50	4.76	5.00	4.98	5.16	6.17	3.84	5.02	4.15	4.06	4.75	4.60
Other	3.88	4.29	4.69	5.00	4.71	5.45	6.07	4.11	4.74	3.77	3.74	4.56	4.30
Overall	4.22	4.52	4.80	4.88	4.90	5.25	6.06	4.23	4.92	4.10	4.06	4.69	4.56
				0		Cognitive (S	atisfaction) S	Scores					
Race/Ethnicity	Residence	Neighborhood	Recreation		Friends and Friendships		Your C	ship with Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
White	4.23	4.62	4.16	4.86	5.14	5.60	5	.53	5.25	3.97	4.46	5.38	4.52
Black/African- American	4.44	4.93	4.38	5.08	5.25	5.26	5	.42	5.13	4.08	4.70	5.63	4.75
Asian/ Pacific Islander	4.24	4.54	4.09	4.74	5.22	5.42	5	.59	5.27	4.17	4.42	5.27	4.51
Native American/ Aleut/Eskimo	3.90	4.37	3.82	4.85	5.12	5.38	5	.69	5.16	3.61	4.27	5.22	4.45
Spanish/Hispanic	4.19	4.73	4.16	4.92	5.32	5.53		.37	5.27	3.99	4.54	5.50	4.60
Other	4.17	4.63	3.88	4.92	5.10	5.59		.47	5.28	3.89	4.30	5.31	4.30
Overall	4.24	4.66	4.18	4.88	5.18	5.53	5	.29	5.22	3.98	4.50	5.41	4.56

As shown in Table 4-155, the female Base and Station respondents generally were happier and more satisfied than their male counterparts. However, the females gave lower scores to Health, Marriage/Intimate Relationship and Military Job than the males. Ambiguity was found in the responses in the Friends and Friendships life domain, for which females responded as being more satisfied, but less happy, than the males.

Table 4-155. Overall Mean Happiness and Satisfaction Scores for the Base and Station Respondents in the 11 Life Domains – by Gender

					Ove	rall Mean	Affective (Ha	ppiness) Sco	res					
Gender	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships		arriage/ Relationship Involved in Intimate Relationship	2 2 2 2	children Children Not Living with Respondent	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Male	4.18	4.49	4.79	4.92	4.91	5.28	5.22	6.07	4.26	4.91	4.06	4.05	4.69	4.54
Female	4.53	4.72	4.89	4.72	4.87	5.22	5.49	6.40	4.66	5.14	4.40	4.01	4.76	4.73
Overall	4.22	4.52	4.80	4.88	4.90	5.25	5.25	6.06	4.23	4.92	4.10	4.06	4.69	4.56
			Leisure		Friends	М	Cognitive (Sat arriage/ Relationship		ores	Relationship		Military		Global
Gender	Residence	Neighborhood	and Recreation	Health	and Friendships	Married	Involved in Intimate Relationship		Children	with Other Relatives	Standard of Living	Job	Yourself	QoL
Male	4.20	4.64	4.15	4.92	5.18	5.42	5.79		.45	5.23	3.90	4.50	5.41	4.54
Female	4.61	4.89	4.31	4.57	5.27	5.33	5.91		.83	5.32	4.27	4.48	5.50	4.73
Overall	4.24	4.66	4.18	4.88	5.18	5.53	5.53	5.	.29	5.22	3.98	4.50	5.41	4.56

Review of the results of the decomposition by marital/parental status, shown in Table 4-156, showed that the respondents who had never been married were generally the least happy and satisfied, reflecting the general low pay grade mix in this subgroup. The subgroup, however, was found to be the most satisfied with their marriage/intimate relationship. In many life domains, respondents with children were generally happier and more satisfied than respondents without children, regardless of their current marital

status. This trend was true in three of the four income and standard of living comparisons, indicating some degree of appreciation for the monetary considerations given to parents in the Marine Corps. Respondents <u>not</u> living with their children also were found to be significantly less happy than those living with their children.

Table 4-156. Overall Mean Happiness and Satisfaction Scores for the Base and Station Respondents in the 11 Life Domains – by Marital/Parental Status

				Overall	Mean Affec	tive (Happine	ss) Scores						
Marital/Parental Status	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship	Relation	Ship with Children Children Not Living with Respondent	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Divorced/Widowed/Separated with Children	4.73	4.69	4.83	4.73	4.68	3.58	5.75	4.22	4.82	4.18	4.19	4.54	4.47
Divorced/Widowed/Separated without Children	4.64	4.66	4.89	4.81	5.03	3.56	-	-	4.90	4.08	3.90	4.70	4.49
Married with Children	4.74	4.88	4.98	5.05	4.95	5.42	6.20	4.46	4.95	4.55	4.41	4.99	4.98
Married without Children	4.71	4.68	4.98	4.93	4.96	5.51	-	-	5.09	4.36	4.03	4.84	4.70
Never Been Married	3.58	4.16	4.60	4.82	4.86	5.25	5.23	4.03	4.87	3.67	3.82	4.47	4.22
Overall	4.22	4.52	4.80	4.88	4.90	5.25	6.06	4.23	4.92	4.10	4.06	4.69	4.56
			(Overall I	Mean Cognit	tive (Satisfac	tion) Scores						
Marital/Parental Status	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship		ship with Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Divorced/Widowed/Separated with Children	4.75	5.01	4.27	4.74	5.03	4.29	5	.25	5.05	3.85	4.68	5.40	4.47
Divorced/Widowed/Separated without Children	4.69	4.90	4.36	4.76	5.28	4.23	-		5.19	3.86	4.28	5.41	4.49
Married with Children	4.80	5.00	4.36	4.95	5.15	5.47	5	.85	5.21	4.30	4.92	5.56	4.98
Married without Children	4.70	4.78	4.21	4.92	5.20	5.73		-	5.34	4.13	4.35	5.47	4.70
Never Been Married	3.58	4.32	4.00	4.87	5.21	5.82		.37	5.24	3.73	4.29	5.29	4.22
Overall	4.24	4.66	4.18	4.88	5.18	5.53	5	.29	5.22	3.98	4.50	5.41	4.56

Figure 4-194 shows the trends in the overall weighted mean affective/happiness scores across the 11 life domains for each of the four Marine Corps QoL studies performed to date, while Figure 4-195 is an equivalent graphic for the overall weighted mean cognitive/satisfaction scores. No pronounced trend in either happiness or satisfaction could be discerned when the life domain scores for the Base and Station Marine respondents were examined. Between 2002 and 2007, weighted mean happiness scores increased in five of the 11 life domains (Residence, Neighborhood, Marriage/Intimate Relationship, Income and Standard of Living (where the largest change in the weighted mean score in any of the life domains, 0.26, occurred), and Military Job). Weighted mean satisfaction scores increased in six of the 11 life domains (Residence, Neighborhood, Leisure and Recreation, Relationship with Your Children, Income and Standard of Living (where again the largest change in the weighted mean score in any of the life domains, 0.35, occurred), and Military Job. The average weighted mean happiness and satisfaction scores increased by 0.032 and 0.073, respectively. Also, when the change in the Global Quality of Life score since 2002 was examined, a slight (0.06) increase was seen, raising that score to 4.56, solidly above neutral and the second-highest score ever calculated.

In many ways, that is good news: 4.5 years into OIF and OEF, the attitudes of Base and Station Marines regarding their quality of life did not appear to have changed to any great extent relative to those expressed in 2002, prior to the commencement of combat operations in Iraq and Afghanistan, and appear to have risen slightly. The same overall themes that were seen in earlier Marine Corps QoL studies – overall displeasure with the BEQ/BOQ and with income and standard of living (although both the overall weighted mean happiness and satisfaction scores for this life domain had both

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increased), and lower levels of both happiness and satisfaction on the part of the lower-ranking enlisted Marines –were seen again in just about every life domain.

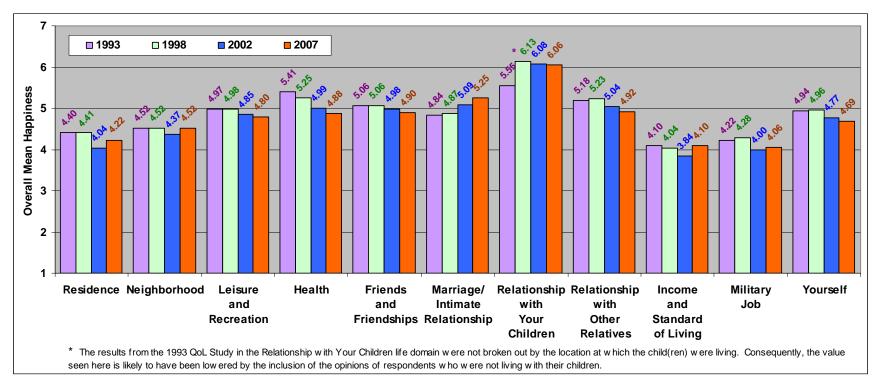


Figure 4-194. Trends in Overall Weighted Mean Happiness Scores in the 11 Life Domains:

Base and Station Marine Respondents

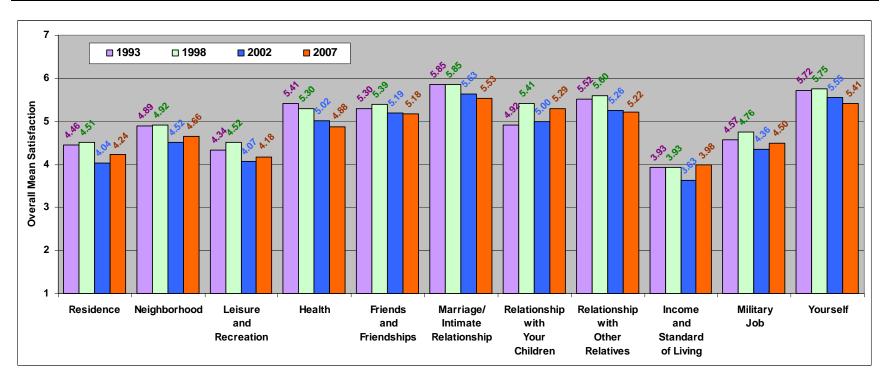


Figure 4-195. Trends in Overall Weighted Mean Satisfaction Scores in the 11 Life Domains:

Base and Station Marine Respondents

5. ANALYSIS OF THE RESPONSES FROM THE INDEPENDENT DUTY MARINES.

5.1 INTRODUCTION

This 2007 QoL Study was only the second consecutive Marine Corps QoL study that included Independent Duty Marines as a separate respondent group. Independent Duty Marines were defined by HQMC and included, among others, Marines training at non-USMC military schools and not just Marines on Inspector/Instructor duty or serving as Marine Security Guards. Independent Duty Marines were a sub-population of the Active Duty Marines and comprised, by HQMC definition, about 16.5 percent of the Marine Corps at the time at which the survey administration effort for this study was conducted. As discussed in Chapter 2, in the context of the analyses performed for this study, the term "Independent Duty Marine" is a shorthand for "non-Production Recruiter Independent Duty Marine" since Production Recruiters technically comprise a subgroup of the Independent Duty Marines.

Independent Duty Marines can be divided into two subgroups, depending on their proximity to a military installation. For the purposes of this study, and following the precedent set by the 2002 QoL Study, an Independent Duty Marine whose residence was within 1 hour or less of the nearest military installation was classified as an Independent Duty Marine with Military Community Support (or IDMw/MCS). Other Independent Duty Marines whose residences were an hour or more away from the nearest military installation were classified as Independent Duty Marines without Military Community Support (or IDMw/oMCS). The number of responses collected from IDMw/MCS and from IDMw/oMCS will be discussed when the results of Background Question #27 are analyzed in the demographics section of this chapter.

Both the Production Recruiters and the Independent Duty Marines returned their surveys to the Study Team *via* the U.S. Postal Service (USPS). Survey forms sent to 3,328 Active Duty Marines were returned to the Study Team in this way. Since the respondents had been guaranteed anonymity, a way was needed to differentiate these two types of mail-in respondents. The Production Recruiters were defined as those respondents who had indicated in Background Question #20 that they were permanently stationed at one of the six Marine Corps Recruiting Districts or who had indicated in Background Question #16 that their primary MOS was 8410, 8411 or 8412. All other Active Duty Marine mail-in respondents were classified as Independent Duty Marines.

Survey packages were distributed to 10,783 potential Independent Duty Marine participants in the survey. Of those, a maximum of 8,188 were delivered by the USPS to the potential participants. From those, 1,085 responses were mailed back to the Study Team. Thus, a 13.3 percent return rate from the Independent Duty Marines (believed to be respectable for a mail-in survey) was achieved. See Appendix E for a more detailed discussion of the survey administration effort.

The organization of this chapter, as well as other key information such as a discussion of statistical and practical significance and the key driver diagrams, is presented in the Analysis Plan, included as Appendix D.

5.2 WEIGHTING OF THE INDEPENDENT DUTY MARINE RESPONDENT SAMPLE

By following the Sample Selection Plan, a concerted effort was made to collect the responses from an Independent Duty Marine sample that would be representative of the total Marine Corps population of Independent Duty Marines. In fact, since past Marine Corps QoL studies found that Marines in the E-2 and E-3 pay grades were less likely to respond to mail-in surveys, an attempt was made to increase the number of surveys sent to those potential respondents by 25 percent so that the opinions of the members of that Pay Grade Group would be better represented in the sample.

However, as seen in Table 5-1, that effort was not fully successful. The fraction of the Independent Duty Marine population in each of the seven Pay Grade Groups, based on USMC-supplied data and taken from Appendix H, is shown in the column labeled "Total Marine Corps (Weight)." The equivalent fraction in the Independent Duty Marine respondent sample is included in the appropriately labeled column.

Table 5-1. Pay Grade Group-Based Weights Assigned to the 2007 Independent Duty Marine Respondent Sample

	Frac	tion of the	
Pay Grade Group	Total Marine Corps (Weight)	Independent Duty Marine Respondent Sample	Ratio
E-2/E-3	0.35293	0.10755	3.28154
E-4/E-5	0.28228	0.26981	1.04622
E-6/E-7	0.15859	0.24717	0.64162
E-8/E-9	0.03529	0.10943	0.32249
WO	0.00912	0.01981	0.46037
O-1 to O-3	0.09452	0.08868	1.06585
O-4 to O-10	0.06727	0.15755	0.42698
Total	100.0%	100.0%	

The differences between the distribution of personnel in the seven Pay Grade Groups in the overall Marine Corps Independent Duty Marine population and in the Independent Duty Marine respondent sample were significant, as shown by the ratios between the two data sets. Ideally, the entry in the Ratio column for each Pay Grade Group would be close to 1.0, as was generally the case for the Base and Station respondent sample and, for the Independent Duty Marines, for the E-4/E-5 and O-1 to O-3 Pay Grade Groups. In such a case, no population-based weighting would be necessary. However, some of the differences between the distribution by Pay Grade Groups in the overall Marine Corps population of Independent Duty Marines and the Independent Duty Marine respondent sample were considerable: The ratios ranged from 0.32 (for the E-8/E-9 Pay Grade Group) to 3.28 for the E-2/E-3 Pay Grade Group. That is, more than three times as many E-8/E-9 respondents and fewer than one-third as many E-2/E-3 respondents returned their surveys as would have been the case if a population-representative sample of Independent Duty Marines had responded to the survey. The major cause of this imbalance was the not-unexpected low return rates for the junior

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enlisted Marines, who should have comprised more than one-third (rather than about 11 percent) of the sample. ⁹⁰ The very low response rate for the members of the E-2/E-3 Pay Grade Group made the response rates from the more-senior (and less-heavily populated) Pay Grade Groups look especially large.

The imbalances meant, for example, that when the population-based weighting scheme used in this study was applied, the opinions of the relatively few members of the E-2/E-3 Pay Grade Group were given about 3.3 times the influence/weight on a computed measure (e.g., the overall mean happiness and satisfaction and the mean effect of a life domain on plans to reenlist and job performance) than would have occurred if the responses were not weighted by Pay Grade Group. Conversely, the influences of the opinions of the smaller, more senior, and higher-responding Pay Grade Groups (i.e., the E-6/E-7, E-8/E-9, WO, and O-4 to O-10 Pay Grade Groups) were reduced by about 30 to 65 percent. Only the influences of the E-4/E-5 and O-1 to O-3 Pay Grade Groups were relatively unaffected.

Thus, the weighted and unweighted mean scores for the various measures discussed later in this chapter likely differed noticeably. In general, the weighted scores (i.e., those generated using the population-based weights in the second column of the table) were likely to be <u>lower</u> than the unweighted scores since considerable influence was added to the opinions of the E-2/E-3 Pay Grade Group, the members of which were both under-represented in the sample and generally less happy and less satisfied with many aspects of their quality of life than their more-senior fellow Marines. The same held true when the results for the demographic subgroups were generated (i.e., when the results were decomposed by anything other than Pay Grade Group, i.e., by race/ethnicity, gender, or marital/parental status), since the mean scores generated for the members of those subgroups were <u>not</u> weighted, and hence were likely to look larger, in the aggregate, than the overall weighted mean scores. This also was the case when the unweighted mean happiness and satisfaction scores of the IDMw/MCS and the IDMw/oMCS subgroups were compared to the overall (and weighted) mean happiness and satisfaction scores for the entire sample of Independent Duty Marines.

In subsequent sections of this chapter, weighted mean scores are computed (e.g., for measures such as the overall mean happiness and satisfaction in a life domain, and the effect of a life domain on a respondent's intentions to reenlist and on their job performance), trend analyses are performed and comparisons are made for the entire group of Independent Duty Marine respondents. As was the case for the Base and Station respondents, when comparisons are made between the results from this 2007 QoL Study and its immediate predecessor, the 2002 QoL Study (the only other Marine Corps QoL study in which the Independent Duty Marines were treated as a separate respondent group), it is important to note that an identical weighting methodology was applied to both the 2002 and the 2007 data (using different, 2002- or 2007-specific population weights, as appropriate) for the groups of Independent Duty Marine respondents from the either study. The population weights applied to the 2002 data

⁹⁰ This was why, as discussed in Appendix E, attempts had been made to mail out an extra increment of surveys to the members of this Pay Grade Group.

also are contained in Appendix H. Since the 2002 QoL Study Report focused only on IDMw/oMCS and, unlike this 2007 QoL Study, included Production Recruiters in that respondent group, it is unlikely that the results seen in the earlier study match those presented here.

5.3 DEMOGRAPHICS OF THE INDEPENDENT DUTY MARINE RESPONDENT SAMPLE

This section characterizes the Independent Duty Marine respondent sample by a variety of personal demographics and career characteristics derived from their answers to the 28 questions in the Background section (comprising Personal and Career-related questions) of the Active Duty Marine survey (Appendix F).

Before the demographic data are presented, it is important to note that not all respondents answered every question and some of those that did answer either failed to provide valid answers (e.g., multiple responses to a single-answer question) or their answers could not be recognized during the optical scanning process. Thus, the data on the total number of responses seen in the graphics presented below vary: Only the respondents from whom valid data were collected for a specific question/set of questions generally were included in the discussion of the responses to that question/set of questions.

Gender, Age and Race/Ethnicity. Table 5-2 shows the gender distribution of the respondents, based on the responses to Question #1.⁹¹ Almost 95 percent of the respondent sample was male, a percentage very close to that of the overall Marine Corps. Gender has been found to be associated with variance in global satisfaction and happiness ratings: In general (and as was seen for the Base and Station respondents), females tend to be more positive in their assessment of satisfaction and happiness with life as a whole.

Table 5-2. Gender Distribution of the Independent Duty Marine Respondents and of the Overall Marine Corps

		Percentage	of
		Independent	Overall
	Count	Duty Marine Respondents	USMC*
Male	1,005	•	93.7%
Female	59	5.5%	6.3%
Total	1,064	100.0%	100.0%

* E-1s generally were excluded from the Base and Station respondent sample, but are included in the "Overall USMC" statistics (taken from p. 11 of December 2007 MCCS "Demographics Update").

⁹¹ Specific questions referred to in this demographics discussion all came from the Background section of the Active Duty Marine survey (Appendix F).

Table 5-3 shows the age distribution of the respondents (based on the responses to Question #2), partitioned into the same seven ranges used in the 1993 and 2002 QoL Study Reports and in the previous chapter of this report. The average age of the Independent Duty Marine respondents was almost 31½ years, or more than 6 years older than their counterparts in the Base and Station respondent sample.

Table 5-3. Age Distribution of the Independent Duty Marine Respondents and of the Overall Marine Corps

		Percentage	e of
	Count	Independent Duty Marine Respondents	Overall USMC*
17-20	64	6.1%	25%
21-25	252	24.1%	42%
26-30	209	20.0%	15.3%
31-35	169	16.2%	8.5%
36-40	205	19.6%	6.0%
41-45	104	9.9%	2.5%
46 & Above	43	4.1%	1.0%
Total	1,046	100.0%	100.0%
Average Age	-	31.44 Yrs	25.07 Yrs

^{*} E-1s generally were excluded from the Independent Duty Marine respondent sample, but are included in the "Overall USMC" statistics (supplied by HQMC (MRW) to the Study Team on 7 April 2008).

Race and ethnicity were addressed by two separate survey questions. The first (Question #3) asked whether the respondent were "of Spanish/Hispanic descent," and the second (Question #4) asked if he/she were a member of one of five racial groups (White, Black/African American, Asian/Pacific Islander, Native American/Aleut/Eskimo or "Other"). As described in the previous chapter, for the data presented below in Table 5-4, the 82 Independent Duty Marines who responded 1) that they were of Spanish/Hispanic descent on Question #3 and 2) that they were members of the "Other" racial group on Question #4 were classified as Spanish/Hispanic. Those 82 respondents represented 7.9 percent of the valid responses. Respondents who said they were Spanish/Hispanic, but who then selected any one of the four other racial groups included in Question #4, were included as members of the racial group with which they had identified.

Table 5-4. Race/Ethnicity of the Independent Duty Marine Respondents and of the Overall Marine Corps

		Percentage	e of
	Count	Independent Duty Marine Respondents	Overall USMC*
White	764	73.2%	68.3%
Black/African-American	125	12.0%	10.5%
Asian/Pacific Islander	29	2.8%	3.5%
Native American/Aleut/Eskimo	22	2.1%	1.6%
Spanish/Hispanic**	82	7.9%	12.1%
Other	22	2.1%	4.0%
Total	1,044	100.0%	100.0%

^{* &}quot;Overall USMC" statistics taken from p. 11 of December 2007 MCCS "Demographics Update," in which "Hispanic" was one of seven options listed. Note that data for "Asian" and "Native Hawaiian/Pacific Islander" groups were combined to match the categories used in the 2007 QoL survey.

Race and ethnicity are of interest because the results from both earlier Marine Corps QoL studies and the 2007 Base and Station respondents have shown that Blacks and Hispanics were somewhat more positive than Whites in their assessment of life as a whole.

Current Level of Education. Question #5 asked the respondents for their current level of education, and provided nine specific options, ranging from not having a high school diploma to having a doctoral or post-graduate degree, and "Other." The results are shown in Table 5-5.

^{**} A total of 166 respondents self-identified as "Spanish/Hispanic" on Question #3 of the 2007 QoL survey. Of those, 82 responded "Other" on Question #4. It is those respondents who are included here.

Table 5-5. Current Education Level of the Independent Duty Marine Respondents

		Nun		Percentage of	
	Enlisted	Officer	Unknown	Total	Independent Duty Marine Respondents
No High School Diploma	3	0	0	3	0.28%
High School Equivalency (E.g., GED, Certificate of Completion)	8	0	0	8	0.76%
High School Diploma	249	4	2	255	24.15%
Less Than 1 Year of College	161	8	3	172	16.29%
1 or More Years of College, Non-Degree	203	6	1	210	19.89%
Associate's Degree	67	6	3	76	7.20%
Bachelor's Degree	54	147	4	205	19.41%
Master's Degree	14	99	1	114	10.80%
Doctoral or Professional Degree	2	8	0	10	0.95%
Other	3	0	0	3	0.28%
Total	764	278	14	1,056	100.0%

Only 34 percent of the 764 enlisted respondents had no more than a high school diploma or its equivalent, while 63 percent had done some undergraduate college work, up to having received a Bachelor's degree. About 91 percent of the officers held either Bachelor's or post-graduate degrees.

Thus, in addition to being older, the Independent Duty Marine respondent group was somewhat more educated than their Base and Station cohorts. In general, bettereducated individuals tend to report higher levels of global quality of life.

Marital and Accompanied Status. The marital status of the Independent Duty Marine respondents, based on the responses to Question #6, is summarized in Table 5-6.

Table 5-6. Marital Status of the Independent Duty Marine Respondents

	Count	Percentage of Independent Duty Marine Respondents
Never Been Married	285	26.8%
Married	685	64.4%
Married but Separated	31	2.9%
Divorced	60	5.6%
Widowed	2	0.2%
Total	1,063	100.0%

About two-thirds of the respondent sample was married, a much higher percentage than that of either the overall Marine Corps (which is 45 percent, as contained on page 2 of the December 2007 MCCS "Demographics Update") or the Base and Station respondent group (48.8 percent). The results from both the 1993 and 2002 QoL

Studies⁹² and for the 2007 Base and Station respondents found that married Marines tended to report higher quality of life than non-married Marines.

Table 5-7 shows the data on the dependent family members of the Independent Duty Marine respondents (based on the responses to Question #8). Note that since this was a "Mark all that apply" question, the total number of responses was greater than the total number of Independent Duty Marine respondents. A much higher percentage of the Independent Duty Marines (77.3 percent) had dependents than did the Base and Station respondent group (61.1 percent), showing that, in addition to being older, better educated and more likely to be married than their Base and Station counterparts, the Independent Duty Marine respondents were more likely to have dependents (primarily spouses and dependent children).

Table 5-7. Dependent Family Members of the Independent Duty Marine Respondents

	Count	Percentage of Independent Duty Marine Responses
None	325	22.7%
Spouse (Non-Military)	447	31.2%
Dependent Child(ren) Living with Me	522	36.5%
Dependent Child(ren) Not Living with Me	123	8.6%
Legal Ward(s) Living with Me	5	0.3%
Dependent Parent(s) or Other Relative(s)	10	0.7%
Total	1,432	100.0%

When asked if they were accompanied by their family members on their assignment (Question #18), 85.5 percent of the Independent Duty Marine respondents who had dependents said that all or some of those dependent family members accompanied them; only 8.7 percent said that they were permanently unaccompanied.

A total of 126 of the 1,085 Independent Duty Marine respondents (11.6 percent) responded to Question #19 by choosing one or more valid reasons for being a "geographic bachelor" by choice (i.e., it was not a requirement of their billet that they be unaccompanied). No real trend was seen in the responses: the response chosen most frequently by the "geographic bachelors" (36 times, or 26.6 percent) was "Some Other Reason," while "Spouse's Job," "Children's School," and "Personal Preference of Self or Spouse" also were chosen relatively frequently (by 26.2, 17.5 and 15.9 percent of the respondents, respectively).

Spouse Employment. Table 5-8 shows the employment status (Question #7) of the spouses of the Independent Duty Marine respondents who said they were married or married but separated (Question #6). It can be seen that 4.0 percent of the married

^{92 1993} QoL Study Report, p. 114 and 2002 QoL Study Report, p. 3-54, respectively.

members in the sample had a military spouse (in contrast to the nearly 11 percent of the Base and Station sample). Note also that almost 35 percent of the spouses of the married or separated Independent Duty Marine respondents were unemployed by choice.

Table 5-8. Employment Status of the Spouses of the Married/Separated Independent Duty Marine Respondents

	Count	Percentage of Independent Duty Marine Respondents
My Spouse Is in the Military	28	4.0%
My Spouse Is Self-Employed (for Pay) at Home	32	4.5%
My Spouse Works in a Civilian Job Part Time	102	14.5%
My Spouse Works in a Civilian Job Full Time	229	32.5%
My Spouse Is a Part-Time USMC Employee	4	0.6%
My Spouse Is a Full-Time USMC Employee	3	0.4%
My Spouse Is Unemployed by Choice	243	34.5%
My Spouse Is Unemployed but Actively Seeking Employment	63	8.9%
Total	704	100.0%

Parental Status. When asked if they had any children under the age of 21 that currently live with them (Question #9), 540 of the Independent Duty Marine respondents (or 51.7 percent of those who gave valid responses) reported having such children in their households. The average number of pre-school children in a household (Question #10), shown in Table 5-9, was 0.84, while the average number of school-aged children was 1.31, for a total of 2.15 children in the average respondents' household. These values show that the Independent Duty Marine respondents had somewhat more and somewhat older children than their Base and Station counterparts.

Table 5-9. Children of the Independent Duty Marine Respondents

	Average
Category	Number
Pre-School (5 Years or Less)	0.84
School Age (6 - 20 Years)	1.31
Average Number of Children	2.15

Enlisted/Officer Breakdown. Question #11 asked the respondents for their pay grade. While more detail on the responses to this question will be given later, Table 5-10 shows that enlisted Marines comprised 72 percent of the Independent Duty Marine respondent sample, and provided 73.4 percent of the valid responses. This shows a higher prevalence of officers in the Independent Duty Marine respondent sample than in the Base and Station respondent sample.

Table 5-10. Enlisted/Officer Breakdown of the Independent Duty Marine Respondents

		Percentage of						
		Independent						
		Duty Marine	Valid					
	Count	Respondents	Responses					
Enlisted	778	71.7%	73.4%					
Officer	282	26.0%	26.6%					
Unknown	25	2.3%						
Total	1,085	100.0%	100.0%					

Service Demographics. A number of other demographic analyses were based on service-related variables, including those related to pay grade, assignment location, and length of service.

Table 5-11 shows several length of service-related measures. The average Independent Duty Marine respondent had spent about 2½ years in his/her current pay grade (Question #12) and almost 10½ years in the Marine Corps (Question #13). This latter figure is almost twice that seen for the Base and Station respondent sample. The average respondent had spent about 16 months in his/her current assignment (Question #17). This latter figure lends some confidence to the perceptions of the respondents regarding quality of life in their current assignments.

Table 5-11. Length of Service Demographics for the Independent Duty Marine Respondents

	Length of Service								
	In Pay Active In Curren Grade Duty Assignmen								
Months	27.1	124.7	15.8						
Years	2.26	10.39*	1.32						

It was stated earlier that Question #11 asked the respondents for their pay grade. A simple breakdown of the results, aggregated by Pay Grade Group, was shown earlier in this chapter during the discussion of the weighting of the respondent sample. Here, the responses to that question, broken down by Pay Grade Group were combined with those for Question #20, which asked the respondents where they were permanently stationed, to produce Table 5-12.

Table 5-12. Pay Grade Group and Location of the Independent Duty Marine Respondents

Location	E-2/E-3	E-4/E-5	E-6/E-7	E-8/E-9	WO	O-1 to O-3	O-4 to O-10	Ungraded	Total
MCB Camp Pendleton	2	3	2	0	1	0	0	0	8
MCAS Miramar	0	2	0	0	0	0	0	0	2
MCRD San Diego	0	2	5	4	0	4	0	1	16
MCAGCC (Twentynine Palms)	0	2	1	0	0	0	0	0	3
MCB Camp Allen Norfolk	4	5	3	0	0	1	2	2	17
MCB Camp Lejeune	12	21	15	8	0	3	6	3	68
MCAS New River	0	0	0	0	0	1	0	0	1
MCAS Cherry Point	2	0	0	0	0	0	0	0	2
MCAS Beaufort	1	0	0	0	0	0	0	0	1
MCLB Albany	0	4	1	0	0	0	0	0	5
MCB Quantico	0	1	0	0	0	2	4	0	7
Marine Barracks 8th	5	6	8	9	0	0	2	0	30
MCB Hawaii	7	5	6	3	1	1	2	0	25
Camp Butler	2	1	0	1	0	0	0	0	4
Other Location Inside CONUS	71	140	148	78	8	68	122	11	646
Other Location Outside CONUS	2	37	27	10	2	7	24	3	112
Unidentified Location	6	57	46	3	13	7	5	1	138
Total	114	286	262	116	25	94	167	21	1,085

Career Intentions. Two questions asked the respondents about their career intentions. Question #14 asked about intentions/interests at the time when the respondent joined the Marine Corps. The respondents were asked to choose as many of the nine options (including "I'm Not Sure ..." and "Other") as were applicable. Question #15 asked the respondents to choose the one statement which best described their career intentions at the time of participating in the survey (note that "Medical Separation" was a new response option added to the 2007 QoL survey). A combination of the responses to these questions is shown in Table 5-13. Note that the rows in the table correspond to the responses to Question #14, the columns correspond to the responses to Question #15, and that the values in the table have been normalized to sum to 100 percent.

Table 5-13. Comparison of Career Intentions of the Independent Duty Marine Respondents at Time of Joining Marine Corps and at Time of Survey Completion

	Which of t	Question #15: Vhich of the Following Statements Best Describes Your Career Intentions at This Time?								
Question #14: When You Joined the Marine Corps What Were Your Intentions/Interests? Mark ALL That Apply	I Intend To Remain in the Marine Corps until Eligible for Retirement	I Am Eligible for Retirement but Intend To Stay in		I'm Not Sure What I Intend To Do	I Intend To Leave the Marine Corps as Soon as I Can	I Intend To Remain on Active Duty but I Am Being Involuntarily Separated	Medical Separation	Total: Intentions at Time of Enlistment		
I Intended To Remain in the Marine Corps until Eligible for Retirement	8.1%	1.3%	0.5%	1.4%	0.9%	0.1%	0.1%	12.3%		
I Intended To Remain in the Marine Corps until I Could Earn Educational Benefits	3.3%	0.6%	0.5%	1.7%	1.2%	0.0%	0.0%	7.3%		
I Intended To Remain in the Marine Corps until I Could Get the Training I Needed	1.7%	0.5%	0.5%	0.9%	0.4%	0.0%	0.0%	4.1%		
I Was Interested in the Travel and Adventure	9.9%	2.0%	0.9%	3.5%	1.8%	0.1%	0.0%	18.2%		
I Wanted To Find Out if I Had What It Takes To Be One of the Few and the Proud	7.7%	1.7%	0.7%	2.4%	1.2%	0.0%	0.0%	13.8%		
I Wanted To Serve My Nation	11.6%	2.6%	0.9%	4.4%	2.4%	0.1%	0.2%	22.1%		
I Wanted the Discipline the Marine Corps Provides	6.9%	1.4%	0.6%	2.1%	1.3%	0.1%	0.1%	12.4%		
I'm Not Sure What I Intended	1.6%	0.2%	0.1%	0.5%	0.6%	0.0%	0.0%	3.1%		
Other	3.5%	0.5%	0.4%	1.3%	0.8%	0.0%	0.1%	6.8%		
Total: Current Intentions	54.3%	10.8%	5.1%	18.2%	10.6%	0.4%	0.6%			

The nine valid responses to Question #14 and the seven valid responses to Question #15 combined to give the 63 response options shown in the table. If the responses had been distributed uniformly over these 63 options, about 1.6 percent of the responses would have occurred in each cell in the table. To highlight the response combinations that had been chosen with relatively "high" frequency, nine cells that received at least twice as many responses as would have occurred had the responses been uniform (i.e., 3.2 percent or more) were highlighted. The entries in five of those cells have been marked by bold text to show that they received at least three times as many responses as would have occurred had the responses been uniform (i.e., 4.8 percent or more).

When intentions at the time of joining the Marine Corps were examined, the 9 response options would each contain about 11.1 percent of the responses if the responses had been distributed uniformly. Instead five of the nine response options received 12.3 percent or more of the responses. The most frequently chosen response options were the "serve my nation" (22.1 percent) and "travel and adventure" (18.2 percent) responses. The "few and the proud," the "discipline" and the "remain until retirement" options also were chosen with a relatively high frequency. Compared with the Base and Station respondents, the response options with the largest increases in frequency of selection were the "serve my nation" (up by 17.6 percent) and the "remain until retirement" (up by 11.8 percent) options. The frequency with which the "discipline" response option was chosen actually declined by 1.6 percent.

When current intentions were examined, a single clear choice, the "remain until eligible for retirement" option, was by far the most frequently chosen response, having been

chosen by more than half of the Independent Duty Marine respondents. That was an almost 59 percent increase over the frequency with which the Base and Station respondents chose that response. Clearly, the more senior Independent Duty Marine respondents are much more committed than the Base and Station respondents to making the Marine Corps a career.

Not surprisingly (given the distribution of current intentions), when the individual combinations of responses were examined, all but two of the nine response options chosen with "high" frequency (and highlighted in the table) reflected the current intention to remain in the Marine Corps until retirement. The two that did not follow this rule were the combinations of an initial desire for "travel and adventure" or to "serve my nation" with uncertainty (the "not sure" response option) about current intentions. To some extent, this mirrored the relatively high frequency with which those two response combinations were chosen by the Base and Station respondents.

The single most frequently chosen response combination was the combination of an initial desire to serve the nation and the current intention of remaining until retirement (11.6 percent). That may not be surprising to persons experienced in Marine Corps career planning. The second most frequently chosen response option was the combination of an initial desire for travel and adventure and the current intention of remaining until retirement (9.9 percent), while the third most frequently chosen combination was the combination of an initial intent to remain until retirement and the current intention of remaining until retirement (8.1 percent). Recall that this was the most frequently chosen combination by the Base and Station respondents.

An attempt was made to determine the impacts of the Marine Corps' increased OPTEMPO, as epitomized by OIF/OEF deployments, on the respondents' current career intentions. Specifically, the responses to Question #15 were examined both for those respondents who had never participated in such deployments, and for those who had. The results are shown in Table 5-14. When reviewing the data in the table, it is essential to remember that many of the respondents without OIF/OEF deployment experience likely were younger Marines who had been in the Marine Corps for less time than their colleagues. Marines in their first enlistment period are less likely to be committed to a Marine Corps career than are those who have re-enlisted at least once and who, as a result of their longer time in service, are more likely to have experienced an OIF/OEF deployment. Note also that the percentages shown in the last row of this table do not match those shown in the analogous row of the previous table since slightly different sets of responses were used to select the data included in each table. That is, the values here show the results for those respondents who gave valid answers to both Question #15 and Question #23, while the values in the previous table show the results for those respondents who gave valid answers to both Question #15 and Question #14.

Table 5-14. Comparison of Current Career Intentions of Independent Duty Marine Respondents Who Have and Have Not Been Deployed as Part of OIF/OEF

	Question #15: Which of the Following Statements Best Describes Your Career Intentions at This Time?									
How Many Times Have You Been Deployed in Support of Operation Enduring Freedom (OEF) and/or Operation Iraqi Freedom (OIF)?	I Intend To		I Intend To Stay in but Not until Retirement	I'm Not Sure What I Intend To Do	I Intend To Leave the Marine Corps as Soon as I Can	I Intend To Remain on Active Duty but I Am Being Involuntarily Separated	Medical Separation	Percentage of Respondents with Given Number of OIF/OEF Deployments		
0 (413 Responses)	43.1%	8.5%	5.6%	25.7%	15.3%	0.7%	1.2%	100.0%		
1 or More (630 Responses)	57.3%	14.9%	3.8%	14.4%	8.7%	0.3%	0.5%	100.0%		
Total: Current Intentions	51.7%	12.4%	4.5%	18.9%	11.3%	0.5%	0.8%	100.0%		

The six response options highlighted in the table stood out as the most commonly chosen by both of the respondent groups considered here. About 43 percent of those respondents with no OIF/OEF deployment experience intended to remain in the Marine Corps until they are eligible for retirement. This compares with more than 57 percent of those (most likely more-senior Marines) with OIF/OEF deployment experience. Both of these percentages were much higher than the equivalent figures for the Base and Station respondents (which were 26 and 40 percent, respectively). Uncertainty about career plans, as expressed in the "not sure" response option, was about 78 percent greater for the respondents without OIF/OEF experience, as might be expected since those respondents likely may be more junior than those with such experience.

Three noticeable differences from the distribution of responses that had been seen for the Base and Station respondents were noted. First, the number of Independent Duty Marine respondents with OIF/OEF experience was about 50 percent greater than the number without such experience (630 vs. 413). The ratio seen for the Base and Station respondents was much more balanced (2,229 vs. 2,479). This is why the table normalized the percentages in each of the three rows of data in the table. Second, the percentage of Independent Duty Marine respondents with OIF/OEF experience who said that they intended to leave the Marine Corps as soon as possible was about 43 percent lower than the rate for the Independent Duty Marine respondents without OIF/OEF experience. The ratio was much closer for the Base and Station respondents (only 8 percent lower). Also, the overall frequency with which that response was chosen by the Independent Duty Marine respondents (11.3 percent) was less than half the frequency with which it was chosen by the Base and Station respondents (25.4 percent). Third, and perhaps more tellingly since this response option inherently tends to eliminate the differences between more-senior and less-senior respondents (because all who chose this response were eligible for retirement), the frequency with which the Independent Duty Marine respondents said that they were eligible for retirement but that they intended to stay in the Marine Corps (12.4 percent) was about four times higher than it was for the Base and Station respondents. In addition, the rate at which Independent Duty Marines who were eligible for retirement said they planned to remain in the Marine Corps was about 75 percent higher for those respondents with OIF/OEF

deployment experience than it was for those without such experience. While the first of these statistics, when examined alone, might merely indicate that Independent Duty Marines were more senior, and hence more likely to be eligible for retirement, than their Base and Station counterparts, when taken together these results seem to imply a greater commitment to the Marine Corps on the part of the Independent Duty Marine respondents. Also, as was the case for the Base and Station respondents, they argue against the belief that Marines are being driven out of the Marine Corps by their OIF/OEF deployment experiences and the frequency of those deployments

If the percentages assigned to the first three response options (which could be considered to be favorable to the Marine Corps in that the respondents expressed an intention to remain in the Marine Corps at least for the present) are aggregated, it can be seen that about 57 percent of the respondents with no OIF/OEF deployment experience selected a favorable response. That figure was about 25 percent lower than the 76 percent of the respondents with OIF/OEF experience who expressed similar sentiments favorable to the Marine Corps.

As was the case for the Base and Station respondents, the responses to these questions may not seem remarkable in isolation. That is, they could appear to be what might be expected by a subject matter expert in Marine Corps or military personnel issues. However, when considered in the context of the Marine Corps' ~4.5 years of participation in OIF/OEF, it could be argued that receiving intuitive or expected responses to these two questions, especially to Question #15, can be viewed as good news for the Marine Corps. That is, it could be reassuring to see that Marine Corps participation in OIF/OEF has not degraded the career intentions of the 2007 QoL survey respondents noticeably.

Deployment History. A number of the Background questions in the Active Duty Marine survey (#21 through #26) were related to the respondents' recent and extended deployment histories. Question #21 asked if the respondent were presently deployed. Only 10.5 percent responded positively. The majority of these (61, or 57.5 percent) said that they were deployed to Iraq, even though an effort had been made not to send surveys to Marines actively deployed as part of OIF. About one-quarter of the respondents said they were deployed at a U.S. embassy.

Question #22 asked how many months *in toto* the respondents had been deployed in the last 12 months. The results for the Independent Duty Marine respondents are shown in Table 5-15. Less than 30 percent of the respondents said they had been deployed during the last 12 months.

Table 5-15. Deployment Time in the Last 12 Months for the Independent Duty Marine Respondents

	Count	Percentage
Not at All	712	71.3%
1-3 Months	83	8.3%
4-6 Months	68	6.8%
7-9 Months	60	6.0%
10-12 Months	76	7.6%
Total	999	100.0%

Questions #23 through #26 focused specifically on OIF/OEF deployments. Question #23 asked how many times the respondent had been deployed in support of OIF or OEF. The results are shown in Table 5-16.

Table 5-16. Number of Deployments in Support of OIF/OEF for the Independent Duty Marine Respondents

		Percentage of				
Number of		Independent Duty Marine	Overall			
Deployments	Count	Respondents ¹	USMC ²			
0	437	40.3%	48.5%			
1	269	24.8%	36.6%			
2	247	22.8%	13.1%			
3	105	9.7%	1.7%			
4+	27	2.5%	0.1%			
Total	1,085	100.0%	100.0%			

^{1.} Respondents were surveyed in October-November 2007.

It can be seen that 40.3 percent of the sample had never been deployed in support of OIF/OEF at the time the surveys were collected. This compares to an overall Marine Corps figure of 48.5 percent, based on data supplied to the Study Team by the Study Sponsor and current as of 7 March 2008. It should be noted that the respondent sample excluded the intentional collection of data from E-1s, who would be unlikely ever to have been deployed to OIF or OEF; thus the percentage of respondents with OIF/OEF deployment experience would be expected to rise. Also, since the sample included only a very small number of Marines who were deployed to OIF/OEF at the time of the data collection, the data shown for the overall Marine Corps excluded the 25,570 Marines deployed in support of OIF/OEF on the 7 March 2008 date.

Overall, the Independent Duty Marine respondent sample appears to have had a greater than average degree of participation in OIF/OEF. Almost 35 percent of the respondents had been on two or more deployments, while fewer than half that percentage, only 14.9 percent, of the overall Marine Corps had that many OIF/OEF deployments. This disparity became even more pronounced when three or more

^{2.} HQMC-supplied data as of 7 March 2008. Percentages shown exclude

E-1s and the 25,570 Marines deployed in OIF/OEF on that date.

deployments were used as the basis of comparison: Almost seven times as many members of the respondent sample had been deployed as part of OIF/OEF than had members of the Marine Corps at large.

Question #24 asked the respondents how long it had been since their last OIF/OEF deployment. The results are shown in Table 5-17. The key numbers are given in the last two columns of the table, which exclude respondents who had never been on an OIF/OEF deployment and which compare the distribution of the remaining responses to the Study Sponsor-supplied data for the entire Marine Corps. When interpreting these data, it is important to remember that the surveys were collected during October-November 2007, while the overall USMC data were current as of 7 March 2008. Thus, some of the respondents might have transitioned between the groups shown in the "Selected Subset" column in the intervening 4-5 months.

Table 5-17. Time Since Last Deployment in Support of OIF/OEF for the Independent Duty Marine Respondents

Percentage of

		Independ Marine Res	pondents ¹ Selected	Overall
	Count ²	Total	Subset ³	USMC⁴
Currently Deployed	48	4.9%		
0-3 Months	29	2.9%	4.8%	10.0%
3-6 Months	36	3.7%	6.0%	11.7%
6-9 Months	43	4.4%	7.2%	6.9%
9-12 Months	30	3.0%	5.0%	6.6%
12-18 Months	119	12.1%	19.9%	11.0%
18+ Months	342	34.8%	57.1%	31.2%
Does Not Apply	337	34.2%		
Total	984	100.0%	100.0%	100.0%

^{1.} Respondents were surveyed in October-November 2007.

Of note, at the time at which the survey data were collected, 77 percent of the "selected subset" of respondents had been home from OIF/OEF for at least 1 year. That percentage compared favorably to the 42 percent figure for the overall Marine Corps.

The respondents next were asked about the anticipated time to their next OIF/OEF deployment (Question #25). The results are shown in Table 5-18. While many (almost 48 percent) of the respondents did not know, only 19.2 percent anticipated another deployment within the next year.

^{2.} The 48 Marines who responded "Currently Deployed" when the 2007 QoL surveys were administered at the 17 USMC Bases and Stations were excluded from the "Selected Subset" due to their relatively small numbers.

^{3.} Excludes Marines who responded "Currently Deployed" or "Does Not Apply" (the latter presumably because they have never participated in an OIF/OEF deployment).

^{4.} Based on HQMC-supplied data as of 7 March 2008. Underlying data include only those Marines with OIF/OEF deployment experience, and percentages shown exclude E-1s and the 25,570 Marines deployed in OIF/OEF on that date.

Table 5-18. Time Until Next Deployment in Support of OIF/OEF for the Independent Duty Marine Respondents

	Count	Percentage
Don't Know	477	47.9%
0-3 Months	19	1.9%
3-6 Months	31	3.1%
6-9 Months	49	4.9%
9-12 Months	92	9.2%
12-18 Months	78	7.8%
18+ Months	110	11.0%
Never	140	14.1%
Total	996	100.0%

Question #26 asked the respondents about their level of satisfaction with three different aspects of their most recent OIF/OEF deployment. The results from those questions are discussed next.

Question #26a asked about satisfaction with the amount of family contact. The results are shown in Figure 5-1. It can be seen that, in general, the Independent Duty Marine respondents were fairly well satisfied with this aspect of their most recent deployment. The average satisfaction score was 5.13, above "Somewhat Satisfied" and almost 0.5 above the analogous score for the Base and Station respondents (however, this difference did not have practical significance). Slightly more than two-thirds of the respondents expressed some degree of satisfaction, while only 16.2 percent expressed some degree of dissatisfaction. The "Satisfied" response, assigned a score of 6, was by far the most frequently chosen response.

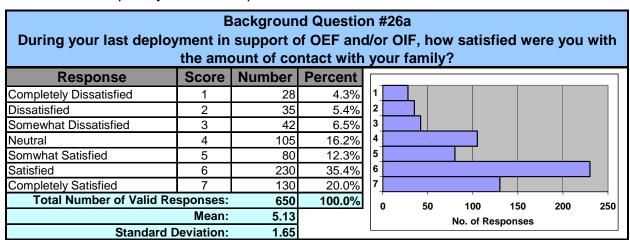


Figure 5-1. Satisfaction of the Independent Duty Marine Respondents Who Had Deployed to OIF/OEF with the Amount of Contact with Their Families

Question #26b asked about satisfaction with the predictability of the length of the deployment. The results are shown in Figure 5-2. The responses for this question, while again favorable (with an average satisfaction score of 4.98), were not as favorable

as those expressed by the Independent Duty Marines to the previous question, but scored more than 0.50 above those of the Base and Station respondents (again, the difference had no practical significance). Here, 63.0 percent of the respondents expressed favorable opinions (i.e., responses of "Somewhat Satisfied," "Satisfied" or "Completely Satisfied"), while 17.5 percent expressed unfavorable opinions (i.e., responses of "Somewhat Dissatisfied," "Dissatisfied" or "Completely Dissatisfied"). Again, "Satisfied" was by far the most frequently chosen response.

Background Question #26b During your last deployment in support of OEF and/or OIF, how satisfied were you with the predictability of the length of your deployment?											
Response	Score	Number	Percent								
Completely Dissatisfied	1	36	5.6%	1							
Dissatisfied	2	37	5.7%	2							
Somewhat Dissatisfied	3	40	6.2%	3				_			
Neutral	4	126	19.5%	4							
Somwhat Satisfied	5	67	10.4%	5							
Satisfied	6	227	35.2%	6							
Completely Satisfied	7	112	17.4%	7							
Total Number of Valid Responses: 645		100.0%		0	50	100	15	0 2	00	250	
Mean: 4.98					•	55		Respons	-		230
Standard Deviation: 1.70				L				.copon.			

Figure 5-2. Satisfaction of the Independent Duty Marine Respondents Who Had Deployed to OIF/OEF with the Predictability of the Length of Their Most Recent Deployment

Question #26c asked about satisfaction with the deployment services received by the respondents' family. The results are shown in Figure 5-3. Again, "Somewhat Satisfied" opinions were expressed in general to this aspect of the respondents' most recent OEF/OIF deployment: An average score of 4.86 was calculated. Both the overall satisfaction score and the percentage of respondents expressing favorable opinions (60.4 percent), while high, were the lowest values seen for the three deployment-related questions. However, the percentage of respondents expressing unfavorable opinions was 17.9 percent, only slightly higher than that on the previous two questions, showing that the lower overall score was due to a higher percentage of respondents (21.6 percent) having chosen the "Neutral" response, and to fewer (13.3 percent) having chosen the most favorable, "Completely Satisfied," response. Once again, "Satisfied" was the most frequently chosen response.

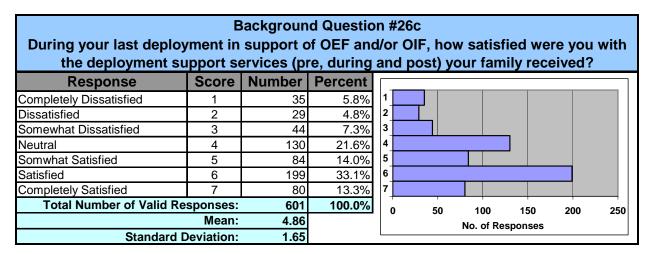


Figure 5-3. Satisfaction of the Independent Duty Marine Respondents Who Had Deployed to OIF/OEF with the Deployment Support Services Their Families Had Received

Question #27 asked the respondents how long it would take them to get from their current residence to the nearest military installation or the one they used the most often. This question was intended to gauge the extent of access to military community support and was the question used to differentiate the IDMw/MCS from the IDMw/oMCS. The results are shown in Table 5-19.

Table 5-19. Time Needed by the Independent Duty Marine Respondents To Get to the Nearest Military Installation

		Percenta	ge of	
	Count	Indepen Duty Ma Respond	arine	MCS Status
Does Not Apply	218	20.1%		
Less Than 15 Minutes	213	19.6%	74.6%	w/MCS
15-30 Minutes	239	22.0%	14.07	W/WICS
More Than 30 Minutes but Less Than 1 Hour	139	12.8%	L	
1-2 Hours	90	8.3%	17.2%	w/oMCS
More Than 2 Hours	97	8.9%	17.270	W/OIVICO
Unknown or Invalid Response	89	8.2%	8.2%	Unknown
Total	1,085	100.0%	100.0%	

Because of the relatively small number of IDMw/oMCS (only 187), it was recommended to, and accepted by, the Marine Corps that the Independent Duty Marine respondent sample should be decomposed into its IDMw/MCS and IDMw/oMCS subgroups only for a limited number of measures for which the opinions of the entire sample of Independent Duty Marines were analyzed. That is, in general in the analyses of the responses of the Independent Duty Marines that follow, results for the IDMw/MCS and IDMw/oMCS subgroups will be shown for the overall mean happiness and satisfaction

measures, and for the effect of a life domain on the respondents' job performance and on their plans to remain on active duty.

Question #28 asked the respondents how often they go to the nearest military installation or the one they used the most often. This was intended to gauge the use of military community support. The results are shown in Table 5-20. It can be seen that more than two-thirds of the Independent Duty Marine respondents visited the military installation nearest to their home at least once a week. However, when the responses of only the 187 IDMw/oMCS were considered, only 13.4 percent visited the military installation nearest to their home that frequently. In fact, more than 27 percent of the IDMw/oMCS respondents said that they never visited because there was no military installation nearby.

Table 5-20. Frequency with Which the Independent Duty Marine Respondents Visit the Military Installation Nearest to Their Residences

	Count	Percentage of Independent Duty Marine Respondents
I Live on Base	225	20.7%
Everyday	355	32.7%
Several Times a Week	117	10.8%
Once a Week	42	3.9%
Once a Month	56	5.2%
Several Times a Year	56	5.2%
Once or Twice a Year	59	5.4%
Have Never Visited	18	1.7%
Never- No Military Installation Nearby	61	5.6%
Unknown or Invalid Response	96	8.8%
Total	1,085	100.0%

5.4 THE RESIDENCE LIFE DOMAIN

5.4.1 Happiness – Affective Evaluations of the Residence Life Domain

The weighted mean affective or happiness score (Question #1) for the Residence life domain for the Independent Duty Marine respondents in 2007 was 4.80, i.e., just under "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-4. It can be seen that more than two-thirds of the respondents, 69.6 percent, expressed some degree of happiness with their residence (Mostly Pleased, Pleased, and Delighted responses), while only 14.5 percent expressed some degree of unhappiness with their residence. Note that the 4.80 weighted mean for the Independent Duty Marines was higher than the 4.22 weighted overall affective mean found for the Base and Station respondents in this life domain.

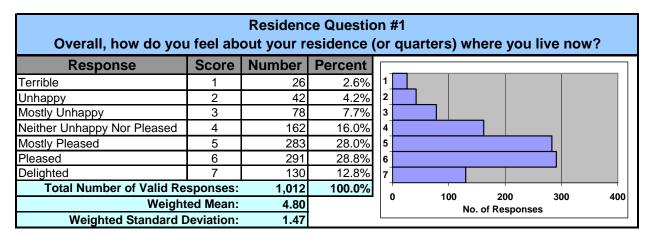


Figure 5-4. Distribution of the Overall Happiness Responses in the Residence Life Domain for the Independent Duty Marine Respondents

This is an appropriate time to give an example of the effect of the weighting of the Independent Duty Marine responses. Recall that in Section 5.1 it was stated that a weighted score (i.e., one generated using the population-based weights) often would be noticeably <u>lower</u> than an unweighted score since the weighting added considerable influence to the opinions of the E-2/E-3 Pay Grade Group, who were generally less happy and less satisfied than their colleagues with their quality of life in many life domains. The data in the figure above are an example of such an effect. The weighted mean shown was 4.80; however, the unweighted mean for the same distribution of responses would have been 5.00.

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall Independent Duty Marine respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-5. While the scores in the two Military Community Support subgroups increased in 2007, the overall weighted score decreased. The 2007 mean Residence D-T score for IDMw/MCS subgroup had the largest change from 2002 (an increase of 0.08). However, none of the differences seen here, either within the groups shown or between the two QoL studies, had any practical significance.

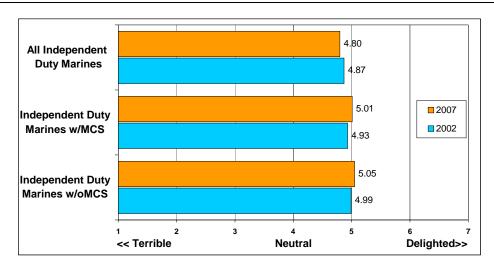


Figure 5-5. Trends in Overall Happiness in the Residence Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Residence life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by Pay Grade Group, are shown in Table 5-21.

Table 5-21. Happiness with Residence by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	104	4.44	1.50
E-4/E-5	269	4.72	1.48
E-6/E-7	252	5.08	1.41
E-8/E-9	108	5.19	1.45
WO	21	5.76	1.14
O-1 to O-3	94	5.29	1.23
O-4 to O-10	164	5.32	1.29

The mean happiness scores increased with Pay Grade Group, with the exception of the WO Pay Grade Group, which had the highest mean happiness score. The minimum happiness score, 4.44, was seen for the E-2/E-3 Pay Grade Group. The maximum happiness score, 5.76, was seen for the WO Pay Grade Group, which had a score 0.44 higher than any other Pay Grade Group. The differences seen between the mean happiness score for the WO subgroup compared with the mean happiness scores for each of the three lowest Pay Grade Groups (E-2/E-3, E-4/E-5, and E-6/E-7) each had practical significance, with Cohen's *d* statistics of 0.99, 0.79, and 0.53, respectively.

Trends in overall happiness with the Residence domain between the 2002 and 2007 QoL studies also were examined by Pay Grade Group; the results are shown in Figure 5-6. The Pay Grade Group that had the largest difference between 2002 and 2007

were the Warrant Officers, for whom the affective mean had increased by 0.76 since 2002. This difference had practical significance, based on the Cohen's *d* statistic of 0.65, with a medium-high effect size. None of the differences in the mean scores of any of the other Pay Grade Groups had practical significance based on their calculated Cohen's *d* statistics. Note also, that while the mean scores in three of the Pay Grade Groups decreased between 2002 and 2007 (i.e., for the E-2/E-3, E-4/E-5 and O-1 to O-3 Pay Grade Groups), the mean scores in the other four Pay Grade Groups increased. It is worth noting that the decreases occurred in the lowest-tenured Pay Grade Groups within the enlisted and officer groups.

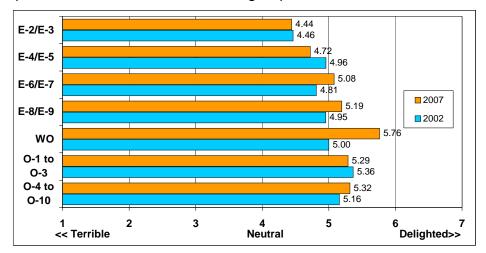


Figure 5-6. Trends in Happiness in the Residence Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by race/ethnicity, are shown in Table 5-22. The minimum happiness score (4.52) was seen for the small number of respondents in the Native American/Aleut/Eskimo subgroup, and the maximum happiness score (5.36) was seen for the equally small number of respondents in the "Other" subgroup. This was the only difference seen here that had practical significance (Cohen's *d* statistic of 0.57, indicating a medium-to-large effect size).

Table 5-22. Happiness with Residence by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	733	5.00	1.42
Black/African-American	115	5.17	1.50
Asian/Pacific Islander	29	4.90	1.29
Native American/Aleut/Eskimo	21	4.52	1.63
Spanish/Hispanic	76	4.99	1.44
Other	22	5.36	1.29

Gender. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by gender, are shown in Table 5-23. The average score for the small number of female respondents was 4.95, or 0.07 below the

happiness score for the male respondents, a difference that had no practical significance.

Table 5-23. Happiness with Residence by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	958	5.02	1.43
Female	55	4.95	1.42

Marital/Parental Status. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by marital/parental status, are shown in Table 5-24. The minimum happiness score (4.38) was seen for the small number of respondents in the Divorced/Widowed/Separated with Children subgroup, and the maximum happiness score (5.10) was seen for the largest subgroup, Married with Children. This difference had practical significance (a Cohen's *d* statistic of 0.51, or a medium-to-large effect size). The mean happiness scores for the married respondents were higher than those respondents who were divorced or unmarried.

Table 5-24. Happiness with Residence by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	4.38	1.36
Divorced/Widowed/Separated without Children	72	4.88	1.34
Married with Children	480	5.10	1.45
Married without Children	166	5.07	1.41
Never Been Married	270	4.89	1.45

Type of Housing. The means and standard deviations of the happiness scores for the Residence life domain, decomposed by type of housing⁹³, are shown in Table 5-25.

Table 5-25. Happiness with Residence by Type of Housing for the Independent Duty Marine Respondents

Housing Type	Count	Mean	Std. Dev.
Personally-Owned Housing	315	5.71	1.07
Rented Civilian Housing	222	4.98	1.28
Shared Rental Housing	33	4.79	1.47
Other	47	4.72	1.54

The happiness scores for this decomposition were relatively consistent, with the exception of the Personally-Owned Housing subgroup, which had the highest mean score, 5.71 (note that this also comprised the largest subgroup). The relatively high mean score seen for the Personally-Owned Housing subgroup had a difference with practical significance with each of the other mean scores seen in the table. Also note

⁹³ Note that for the Independent Duty Marine respondent group, the following housing type subgroups were excluded from this decomposition analysis: BEQ/BOQ, Family Housing on Base, and Military Housing in the Civilian Community. The translation between survey response options and the housing types seen here was contained in an analogous discussion included in the Residence life domain section of Chapter 4.

that the mean happiness scores seen here were essentially equivalent to those seen for the Base and Station respondents, with the exception of the "Other" housing type, which was significantly higher for the Independent Duty Marines.

5.4.2 Satisfaction – Cognitive Evaluations of the Residence Life Domain

The weighted mean cognitive or satisfaction score (Question #10j) in the Residence life domain for the Independent Duty Marine respondents in 2007 was 4.88, i.e., slightly below "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Residence life domain is shown in Figure 5-7. In the overall sample, the highest percentage of respondents, 38.1 percent, responded that they were "Satisfied" (a score of 6) with their residence overall. Two-thirds of the respondents, 68.5 percent, expressed some degree of satisfaction with their residence, and only 16.3 percent expressed some degree of dissatisfaction. Note that the 4.88 weighted mean for the Independent Duty Marines was markedly higher than the 4.24 weighted overall cognitive mean found for the Base and Station respondents.

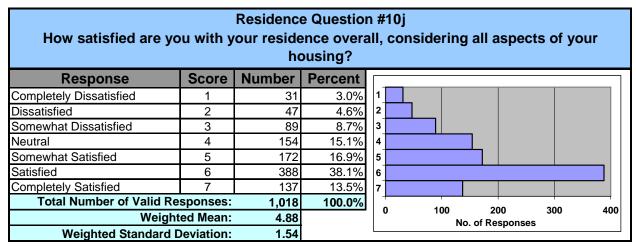


Figure 5-7. Distribution of the Overall Satisfaction Responses in the Residence Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall Independent Duty Marine respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-8. Increases were seen for all three groups considered. The 2007 mean Residence satisfaction score for the IDMw/MCS subgroup had the largest relative change from 2002, increasing slightly (by 0.18). However, no practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

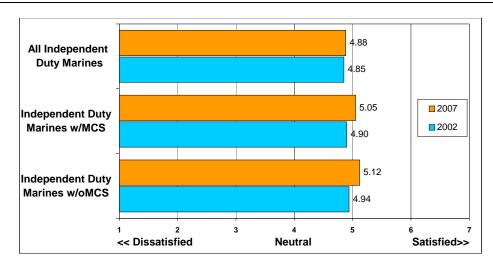


Figure 5-8. Trends in Overall Satisfaction in the Residence Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Residence life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by Pay Grade Group, are shown in Table 5-26.

Table 5-26. Satisfaction with Residence by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	111	4.59	1.50
E-4/E-5	273	4.70	1.63
E-6/E-7	248	5.25	1.39
E-8/E-9	115	5.24	1.54
WO	21	5.71	1.23
O-1 to O-3	90	5.21	1.39
O-4 to O-10	160	5.41	1.45

The minimum satisfaction score, 4.59, was seen for the E-2/E-3 Pay Grade Group. The maximum satisfaction score, 5.71, was seen for the WO Pay Grade Group. The differences seen between the mean of the WO Pay Grade Group and the means of either the E-2/E-3 or the E-4/E-5 Pay Grade Groups each had practical significance (with Cohen's *d* statistics of 0.82 and 0.70, respectively).

When the trends in overall satisfaction with the Residence life domain were examined by Pay Grade Group, as shown in Figure 5-9, increases were seen in five out of the seven Pay Grade Groups examined (E-2/E-3, E-6/E-7, E-8/E-9, WO, and O-4 to O-10), with the largest increase, 0.64, seen for the WO Pay Grade Group. However, this difference had no practical significance, based on the Cohen's *d* statistic of 0.45.

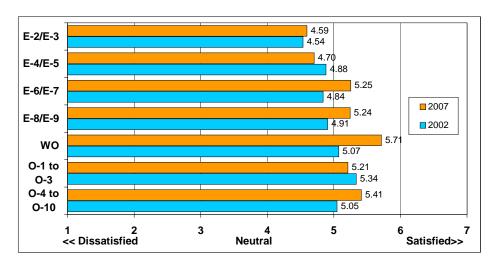


Figure 5-9. Trends in Satisfaction in the Residence Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by race/ethnicity, are shown in Table 5-27. The minimum satisfaction score (4.48) was seen for the small number of Native American/Aleut/Eskimo respondents and the maximum satisfaction score (5.56) was seen for the Asian/Pacific Islander subgroup. There were differences of practical significance between the highest scoring Asian/Pacific Islander subgroup and the two lowest scoring subgroups, Native American/Aleut/Eskimo and "Other" (with Cohen's *d* statistics of 0.71 and 0.62, respectively).

Table 5-27. Satisfaction with Residence by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	735	5.07	1.50
Black/African-American	117	5.25	1.56
Asian/Pacific Islander	27	5.56	1.09
Native American/Aleut/Eskimo	21	4.48	1.86
Spanish/Hispanic	81	4.94	1.60
Other	21	4.76	1.45

Gender. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by gender, are shown in Table 5-28. The average score for the female respondents was 5.27, or 0.21 greater than that for the male respondents. The difference seen here had no practical significance.

Table 5-28. Satisfaction with Residence by Gender for the Independent Duty

Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	966	5.06	1.54
Female	55	5.27	1.25

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by marital/parental status, are shown in Table 5-29. The scores were relatively consistent across these subgroups (with married respondents scoring slightly higher than unmarried respondents) with one notable exception: The relatively small Divorced/Widowed/Separated with Children subgroup, the mean satisfaction score for which was 3.93. Although not shown in the table, the Divorced/Widowed/Separated with Children subgroup was the only subgroup for which "Satisfied" (assigned a score of 6) was not the most frequently chosen response. Instead, "Neutral" (assigned a score of 4) was the most frequently chosen response in this subgroup. Note that the difference between the mean score for the Divorced/Widowed/Separated with Children had practical significance when compared with the mean scores for each of the other subgroups considered here.

Table 5-29. Satisfaction with Residence by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	15	3.93	1.71
Divorced/Widowed/Separated without Children	68	5.12	1.30
Married with Children	487	5.17	1.55
Married without Children	168	5.20	1.42
Never Been Married	271	4.86	1.56

Type of Housing. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by type of housing, are shown in Table 5-30. The satisfaction scores for this decomposition were relatively consistent, with the exception of the Personally-Owned Housing subgroup, which had the highest mean score, 5.78 (note that this was also the largest subgroup). This score was well into the "Somewhat Satisfied" to "Satisfied" range and was 0.69 above the next-highest mean satisfaction score seen (for the Rented Civilian Housing), a difference of practical significance which had a Cohen's *d* statistic of 0.56. The minimum satisfaction score for this decomposition was seen for the respondents living in Shared Rental Housing.

Table 5-30. Satisfaction with Residence by Type of Housing for the Independent Duty Marine Respondents

Housing Type	Count	Mean	Std. Dev.
Personally-Owned Housing	312	5.78	1.11
Rented Civilian Housing	214	5.09	1.36
Shared Rental Housing	32	4.78	1.29
Other	45	4.84	1.31

When mean satisfaction scores for this life domain for the members of the 2007 Independent Duty Marine respondent sample living in non-military housing were compared to the mean satisfaction scores for their counterparts from the 2002 QoL Study, slight increases could be seen (Figure 5-10). However, none of the differences shown here had any practical significance.

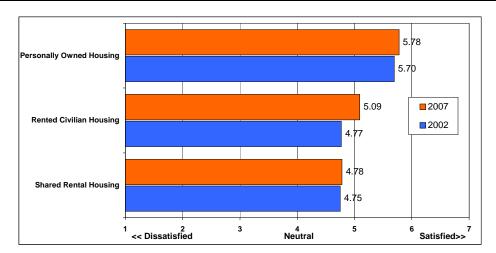


Figure 5-10. Satisfaction with Non-Military Housing for the Independent Duty Marine Respondents

In addition to asking the respondents about their overall satisfaction with their residence, Question #10 also asked about satisfaction with a series of nine separate facets of residence. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-11.

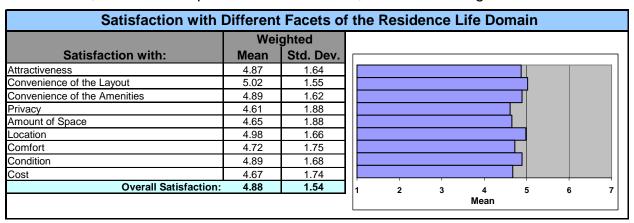


Figure 5-11. Satisfaction with Facets of Residence for the Independent Duty Marine Respondents

The two minimum weighted mean scores (and the two highest standard deviations) were seen for Privacy and Amount of Space, although the range of scores was relatively compressed for all satisfaction facets questions. In fact, none of the differences seen here had any practical significance. Further analysis indicated that the reason for this was that there were some disparities in satisfaction for those residence facets between Pay Grade Groups.

To explore this more fully, Figure 5-12 shows a histogram of the responses for satisfaction with Privacy. It can be seen that 23.1 percent of the Independent Duty Marine respondent sample indicated some degree of dissatisfaction with the privacy of their residence and 6.4 percent responded that they were "Completely Dissatisfied."

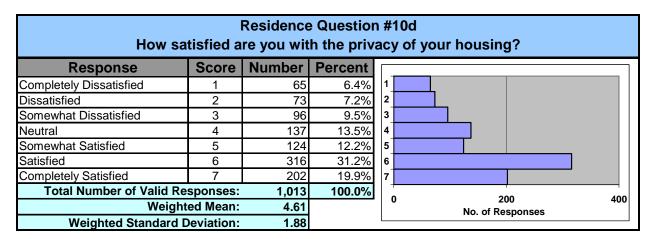


Figure 5-12. Satisfaction with Privacy of Residence for the Independent Duty

Marine Respondents

When Question #10d was examined by Pay Grade Group, the minimum mean score, 4.13 for E-2/E-3 respondents, and the maximum mean score, 5.62 for WO respondents, differed by 1.49 points. Not surprisingly, this difference had practical significance (Cohen's *d* statistic was 0.89).

Similar trends were seen when the facet of Amount of Space (Question #10e) was examined.

In order to determine the factors that were key to the reported overall satisfaction in the Residence life domain, multiple regression of the facets of satisfaction on the overall satisfaction with residence for those Independent Duty Marine respondents living in non-military housing (i.e., Personally Owned Housing, Rented Civilian Housing, and Shared Rental Housing) was performed. The results are shown in Figure 5-13. The relative range of the influence of the facets (as shown on the vertical axis) occurred over a somewhat compressed scale, with the facet influence values falling between 0.041 and 0.196. The results indicated that overall satisfaction with residence was most strongly influenced by satisfaction with the Cost of the housing and its Condition. followed by (in decreasing order) Attractiveness, Location, and amount of Space. Note that these results were fairly similar to those seen in the 2002 QoL Study. Comfort, the Convenience of the Layout, Amenities, and Privacy had somewhat less influence than the previously mentioned facets. Given the clustering of the influence values of these facets for the Residence life domain, the mean satisfaction scores also were an important consideration for analysis. In addition to being relatively strong influences on overall satisfaction, the Cost, Attractiveness, and Space of the housing also had mean satisfaction scores below the overall mean satisfaction score, denoting that these facets had high potential as areas for improvement that could result in higher overall satisfaction in this life domain for the Independent Duty Marine respondents. Privacy had the lowest mean satisfaction score but also had the lowest degree of influence; the latter would limit this facet's potential for improving satisfaction in this life domain.

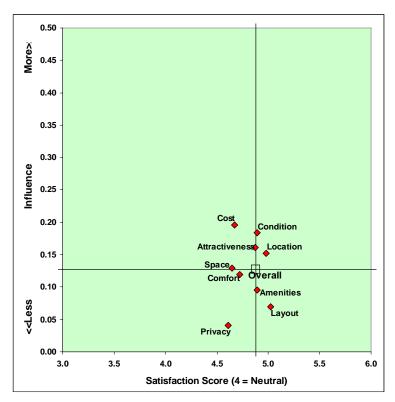


Figure 5-13. Key Driver Diagram for the Residence Life Domain for the Independent Duty Marine Respondents Living in Non-Military Housing

5.4.3 Effect of Residence on Job Performance

Question #11 asked about the effect of housing on the respondents' job performance. A histogram of the responses to that question is shown in Figure 5-14.

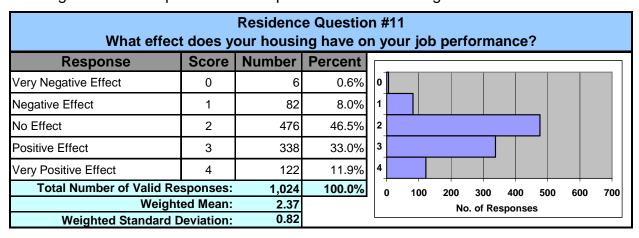


Figure 5-14. Effect of Residence on Job Performance for the Independent Duty

Marine Respondents

The weighted mean score for this question was 2.37, in the "No Effect" to "Positive Effect" range. Slightly under half (46.5 percent) of the respondents answered that their residence had no effect on their job performance. However, more respondents (460, or

44.9 percent) said their housing had some degree of positive effect than said that their housing had some degree of negative effect (88, or 8.6 percent). Although not shown here, both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (2.18 and 2.35, respectively) below the overall weighted mean for the question. Recall that these Marines tended to have the lowest happiness and satisfaction scores in this life domain.

The effect of residence on job performance was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-31. The mean scores for effect on job performance were consistent across the subgroups, with no difference with any practical significance. The mean score for the IDMw/oMCS subgroup was 2.51, or 0.04 above the mean score for IDMw/MCS subgroup.

Table 5-31. Effect of Residence on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample			w/MCS			w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	1,024	2.37	0.82	789	2.47	0.82	184	2.51	0.87

5.4.4 Effect of Residence on Plans To Remain on Active Duty

Question #12 asked about the effect of housing on the respondents' plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-15.

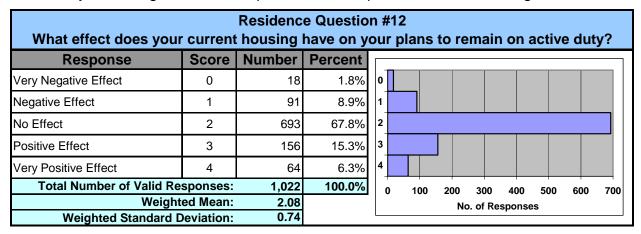


Figure 5-15. Effect of Residence on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.08, or slightly above "No Effect." The majority of the respondents, 67.8 percent, answered that their Residence had no effect on their plans to remain on active duty. However, more respondents (220, or 21.6 percent) said their housing had some degree of positive effect on their plans to remain on active duty than said that their housing had some degree of negative effect (109, or 10.7 percent). Although not shown here, both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (1.95 and 2.05, respectively) that again were less than the overall mean. Once again, since these Marines tended to have the lowest happiness

and satisfaction scores in this life domain, the impact of those perceptions on their plans to remain on active duty may be cause for some concern.

The effect of residence on plans to remain on active duty (Question #12) was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-32. The mean scores for effect on plans to remain on active duty were consistent across the subgroups, with no difference with any practical significance. The mean score for the IDMw/oMCS subgroup was 2.08, or 0.09 below the mean score for IDMw/MCS subgroup.

Table 5-32. Effect of Residence on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample			w/MCS			w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	1,022	2.08	0.74	785	2.17	0.74	185	2.08	0.73

Question #9 asked the respondents: "If quality housing were to be guaranteed upon reenlistment or at your next career decision point, would that influence your decision to remain in the Marine Corps?" The possibility did not appear to excite the respondents excessively: as shown in Table 5-33, 41.8 percent answered "Yes," and 58.2 percent answered "No." These percentages differed markedly from those seen for the Base and Station respondents, and in a detrimental/less influential direction. Perhaps the influence of this potential guarantee on the Independent Duty Marine respondents was attenuated by the more-senior rank structure of that respondent group.

Table 5-33. Influence on Career Plans of a Guarantee of Quality Housing for the Independent Duty Marine Respondents

	Count	Percent
Yes: A Guarantee of Quality Housing Would Influence My Career Plans	430	41.8%
No: A Guarantee of Quality Housing Would <u>Not</u> Influence My Career Plans	599	58.2%
Total	1,029	100.0%

5.4.5 Other Life Domain-Specific Analyses

The responses to several other questions specific to the Residence life domain were examined. The results are presented below.

Question #4 asked the respondents living in civilian housing ⁹⁴ to provide the cost of their monthly rent or mortgage. The calculated overall mean response was \$1,482.00, or \$156 greater than average cost for civilian housing calculated for the Base and Station respondent group.

⁹⁴ That is, who responded in Residence Question #2 that they lived in personally-owned or rented civilian housing or that they shared rental housing in the civilian community or lived in a mobile home..

Question #5 asked the respondents living in civilian housing to provide an indication of the percentage of their monthly rent or mortgage that was covered by their BAH. Figure 5-16 shows the responses to that question. The calculated mean response was essentially equivalent to the "100% of mortgage or rent" response, and almost exactly equal to the value computed for the responses of the Base and Station Marines to this question. Thus, by this measure, it appears that the BAH was adequate for the members of the Independent Duty Marine sample who lived in civilian housing. However, looked at another way, the data in the figure show that for 308 of the 703 respondents, or 43.7 percent, the BAH covered less than 100 percent of their mortgage or rent.

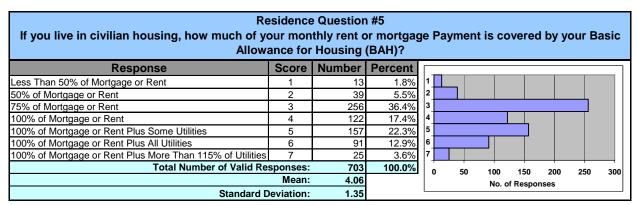


Figure 5-16. Adequacy of BAH for the Independent Duty Marine Marines Living in Civilian Housing

5.4.6 Conclusions for the Residence Life Domain for the Independent Duty Marine Respondents

Satisfaction and happiness in the Residence life domain remained relatively consistent in 2007 when compared with the results from the 2002 Study. Also, there was relative consistency in residence satisfaction, happiness, and effects on job performance and on plans to remain on active duty between those Independent Duty Marines with Military Community Support and without Military Community Support. There were, however, differences of practical significance in happiness and satisfaction mean scores when the respondent data were decomposed demographically, specifically by Pay Grade Group, race/ethnicity, marital status and type of housing. Marines in lower Pay Grade Groups were typically less pleased with their residence, while the Warrant Officers stood out for their levels of both happiness and satisfaction. The Native American/Aleut/Eskimo subgroup was much less pleased with their housing than were the other racial/ethnic groups, as were the Divorced/Widowed/Separated with Children respondents. Respondents in personally-owned housing were by far the most pleased with their residence. Notably, for the Independent Duty Marine respondent group, all calculated average scores for happiness and satisfaction were above the "Neutral" level and slightly higher in general when compared with the Base and Station respondent group.

One facet of this life domain in which improvements might be most likely to have impacts on overall satisfaction would be the cost of the respondents' residences. This

facet had the highest influence and a relatively low mean satisfaction score. When looked at in more detail, nearly 44 percent of the Independent Duty Marine respondents said that their BAH covered less than 100 percent of their mortgage expenses. Residence had some positive effect on the job performance of the respondents, but almost no effect on their plans to remain on active duty.

5.5 THE NEIGHBORHOOD LIFE DOMAIN

5.5.1 Happiness – Affective Evaluations of the Neighborhood Life Domain

The weighted mean affective or happiness score (Question #1) for the Neighborhood life domain for the Independent Duty Marines respondents in 2007 was 4.76, or three-quarters of the way between "Neither Unhappy Nor Pleased" and "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Independent Duty Marines respondent sample in this life domain is shown in Figure 5-17. It can be seen that the highest percentage of respondents, 30.3 percent, were "Pleased" with their neighborhood and two-thirds of the respondents answered positively (67.4 percent). Only 12.1 percent of the respondents expressed any level of unhappiness with their neighborhood. Note also that the 4.76 weighted mean for the Independent Duty Marines was somewhat higher than the 4.52 weighted overall affective mean found for the Base and Station Marines.

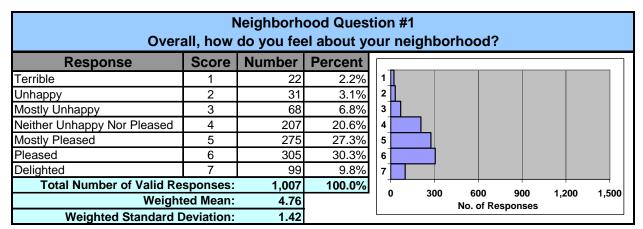


Figure 5-17. Distribution of the Overall Happiness Responses in the Neighborhood Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-18. The 2007 weighted overall mean Neighborhood D-T score decreased slightly (by 0.12) from the 2002 score, while the scores for the two Military Community Support subgroups saw essentially no changes. No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

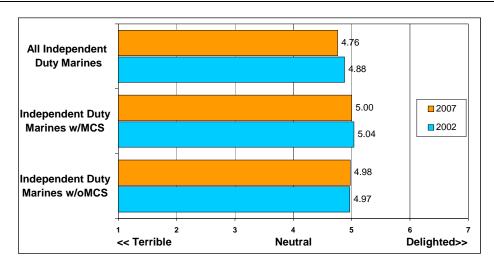


Figure 5-18. Trends in Overall Happiness in the Neighborhood Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Neighborhood life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by Pay Grade Group, are shown in Table 5-34.

Table 5-34. Happiness with Neighborhood by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	106	4.41	1.51
E-4/E-5	260	4.68	1.40
E-6/E-7	252	5.10	1.30
E-8/E-9	113	5.18	1.23
WO	21	5.57	0.81
O-1 to O-3	91	5.07	1.20
O-4 to O-10	164	5.38	1.17

A number of significant differences appeared in this decomposition. As pay grade increased, overall happiness increased through the enlisted and WO Pay Grade Groups. The mean score for the O-1 to O-3 Pay Grade Group was lower (by 0.50) than for the Warrant Officers and somewhat lower (by 0.31) than for the senior officers. The difference between the minimum happiness score, 4.41 for the E-2/E-3 Pay Grade Group, and the maximum happiness score, 5.57 for the WO Pay Grade Group, had a Cohen's *d* statistic of 0.96, indicating a difference of practical significance. Differences with practical significance also were found between the mean score of the E-2/E-3 Pay Grade Group and those of the O-4 to O-10 and E-8/E-9 Pay Grade Groups and between the mean score of the WO Pay Grade Group and the E-4/E-5 Pay Grade Group.

The trends in overall happiness in the Neighborhood life domain by Pay Grade Group are shown in Figure 5-19. Scores in four of the seven Pay Grade Group scores increased between 2002 and 2007, with the Warrant officers having both the largest increase (0.50) and the only change since 2002 that was of practical significance. The exceptions to the trend of increases since 2002 were seen for the E-2/E-3, E-4/E-5 and O-1 to O-3 Pay Grade Groups, the lowest-tenured of the subgroups in both the enlisted and officer groups. It also can be seen that the two lowest Pay Grade Groups were the only respondent groups with an average score below "Mostly Pleased."

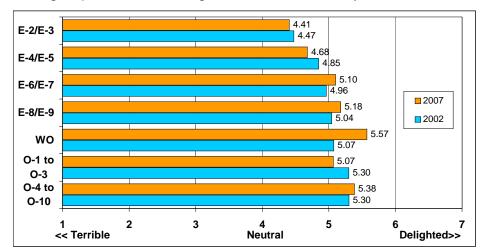


Figure 5-19. Trends in Overall Happiness in the Neighborhood Life Domain for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by race/ethnicity, are shown in Table 5-35. The range of scores was relatively compressed, with the minimum happiness score (4.59) seen for the "Other" subgroup and the maximum happiness score (5.12) seen for the Black/African American subgroup. The White and the Asian/Pacific Islander subgroups also scored in the "Mostly Pleased" range. None of the differences seen here had any practical significance.

Table 5-35. Happiness with Neighborhood by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	728	5.00	1.33
Black/African-American	118	5.12	1.23
Asian/Pacific Islander	25	5.00	1.32
Native American/Aleut/Eskimo	22	4.64	1.59
Spanish/Hispanic	77	4.82	1.39
Other	22	4.59	1.30

Gender. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by gender, are shown in Table 5-36. The

average score for the female respondents was 5.02, a trivial 0.03 greater than that for the male respondents.

Table 5-36. Happiness with Neighborhood by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	954	4.99	1.34
Female	56	5.02	1.27

Marital/Parental Status. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by marital/parental status, are shown in Table 5-37. The scores were relatively consistent across these subgroups. The mean score for the Married with Children subgroup was the only one to exceed "Mostly Pleased." None of the differences seen here had any practical significance.

Table 5-37. Happiness with Neighborhood by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	17	4.88	1.41
Divorced/Widowed/Separated without Children	67	4.88	1.23
Married with Children	486	5.12	1.28
Married without Children	164	4.96	1.41
Never Been Married	265	4.78	1.40

Type of Housing. The means and standard deviations of the happiness scores for the Neighborhood life domain, decomposed by type of housing, are shown in Table 5-38.

Table 5-38. Happiness with Neighborhood by Type of Housing for the Independent Duty Marine Respondents

Housing Type	Count	Mean	Std. Dev.
Personally-Owned Housing	310	5.53	1.05
Rented Civilian Housing	220	4.95	1.32
Shared Rental Housing	32	4.81	1.38
Other	42	4.36	1.45

Two scores stood out. The mean score for the respondents living in Personally-Owned Housing was 0.58 greater than the next highest score. This difference had a Cohen's *d* statistic of 0.49, just barely below the threshold used in this study to denote practical significance, but the differences with the other two subgroups considered here did have practical significance. The mean score for the "Other" subgroup was 0.45 below the next lowest score, although only the difference between that score and the mean of the highest scoring subgroup had any practical significance.

5.5.2 Satisfaction – Cognitive Evaluations of the Neighborhood Life Domain

The weighted mean cognitive or satisfaction score (Question #3I) in the Neighborhood life domain for the Independent Duty Marine respondents in 2007 was 4.97, i.e., nearly

"Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marines respondent sample in the Neighborhood life domain is shown in Figure 5-20. In the overall sample, the response chosen by the highest percentage of respondents was "Satisfied" (chosen by 38.9 percent of the Independent Duty Marine respondents). Overall, 11.4 percent of the respondents felt negatively about this aspect of their lives, while 69.9 percent were in some way satisfied. Note also that the 4.97 weighted mean for the Independent Duty Marines was somewhat higher than the 4.66 weighted overall cognitive mean found for the Base and Station Marines.

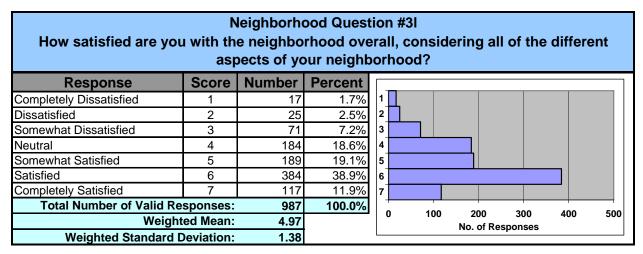


Figure 5-20. Distribution of the Overall Satisfaction Responses in the Neighborhood Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-21. The 2007 weighted mean satisfaction score for Neighborhood decreased slightly (by 0.07 points) from the 2002 weighted score. Independent Duty Marines both with and without Military Community Support had slight increases in their satisfaction in this life domain. No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

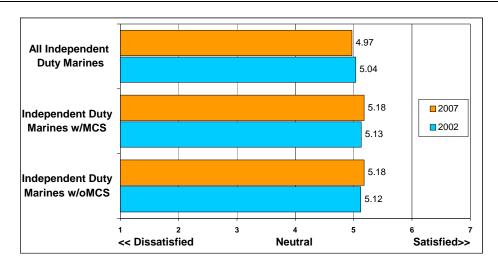


Figure 5-21. Trends in Overall Satisfaction in the Neighborhood Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Neighborhood life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, marital/parental status, and type of housing. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by Pay Grade Group, are shown in Table 5-39.

Table 5-39.	Satisfaction with Neighborhood by Pay Grade Group for the
	Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	101	4.74	1.39
E-4/E-5	256	4.80	1.44
E-6/E-7	246	5.30	1.23
E-8/E-9	112	5.31	1.29
WO	21	5.90	0.70
O-1 to O-3	89	5.18	1.29
O-4 to O-10	162	5.51	1.29

The means for all the Pay Grade Groups fell between "Neutral" and "Satisfied," indicating that the respondents generally were satisfied with their neighborhoods. The minimum satisfaction score, 4.74, was seen for the E-2/E-3 Pay Grade Group, while the maximum satisfaction score, 5.90, was seen for the WO Pay Grade Group. The difference between these two scores had a Cohen's *d* statistic of 1.05, denoting practical significance. In fact, the mean of the WO Pay Grade Group had differences of practical significance with the means of every other Pay Grade Group except that of the second-highest scoring O-4 to O-10 Pay Grade Group. The mean of the E-2/E-3 Pay Grade Group also was significantly different from the mean of that senior officer Pay Grade Group.

When the trends in overall satisfaction with the Neighborhood life domain were examined by Pay Grade Group, as shown in Figure 5-22 the direction of the changes between the results from 2002 and those from 2007 were seen to vary. Overall four of the seven Pay Grade Group scores increased between 2002 and 2007. The three exceptions to this trend of increases since 2002 were seen for the two most junior enlisted and the most junior (in terms of time in service) officer Pay Grade Groups. Also, the two lowest Pay Grade Groups were the only respondent groups with means below "Somewhat Satisfied." Of note also is the increase in the satisfaction of the members of the WO Pay Grade Group. This change had a Cohen's *d* statistic of 0.61, indicating a change of practical significance.

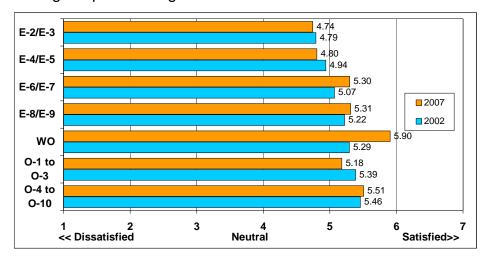


Figure 5-22. Trends in Satisfaction in the Neighborhood Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by race/ethnicity, are shown in Table 5-40. The scores were relatively clustered, ranging from a low of 4.73 for the small number of Native American/Aleut/Eskimo respondents to the maximum of 5.39 for the Black/African American subgroup. None of the differences seen here had any practical significance, although the difference between the two extremes almost satisfied the criteria used in this study for practical significance (Cohen's *d* statistic was 0.48).

Table 5-40. Satisfaction with Neighborhood by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	713	5.12	1.36
Black/African-American	115	5.39	1.27
Asian/Pacific Islander	24	5.33	1.05
Native American/Aleut/Eskimo	22	4.73	1.45
Spanish/Hispanic	77	5.22	1.42
Other	21	4.86	1.31

Gender. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by gender, are shown in Table 5-41. The average score for the female respondents was 5.23, only 0.08 greater than that for the male respondents. That difference had no practical significance. Both male and female respondents rated their satisfaction above "Somewhat Satisfied."

Table 5-41. Satisfaction with Neighborhood by Gender for the Independent Duty

Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	936	5.15	1.37
Female	52	5.23	1.06

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by marital/parental status, are shown in Table 5-42. The scores were relatively consistent across the subgroups with only the Divorced/Widowed/Separated without Children and the Never Been Married subgroups scoring below "Somewhat Satisfied," although both were well above "Neutral." The Married respondents, regardless of their parental status, were the most-satisfied subgroups.

Table 5-42. Satisfaction with Neighborhood by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	15	5.07	1.53
Divorced/Widowed/Separated without Children	65	4.83	1.29
Married with Children	480	5.31	1.34
Married without Children	163	5.27	1.29
Never Been Married	255	4.85	1.38

Type of Housing. The means and standard deviations of the satisfaction scores for the Neighborhood life domain, decomposed by type of housing, are shown in Table 5-43.

Table 5-43. Satisfaction with Neighborhood by Type of Housing for the Independent Duty Marine Respondents

Housing Type	Count	Mean	Std. Dev.
Personally-Owned Housing	307	5.73	1.01
Rented Civilian Housing	214	5.08	1.26
Shared Rental Housing	30	5.10	1.42
Other	40	4.30	1.59

The small number of respondents in the "Other" subgroup had by far the lowest satisfaction scores. The two rented housing groups, Rented Civilian Housing and Shared Rental Housing, scored in the middle with mean scores just above "Somewhat Satisfied." Those respondents in Personally-Owned Housing scored the highest, at 5.73. All of the differences seen here, except that between the two types of rented housing, had practical significance.

Figure 5-23 compares the mean satisfaction scores for the Neighborhood life domain for the members of the 2007 Independent Duty Marines respondent sample living in non-military housing to the results for their counterparts from the 2002 QoL Study. All scores remained above the "Somewhat Satisfied" level and all increased since 2002, although none of the changes had any practical significance.

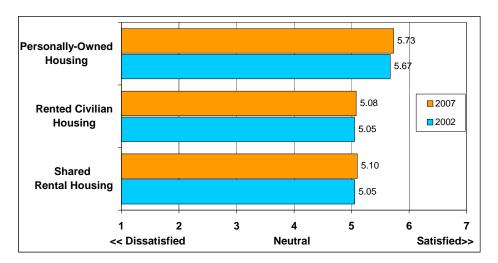


Figure 5-23. Satisfaction with Neighborhood (Non-Military Residence) for the Independent Duty Marine Respondents

Figure 5-24 shows the average satisfaction scores for the Independent Duty Marines respondents living in non-military housing for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. Recall that the satisfaction with their neighborhood expressed by the Independent Duty Marine respondents who lived in personally-owned housing was the highest of any type of residence. When broken down into subgroups as a function of Military Community Support and comparing their scores to the overall, that trend continued. Personally-owned housing had the highest satisfaction, while rented civilian housing and shared rental housing had lower and similar satisfaction scores. Because there were fewer than 10 IDMw/oMCS who lived in Shared Rental Housing, no data were shown for that subgroup.

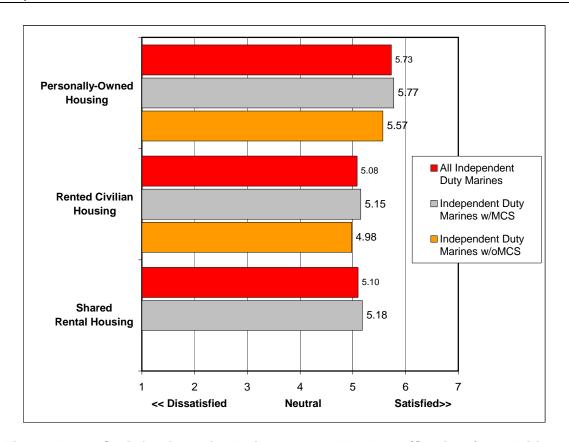


Figure 5-24. Satisfaction with Neighborhood by Base/Station (Non-Military Residence) for the Independent Duty Marine Respondents

In addition to asking the respondents about their overall satisfaction with their neighborhood, Question #3 also asked about satisfaction with a series of 11 separate facets of neighborhood. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-25.

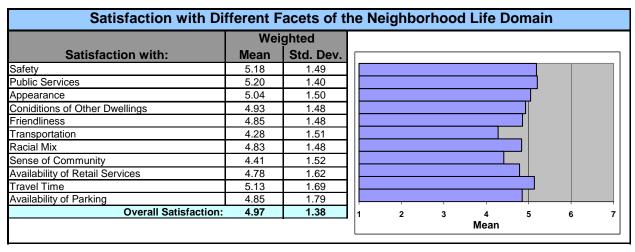


Figure 5-25. Satisfaction with Facets of Neighborhood for the Independent Duty Marine Respondents

The highest weighted score, 5.20, was seen in Public Services, with Safety being rated just below, at 5.18. Further analysis indicated that 70.6 percent of the respondents felt safe in their neighborhood with the most (38.6 percent) respondents answering "Satisfied" with the safety of their neighborhood. The lowest weighted satisfaction scores were seen for Transportation (4.28) and Sense of Community (4.41). For the latter, respondents both with and without military support scored similarly, indicating that Military Community Support had little influence on this facet.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with neighborhood for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-26. Similar to the results for the Base and Station respondents (and to the 2002 Independent Duty Marine results), Appearance had by far the largest influence in this life domain, possessing a mean only slightly above the overall and having over twice the impact as the next most influential facet (Parking). Thus, improvements in the appearance of the respondents' neighborhoods could result in large increases in overall satisfaction in this life domain. Other focal points for improvement would be Parking and availability of Retail Services, both of which had influence values greater and mean scores lower than the overall mean satisfaction.

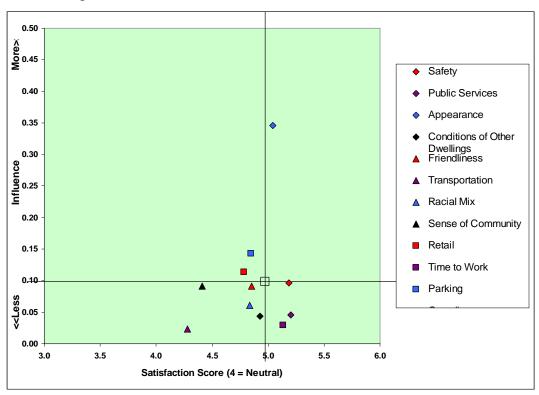


Figure 5-26. Key Driver Diagram for the Neighborhood Satisfaction Facets for the Independent Duty Marine Respondents

⁹⁵ Note that due to the large number of facet satisfactions considered in this life domain, a slightly different form of the key driver diagram (one that uses a legend and does not place the facet satisfaction names in the diagram itself) has been used; however, the consistent scaling of the chart has been maintained.

5.5.3 Effect of Neighborhood on Job Performance

Question #4 asked about the effect of the respondents' neighborhood on their job performance. A histogram of the responses to that question is shown in Figure 5-27.

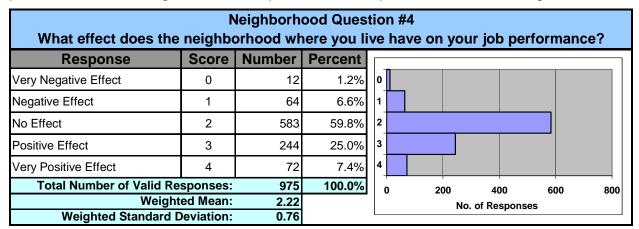


Figure 5-27. Effect of Neighborhood on Job Performance for the Independent Duty Marine Respondents

Overall, the neighborhood in which the respondents lived had a positive effect on job performance: The weighted mean score for this question was 2.22, falling at the lower end of the "No Effect" to "Positive Effect" range. Note that 59.8 percent of the respondents answered that their neighborhood had no effect on their job performance. However, more respondents (316, or 32.4 percent) said their neighborhood had a positive effect than said that their neighborhood had a negative effect (76, or 7.8 percent) on their job performance.

The effect of the respondents' neighborhood on job performance was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-44. All the groups considered here rated their neighborhood as having a slightly positive effect on job performance. The IDMw/oMCS were slightly more satisfied than the IDMw/MCS, but the difference was without practical significance.

Table 5-44. Effect of Neighborhood on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
_	Т	Total Sample w/MCS			S	w/oMCS			
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	975	2.22	0.76	742	2.31	0.75	175	2.35	0.81

5.5.4 Effect of Neighborhood on Plans To Remain on Active Duty

Question #5 asked about the effect of the respondents' neighborhood on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-28.

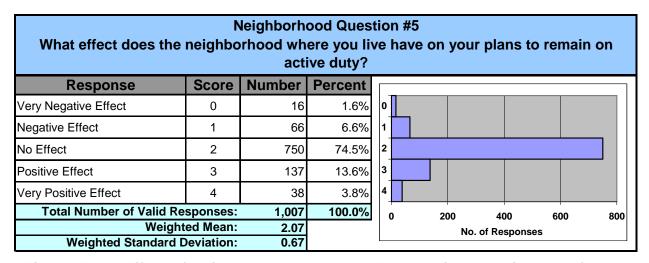


Figure 5-28. Effect of Neighborhood on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.07, or slightly above "No Effect." Nearly three-fourths of the respondents said that their neighborhood had no effect on their plans to remain on active duty. However, more respondents (175, or 17.4 percent) said their neighborhood had a positive effect than said that their neighborhood had a negative effect (82, or 8.2 percent).

The effect of the respondents' neighborhood on plans to remain on active duty was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-45. All the groups considered rated their neighborhood as having a slightly positive effect on their plans to remain on active duty. The IDMw/MCS were slightly more satisfied than the IDMw/oMCS, although the difference had no practical significance.

Table 5-45. Effect of Neighborhood on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Т	Total Sample w/MCS			w/oMCS				
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	1,007	2.07	0.67	770	2.12	0.63	182	2.08	0.66

5.5.5 Conclusions for the Neighborhood Life Domain for the Independent Duty Marine Respondents

Overall weighted mean happiness and satisfaction showed slight decreases since 2002, although the changes were not significant. Respondents in the lower Pay Grade Groups held the worst views of their neighborhood, although they still were generally positive. The high levels of both happiness and satisfaction, and the large increases seen since 2002, for the Warrant Officers were notable. However, the mean happiness and satisfaction scores of the E-2/E-3, E-4/E-5 and O-1 to O-3 Pay Grade Groups (i.e., those Pay Grade Groups for which the members generally had the shortest time of service in the Marine Corps) all declined between 2002 and 2007. Of the racial/ethnic

groups considered, the Native America/Aleut/Eskimo subgroup had consistently low scores, although they were not significantly lower than any of the other racial/ethnic subgroups considered. Marines living in Personally-Owned Housing scored higher overall in both happiness and satisfaction than those living in other types of non-Military housing. The generally positive attitudes toward neighborhood had slightly positive effects on the respondents' job performance and plans to remain on active duty, although the majority of the Independent Duty Marines thought that their neighborhood had no effect on those measures. The effect of Military Community Support appeared minimal. The facet of neighborhood satisfaction with the greatest potential for increasing overall life domain satisfaction was that of the appearance of the neighborhood in which the respondents live.

5.6 THE LEISURE AND RECREATION LIFE DOMAIN

5.6.1 Happiness – Affective Evaluations of the Leisure and Recreation Life Domain

The weighted mean affective or happiness score (Question #1) for the Leisure and Recreation life domain for the Independent Duty Marine respondents in 2007 was 4.87, indicating that the Marines in the respondent sample were generally happy with their leisure and recreation activities. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-29. It can be seen that 71.0 percent of the respondents indicated some degree of happiness with their leisure and recreation activities, while only 12.7 percent of the respondents indicated some degree of unhappiness. Note also that, although the distributions of responses and the weighting schemes used differed, the 4.87 weighted mean for the Independent Duty Marines was only the slightly higher than the 4.80 weighted overall affective mean found for the Base and Station Marines.

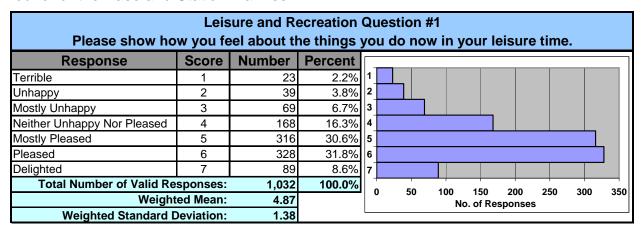


Figure 5-29. Distribution of the Overall Happiness Responses in the Leisure and Recreation Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-30. The 2007 weighted overall mean affective leisure and recreation

D-T score for the entire Independent Duty Marine sample decreased slightly (by 0.13) from the 2002 weighted score as did the IDMw/oMCS mean (by 0.12). The IDMw/MCS mean increased slightly from the 2002 value, by 0.03 points. No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

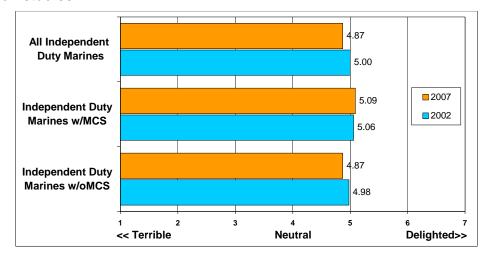


Figure 5-30. Trends in Overall Happiness in the Leisure and Recreation Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Leisure and Recreation life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by Pay Grade Group, are shown in Table 5-46.

Table 5-46. Happiness with Leisure and Recreation by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	113	4.77	1.41
E-4/E-5	276	4.67	1.39
E-6/E-7	253	4.94	1.44
E-8/E-9	113	5.41	1.04
WO	21	5.33	1.28
O-1 to O-3	92	5.21	1.20
O-4 to O-10	164	5.30	1.13

In a change from an often-seen pattern, the mean of the E-4/E-5 Pay Grade Group was lower than that of the E-2/E-3 Pay Grade Group, although the difference had no practical significance. However, the difference between the lowest mean (4.67 for the E-4/E-5 Pay Grade Group) and the highest mean (5.41 for the E-8/E-9 Pay Grade Group) did have practical significance (having a Cohen's *d* statistic of 0.60). None of

the other differences between the means of any of the other Pay Grade Groups had practical significance.

Figure 5-31 shows the trends in satisfaction between 2002 and 2007 across Pay Grade Groups for the Leisure and Recreation life domain. The means of the three lowest Pay Grade Groups declined since 2002, while the means for the other four Pay Grade Groups improved since 2002. The mean of the E-8/E-9 Pay Grade Group changed the most since 2002 (an increase of 0.46), but this change had no practical significance.

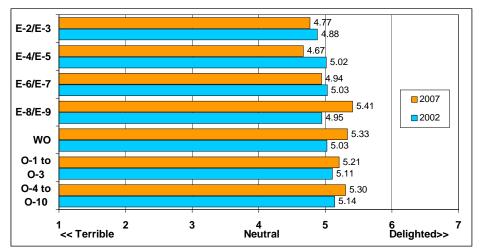


Figure 5-31. Trends in Happiness in the Leisure and Recreation Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by race/ethnicity, are shown in Table 5-47.

Table 5-47. Happiness with Leisure and Recreation by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	745	5.07	1.27
Black/African-American	117	4.84	1.53
Asian/Pacific Islander	28	5.04	1.17
Native American/Aleut/Eskimo	21	4.62	1.63
Spanish/Hispanic	82	4.87	1.40
Other	21	4.52	1.29

The means corresponded with responses between "Neither Unhappy Nor Pleased" and "Mostly Pleased," with the exception of the White and Asian/Pacific Islander subgroups whose means edged into the "Mostly Pleased" range. The "Other" racial/ethnic subgroup had the lowest mean of 4.52, but the difference between this mean and that of the White subgroup (5.07) had no practical significance (Cohen's *d* statistic of 0.43). The quickly growing Spanish/Hispanic subgroup had a mean of 4.87, equal to the overall affective mean.

Gender. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by gender, are shown in Table 5-48. The means of both the males and the females were close to "Mostly Pleased" and differed by only 0.09. This difference had no practical significance.

Table 5-48. Happiness with Leisure and Recreation by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	976	5.02	1.34
Female	58	4.93	1.21

Marital/Parental Status. The means and standard deviations of the happiness scores for the Leisure and Recreation life domain, decomposed by marital/parental status, are shown in Table 5-49.

Table 5-49. Happiness with Leisure and Recreation by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	17	5.00	1.27
Divorced/Widowed/Separated without Children	69	4.94	1.46
Married with Children	490	5.17	1.23
Married without Children	170	4.91	1.49
Never Been Married	276	4.82	1.34

The scores were relatively consistent across the subgroups. The Never Been Married subgroup had the lowest mean (4.82) while the Married with Children subgroup had the largest mean (5.17). This difference had no practical significance. The respondents with children seemed happier than their counterparts without children regardless of the current marital status of the respondents.

5.6.2 Satisfaction – Cognitive Evaluations of the Leisure and Recreation Life Domain

The weighted mean cognitive or satisfaction score (Question #3e) in the Leisure and Recreation life domain for the Independent Duty Marine respondents in 2007 was 4.51, i.e., between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Leisure and Recreation life domain is shown in Figure 5-32. A total of 21.0 percent of the respondents expressed some level of dissatisfaction compared with 57.8 percent of the respondents who indicated some level of satisfaction with their leisure and recreation activities/opportunities. Also note that the 4.51 weighted mean for the Independent Duty Marines was higher than the 4.18 weighted overall cognitive mean found for the Base and Station respondents.

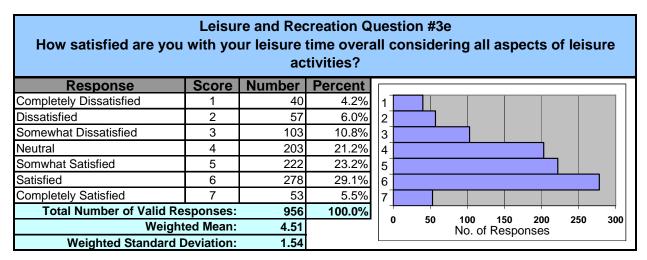


Figure 5-32. Distribution of the Overall Satisfaction Responses in the Leisure and Recreation Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-33. The 2007 weighted mean satisfaction score for the entire Independent Duty Marine sample for the Leisure and Recreation life domain decreased slightly (by 0.03 points) from the 2002 weighted score, but this change did not have any practical significance. In fact, no practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

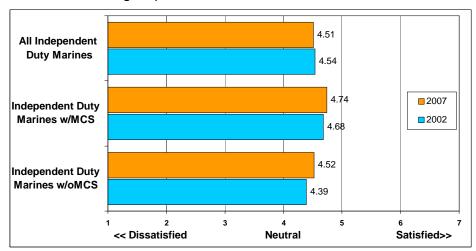


Figure 5-33. Trends in Overall Satisfaction in the Leisure and Recreation Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Leisure and Recreation life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by Pay Grade Group, are shown in Table 5-50.

Table 5-50. Satisfaction with Leisure and Recreation by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	105	4.40	1.61
E-4/E-5	253	4.25	1.55
E-6/E-7	229	4.73	1.51
E-8/E-9	104	4.78	1.37
WO	18	5.00	1.37
O-1 to O-3	90	4.78	1.31
O-4 to O-10	157	5.01	1.32

The means for the individual Pay Grade Groups corresponded to responses between "Neutral" and "Somewhat Satisfied." When the minimum Pay Grade Group mean (4.25 for the E-4/E-5 Pay Grade Group) was compared to the maximum Pay Grade Group mean (5.01 for the O-4 to O-10 Pay Grade Group), no practical significance was seen in the difference (a Cohen's *d* statistic of 0.43 was found). As was the case for the affective measure, the E-4/E-5 Pay Grade Group had the lowest mean.

When the trends in overall satisfaction with the Leisure and Recreation life domain were examined by Pay Grade Group, as shown in Figure 5-34, increases from the 2002 values were seen in every group except for the E-2/E-3 and E-4/E-5 Pay Grade Groups. However, none of the changes shown here had any practical significance.

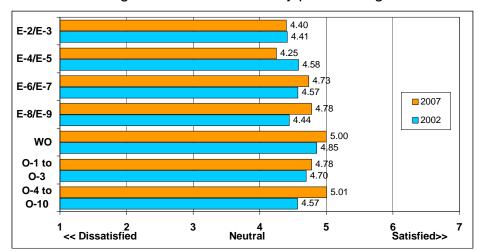


Figure 5-34. Trends in Satisfaction in the Leisure and Recreation Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by race/ethnicity, are shown in Table 5-51.

Table 5-51. Satisfaction with Leisure and Recreation by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	698	4.70	1.45
Black/African-American	107	4.54	1.45
Asian/Pacific Islander	26	4.50	1.45
Native American/Aleut/Eskimo	19	3.89	1.66
Spanish/Hispanic	72	4.47	1.70
Other	18	4.39	1.69

The minimum satisfaction score (3.89) was seen for the small number of Native American/Aleut/Eskimo respondents and the maximum satisfaction score (4.70) was seen for the White subgroup. The Cohen's *d* statistic between the means of these two subgroups was 0.52, indicating a difference of practical significance, but none of the other differences had any practical significance.

Gender. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by gender, are shown in Table 5-52. The means in this section corresponded to responses about halfway between "Neutral" and "Somewhat Satisfied." The small difference seen had no practical significance.

Table 5-52. Satisfaction with Leisure and Recreation by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	902	4.65	1.48
Female	55	4.62	1.48

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by marital/parental status, are shown in Table 5-53.

Table 5-53. Satisfaction with Leisure and Recreation by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	14	4.71	1.49
Divorced/Widowed/Separated without Children	68	4.62	1.37
Married with Children	459	4.69	1.46
Married without Children	152	4.69	1.55
Never Been Married	255	4.53	1.55

The scores were relatively consistent across the subgroups: The means were tightly grouped with a maximum difference of only 0.18. The maximum value of the Cohen's *d* statistic was 0.12, indicating no differences of practical significance.

In addition to asking the respondents about their overall satisfaction with their leisure and recreation activities, Question #3 also asked about satisfaction with a series of four separate facets of leisure and recreation. The weighted mean and standard deviation

scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-35. It can be seen that the variety of leisure activities and the facilities provided for leisure activities had higher mean satisfaction scores than did the cost of leisure activities and amount of leisure time. None of the differences seen here had practical significance.

Satisfaction with Differer	nt Facets	of the Fr	ien	ds and	Friend	Iships	Life Do	omain	
	Wei	ghted							
Satisfaction with:	Mean	Std. Dev.							
Variety of leisure activities	4.61	1.61							
Cost of Leisure activities	4.27	1.54					_		
Facilities provided for leisure activities	4.53	1.58					1		
Amount of leisure time	4.33	1.77							
Overall Satisfaction:	4.51	1.54	1	2	3	4	5	6	7
	•	_	Ľ		J	Mean	.		

Figure 5-35. Satisfaction with Facets of Leisure and Recreation for the Independent Duty Marine Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with leisure and recreation for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-36. The magnitudes of the facet satisfactions ranged from 0.131 to 0.454. The results indicated that overall satisfaction with leisure and recreation was most strongly influenced by satisfaction with the Amount of Leisure Time, followed by the Variety of Activities Available. Note that these results are fairly similar to those seen in the 2002 QoL Study in that the amount of time for leisure activities was a key driver in that earlier study. One difference between the two QoL studies (beside the increases in satisfaction discussed in the earlier sections) was a notable increase in the influence of the Variety of Activities Available, which was located above the overall mean in terms of influence in 2007 as opposed to its less influential position below the overall mean in 2002.

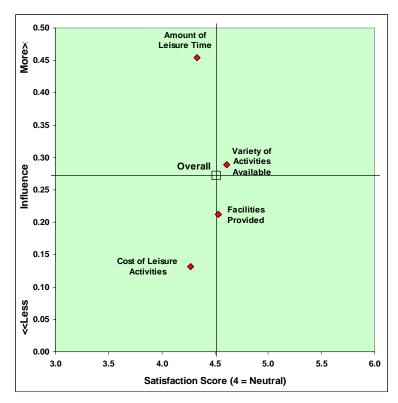


Figure 5-36. Key Driver Diagram for the Leisure and Recreation Life Domain for the Independent Duty Marine Respondents

Thus, the data indicated that the best way to improve the satisfaction of the Independent Duty Marines in this life domain would be to increase the Amount of Leisure Time available to those Marines for leisure and recreation followed by increasing the Variety of Activities Available to them. Reducing the Cost of Leisure Activities would be beneficial, but that facet of satisfaction, with its relatively low influence, was not a key driver in this life domain.

5.6.3 Effect of Leisure and Recreation on Job Performance

Question #6 asked about the effect of Leisure and Recreation on the respondents' job performance. A histogram of the responses to that question is shown in Figure 5-37.

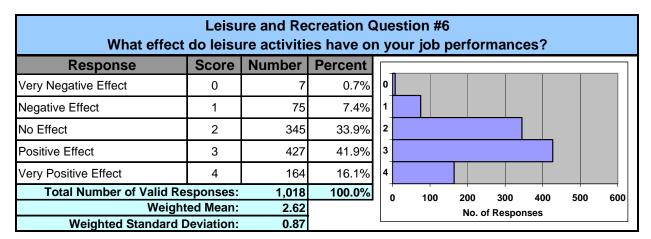


Figure 5-37. Effect of Leisure and Recreation on Job Performance for the Independent Duty Marine Respondents

Overall, leisure and recreation activities had a positive effect on job performance: The weighted mean score for this question was 2.62, over half way from "No Effect" toward "Positive Effect." Only 8.1 percent of the respondents indicated that leisure and recreation had any level of negative effect on their job performance, while 58.0 percent (or more than seven times as many) of the respondents indicated that leisure and recreation had either a "Positive" or "Very Positive Effect" on their job performance.

The effect of leisure and recreation on job performance was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-54. It can be seen that the means were clustered together with a difference between the two unweighted subgroup means of only 0.05, a difference with no practical significance.

Table 5-54. Effect of Leisure and Recreation on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
2	Т	otal Sar	nple	w/MCS			w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	1,018	2.62	0.87	785	2.67	0.81	177	2.62	0.95

5.6.4 Effect of Leisure and Recreation on Plans To Remain on Active Duty

Question #7 asked about the effect of the respondents' leisure and recreation activities on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-38.

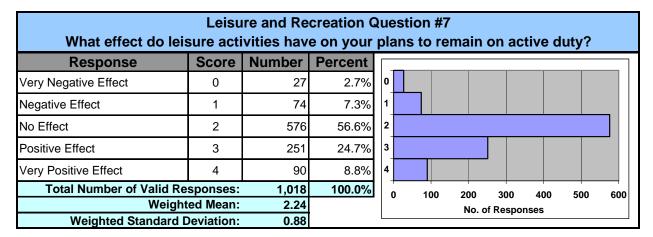


Figure 5-38. Effect of Leisure and Recreation on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.24, or one-quarter of the way between "No Effect" and "Positive Effect." Over 56 percent of the respondents said that their leisure and recreation activities had no effect on their plans to remain on active duty. However, more than three times as many respondents (341, or 33.5 percent) said their leisure and recreation activities had some degree of positive effect than said that they had some degree of negative effect (101, or 10.0 percent).

The effect of leisure and recreation on plans to remain on active duty was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-55. Similar to the results from the analogous job performance question, the unweighted subgroup means were nearly identical.

Table 5-55. Effect of Leisure and Recreation on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample			w/MCS			w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	1,018	2.24	0.88	784	2.30	0.82	178	2.31	0.84

5.6.5 Other Life Domain-Specific Analyses

Question #5 asked the respondents to compare the level of enjoyment they received from their leisure and recreation activities at their current location to the enjoyment received from the activities at the other places where they had been stationed during their Marine Corps careers. The responses were scored on a seven-point scale ranging from 1 for "Much Less Enjoyable" to 7 for "Much More Enjoyable," with a score of 4 assigned to "About the Same" (note that the responses of the 81 Independent Duty Marine respondents who said they were on their first assignments were not included in the analysis). The results are shown in Figure 5-39.

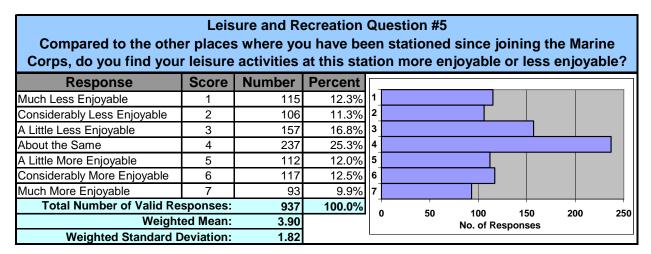


Figure 5-39. Comparison with Previous Level of Enjoyment of Leisure and Recreation Activities for the Independent Duty Marine Respondents

Overall, the respondents felt that their current location was somewhat less enjoyable than their previous duty stations: The overall value for this measure was 3.90, slightly below the neutral value of 4.0. A total of 40.4 percent of the respondents indicated a response worse than "About the Same" compared with the 34.4 percent of the respondents who indicated better than "About the Same."

5.6.6 Conclusions for the Leisure and Recreation Life Domain for the Independent Duty Marine Respondents

Independent Duty Marine respondents overall reported being slightly pleased with their leisure and recreation activities in both the affective and cognitive measures. Differences from the results of the 2002 QoL Study were minor, with both the affective and cognitive measures declining slightly. Neither change was found to have any practical significance.

The E-2/E-3 and E-4/E-5 Pay Grade Groups had the lowest mean affective and cognitive scores; the E-8/E-9, WO, and O-4 to O-10 Pay Grade Groups rated their happiness and satisfaction the highest of the Pay Grade Groups.

Leisure and recreation activities were scored as having somewhat positive effects on job performance and somewhat less, but still positive, effects on plans to remain on active duty. No differences of practical significance were seen between the IDMw/MCS and the IDMw/oMCS for the affective, cognitive, job performance, or plans to remain on active duty questions.

5.7 THE HEALTH LIFE DOMAIN

5.7.1 Happiness – Affective Evaluations of the Health Life Domain

The weighted mean affective or happiness score (Question #1) for the Health life domain for the Independent Duty Marines in 2007 was 5.15, just above "Mostly Pleased" on the seven-point D-T scale and a generally positive assessment of the respondents' health. A histogram of the responses to the affective question with the

weighted overall mean and standard deviation values for the Independent Duty Marine sample in this life domain is shown in Figure 5-40. It can be seen that 76.3 percent of the Independent Duty Marines answered they were in some way pleased with the state of their health, while only 12.9 percent were unhappy. Note that the 5.15 weighted mean for the Independent Duty Marines was higher than the 4.88 weighted overall cognitive mean found for the Base and Station respondents.

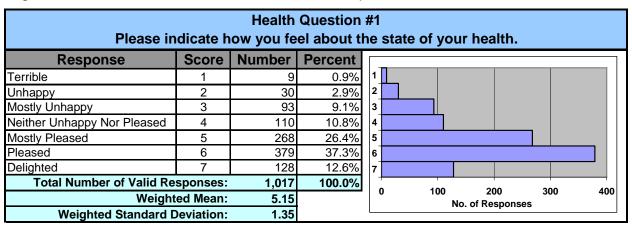


Figure 5-40. Distribution of the Overall Happiness Responses in the Health Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-41. The 2007 weighted mean Health D-T score for the entire Independent Duty Marine sample decreased slightly (by 0.07) from the 2002 weighted score. The mean scores for the two Military Community Support-based subgroups also declined to various degrees. However, none of the differences seen here, either with the groups shown or between the two QoL studies, had any practical significance.

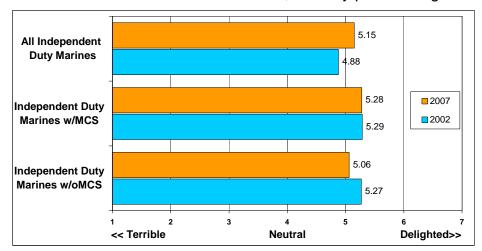


Figure 5-41. Trends in Overall Happiness in the Health Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Health life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Health life domain, decomposed by Pay Grade Group, are shown in Table 5-56.

Table 5-56. Happiness with Health by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	108	5.04	1.41
E-4/E-5	276	5.14	1.34
E-6/E-7	251	5.01	1.45
E-8/E-9	111	5.24	1.05
WO	19	5.47	1.02
O-1 to O-3	92	5.48	1.18
O-4 to O-10	160	5.56	1.13

The subgroup scores centered above "Mostly Pleased" (all within 0.55 of each other), and the mean scores in the enlisted Pay Grade Groups and the officer Pay Grade Groups were fairly consistent within those groups, with the enlisted personnel averaging a mean of 5.13 and the officers averaging 5.50. The E-6/E-7 Pay Grade Group had the lowest mean affective score of all the Pay Grade Groups, 5.01, and the O-4 to O-10 Pay Grade Group had the highest mean affective score, 5.56. None of the differences seen here had any practical significance (the largest value of the Cohen's *d* statistic found was 0.42, for the difference between the two extreme mean scores).

When the trends in the overall happiness with the Health life domain were examined by Pay Grade Group, as shown in Figure 5-42, little difference was seen between the scores from the 2007 QoL Study and those from the 2002 QoL Study. With the slight increase of 0.06 in the mean score of the E-2/E-3 Pay Grade Group since 2002, the scores for all the Pay Grade Groups in 2007 were between "Mostly Pleased" and "Pleased." The scores for three of the seven Pay Grade Groups increased while those of four others decreased, but all of the changes were small and none were of practical significance.

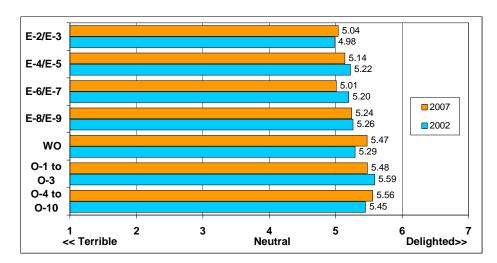


Figure 5-42. Trends in Overall Happiness in the Health Life Domain for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Health life domain, decomposed by race/ethnicity, are shown in Table 5-57. All but two of the racial/ethnic subgroups had mean happiness scores above the "Mostly Pleased" level. The Black/African-American subgroup was the happiest with health, with a mean score of 5.38. The members of the two of the smallest subgroups, the "Other" subgroup (4.50) and the Native American/Aleut/Eskimo subgroup (4.52) had mean scores that were markedly lower than those of the other four subgroups. In fact, the differences between these two means and the mean of the high-scoring Black/African-American subgroup each had practical significance, with Cohen's *d* statistics of 0.63 and 0.55, respectively.

Table 5-57. Happiness with Health by Race/Ethnicity for the Independent Duty

Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	736	5.23	1.30
Black/African-American	117	5.38	1.24
Asian/Pacific Islander	29	5.14	1.13
Native American/Aleut/Eskimo	21	4.52	1.69
Spanish/Hispanic	78	5.13	1.31
Other	20	4.50	1.54

Gender. The means and standard deviations of the happiness scores for the Health life domain, decomposed by gender, are shown in Table 5-58. Although the mean scores for the male and female respondents differ by 0.26, there was no practical significance to this difference.

Table 5-58. Happiness with Health by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	964	5.22	1.30
Female	55	4.96	1.48

Marital/Parental Status. The means and standard deviations of the happiness scores for the Health life domain, decomposed by marital/parental status, are shown in Table 5-59. The scores were relatively consistent across these subgroups. The Divorced/Widowed/Separated with Children subgroup had a mean happiness score below "Mostly Pleased," while all the other respondent groups scored above that level. None of the differences seen here had any practical significance.

Table 5-59. Happiness with Health by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	4.75	1.39
Divorced/Widowed/Separated without Children	72	5.00	1.19
Married with Children	478	5.33	1.20
Married without Children	165	5.16	1.38
Never Been Married	277	5.14	1.45

5.7.2 Satisfaction – Cognitive Evaluations of the Health Life Domain

The weighted mean cognitive or satisfaction score (Question #9e) in the Health life domain for the Independent Duty Marines in 2007 was 5.14, i.e., just above "Somewhat Satisfied" on the seven-point satisfaction scale, and only 0.01 different (lower) than the value seen for the affective measure. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine sample in the Health life domain is shown in Figure 5-43. The highest percentage of respondents, 42.6 percent, responded that they were "Satisfied" with their health overall. In contrast, note that only 14.0 percent of the respondents were dissatisfied with their health in any way.

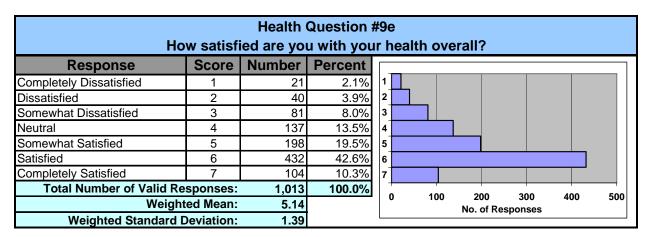


Figure 5-43. Distribution of the Overall Satisfaction Responses in the Health Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-44. The 2007 weighted mean satisfaction score for Health decreased slightly (by 0.10) from the 2002 weighted score, but this decrease had no practical significance. Note that while the values of the mean satisfaction scores in this life domain all declined since 2002, all the groups considered had satisfaction scores above "Somewhat Satisfied." No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

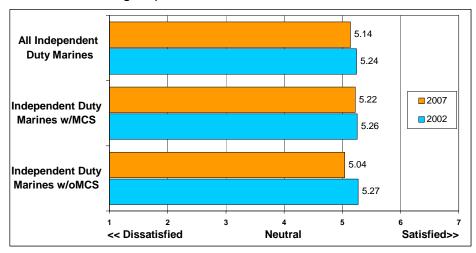


Figure 5-44. Trends in Overall Satisfaction in the Health Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Health life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Health life domain, decomposed by Pay Grade Group, are shown in Table 5-60.

Table 5-60. Satisfaction with Health by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	107	5.21	1.30
E-4/E-5	274	5.02	1.47
E-6/E-7	252	4.84	1.54
E-8/E-9	108	5.29	1.17
WO	20	5.00	1.34
O-1 to O-3	91	5.45	1.28
O-4 to O-10	161	5.48	1.22

As was the case for the affective measure, the E-6/E-7 subgroup had the lowest mean score and was the only one with a score below "Somewhat Satisfied." The O-4 to O-10 Pay Grade Group again had the highest mean (5.48), but the difference between these two most extreme mean scores had no practical significance: Only a small-to-medium effect size was seen (Cohen's *d* statistic of 0.46).

When the trends in the overall satisfaction with the Health life domain were examined by Pay Grade Group, as shown in Figure 5-45, three of the four Pay Grade Groups – the E-2/E-3, E-8/E-9, and O-4 to O-10 Pay Grade Groups – saw increases. However, though decreases occurred, only the E-6/E-7 Pay grade group had satisfaction below "Somewhat Satisfied." None of the differences seen here had any practical significance.

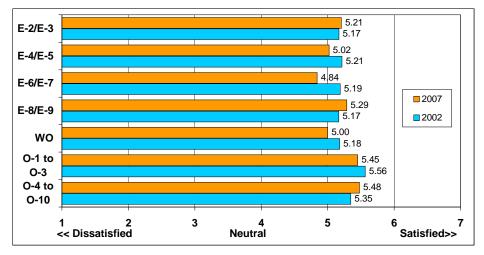


Figure 5-45. Trends in Satisfaction in the Health Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Health life domain, decomposed by race/ethnicity, are shown in Table 5-61. The White and Black/African-American subgroups tied for the highest satisfaction (5.18), while the Native American/Aleut/Eskimo subgroup had the lowest satisfaction (4.43, still well

above the Neutral score of 4). The differences between these two extremes had practical significance, with a Cohen's *d* statistic of 0.52 for each. In general the smaller racial/ethnic subgroups had the lower satisfaction scores.

Table 5-61. Satisfaction with Health by Race/Ethnicity for the Independent Duty

Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	738	5.18	1.36
Black/African-American	114	5.18	1.39
Asian/Pacific Islander	27	4.85	1.49
Native American/Aleut/Eskimo	21	4.43	1.50
Spanish/Hispanic	78	5.05	1.61
Other	20	4.65	1.63

Gender. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by gender, are shown in Table 5-62. The female respondents rated their satisfaction with their health somewhat lower than did the male respondents. However, the differences had no practical significance and both were roughly within the domain of "Mostly Pleased."

Table 5-62. Satisfaction with Health by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	963	5.15	1.40
Female	54	4.83	1.44

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Health life domain, decomposed by marital/parental status, are shown in Table 5-63. Although none of the differences had any practical significance, it can be seen that the Divorced/Widowed/Separated Marines scored lower (4.50 and 4.91) than Married Marines (5.21 and 5.18), independent of parental status within those marital subgroups. The Never Been Married Marines scored just slightly below the currently married Marines (5.12).

Table 5-63. Satisfaction with Health by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	4.50	1.59
Divorced/Widowed/Separated without Children	69	4.91	1.23
Married with Children	485	5.21	1.33
Married without Children	165	5.18	1.44
Never Been Married	273	5.12	1.51

In addition to asking the respondents about their overall satisfaction with their health, Question #9 also asked about satisfaction with a series of six separate facets of health. The weighted mean and standard deviation scores for each of these facets are shown

in Figure 5-46. The lowest weighted mean score and the highest weighted standard deviation were seen in how satisfied the respondents were with how well they sleep. The weighted mean score for this facet was just above the "Neutral" score of 4, while the other facets were well above that (satisfaction with weight was the second lowest facet though still 0.35 above satisfaction with sleep). None of the differences seen here had any practical significance.

Satisfaction with Different Facets of the Health Life Domain											
	Wei										
Satisfaction with:	Mean	Std. Dev.	Г								
Weight	4.57	1.73									
Level of Energy	4.72	1.56									
Sleep	4.22	1.76									
Endurance	4.76	1.53									
Medical Care	4.72	1.60									
Dental Care	4.87	1.55									
Overall Satisfaction:	5.14	1.39	.	1	2	3	4	5	6	7	
							Mean				

Figure 5-46. Satisfaction with Facets of Health for the Independent Duty Marine Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with health for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-47. The rankings of the facets and their relative influence levels look similar to those seen in the 2002 QoL Study (with the addition of the facets of Medical Care and Dental Care, which were not included in the analogous diagram from the 2002 QoL Study). The facet of Endurance had the largest influence, followed by Energy Level and Medical Care, all of which had influence coefficients larger than the overall domain mean. Improvements in these facets likely would result in an increase in the overall satisfaction rating in this life domain. Dental Care had the least amount of influence and was negatively correlated with the overall mean (as indicated by the asterisk in the diagram).

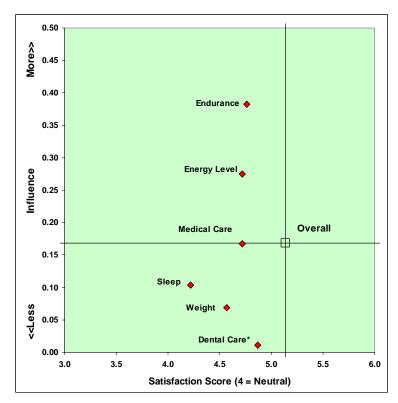


Figure 5-47. Key Driver Diagram for the Health Life Domain for the Independent Duty Marine Respondents

5.7.3 Effect of Health on Job Performance

Question #12 asked about the effect of the <u>respondents' state of health</u> on their job performance. In general and not unexpectedly, a Marine's health had a positive effect on his/her job performance, as can be seen in Figure 5-48. The weighted mean score for this question was 2.64, falling about two-thirds of the way between "No Effect" and "Positive Effect." More than half (65.0 percent) of the respondents answered that their state of health had a positive effect on their job performance. Although not shown here, the mean scores for the officer Pay Grade Groups were above "Positive Effect."

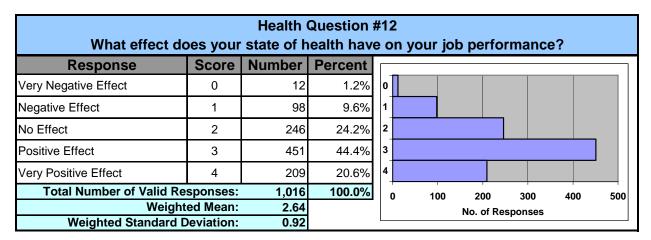


Figure 5-48. Effect of the Respondents' Health on Job Performance for the Independent Duty Marine Respondents

The effect of health on job performance was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-64. It can be seen that all groups rated their health as having a positive effect on their job performance. Those with Military Community Support felt that health was slightly less of a positive influence than did their cohorts without Military Community Support (2.72, versus 2.85), but both scores were well above "No Effect." None of the differences seen here had any practical significance.

Table 5-64. Effect of the Respondents' Health on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

				Indepen	dent Du	ity Marines			
	Total Sample w/MCS w/oMCS					S			
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Performance	1,016	2.64	0.92	780	2.72	0.92	178	2.85	0.93

Question #17 asked about the effect of the <u>respondents' medical care</u> on their job performance. The results are shown in Figure 5-49. The weighted mean score for this question was 2.33, falling one-third of the way between "No Effect" and "Positive Effect." Many more respondents answered that their medical care had a positive effect on their job performance (40.9 percent) than answered that it had a negative effect (10.3 percent). Nearly half of the respondents (48.9) answered that their medical care had "No Effect" on their job performance.

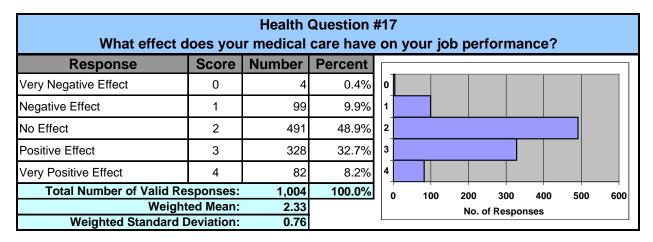


Figure 5-49. Effect of the Respondents' Medical Care on Job Performance for the Independent Duty Marine Respondents

The effect of the respondents' medical care on their job performance was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-65. It can be seen that all groups rated their health as having a positive effect on their job performance. None of the differences seen here had any practical significance.

Table 5-65. Effect of the Respondents' Medical Care on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

				Indepen	dent Du	ıty Marines			
	Т	Total Sample w/MCS w/oMCS						S	
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Performance	1,004	2.33	0.76	772	2.38	0.77	175	2.41	0.86

Question #24 asked about the effect of the respondents' <u>dependent family members'</u> <u>state of health</u> on their job performance. The data were examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-66. The mean score for this question for the Independent Duty Marines with dependents was 2.50 on the standard five-point effects scale, falling in the middle of the "No Effect" to "Positive Effect" range. The scores for the IDMw/MCS and IDMw/oMCS subgroups showed no differences that had practical significance.

Table 5-66. Effect of Dependents' State of Health on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

Question		Independent Duty Marines							
Effect that dependent family members' state	nors' state	Total Sample			w/MCS w/oMCS				
of health has on your job perfo		Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
	772	2.50	0.92	574	2.49	0.93	141	2.57	0.86

Question #26 asked about the effect of the respondents' <u>dependent family members'</u> medical care on their job performance. Again, the data were examined for the entire

Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-67. The mean score for the Independent Duty Marines with dependents, 2.48, was equivalent to that seen for several of the previous questions related to health and job performance. The mean scores for the IDMw/MCS and IDMw/oMCS subgroups again showed no differences that had practical significance.

Table 5-67. Effect of Dependents' Medical Care on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

Question				Indepen	dent Du	ıty Marines				
Effect that dependent family members'	Т	otal Sar	nple		w/MC	S		w/oMCS		
medical care has on your job performance	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	
	768	2.48	0.89	570	2.47	0.89	142	2.53	0.85	

5.7.4 Effect of Health on Plans To Remain on Active Duty

Question #13 asked about the effect of the <u>respondents' state of health</u> on their plans to remain on active duty. The results are shown in Figure 5-50. The weighted mean score for this question was 2.33, falling in the "No Effect" to "Positive Effect" range. The largest percentage of the respondents (47.7 percent) said that their health had "No Effect" on this measure, while 12.3 percent felt there was a negative effect and 40.1 percent felt that their state of health had a positive effect on their plans to remain on active duty.

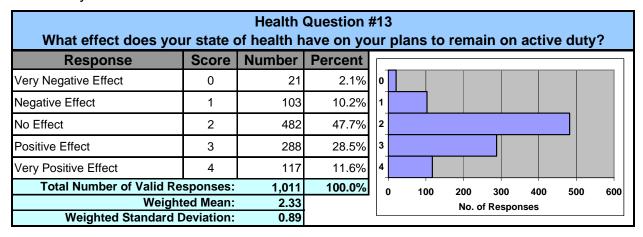


Figure 5-50. Effect of the Respondents' Health on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The effect of health on plans to remain on active duty was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-68, it can be seen that all groups rated their health as having a positive effect on their plans to remain on active duty. Those with Military Community Support felt health had slightly less of a positive influence than did those without Military Community Support (2.35 versus the 2.48), but the scores were still well above "No Effect." The scores for the IDMw/MCS and IDMw/oMCS subgroups again showed no differences that had practical significance.

Table 5-68. Effect of the Respondents' Health on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

		Independent Duty Marines									
	Т	Total Sample w/MCS w/oMCS							S		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.		
Effects on Plans To Remain on Active Duty	1,011	2.33	0.89	779	2.35	0.90	178	2.48	0.90		

Question #18 asked about the effect of the <u>respondents' medical care</u> on their plans to remain on active duty. The results, shown in Figure 5-51, look similar to those seen for Question #13, discussed immediately above.

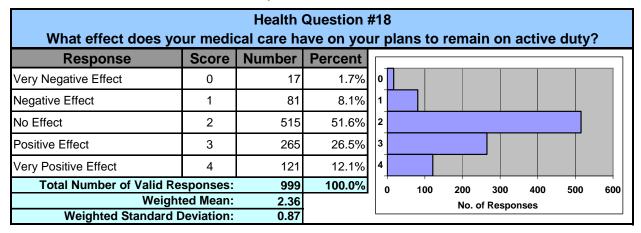


Figure 5-51. Effect of the Respondents' Medical Care on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The effect of medical care on plans to remain on active duty was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-69, the results were similar to those seen for Question #13 although the unweighted means for the IDMw/MCS and the IDMw/oMCS were somewhat smaller and closer together.

Table 5-69. Effect of the Respondents' Medical Care on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

				Indepen	dent Du	ıty Marines			
	Total Sample w/MCS w/oMCS						S		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	999	2.36	0.87	766	2.39	0.85	177	2.41	0.89

Question #25 asked about the effect of the respondents' <u>dependent family members'</u> <u>state of health</u> on their plans to remain on active duty. The data were examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-70. The mean score for this question for the Independent Duty Marines with dependents, 2.44, was equivalent to that seen for several previous questions. The availability or lack of Military Community Support had little influence on score of those two subgroups.

Table 5-70. Effect of Dependents' State of Health on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

Question		Independent Duty Marines							
Effect that dependent family members' state	Т	Total Sample			w/MC	S	w/oMCS		
of health has on your plans to remain on	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
active duty	773	2.44	0.90	575	2.43	0.91	141	2.45	0.83

Question #27 asked about the effect of the respondents' <u>dependent family members'</u> <u>medical care</u> on their plans to remain on active duty. Again, the data were examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-71. The mean score for this question for the Independent Duty Marines with dependents, 2.44, was equivalent to that seen for similar questions and, again, the availability or lack of Military Community Support had little influence on score of those two subgroups.

Table 5-71. Effect of Dependents' Medical Care on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

Question		Independent Duty Marines							
Effect that dependent family members'		otal Sar			w/MC	~	w/oMCS		
medical care has on your plans to remain on	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
active duty	769	2.44	0.92	575	2.43	0.93	140	2.46	0.85

5.7.5 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Health life domain were examined. The results are presented below.

Question #6 asked the respondents to indicate if they were a smoker. The data, contained in Table 5-72, show that 17.5 percent of the Independent Duty Marines said they smoke.

Table 5-72. Prevalence of Smoking in the Independent Duty Marine Respondents

	Count	Percent
Yes: I Smoke	182	17.5%
No: I Do Not Smoke	858	82.5%
Total	1,040	100.0%

Question #7 asked the respondents to indicate if they used smokeless tobacco. As shown in Table 5-73, 16.0 percent of the Independent Duty Marine respondents said that they did.

Table 5-73. Use of Smokeless Tobacco by the Independent Duty Marine Respondents

	Count	Percent
Yes: I Use Smokeless Tobacco	167	16.0%
No: I Do Not Use Smokeless Tobacco	874	84.0%
Total	1,041	100.0%

Question #8 asked the respondents to indicate the frequency with which they drank alcohol. As shown in Figure 5-52 the majority of the respondents drank a few times per month or less (52.8 percent). Only 12.2 percent drank at least four times per week.

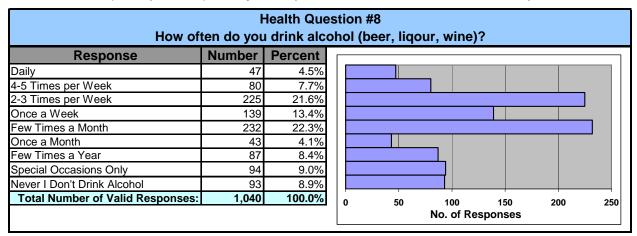


Figure 5-52. Frequency of Alcohol Use by the Independent Duty Marine Respondents

Questions #9f, #9g, #22 and #23 asked the respondents to indicate their satisfaction with their medical and dental care (4.72 and 4.87, respectively) and the medical and dental care of their dependents (4.63 and 4.48, respectively). The responses then were plotted against equivalent data from the 2002 QoL Study and included in Figure 5-53. All satisfaction levels fell toward the middle of the "Neutral" to "Somewhat Satisfied" range. Three of the means increased since the 2002 QoL Study data were collected, but none of the differences seen had any practical significance.

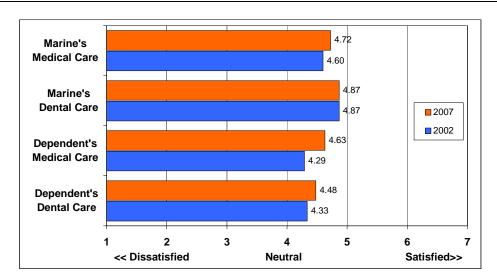


Figure 5-53. Overall Satisfaction with Medical and Dental Care for the Independent Duty Marine Respondents

Figure 5-54 shows the average satisfaction scores with medical and dental care and with dependents' medical and dental care for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups.

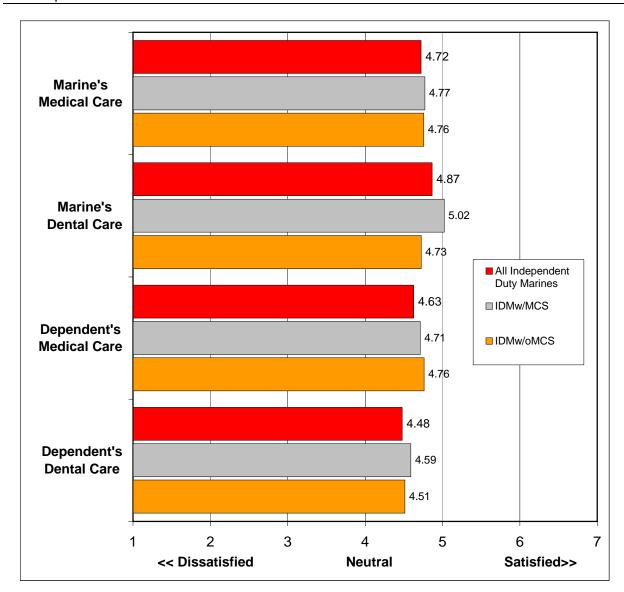


Figure 5-54. Overall Satisfaction with Medical and Dental Care for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

All but one of the groups examined here had satisfaction scores just below "Somewhat Satisfied," with the satisfaction with "Marine's Dental Care" for the IDMw/MCS just above "Somewhat Satisfied." No clear trends could be seen in the scores of those Independent Duty Marines with and without Military Community Support, and any differences did not have any practical significance.

Question #21 asked the respondents to indicate whether any of their dependent family members had special medical needs. The results are shown in Table 5-74. A large majority of the respondents (87.3 percent) indicated that they either had no dependent family members or that none of their dependents had special medical needs. As a whole, 5.8 percent of the respondents indicated that their spouses had special medical

needs, and 7.1 percent said they had dependent children living with them who had such needs.

Table 5-74. Independent Duty Marine Respondents with Dependent Family Members with Special Medical Needs

Health Question #21 Which of your dependent family members, if any, has special medical needs (e.g., disabilities and or medical conditions requiring special care)?						
Response	Number	Percent*				
I Have No Dependent Family Members	351	32.4%				
None of My Dependent Family Members Have Special Needs	596	54.9%				
My Spouse	63	5.8%				
Dependent Child(ren) Living with Me	77	7.1%				
Dependent Child(ren) Not Living with Me	8	0.7%				
Legal ward(s) Living with Me	1	0.1%				
Dependent Parent(s) or Other Relative(s) 4 0.4%						
* Total does not sum up to 100% as respondents may have multiple with special medical needs.	e dependent fa	mily members				

5.7.6 Conclusions for the Health Life Domain for the Independent Duty Marine Respondents

Both happiness and satisfaction with health of the Independent Duty Marines decreased between 2002 and 2007, although the declines did not have practical significance. The two measures received overall scores of 5.15 and 5.14 out of 7, respectively, both of which were above the "Somewhat Satisfied" level. When comparing the scores across Pay Grade Groups, senior officers in the O-4 to O-10 Pay Grade groups scored the highest, while the E-6/E-7 Pay Grade Group had the lowest means. Although the female respondents rated their health lower on both the affective and cognitive measures, the differences with their male counterparts had no practical significance. The Native American/Aleut/Eskimo and "Other" racial/ethnic subgroups and the Divorced/Widowed/Separated with Children subgroup were notable for their relatively low opinions of their health. The state of a Marine's health and health care, as well as that of their dependents, all had positive effects on both job performance and on intentions to remain on active duty. No differences with any practical significance in any of these measures (overall happiness and satisfaction, job performance or plans to remain on active duty) were seen between those respondents with or without Military Community Support, although the latter generally scored somewhat higher (in all but overall satisfaction).

When looking at satisfaction with medical and dental care for the respondents and their dependents, Marines were, as a whole, the most satisfied with their own dental care and least satisfied with their dependent's dental care.

5.8 THE FRIENDS AND FRIENDSHIPS LIFE DOMAIN

5.8.1 Happiness – Affective Evaluations of the Friends and Friendships Life Domain

The weighted overall mean affective or happiness score (Question #1) for the Friends and Friendships life domain for the Independent Duty Marine respondents in 2007 was 4.99, essentially equivalent to "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted mean and standard deviation values for the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-55. Almost 62 percent of the respondents chose "Mostly Pleased" and "Pleased" as their responses. Note that only 11.4 percent of the respondents indicated any unhappiness in this life domain. Note also that, although the distributions of the responses and the weighting schemes used differed, the 4.99 weighted mean for the Independent Duty Marines was only slightly higher than the 4.90 weighted overall affective mean found for the Base and Station Marines, due to the different weightings applied to the raw results.

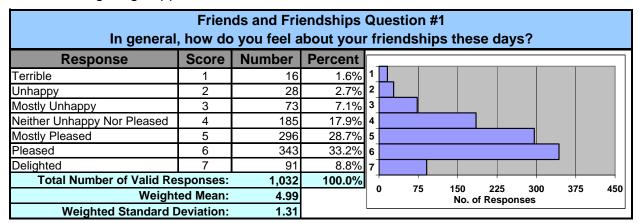


Figure 5-55. Distribution of the Overall Happiness Responses in the Friends and Friendships Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-56. The 2007 weighted overall mean affective Friends and Friendships D-T score for the entire Independent Duty Marine sample decreased slightly from the 2002 value (by 0.01) and the mean score for the IDMw/oMCS subgroup also decreased (by 0.12). The mean score for the IDMw/MCS subgroup increased slightly from the 2002 value (by 0.09). No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

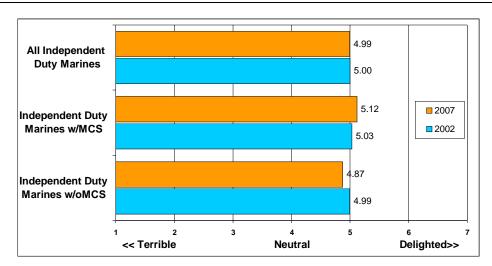


Figure 5-56. Trends in Overall Happiness in the Friends and Friendships Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Friends and Friendships life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by Pay Grade Group, are shown in Table 5-75.

Table 5-75. Happiness with Friends and Friendships by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	111	4.99	1.32
E-4/E-5	272	4.82	1.32
E-6/E-7	256	4.95	1.36
E-8/E-9	114	5.11	1.24
WO	21	5.52	0.93
O-1 to O-3	93	5.16	1.29
O-4 to O-10	165	5.43	1.00

The means of the three lowest Pay Grade Groups corresponded to a response just below "Mostly Pleased," while the means of the four higher Pay Grade Groups were above that level. The responses ranged from 4.82 for the E-4/E-5 Pay Grade Group to 5.52 for the small number of Warrant Officers. This difference was found to have practical significance: The Cohen's *d* statistic was 0.61, or a medium-to-large effect size. Note also that the mean for the E-4/E-5 Pay Grade Group was lower than that of the E-2/E-3 Pay Grade Group.

Trends in the mean affective scores decomposed by Pay Grade Group for the entire Independent Duty Marine sample are shown in Figure 5-57. The means of the three lowest Pay Grade Groups declined or stayed the same since 2002, while the means of

the other four Pay Grade Groups improved. The mean of the WO Pay Grade Group changed the most since 2002, increasing by 0.59, a change which proved to have practical significance (a small to medium Cohen's *d* statistic of 0.56).

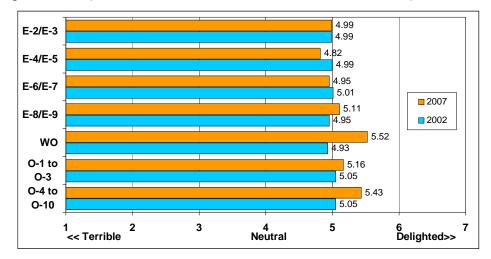


Figure 5-57. Trends in Overall Happiness in the Friends and Friendships Life Domain for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by race/ethnicity, are shown in Table 5-76.

Table 5-76. Happiness with Friends and Friendships by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	746	5.12	1.21
Black/African-American	118	5.08	1.31
Asian/Pacific Islander	27	5.00	1.33
Native American/Aleut/Eskimo	22	4.00	1.95
Spanish/Hispanic	82	4.87	1.39
Other	22	4.55	1.57

With two obvious exceptions -- the Native American/Aleut/Eskimo and "Other" subgroups -- the responses were tightly clustered. The Native American/Aleut/Eskimo subgroup scored by far the lowest, while the mean for the "Other" subgroup also was relatively low; the difference between the means of these two subgroups had no practical significance. However, comparing the 4.00 mean of the Native American/Aleut/Eskimo subgroup to the 4.87 mean of the Spanish/Hispanic subgroup, the lowest mean of the four "clustered" values, resulted in a difference of practical significance (Cohen's *d* statistic of 0.51) so, by inference, the differences with all of the other "clustered" racial/ethnic groups also had practical significance. The White subgroup had the highest mean score, 5.12.

Gender. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by gender, are shown in Table 5-77. The males (5.06) were somewhat happier than the females (4.73) with their friends and friendships, but the difference had no practical significance.

Table 5-77. Happiness with Friends and Friendships by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	978	5.06	1.27
Female	56	4.73	1.47

Marital/Parental Status. The means and standard deviations of the happiness scores for the Friends and Friendships life domain, decomposed by marital/parental status, are show in Table 5-78.

Table 5-78. Happiness with Friends and Friendships by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	4.19	1.38
Divorced/Widowed/Separated without Children	72	4.89	1.46
Married with Children	490	5.14	1.21
Married without Children	172	4.99	1.24
Never Been Married	274	5.00	1.34

The Married with Children subgroup had the highest mean happiness score, 5.14, while the small number of members of the Divorced/Widowed/Separated with Children subgroup had the smallest, 4.19. The mean score for this subgroup was the outlier from the other four means, which were tightly clustered at the "Mostly Pleased" level. When this mean value was compared to the next lowest mean, the 4.89 value for the Divorced/Widowed/Separated without Children subgroup, a Cohen's *d* statistic of 0.49 was found, or just barely under the threshold used to determine practical significance in this study. Thus, the differences with the mean scores of all the other subgroups did have practical significance.

5.8.2 Satisfaction – Cognitive Evaluations of the Friends and Friendships Life Domain

The weighted mean cognitive or satisfaction score (Question #5e) in the Friends and Friendships life domain for the Independent Duty Marine respondents in 2007 was 5.19, or slightly above "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Friends and Friendships life domain is shown in Figure 5-58. The "Somewhat Satisfied" and "Satisfied" responses received the highest frequency of responses, 17.7 and 42.6 percent, respectively. Only 10.2 percent of the respondents indicated some level of dissatisfaction, while 72.9 percent indicated some level of satisfaction. Note

also that, although the distributions of the responses and the weighting schemes used differed, the 5.19 weighted mean for the Independent Duty Marines was only 0.01 higher than the 5.18 weighted overall affective mean found for the Base and Station Marines.

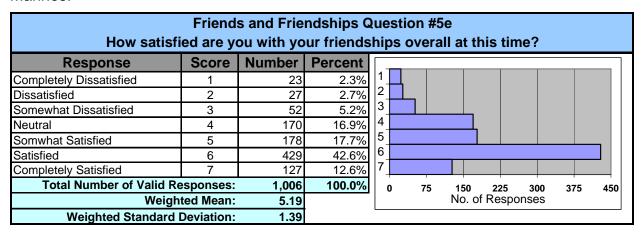


Figure 5-58. Distribution of the Overall Satisfaction Responses in the Friends and Friendships Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-59. The 2007 weighted mean Friends and Friendships satisfaction score for the entire Independent Duty Marine sample decreased slightly from the 2002 weighted score, by 0.02. The IDMw/MCS mean increased somewhat since 2002, by 0.14. The IDMw/oMCS mean also increased from the 2002 value, by 0.11. No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

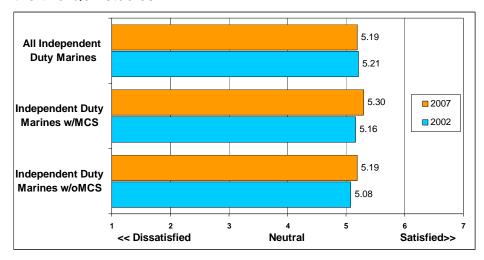


Figure 5-59. Trends in Overall Satisfaction in the Friends and Friendships Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Friends and Friendships life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by Pay Grade Group, are shown in Table 5-79.

Table 5-79. Satisfaction with Friends and Friendships by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	110	5.15	1.44
E-4/E-5	267	5.09	1.36
E-6/E-7	250	5.26	1.43
E-8/E-9	108	5.28	1.43
WO	21	5.43	1.12
O-1 to O-3	91	5.34	1.32
O-4 to O-10	159	5.40	1.21

The mean from each Pay Grade Group indicated a response between "Mostly Satisfied" and "Satisfied." When the minimum Pay Grade Group mean (5.09 for the E-4/E-5 Pay Grade Group) was compared to the maximum Pay Grade Group mean (5.43 for the Warrant Officers), the difference was found to have no practical significance. Again, the mean for the E-4/E-5 Pay Grade Group was lower than that of the E-2/E-3 Pay Grade Group.

Trends in the mean cognitive scores decomposed by Pay Grade Group for the entire Independent Duty Marine sample are shown in Figure 5-60. The means of the two lowest Pay Grade Groups declined since 2002 while the means in the other five Pay Grade Groups increased. The mean of the WO Pay Grade Group changed the most since 2002, a positive increase of 0.55 that had no practical significance (based on a Cohen's *d* statistic of 0.45).

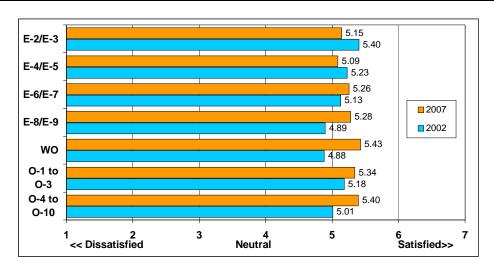


Figure 5-60. Trends in Satisfaction in the Friends and Friendships Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by race/ethnicity, are shown in Table 5-80.

Table 5-80. Satisfaction with Friends and Friendships by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	733	5.31	1.29
Black/African-American	116	5.30	1.41
Asian/Pacific Islander	25	5.12	1.45
Native American/Aleut/Eskimo	21	4.19	2.06
Spanish/Hispanic	76	5.18	1.50
Other	21	4.52	1.63

The means ranged from 5.31 for the White subgroup to 4.19 for the Native American/ Aleut/Eskimo subgroup, a difference with practical significance (having a Cohen's *d* statistic of 0.65). The small number of respondents in the Native American/Aleut/ Eskimo subgroup was relatively unsatisfied with their friends and friendships (having a mean response just above "Neutral," and by far the largest variation in the standard deviation of their responses). The next-lowest mean was seen for the "Other" subgroup. The difference between the 4.52 mean for this subgroup and that of the Native America/Aleut/Eskimo had no practical significance; however, the difference with the mean of the Asian/Pacific Islander subgroup (5.12), the next highest scoring subgroup (and, by inference, with the means of the three higher-scoring subgroups) did have practical significance. In addition, the differences between the 4.52 mean score for the "Other" subgroup and the mean scores for the two highest-scoring subgroups (the White and Black/African American subgroups) also had practical significance.

Gender. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by gender, are shown in Table 5-81. The

means corresponded to "Mostly Pleased." Males were more satisfied with their friends and friendships than the females, but no practical significance existed in the difference between the two means.

Table 5-81. Satisfaction with Friends and Friendships by Gender for the Independent Duty Marine Respondents

Gender	Count Mean		Std. Dev.
Male	952	5.26	1.35
Female	57	4.91	1.57

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Friends and Friendships life domain, decomposed by marital/parental status, are shown in Table 5-82.

Table 5-82. Satisfaction with Friends and Friendships by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	14	4.71	1.44
Divorced/Widowed/Separated without Children	70	5.20	1.48
Married with Children	485	5.25	1.35
Married without Children	164	5.34	1.28
Never Been Married	268	5.22	1.39

Four of the five means were closely clustered, between 5.20 for the Divorced/Widowed/ Separated without Children subgroup and 5.34 for the Married without Children subgroup. The exception to this was the mean of 4.71 seen for the 14 respondents in the Divorced/Widowed/Separated with Children group. No practical significance existed between any of the means seen here.

In addition to asking the respondents about their overall satisfaction with their friends and friendships, Question #5 also asked about satisfaction with a series of four separate facets of friends and friendships. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-61.

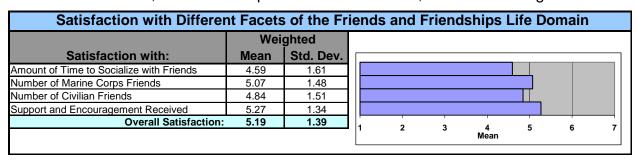


Figure 5-61. Satisfaction with Facets of Friends and Friendships for the Independent Duty Marine Respondents

The minimum weighted mean score, 4.59, corresponding to a response between "Neutral" and "Somewhat Satisfied," was given to the amount of time available to

socialize with friends. The largest weighted mean score, 5.27, corresponding to a response between "Somewhat Satisfied" and "Satisfied," was given to the support and encouragement received facet. The Cohen's *d* statistic for these means was 0.46, an effect size verging on a medium effect, but still not one that denoted practical significance using the criteria of this study. Note also that, although the weighted overall mean satisfaction in this life domain was 5.19, only the Support and Encouragement facet score exceeded that value. Thus, the Independent Duty Marine respondents seem to have been more satisfied with the overall status of their friends and friendships than with all but one of the four individual facets explored in the satisfaction question.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with friends and friendships for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-62.

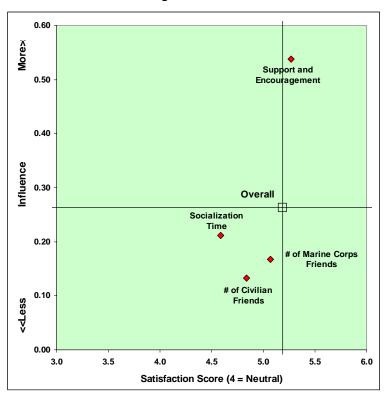


Figure 5-62. Key Driver Diagram for the Friends and Friendships Life Domain for the Independent Duty Marine Respondents

The magnitudes of the influences of the facet satisfactions ranged from 0.133 for Number of Civilian Friends to 0.538 for Support and Encouragement. The overall structure of the key driver diagram was the same in 2007 as 2002, although the Number of Marine Corps Friends was more influential than the Number of Civilian Friends in

⁹⁶ Note that since the influence of the Support and Encouragement facet was so high, the maximum range of the vertical axis on this diagram was set to 0.60, instead of the standard value of 0.50.

2007, the opposite of the situation in 2002. While Support and Encouragement was the only facet to have an influence greater than that of the overall mean, it also had a satisfaction score slightly greater than that of the overall mean, indicating that it might be difficult to achieve large increases in satisfaction in this life domain. This was bolstered by the fact that the least satisfaction was shown with Socialization Time, although the influence of that factor was relatively low and the satisfaction with it was relatively high (more than midway between "Neutral" and "Somewhat Satisfied").

5.8.3 Effect of Friends and Friendships on Job Performance

Question #6 asked about the effect of Friends and Friendships on the respondents' job performance. A histogram of the responses to that question is shown in Figure 5-63.

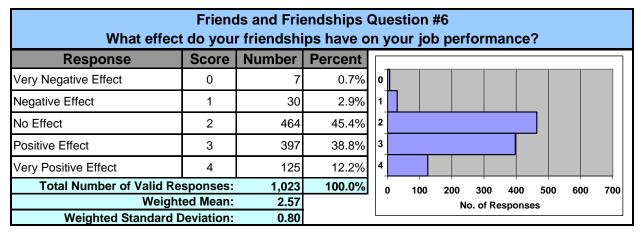


Figure 5-63. Effect of Friends and Friendships on Job Performance for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.57, falling between "No Effect" and "Positive Effect." The largest percentage of the respondents (45.4 percent) indicated that their friends and friendships had "No Effect" on their job performance, although the "Positive Effect" response was a close second with 38.8 percent. A total of 51.0 percent of the respondents said that their friends and friendships had some degree of positive effect on their job performance. In contrast, a miniscule 3.6 percent indicated any degree of negative effect.

When the responses were examined along with the results of Friends and Friendships Question #2, which asked the respondent to identify their most common type of close friend, the respondents who had chosen either "Very Negative Effect" or "Negative Effect" to this question indicated that their close friends were Marines at this location, Marines at other locations and "Others" (each with 25.0 percent), and civilians back home (19.4 percent). Although more than 60 respondents indicated that their closest friends were members of other military services, none of them indicated that these friends had any degree of negative effect. An equivalent breakdown by type of friend was done for the respondents who indicated that their friends had a "Positive Effect" or "Very Positive Effect" on their job performance. The groups that most affected job performance in a positive way were the Marines at this location (35.7 percent), followed by Marines at other locations (26.0 percent), and civilians back home (15.0 percent).

The effect of friends and friendships on job performance was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-83. The unweighted subgroup means differed by only 0.06, a difference with no practical significance.

Table 5-83. Effect of Friends and Friendships on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample w/MCS w/oMCS					S			
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	1,023	2.57	0.80	783	2.60	0.75	182	2.54	0.77

5.8.4 Effect of Friends and Friendships on Plans To Remain on Active Duty

Question #7 asked about the effect of friends and friendships on the respondents' plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-64.

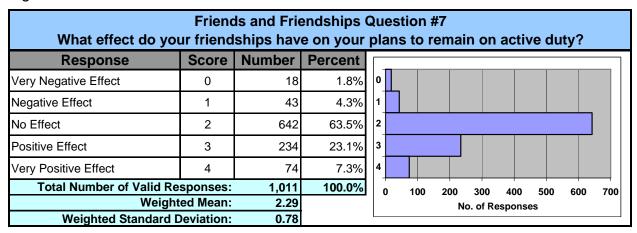


Figure 5-64. Effect of Friends and Friendships on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.29, slightly above "No Effect." The majority of the respondents, 63.5 percent, indicated that their friends and friendships had "No Effect" on their plans to remain on active duty. However, only 6.1 percent of the Marines had friendships that had any degree of negative effect on their plans to remain on active duty.

When the responses were grouped by the results of Friends and Friendships Question #2, which asked the respondent to identify their most common type of close friend, the respondents who had chosen either of the negative responses to this question indicated that their close friends were civilians back home (37.5 percent), Marines at other locations (19.7) and "Others" (14.8 percent). An equivalent breakdown by friend type was done for the respondents who indicated that their friends had any degree of positive effect on their plans for active duty. The types of friends that most affected plans for active duty in a positive way were the Marines at this location (40.5 percent) and Marines at other locations (27.6 percent).

The effect of friends and friendships on plans to remain on active duty was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-84. The means were clustered close together with a difference between the two unweighted subgroup means of only 0.09, a difference with no practical significance.

Table 5-84. Effect of Friends and Friendships on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample w/MCS w/oMCS				S				
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	1,011	2.29	0.78	774	2.32	0.74	183	2.23	0.82

5.8.5 Conclusions for the Friends and Friendships Life Domain for the Independent Duty Marine Respondents

Neither the overall mean happiness (affective) nor satisfaction (cognitive) scores in this life domain had changed in terms of practical significance since 2002, although some differences with practical significance were found among the demographic subgroups considered in this analysis. The respondents in all demographic subgroups generally seemed to be happy/satisfied with their relationships with their friends and friendships, with the clear exception of the Native American/Aleut/Eskimo respondents, who were significantly below the average in their happiness and satisfaction ratings. The members of the Divorced/Married/Separated with Children subgroup also were significantly less happy with their friends and friendships than their cohorts, but only somewhat (and not significantly) less satisfied. Warrant Officers saw the largest improvements in both happiness and satisfaction in the life domain.

The majority of the respondents felt that their friends and friendships had some degree of positive effect on their job performance and, but to a lesser degree, on their plans to remain on active duty.

5.9 THE MARRIAGE/INTIMATE RELATIONSHIP LIFE DOMAIN

In contrast to many of the other life domains in the 2007 Active Duty Marine survey, Question #1 in the Marriage/Intimate Relationship life domain was not the affective (happiness) question. Instead, it asked whether the respondent, at the time at which the survey was completed, was 1) married, 2) involved in a serious intimate relationship but not married, or 3) not seriously involved with anyone. Respondents who were neither married nor involved in a serious intimate relationship were instructed to skip this life domain completely and to go to the Your Relationship with Your Children life domain. Those respondents who were married or involved in a serious intimate relationship were instructed to continue in the Marriage/Intimate Relationship life domain and to answer the affective question and the 12 others that followed. The results for Question #1 for the Independent Duty Marine respondents are shown in Figure 5-65.

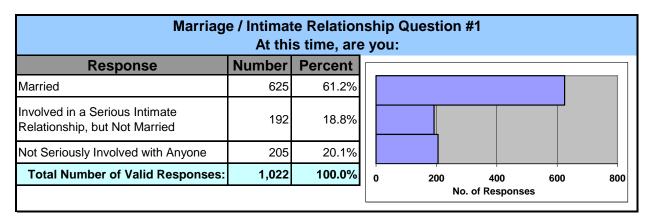


Figure 5-65. Relationship Status for the Independent Duty Marine Respondents

It is important to remember when reviewing the results from this life domain that appear below that <u>only</u> the responses from the 817 Independent Duty Marine Respondents who said they were married (625) or involved in an intimate relationship (192) were included in the analyses that follow. No responses from any respondent who picked the "Not Seriously Involved with Anyone" option, but who then, in contradiction to the instructions to skip to the next life domain, answered any of the remaining 13 questions in the Marriage/Intimate Relationship life domain were included in the analyses that follow. In addition, only valid responses to Question #1 were considered: If the response to Question #1 could not be read by the optical scanner or was blank, any responses to the remaining 13 questions in this life domain were ignored.

It also is important to note one implication of the reversal of question order. In the 2002 QoL Study, the only other study that collected data from Independent Duty Marines as a separate respondent group, the affective question in this life domain was answered by all respondents, before the respondents not involved with anyone were winnowed out of the sample used to analyze the succeeding questions. For this 2007 QoL Study, data from only those respondents who were married or who were involved in a serious intimate relationship were analyzed for the affective question. However, because the data from the 2002 QoL Study had been provided to the Study Team, the affective score from that study in this life domain was recalculated using the same methodology as that applied to the 2007 data, so no change in the pool of respondents should have occurred.

The results from Question #1 were examined for the IDMw/MCS and the IDMw/oMCS subgroups, and the results are shown in Table 5-85. Both the IDMw/MCS and IDMw/oMCS subgroups had similar breakdowns of those who were married; around 60.0 percent, while both those not involved in a serious relationship and those involved represented around 20 percent of the subgroups' members.

Table 5-85. Relationship Status for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

			ge	
Independent Duty Marines	Count	Married	Involved	Not Involved
Total Sample	1,022	61.2%	18.8%	20.1%
IDMw/MCS	769	60.5%	18.6%	20.9%
IDMw/oMCS	179	62.6%	19.6%	17.9%

5.9.1 Happiness – Affective Evaluations of the Marriage/Intimate Relationship Life Domain

The weighted mean affective or happiness score (Question #2) for the Marriage/Intimate Relationship life domain for the Independent Duty Marine Respondents for 2007 was 5.50, exactly halfway between "Mostly Pleased" and "Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-66. It can be seen that 80.4 percent of the Independent Duty Marine Respondents answered that they were in some way happy with their marriage or intimate relationship, while only 11.6 percent were in some way unhappy. Also note that the 5.50 weighted mean for the Independent Duty Marines was somewhat higher than the 5.25 weighted overall affective mean found for the Base and Station respondents.

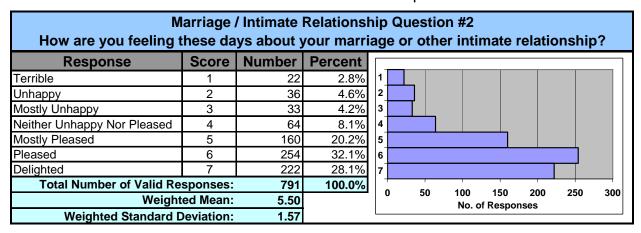


Figure 5-66. Distribution of the Overall Happiness Responses in the Marriage/Intimate Relationship Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-67. The 2007 weighted mean marriage/intimate relationship D-T score increased slightly (by 0.01) from the 2002 weighted score. Both of the mean scores for the IDMw/MCS and the IDMw/oMCS subgroups also decreased modestly.

However, no practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

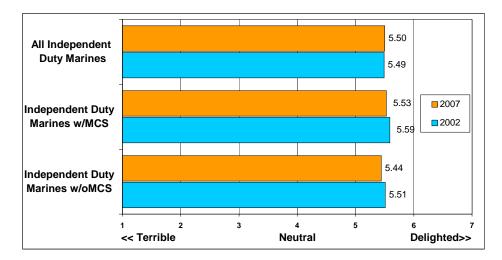


Figure 5-67. Trends in Overall Happiness in the Marriage/Intimate Relationship Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Marriage/Intimate Relationship life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. The data from each decomposition were looked at separately for those respondents who were married and for those involved in a serious relationship but not married; however, the results for the married and the intimately involved subgroups were combined unless the separate results showed some differences of analytical interest. Each subgroup is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by Pay Grade Group, are shown in Table 5-86.

Table 5-86. Happiness with Marriage/Intimate Relationship by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	53	5.74	1.50
E-4/E-5	177	5.13	1.80
E-6/E-7	218	5.39	1.59
E-8/E-9	101	5.60	1.45
WO	20	5.80	0.89
O-1 to O-3	67	5.73	1.19
O-4 to O-10	155	5.64	1.27

All Pay Grade groups had means above "Mostly Pleased," though no notable trend was seen. The E-4/E-5 Pay Grade Group had the lowest mean affective score of all the Pay Grade Groups (5.13) but this was still above "Mostly Pleased." The WO Pay Grade

Group had the highest mean affective score (5.80). The differences in the extremes seen here were not of practical significance (Cohen's *d* statistic was 0.47).

When the trends in overall happiness with the Marriage/Intimate Relationship life domain were examined by Pay Grade Group, as shown in Figure 5-68, no clear trend emerged. Increases were seen in the four of the seven Pay Grade Groups (i.e., in the E-2/E-3, E-8/E-9, WO and O-1 to O-3 Pay Grade Groups). The other three Pay Grade Group scores decreased between 2002 and 2007. Although the E-2/E-3 Pay Grade Group had the largest change in value between 2002 and 2007 (an increase of 0.35), this increase had no practical significance, possessing a Cohen's *d* statistic of 0.24.

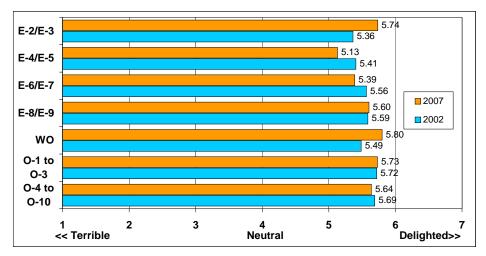


Figure 5-68. Trends in Happiness in the Marriage/Intimate Relationship Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by race/ethnicity, are shown in Table 5-87. The "White" respondents were happiest (5.53) with their marriage or intimate relationship, while the members of the Native American/Aleut/Eskimo subgroup were the least happy (5.20). The difference in the extremes had no practical significance.

Table 5-87. Happiness with Marriage/Intimate Relationship by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	577	5.53	1.49
Black/African-American	89	5.33	1.46
Asian/Pacific Islander	19	5.26	1.79
Native American/Aleut/Eskimo	15	5.20	1.52
Spanish/Hispanic	63	5.25	1.77
Other	17	5.35	1.62

Gender. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by gender, are shown in Table

5-88. The mean for the female respondents was 0.12 higher than the mean for the male respondents but this difference had no practical significance.

Table 5-88. Happiness with Marriage and Intimate Relationships by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	751	5.46	1.53
Female	40	5.58	1.53

Marital/Parental Status. The means and standard deviations of the happiness scores for the Marriage/Intimate Relationship life domain, decomposed by marital/parental status, are shown in Table 5-89. ⁹⁷ The respondents in the divorced/widowed/separated subgroup, regardless of their parental status, scored significantly lower than any other group: The minimum value of the Cohen's *d* statistic for these differences was 1.06 (the effect size between Married with Children and Divorced/Widowed/Separated without Children).

Table 5-89. Happiness with Marriage/Intimate Relationship by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	11	3.18	2.09
Divorced/Widowed/Separated without Children	30	3.53	2.32
Married with Children	482	5.56	1.38
Married without Children	168	5.67	1.49
Never Been Married	94	5.55	1.30

5.9.2 Satisfaction – Cognitive Evaluations of the Marriage/Intimate Relationship Life Domain

The weighted mean cognitive or satisfaction score (Question #13g) in the Marriage/Intimate Relationship life domain for the Independent Duty Marine Respondents for 2007 was 5.63, i.e., about halfway between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale and slightly above the value seen for the affective measure. A histogram of the responses to the satisfaction question as well as the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Marriage/Intimate Relationship life domain are shown in Figure 5-69. In the overall sample, 80.3 percent of the respondents said they were in some way satisfied with their marriage or intimate relationship. Only 11.7 percent were in some way dissatisfied. Note also that, although the distributions of responses and the weighting schemes used differed, the 5.63 weighted mean for the Independent Duty Marines was only slightly higher than the 5.53 weighted overall cognitive mean found for the Base and Station respondents.

⁹⁷ Note that the only respondents considered here, as elsewhere in this life domain, were those who had responded that they were either married or involved in a serious intimate relationship. Thus, the 135 non-married respondents included here had admitted to being involved in a serious intimate relationship in Question #1.

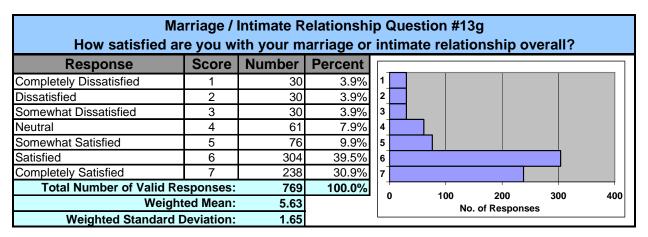


Figure 5-69. Distribution of the Overall Satisfaction Responses in the Marriage/Intimate Relationship Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-70. The 2007 weighted mean satisfaction score in this life domain decreased slightly (by 0.14) from the 2002 score, but this decrease had no practical significance. Although the mean scores for both the IDMw/MCS and the IDMw/oMCS subgroups also decreased, no practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

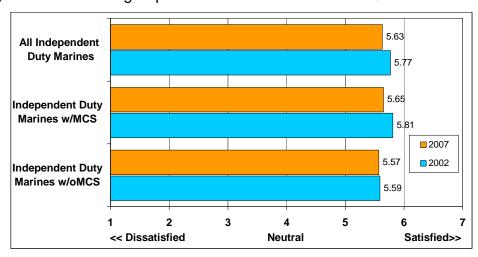


Figure 5-70. Trends in Overall Satisfaction in the Marriage/Intimate Relationship Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Marriage/Intimate Relationship life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. As was done before, the data in each decomposition were looked at separately for those respondents who were married as well as for those involved in a serious

relationship but not married; but the results for the two subgroups were combined unless otherwise noted. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by Pay Grade Group, are shown in Table 5-90.

Table 5-90. Satisfaction with Marriage/Intimate Relationship by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	51	5.82	1.65
E-4/E-5	173	5.34	1.86
E-6/E-7	214	5.51	1.59
E-8/E-9	95	5.62	1.55
WO	19	5.58	1.35
O-1 to O-3	67	5.85	1.26
O-4 to O-10	150	5.74	1.34

All the subgroup scores were clustered between "Mostly Pleased" and "Pleased" and there was no trend across the Pay Grade Groups. The O-1 to O-3 Pay Grade Group had the highest mean (5.85), and the E-4/E-5 had the lowest score (5.34). The difference between the extrema had no practical significance having a Cohen's *d* statistic of 0.32.

The trends in the overall satisfaction with the Marriage/Intimate Relationship life domain were examined by Pay Grade Group and are shown in Figure 5-71. All Pay Grade Groups saw a decline in satisfaction in 2007 as compared with the results from 2002. However all Pay Grade Groups had satisfaction scores between "Somewhat Satisfied" and "Satisfied," and none of the differences seen here had any practical significance.

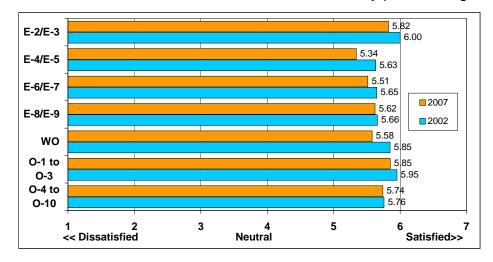


Figure 5-71. Trends in Satisfaction in the Marriage/Intimate Relationship Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by race/ethnicity, are shown in Table 5-91. With one obvious exception, the Native American/Aleut/Eskimo subgroup, which had a mean of 4.69, the mean scores were clustered around the midpoint of the "Somewhat Satisfied" to "Satisfied" range. The White subgroup was the most satisfied (5.64), and the difference between it and the Native American/Aleut/Eskimo subgroup was the only difference seen here that had practical significance.

Table 5-91. Satisfaction with Marriage/Intimate Relationship by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	562	5.64	1.54
Black/African-American	86	5.36	1.64
Asian/Pacific Islander	18	5.33	1.61
Native American/Aleut/Eskimo	13	4.69	2.02
Spanish/Hispanic	63	5.56	1.86
Other	14	5.43	1.60

Gender. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by gender, are shown in Table 5-92. The mean for the female respondents was 0.31 higher than the mean for the male respondents but this difference had no practical significance.

Table 5-92. Satisfaction with Marriage and Intimate Relationships by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	728	5.56	1.60
Female	39	5.87	1.26

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Marriage/Intimate Relationship life domain, decomposed by marital/parental status, are shown in Table 5-93. ⁹⁸ It can be seen that the divorced/widowed/separated Marines, regardless of their parental status, were much less satisfied than any other subgroup of respondents. In fact, all of the differences seen between these two subgroups and the respondents who either were married or who had never been married had practical significance (the smallest effect size was 0.92 as calculated by the Cohen's *d* statistic). The Never Been Married Marines were the most satisfied subgroup.

⁹⁸ Note that the only respondents considered here, as elsewhere in this life domain, were those who had responded that they were either married or involved in a serious intimate relationship. Thus, the 136 non-married respondents included here had admitted to being involved in a serious intimate relationship in Question #1.

Table 5-93. Satisfaction with Marriage/Intimate Relationship by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	11	3.27	2.15
Divorced/Widowed/Separated without Children	30	3.80	2.38
Married with Children	463	5.61	1.46
Married without Children	161	5.75	1.57
Never Been Married	95	6.01	1.20

In addition to asking the respondents about their overall satisfaction with their marriage or intimate relationship, Question #13 also asked about satisfaction with a series of six separate facets of this life domain. The weighted mean and standard deviation scores for each of these facets are shown in Figure 5-72. The lowest weighted scores were seen in Communication (5.25) and how Conflicts Are Resolved (5.26), while the highest weighted scores were seen in Support of Career (5.63) and Love and Understanding (5.62). All facets had a weighted mean at or below the overall weighted satisfaction but still above "Somewhat Satisfied" and none of the differences seen here had any practical significance.

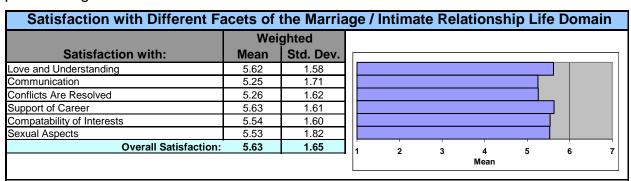


Figure 5-72. Satisfaction with Facets of Marriage/Intimate Relationship for the Independent Duty Marine Respondents

To examine any differences in satisfaction with the six facets of this life domain between the married and the involved but not married respondents, Table 5-94 was created. It can be seen that the weighted mean satisfaction scores for those respondents who were involved but not married were higher for every facet than the scores for the married respondents. Note, however, that none of the differences between mean scores for the married and the involved but not married respondents in any facet of satisfaction or between the two overall satisfaction means had any practical significance; the maximum effect size (seen for Compatibility of Interests) was 0.40 as calculated by the Cohen's *d* statistic.

Table 5-94. Satisfaction with Facets of Marriage/Intimate Relationship for the Independent Duty Marine Respondents

Facet of	M	arried	Involved		
Satisfaction	Mean	Std. Dev.	Mean	Std. Dev.	
Love and Understanding	5.43	1.77	5.85	1.24	
Communication	5.19	1.82	5.38	1.51	
Conflicts Are Resolved	5.16	1.74	5.36	1.48	
Support of Career	5.59	1.68	5.64	1.52	
Compatability of Interests	5.26	1.77	5.88	1.28	
Sexual Aspects	5.31	1.90	5.83	1.67	
Overall	5.40	1.81	5.93	1.35	

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with marriage/intimate relationship for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-73.

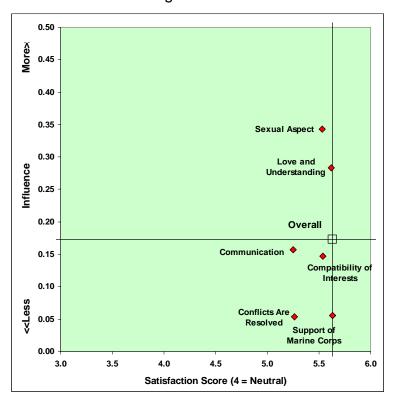


Figure 5-73. Key Driver Diagram for the Marriage/Intimate Relationship Satisfaction Facets for the Independent Duty Marine Respondents

The magnitudes of the influence of the facet satisfactions ranged from 0.054 to 0.343. The facet with the greatest influence and a mean score lower than the overall mean was Sexual Aspect. A similar situation – high influence and a mean lower than the overall mean, also obtained for the Love and Understanding facet. Any increase in the satisfaction of one or both of these facets of Marriage/Intimate relationship would be

likely to have the greatest benefits in increasing the overall satisfaction in this life domain. Note also that this diagram is similar to the key driver diagram in this life domain for the Base and Station respondents.

5.9.3 Effect of Marriage/Intimate Relationship on Job Performance

Question #4 asked about the effect of the respondents' marriage or intimate relationship on their job performance. In general and not unexpectedly, a Marine's marriage or intimate relationship had a positive effect on their job performance, as can be seen in Figure 5-74.

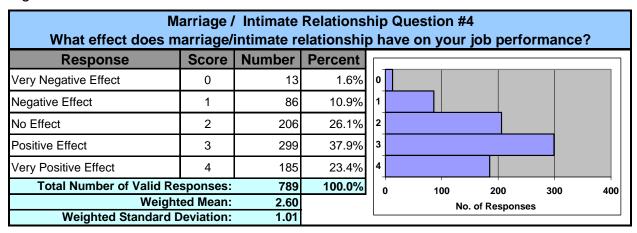


Figure 5-74. Effect of Marriage/Intimate Relationship on Job Performance for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.60, falling above the halfway point between "No Effect" to "Positive Effect." Well over half (61.3 percent) of the respondents answered that their marriage or intimate relationship had a positive effect on their job performance. Only 12.5 percent of the respondents said their marriage or intimate relationship had a negative effect on their job performance.

The effect of the respondents' marriage or intimate relationship on their job performance was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-95. The mean score for the IDMw/MCS exceeded that of the IDMw/oMCS by 0.03 points, a difference that had no practical significance.

Table 5-95. Effect of Marriage/Intimate Relationship on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample w/MCS w/oMCS				S				
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Performance	789	2.60	1.01	597	2.72	0.98	143	2.69	1.00

5.9.4 Effect of Marriage/Intimate Relationship on Plans To Remain on Active Duty

Question #5 asked about the effect of the respondents' marriage or intimate relationship on their plans to remain on active duty. The results for the married respondents and the

involved but not married respondents were considered separately but deemed to not be different enough to warrant separate breakdowns. The results are shown in Figure 5-75.

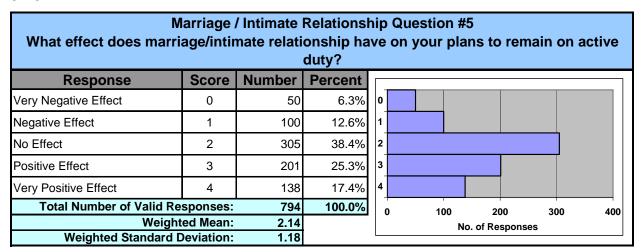


Figure 5-75. Effect of Marriage on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score on this question was 2.14, slightly above "No Effect." Here a larger portion answered that their marriage/intimate relationship had a positive effect (42.7 percent) than a negative effect (18.9 percent) on their plans to remain on active duty.

The effect of the respondents' marriage or intimate relationship on their plans to remain on active duty was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-96. The mean score for the IDMw/oMCS exceeded that of the IDMw/MCS by 0.04 points, a difference that had no practical significance.

Table 5-96. Effect of Marriage/Intimate Relationship on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample			w/MCS			w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	794	2.14	1.18	601	2.36	1.08	144	2.40	1.09

5.9.5 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Marriage/Intimate Relationship life domain were examined. The results are presented below.

Question #3 asked the respondents to indicate how satisfied they thought they would be with their marriage or intimate relationship if they were not in the Marines. Table 5-97 shows the responses to this question for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The weighted mean satisfaction score for the entire Independent Duty Marine respondent sample on this question was

5.57, which fell about halfway between "Somewhat Satisfied" and "Satisfied' and which was only 0.14 higher than the overall weighted cognitive mean in this life domain. There was only a minimal difference in the responses for the IDMw/MCS and IDMw/oMCS subgroups.

Table 5-97. Expected Satisfaction with Marriage/Intimate Relationship if the Respondent Were Not in the Marine Corps for the Independent Duty Marine Respondents

				Indepen	dent Du	ıty Marines	i		
	Total Sample w/MCS w/oMC				S				
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Satisfaction if not in the Marines	790	5.57	1.48	599	5.55	1.37	143	5.54	1.38

Question #6 asked the respondents to indicate how well they thought the Marine Corps accommodated the demands of their marriage/intimate relationship. The resulting data, Figure 5-76, are shown on a scale of "Extremely Poorly" (assigned a score of 0) to "Extremely Well" (assigned a score of 4). The weighted average score for this question was 1.93, which fell in the lower half of the possible range, i.e., between "Very Poorly" and "So, So." Though 31.7 percent of the Independent Duty Marine Respondents felt that the Marine Corps did a good job of accommodating their marriage or intimate relationship and 21.8 percent felt the Marine Corps did at best very poorly, the weighted average indicated that, as a whole, Marines think the Marine Corps is doing slightly worse than the neutral score of "So, So" in accommodating their marriage or intimate relationship.

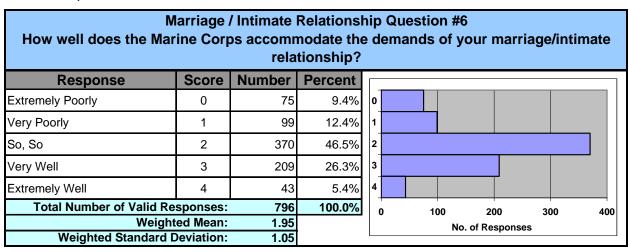


Figure 5-76. Degree to Which the Marine Corps Accommodates the Marriage/Intimate Relationship of the Independent Duty Marine Respondents

Question #14 asked the respondents to indicate how capable they thought their spouse or partner would be in taking responsibility for various aspects of life if military duties took the respondent away for 6 or more months. The data were scored on a scale of "Not at all capable" (assigned a score of 0) to "Extremely capable" (assigned a score of 4) in Figure 5-77. The respondents had the most confidence (a score of 3.05) in the capability of their spouse/partner to take full responsibility for childcare, although that

area had the fewest number of respondents that did not pick "Not applicable" as their response. The respondents had the least confidence (a score of 2.48) in the capabilities of their spouse/partner to deal with investments, although the rating assigned was above "Capable."

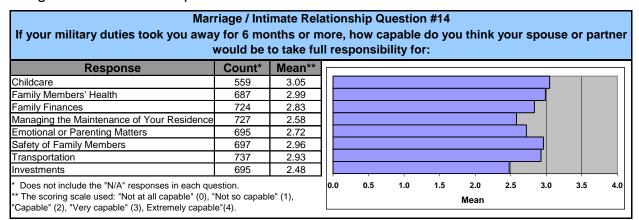


Figure 5-77. Capabilities of the Spouses/Partners of the Independent Duty Marine Respondents

5.9.6 Conclusions for the Marriage/Intimate Relationship Life Domain for the Independent Duty Marine Respondents

Since the 2002 QoL Study was performed, happiness remained about the same while satisfaction decreased slightly for the Marriage/Intimate Relationship life domain, but the changes had no practical significance. Decomposing the responses by the demographic groups considered in this study (i.e., Pay Grade Group, race/ethnicity, gender, and marital/parental status) showed that divorced/widowed/separated respondents were markedly less happy and less satisfied with their marriage or intimate relationship than were the other respondents. Those respondents involved in a serious intimate relationship but who had never been married were more satisfied with every facet of their relationship in this life domain. While marriage and intimate relationships tended to have a fairly strong positive influence on job performance; the effect on plans to remain on active duty was less strong, but still positive. In general, the respondents believed that they would be only somewhat more satisfied with their marriage/intimate relationship if they were not in the Marine Corps and that the Marine Corps had done a less than "So, So" job in accommodating the demands of their marriage/intimate relationship.

5.10 THE RELATIONSHIP WITH YOUR CHILDREN LIFE DOMAIN

5.10.1 Happiness – Affective Evaluations of the Relationship with Your Children Life Domain

Following the convention of the 2002 QoL Study Report, values for the overall affective (happiness) measure in the Your Relationship with Your Children life domain were computed separately for the respondents living with their children in their household and for the respondents <u>not</u> living with their children in their household.

The weighted mean affective or happiness score for the Your Relationship with Your Children life domain for those Independent Duty Marine respondents living with their children (Question #2) in 2007 was 6.22 (Figure 5-78), corresponding to a response of "Pleased" on the seven-point D-T scale. The weighted mean affective or happiness score for the Your Relationship with Your Children life domain for those Independent Duty Marine respondents not living with their children (Question #3) in 2007 was substantially lower at 4.45 (Figure 5-79). Note the relatively small number of respondents to each of the two questions (compared with the 800-1000 responses seen in other life domains) and that the scales in the two histograms differ because of the three- to four-fold greater number of respondents living with their children. Also, although the distributions of responses and the weighting schemes used differed, the means for the Independent Duty Marines were only slightly higher than the weighted overall affective means found for the Base and Station Marines, regardless of the residence of the children.

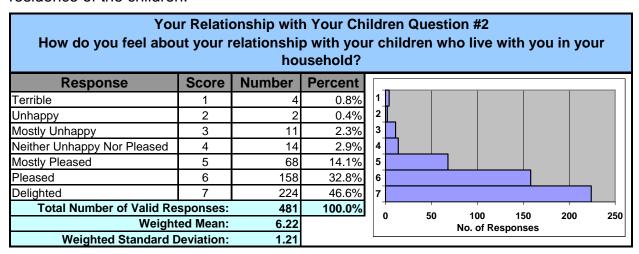


Figure 5-78. Distribution of the Overall Happiness Responses in the Your Relationship with Your Children Life Domain for the Independent Duty Marine Respondents Living with Their Children

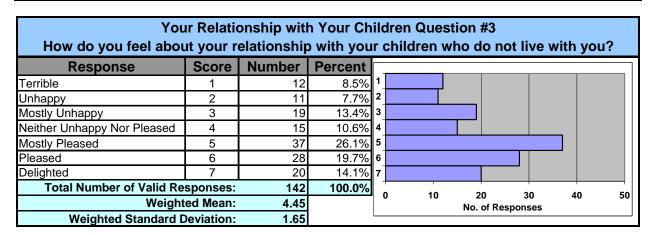


Figure 5-79. Distribution of the Overall Happiness Responses in the Your Relationship with Your Children Life Domain for the Independent Duty Marine Respondents Not Living with Their Children

When the weighted mean for those respondents living with their children was compared to the weighted mean for the respondents <u>not</u> living with their children, a difference with practical significance of effect size 1.47 was seen, as calculated by the Cohen's *d* statistic. This effect size indicated that the respondents were significantly happier with their relationship with their children when the children were living in the respondents' household.

Trends over the 2002 and 2007 Marine Corps QoL studies in the mean Your Relationship with Your Children affective scores for those respondents living with and not with their children are shown in Figure 5-80. The weighted mean happiness of the respondents living with their children decreased to 6.22 from the 2002 level of 6.40, but this difference had no practical significance. Similarly, the 2007 weighted affective mean for Independent Duty Marines not living with their children dropped to 4.45 from the 2002 weighted mean of 4.74, but this decrease also had no practical significance.

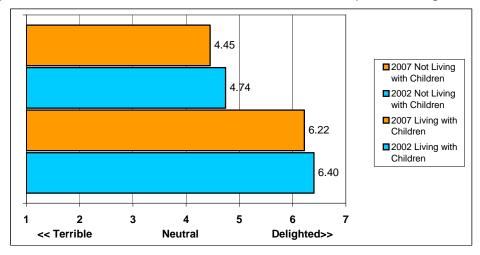


Figure 5-80. Trends in Overall Happiness in the Your Relationship with Your Children Life Domain for Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-81. The overall 2007 D-T weighted score for the entire Independent Duty Marine sample decreased (by 0.07) from the 2002 score as did the IDMw/oMCS mean (by 0.14). The IDMw/MCS mean increased from the 2002 value (by 0.16). No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

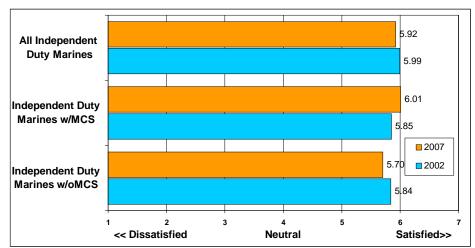


Figure 5-81. Trends in Overall Happiness in the Your Relationship with Your Children Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Your Relationship with Your Children life domain also was analyzed by decomposing the Independent Duty Marine respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by Pay Grade Group and child residence, are shown in Table 5-98.

Table 5-98. Happiness with Your Relationship with Your Children by Pay Grade Group and Child Residence for the Independent Duty Marine Respondents

Pay Grade Group	Childre	en with R	espondent	Children Not with Responde			
ray Grade Group	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	
E-2/E-3	13	6.23	1.30	5	4.80	1.30	
E-4/E-5	80	5.81	1.56	28	4.07	2.05	
E-6/E-7	167	6.05	1.22	48	4.44	1.72	
E-8/E-9	83	6.28	0.93	32	5.00	1.93	
WO	17	6.12	0.86	4	5.75	0.96	
O-1 to O-3	28	6.21	0.96	7	3.86	1.57	
O-4 to O-10	122	6.16	0.84	18	4.61	1.58	

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When looking at the respondents living with their children, the E-4/E-5 Pay Grade Group had the lowest average happiness score, 5.81, followed by the E-6/E-7 Pay Grade Group with a mean of 6.05. The mean of the E-4/E-5 Pay Grade Group corresponded to a response slightly below "Pleased." The other Pay Grade Groups had means above 6, corresponding to responses between "Pleased" and "Delighted." None of the differences seen here for the respondents living with their children had any practical significance. It is interesting to note, however, that the small number of respondents in the E-2/E-3 Pay Grade Group had one of the highest mean scores.

When looking at the mean affective score for the respondents <u>not</u> living with their children, it is important to note that several of the respondent groups contained fewer than 10 respondents. The O-1 to O-3 Pay Grade Group had the lowest mean (3.86, a less than "Neutral" score and 0.21 below the next lowest mean of 4.07 found in the E-4/E-5 Pay Grade Group). The results for the O-1 to O-3 Pay Grade Group were found to have difference with practical significance with the WO, E-8/E-9 and E-2/E-3 Pay Grade Groups. The WO Pay Grade Group had the greatest mean of 5.75. In fact, differences of practical significance were found between the WO Pay Grade Group and every other Pay Grade Group except for the second-highest scoring E-8/E-9 Pay Grade Group (where the value of the Cohen's *d* statistic was 0.492, just barely below the threshold used in this study to define practical significance). None of the other differences seen here (e.g., between the E-4/E-5 and the E-8/E-9 Pay Grade Groups) had practical significance.

Comparing across the two groups of parents (i.e., those living with and those <u>not</u> living with their children), the three groups with the largest differences (in decreasing order) were the O-1 to O-3, E-4/E-5, and E-6/E-7 Pay Grade Groups, with differences of 2.35, 1.74, and 1.61, respectively. See Figure 5-82. All the differences seen in the figure had practical significance with the exception of the WO Pay Grade Group.

 $^{^{99}}$ Although one of the benefits of the use of practical significance and the Cohen's d statistic to make that determination is that the statistic is independent of sample size.

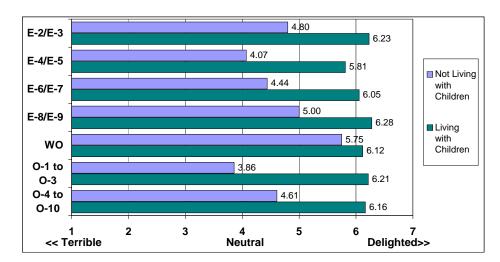


Figure 5-82. Happiness with Your Relationship with Your Children Comparing Independent Duty Marine Respondents Living with and Not Living with Their Children by Pay Grade Group

Trends in overall happiness in the Your Relationship with Your Children life domain were examined by Pay Grade Group for those respondents living with their children. The results are shown in Figure 5-83. The only Pay Grade Group with a difference with practical significance between 2002 and 2007 was the E-2/E-3 Pay Grade Group, for which the affective mean had declined by 0.63 since 2002.

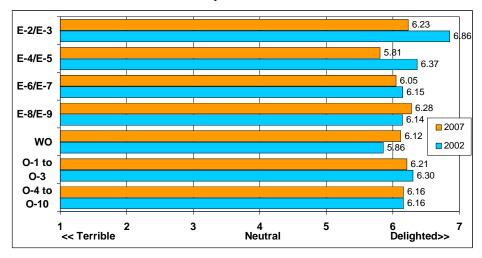


Figure 5-83. Trends in Happiness in the Your Relationship with Your Children Life Domain by Pay Grade Group for the Independent Duty Marine Respondents Living with Their Children

Trends in overall happiness in the Your Relationship with Your Children life domain were examined by Pay Grade Group for those respondents <u>not</u> living with their children. The results are shown in Figure 5-84. The largest change between 2002 and 2007 occurred in the WO Pay Grade Group, an increase of 0.58 that was not found to have practical significance. Thus, no changes of practical significance had occurred in any of the Pay Grade Groups for the respondents <u>not</u> living with their children since 2002.

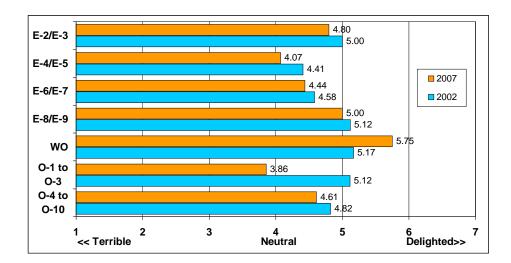


Figure 5-84. Trends in Happiness in the Your Relationship with Your Children Life Domain by Pay Grade Group for the Independent Duty Marine Respondents Living without Their Children

Race/Ethnicity. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by race/ethnicity and child residence, are shown in Table 5-99.

Table 5-99. Happiness with Your Relationship with Your Children by Race/Ethnicity and Child Residence for the Independent Duty Marine Respondents

Race/Ethnicity	Childre	en with R	espondent	Children	n Not with Respondent			
Kace/Etillicity	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.		
White	366	6.13	1.03	83	4.40	1.71		
Black/African-American	65	5.94	1.38	37	5.30	1.53		
Asian/Pacific Islander	13	6.23	1.64	-	ı	-		
Native American/Aleut/Eskimo	12	5.67	1.61	5	4.00	2.83		
Spanish/Hispanic	39	6.05	1.65	11	3.82	1.94		
Other	11	5.64	1.29	4	3.75	1.50		

When looking at the respondents living with their children, the Asian/Pacific Islander subgroup had the highest overall happiness mean (6.23) while the "Other" subgroup had the lowest mean (5.64). This difference and, consequently, all of the others seen here, had no practical significance. Note that the "Other," Native American/Aleut/ Eskimo, and Asian/Pacific Islander subgroups each had fewer than 15 respondents.

When looking at the mean affective score for the respondents <u>not</u> living with their children, the Black/African American subgroup had the highest overall mean (5.30) while the "Other" subgroup had the lowest mean (3.75). All of the differences between the Black/African American subgroups and each of the others were found to have practical significance. Note, however, that the Spanish/Hispanic, Native American/

Aleut/Eskimo, and "Other" subgroups each had fewer than 15 respondents and the Asian/Pacific Islander subgroup had none.

Comparing the respondents living with their children with the respondents <u>not</u> living with their children, it again could be seen that the former group was significantly more happy than the latter group. In fact, when comparing the differences in the means within the subgroups but across the two children's residence groups, all the differences were found to have practical significance except for the Black/African-American subgroup. The "Other" subgroup was the least happy in both categories.

Gender. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by gender and child residence, are shown in Table 5-100. Within the breakdown by gender, male respondents were slightly more satisfied female respondents when children were present in the house, but were less happy than the female respondents when <u>not</u> living with their children; however the low number of female respondents (14 and 2 in the two subgroups) means that comparisons across gender should only be looked at generally. When comparing those male respondents living with their children with those <u>not</u> living with their children, the difference had practical significance.

Table 5-100. Happiness with Your Relationship with Your Children by Gender and Child Residence for the Independent Duty Marine Respondents

Gender	Childr	en with R	espondent				
	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	
Male	495	6.10	1.15	138	4.53	1.78	
Female	14	6.07	1.14	2	5.50	2.12	

Marital/Parental Status. The means and standard deviations of the happiness scores for the Your Relationship with Your Children life domain, decomposed by marital/parental status and child residence, are shown in Table 5-101. Note that only three of the marital/parental status subgroups were relevant here (i.e., the groups without children were not considered), and the small number of Never Been Married and Divorced/Widowed/Separated respondents.

Table 5-101. Happiness with Your Relationship with Your Children by Marital/Parental Status and Child Residence for the Independent Duty Marine Respondents

Marital/Parental Status	Children with Respondent Children Not with Res					Respondent
Marital/Farental Status	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	13	5.54	1.39	4	5.00	2.16
Married with Children	464	6.16	1.10	73	4.62	1.70
Never Been Married	11	5.18	1.78	8	4.25	1.67

When looking at the respondents living with their children, the means ranged from 5.18 (Never Been Married) and 6.16 (Married with Children). When these extremes were compared, no practical significance was found between the marital/parental groups for those respondents living with their children. When looking at the mean affective scores

for the respondents <u>not</u> living with their children, no differences with practical significance were found. For both respondents living with and <u>not</u> living with their children, the Never Been Married subgroup had the lowest means. When comparing the differences in the means within the marital/parental status groups but across the two children's residence groups, the differences within the Married with Children and the Never Been Married subgroups had practical significance.

5.10.2 Satisfaction – Cognitive Evaluations of the Relationship with Your Children Life Domain

The weighted mean cognitive or satisfaction score (Question #6e) in the Relationship with Your Children life domain for the Independent Duty Marine respondents in 2007 was 5.63, i.e., between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Your Relationship with Your Children life domain is shown in Figure 5-85. The three most frequently chosen responses were those that indicated positive satisfaction and which, when summed together, were chosen by 85.1 percent of the respondents. Note that only 8.9 percent of the respondents indicated any level of dissatisfaction with the overall relationship with their children.

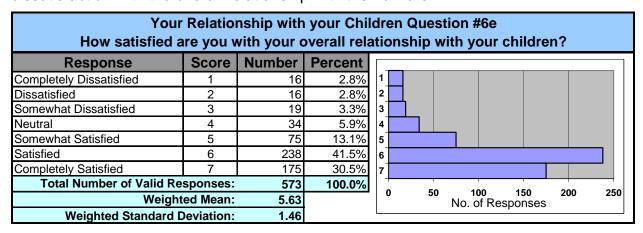


Figure 5-85. Distribution of the Overall Satisfaction Responses in the Your Relationship with Your Children Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-86. The 2007 weighted satisfaction score for the entire Independent Duty Marine sample decreased (by 0.03) from the 2002 score, although the mean scores for the IDMw/MCS and IDMw/oMCS both increased (by 0.12 and 0.24, respectively). No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

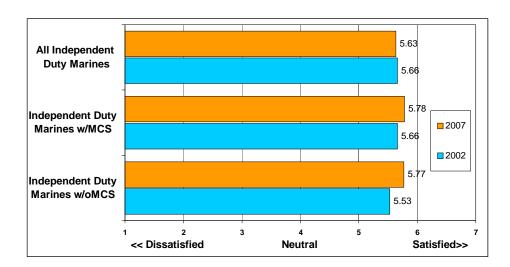


Figure 5-86. Trends in Overall Satisfaction in the Your Relationship with Your Children Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Your Relationship with Your Children life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by Pay Grade Group, are shown in Table 5-102.

Table 5-102. Satisfaction with Your Relationship with Your Children by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	14	5.79	1.19
E-4/E-5	108	5.26	1.83
E-6/E-7	189	5.68	1.49
E-8/E-9	89	5.88	1.27
WO	18	5.72	0.89
O-1 to O-3	32	5.72	1.49
O-4 to O-10	123	5.99	0.96

The means of the Pay Grade Groups ranged between 5.26 for the E-4/E-5 Pay Grade Group and 5.99 for the O-4 to O-10 Pay Grade Group and corresponded to responses between "Somewhat Satisfied" and "Satisfied." The Cohen's *d* statistic for the difference between the E-4/E-5 and O-4 to O-10 Pay Grade Group was 0.50, which was considered to have practical significance.

When the trends in overall satisfaction with the Your Relationship with Your Children life domain were examined by Pay Grade Group, as shown in Figure 5-87, it was apparent that the E-8/E-9 Pay Grade Group had the largest change since 2002. However, that 0.51 increase had no practical significance, since it had a Cohen's *d* statistic of only

0.36. Only two of the Pay Grade Groups saw decreases in satisfaction: The E-4/E-5 and O-1 to O-3 Pay Grade Groups. The largest decrease in satisfaction, 0.36, occurred in the E-4/E-5 Pay Grade Group; however, this had no practical significance.

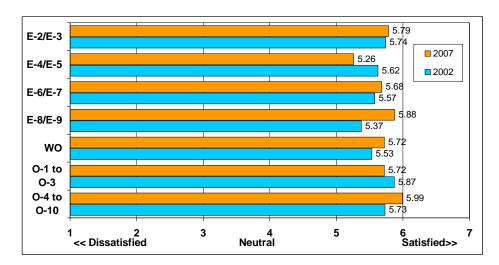


Figure 5-87. Trends in Satisfaction in the Your Relationship with Your Children Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by race/ethnicity, are shown in Table 5-103. The largest racial/ethnic group (White) had the highest mean, 5.79, and the smallest standard deviation, 1.32. The "Other" subgroup had the lowest mean, 4.64. The differences between the results for the four highest-scoring subgroups (White, Asian/Pacific Islander, Spanish/Hispanic, and Black/African-American) and the "Other" subgroup all had practical significance. Note also the relatively small number of respondents in the "Other," Asian/Pacific Islander and Native American/Aleut/Eskimo subgroups.

Table 5-103. Satisfaction with Your Relationship with Your Children by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	398	5.79	1.32
Black/African-American	80	5.55	1.53
Asian/Pacific Islander	12	5.75	1.71
Native American/Aleut/Eskimo	14	5.29	1.59
Spanish/Hispanic	48	5.58	1.80
Other	14	4.64	1.65

Gender. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by gender, are shown in Table 5-104. Although the male respondents scored higher, the difference seen here had no practical significance.

Table 5-104. Satisfaction with Your Relationship with Your Children by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	557	5.69	1.45
Female	16	5.63	1.36

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Your Relationship with Your Children life domain, decomposed by marital/parental status, are shown in Table 5-105.

Table 5-105. Satisfaction with Your Relationship with Your Children by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	14	5.21	1.97
Married with Children	470	5.94	1.19
Never Been Married	17	4.88	1.41

Only the "Married with Children" subgroup had more than 20 respondents. This subgroup also had the highest satisfaction and lowest standard deviation; indicating a high level of satisfaction among all respondents. Those who had Never Been Married had the lowest satisfaction, 4.88, a level that was found to be significantly lower than that of the Married with Children subgroup (Cohen's *d* statistic was 0.81). No differences with practical significance were found between the "Divorced Widowed Separated with Children" subgroup and either of the other subgroups.

In addition to asking the respondents about their overall satisfaction with their neighborhood, Question #6 also asked about satisfaction with a series of four separate facets of the respondents' relationship with their children. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-88.

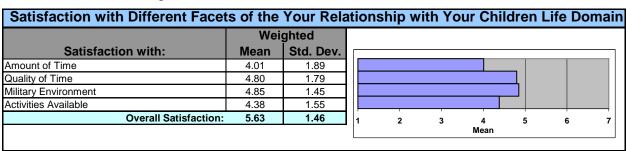


Figure 5-88. Satisfaction with Facets of Your Relationship with Your Children for the Independent Duty Marine Respondents

The weighted facet means ranged from 4.01 (Amount of Time with Your Children), corresponding to a "Neutral" response, to 4.85 (Military Environment for Raising Children), corresponding to a response slightly below "Somewhat Satisfied." Thus, although the respondents expressed some degree of dissatisfaction regarding the

amount of time they could spend with their children, they indicated some degree of satisfaction with the quality of that time. These two facets had a difference of practical significance, based on the Cohen's *d* statistic of 0.50. Note also that, since the weighted overall mean satisfaction score was not the numerical average of the four weighted facet satisfaction scores shown here, it was possible for the four facets to have weighted means lower than the overall weighted satisfaction mean.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with the relationship with their children for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-89.

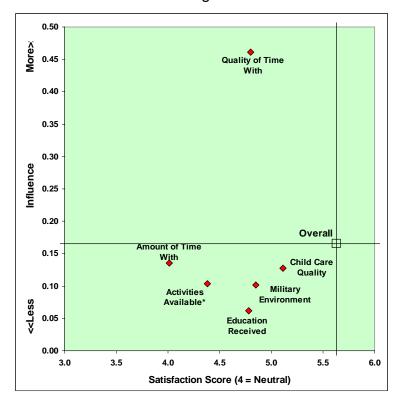


Figure 5-89. Key Driver Diagram for the Relationship with Your Children Life Domain for the Independent Duty Marine Respondents

The magnitudes of the influence factors ranged from 0.062 for Education Received to 0.461 for Quality of Time With their children. As was the case for the Base and Station Marines, it was clear where the Independent Duty Marines placed their emphasis in this life domain: Quality of Time was by far the most influential of the factors and, at the same time, was an area where satisfaction was below that of the overall domain mean. Quality of Time also was the only facet that had more influence than the overall domain mean. This indicates an area where the opportunity for large increases in domain satisfaction may be possible. Amount of Time was the facet with the lowest mean score, although its influence, while the second highest of the facets, fell below that of the overall mean. Also note that the asterisk next to Activities Available indicates that it had a negative correlation with the overall mean.

It is also interesting to note that the results from the 2007 QoL survey shown here differed markedly from those from the 2002 QoL Study. In that earlier study, the least and most influential facets were Quality of Time with their children, Education Received, and Activities Available. While Education Received still ranked relatively low in influence, the relative influence of those other two extrema have changed considerably. It appears that the Independent Duty Marines have reordered their priorities in this life domain significantly, just as the 2007 Base and Station respondents have done.

5.10.3 Effect of Relationship with Your Children on Job Performance

Question #11 asked about the effect of the respondents' relationship with their children on their job performance. A histogram of the responses to that question is shown in Figure 5-90.

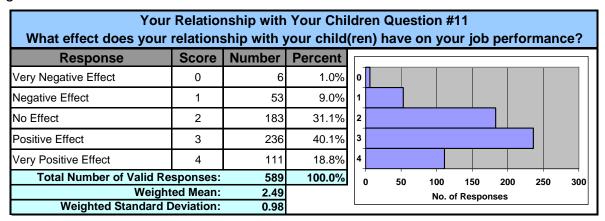


Figure 5-90. Effect of Your Relationship with Your Children on Job Performance for the Independent Duty Marine Respondents

Overall, the relationship with their children had a positive effect on the respondents' job performance: The weighted mean score for this question was 2.49, halfway between "No Effect" and "Positive Effect." A majority of the respondents (58.9 percent) responded either a "Positive Effect" or a "Very Positive Effect," and only 10.0 percent indicated that their relationship with their children had any degree of negative effect.

The effect of the respondents' relationship with their children was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-106. The mean score of the IDMw/oMCS subgroup was 0.04 greater than that of the IDMw/MCS subgroup, a difference that had no practical significance.

Table 5-106. Effect of Your Relationship with Your Children on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines									
	Т	otal Sar	nple		w/MC	S		w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	
Effects on Job Peformance	589	2.49	0.98	436	2.65	0.90	108	2.69	0.94	

5.10.4 Effect of Relationship with Your Children on Plans To Remain on Active Duty

Question #12 asked about the effect of the respondents' relationship with their children on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-91.

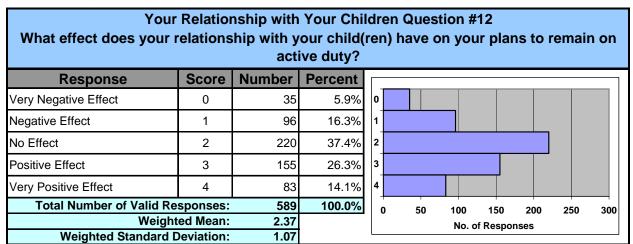


Figure 5-91. Effect of Your Relationship with Your Children on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.37, or somewhat above "No Effect." However, still the most frequently chosen response, only a relatively small percentage of the respondents (37.4 percent) said that their relationship with their children had no effect on their plans to remain on active duty, while a larger fraction of the respondents (40.4 percent) said their relationship with their children had some degree of positive effect. This can be compared to the 22.2 percent that indicated that their relationship with their children had some degree of negative effect on their plans to remain on active duty.

In a related issue, Question #13 asked about the effect of the overall educational opportunities available to the respondents' children on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-92.

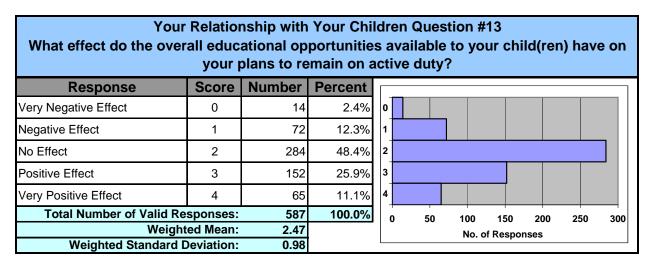


Figure 5-92. Effect of Their Children's Educational Opportunities on the Respondents' Plans To Remain on Active Duty for the Independent Duty Marine Respondents

Here, the weighted mean score was 2.47, or 0.10 higher than the score seen in the discussion of the other 'remain on active duty' question. Note that a higher percentage, and a near-majority, of the respondents indicated that the educational opportunities available to their children had "No Effect" on their plans to remain on active duty. While only 14.7 percent of the respondents indicated that the educational opportunities available to their children had any degree of negative effect on their plans to remain on active duty, 37.0 percent indicated that this issue had some degree of positive effect.

The effect of children's educational opportunities on the respondents' plans to remain on active duty as well as those overall plans were examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-107. The means for the IDMw/MCS subgroup were higher than the means for the IDMw/oMCS subgroup for both of the effects considered. However, none of the differences seen here had any practical significance.

Table 5-107. Effect of Your Relationship with Your Children and Educational Opportunities on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample				w/MC	S		S	
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	589	2.37	1.07	436	2.27	1.08	110	2.14	1.10
Effects of Educational Opportunities on Active Duty Plans	573	2.49	0.99	435	2.29	0.90	110	2.22	0.97

5.10.5 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Your Relationship with Your Children life domain were examined. The results are presented below.

Question #5 asked the respondents to indicate, if they had school age children, their satisfaction with the education that their children were receiving, using the standard seven-point satisfaction scale. Figure 5-93 shows the histogram of responses.

The average weighted satisfaction score was 4.78, somewhat below "Somewhat Satisfied." The most frequently chosen response was "Satisfied" (43.7 percent), and 79.1 percent of the respondents indicated some level of satisfaction with their children's schools, while only 14.5 percent indicated any level of dissatisfaction.

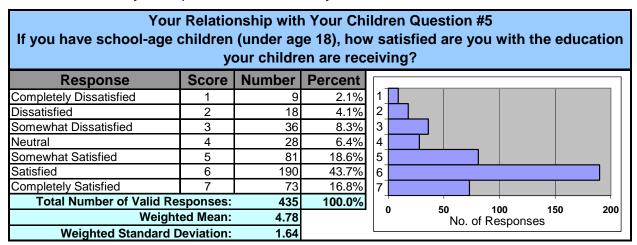


Figure 5-93. Satisfaction with Their Children's Education for the Independent Duty Marine Respondents

Question #7 asked the respondents to indicate the usual primary care provider for their youngest child while the respondent was on duty. The results are shown in Figure 5-94. It was evident from the histogram that a majority, 64.5 percent, of the respondents relied on their spouses to watch their youngest child while they were on active duty. Two other types of primary care providers that frequently were cited were "Other" (8.2 percent) and "Military Child Development Center" (7.5 percent).

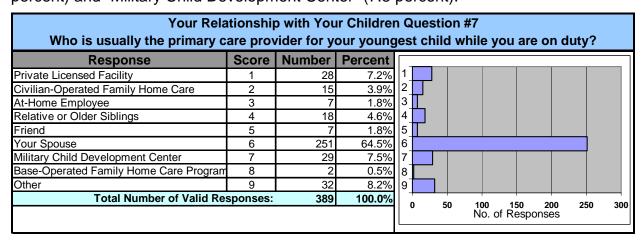


Figure 5-94. Primary Care Providers for the Independent Duty Marine Respondents' Youngest Child while on Duty

Question #8 asked the respondents to indicate their one most critical childcare requirement. The results, decomposed for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Table 5-108. The most frequently indicated childcare needs in all the groups considered were occasional babysitting, all day care for pre-school children and before and/or after school care. Overnight care was the least frequently chosen response in all of the groups.

Table 5-108. Most Critical Childcare Requirement for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Your Relationship with Your Children Question # 8 What is your ONE most critical child care requirement?										
IDM Group Count Occasional Babysitting Child Child School Child School Care Child Care Child School Care Child Care Child Care Care Care Care Care Care Care Care								Other			
IDMw/MCS	272	30.9%	19.1%	16.5%	1.1%	2.9%	10.3%	3.7%	15.4%		
IDMw/oMCS	71	38.0%	21.1%	14.1%	0.0%	2.8%	9.9%	4.2%	9.9%		
IDM Overall	378	31.5%	19.8%	15.9%	1.1%	2.6%	10.8%	3.4%	14.8%		

Question #9 asked the respondents about their satisfaction with aspects of childcare. A histogram comparing the three facets of childcare and the overall satisfaction with childcare for the 74 respondents who had indicated that they used professional childcare (i.e., responses 1, 2, 7 and 8 to Question #7) is shown in Figure 5-95.

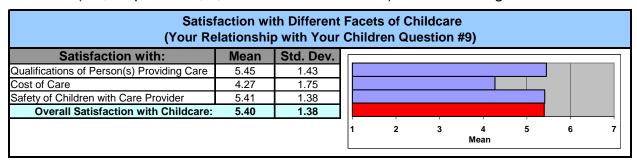


Figure 5-95. Satisfaction with Facets of Childcare for the Independent Duty

Marine Respondents

The overall satisfaction with professional childcare by its users was 5.40, corresponding to a response between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. The facet with by far the smallest mean (4.27, corresponding to a "Neutral" response) was "Cost of Care." The Cohen's *d* statistic comparing the mean for "Cost of Care" with the overall mean satisfaction level with childcare was 0.72, indicating a difference with practical significance. The means of "Qualifications of Person(s) Providing Care" and "Safety of Children with Care Provider" were much closer to the mean overall satisfaction, and no differences of practical significance were found.

Since relatively few respondents (77) were included in the analysis of satisfaction with professional childcare, no analysis of the IDMw/MCS and the IDMw/oMCS results was performed.

5.10.6 Conclusions for the Relationship with Your Children Life Domain for the Independent Duty Marine Respondents

The affective scores (from both respondents living with their children and those who were <u>not</u>)) had not changed significantly since 2002. However, the affective means for the respondents living with their children were significantly higher than the affective means for the respondents <u>not</u> living with their children. Those differences were maintained across all demographic subgroups examined (i.e., Pay Grade Group, race/ethnicity, gender and marital/parental status). The cognitive measure also showed no changes of practical significance between 2002 and 2007. Furthermore, no practical significance existed between the IDMw/MCS and IDMw/oMCS subgroups for either the affective or cognitive questions. Decomposing responses to the affective and cognitive questions by Pay Grade Group, race/ethnicity and marital/parental status showed some differences of practical significance between the subgroups. The key driver diagrams showed Quality of Time with children as the most important driver and Education Received as the least important driver.

Relationships with their children had a somewhat positive effect on the job performance of the Independent Duty Marine respondents, and only a slightly less positive effect on their plans to remain on active duty. In general, the differences between the IDMw/MCS subgroups and the IDMw/oMCS subgroups were small and they never had any practical significance. The overall educational opportunities available to their children had a slightly greater impact on the respondents' plans to remain on active duty, and the Independent Duty Marine respondents, as a whole, seemed satisfied with the education their children were receiving.

5.11 THE YOUR RELATIONSHIP WITH OTHER RELATIVES LIFE DOMAIN

5.11.1 Happiness – Affective Evaluations of the Relationship with Other Relatives Life Domain

The weighted mean affective or happiness score (Question #1) for the Your Relationship with Other Relatives Life Domain for all of the Independent Duty Marine respondents in 2007 was 5.08, or slightly above "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for all of the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-96. It can be seen that 72.1 percent of the respondents indicated they were "Mostly Pleased" to "Delighted" about their relationship with their relatives. On the other hand, only 11.5 percent of the respondents selected one of the three negative responses. Also note that the 5.08 weighted mean for the Independent Duty Marines was somewhat higher than the 4.92 weighted overall affective mean found for the Base and Station respondents.

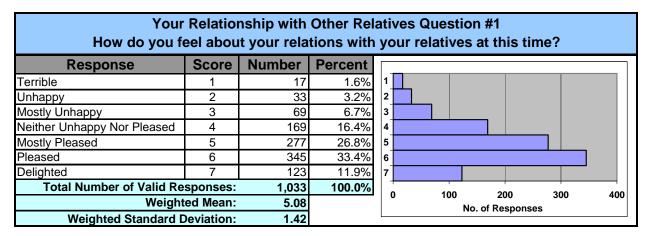


Figure 5-96. Distribution of the Overall Happiness Responses in the Your Relationship with Other Relatives Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-97. The means for all three of the groups considered decreased since 2002, although none of the changes had practical significance. The largest decrease, 0.24, occurred for the entire Independent Duty Marine sample.

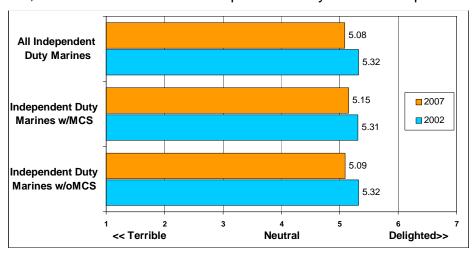


Figure 5-97. Trends in Overall Happiness in the Your Relationship with Other Relatives Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Your Relationship with Other Relatives life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Your Relationship with Other Relatives life domain, decomposed by Pay Grade Group, are shown in Table 5-109.

Table 5-109. Happiness with the Your Relationship with Other Relatives by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	109	5.08	1.57
E-4/E-5	278	5.01	1.38
E-6/E-7	252	5.08	1.36
E-8/E-9	116	5.13	1.36
WO	21	5.43	0.87
O-1 to O-3	93	5.11	1.39
O-4 to O-10	164	5.30	1.01

The means of the Pay Grade Groups corresponded to responses between "Mostly Pleased" and Pleased" and ranged from 5.01 to 5.42, for the E-4/E-5 and WO Pay Grade Groups, respectively, but the difference between the two had no practical significance. Once again, the mean score for the E-4/E-5 Pay Grade Group was the lowest seen.

When the trends in overall happiness with the Your Relationship with Other Relatives life domain were examined by Pay Grade Group, as shown in Figure 5-98, it was seen that the WO Pay Grade Group was the only group in which the mean score increased since 2002, and the 0.35 increase for this Pay Grade Group was the second largest change. The largest change since 2002 was a decrease of 0.38 in the mean score of the E-4/E-5 Pay Grade Group. None of the changes seen here had any practical significance, but the almost universal downward trend since 2002 may be of interest.

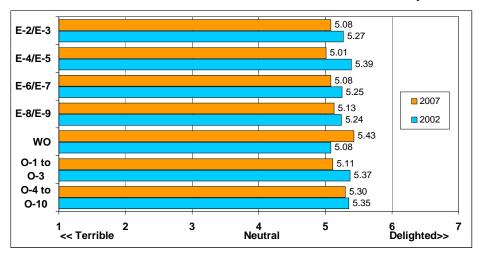


Figure 5-98. Trends in Happiness in the Your Relationship with Other Relatives Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Your Relationship with Other Relatives life domain, decomposed by race/ethnicity, are shown in Table 5-110.

Table 5-110. Happiness with Your Relationship with Other Relatives by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	750	5.15	1.24
Black/African-American	119	5.18	1.50
Asian/Pacific Islander	27	4.85	1.83
Native American/Aleut/Eskimo	21	4.67	1.93
Spanish/Hispanic	79	5.18	1.51
Other	22	4.50	1.57

The minimum mean of 4.50, which was halfway between "Neither Unhappy nor Pleased" and "Mostly Pleased," was found in the "Other" subgroup. The maximum mean was 5.18, or just above "Mostly Pleased," and was found in the Black/African-American and the Spanish/Hispanic subgroups. The comparison of these two extreme means yielded a small to medium Cohen's *d* statistic of 0.44, which had no practical significance. Whites (the largest racial/ethnic group in the sample and the Marine Corps) had the next highest mean (5.15), just slightly below the highest.

Gender. The means and standard deviations of the happiness scores for the Your Relationship with Other Relatives life domain, decomposed by gender, are shown in Table 5-111. The mean score for the males, 5.13, was only 0.17 above the mean score for the females. The difference had no practical significance.

Table 5-111. Happiness with Your Relationship with Other Relatives by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	983	5.13	1.32
Female	55	4.96	1.51

Marital/Parental Status. The means and standard deviations of the happiness scores for the Your Relationship with Other Relatives life domain, decomposed by marital/parental status, are shown in Table 5-112. The means were clustered around "Mostly Pleased" on the seven-point D-T scale. The largest mean was 5.19 in the Married with Children subgroup while the minimum mean was 4.88 in the Divorced/Widowed/Separated with Children subgroup. However, none of the differences seen here had any practical significance. The married respondents were somewhat happier overall with their relationships with their other relatives than the other marital/parental subgroups considered here.

Table 5-112. Happiness with Your Relationship with Other Relatives by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	4.88	1.63
Divorced/Widowed/Separated without Children	72	4.93	1.46
Married with Children	488	5.19	1.24
Married without Children	174	5.03	1.26
Never Been Married	277	5.10	1.48

5.11.2 Satisfaction – Cognitive Evaluations of the Relationship with Other Relatives Life Domain

The weighted mean cognitive or satisfaction score (Question #5d) for the Relationship with Other Relatives life domain for the Independent Duty Marine respondents in 2007 was 5.36, i.e., between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the cognitive question with the weighted overall mean and standard deviation values for the entire Independent Duty Marine respondent sample in this life domain is shown in Figure 5-99. It can be seen that 77.2 percent of the respondents indicated some degree of satisfaction with their relationship with their relatives. On the other hand, only 8.9 percent of the respondents indicated any degree of dissatisfaction. Also note that the 5.36 weighted mean for the Independent Duty Marines was higher than the 5.22 weighted overall cognitive mean found for the Base and Station respondents.

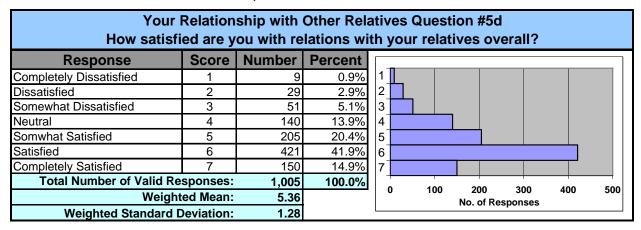


Figure 5-99. Distribution of the Overall Satisfaction Responses in the Your Relationship with Other Relatives Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-100. All three scores increased between 2002 and 2007. The IDMw/oMCS had the largest increase, 0.16. None of the differences seen here had any practical significance, either within the groups shown or between the two QoL studies.

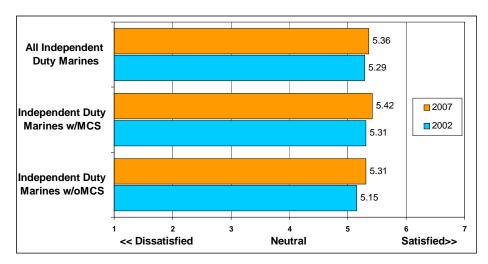


Figure 5-100. Trends in Overall Satisfaction in the Your Relationship with Other Relatives Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Your Relationship with Other Relatives life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by Pay Grade Group, are shown in Table 5-113

Table 5-113. Satisfaction with Your Relationship with Other Relatives by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	107	5.44	1.25
E-4/E-5	270	5.21	1.37
E-6/E-7	247	5.43	1.33
E-8/E-9	113	5.19	1.37
WO	21	5.62	0.74
O-1 to O-3	88	5.36	1.23
O-4 to O-10	159	5.50	1.05

All of the means were between "Somewhat Satisfied" and "Satisfied." The smallest mean was 5.19 from the E-8/E-9 Pay Grade Group while the largest mean was 5.62 from the WO Pay Grade Group. The small number of Warrant Officers also had the lowest standard deviation of any Pay Grade Group, indicating that not only were the members of this group the most satisfied with their relationship with their other relatives, but also that *most* of the Warrant Officers were highly satisfied. No clear trend was evident in the mean scores of the enlisted Pay Grade Groups. None of the differences seen here had any practical significance.

When the trends in overall satisfaction with the Your Relationship with Other Relatives life domain were examined by Pay Grade Group, as shown in Figure 5-101, it was seen

that the E-4/E-5 Pay Grade Group was the only one for which the mean score had decreased since 2002, and that decrease, 0.02, was trivial. The Warrant Officers had the largest increase, 0.62; this change had a Cohen's *d* statistic of 0.54, and thus indicated a change of practical significance. None of the other changes seen here had any practical significance.

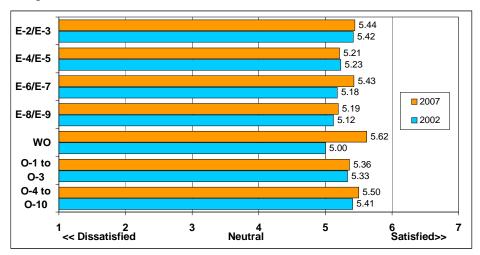


Figure 5-101. Trends in Satisfaction in the Your Relationship with Other Relatives Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by race/ethnicity, are shown in Table 5-114. The mean of the Native American/Aleut/Eskimo subgroup (4.75) corresponded to a response between "Neutral" and "Somewhat Satisfied," while the other racial/ethnic subgroups all had mean responses between "Somewhat Satisfied" and "Satisfied." The White subgroup was the most satisfied (5.41), but the difference between this mean and the lowest scoring subgroup (and, hence, with all the other subgroups) had no practical significance (the maximum value of the Cohen's *d* statistic was 0.44).

Table 5-114. Satisfaction with Your Relationship with Other Relatives by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	728	5.41	1.20
Black/African-American	114	5.26	1.50
Asian/Pacific Islander	27	5.19	1.33
Native American/Aleut/Eskimo	20	4.75	1.74
Spanish/Hispanic	80	5.39	1.48
Other	21	5.19	1.21

Gender. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by gender, are shown in Table 5-115. Males were more slightly satisfied (5.37) than their female counterparts (5.31), but the difference had no practical significance.

Table 5-115. Satisfaction with Your Relationship with Other Relatives by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	953	5.37	1.27
Female	55	5.31	1.35

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Your Relationship with Other Relatives life domain, decomposed by marital/parental status, are shown in Table 5-116. The means for all of the marital/parental subgroups fell above "Somewhat Satisfied" but less than half way toward "Satisfied." The least-satisfied subgroup was the Divorced/Widowed/Separated without Children subgroup, which had a mean of 5.03, while the most satisfied subgroups, the Married with Children and the Married without Children subgroups, both had means of 5.41. None of the differences seen here had practical significance.

Table 5-116. Satisfaction with Your Relationship with Other Relatives by Marital/Parental Status for Independent Duty Marine Respondent

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	15	5.33	1.23
Divorced/Widowed/Separated without Children	72	5.03	1.38
Married with Children	474	5.41	1.26
Married without Children	168	5.41	1.15
Never Been Married	270	5.34	1.34

In addition to asking the respondents about their overall satisfaction with their relationships with their other relatives, Question #5 also asked about satisfaction with a series of three separate facets of this life domain. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-102.

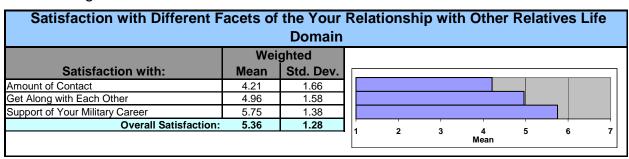


Figure 5-102. Satisfaction with Facets of Your Relationship with Other Relatives for the Independent Duty Marine Respondents

The respondents were least satisfied with the amount of contact they had with their other relatives (the mean score was only somewhat above "Neutral"), but were most satisfied with their relative's support of their military career (the mean score was almost up to "Satisfied"). Practical significance was found for the differences between the career support facet and both of the other facets examined.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with relationship with other relatives for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-103.

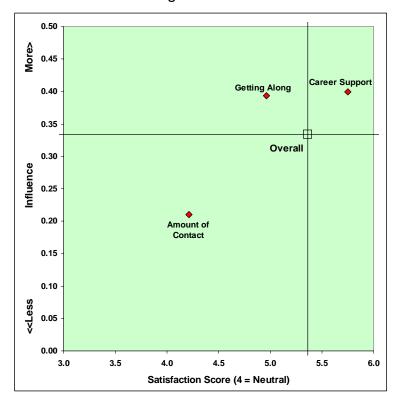


Figure 5-103. Key Driver Diagram for the Relationship with Other Relatives Life Domain for the Independent Duty Marine Respondents

The magnitudes of the influence factors ranged from 0.210 for Amount of Contact to 0.399 for Career Support. The overall structure of the key driver diagram differed from that of the analogous 2002 diagram in one way: The influence of the Career Support facet increased to a level barely above (0.399 to 0.393) that of the Getting Along facet, which was the most-influential driver of the 2002 results. Since the mean score for the Getting Along facet was below that of the overall mean and it had only slightly less influence, that facet was likely to be the one in which the greatest increase in domain satisfaction might be possible, although it also is one which might be difficult for the Marine Corps to influence directly. Another free time-related facet, Amount of Contact, had the lowest satisfaction rating of the facets, but also the least influence on the overall satisfaction. Although this facet is one that might be somewhat amenable to action by the Marine Corps, its combination of low satisfaction and low influence indicated that increases in satisfaction could be possible, but likely would not result in great increases in domain satisfaction.

5.11.3 Effect of Relationship with Other Relatives on Job Performance

Question #6 asked about the effect of the respondents' relationship with other relatives on their job performance. A histogram of the responses to that question is shown in Figure 5-104. The weighted mean, 2.39, corresponded to a response in the lower portion of the "No Effect" to "Positive Effect" range. Nearly 60 percent of the respondents said that their relationship with their other relatives had "No Effect" on their job performance. A total of 32.8 percent of the respondents indicated that their relationship with other relatives had a "Positive Effect" or "Very Positive Effect." In comparison, only 3.9 percent of the respondents indicted that their relationship with their other relatives had a "Very Negative Effect" or "Negative Effect."

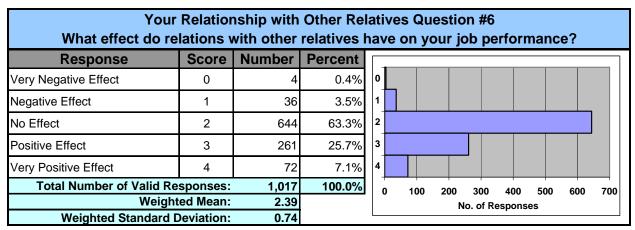


Figure 5-104. Effect of Your Relationship with Other Relatives on Job Performance for the Independent Duty Marine Respondents

The effect of the respondents' relationships with their other relatives on job performance was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-117. It can be seen that the unweighted subgroup means were nearly identical.

Table 5-117. Effect of Your Relationship with Other Relatives on Job Performance for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample w/MCS				v/MCS w/oMCS			S	
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	1,017	2.39	0.74	809	2.35	0.68	180	2.33	0.69

5.11.4 Effect of Relationship with Other Relatives on Plans To Remain on Active Duty

Question #7 asked about the effect of the respondents' relationship with other relatives on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-105. The weighted mean was 2.05, corresponding to a response just slightly above "No Effect." Similar to the Job Performance question discussed previously, a majority of the respondents, 67.8 percent, indicated that their relationships with their other relatives had "No Effect" on their plans to remain on active duty. Only

12.1 percent of the respondents indicated that their relationships with their relatives had any degree of negative effect on their plans to remain on active duty compared to 20.1 percent of the respondents who indicated that their relationships with their other relatives had any degree of positive effect on their plans to remain on active duty.

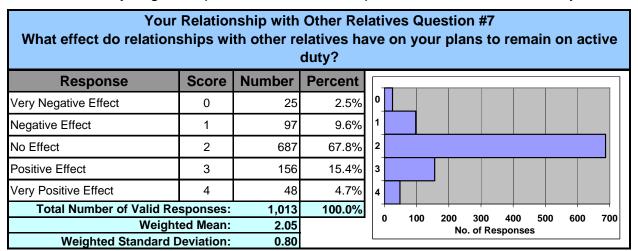


Figure 5-105. Effect of Your Relationship with Other Relatives on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The effect of the respondents' relationships with their other relatives on their plans to remain on active duty was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-118. None of the differences seen here had any practical significance.

Table 5-118. Effect of Your Relationship with Other Relatives on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and Its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample w/MCS			mple w/MCS w/oMCS					
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	1,013	2.05	0.80	780	2.09	0.72	176	2.19	0.80

5.11.5 Conclusions for the Relationship with Other Relatives Life Domain for the Independent Duty Marine Respondents

Happiness scores in the Your Relationship with Other Relatives life domain decreased in 2007 while satisfaction scores increased when compared with the results from the 2002 Study, but the changes had no practical significance. Decomposing the responses by Pay Grade Group, race/ethnicity, gender, and marital/parental status did not result in any significant differences between the subgroups. Similar to the results for the affective question, comparing the cognitive evaluations by Pay Grade Group, race/ethnicity, gender, and marital/parental status did not result in any significant deviations from the overall satisfaction level. However, decomposing by Pay Grade Group did result in one difference, specifically for the Warrant Officers, who indicated an increase of practical significance in their satisfaction since 2002 in this life domain.

The majority of the respondents indicated that this life domain had "No Effect" on job performance or on their plans to remain on active duty. However, three times as many respondents indicated this life domain had some level of negative effect on their plans to remain on active duty than it did on their job performance, although the percentages were very low (3.9 and 12.1 percent) in both cases.

5.12 THE INCOME AND STANDARD OF LIVING LIFE DOMAIN

5.12.1 Happiness – Affective Evaluations of the Income and Standard of Living Life Domain

The weighted mean affective or happiness score (Question #1) for the Income and Standard of Living life domain for the Independent Duty Marine respondents in 2007 was 4.62, i.e., between "Neither Unhappy Nor Pleased" and "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-106. It can be seen that the majority of the respondents, 67.9 percent, expressed some degree of happiness with their Income and Standard of Living, and only a relatively small portion of the respondents (15.1 percent) expressed some degree of unhappiness. Also note that the 4.62 weighted mean for the Independent Duty Marines was noticeably higher than the 4.10 weighted overall affective mean found for the Base and Station respondents.

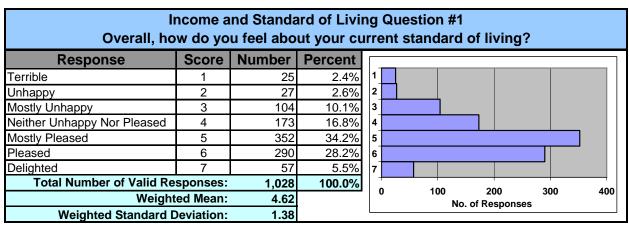


Figure 5-106. Distribution of the Overall Happiness Responses in the Income and Standard of Living Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-107. The mean happiness scores remained relatively consistent between the 2002 and 2007 studies. The 2007 weighted mean Income and Standard of Living D-T score for the entire Independent Duty Marine respondent sample was unchanged. The mean scores in both the IDMw/MCS and IDMw/oMCS subgroups both increased from 2002 to 2007, but the changes had no practical significance.

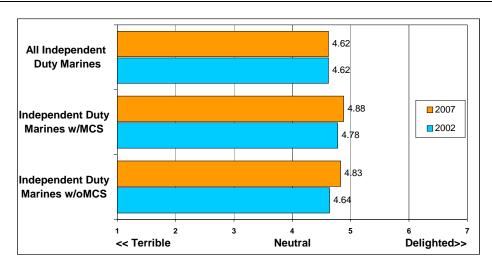


Figure 5-107. Trends in Overall Happiness in the Income and Standard of Living Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Income and Standard of Living life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by Pay Grade Group, are shown in Table 5-119.

Table 5-119. Happiness with Income and Standard of Living by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	109	4.26	1.46
E-4/E-5	275	4.45	1.35
E-6/E-7	252	4.85	1.26
E-8/E-9	114	5.04	1.18
WO	21	5.29	1.01
O-1 to O-3	93	5.37	1.03
O-4 to O-10	164	5.41	0.98

The mean happiness scores increased with Pay Grade Group, with generally diminishing increases for the officers of all ranks. The minimum happiness score, 4.26, was seen for the E-2/E-3 Pay Grade Group. The maximum happiness score, 5.41, was seen for the O-4 to O-10 Pay Grade Group. Note also that as the Pay Grade Group increased, the standard deviations, in general, decreased, indicating that Marines in the lower Pay Grade Groups had a broader variance in their individual happiness scores. A number of differences with practical significance were found between the results for the Pay Grade Groups. The differences between the happiness score for the O-4 to O-10 subgroup and those of the <a href="https://linearchy.com/happiness/

significance. Differences with practical significance also were found between the happiness scores of the other officer Pay Grade Groups (i.e., the O-1 to O-3 and the WO Pay Grade Groups) and both of the E-2/E-3 and E-4/E-5 Pay Grade Groups, and between the E-8/E-9 and E-2/E-3 Pay Grade Groups.

Trends in overall happiness with the Income and Standard of Living domain between the 2002 and 2007 Marine Corps QoL studies also were examined by Pay Grade Group; the results are shown in Figure 5-108. The Pay Grade Group with the largest difference between 2002 and 2007 was the Warrant Officers, for whom the affective mean had increased by 0.63 since 2002. This difference had practical significance, based on the Cohen's *d* statistic of 0.53. None of the other differences seen here had practical significance.

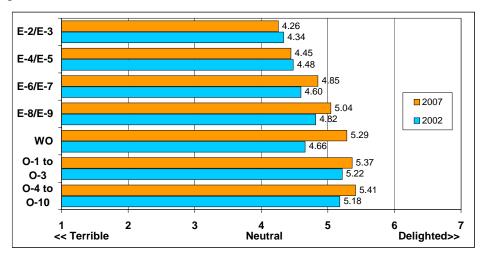


Figure 5-108. Trends in Happiness in the Income and Standard of Living Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by race/ethnicity, are shown in Table 5-120. The minimum happiness score (4.25) was seen for the small number of respondents in the Native American/Aleut/Eskimo subgroup, and the maximum happiness score (5.07) was seen for the small number of respondents in the Asian/Pacific Islander subgroup. The difference between the maximum and minimum mean happiness scores had practical significance (Cohen's *d* statistic of 0.56) as did the difference between the lowest score and the next highest, the 5.04 mean score of the Black/African American subgroup.

Table 5-120. Happiness with Income and Standard of Living by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	751	4.87	1.28
Black/African-American	113	5.04	1.19
Asian/Pacific Islander	27	5.07	0.92
Native American/Aleut/Eskimo	20	4.25	1.86
Spanish/Hispanic	80	4.54	1.44
Other	22	4.86	1.13

Gender. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by gender, are shown in Table 5-121. The average score for the small number of female respondents was 4.73, or 0.14 less than that for the male respondents. The difference seen here had no practical significance.

Table 5-121. Happiness with Income and Standard of Living by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	977	4.87	1.29
Female	55	4.73	1.38

Marital/Parental Status. The means and standard deviations of the happiness scores for the Income and Standard of Living life domain, decomposed by marital/parental status, are shown in Table 5-122. The minimum happiness score (4.00, or "Neutral") was seen for the small number of respondents in the Divorced/Widowed/Separated with Children subgroup. The highest mean happiness scores (5.06 and 5.02, or just above "Somewhat Satisfied") were seen for the two Married subgroups. The differences between the scores of these two subgroups and the lowest scoring subgroup both had practical significance.

Table 5-122. Happiness with Income and Standard of Living by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status		Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	4.00	1.21
Divorced/Widowed/Separated without Children	71	4.49	1.40
Married with Children	486	5.02	1.21
Married without Children	170	5.06	1.19
Never Been Married	279	4.61	1.42

5.12.2 Satisfaction – Cognitive Evaluations of the Income and Standard of Living Life Domain

The weighted mean cognitive or satisfaction score (Question #10g) in the Income and Standard of Living life domain for the Independent Duty Marine respondents in 2007 was 4.35, i.e., between "Neutral" and "Somewhat Satisfied" on the seven-point

satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Income and Standard of Living life domain is shown in Figure 5-109. In the overall sample, the highest percentage of respondents, 30.4 percent, responded that they were "Satisfied" with their Income and Standard of Living overall. It can be seen that the majority of the respondents, 60.1 percent, expressed some degree of satisfaction with their Income and Standard of Living, while 24.1 percent of the respondents expressed some degree of dissatisfaction. Also note that the 4.35 weighted mean for the Independent Duty Marines was noticeably higher than the 3.98 weighted overall cognitive mean found for the Base and Station respondents.

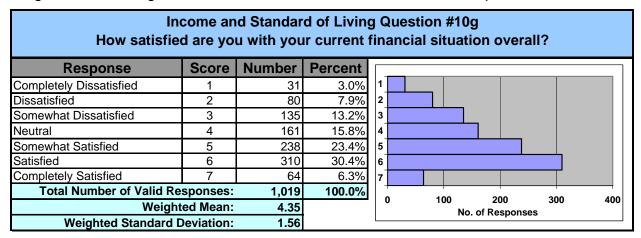


Figure 5-109. Distribution of the Overall Satisfaction Responses in the Income and Standard of Living Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the entire respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-110. Slight increases in the mean satisfaction scores were seen for IDMw/MCS and IDMw/oMCS, as well as for the overall Independent Duty Marine sample. The 2007 mean satisfaction score for the IDMw/MCS subgroup had the largest relative change from 2002, 0.37. However, no practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

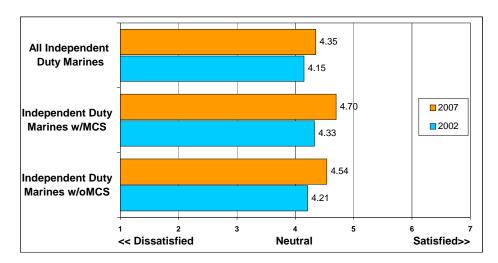


Figure 5-110. Trends in Overall Satisfaction in the Income and Standard of Living Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Income and Standard of Living life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by Pay Grade Group, are shown in Table 5-123.

Table 5-123. Satisfaction with Income and Standard of Living by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	106	3.86	1.50
E-4/E-5	270	4.17	1.54
E-6/E-7	252	4.70	1.52
E-8/E-9	114	4.94	1.36
WO	20	5.25	1.45
O-1 to O-3	93	5.17	1.33
O-4 to O-10	164	5.30	1.24

The general displeasure of the two lowest Pay Grade Groups with their Income and Standard of Living was apparent once again: The minimum satisfaction score, 3.86 (below the "Neutral" score of 4), was seen for the E-2/E-3 Pay Grade Group, and the next lowest score was the 4.17 (just above "Neutral") of the E-4/E-5 Pay Grade Group. Differences with practical significance were found between the E-2/E-3 Pay Grade Group and every other Pay Grade Group except for the E-4/E-5 Pay Grade Group. Differences with practical significance were found between the E-4/E-5 Pay Grade Group and every higher-ranking Pay Grade Group except for the E-6/E-7 Pay Grade Group.

When the trends in overall satisfaction over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group with the Income and Standard of Living life domain were examined by Pay Grade Group, as shown in Figure 5-111, increases were seen in all Pay Grade Groups examined, with the largest increase, 1.10, seen for the Warrant Officers. This difference had practical significance, based on the Cohen's *d* statistic of 0.73. None of the other differences seen in the figure, however, had practical significance.

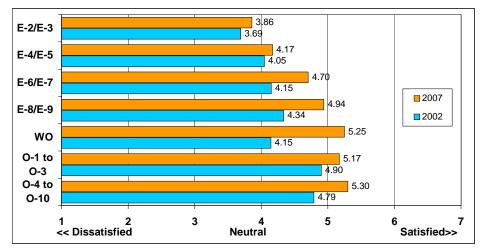


Figure 5-111. Trends in Satisfaction in the Income and Standard of Living Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by race/ethnicity, are shown in Table 5-124. The minimum satisfaction score (4.18) was seen for the small number of "Other" respondents, and the maximum satisfaction score (5.11) was seen for the Asian/Pacific Islander subgroup. There were differences of practical significance between the Asian/Pacific Islander subgroup and both of the two lowest scoring subgroups, Spanish/Hispanic and "Other" (with Cohen's *d* statistics of 0.51 and 0.66, respectively).

Table 5-124. Satisfaction with Income and Standard of Living by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	740	4.67	1.52
Black/African-American	114	4.70	1.49
Asian/Pacific Islander	27	5.11	1.19
Native American/Aleut/Eskimo	20	4.65	1.76
Spanish/Hispanic	81	4.37	1.67
Other	22	4.18	1.59

Gender. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by gender, are shown in Table 5-125.

The average score for the female respondents was 0.22 less than that for the male respondents. This difference had no practical significance.

Table 5-125. Satisfaction with Income and Standard of Living by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	968	4.67	1.52
Female	56	4.45	1.62

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Income and Standard of Living life domain, decomposed by marital/parental status, are shown in Table 5-126. The maximum mean satisfaction score for this decomposition was seen for the Married without Children subgroup, the mean satisfaction score for which was 4.90, followed closely by the score for the Married with Children subgroup (4.79). The minimum mean satisfaction score was seen for the relatively small Divorced/Widowed/Separated with Children subgroup, the mean satisfaction score for which was 3.69. The differences between that lowest-scoring subgroup and both of the Married subgroups had practical significance, having Cohen's *d* statistics of 0.68 and 0.76 respectively.

Table 5-126. Satisfaction with Income and Standard of Living by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	3.69	1.74
Divorced/Widowed/Separated without Children	71	4.34	1.56
Married with Children	487	4.79	1.49
Married without Children	170	4.90	1.45
Never Been Married	268	4.41	1.56

In addition to asking the respondents about their overall satisfaction with their Income and Standard of Living, Question #10 also asked about satisfaction with a series of six separate facets of Income and Standard of Living. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-112.

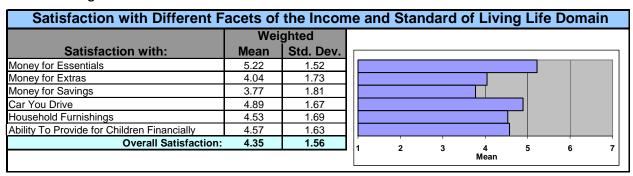


Figure 5-112. Satisfaction with Facets of Income and Standard of Living for the Independent Duty Marine Respondents

The two minimum weighted mean scores (and the two highest standard deviations) were seen for Money for Savings and Money for Extras. Further analysis indicated that the reason for this was that there were some disparities in satisfaction for those facets between Pay Grade Groups. Figure 5-113 shows the histogram of responses for satisfaction with Money for Savings. It can be seen that 40.4 percent of the Independent Duty Marine respondent sample indicated some degree of dissatisfaction with the money available for savings and 11.8 percent responded that they were "Completely Dissatisfied."

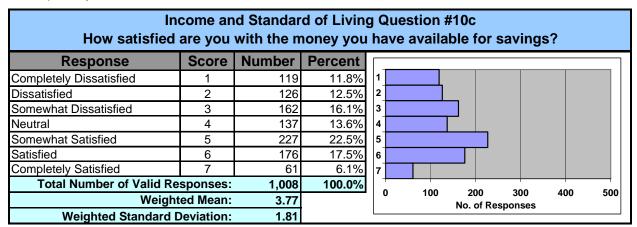


Figure 5-113. Satisfaction with Money Available for Savings for the Independent Duty Marine Respondents

When the responses to this sub-question were examined by Pay Grade Group, the minimum mean score, 3.42 for the E-2/E-3 respondents, and the maximum mean score, 4.72 for the O-4 to O-10 respondents, differed by 1.30 points. Not surprisingly, this difference had practical significance (Cohen's *d* statistic was 0.76). Similar trends were seen when the facet of Money for Extras (Question #10b) was examined.

In order to determine the factors that were key to the reported overall satisfaction in the Income and Standard of Living life domain, multiple regression of the facets of satisfaction on the overall satisfaction with Income and Standard of Living for the entire sample of Independent Duty Marine respondents was performed. The results are shown in Figure 5-114.

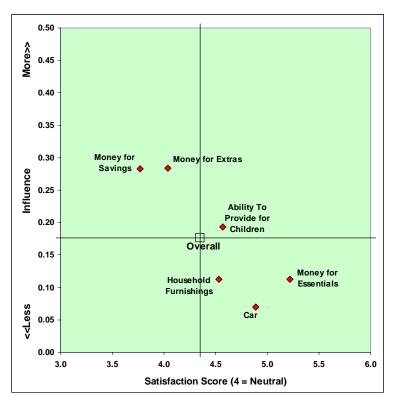


Figure 5-114. Key Driver Diagram for the Income and Standard of Living Life Domain for the Independent Duty Marine Respondents

The magnitudes of the influence factors ranged from 0.070 for Car to 0.283 and 0.284 for Money for Savings and Money for Extras, respectively. The results indicated that overall satisfaction with Income and Standard of Living was most strongly influenced by satisfaction with the Money for Extras and Money for Savings, followed by the Ability To Provide for Children. Note that these results were somewhat similar to those seen in the 2002 QoL Study, although in that earlier study Money for Essentials had the third highest influence. Money for Essentials, Household Furnishings, and the satisfaction with the one's Car had influence values that were below those of both the first three facets and the overall mean for the life domain. The mean satisfaction scores also were an important consideration. In addition to being the strongest influences on overall satisfaction in this life domain, Money for Extras and Money for Savings also had the lowest mean satisfaction scores, falling below the overall mean satisfaction score, indicating that these facets had high potential as areas for improvement that could result in higher overall satisfaction in this life domain for the Independent Duty Marine respondents. The Ability To Provide for Children, which was a slightly less influential facet, had a mean satisfaction score just above the overall mean, but also was considered a facet with some potential for improvement. Money for Essentials was a relatively non-influential facet and had the highest mean score among the facets, indicating that this facet had a low potential as an improvement opportunity.

5.12.3 Effect of Income and Standard of Living on Job Performance

Question #11 asked about the effect of the respondents' financial situations on their job performance. A histogram of the responses to that question is shown in Figure 5-115.

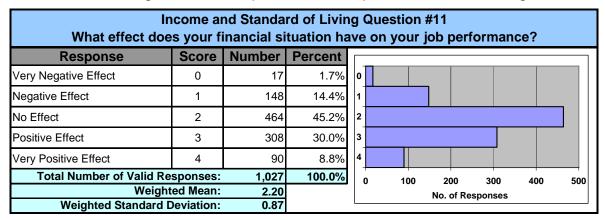


Figure 5-115. Effect of Income and Standard of Living on Job Performance for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.20, in the "No Effect" to "Positive Effect" range. Slightly under half (45.2 percent) of the respondents answered that their financial situation had no effect on their job performance. However, more respondents (398, or 38.8 percent) said their financial situation had a "Positive" or "Very Positive" effect than said that their financial situation had a "Negative" or "Very Negative" effect (165, or 16.1 percent). Not unexpectedly given the results seen earlier, both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (2.03 and 2.11, respectively) below the overall weighted mean for the question, although these differences did not have practical significance.

The effect of a respondent's financial situation on their job performance was examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups, as shown in Table 5-127. The mean scores were consistent across the subgroups, with the IDMw/MCS subgroup having a mean score 0.05 above the mean score for IDMw/oMCS.

Table 5-127. Effect of Income and Standard of Living on Job Performance for the Total Independent Duty Marine Sample and its Military Community Support Subgroups

	Independent Duty Marines								
	Т	Total Sample w/MC			S		w/oMC	S	
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	1,027	2.20	0.87	786	2.31	0.86	182	2.26	0.91

5.12.4 Effect of Income and Standard of Living on Plans To Remain on Active Duty

Question #12 asked about the effect of a respondent's financial situations on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-116.

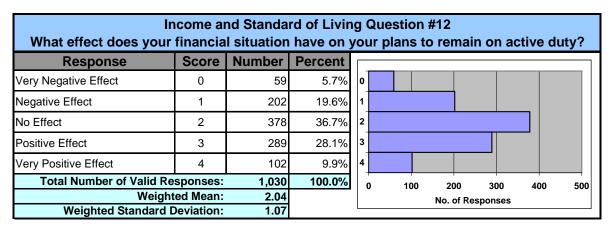


Figure 5-116. Effect of Income and Standard of Living on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.04, or only slightly above "No Effect." The largest percentage of the respondents, 36.7 percent, answered that their financial situation had no effect on their plans to remain on active duty. However, more respondents (391, or 38.0 percent) said their financial situation had a "Positive" or "Very Positive" effect on their plans to remain on active duty than said that their financial situation had a "Negative" or "Very Negative" effect (261, or 25.3 percent). Once again, both the E-2/E-3 and E-4/E-5 Pay Grade Groups had mean scores (1.79 and 1.99, respectively), less than the overall weighted mean. Since these Marines tended to have the lowest happiness and satisfaction scores in this life domain, the impact of those perceptions on their plans to remain on active duty may be cause for some concern.

The effects of a respondent's financial situation on their plans to remain on active duty were examined for the entire Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups, as shown in Table 5-128. Again, the mean scores were consistent across the subgroups, with the IDMw/MCS subgroup having a mean score 0.05 above the mean score for IDMw/oMCS.

Table 5-128. Effect of Income and Standard of Living on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample w/MCS			w/oMCS					
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	1,030	2.04	1.07	791	2.17	1.02	182	2.12	1.11

5.12.5 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Income and Standard of Living life domain were examined. The results are presented below.

Question #2 asked the respondents if they had experienced any of a set of financial hardships since arriving at their present duty location. Table 5-129 shows the percentage of responses to each hardship for the 2007 Independent Duty Marine respondent sample.

Table 5-129. Financial Hardships Experienced by Independent Duty Marine Respondents

Financial Hardship	Percentage Who Experienced
Difficulty Meeting Monthly Obligations	18.2%
Letter of Indebtedness to Your Command	1.5%
Reposession of Something Purchased	0.6%
Bankruptcy	0.5%
Crisis Loan from Military Relief	1.8%
Trouble over Child Support Payments	1.5%
None of the Above	74.7%

A total of 74.7 percent of the Independent Duty Marine respondents in 2007 answered that they had experienced none of the financial hardships listed in Question #2. Relatively low percentages of respondents selected most of the other financial hardship options, with the exception of "Difficulty Meeting Monthly Financial Obligations," which was selected by 18.2 percent of the Independent Duty Marine respondents. It is noteworthy that the percentages of respondents who chose each of the financial hardships shown was smaller for the Independent Duty Marines than they were for the Base and Station respondents, likely reflecting the higher mix of pay grades in the former group.

Question #4 asked the respondents if they had a second (civilian) job. Only 6.3 percent of Independent Duty Marines responded that they had a second job, slightly less than the 7.5 percent of Base and Station respondents who answered similarly. Subsequently, for Question #5 (which asked the respondents to select from a list of options the main reason why they had a second job), only 14 respondents, or 1.3 percent of the overall Independent Duty Marine sample, responded that they had taken on a second job in order to meet monthly financial obligations.

Question #7 asked the respondents to select how much money certain Marine Corpsprovided benefits saved them by choosing one of the following answers: "Does Not Apply," "Nothing at All," "A Little," "Some," "Quite a Bit," or "A Great Deal." The responses were examined for the total Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups who answered that these amenities or benefits saved them either "Quite a Bit" or "A Great Deal," which will be collectively referred to as the percentage of respondents who 'reported favorably' on a benefit. The results are shown in Table 5-130.

Table 5-130. Percentages of Independent Duty Marine Respondents Who Save "Quite a Bit' or "A Great Deal" Using Marine Corps Benefits and Amenities

	Percentage of Respondents Answering That These Aspects Saved Them "Quite a Bit" or "A Great Deal"						
	Base Exchange						
Total Sample	10.23%	25.16%	19.35%	59.45%	12.53%		
IDMw/MCS	11.87%	30.28%	18.79%	62.92%	12.98%		
IDMw/oMCS	2.14%	5.88%	12.50%	51.34%	6.42%		

As might be expected given the definition of the two Military Community Support subgroups, the percentages of respondents who reported favorably were similar for all benefits categories between the total Independent Duty Marine sample and the IDMw/MCS subgroup. In contrast, the percentages of the IDMw/oMCS subgroup that reported favorably were noticeably lower in all categories, with the exception of Health Care Benefits, in which the percentage was only slightly lower. Examining the table horizontally, it can be seen that Health Care Benefits elicited, by far, the maximum percentage of respondents who reported favorably, while the minimum percentages of respondents who reported favorably were seen for the Base Exchange and Military Housing. Note that Military Childcare was treated somewhat differently from the other benefits/amenities examined in this question since many respondents e.g., non-parents (who were instructed to answer "Does Not Apply"), had no reason to take advantage of that option. To get a better perspective on the opinions of the respondents for whom this option was relevant, the percentages shown in the table were computed using only the opinions of the respondents who gave a valid response other than "Does Not Apply."

5.12.6 Conclusions for the Income and Standard of Living Life Domain for the Independent Duty Marine Respondents

Satisfaction and happiness in the Income and Standard of Living life domain for the Independent Duty Marines remained relatively consistent (and rising modestly) in 2007 when compared to the results from the 2002 QoL Study. Also, there was relative consistency in satisfaction, happiness, effect on job performance, and effect on plans to remain on active duty between the IDMw/MCS and the IDMw/oMCS subgroups. There were, however, differences of practical significance in happiness and satisfaction when the respondent data were decomposed demographically, specifically with respect to Pay Grade Group, race/ethnicity, and marital/parental status. Marines in the E-2/E-3 and the E-4/E-5 Pay Grade Groups were much less happy and less satisfied with their Income and Standard of Living, as were the members of the Divorced/Widowed/ Separated with Children subgroup. High-ranking officers and married Marines tended to be particularly happy and satisfied with their Income and Standard of Living. Money available for extras and for savings were key drivers in this life domain and appeared to be the primary causes of dissatisfaction among Marines who indicated that they were dissatisfied with their financial situation. The members of this respondent group also

rated their happiness and satisfaction markedly higher than the Base and Station respondents, a result of the higher-ranking mix of members of this respondent group.

5.13 THE MILITARY JOB LIFE DOMAIN

5.13.1 Happiness – Affective Evaluations of the Military Job Life Domain

The weighted mean affective or happiness score (Question #1) for the Military Job life domain for the Independent Duty Marine respondents in 2007 was 4.34, somewhat above "Neither Unhappy Nor Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-117. It can be seen that 60.6 percent of the Independent Duty Marine respondents answered they were in some way happy with the state of their job, nearly triple the 23.1 percent who were unhappy. Also note that the 4.51 weighted mean for the Independent Duty Marines was somewhat higher than the 4.06 weighted overall affective mean found for the Base and Station respondents.

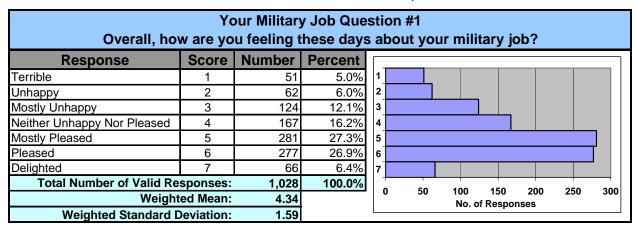


Figure 5-117. Distribution of the Overall Happiness Responses in the Military Job
Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-118. The 2007 weighted mean overall D-T score decreased (by 0.22) from the 2002 weighted score as did the IDMw/oMCS (by 0.07), while the IDMw/MCS increased (by 0.01). However, none of the differences seen here had any practical significance.

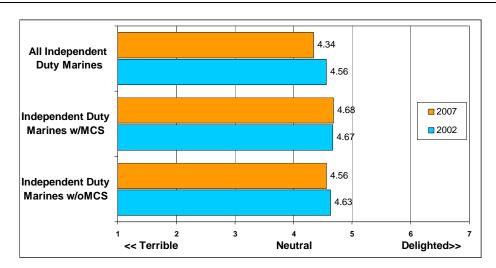


Figure 5-118. Trends in Overall Happiness in the Military Job Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Military Job life domain also was analyzed by decomposing the Independent Duty Marine respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by Pay Grade Group, are shown in Table 5-131.

Table 5-131. Happiness with Military Job by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	107	3.88	1.59
E-4/E-5	272	4.32	1.55
E-6/E-7	256	4.53	1.59
E-8/E-9	114	5.00	1.33
WO	21	5.10	1.41
O-1 to O-3	93	4.86	1.55
O-4 to O-10	165	5.24	1.16

Some noticeable differences appeared within this decomposition. The subgroup scores ranged widely, from below "Neither Unhappy Nor Pleased" for the E-2/E-3 Pay Grade Group (3.88) to above "Mostly Pleased" for the Warrant Officers (5.10) and the O-4 to O-10 Pay Grade Group (5.24). The mean scores in the enlisted Pay Grade Groups increased with pay grade, but there was no clear trend for the officer Pay Grade Groups. The difference between the means of the E-2/E-3 and the O-4 to O-10 Pay Grade Groups had practical significance, with a Cohen's *d* statistic of 0.98, indicating a very large effect size. In fact, practical significance was found for the differences in the results for the E-2/E-3 Pay Grade Group and those of the E-8/E-9 and all three officer Pay Grade Groups. In addition, practical significance was found for the differences in

the results of the O-4 to O-10 Pay Grade Group and each of the three lowest enlisted Pay Grade Groups (i.e., the E-2/E-3, E-4/E-5, and E-6/E-7 Pay Grade Groups).

When the trends in the overall happiness with the Military Job life domain were examined by Pay Grade Group, as shown in Figure 5-119, no clear trend was seen. The mean scores in two Pay Grade Groups, E-2/E-3 and E-6/E-7, decreased by 0.52 and 0.15, respectively, while a third, the E-4/E-5 decreased negligibly (by 0.01). Only the E-2/E-3 Pay Grade Group had a score below that of the neutral response "Neither Unhappy Nor Pleased." Of the differences seen here, only the decrease in the E-2/E-3 had practical significance.

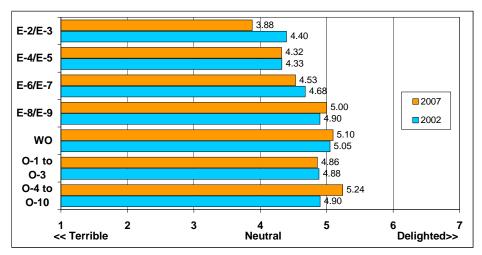


Figure 5-119. Trends in Happiness in the Military Job Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by race/ethnicity, are shown in Table 5-132. The Native American/Aleut/Eskimo respondents were least happy with their military job (3.60), while the members of the Black/African-American subgroup were the happiest (4.77). A medium effect size (0.64 as calculated by the Cohen's *d* statistic) was seen in the difference between these extremes, although discounting the Native American/Aleut/Eskimo group, all other racial/ethnic groups considered in this study were equally happy with their military job.

Table 5-132. Happiness with Military Job by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	748	4.67	1.49
Black/African-American	116	4.77	1.55
Asian/Pacific Islander	28	4.54	1.40
Native American/Aleut/Eskimo	20	3.60	2.06
Spanish/Hispanic	81	4.53	1.66
Other	22	4.23	1.80

Gender. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by gender, are shown in Table 5-133. The mean scores for the male and female respondents differed by only 0.05, too small to be of practical significance.

Table 5-133. Happiness with Military Job by Gender for the Independent Duty

Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	978	4.63	1.53
Female	55	4.58	1.55

Marital/Parental Status. The means and standard deviations of the happiness scores for the Military Job life domain, decomposed by marital/parental status, are shown in Table 5-134. The scores were relatively consistent across the subgroups, with a maximum mean of 4.85 for the Married with Children subgroup and a minimum score of 4.19 for the Divorced/Widowed/Separated without Children subgroup. None of the differences seen here had any practical significance: The largest Cohen's *d* statistic (of 0.40) was seen between the extremes.

Table 5-134. Happiness with Military Job by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	17	4.35	1.58
Divorced/Widowed/Separated without Children	72	4.19	1.88
Married with Children	487	4.85	1.43
Married without Children	170	4.74	1.50
Never Been Married	276	4.30	1.54

5.13.2 Satisfaction – Cognitive Evaluations of the Military Job Life Domain

The weighted mean cognitive or satisfaction score (Question #14n) in the Military Job life domain for the Independent Duty Marine respondents in 2007 was 4.78, i.e., most of the way between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Military Job life domain is shown in Figure 5-120. The highest percentage of respondents, 41.0 percent, responded that they were "Satisfied" with their military job overall, while only 14.0 percent of the respondents were dissatisfied with their job in any way. Also note that the 4.78 weighted mean for the Independent Duty Marines was somewhat higher than the 4.50 weighted overall cognitive mean found for the Base and Station respondents.

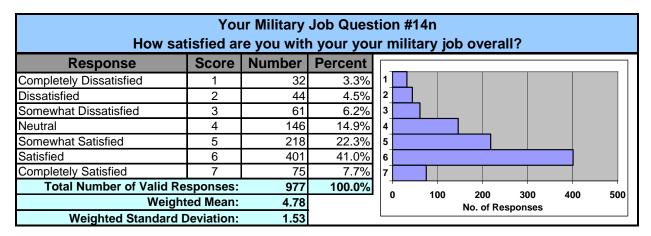


Figure 5-120. Distribution of the Overall Satisfaction Responses in the Military Job Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-121. The 2007 weighted mean overall satisfaction score for Military Job increased by 0.07 from the 2002 weighted score. Similarly, the scores for both the IDMw/MCS and the IDMw/oMCS saw increases (0.20 and 0.15, respectively). However, these increases had no practical significance, since the largest effect size had a Cohen's *d* statistic of only 0.13.

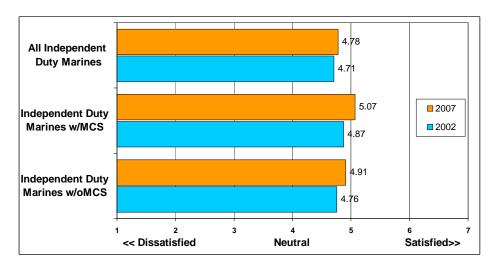


Figure 5-121. Trends in Overall Satisfaction in the Military Job Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Military Job life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by Pay Grade Group, are shown in Table 5-135.

Table 5-135. Satisfaction with Military Job by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	98	4.44	1.64
E-4/E-5	260	4.59	1.54
E-6/E-7	244	5.12	1.36
E-8/E-9	105	5.37	1.26
WO	21	5.71	1.10
O-1 to O-3	91	5.20	1.38
O-4 to O-10	158	5.53	1.03

Most of the subgroup scores, with the exceptions of the two lower enlisted Pay Grade Groups, were above "Somewhat Satisfied." The WO Pay Grade Group had the highest mean (5.71). However, the results from the two lowest enlisted Pay Grade Group stood out: The E-2/E-3 and E-4/E-5 Pay Grade Groups again had the lowest means scores of all the Pay Grade Groups. In fact, their scores were so low that differences with practical significance were found between the scores of the E-2/E-3 Pay Grade Group and the E-8/E-9 and all three of the officer Pay Grade Groups, and between the E-4/E-5 Pay Grade Group and the E-8/E-9, Warrant Officer and O-4 to O-10 Pay Grade Groups.

When the trends in the overall satisfaction with the Military Job life domain were examined by Pay Grade Group, as shown in Figure 5-122, it was seen that satisfaction in 2007 was about the same or higher than it had been in 2002 across all but one of the Pay Grade Groups. The exception was the E-2/E-3 Pay Grade Group, where the satisfaction of the Independent Duty Marines had declined by 0.12. Only two Pay Grade Groups, E-2/E-3 and E-4/E-5, had mean scores below the "Somewhat Satisfied" level, pulling down the 2007 overall satisfaction mean. Both Warrant Officers and the O-4 to O-10 Pay Grade Groups both saw large increases in their mean cognitive scores, although these changes had no practical significance.

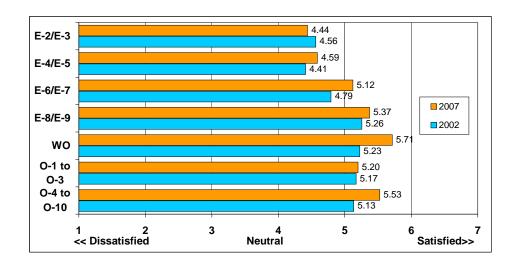


Figure 5-122. Trends in Satisfaction in the Military Job Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by race/ethnicity, are shown in Table 5-136. The Native American/Aleut/Eskimo subgroup had the lowest mean satisfaction level and the Black/African-American and White subgroup were the most satisfied, with the Spanish/Hispanic subgroup only 0.02 below. None of the differences among race/ethnicity had any practical significance.

Table 5-136. Satisfaction with Military Job by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	709	5.06	1.43
Black/African-American	111	5.06	1.34
Asian/Pacific Islander	25	4.88	1.42
Native American/Aleut/Eskimo	20	4.55	1.64
Spanish/Hispanic	74	5.04	1.44
Other	22	4.77	1.41

Gender. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by gender, are shown in Table 5-137. The female respondents rated their satisfaction with their military job 0.14 higher than did the male respondents. However, this difference had no practical significance.

Table 5-137. Satisfaction with Military Job by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	923	5.02	1.43
Female	56	5.16	1.39

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Military Job life domain, decomposed by marital/parental status, are shown in

Table 5-138. It can be seen that Independent Duty Marines with children, regardless of their marital status, rated their satisfaction with their job substantially higher than those without children. In fact, the respondents in the Divorced/Widowed/Separated without Children and the Never Been Married subgroups had the lowest scores (4.70 and 4.67, respectively) and were the only subgroups scoring below "Somewhat Satisfied." The Married with Children respondents had the highest satisfaction score of 5.27. None of the differences seen here had any practical significance.

Table 5-138. Satisfaction with Military Job by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	16	5.25	1.29
Divorced/Widowed/Separated without Children	69	4.70	1.70
Married with Children	469	5.27	1.28
Married without Children	161	5.09	1.45
Never Been Married	254	4.67	1.52

In addition to asking the respondents about their overall satisfaction with their military job, Question #14 also asked about satisfaction with a series of 12 separate facets of their job. The weighted mean and standard deviation scores for each of these facets are shown in Figure 5-123. The lowest weighted score (4.41) was seen in the satisfaction with Pay and Benefits. Amount of Job Security scored the highest of all facets (5.69) and was one of only three facets with an average above "Somewhat Satisfied" (the other two being Amount of Responsibility, 5.07, and Amount of Challenge, 5.03)

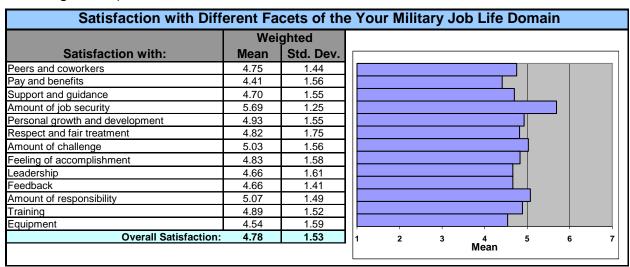


Figure 5-123. Satisfaction with Facets of Military Job for the Independent Duty

Marine Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with military job for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-124. Note that, as was the case for the Neighborhood life

domain, the large number of facet satisfactions included in the regression required the use of a slightly different form of the key driver diagram (one that uses a legend and does not place the facet satisfaction names in the diagram itself) has been used; however, the consistent scaling of the chart has been maintained.

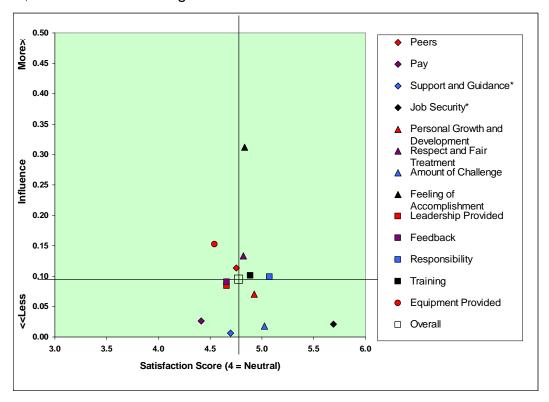


Figure 5-124. Key Driver Diagram for the Your Military Job Satisfaction Facets for the Independent Duty Marine Respondents

The magnitudes of the facet satisfactions ranged from a low of 0.006 for Support and Guidance¹⁰⁰ to a high of 0.312 for Feeling of Accomplishment. Although its mean score was slightly higher (by 0.05) than the overall mean, Feeling of Accomplishment had the largest influence on the Military Job life domain; an improvement in this facet is likely to create a large increase in the overall satisfaction of the Independent Duty Marine respondents. Another focal point for improvement would be Equipment Provided: Satisfaction with this facet of Military Job had the second largest level of influence and it was the facet with the second-lowest mean score. Other facets with influences greater than that of the overall domain mean were Respect and Fair Treatment, Peers, Training, and Responsibility. All four of these facets had higher satisfaction scores than the overall domain mean, indicating that it is still important to maintain, if not improve, satisfaction in these areas. Note that the results seen here were somewhat different than those that were found for the Independent Duty Marines in the 2002 QoL Study, in which Feeling of Accomplishment, Respect and Fair

¹⁰⁰ In actuality, the beta weight for this facet was negative, implying a slight negative correlation between that facet and overall domain satisfaction. The same was true for Job Security, which had a beta value of magnitude of 0.021.

Treatment and Responsibility were the three most influential facets of satisfaction with military job.

5.13.3 Effect of Military Job on Job Performance

Due to the subject of this life domain, this question was irrelevant and was not asked.

5.13.4 Effect of Military Job on Plans To Remain on Active Duty

Question #17 asked about the effect of their military job on the respondents' plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-125.

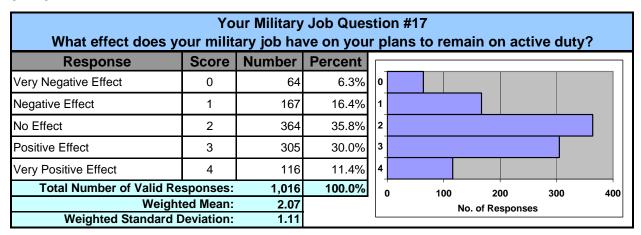


Figure 5-125. Effect of Military Job on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.07, falling just above "No Effect." The most frequently chosen response was "No Effect." Although 41.4 percent of the respondents answered their military job had some degree of positive effect (versus the 22.7 percent that said it had some degree of negative effect), the population weighted mean of 2.07 suggests that the Independent Duty Marines as a whole felt their job had little effect on their plans to remain on active duty.

The effect of their military job on the respondents' plans to remain on active duty was examined for the entire Independent Duty Marine sample, and for the IDMw/MCS and IDMw/oMCS subgroups. The results are shown in Table 5-139. As was the case for the entire Independent Duty Marine respondent group, the IDMw/MCS and the IDMw/oMCS subgroups both felt that their military job had only a slight positive effect on their plans to remain on active duty, although the respondents with Military Community Support said they were slightly more likely to remain on active duty than their cohorts without Military Community Support, though the difference had no practical significance.

Table 5-139. Effect of Military Job on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

	Independent Duty Marines								
_	Total Sample w/MCS w/oMCS				S				
Question	Count	Count Mean Std. Dev.			Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	1,016	2.07	1.11	780	2.27	1.07	181	2.14	0.99

5.13.5 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Military Job life domain were examined. The results are presented below.

Question #2 asked the respondents to indicate how many hours they worked in a typical week. Figure 5-126 shows the responses to that question. Note that only those responses between 20 and 126 hours per week were considered valid and included in the calculations. It can be seen that almost none of the respondents claimed to work less than 40 hours per week. The valid responses were distributed fairly evenly among the other ranges considered, although the greatest number of respondents (268, or 27.5 percent) said that they worked more than 60 hour per week. The average number of hours worked per week by the Independent Duty Marine respondents was 57.6 hours.

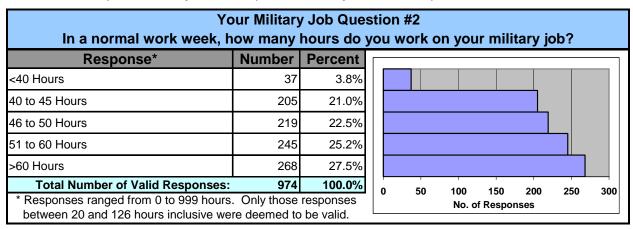


Figure 5-126. Average Number of Hours Worked Each Week for the Independent Duty Marine Respondents

Question #4 asked the respondents to indicate how well their Marine Corps training prepared them for their present job. ¹⁰¹ Figure 5-127 shows the responses to that question. Only 5.7 percent of the respondents thought that their training was not pertinent to their current work. The most common response (49.1 percent) was that respondents thought that their training prepared them "Pretty Well" for their present job.

¹⁰¹ Adequacy of training is also a component of the Personal Readiness composite variable used in the SEM analysis discussed later in this report.

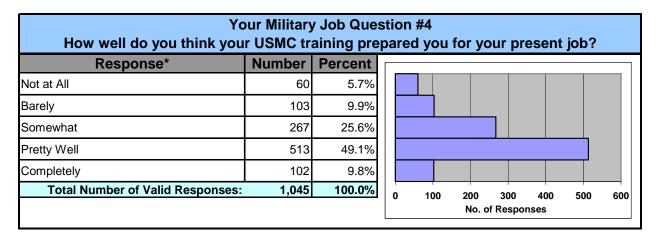


Figure 5-127. Self-Evaluation of Adequacy of Training by the Independent Duty

Marine Respondents

Question #10 asked the respondents how much time they had taken off from duty during the past month for a set of six personal reasons. The respondents were instructed to include time when they arrived late or left early, but not to include scheduled leave time.

Question #10a asked about time off duty for non-duty-related education (see Figure 5-128). The majority of the respondents (90.1 percent) said they had taken no time off duty for education. Only 2.4 percent of the respondents said they had missed 1 or more days of duty for educational reasons.

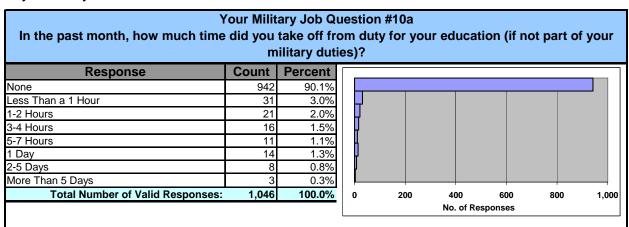


Figure 5-128. Time Off Duty for Education for the Independent Duty Marine Respondents

Question #10b asked about time off duty due to transportation problems (see Figure 5-129). The majority of the respondents (87.5 percent) said they had taken no time off duty due to transportation problems. Only 1.3 percent of the respondents said they had missed 1 or more days of duty because of transportation problems.

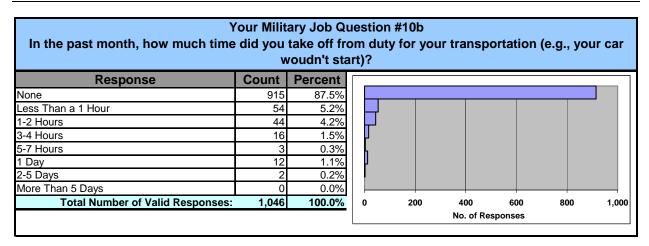


Figure 5-129. Time Off Duty Due to Transportation Problems for the Independent Duty Marine Respondents

Question #10c asked about time off duty for pregnancy reasons (see Figure 5-130). The majority of the respondents (93.9 percent) answered that they had taken no time off duty for pregnancy-related reasons. Only 2.6 percent of the respondents said they had missed 1 or more days of duty due to pregnancy-related issues.

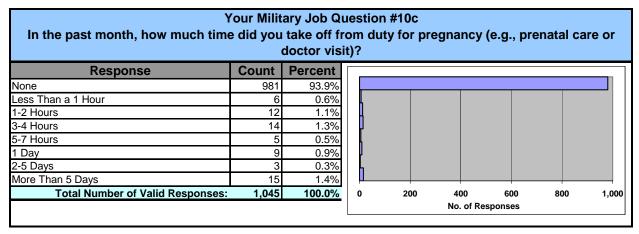


Figure 5-130. Time Off Duty for Pregnancy for the Independent Duty Marine Respondents

Question #10d asked about time off duty for health reasons (see Figure 5-131). The majority of the respondents (62.7 percent) said they had taken no time off duty for health reasons in the past month. In contrast to the previous questions, a fairly high percentage (11.7 percent) of the respondents said they had missed 1 or more days of duty due to health reasons.

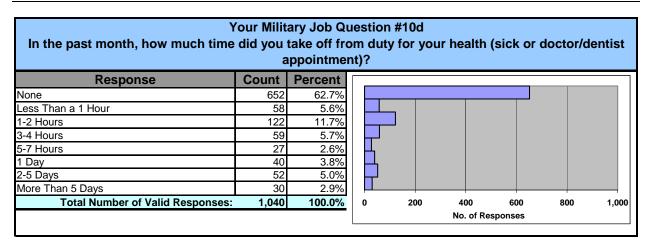


Figure 5-131. Time Off Duty for Health Reasons for the Independent Duty Marine Respondents

Question #10e asked about time off duty for personal business (see Figure 5-132). The majority of the respondents (70.1 percent) said they had taken no time off duty for personal business. Only 3.9 percent of the respondents said they had missed 1 or more days of duty for personal business.

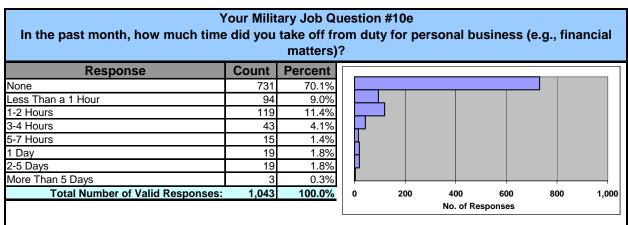


Figure 5-132. Time Off Duty for Personal Business for the Independent Duty

Marine Respondents

Question #10f asked about time off duty for other personal reasons (see Figure 5-133). The majority of the respondents (62.9 percent) said they had taken no time off duty for personal reasons. Only 8.2 percent of the respondents said they had missed 1 or more days of duty for other personal reasons.

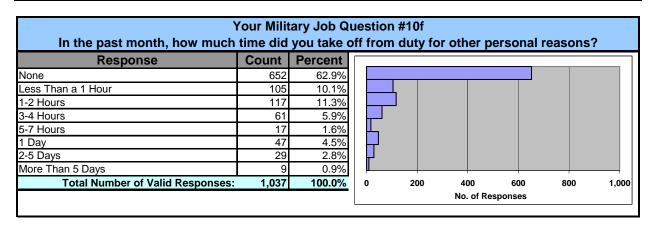


Figure 5-133. Time Off Duty for Other Personal Reasons for the Independent Duty Marine Respondents

Question #11 asked the respondents how much time they had taken off duty during the past month for a set of five family reasons. As was the case for Question #10, the respondents were instructed to include time when they arrived late or left early, but not to include scheduled leave time. Note that 216 members of the Independent Duty Marine respondents were not included in the results shown below, since they responded "Do not have family with me" and were instructed to skip this question.

Question #11a asked about time off duty to care for children (see Figure 5-134). The majority of the respondents (70.5 percent) said they had taken no time off duty to care for children. Only 7.6 percent of the respondents said they had missed 1 or more days of duty to care for children.

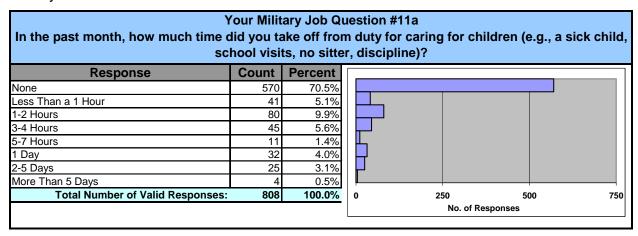


Figure 5-134. Time Off Duty To Care for Children for the Independent Duty Marine Respondents

Question #11b asked about time off duty to help their spouse (see Figure 5-135). The majority of the respondents (76.3 percent) said they had taken no time off duty to help their spouse. Only 6.9 percent of the respondents said they had missed 1 or more days of duty helping their spouse.

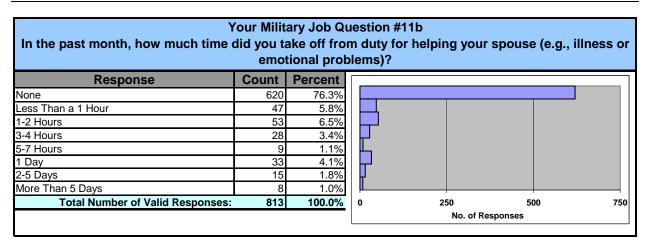


Figure 5-135. Time Off Duty To Help a Spouse for the Independent Duty Marine Respondents

Question #11c asked about time off duty for family business (see Figure 5-136). The majority of the respondents (79.4 percent) said they had taken no time off duty for family business. Only 3.7 percent of the respondents said they had missed 1 or more days of duty due to family business.

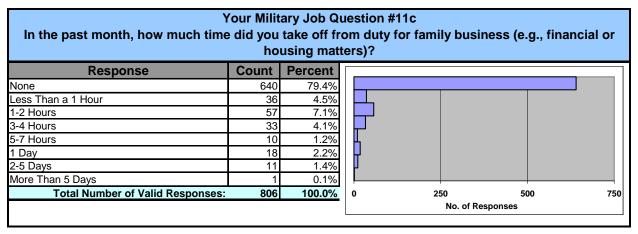


Figure 5-136. Time Off Duty for Family Business for the Independent Duty Marine Respondents

Question #11d asked about time off duty for family transportation (see Figure 5-137). The majority of the respondents (84.5 percent) said they had taken no time off duty for family transportation. Only 2.1 percent of the respondents said they had missed 1 or more days of duty for family transportation.

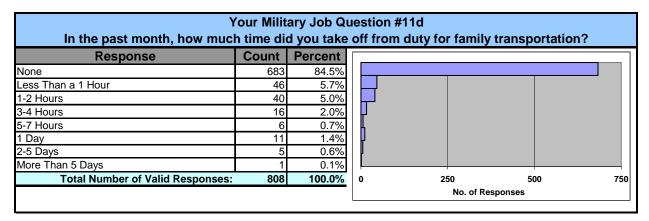


Figure 5-137. Time Off Duty for Family Transportation for the Independent Duty

Marine Respondents

Question #11e asked about time off duty for other family matters (see Figure 5-138). The majority of the respondents (75.3 percent) said they had taken no time off duty for other family matters. Only 5.9 percent of the respondents said they had missed 1 or more days of duty for other family matters.

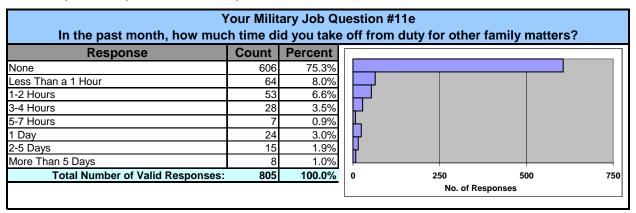


Figure 5-138. Time Off Duty for Family Matters for the Independent Duty Marine Respondents

Question #12 asked the respondents about the provisions they may have made for a short-notice deployment. A histogram of the "No" responses to this question is shown in Figure 5-139. Notice that, given that the "N/A" option eliminated those respondents for whom a given action/provision was unnecessary, the "No" responses are important because they indicated the number of respondents that were likely to need to take action on each provision included in the question. The numbers are highlighted in the figure to draw attention to them.

Quality of Life (QoL) in the U.S. Marine Corps Study Final Report

Your Military Job Question #12 If you had to deploy on short notice, have you made provisions for:								
Response	N/A	No	Yes					
A Will	73	341	611					
A Joint Checking Account	212	161	651					
A Power of Attorney	99	383	535					
Storage of Possessions	323	324	368					
Payment of Bills	77	157	787					
Elder Care	848	119	53					
Care of Pets	564	99	363					
Lease Obligations	520	132	368			_		
Management of Investments	290	163	569					
Modifying Official Records If Necessary	291	276	447					
				0	100	200	300	400
					Numb	er of "No" R	esponses	

Figure 5-139. Preparations for Short-Notice Deployment by the Independent Duty

Marine Respondents

The three provisions with the highest number of negative responses (each were selected 300 or more times) were a power of attorney (383 selections), a will (341 selections), and storage of possessions (324 selections). Another option that many respondents needed to perform was modifying official records (276 selections). Even the provision that was selected the fewest number of times (care of pets, which was selected 99 times) was chosen by about 9.7 percent of the members of the Independent Duty Marine respondent group.

Question #13 asked about the personal commitment of the respondents to the Marine Corps, referred to as their "Organizational Commitment." This measure has been addressed explicitly in all three previous Marine Corps QoL study reports. The Organizational Commitment composite variable comprised a battery of 11 separate subquestions, each measured on a seven-point scale from "Completely Disagree" to "Completely Agree." Such a battery can be applied either by averaging the responses to the individual sub-questions from each respondent (as was done in the SEM analyses discussed later), or by displaying how each aspect of the battery was scored.

The latter was done to create Figure 5-140, where the results for the 2007 Independent Duty Marine respondents were compared with those of the 2002 Independent Duty Marine respondents on 10 of the 11 sub-questions. One sub-question was deleted because a factor analysis performed on the 11 sub-questions indicated that "Most things in life are more important than work" (when reverse-coded to give negative responses a larger score) had consistently low correlation with the other sub-questions. That sub-question was deleted from both the 1998 and 2002 QoL Study Reports for the same reason.

¹⁰² Organizational Commitment is also a component of the Personal Readiness composite variable used in the SEM analysis discussed later in this report.

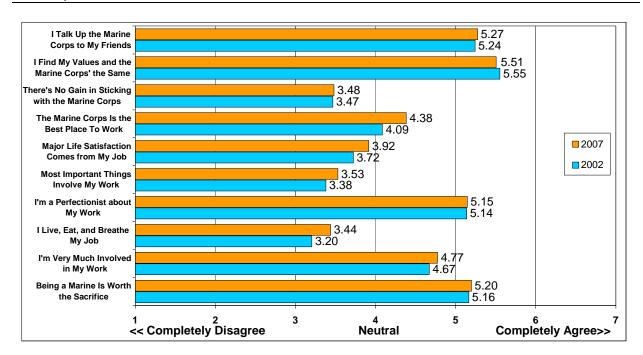


Figure 5-140. Organizational Commitment of the Independent Duty Marine Respondents

When reviewing the results shown in the figure, it can be seen that most of the subquestions saw results very similar to those from 2002. Although the magnitudes of none of the changes were great, the mean values for two of the sub-questions decreased (but by only 0.04 and 0.01¹⁰³) while the mean value for the remaining nine sub-questions increased (by from 0.01 to 0.29). The largest changes were positive and were seen in "The Marine Corps Is the Best Place To Work" and "I Live, Eat, and Breathe My Job," both of which indicate an increase in the importance of the Marine Corps in the lives of the respondents.

Question #16 asked about the frequency of seven potential problems on the job ¹⁰⁵ in the past month, and gave the respondents five response options ranging from "None of the Time" to "All of the Time." The respondents were divided into those who previously had been deployed in support of OIF/OEF and those who had not. The results for each sub-question are discussed below. Note that the table includes a column showing the differences between the percentages of respondents with and without OIF/OEF experience that chose each response option. Thus, negative values indicate that a higher percentage of the respondents without OIF/OEF experience chose a particular response option than did those with OIF/OEF experience.

¹⁰³ Note that the average response in 2007 to the question "There's No Gain in Sticking with the Marine Corps" was 0.01 higher than the average response in 2002. However, since this was a negatively-worded question, that increase in agreement with the statement represented a decrease in the organizational commitment of the respondents.

¹⁰⁴ Note that the sub-questions' statements were reworded for brevity in the figure.

¹⁰⁵ Job problems are also a component of the Personal Readiness composite variable used in the SEM analysis discussed later in this report.

Table 5-140 addresses the frequency with which the respondents' mind was not on the job. It can be seen that the respondents who had been deployed in support of OIF/OEF said they did not have their minds on the job somewhat less frequently than those respondents who had never been deployed in support of OIF/OEF. This is shown by the negative values in the upper rows of the "Difference in Percentages" column in the table. That is, the respondents with deployment experience admitted to having a higher level of focus while on their jobs.

Table 5-140. Frequency of Job Problems - Mind Not on Job (#16a) - for the Independent Duty Marine Respondents

	OIF/C				
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percent	Percentages
All of the Time	8	1.3%	16	3.9%	-2.6%
Most of the Time	37	5.9%	30	7.3%	-1.5%
Some of the Time	210	33.2%	140	34.2%	-1.0%
A Little of the Time	293	46.4%	157	38.4%	8.0%
None of the Time	84	13.3%	66	16.1%	-2.8%
Total	632	100.0%	409	100.0%	0.0%

Table 5-141 addresses the frequency with which the respondents admitted they had lost their temper. Those respondents with OIF/OEF deployment experience seemed to have lost their temper fractionally more often than those respondents without OIF/OEF deployment experience. That is, the respondents with deployment experience reported being slightly worse off than those without OIF/OEF experience.

Table 5-141. Frequency of Job Problems - Loss of Temper (#16b) - for the Independent Duty Marine Respondents

	OIF/0				
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percent	Percentages
All of the Time	13	2.0%	9	2.2%	-0.2%
Most of the Time	26	4.1%	16	3.9%	0.2%
Some of the Time	124	19.5%	75	18.3%	1.2%
A Little of the Time	205	32.2%	107	26.1%	6.1%
None of the Time	268	42.1%	203	49.5%	-7.4%
Total	636	100.0%	410	100.0%	0.0%

Table 5-142 addresses the frequency with which the respondents accomplished less than they would have liked. The differences seen between the two groups indicate that those with OIF/OEF experience accomplished less than desired at a lower frequency than those without OIF/OEF experience. That is, the respondents with OIF/OEF deployment experience reported being slightly better off than those without such experience.

Table 5-142. Frequency of Job Problems - Accomplished Less Than Desired (#16c) - for the Independent Duty Marine Respondents

	OIF/C	ience			
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percent	Percentages
All of the Time	17	2.7%	24	5.9%	-3.2%
Most of the Time	70	11.1%	42	10.4%	0.7%
Some of the Time	210	33.2%	127	31.4%	1.8%
A Little of the Time	254	40.1%	153	37.8%	2.3%
None of the Time	82	13.0%	59	14.6%	-1.6%
Total	633	100.0%	405	100.0%	0.0%

Table 5-143 addresses the frequency with which the respondents were not at their best. For this measure, the respondents with OIF/OEF deployment experience reported a lower frequency of this problem, as indicated by the negative values in the upper rows of the "Difference in Percentages" column in the table. That is, the respondents with OIF/OEF deployment experience reported being better off than those without such experience.

Table 5-143. Frequency of Job Problems - Not at Their Best (#16d) - for the Independent Duty Marine Respondents

	OIF/0				
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percent	Percentages
All of the Time	7	1.1%	10	2.5%	-1.3%
Most of the Time	27	4.3%	30	7.4%	-3.1%
Some of the Time	151	24.1%	101	24.8%	-0.7%
A Little of the Time	333	53.2%	200	49.1%	4.1%
None of the Time	108	17.3%	66	16.2%	1.0%
Total	626	100.0%	407	100.0%	0.0%

Table 5-144 addresses the frequency with which the respondents admitted that they were more likely to make mistakes. Again, the respondents with OIF/OEF deployment experience reported that they were somewhat less likely to make mistakes, as indicated by the relatively large negative values in the second and third rows of the "Difference in Percentages" column in the table and the larger value in the "None of the Time" response. That is, the respondents with OIF/OEF deployment experience reported being better off than those without such experience.

Table 5-144. Frequency of Job Problems - More Likely To Make Mistakes (#16e) - for the Independent Duty Marine Respondents

	OIF/C	ience			
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percent	Percentages
All of the Time	6	1.0%	3	0.7%	0.2%
Most of the Time	7	1.1%	21	5.2%	-4.1%
Some of the Time	68	10.8%	59	14.6%	-3.7%
A Little of the Time	332	53.0%	200	49.4%	3.6%
None of the Time	214	34.1%	122	30.1%	4.0%
Total	627	100.0%	405	100.0%	0.0%

Table 5-145 addresses the frequency with which the respondents had their performance criticized by their co-workers. Once again, the respondents with OIF/OEF deployment experience reported much less likelihood of having had their performance criticized, as indicated by the negative values in the upper rows of the "Difference in Percentages" column in the table and the very large value in the "None of the time" response. That is, the respondents with OIF/OEF deployment experience reported being better off than those without such experience.

Table 5-145. Frequency of Job Problems – Performance Criticized by Co-Workers (#16f) - for the Independent Duty Marine Respondents

	OIF/0				
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percent	Percentages
All of the Time	7	1.1%	26	6.4%	-5.2%
Most of the Time	7	1.1%	30	7.3%	-6.2%
Some of the Time	61	9.7%	55	13.4%	-3.8%
A Little of the Time	125	19.8%	94	23.0%	-3.2%
None of the Time	431	68.3%	204	49.9%	18.4%
Total	631	100.0%	409	100.0%	0.0%

Table 5-146 addresses the frequency with which the respondents had problems with a superior. The respondents with OIF/OEF deployment experience reported a lower frequency of problems with their superiors, as indicated by the negative values in the upper rows of the "Difference in Percentages" column in the table. That is, the respondents with OIF/OEF deployment experience reported being better off than those without such experience.

Table 5-146. Frequency of Job Problems – Problems with a Superior (#16g) - for the Independent Duty Marine Respondents

	OIF/0				
	WITH Ex	perience	WITHOUT	Experience	Difference in
Response	Number	Percent	Number	Percent	Percentages
All of the Time	13	2.1%	17	4.2%	-2.1%
Most of the Time	29	4.6%	21	5.1%	-0.5%
Some of the Time	64	10.2%	55	13.5%	-3.3%
A Little of the Time	132	21.1%	86	21.1%	0.0%
None of the Time	389	62.0%	229	56.1%	5.9%
Total	627	100.0%	408	100.0%	0.0%

Question #18 asked the respondents to pick the one best thing about being a Marine from a list of seven specific and one generic (i.e., "Other") response options. The results are shown in Figure 5-141. The two most frequently chosen options were to be one of the "Few and the Proud" (34.4 percent) and "... To Serve Your Country" (24.9 percent). These two, when added together, represented 59.3 percent of the respondents. These results were somewhat similar to those from the Base and Station respondents, except that the order of the responses was reversed. The least frequently chosen options were "Pay and Benefits," "Retirement Options," and "Job Security."

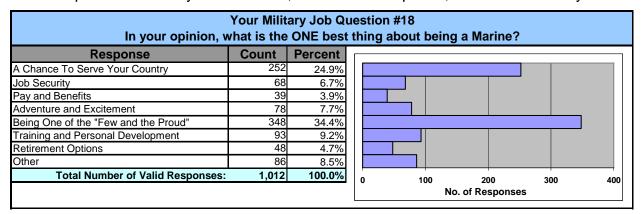


Figure 5-141. Best Thing about Being a Marine for the Independent Duty Marine Respondents

5.13.6 Conclusions for the Military Job Life Domain for the Independent Duty Marine Respondents

Satisfaction and happiness in the Military Job life domain for the Independent Duty Marine respondents generally remained about the same in 2007 when compared to the results from the 2002 QoL Study. Respondents in the E-2/E-3 and E-4/E-5 Pay Grade Groups were, in general, noticeably less satisfied with their job than those in higher pay grades. Race/ethnicity, gender and marital/parental status had little to no effect on the opinions regarding the respondents' job, although the Native American/Aleut/Eskimo respondents were less happy and somewhat less satisfied and the respondents with children seemed to score their happiness and satisfaction with their jobs higher than

their childless cohorts, regardless of their marital status. In general, respondents rarely took off from duty more than a few hours each month for either personal or family reasons. The frequency with which the respondents admitted to having had problems on the job appeared to be lower for those respondents who had previously been deployed in support of OIF/OEF than for those with no OIF/OEF deployment experience.

5.14 THE YOURSELF LIFE DOMAIN

5.14.1 Happiness – Affective Evaluations of the Yourself Life Domain

The weighted mean affective or happiness score (Question #1) for the Yourself life domain for the Independent Duty Marine respondents in 2007 was 4.86, i.e., slightly under "Mostly Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in this life domain is shown in Figure 5-142. It can be seen that the majority of the respondents, 72.5 percent, expressed some degree of happiness with themselves, and only a relatively small portion of respondents (12.6 percent) expressed some degree of unhappiness. Also, although the distributions of responses and the weighting schemes used differed, the 4.86 weighted mean for the Independent Duty Marines was only somewhat higher than the 4.69 weighted overall affective mean found for the Base and Station Marines.

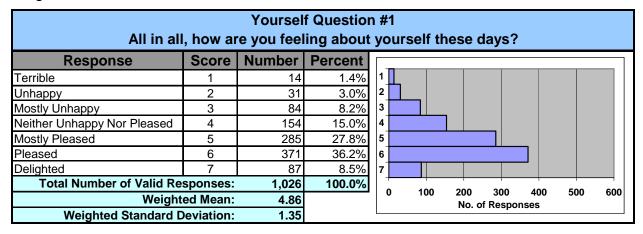


Figure 5-142. Distribution of the Overall Happiness Responses in the Yourself Life Domain for the Independent Duty Marine Respondents

Trends in the mean affective scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-143. The mean happiness scores remained relatively consistent between the 2002 and 2007 studies. The 2007 weighted mean Yourself D-T score for the entire sample of Independent Duty Marine respondents had the largest change from 2002, decreasing by 0.25 from the 2002 score, but this decrease had no practical significance. In fact, no practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

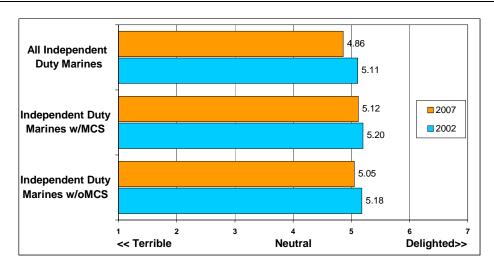


Figure 5-143. Trends in Overall Happiness in the Yourself Life Domain for the Independent Duty Marine Respondents

Overall happiness in the Yourself life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in happiness according to Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by Pay Grade Group, are shown in Table 5-147.

Table 5-147. Happiness with Yourself by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	105	4.51	1.36
E-4/E-5	275	4.78	1.36
E-6/E-7	254	5.06	1.34
E-8/E-9	114	5.46	1.07
WO	21	5.57	0.81
O-1 to O-3	93	5.28	1.21
O-4 to O-10	164	5.48	1.01

The minimum happiness score, 4.51 (well above the "Neutral" score of 4), was seen for the E-2/E-3 Pay Grade Group. The maximum happiness score, 5.57, was seen for the WO Pay Grade Group. Note also that as the mean happiness scores increased, the standard deviations, in general, decreased, indicating that Marines in the lower Pay Grade Groups had a broader variance in their individual happiness scores. A number of the differences seen here had practical significance, with the largest Cohen's *d* statistic, 0.95, found for the difference between the WO and the E-2/E-3 Pay Grade Group. In fact, the differences between the score for the E-2/E-3 Pay Grade Group and the scores for the E-8/E-9 and for all of the officer Pay Grade Groups were found to have practical significance. The same held true for the score from the E-4/E-5 Pay Grade Group, with

the exception of the difference with the O-1 to O-3 Pay Grade Group, which did not have any practical significance.

Trends in overall happiness in the Yourself domain between the 2002 and 2007 Marine Corps QoL studies also were examined by Pay Grade Group. The results are shown in Figure 5-144. The Pay Grade Group that had the largest difference between 2002 and 2007 was the E-2/E-3 group, in which the affective mean decreased by 0.37 since 2002. However, that difference had no practical significance.

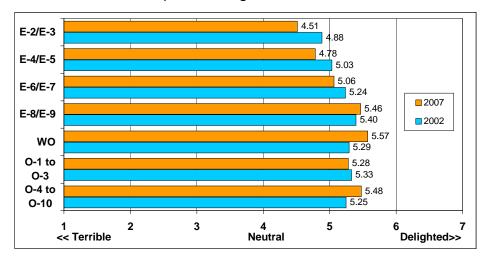


Figure 5-144. Trends in Happiness in the Yourself Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by race/ethnicity, are shown in Table 5-148. The minimum happiness score (4.45) was seen for the small number of respondents in the Native American/Aleut/Eskimo subgroup, and the maximum happiness score (5.57) was seen for the small number of respondents in the Asian/Pacific Islander subgroup. The difference between the maximum and minimum mean happiness scores had practical significance (Cohen's *d* statistic of 0.70), as did the difference between the second-lowest scoring subgroup ("Other") and the Asian/Pacific Islander subgroup (Cohen's *d* statistic of 0.85, due to the 30 percent decrease in the standard deviation of the lower scoring subgroup).

Table 5-148. Happiness with Yourself by Race/Ethnicity for the Independent Duty
Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	745	5.08	1.24
Black/African-American	118	5.20	1.34
Asian/Pacific Islander	28	5.57	1.03
Native American/Aleut/Eskimo	20	4.45	2.01
Spanish/Hispanic	78	4.88	1.49
Other	21	4.52	1.40

Gender. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by gender, are shown in Table 5-149. The average score for the small number of female respondents was 0.48 less than that for the male respondents, a difference that had no practical significance.

Table 5-149. Happiness with Yourself by Gender for the Independent Duty Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	975	5.10	1.28
Female	55	4.62	1.41

Marital/Parental Status. The means and standard deviations of the happiness scores for the Yourself life domain, decomposed by marital/parental status, are shown in Table 5-150. The minimum happiness score (4.53) was seen for the small number of respondents in the Divorced/Widowed/Separated with Children subgroup, and the maximum happiness score (5.34) was seen for the Married with Children subgroup. This difference had practical significance (a Cohen's *d* statistic of 0.70). The difference between the Married with Children subgroup and the second-lowest scoring subgroup, the Never Been Married respondents, also had practical significance. Also, the mean happiness scores for the married respondents were higher than the scores for the respondents who were divorced/widowed/separated or unmarried.

Table 5-150. Happiness with Yourself by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	17	4.53	1.18
Divorced/Widowed/Separated without Children	70	4.86	1.25
Married with Children	489	5.34	1.15
Married without Children	170	5.10	1.29
Never Been Married	272	4.69	1.41

5.14.2 Satisfaction – Cognitive Evaluations of the Yourself Life Domain

The weighted mean cognitive or satisfaction score (Question #5f) in the Yourself life domain for the Independent Duty Marine respondents in 2007 was 5.51, i.e., midway between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Independent Duty Marine respondent sample in the Yourself life domain is shown in Figure 5-145. In the overall sample, the majority of the respondents, 54.0 percent, responded that they were "Satisfied" with themselves overall. It can be seen that the overwhelming majority of the respondents, 86.8 percent, expressed some degree of satisfaction with themselves, while only a small portion of respondents (4.8 percent) expressed any degree of dissatisfaction. Also, although the distributions of responses and the weighting schemes used differed, the 5.51 weighted mean for the Independent Duty Marines was only slightly higher than the 5.41 weighted overall cognitive mean found for the Base and Station Marines.

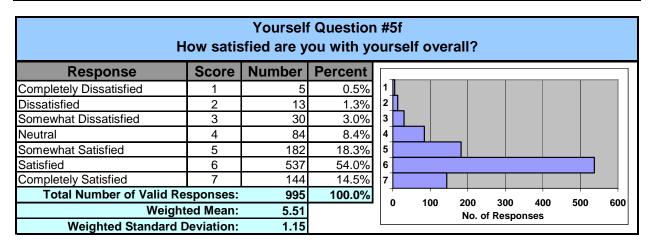


Figure 5-145. Distribution of the Overall Satisfaction Responses in the Yourself Life Domain for the Independent Duty Marine Respondents

Trends in the mean cognitive scores over the two Marine Corps QoL studies that collected data on the Independent Duty Marines as a separate respondent group, for the overall respondent group and for the IDMw/MCS and IDMw/oMCS subgroups, are shown in Figure 5-146. The mean satisfaction scores remained relatively consistent between the 2002 and 2007 studies. A slight increase in mean satisfaction was seen for the IDMw/MCS subgroup, but slight decreases were seen for the overall Independent Duty Marine sample and for the IDMw/oMCS subgroup. The 2007 weighted mean Yourself satisfaction score for the total sample of Independent Duty Marine respondents had the largest change from 2002, decreasing slightly (by 0.09) from the 2002 weighted score. No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

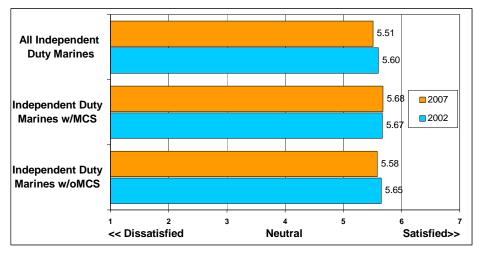


Figure 5-146. Trends in Overall Satisfaction in the Yourself Life Domain for the Independent Duty Marine Respondents

Overall satisfaction in the Yourself life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay

Grade Group, race/ethnicity, gender, and marital/parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by Pay Grade Group, are shown in Table 5-151.

Table 5-151. Satisfaction with Yourself by Pay Grade Group for the Independent Duty Marine Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	101	5.36	1.30
E-4/E-5	265	5.49	1.10
E-6/E-7	246	5.57	1.20
E-8/E-9	113	5.93	0.84
WO	21	6.00	0.45
O-1 to O-3	90	5.62	0.89
O-4 to O-10	159	5.86	0.77

The minimum satisfaction score, 5.36, was seen for the E-2/E-3 Pay Grade Group. The maximum satisfaction score, 6.00, was seen for the WO Pay Grade Group. There also were differences with practical significance between the WO Pay Grade Group and the E-4/E-5 Pay Grade Group (Cohen's *d* statistic of 0.61) and the E-2/E-3 Pay Grade Group and the E-2/E-3 Pay Grade Group.

Trends in overall satisfaction in the Yourself domain between the 2002 and 2007 Marine Corps QoL studies also were examined by Pay Grade Group. The results are shown in Figure 5-147. The mean satisfaction scores remained relatively consistent, with the largest change, an increase of 0.27, seen for the WO Pay Grade Group. This difference had no practical significance, based on the Cohen's *d* statistic of 0.39. Note that the scores in three of the Pay Grade Groups decreased from 2002 to 2007, while scores in three other Pay Grade Groups increased. One score, for the E-4/E-5 Pay Grade Group was essentially unchanged, declining by 0.01.

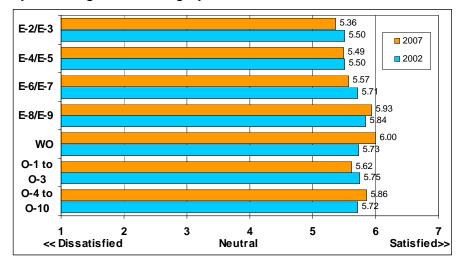


Figure 5-147. Trends in Satisfaction in the Yourself Life Domain by Pay Grade Group for the Independent Duty Marine Respondents

Race/Ethnicity. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by race/ethnicity, are shown in Table 5-152. With one exception, the scores were closely clustered in the middle of the "Somewhat Satisfied" to "Satisfied" range. The minimum satisfaction score (4.90) was seen for the small number of Native American/Aleut/Eskimo respondents and the maximum satisfaction score (5.77) was seen for the Asian/Pacific Islander subgroup. There was a difference of practical significance between these two subgroups, with a Cohen's *d* statistic of 0.56. Differences of practical significance also were found between the lowest-scoring subgroup and the Black/African American and White subgroups.

Table 5-152. Satisfaction with Yourself by Race/Ethnicity for the Independent Duty Marine Respondents

Race/Ethnicity	Count	Mean	Std. Dev.
White	720	5.64	0.99
Black/African-American	115	5.72	1.18
Asian/Pacific Islander	26	5.77	1.27
Native American/Aleut/Eskimo	21	4.90	1.79
Spanish/Hispanic	76	5.61	1.19
Other	21	5.43	1.12

Gender. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by gender, are shown in Table 5-153. The average score for the female respondents was 0.25 less than that for the male respondents. This difference had no practical significance.

Table 5-153. Satisfaction with Yourself by Gender for the Independent Duty

Marine Respondents

Gender	Count	Mean	Std. Dev.
Male	945	5.65	1.06
Female	52	5.40	1.11

Marital/Parental Status. The means and standard deviations of the satisfaction scores for the Yourself life domain, decomposed by marital/parental status, are shown in Table 5-154. With one exception, the means were tightly clustered toward the upper half of the "Somewhat Satisfied" to "Satisfied" range. The minimum mean satisfaction score, 5.07, was seen for the relatively small Divorced/Widowed/Separated with Children subgroup. The maximum mean satisfaction score, 5.78, was seen for the Married with Children subgroup. The difference between these two extrema was found to have practical significance, having a Cohen's *d* statistic of 0.60. Note also that the mean satisfaction scores for the married respondents were higher than those for any other subgroup.

Table 5-154. Satisfaction with Yourself by Marital/Parental Status for the Independent Duty Marine Respondents

Marital/Parental Status	Count	Mean	Std. Dev.
Divorced/Widowed/Separated with Children	15	5.07	1.39
Divorced/Widowed/Separated without Children	70	5.51	1.21
Married with Children	478	5.78	0.91
Married without Children	166	5.63	1.09
Never Been Married	259	5.44	1.19

In addition to asking the respondents about their overall satisfaction with themselves, Question #5 also asked about satisfaction with a series of five separate facets of the Yourself life domain. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 5-148.

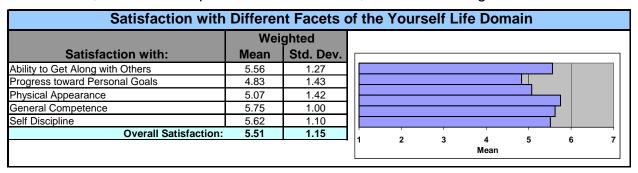


Figure 5-148. Satisfaction with Facets of Yourself for the Independent Duty

Marine Respondents

The two minimum weighted mean scores (and the two highest standard deviations) were seen for Progress toward Personal Goals and Physical Appearance. Further analysis indicated that the reason for this was that there were some disparities in satisfaction with those facets between Pay Grade Groups. Figure 5-149 shows the histogram of responses for satisfaction with Progress toward Personal Goals. It can be seen that 16.0 percent of the Independent Duty Marine respondent sample indicated some degree of dissatisfaction with the Progress toward Personal Goals.

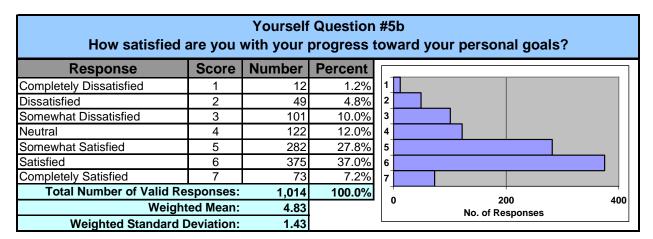


Figure 5-149. Satisfaction with Progress toward Personal Goals for the Independent Duty Marine Respondents

When Question #5b was examined by Pay Grade Group, the minimum mean score, 4.60 for E-2/E-3 respondents, and the maximum mean score, 5.47 for O-4 to O-10 respondents, differed by 0.87. Not surprisingly, this difference had practical significance (Cohen's *d* statistic was 0.66). Similar trends were seen when the facet of Physical Appearance (Question #5c) was examined.

In order to determine the factors that were key to the reported overall satisfaction in the Yourself life domain, multiple regression of the facets of satisfaction on the overall satisfaction with self for the Independent Duty Marine respondents was performed. The results are shown in Figure 5-150.

The magnitudes of the facet satisfactions ranged from a low of 0.135 for Ability To Get Along with Others to a high of 0.287 for Physical Appearance. The results indicated that overall satisfaction with Yourself was most strongly influenced by satisfaction with the Physical Appearance and Self Discipline. Note that these results were fairly similar to those seen in the 2002 QoL Study, and for the 2007 Base and Station Marine sample (although the order of influence was reversed). The mean satisfaction scores also were an important consideration for analysis. In addition to being a relatively strong influence on overall satisfaction, Physical Appearance also had one of the lowest mean satisfaction scores, falling below the overall mean score, indicating that this facet had high potential as an area for improvement that could influence higher overall satisfaction with personal development for the Independent Duty Marine respondents. Progress toward Personal Goals, which was a slightly less influential facet, also had a mean satisfaction score lower than the overall mean and also was considered a facet with high potential for domain improvement. The Ability To Get Along with Others was the least influential facet and had a mean score higher than the overall mean for this domain, indicating that this facet had the least potential as an improvement opportunity.

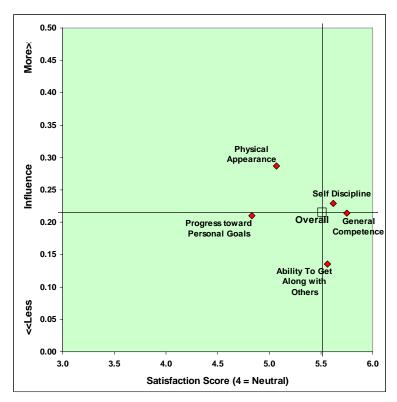


Figure 5-150. Key Driver Diagram for the Yourself Life Domain for the Independent Duty Marine Respondents

5.14.3 Effect of Yourself on Job Performance

Question #8 asked about the effect of the respondents' personal development on the their job performance. A histogram of the responses to that question is shown in Figure 5-151.

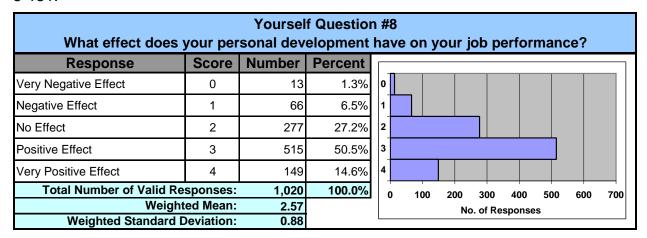


Figure 5-151. Effect of Yourself on Job Performance for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.57, midway between "No Effect" and "Positive Effect." Slightly over half (50.5 percent) of the respondents answered that

their personal development had some degree of positive effect on their job performance. Moreover, more respondents (664, or 65.1 percent) said their personal development had some degree of positive effect on their job performance than said that their personal development had some degree of negative effect (79, or 7.8 percent).

The effect of a respondent's personal development on job performance was examined for the total Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups as shown in Table 5-155. The mean scores for effect on job performance were relatively consistent across the subgroups: The mean score for the IDMw/MCS subgroup was 2.73, or 0.05 above the mean score for IDMw/oMCS subgroup. This difference had no practical significance.

Table 5-155. Effect of Yourself on Job Performance for the Total Independent Duty Marine Sample and its Military Community Support Subgroups

	Independent Duty Marines								
	Total Sample				w/MC	S	w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Job Peformance	1,020	2.57	0.88	783	2.73	0.82	184	2.68	0.91

5.14.4 Effect of Yourself on Plans To Remain on Active Duty

Question #9 asked about the effect of a respondent's personal development on their plans to remain on active duty. A histogram of the responses to that question is shown in Figure 5-152.

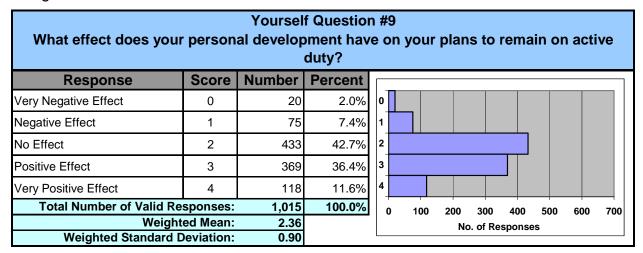


Figure 5-152. Effect of Yourself on Plans To Remain on Active Duty for the Independent Duty Marine Respondents

The weighted mean score for this question was 2.36, in the "No Effect" to "Positive Effect" range. A large percentage of the respondents, 42.7 percent, answered that their personal development had no effect on their plans to remain on active duty. However, more respondents (487, or 48.0 percent) said their personal development had some degree of positive effect on their plans to remain on active duty than said that their personal development had some degree of negative effect (95, or 9.4 percent).

The effect of the respondents' personal development on their plans to remain on active duty was examined for the total Independent Duty Marine sample and for the IDMw/MCS and IDMw/oMCS subgroups, as shown in Table 5-156. The mean scores for effect on plans to remain on active duty were relatively consistent across the subgroups: The mean score for the IDMw/MCS subgroup was 2.49, or 0.07 above the mean score for IDMw/oMCS subgroup. This difference had no practical significance.

Table 5-156. Effect of Yourself on Plans To Remain on Active Duty for the Total Independent Duty Marine Sample and its Military Community Support Subgroups

				Indepen	dent Du	ıty Marines			
	Т	otal Sar	nple		w/MC	S	w/oMCS		
Question	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.	Count	Mean	Std. Dev.
Effects on Plans To Remain on Active Duty	1,015	2.36	0.90	776	2.49	0.85	182	2.42	0.96

5.14.5 Other Life Domain-Specific Analyses

Question #4 asked respondents to select from a list of educational benefits/academic accomplishments which of those benefits they had used since joining the Marine Corps. Figure 5-153 shows the number of affirmative responses for each academic accomplishment, as well as a percentage computed by dividing the number of affirmative responses by the Independent Duty Marine respondent sample size (1,085).

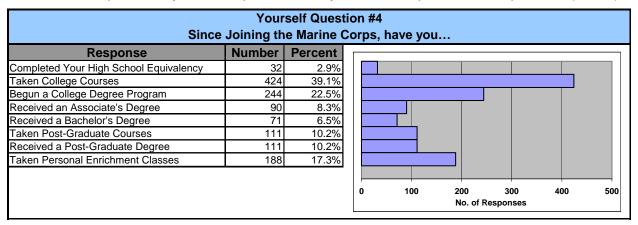


Figure 5-153. Educational Accomplishments of the Independent Duty Marine Respondents since Joining the Marine Corps

The highest number of respondents, 424, or 39.1 percent, answered that they had "Taken college courses"; however, only 244, or 22.5 percent, answered that they had begun a college degree program. Even fewer respondents had received Associate's or Bachelor's degrees based on their college work. The percentage of Independent Duty Marines who had received a post-graduate degree, 10.2 percent, was noteworthy, however, especially when compared to the 1.9 percent figure for the Base and Station Marines. This is likely another reflection of the more-senior nature of the Independent Duty Marine respondent sample.

Question #6 and Question #12 in the Yourself Domain asked respondents a set of questions designed to measure their Optimism and Self-Esteem, respectively. For Question #6 (Optimism), respondents were asked to provide an answer on a seven-

point scale from "Completely Disagree" to "Complete Agree" to 12 statements (such as "In uncertain times, I usually expect the best" and "I'm always optimistic about my future") that dealt with the respondents' outlook on life. For Question #12 (Self-Esteem), respondents were asked to provide an answer on a four-point scale from "Strongly Disagree" to "Strongly Agree" to 10 statements (such as "I feel that I have a number of good qualities" and "I take a positive attitude toward myself") that dealt with a respondent's self-esteem.

After rescaling the responses from Question #12 to a seven-point scale, the responses to Questions #6c, #6h, #6i and #6l and to Questions #12c, #12e, #12h, #12i, and #12j were reverse-coded, so that "better" responses (i.e., those expressing higher optimism or self-esteem) received higher scores. Then, weighted mean scores for the two composites were calculated. These values were compared to the weighted mean Optimism and Self-Esteem values calculated for the Base and Station respondents; the results are shown in Figure 5-154. The weighted values means somewhat, with higher scores seen for the more-senior Independent Duty Marine respondents. These differences did not have any practical significance.

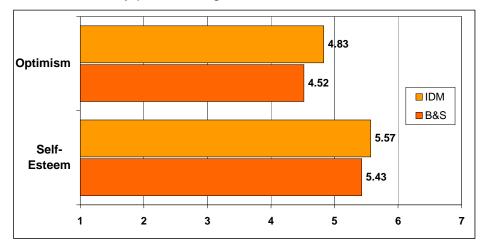


Figure 5-154. Normalized Optimism and Self-Esteem Scores for the Independent Duty Marine Respondents Compared with the Base and Station Results

5.14.6 Conclusions for the Yourself Life Domain for the Independent Duty Marine Respondents

Satisfaction and happiness in the Yourself life domain remained relatively consistent in 2007 when compared with the results from the 2002 Study, but satisfaction was markedly higher than happiness. Also, there was relative consistency in the Yourself life domain with satisfaction, happiness, effect on job performance, and effect on plans to remain on active duty between those Independent Duty Marines with Military Community Support and those without Military Community Support. There were, however, differences of practical significance in happiness and satisfaction mean scores when this respondent data was decomposed demographically, specifically with respect to Pay Grade Group, race/ethnicity, and marital/parental status. Marines in lower Pay Grade Groups and unmarried Marines typically were less pleased with themselves.

High-ranking officers tended to be particularly happy and satisfied with themselves. Physical appearance and one's progress toward personal goals were key drivers in the Yourself domain and appeared to be primary causes of dissatisfaction among Marines who indicated that they were dissatisfied with themselves. Optimism and Self-Esteem for Independent Duty Marines were relatively positive (especially the latter composite measure) and consistent with, and slightly higher than, the results seen for the Base and Station respondents.

5.15 LIFE AS A WHOLE OR GLOBAL QUALITY OF LIFE FOR THE INDEPENDENT DUTY MARINES

Life as a Whole/Global Quality of Life for the Independent Duty Marine respondents was assessed using the responses to a composite of six separate questions -- three that appeared in the Life as a Whole section at the beginning of the survey instrument (immediately after the Background section and preceding the Residence life domain) and three that appeared in the Life as a Whole section at the end of the survey instrument (immediately following the Yourself life domain). It also included responses to selected questions (e.g., effect on job performance and plans to remain on active duty) in each of the 11 life domains of the Active Duty Marine survey. The analyses performed included an assessment of Global Quality of Life and Measures of Military Importance.

5.15.1 Assessment of Global Quality of Life and Trend Analyses

5.15.1.1 Methodology

Summaries of the responses to each of the six individual Life as a Whole questions are provided in Appendix K.

The Global Quality of Life assessment for the Independent Duty Marines was performed using a methodology similar to that used for the Base and Station respondents and described in Chapter 4. Employing the same criteria for selecting respondents to include in the Life as a Whole composite calculation resulted in the inclusion of 1,006 of the total of 1,085 Independent Duty Marine respondents (92.7 percent) in the Life as a Whole composite calculations. As was the case for the Base and Station Marine respondents, the Life as a Whole Composite for the Independent Duty Marines was calculated on a seven-point scale.

Cronbach's Alpha was calculated to assess the internal consistency of using the combination of the six Life as a Whole questions as a single uni-dimensional construct for measuring Global Quality of Life. The calculated value of this statistic for the 2007 Independent Duty Marine respondent sample was 0.88. A value of 0.70 or higher is generally considered acceptable in social science research applications. With a Cronbach's Alpha of 0.88, the six-question Life as a Whole composite provided adequate internal consistency in serving as a metric for Global Quality of Life.

5.15.1.2 Results and Analysis

The 2007 Global Quality of Life score for Independent Duty Marines was 4.76 on a 1-to-7 scale. Figure 5-155 shows the weighted Global Quality of Life scores for the 2007 Independent Duty Marine respondents and for the 2002 Independent Duty Marine respondents and the 2007 Base and Station respondents. The weighted score was higher than that found for the Base and Station respondents (4.56), but was a slight decline from the weighted quality of life score for the Independent Duty Marines in the 2002 sample, which was re-calculated to be 4.91. However, the differences had no practical significance (Cohen's *d* statistic of 0.11). The score represented a generally positive perception of overall Global Quality of Life. Note that the weighted Global Quality of Life score for 2002 was re-calculated from the raw, Government-furnished 2002 data provided to the Study Team, in accordance with the methodology set forth earlier in Section 4.14.1.1, and does not match the value included in the Final Report for that earlier study. Of the 2,115 responses in the 2002 survey, 2,045 responses (96.7 percent) met the two-thirds valid answer criteria of the 2007 methodology and were included in the recalculation of the 2002 Global Quality of Life.

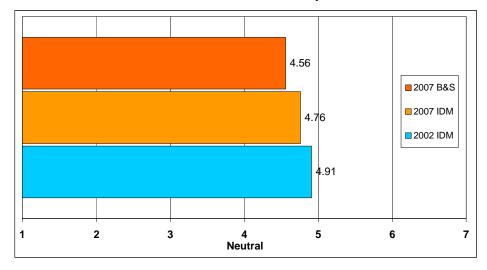


Figure 5-155. Comparison of Global Quality of Life for the 2007 Independent Duty

Marine Respondents with Other Selected Groups

¹⁰⁶ As explained in Section 4.1.1 of this report, all the 2002 scores included in this report were recalculated using the same weighting methodology as was applied to the 2007 data in order to maximize the comparability of the results/ numbers reported for these two studies. This recalculation almost invariably resulted in changes, so the reader is reminded that the 2002 scores seen in this report are unlikely to match those in the original 2002 QoL Study Report. The reader is also reminded that the 2002 QoL Study Report focused on, and gave results (i.e., scores) for what was called an Independent Duty Marine without Military Community Support composite. This was composed of the responses (about one-third of those in the composite) from non-Production Recruiter Independent Duty Marines who lived at least 1 hour from the nearest military installation. In contrast, this 2007 QoL Report focused on analyzing the responses of <u>all</u> HQMC-defined non-Production Recruiter Independent Duty Marines, regardless of how far they lived from the nearest military installation.

5.15.2 Analysis by Demographic Subgroup

Global Quality of Life for the Independent Duty Marine respondents also was analyzed by decomposing the respondent data into subgroups to examine differences according to availability of Military Community Support, Pay Grade Group, race/ethnicity, gender, and marital/parental status. Each will be discussed in turn.

5.15.2.1 *Military Community Support*

Members of both the IDMw/MCS and IDMw/oMCS subgroups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 5-156. Respondents in both groups had very similar scores: The IDMw/MCS subgroup had a higher score (5.06) than that of the IDMw/oMCS subgroup (4.96), but the difference was very small and had no practical significance.

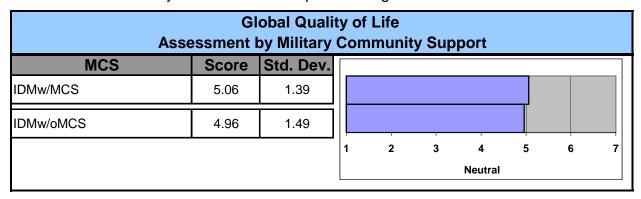


Figure 5-156. Global Quality of Life by Military Community Support for the Independent Duty Marine Respondents

Figure 5-157 shows the breakdown of Global Quality of Life scores for the Independent Duty Marine respondents with and without Military Community Support for both 2002 and 2007. No practical significance existed in any of the differences seen here, either within the groups shown or between the two QoL studies.

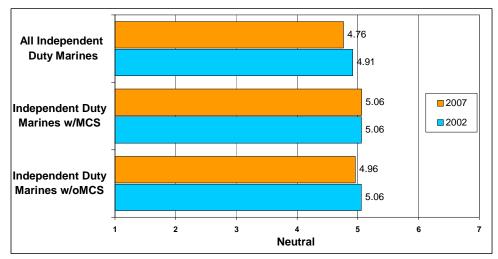


Figure 5-157. Trends in Global Quality of Life by Military Community Support for the Independent Duty Marine Respondents

5.15.2.2 Pay Grade Group

All Pay Grade Groups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life. Figure 5-158 shows the Global Quality of Life assessment for the Independent Duty Marine respondents by Pay Grade Group.

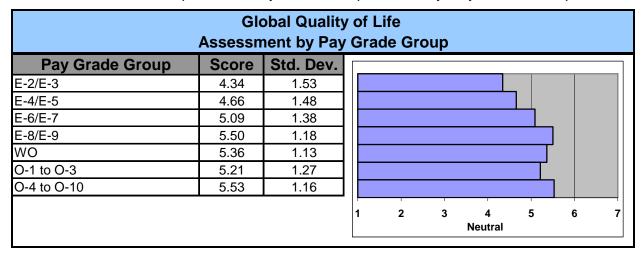


Figure 5-158. Global Quality of Life by Pay Grade Group for the Independent Duty

Marine Respondents

The Global Quality of Life score was highest for the O-4 to O-10 Pay Grade Group, 5.53, and lowest for the E-2/E-3 Pay Grade Group, 4.34. The E-2/E-3 Pay Grade Group appeared to be much less satisfied with their Global Quality of Life than the other Pay Grade Groups. While the difference from the 4.66 Global Quality of Life score seen for the E-4/E-5 respondents had no practical significance (Cohen's *d* statistic of 0.21), for all other comparisons the differences between the score of the E-2/E-3 Pay Grade Group and the scores of the other Pay Grade Groups all had practical significance, with the Cohen's *d* statistic ranging from 0.51 (when comparing the E-2/E-3 and 0-4 to O-10 Pay Grade Group). Comparisons of scores between other pairs of Pay Grade Groups also showed differences that had practical significance between the E-4/E-5 Pay Grade Group and the E-8/E-9 (Cohen's *d* statistic of 0.63), the WO (Cohen's *d* statistic of 0.53), and the O-4 to O-10 (Cohen's *d* statistic of 0.66) Pay Grade Groups.

The breakdown of Global Quality of Life scores by Pay Grade Group for both 2007 and 2002 are shown in Figure 5-159. The scores for 2002 were recalculated from the raw 2002 survey data to maximize comparability. The results were very similar across the two studies and reflected very little difference between the scores for each Pay Grade Group. None of the differences within any of the Pay Grade Groups between the 2007 and 2002 scores had practical significance. The E-2/E-3 Pay Grade Group had the lowest quality of life score in both studies. In 2002, the O-1 to O-3 Pay Grade Group had the highest score (although the differences with the next highest scoring pay grade

groups were very small) while in 2007, the O-4 to O-10 Pay Grade Group had the highest score (again by a slim margin).

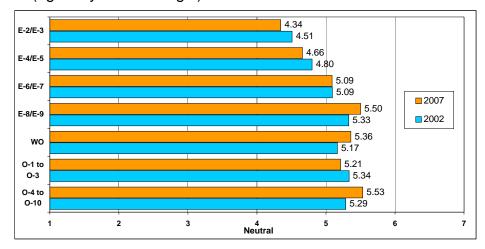


Figure 5-159. Trends in Global Quality of Life by Pay Grade Group for the Independent Duty Marine Respondents

5.15.2.3 Race/Ethnicity

All racial/ethnic groups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 5-160. The Asian/Pacific Islander subgroup had the highest overall score of 5.19. The Native American/Aleut/Eskimo group had the lowest score of 4.52. The difference between these two extremes had no practical significance (Cohen's *d* statistic was 0.41).

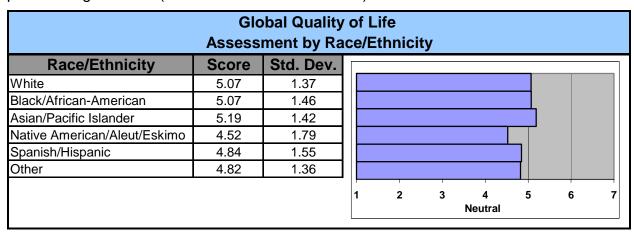


Figure 5-160. Global Quality of Life by Race/Ethnicity for the Independent Duty

Marine Respondents

Figure 5-161 shows the breakdown of Global Quality of Life scores by race/ethnicity for both the 2002 and 2007 QoL Studies. The responses for 2002 were re-categorized into the same race/ethnicity groupings used in 2007 and the scores recalculated from the raw 2002 survey data to maximize comparability. The greatest differences in scores (both decreases) were seen in the Native American/Aleut/Eskimo and Spanish/Hispanic

groups. However, based on Cohen's *d* statistics (0.20 and 0.17, respectively), the differences had no practical significance.

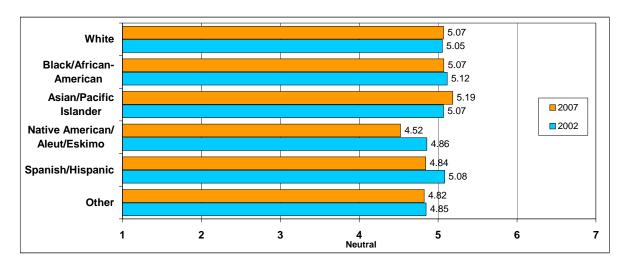


Figure 5-161. Trends in Global Quality of Life by Race/Ethnicity for the Independent Duty Marine Respondents

5.15.2.4 Gender

Both genders indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 5-162. The male respondents had the higher score at 5.05, or 0.21 higher than the female score of 4.84. However, this difference did not have practical significance, (Cohen's *d* statistic was 0.15). Note that the score for the males was 0.51 higher than for the male Base and Station respondents (4.54) although the difference did not have practical significance (Cohen's *d* statistic was 0.35).

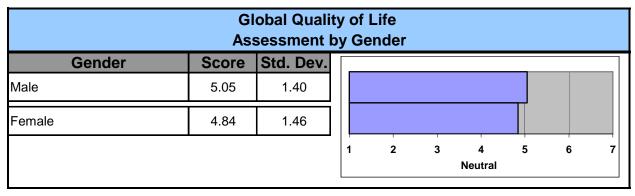


Figure 5-162. Global Quality of Life by Gender for the Independent Duty Marine Respondents

Figure 5-163 shows the breakdown of Global Quality of Life scores by Gender for both 2002 and 2007. The scores for 2002 were recalculated from the raw 2002 survey data to maximize comparability. The scores for both males and females were very similar in 2002 and 2007.

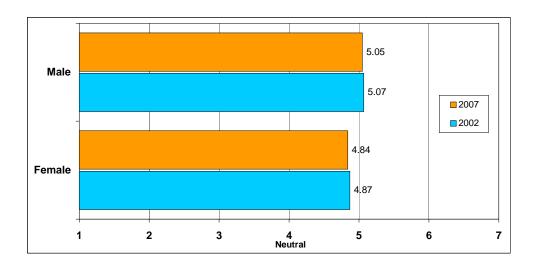


Figure 5-163. Trends in Global Quality of Life by Gender for the Independent Duty

Marine Respondents

5.15.2.5 Marital/Parental Status

Respondents in all Marital/Parental Status groups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 5-164. The Married with Children subgroup had the highest Global Quality of Life score at 5.30 and the Divorced/Widowed/Separated with Children subgroup had the lowest at 4.61. Note that the three lowest scoring subgroups – all unmarried – had very similar scores. The difference between the lower scoring subgroups and the Married with Children subgroup bordered on practical significance, as indicated by the calculated Cohen's *d* statistics ranging from 0.44 to 0.49 (medium effect size). However, no practical significance existed in any of the differences seen here.

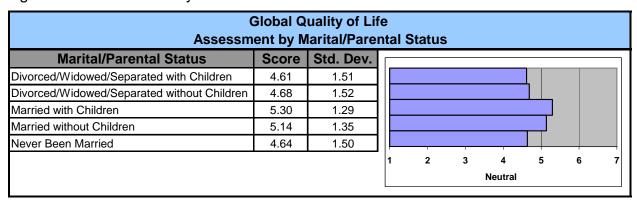


Figure 5-164. Global Quality of Life by Marital/Parental Status for the Independent Duty Marine Respondents

Figure 5-165 shows the breakdown of Global Quality of Life scores by Marital/Parental Status for both 2002 and 2007. The responses for 2002 were re-categorized into the same Marital/Parental Status groupings used in 2007 and the scores recalculated from the raw 2002 survey data to maximize comparability. The largest difference was seen

in the Divorced/Widowed/Separated with Children subgroup, but the difference had no practical significance (Cohen's *d* statistic of 0.21).

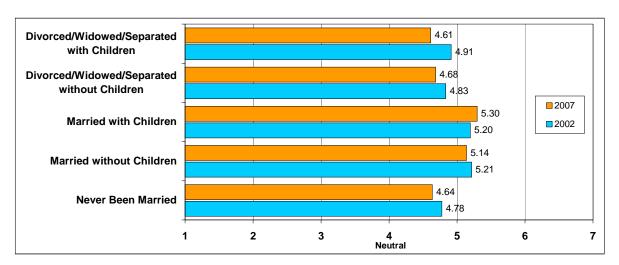


Figure 5-165. Trends in Global Quality of Life by Marital/Parental Status for the Independent Duty Marine Respondents

5.15.3 Key Drivers of Global Quality of Life

In order to determine the factors that were key to the reported overall satisfaction with Global Quality of Life, multiple regression of the individual life domain satisfactions on the Life as a Whole composite was performed for the Independent Duty Marine respondents. The results are shown in the key driver diagram in Figure 5-166. The overall domain responses are located vertically in relation to their influence on the Global Quality of Life assessment as indicated by the regression analysis. Note that the Relationship with Other Relatives life domain had a negative correlation with/influence on the Global Quality of Life and was therefore marked with an asterisk (since the magnitude of the influence is shown in the figure).

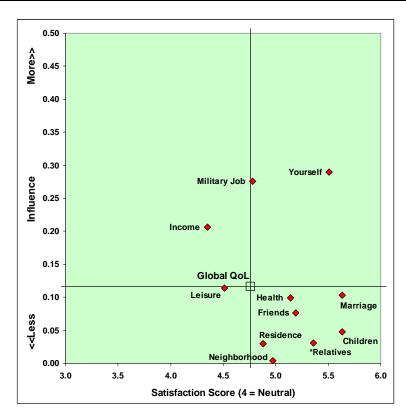


Figure 5-166. Key Drivers of Global Quality of Life for the Independent Duty

Marine Respondents

The three most influential life domains were Yourself, Your Military Job, and Income and Standard of Living. 107 All the life domains except Income and Standard of Living and Leisure and Recreation had mean scores above the overall composite mean, 108 indicating that the impact of improving satisfaction in all but those two life domains on improvements in Global Quality of Life might be limited. Income and Standard of Living provided the best opportunity for improvement in Global Quality of Life: It had both a mean satisfaction score less than that of the Global Quality of Life and a high influence. Leisure and Recreation provided another, but less powerful, opportunity for improvement: It had an influence level only slightly below that of the composite and a mean score below the composite mean, indicating that efforts to improve satisfaction in that life domain, specifically (based on the insights gained during the analysis of that domain) by increasing the amount of time available for leisure activities and, to a lesser extent, by reducing the cost of leisure activities, likely would lead to some substantive improvements in Global Quality of Life for the Independent Duty Marines.

¹⁰⁷ While inspection of the 2002 QoL Study Report (specifically, Figure 3-73 on p. 3-110 and Appendix F) showed Yourself and Your Military Job to be the top two drivers, it must be remembered that the group of Marines considered in that earlier study was not equivalent to the group included in the figure above.

¹⁰⁸ The life domains explained about 64 percent of the variance observed in the Global Quality of Life assessment, equivalent to what was found in the 1993 QoL Study for the entire group of 10,000+ respondents (see pp. 116 and 117 of the 1993 QoL Report).

5.15.4 Measures of Military Importance

Each life domain section of the 2007 QoL survey instrument, except for the Military Job and Health domains, included two questions that reported the extent to which the topic of the life domain impacted 1) the respondents' plans to remain on active duty, and 2) the respondents' job performance. The respondents were given five response options, ranging from "Very Positive Effect" to "Very Negative Effect."

The results of these questions were presented individually in the analysis of the results of each individual life domain. Here they are considered as a group to give a better overall view of these topics for the Independent Duty Marine respondent sample.

In addition, the Retention Analysis presents the results from two questions that inquired about the respondents' retention intentions.

5.15.4.1 Plans To Remain on Active Duty

Plans to remain on active duty were assessed based on the responses to 15 questions taken from the individual life domain sections of the survey. Table 5-157 lists the life domains (taken from the 2007 Active Duty Marine QoL survey instrument in Appendix F), lists the particular questions applicable to this analysis, and relates these questions to the summary titles used in Figure 5-167, which shows the results of this assessment for each of the pertinent questions. Each of these questions contained five response options ranging from "Very Negative Effect" to "Very Positive Effect."

Table 5-157. Questions Addressing Intentions to Remain on Active Duty in the 2007 QoL Survey

Life Domain	Question #	Figure Summary Title
Your Residence	12	Residence
Your Neighborhood	5	Neighborhood
Leisure and Recreation	7	Leisure and Recreation
Health	13	Health - Your State
Health	18	Health - Your Medical Care
Health	25	Health - Family State
Health	27	Health - Family Medical Care
Friends and Friendships	7	Friends and Friendships
Marriage/Intimate Relationship	5	Marriage/Intimate Relationship
Your Relationship with Your Children	12	Relationship with Your Children
Your Relationship with Your Children	13	Children's Educational Opportunities
Your Relationship with Other Relatives	7	Relationship with Other Relatives
Income and Standard of Living	12	Income and Standard of Living
Your Military Job	17	Your Military Job
Yourself	9	Yourself

¹⁰⁹ Note that the Health life domain also had analogous questions related to the state of the health of the respondent's family and the effect of both the respondent's and their family's healthcare, while the job performance question was not appropriate for the Military Job life domain.

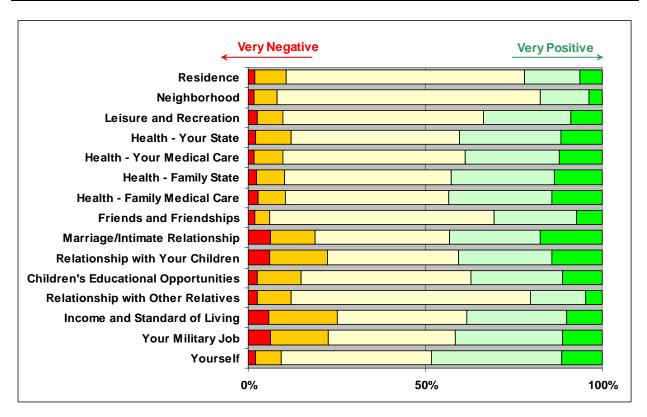


Figure 5-167. Reported Effect on Intentions To Remain on Active Duty for the Independent Duty Marines

A number of different insights can be drawn from the figure.

- Positive Impacts. The responses were considered in terms of positive impact on plans to remain on active duty (i.e., the total percentages of respondents who answered either "Very Positive Effect" or "Positive Effect"). By this measure, 12 of the 15 questions/life domains (i.e., all except Residence, Neighborhood and Relationship with Other Relatives) could be said to have had positive impacts because more than 30 percent of the respondents chose the two favorable responses to the applicable questions. These 'strongly positive' impacts ranged from Yourself (48.2 percent positive responses¹¹⁰) to the Friends and Friendships (30.5 percent positive responses).
- Negative Impacts. The responses were considered in terms of negative impact on
 plans to remain on active duty (i.e., the total percentages of respondents who
 answered either "Very Negative Effect" or "Negative Effect"). By this measure, only
 one of the 15 questions/life domains (Income and Standard of Living, which had 25.2
 percent negative responses) could be said to have had negative impacts because

¹¹⁰ Note that the percentages quoted in this section of the report may not match the percentages included in the individual histograms showing the results of the Effect on Plans To Remain on Active Duty questions and included in the individual life domains because the data presented here include <u>all</u> valid responses to the questions, while the data presented in the life domain analyses was weighted by Pay Grade Group, and thus excluded any respondents for whom a pay grade could not be determined.

more than 25 percent of the respondents chose the two unfavorable responses to the question. Relatively high percentages of negative responses also were seen for the Your Military Job (22.6 percent) and Relationship with Your Children (22.4 percent) life domains.

- Polarizing Impacts. These were defined as questions/life domains for which less than 50 percent of the respondents chose the "No Effect" response. By this measure, nine of the 15 questions/life domains -- Health Your State (47.5 percent), Health Family State (47.1 percent), Health Family Medical Care (46.0 percent), Marriage/Intimate Relationship (38.1 percent), Relationship with Your Children (37.1 percent), Children Educational Opportunities (48.1 percent), Income and Standard of Living (36.6 percent), Your Military Job (35.9 percent), Your Personal Development (42.4 percent) -- qualified as having polarizing impacts. Of these nine questions/life domains,
 - All also had positive effects on the respondents' plans to remain on active duty, indicating that the relatively low percentages of "No Effect" responses were due to the simultaneous high percentages of positive responses.
 - One (Income and Standard of Living) had a negative effect on the respondents' plans to remain on active duty. The weighted mean score in this life domain was 2.04 on a scale of 0-to-4, one of the lowest scores seen.
- Based upon a visual inspection of Figure 3-74 of the 2002 QoL Study Report, domain impacts on respondent plans to remain on active duty appeared to have been very similar in the 2002 and 2007 studies, but somewhat better in selected life domains (e.g., Leisure and Recreation, Health Your Medical Care, Relationship with Children and Your Military Job) in 2007. Yourself had the highest positive impact in both studies. Income and Standard of Living, Military Job and Relationship with Your Children had the most negative impacts in both the 2002 and 2007. However in 2002 Military Job had a slightly greater negative impact than Income and Standard of Living, while in 2007 the opposite was true.
- The highest weighted score, 2.47, on the 0-to-4 scale was seen for the Children's Educational Opportunities question.
- The lowest weighted score, 2.04, was seen for the Income and Standard of Living life domain.

5.15.4.2 Job Performance

Impact on job performance was assessed based on the responses to 13 questions taken from the individual life domain sections of the survey. Table 5-158 lists the life domains (again as named in the 2007 QoL survey itself), the particular questions applicable to this analysis, and relates these questions to the summary titles used in Figure 5-168, which shows the results of this assessment for each of the pertinent questions. As discussed in previous sections, each of these questions contained five response options ranging from "Very Negative Effect" to "Very Positive Effect."

Table 5-158. Survey Questions Addressing Job Performance in the 2007 QoL Survey

Survey Section	Question #	Figure Summary Title
Your Residence	11	Residence
Your Neighborhood	4	Neighborhood
Leisure and Recreation	6	Leisure and Recreation
Health	12	Health - Your State
Health	17	Health - Your Medical Care
Health	24	Health - Family State
Health	26	Health - Family Medical Care
Friends and Friendships	6	Friends and Friendships
Marriage/Intimate Relationship	4	Marriage/Intimate Relationship
Your Relationship with Your Children	11	Relationship with Your Children
Your Relationship with Other Relatives	6	Relationship with Other Relatives
Income and Standard of Living	11	Income and Standard of Living
Yourself	8	Yourself

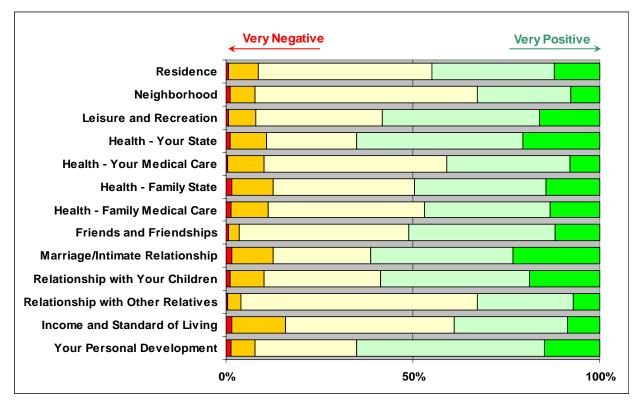


Figure 5-168. Reported Effect on Job Performance for the Independent Duty

Marines

A number of different insights can be drawn from the figure.

- Positive Impacts. The responses were considered in terms of positive impact on job performance (i.e., the total percentages of respondents who answered either "Very Positive Effect" or "Positive Effect"). By this measure all of the 13 questions/life domains had strong positive impacts because from 32.7 to 65.1 percent of the respondents chose the two favorable responses to the applicable questions.
- Negative Impacts. The responses were considered in terms of negative impact on
 job performance (i.e., the total percentages of respondents who answered either
 "Very Negative Effect" or "Negative Effect"). None of the domains had greater than
 25 percent negative responses so none could be considered to have had a strong
 negative impact by this criterion. The Income and Standard of Living life domain,
 which had 16.0 percent negative responses, had the largest negative impact.
- Polarizing Impacts. These were defined as questions/life domains for which less than 50 percent of the respondents chose the "No Effect" response. By this definition, 11 of the 13 questions/life domains qualified as having polarizing impacts. However, in general this occurred because the respondents gave such overwhelmingly positive responses to so many questions/life domains that by default these questions/life domains fell into this category. Only one life domain, Income and Standard of Living, for which 38.9 percent of the respondents answered positively and 16.0 percent of the respondents answered negatively, might be considered truly to have been "polarizing" on the question of its effect on job performance.
- Based upon a visual inspection of Figure 3-75 of the 2002 QoL Study Report, domain effect on respondent job performance appeared to have improved in 2007 relative to that in 2002 in the areas of Leisure and Recreation, Marriage/Intimate Relationship, Relationship with Children and, Income and Financial Status. Health Your State and Yourself were tied for having the greatest positive impact in 2007 and these also had the two highest levels of positive impact in 2002. In both 2002 and 2007 Income and Standard of Living had the largest negative impact.
- The highest weighted score, 2.64, on the 0-to-4 scale was seen for Health Your State. Leisure and Recreation was close behind with a score of 2.62.
- The lowest weighted score, 2.20 was seen for the Income and Standard of Living life domain.

5.15.4.3 Retention Analysis

Two questions in the 2007 QoL survey, which differed in how they allowed the respondents to answer, were related directly to retention intentions.

¹¹¹ Note that the percentages quoted in this section of the report may not match the percentages included in the individual histograms showing the results of the Effect on Job Performance questions and included in the individual life domains because the data presented here include <u>all</u> valid responses to the questions, while the data presented in the life domain analyses was weighted by Pay Grade Group, and thus excluded any respondents for whom a pay grade could not be determined.

The first question, Question #15 in the Background section, was common to all three prior Marine Corps QoL studies and asked the respondents to answer by picking which of seven statement options, summarized in Figure 5-169, 112 best described their career intentions. Social scientists believe that behavior intentions are reliable and valid predictors of actual behavior based on the results of several longitudinal studies. 113

Background Question #15 Which of the following statements best describes your career intentions at this time?											
Response	Number	Percent									
I Intend To Remain in the Marine Corps until Eligible for Retirement	539	51.7%									
I Am Eligible for Retirement but Intend To Stay in	129	12.4%									
I Intend To Stay in but Not until Retirement	47	4.5%									
I Am Not Sure What I Intend To Do	197	18.9%									
I Intend To Leave the Marine Corps as Soon as I Can	118	11.3%									
I Intend To Remain on Active Duty but I Am Being Involuntarily Separated	5	0.5%		T							
Medical Separation	8	0.8%	l 1								
Total Number of Valid Responses:	1,043	100.0%	0	100 20	00 300	400	500	600	 700		
			U	100 20	No. of R			000	700		

Figure 5-169. Retention Analysis: Responses to Background Question #15 by the Independent Duty Marines

The most frequently selected response was "I intend to remain in the Marine Corps until eligible for retirement," with 51.7 percent of the respondents selecting this response. A total of 11.3 percent of the respondents selected the "I intend to leave the Marine Corps as soon as I can" response, or less than half the percentage of the Base and Station respondents who selected that response. The least selected response was "I intend to remain on active duty but I am being involuntarily separated," with 0.5 percent of the respondents selecting this response. "Medical Separation," a new option added to the 2007 QoL survey, was selected by 0.8 percent of the respondents.

The second retention-related question, Question #11 in the Yourself life domain, was first used in the 2002 QoL Study. It asked the respondents to indicate how much they agreed or disagreed with the statement:

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

The respondents then answered by selecting the point on a "continuous" seven-point scale (i.e., darkening one of seven circles between the two extreme values) that best represented the intensity of their retention intentions. The options ranged from a circle labeled "Completely Disagree" (assigned a score of 1) to a circle labeled "Completely Agree" (assigned a score of 7). The center circle was labeled "Neutral."

The results for this second retention-related question are shown graphically by Pay Grade Group in Figure 5-170. The percentage of respondents in each Pay Grade Group who selected each of the individual circles is shown using a color scale between the two extreme responses. The E-2/E-3 Pay Grade Group showed the greatest disagreement with the statement: 54.8 percent of the respondents in that Pay Grade

¹¹² Note that the percentages shown here do not match those shown in the Background section of this report for the comparison of Background Questions #14 and #15 because the earlier graphic required valid responses to both Questions #14 and #15, whereas the data here required only valid responses to Question #15.
¹¹³ 1993 OoL Study Report, p. 127.

Group expressed some level of disagreement (i.e., darkened a circle to the left of the neutral option). Note that this figure was about 4.5 percentage points lower than the percentage of E-2/E-3 Base and Station respondents who expressed some level of disagreement (59.2 percent). The O-4 to O-10 Pay Grade Group agreed the most with the statement as 96.9 percent expressed some level of agreement (i.e., darkened a circle to the right of the neutral option). Note also that none of the members of the WO or the O-4 to O-10 Pay Grade Groups expressed any level of disagreement with the statement (i.e., darkened a circle to the left of the neutral option). The E-6/E-7 and E-8/E-9 Pay Grade Groups also expressed a high level of agreement, with 84.0 and 91.2 percent, respectively. No comparisons could be made with the results of the 2002 QoL Study since an analogous graphic was not contained in that volume.

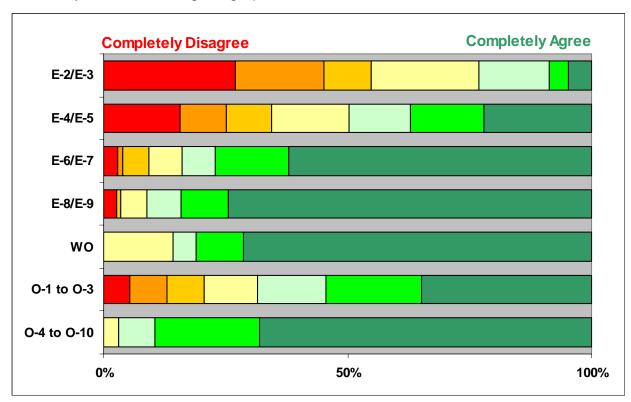


Figure 5-170. Retention Intentions of the Independent Duty Marines by Pay Grade Group (Yourself Question #11)

Figure 5-171 shows the overall grouping of the responses (also weighted by Pay Grade Group) for Yourself Question #11. The figure shows that nearly half (45.8 percent) of the respondents completely agreed with the statement and that 70.3 percent expressed some level of agreement. The equivalent figures for the 2007 Base and Station respondents were 21.4 and 39.5 percent, respectively, another indication that the more-senior cohort of Independent Duty Marines was more fully committed to a Marine Corps career.

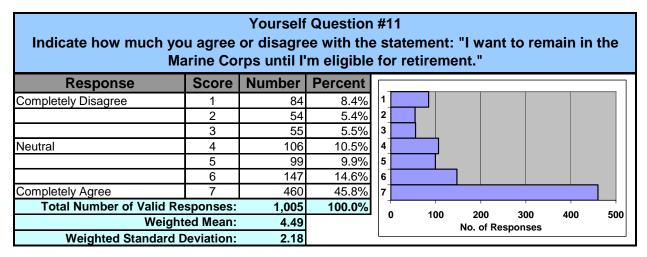


Figure 5-171. Independent Duty Marines Retention Intentions Overall (Yourself Question #11)

5.15.5 Conclusions for Life as a Whole/Global Quality of Life for the Independent Duty Marine Respondents

Overall the Global Quality of Life assessment for the Independent Duty Marines in 2007 did not show any large divergence from the of the 2002 QoL Study. This included Trends by Pay Grade Group, as well as other demographic groupings. In terms of key drivers of Global Quality of Life, Yourself and Your Military Job remained the top two drivers for this respondent group. No significant differences were seen in the opinions of those Independent Duty Marines with and without Military Community Support.

The results for the measures of military performance also were very similar to the results of the 2002 QoL Study, including the determination of which questions/life domains had the greatest positive and negative impacts on plans to remain on active duty and job performance. The retention intention results, especially when it is remembered that they were collected after 4.5 years of Marine Corps commitments to both OIF and OEF, were encouraging: Approximately 70 percent of Independent Duty Marine survey respondents indicated their intentions to stay in the Marine Corps until eligible for retirement.

5.16 SUMMARY OF THE RESPONSES OF THE INDEPENDENT DUTY MARINES

The opinions of the Independent Duty Marines are summarized in this section.

Table 5-159 shows the life domain rankings, based on the overall weighted mean happiness and satisfaction scores from this 2007 QoL Study. It is clear that happiness and satisfaction were scored differently by the respondents. Satisfaction received a higher score in seven of the 10 life domains in which a single happiness score was computed and happiness received a higher score in three of the 10. In general, what could be characterized as 'family/personal relationship' life domains were rated the highest. Relationship with Your Children (when the opinions of the parents living with their child(ren) were considered), Marriage/Intimate Relationship, Relationship with Other Relatives, and Friends and Friendships, in that order, were included in the five

highest mean happiness scores (Health received third highest happiness score). The same four life domains received four of the five highest mean satisfaction scores (Yourself received the third highest satisfaction score).

Table 5-159. Overall Weighted Mean Happiness and Satisfaction Scores in Each of the Life Domains for the 2007 Independent Duty Marine Respondents

Happiness		Satisfaction				
How Do You Feel about	Mean ¹	How Satisfied Are You Overall with:	Mean ²			
Relationship with Your Children	6.22/4.45 ³	Marriage/Intimate Relationship	5.63			
Marriage/Intimate Relationship	5.50	Relationship with Your Children	5.63			
Health	5.15	Yourself	5.51			
Relationship with Other Relatives	5.08	Relationship with Other Relatives	5.36			
Friends and Friendships	4.99	Friends and Friendships	5.19			
Leisure and Recreation	4.87	Health	5.14			
Yourself	4.86	Your Neighborhood	4.97			
Your Residence	4.80	Your Residence	4.88			
Your Neighborhood	4.76	Military Job	4.78			
Income and Standard of Living	4.62	Leisure and Recreation	4.51			
Military Job	4.34	Income and Standard of Living	4.35			

- 1. Affective/Happiness Scale: 1 = Terrible; 4 = Neither Unhappy Nor Pleased; 7 = Delighted
- 2. Cognitive/Satisfaction Scale: 1 = Completely Dissatisfied; 4 = Neutral; 7 = Completely Satisfied
- 3. First value represents the opinions of those parents living with their child(ren); second score represents the opinions of those parents not living with their children.

It can be seen that Income and Standard of Living was the life domain with which the respondents were most displeased: That life domain received the second-lowest weighted mean happiness score and the lowest weighted mean satisfaction score. However, in contrast with what was seen for the Base and Station respondents, both scores were noticeably above the neutral score of 4.00, with the happiness score in the upper part 4-to-5 range (probably reflecting the more-senior mix of pay grades in the Independent Duty Marine respondent sample). Within the individual life domains, the biggest differences between happiness and satisfaction were seen in the Relationship with Your Children domain (in which the weighted mean happiness score was either 0.59 higher or 1.18 lower than the weighted mean satisfaction score, depending on whether the respondents were or were <u>not</u> living with their children, respectively). Other large differences occurred in the Yourself life domain (where the weighted mean satisfaction score was 0.65 higher) and the Military Job life domain (in which the weighted mean satisfaction score was 0.44 higher). Leisure and Recreation, in which the weighted mean satisfaction score was 0.36 lower than the mean happiness score, was also notable.

When comparisons were made between the Independent Duty Marine and the Base and Station Marine respondents, a clear trend was seen: Weighted mean happiness and satisfaction scores both overall and in every individual life domain were higher for the Independent Duty Marines. This likely was driven most strongly by the more-senior rank structure of that group.

Table 5-160 compares the happiness and satisfaction of the Independent Duty Marines as a function of whether or not they lived within an hour or less of a military installation (defined as being with or without Military Community Support, or IDMw/MCS and IDMw/oMCS). The IDMw/MCS were both slightly happier and slightly more satisfied than the IDMw/oMCS, although none of the differences seen had any practical significance. The only life domain in which the IDMw/oMCS were both happier and more satisfied was the Residence life domain. They also were happier, but less satisfied, with their Health than were the IDMw/MCS respondents. Satisfaction in the Neighborhood life domain was equal for the two subgroups. The largest difference was seen in the scores of their happiness with there relationship with their children, in which the IDMw/MCS scored 0.31 higher than the IDMw/oMCS. Despite the dominating number of life domains in which the IDMw/MCS respondents were both happier and more satisfied, the differences generally were relatively small, as reflected in the Global Quality of Life scores: The IDMw/MCS rated their Global Quality of Life at 5.06, 0.10 greater than their IDMw/oMCS colleagues.

Table 5-160. Overall Mean Happiness and Satisfaction Scores for the Independent Duty Marine Respondents in the 11 Life Domains – by Military Community Support Status

			Overa	ıll Mean	Affective (F	lappiness) So	cores					
Military Community Support Status	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship	Relationship with Your Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Independent Duty Marines with Military Community Support	5.01	5.00	5.09	5.06	5.12	5.53	6.01	5.15	4.88	4.63	5.12	5.06
Independent Duty Marines without Military Community Support	5.05	4.98	4.87	5.28	5.03	5.44	5.70	5.09	4.83	4.56	5.05	4.96
Overall	4.80	4.76	4.87	5.15	4.99	5.50	5.92	5.08	4.62	4.34	4.86	4.76
			Overal	l Mean	Cognitive (S	atisfaction) S	Scores					
Military Community Support Status	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship	Relationship with Your Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Independent Duty Marines with Military Community Support	5.05	5.18	4.74	5.22	5.30	5.65	5.78	5.42	4.70	5.07	5.68	5.06
Independent Duty Marines without Military Community Support	5.12	5.18	4.52	5.04	5.19	5.57	5.77	5.31	4.54	4.91	5.58	4.96
Overall	4.88	4.97	4.51	5.14	5.19	5.63	5.63	5.36	4.35	4.78	5.51	4.76

Table 5-161 compares the happiness and satisfaction scores for the seven Pay Grade Groups. The two lowest enlisted Pay Grade Groups generally had the lowest happiness and satisfaction scores across each of the life domains. The most-senior enlisted and commissioned officer Pay Grade Groups were found to be generally happy and satisfied overall. However, notable differences were seen from the results for the Base and Station Marines. In that larger group, the E-2/E-3 Pay Grade Group almost invariably had the lowest scores, for both happiness and satisfaction, in any life domain, with the E-4/E-5 Pay Grade Group having the second lowest score in most instances. For the Independent Duty Marines, the E-4/E-5 Pay Grade Group had the lowest score much more frequently, a frequency that was equivalent to the number of times the E-2/E-3 Pay Grade Group had the lowest score. Overall, however, the lower-ranking subgroup had the lowest score (Global Quality of Life mean score of 4.34).

Table 5-161. Overall Mean Happiness and Satisfaction Scores for the Independent Duty Marine Respondents in the 11 Life Domains – by Pay Grade Group

					Overell Me	an Affaativa	/! lannin a a a \	Casusa					
Pay			Leisure		Friends	Marriage/			Relationship Income and		Military		Global
Grade Group	Residence	Neighborhood	and Recreation	Health	and Friendships	Intimate Relationship	Children Living with Respondent	Children Not Living with Respondent	with Other Relatives	Standard of Living	Job	Yourself	QoL
E-2/E-3	4.44	4.41	4.77	5.04	4.99	5.74	6.23	4.80	5.08	4.26	3.88	4.51	4.34
E-4/E-5	4.72	4.68	4.67	5.14	4.82	5.13	5.81	4.07	5.01	4.45	4.32	4.78	4.66
E-6/E-7	5.08	5.10	4.94	5.01	4.95	5.39	6.05	4.44	5.08	4.85	4.53	5.06	5.09
E-8/E-9	5.19	5.18	5.41	5.24	5.11	5.60	6.28	5.00	5.13	5.04	5.00	5.46	5.50
WO	5.76	5.57	5.33	5.47	5.52	5.80	6.12	5.75	5.43	5.29	5.10	5.57	5.36
O-1 to O-3	5.29	5.07	5.21	5.48	5.16	5.73	6.21	3.86	5.11	5.37	4.86	5.28	5.21
O-4 to O-10	5.32	5.38	5.30	5.56	5.43	5.64	6.16	4.61	5.30	5.41	5.24	5.48	5.53
Overall	4.80	4.76	4.87	5.15	4.99	5.50	6.22	4.45	5.08	4.62	4.34	4.86	4.76
					Overall Mea	n Cognitive	(Satisfaction) Scores					
Pay Grade Group	Residence	ŭ	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship	Relation Your C	ship with Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	QoL
E-2/E-3	4.59	4.74	4.40	5.21	5.15	5.82	5	.79	5.44	3.86	4.44	5.36	4.34
E-4/E-5	4.70	4.80	4.25	5.02	5.09	5.34	5	.26	5.21	4.17	4.59	5.49	4.66
E-6/E-7	5.25	5.30	4.73	4.84	5.26	5.51	5	.68	5.43	4.70	5.12	5.57	5.09
E-8/E-9	5.24	5.31	4.78	5.29	5.28	5.62		.88	5.19	4.94	5.37	5.93	5.50
wo	5.71	5.90	5.00	5.00	5.43	5.58		.72	5.62	5.25	5.71	6.00	5.36
O-1 to O-3	5.21	5.18	4.78	5.45	5.34	5.85		.72	5.36	5.17	5.20	5.62	5.21
O-4 to O-10	5.41	5.51	5.01	5.48	5.40	5.74	5	.99	5.50	5.30	5.53	5.86	5.53
Overall	4.88	4.97	4.51	5.14	5.19	5.63	5	.63	5.36	4.35	4.78	5.51	4.76

Table 5-162 compares the happiness and satisfaction scores for the six racial/ethnic groups considered in this study. The Asian/Pacific Islander subgroup had the highest overall Global Quality of Life score, but had the highest mean happiness score in only four of the 12 life domain/decompositions (since two happiness scores were computed for the Relationship with Your Children life domain). The Black/African American subgroup had the highest happiness score in five of the life domains/decompositions and the Whites had the highest happiness score in three. The results for satisfaction were somewhat different: The White subgroup had the highest mean satisfaction score in seven of the life domains, while the Black/African American and Asian/Pacific Islander subgroups each had the highest scores in three life domain/decompositions. The small Native American/Aleut/Eskimo and "Other" subgroups generally had the lowest happiness and satisfaction scores with very few exceptions. They each had the lowest mean happiness scores in six life domains/decompositions, but the Native American/Aleut/Eskimo subgroup was by far the least satisfied, having the lowest mean satisfaction score in nine life domains. These results generally agreed with those found for the Base and Station respondents: Black/ African Americans scored highly, while the smaller subgroups scored poorly. However, the high satisfaction levels of the White Independent Duty Marines were not seen for their Base and Station counterparts.

Table 5-162. Overall Mean Happiness and Satisfaction Scores for the Independent Duty Marine Respondents in the 11 Life Domains – by Racial/Ethnic Group

	Overall Mean Affective (Happiness) Scores												
Race/Ethnicity	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship		ship with Children Children Not Living with Respondent	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
White	5.00	5.00	5.07	5.23	5.12	5.53	6.13	4.40	5.15	4.87	4.67	5.08	5.07
Black/African- American	5.17	5.12	4.84	5.38	5.08	5.33	5.94	5.30	5.18	5.04	4.77	5.20	5.07
Asian/ Pacific Islander	4.90	5.00	5.04	5.14	5.00	5.26	6.23	-	4.85	5.07	4.54	5.57	5.19
Native American/ Aleut/Eskimo	4.52	4.64	4.62	5.52	4.00	5.20	5.67	4.00	4.67	4.25	3.60	4.45	4.52
Spanish/Hispanic	4.99	4.82	4.87	5.13	4.87	5.25	6.05	3.82	5.18	4.54	4.53	4.88	4.84
Other	5.36	4.59	4.52	4.50	4.55	5.35	5.64	3.75	4.50	4.86	4.23	4.52	4.82
Overall	4.80	4.76	4.87	5.15	4.99	5.50	6.22	4.45	5.08	4.62	4.34	4.86	4.76

	Overall Mean Cognitive (Satisfaction) Scores											
Race/Ethnicity	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship	Relationship with Your Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
White	5.07	5.12	4.70	5.18	5.31	5.64	5.79	5.41	4.67	5.06	5.64	5.07
Black/African- American	5.25	5.39	4.54	5.18	5.30	5.36	5.55	5.26	4.70	5.06	5.72	5.07
Asian/ Pacific Islander	5.56	5.33	4.50	4.85	5.12	5.33	5.75	5.19	5.11	4.88	5.77	5.19
Native American/ Aleut/Eskimo	4.48	4.73	3.89	4.43	4.19	4.69	5.29	4.75	4.65	4.55	4.90	4.52
Spanish/Hispanic	4.94	5.22	4.47	5.05	5.18	5.56	5.58	5.39	4.37	5.04	5.61	4.84
Other	4.76	4.86	4.39	4.65	4.52	5.43	4.64	5.19	4.18	4.77	5.43	4.82
Overall	4.88	4.97	4.51	5.14	5.19	5.63	5.63	5.36	4.35	4.78	5.51	4.76

As shown in Table 5-163, the male Independent Duty Marine respondents generally were happier (in nine of the 12 life domain/decompositions) and more satisfied (in seven of the 11 life domains) than their female counterparts. However, the males gave lower scores to Neighborhood and Marriage/Intimate Relationship than the females. These results contradicted those for the Base and Station Marines, for whom the females had the higher Global Quality of Life score.

Table 5-163. Overall Mean Happiness and Satisfaction Scores for the Independent Duty Marine Respondents in the 11 Life Domains – by Gender

	Overall Mean Affective (Happiness) Scores												
0	Leisure		11 101.	Friends	Marriage/	Relationship with Your Children		Relationship		Military	Yourself	Global	
Gender	Kesidence	nce Neighborhood and Health and Inti Recreation Friendships Relati	Intimate Relationship	Children Living with Respondent	Children Not Living with Respondent		Standard of Living	Job	QoL				
Male	5.02	4.99	5.02	5.22	5.06	5.46	6.10	4.53	5.13	4.87	4.63	5.10	5.05
Female	4.95	5.02	4.93	4.96	4.73	5.58	6.07	5.50	4.96	4.73	4.58	4.62	4.84
Overall	4.80	4.76	4.87	5.15	4.99	5.50	6.22	4.45	5.08	4.62	4.34	4.86	4.76

	Overall Mean Cognitive (Satisfaction) Scores											
Gender	Residence	Neighborhood	Leisure and Recreation	Health	7.1	Marriage/ Intimate Relationship	Relationship with Your Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Male	5.06	5.15	4.65	5.15	5.26	5.56	5.69	5.37	4.67	5.02	5.65	5.05
Female	5.27	5.23	4.62	4.83	4.91	5.87	5.63	5.31	4.45	5.16	5.40	4.84
Overall	4.88	4.97	4.51	5.14	5.19	5.63	5.63	5.36	4.35	4.78	5.51	4.76

The scores from the decomposition by marital/parental status, shown in Table 5-164, broke into two clear segments: Those respondents who were married, and those who were not. This dichotomy was much more pronounced than what was seen for the Base and Station respondents. Within the segments of the Independent Duty Marine sample, the respondents who were Married with Children were generally happier and more satisfied, while the members of the Divorced/Widowed/Separated with Children

subgroup were the least happy and most dissatisfied. Parents were both happier and more satisfied than non-parents with their Income and Standard of Living in all cases, indicating at least some degree of appreciation for the monetary considerations given to parents in the Marine Corps. The Never Been Married subgroup stood out in one area: Their satisfaction with their intimate relationship.

Table 5-164. Overall Mean Happiness and Satisfaction Scores for the Independent Duty Marine Respondents in the 11 Life Domains – by Marital/Parental Status

				Overall	Mean Affec	tive (Happine	ess) Scores						
Marital/Parental Status	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate Relationship		children Children Not Living with Respondent	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Divorced/Widowed/Separated with Children	4.38	4.88	5.00	4.75	4.19	3.18	5.54	5.00	4.88	4.00	4.35	4.53	4.61
Divorced/Widowed/Separated without Children	4.88	4.88	4.94	5.00	4.89	3.53	N/A	N/A	4.93	4.49	4.19	4.86	4.68
Married with Children	5.10	5.12	5.17	5.33	5.14	5.56	6.16	4.62	5.19	5.02	4.85	5.34	5.30
Married without Children	5.07	4.96	4.91	5.16	4.99	5.67	N/A	N/A	5.03	5.06	4.74	5.10	5.14
Never Been Married	4.89	4.78	4.82	5.14	5.00	5.55	5.18	4.25	5.10	4.61	4.30	4.69	4.64
Overall	4.80	4.76	4.87	5.15	4.99	5.50	6.22	4.45	5.08	4.62	4.34	4.86	4.76
)verali i	Mean Cognit	tive (Satisfact	tion) Scores						
Marital/Parental Status	Residence	Neighborhood	Leisure and Recreation	Health	Friends and Friendships	Marriage/ Intimate	Relation	ship with Children	Relationship with Other Relatives	Income and Standard of Living	Military Job	Yourself	Global QoL
Divorced/Widowed/Separated with Children	3.93	5.07	4.71	4.50	4.71	3.27	5	.21	5.33	3.69	5.25	5.07	4.61
Divorced/Widowed/Separated without Children	5.12	4.83	4.62	4.91	5.20	3.80	N	I/A	5.03	4.34	4.70	5.51	4.68
Married with Children	5.17	5.31	4.69	5.21	5.25	5.61	5	.94	5.41	4.79	5.27	5.78	5.30
Married without Children	5.20	5.27	4.69	5.18	5.34	5.75		I/A	5.41	4.90	5.09	5.63	5.14
Never Been Married	4.86	4.85	4.53	5.12	5.22	6.01		.88	5.34	4.41	4.67	5.44	4.64
Overall	4.88	4.97	4.51	5.14	5.19	5.63	5	.63	5.36	4.35	4.78	5.51	4.76

Figure 5-172 shows the trends in the overall weighted mean affective/happiness scores across the 11 life domains and for each of the two Marine Corps QoL studies performed in which the Independent Duty Marines were treated as a separate respondent group, while Figure 5-173 is an equivalent graphic for the overall weighted mean cognitive/satisfaction scores. Overall, a slight downward trend was seen. Between 2002 and 2007, weighted mean happiness scores decreased in eight of the 11 life domains (Residence, Neighborhood, Leisure and Recreation, Friends and Friendships, Relationship with Your Children, Relationship with Other Relatives, Military Job, and Yourself (where the largest change in weighted mean happiness scores in any of the life domains, -0.25, occurred)). Weighted mean satisfaction scores decreased in seven of the 11 life domains (Neighborhood, Leisure and Recreation, Health, Friends and Friendships, Marriage/Intimate Relationship, Relationship with Your Children and Yourself), although most of the decreases were very small (only one, a decrease of 0.14 in the Marriage/Intimate Relationship life domain, was greater than 0.10 in magnitude).

Thus, there appeared to be a slight overall downward movement in the perception of quality of life on the part of the Independent Duty Marines. This life domain trend-based assessment was supported by the Global Quality of Life score computed for the Independent Duty Marines: The 4.56 score computed from the 2007 data reflected a decline of 0.15 from the score computed from the 2002 data. That change had no practical significance, but ran counter to the results seen for the Base and Station respondents, where Global Quality of Life increased slightly.

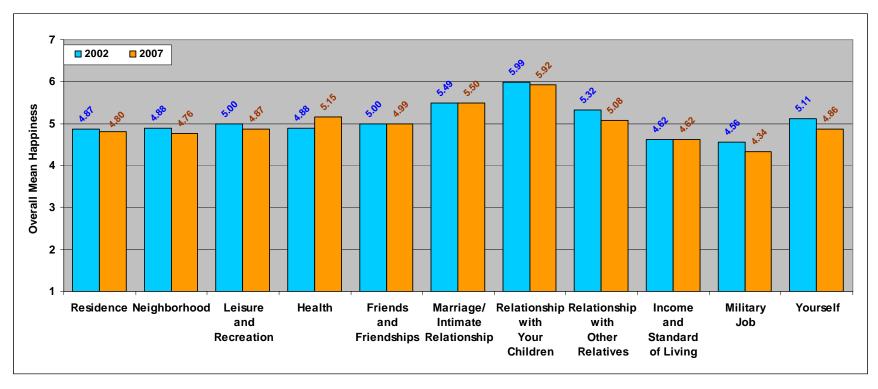


Figure 5-172. Trends in Overall Weighted Mean Happiness Scores in the 11 Life Domains: Independent Duty Marine Respondents

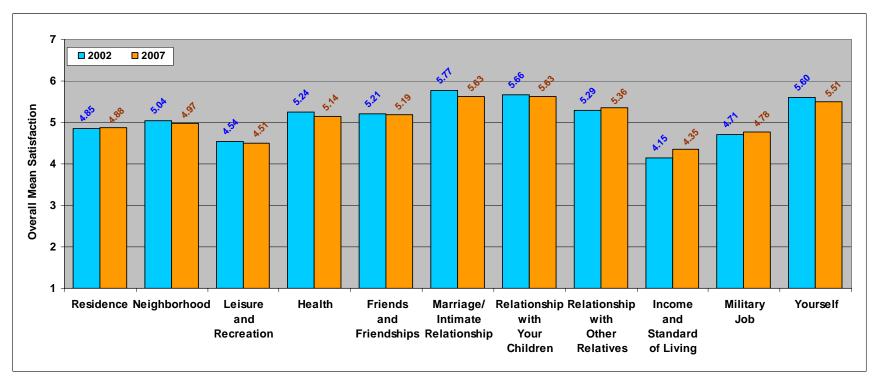


Figure 5-173. Trends in Overall Weighted Mean Satisfaction Scores in the 11 Life Domains: Independent Duty Marine Respondents

6. ANALYSIS OF THE RESPONSES FROM THE FAMILY MEMBERS

6.1 INTRODUCTION

This 2007 QoL Study was the second consecutive Marine Corps QoL study that included Family Members as a separate respondent group. The potential Family Member participants in the survey were selected randomly by HQMC with the intention of being representative of spouses throughout the Marine Corps. Starting with the assumption that 45 percent of Marines were married and given that it was recommended that 19,009 Active Duty Marine surveys be distributed prior to the E-2/E-3 enhancement (discussed in Chapter 2 and Appendix E), 8,554 (or 0.45 * 19,009) Family Member surveys initially were mailed. The group of Family Members to whom surveys were sent was selected based on the proportion of Active Duty Marines falling into each of the three survey administration groups (on-site administration by Study Team personnel, mail-in by Independent Duty Marines, mail-in by Production Recruiters.

Family Members returned their surveys *via* the USPS. For the reasons discussed in Appendix E, a total of 9,312 survey packages eventually were mailed to potential Family Member participants in the survey. Of those, a maximum of 8,236 were delivered by the USPS to the potential participants. From those, 2,172 Family Member surveys were returned to the Study Team for analysis. Thus, a 26.2 percent return rate from the Family Members (believed to be very high for a mail-in survey) was achieved. See Appendix D for a more detailed discussion of the survey administration effort.

The organization of this chapter, as well as other key information such as a discussion of statistical and practical significance and the key driver diagrams, is presented in the Analysis Plan, included as Appendix D.

6.2 WEIGHTING OF THE FAMILY MEMBER RESPONDENT SAMPLE

The weighting scheme developed for use in this 2007 QoL Study was based on that used in the 2002 QoL Study, the only other Marine Corps QoL study to include Family Members as a separate respondent group.

As was the case for the Base and Station and Independent Duty Marines, in order to produce a more accurate portrayal of quality of life perceptions within Marine Corps families, it was necessary to weight the results of selected analyses (specifically those applied to the entire group of Family Member respondents) by Pay Grade Group. However, the balance/relative percentage of married personnel among Active Duty Marines was not known in advance. Fortunately, with a mail-in response rate of more than 26 percent to a random sample of over 9,000 Marine Corps families, the responses were sufficiently numerous to give confidence that the representation by Pay Grade Group was statistically valid after correction for the lower response rates expected from (and in actuality provided by) the spouses of junior enlisted Marines.

From the Active Duty Marine surveys collected by or returned to the Study Team, it was possible to compute the projected percentage of married Active Duty Marines across the entire Marine Corps in each of the seven Pay Grade Groups considered in this

study by analyzing the responses to Question #6 of the Active Duty Marine survey (which asked about marital status). The percentages calculated are included in the second column of Table 6-1. Then, using the data from Question #6 of the Family Member survey (which asked for the rank of the respondent's spouse), the distribution of the Family Member respondents by the Pay Grade Group of their spouses could be calculated. Those data are included in the third column of Table 6-1. The relative values of the two percentages were used to generate the "Ratio" values shown in the table. When normalized to sum to 1.00, those ratios became the weights included in the right-hand column of the table.

Table 6-1. Pay Grade Group-Based Weights Assigned to the 2007 Family Member Respondent Sample

	Percent	age of	•	
Pay Grade Group	Married Marines Projected in Each Pay Grade Group	Family Member Survey Respondents	Ratio	Weight
E-2/E-3	16.717%	9.920%	1.685	0.25824
E-4/E-5	39.580%	31.352%	1.262	0.19346
E-6/E-7	21.289%	23.772%	0.896	0.13725
E-8/E-9	6.867%	7.861%	0.873	0.13385
WO	1.965%	2.854%	0.688	0.10549
O-1 to O-3	6.586%	12.026%	0.548	0.08392
O-4 to O-10	6.997%	12.213%	0.573	0.08779
Total	100.0%	100.0%		1.00000

The table says, for example, that of all Active Duty Marines that were married, 16.7 percent were projected to fall in the E-2/E-3 Pay Grade Group, while only about 7 percent were projected to be senior officers. When the Family Member responses were analyzed, however, only about 10 percent of the responses came from the spouses of Marines in the E-2/E-3 Pay Grade Group, while more than 12 percent came from the spouses of senior officers. Thus, with respect to the projected married population of the Marine Corps, the spouses of the E-2s and E-3s responded at about 60 percent of the desired rate while the spouses of the senior officers responded at a rate almost twice (175 percent) as high as the desired. As a result, when called for in this chapter, the responses of the spouses were weighted as shown in the "Weight" column of the table as a function of the Pay Grade Group of the spouse of the respondent.

6.3 DEMOGRAPHICS OF THE FAMILY MEMBER RESPONDENT SAMPLE

This section characterizes the Family Member respondent sample by a variety of personal demographics and spousal career characteristics derived from their answers to the 11 questions in the Background section (comprising personal and spouse-related questions) of the Family Member survey (Appendix G).

Before the demographic data are presented, it is important to note that not all respondents answered every question and some of those that did answer either failed

to provide valid answers (e.g., multiple responses to a single-answer question) or their answers could not be recognized during the optical scanning process. Thus, the data on the total number of responses seen in the tables presented below vary: Only the respondents from whom valid data were collected for a specific question/set of questions generally were included in the discussion of the responses to that question/set of questions.

Gender, Age and Race/Ethnicity. Table 6-2 shows the gender distribution of the Family Member respondents, based on the responses to Question #1. More than 98 percent of the respondent sample was female. Because of the relatively small number of male Family Member respondents, specific results from that demographic group will not be examined separately in this chapter.

Table 6-2. Gender Distribution of the Family Member Respondents

	Count	Percentage
Male	40	1.9%
Female	2,081	98.1%
Total	2,121	100.0%

Table 6-3 shows the age distribution of the respondents (based on the responses to Question #2), partitioned into the same seven ranges used in the 2002 QoL Study Reports. The average age of the Family Member respondents was slightly over 30 years.

Table 6-3. Age Distribution of the Family Member Respondents

	Count	Percentage
16-20	161	7.6%
21-25	542	25.6%
26-30	502	23.7%
31-35	382	18.1%
36-40	305	14.4%
41-45	156	7.4%
46 & Above	68	3.2%
Total	2,116	100.0%
Average Age	-	30.14 Yrs

As was the case in the 2002 QoL Study, no question related to race/ethnicity was included in the Family Member survey.

Length of Marriage. Table 6-4 shows the distribution of the length of the marriages (in years) of the Family Member respondents, based on the responses to Question #3. The average number of year married (assuming that the "Less Than 1 Year" responses equated to an average length of marriage of 6 months) of 6.5 years.

¹¹⁴ Specific questions referred to in this demographics discussion all came from the Background section of the Family Member survey (Appendix G).

Table 6-4. Length of Marriage of the Family Member Respondents

Length of Marriage	Count	Percentage
Less Than 1 Year	263	12.3%
1-4 Years	803	37.5%
5-9 Years	513	23.9%
10-14 Years	293	13.7%
15-19 Years	179	8.4%
20-24 Years	68	3.2%
25-29 Years	16	0.7%
30 or More Years	7	0.3%
Total	2,142	100.0%
Average*	6.49 Yrs	-

^{*} Assumes responses of "Less than 1 Year" averaged 6 months in length.

Parental Status. When asked if they had any children under the age of 21 that currently live in their household (Question #4), 1,391 of the Family Member respondents (or 68.1 percent of those who gave valid responses) reported having such children in their households. The average number of pre-school children in a household (Question #5), shown in Table 6-5, was 1.05, while the average number of school-aged children was 1.01, for a total of 2.05 children in the average Family Member respondents' household. These values show that the Family Member respondents had slightly more and slightly older children than the Base and Station respondents.

Table 6-5. Children of the Family Member Respondents

Category	Average Number
Pre-School (5 Years or Less)	1.05
School Age (6 - 20 Years)	1.01
Average Number of Children	2.06

Spouse Pay Grade Group and Enlisted/Officer Breakdown. Question #6 asked the respondents for their spouse's rank. Table 6-6 shows that spouses of enlisted Marines comprised almost 72 percent of the entire Family Member respondent sample and provided 72.9 percent of the valid responses. This shows a higher prevalence of the spouses of officers in the Family Member respondent sample than in the Base and Station respondent sample.

Also note: for the sake of brevity and to avoid awkwardness in the wording used in this chapter (for example, the desire to avoid the use of phrasing such as 'the spouses of the members of the E-2/E-3 Pay Grade Group' or 'the respondents' spouses' Pay Grade Group'), any reference made in this chapter to "pay grade" or "Pay Grade Group" inherently should be taken to refer to the pay grade or Pay Grade Group of the spouse of the respondent.

Table 6-6. Enlisted/Officer Breakdown of the Spouses of the Family Member Respondents

Pay Grade Group of Spouse	Count	Percer	ntage
E-2/E-3	212	9.9%	itago
E-4/E-5	670	31.4%	70.00/
E-6/E-7	508	23.8%	72.9%
E-8/E-9	168	7.9%	
WO	61	2.9%	
O-1 to O-3	257	12.0%	27.1%
O4 to O10	261	12.2%	
Unknown	35	1.6%	
Total	2,172	100.0%	100.0%

Service Demographics. A number of other demographic analyses were based on service-related variables, including those related to length of service and assignment location.

Question # 7 asked the Family Member respondents how many years their spouses had been on active duty in the Marine Corps. The spouse of the average Family Member respondent had spent just over 9.9 years in the Marine Corps. That figure was almost twice that seen for the Base and Station respondent sample, which was 5.4 years.

Question #8 asked the respondents where their spouses were permanently stationed. The results are shown in Table 6-7.

Table 6-7. Location of the Spouses of the Family Member Respondents

Location	Count	Percentage
MCB Camp Pendleton	337	15.52%
MCAS Miramar	86	3.96%
MCRD San Diego	44	2.03%
MCAS Yuma	47	2.16%
MCAGCC Twentynine Palms	97	4.47%
MCLB Barstow	6	0.28%
MCB Camp Lejeune	365	16.80%
MCAS New River	82	3.78%
MCAS Cherry Point	110	5.06%
MCAS Beaufort	51	2.35%
MCRD Parris Island	24	1.10%
MCLB Albany	10	0.46%
MCB Quantico	117	5.39%
Headquarters Battalion Henderson Hall	30	1.38%
MCAS Hawaii	84	3.87%
MCAS Iwakuni	25	1.15%
MCB Camp Butler	128	5.89%
Camp Allen Norfolk	13	0.60%
Marine Barracks 8th	15	0.69%
Inside CONUS	401	18.46%
Outside CONUS	22	1.01%
Unidentified Location	78	3.59%
Total	2,172	100.00%

Deployment History. A number of the Background questions in the Family Member survey (#9 through #11) were related to the OIF/OEF deployment histories of the spouses of the respondents.

Question #9 asked how many times the respondents' spouse had been deployed in support of OIF or OEF. The results are shown in Table 6-8. The spouses of only one-quarter of the Family Member sample had never been deployed in support of OIF/OEF at the time the surveys were collected. This compares with an overall Marine Corps figure of 41.5 percent, based on data supplied to the Study Team by the Study Sponsor and current as of 7 March 2008. It should be noted that the respondent sample excluded the intentional collection of data from spouses of E-1s, who would be unlikely ever to have been deployed to OIF or OEF; thus the percentage of respondents whose spouses had OIF/OEF deployment experience would be expected to rise.

¹¹⁵ Note that the results from Question #9 were combined with those from Question #10 (discussed immediately below) to adjust the responses to account for currently deployed spouses. Thus, if a respondent answered Question #9 by saying that their spouse had been deployed to OIF/OEF two times and answered Question #10 by saying that they were "Currently Deployed" at the time at which the data were collected, the count of the number of spouses that had been on two deployments was decremented by one, and the number of currently deployed spouses was incremented by one. Note that the count of 2,079 represents the total number of valid responses to Question #9, regardless of the responses to Question #10 (only 1,936 respondents gave valid answers to both questions).

Table 6-8. Number of Deployments in Support of OIF/OEF for the Spouses of the Family Member Respondents

		Percentage of		
Number of Deployments	Count	Spouses of Family Member Respondents ¹	Overall USMC ²	
Currently Deployed	315	15.2%	14.4%	
0	516	24.8%	41.5%	
1	539	25.9%	31.3%	
2	492	23.7%	11.2%	
3	168	8.1%	1.5%	
4+	49	2.4%	0.1%	
Total	2,079	100.0%	100.0%	

^{1.} Respondents were surveyed in October-November 2007.

Overall, the spouses of the Family Member respondent sample appear to have had a somewhat greater than average degree of participation in OIF/OEF. The spouses of 15.2 percent of the respondents were deployed to OIF/OEF at the time at which the survey data were collected, just slightly higher than the 14.4 percent of the overall Marine Corps above the pay grade of E-1 that was deployed. The table shows that about 34 percent of the spouses of the respondents had been on two or more deployments, not counting their current deployment. When those spouses who were deployed at the time at which the data were collected were included according to the total number of deployments in which they had participated, the percentage of spouses who had been on two or more deployments jumped to almost 43 percent. In contrast, only about one-third of that percentage, 14.9 percent, of the overall Marine Corps had that many OIF/OEF deployments. This disparity became even more pronounced when persons with three or more deployments were used as the basis of comparison: When the 10.5 percent figure seen in the table was adjusted to include the spouses with three or more deployments who also were deployed at the time at which the data were collected, more than 7.6 times (13.8 percent vs. 1.6 percent) as many spouses of the members of the Family Member respondent sample had been deployed as part of OIF/OEF than had members of the Marine Corps at large.

Question #10 asked the respondents how long it had been since their spouse's last OIF/OEF deployment. The results are shown in Table 6-9. The last two columns of the table compare the distribution of the responses to the Study Sponsor-supplied data for the entire Marine Corps. When interpreting these data, it is important to remember that the surveys were collected during October-November 2007, while the overall USMC data were current as of 7 March 2008. Thus, some of the respondents might have transitioned between the groups shown in the intervening 4-5 months.

^{2.} HQMC-supplied data as of 7 March 2008. Percentages shown exclude

E-1s but do include the 25,570 Marines deployed in OIF/OEF on that date.

Table 6-9. Time Since Last Deployment in Support of OIF/OEF for the Spouses of the Family Member Respondents

_		Percentage of			
		Family Member	Overall		
	Count	Responses ¹	USMC ²		
Currently Deployed	321	16.4%	22.5%		
0-3 Months	176	9.0%	10.0%		
3-6 Months	96	4.9%	11.7%		
6-9 Months	148	7.6%	6.9%		
9-12 Months	129	6.6%	6.6%		
12-18 Months	202	10.3%	11.0%		
18+ Months	471	24.1%	31.2%		
Does Not Apply	413	21.1%			
Total	1,956	100.0%	100.0%		

^{1.} Respondents were surveyed in October-November 2007.

Of note, while 22.5 percent of the non-E-1 members of the Marine Corps with OIF/OEF deployment experience were deployed as part of OIF/OEF, only 16.4 percent of the Family Members responded that their spouses had been deployed as part of OIF/OEF when the data were collected. The latter percentage may have been decreased somewhat by a reluctance on the part of the spouses of deployed Marines to complete the survey and/or to a diminished likelihood of successful survey delivery to the potential respondents if, for example, they had changed their residence (e.g., returned home to live with their families) during the duration of their spouse's deployment. At the time at which the survey data were collected, the spouses of more than 35 percent of the Family Member respondents had been home from OIF/OEF for at least 1 year compared to the 42 percent figure for the overall Marine Corps.

The respondents next were asked about the anticipated time to their spouse's next OIF/OEF deployment (Question #11). The results are shown in Table 6-10. While many (almost 47 percent) of the respondents did not know, about 30 percent of the respondents anticipated that their spouse would take part in another deployment within the next year. That figure is equivalent to that given by the Base and Station respondents, but about 50 percent greater than the analogous figure given by the Independent Duty Marine respondents.

^{2.} Based on HQMC-supplied data as of 7 March 2008. Underlying data include only those Marines with OIF/OEF deployment experience, and percentages shown exclude E-1s.

¹¹⁶ Note that the percentage of currently deployed spouses given in this table, which portrays the results from Question #10 differs from the percentage given in the previous table that portrays the results from Question #9. The difference was due to the different number of valid responses to the two questions (2,079 to Question #9, but only 1,956 to Question #10).

Table 6-10. Time Until Next Deployment in Support of OIF/OEF for the Spouses of the Family Member Respondents

	Count	Percentage
Don't Know	956	46.9%
0-3 Months	168	8.2%
3-6 Months	132	6.5%
6-9 Months	131	6.4%
9-12 Months	175	8.6%
12-18 Months	130	6.4%
18+ Months	148	7.3%
Never	199	9.8%
Total	2,039	100.0%

6.4 THE RESIDENCE LIFE DOMAIN

6.4.1 Satisfaction – Cognitive Evaluation of the Residence Life Domain

The weighted mean cognitive or satisfaction score (Question #5m) in the Residence life domain for the Family Member respondents in 2007 was 5.31, i.e., between "Somewhat Satisfied" and "Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Member respondent sample in the Residence life domain is shown in Figure 6-1. In the overall sample, the highest percentage of respondents, 42.5 percent, responded that they were "Satisfied" with their residence overall. A total of 75.8 percent of the respondents expressed some degree of satisfaction with their residence, while only 12.1 percent of the respondents expressed any degree of dissatisfaction with their residence.

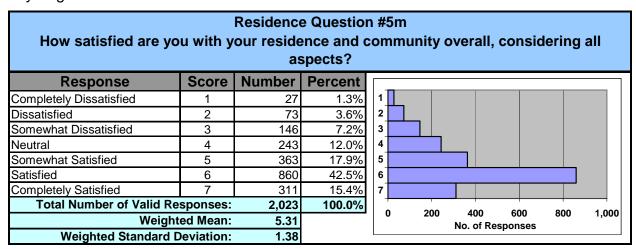


Figure 6-1. Distribution of the Overall Satisfaction Responses in the Residence Life Domain for the Family Member Respondents

Trends in the weighted mean Residence satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-2. The 2007 weighted mean satisfaction score for Residence

increased somewhat (by 0.26) from the 2002 weighted score, but this increase had no practical significance, since its Cohen's *d* statistic was only 0.18.

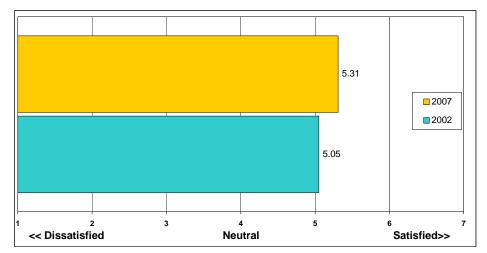


Figure 6-2. Trends in Overall Satisfaction in the Residence Life Domain for the Family Member Respondents

Overall satisfaction in the Residence life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses, the base/station to which the respondents' spouses were assigned, parental status, and housing type. Each is discussed in turn below. Recall, that since only 40 of the Family Member respondents were male, no decomposition by gender was examined. Also, there was no race/ethnicity question in the Family Member survey, so that decomposition can not be examined.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by Pay Grade Group, are shown in Table 6-11.

Table 6-11. Satisfaction with Residence by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	195	4.98	1.40
E-4/E-5	638	5.10	1.41
E-6/E-7	480	5.29	1.41
E-8/E-9	161	5.67	1.21
WO	58	5.69	1.37
O-1 to O-3	243	5.51	1.20
O-4 to O-10	248	5.60	1.31

The mean satisfaction score increased with Pay Grade Group through the enlisted and Warrant Officers. All Pay Grade Groups scored at or above "Somewhat Satisfied." The minimum satisfaction score, 4.98, was seen for the E-2/E-3 Pay Grade Group, and the maximum satisfaction score, 5.69, was seen for the WO Pay Grade Group. The only

difference of practical significance (a Cohen's *d* statistic of 0.51) in mean satisfaction by Pay Grade Group was between these two extrema.

When the trends in overall satisfaction with the Residence life domain were examined by Pay Grade Group, as shown in Figure 6-3, increases were seen in every Pay Grade Group between the results from 2002 and those from 2007; however, none of the differences had any practical significance.

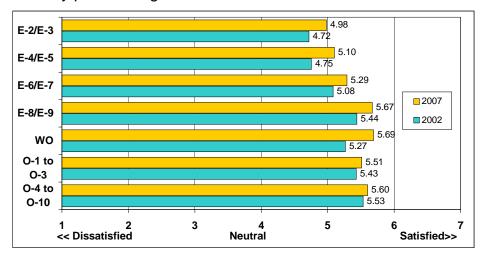


Figure 6-3. Trends in Satisfaction in the Residence Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by the base/station to which the respondents' spouses were assigned (for the 15 largest installations), are shown in Table 6-12. The mean satisfaction scores varied from a minimum of 4.96 at Camp Butler and MCB Hawaii to a maximum of 5.72 for Headquarters Battalion Henderson Hall. The six bases/stations with the lowest mean satisfaction scores for this life domain were (in ascending order) Camp Butler, MCB Hawaii, MCAS Beaufort, MCAGCC (Twentynine Palms), MCAS Cherry Point, MCAS Miramar, and MCAS Iwakuni. Note that all three of the OCONUS locations were on this list of lowest mean satisfaction scores. There were differences of practical significance between the highest mean satisfaction score (Headquarters Battalion Henderson Hall) and the three lowest scoring locations (Camp Butler, MCB Hawaii, and MCAS Beaufort), with Cohen's *d* statistics of 0.56, 0.62, and 0.54, respectively, and also between MCB Quantico and both Camp Butler and MCB Hawaii (Cohen's *d* statistics of 0.52 and 0.58, respectively).

Table 6-12. Satisfaction with Residence by Installation for the Family Member Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	50	4.98	1.55
MCB Camp Butler	120	4.96	1.51
MCB Camp Lejeune	348	5.36	1.35
MCB Camp Pendleton	312	5.32	1.33
MCAS Cherry Point	105	5.16	1.56
MCB Hawaii	83	4.96	1.27
Headquarters Battalion Henderson Hall	29	5.72	1.16
MCAS Iwakuni	23	5.30	1.06
MCAS Miramar	83	5.29	1.23
MCAS New River	79	5.53	1.25
MCRD Parris Island	22	5.50	1.34
MCB Quantico	113	5.64	1.08
MCRD San Diego	40	5.58	1.24
MCAGCC (Twentynine Palms)	89	5.07	1.44
MCAS Yuma	44	5.41	1.26

Parental Status. The means and standard deviations of the satisfaction scores for the Residence life domain, decomposed by parental status, are shown in Table 6-13. The average score for the Married with Children respondents was 5.33, 0.06 greater than that for the Married without Children respondents. This difference had no practical significance.

Table 6-13. Satisfaction with Residence by Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,330	5.33	1.38
Married without Children	644	5.27	1.38

Housing Type. The means of the satisfaction scores for the Residence life domain, decomposed by housing type, are shown in Table 6-14. The minimum satisfaction score, 4.88 (above the "Neutral" score of 4), was seen for the Family Member respondents residing in Family Housing on Base. The maximum satisfaction score, 5.77, was seen for the Family Member respondents residing in Personally-Owned Housing. There was practical significance in the difference between the mean scores for respondents residing in Personally Owned Housing and respondents residing in Family Housing on Base or in Shared Rental Housing (both with Cohen's *d* statistics of 0.66).

Table 6-14. Satisfaction with Residence by Housing Type for the Family Member Respondents

Housing Type	Count	Mean	Std. Dev.
Military Housing in Civilian Community	202	5.27	1.25
Family Housing on Base	551	4.88	1.54
Personally-Owned Housing	689	5.77	1.14
Rented Civilian Housing	409	5.22	1.29
Shared Rental Housing	52	4.94	1.35
Other	52	5.29	1.46

In addition to asking the Family Member respondents about their overall satisfaction with their residence, Question #5 also asked about satisfaction with a series of 12 separate facets of residence. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 6-4.

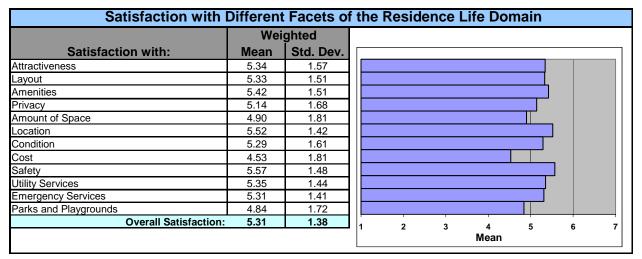


Figure 6-4. Satisfaction with Facets of Residence for the Family Member Respondents

The three weighted minimum mean scores (and the three highest standard deviations) were seen for Cost, Parks and Playgrounds, and Amount of Space. Figure 6-5 shows the histogram of responses for satisfaction with the Cost of housing. It can be seen that 30.1 percent of the Family Member respondent sample indicated some degree of dissatisfaction with the cost of their housing and 7.1 percent responded that they were "Completely Dissatisfied." Similar trends were seen when the facets of Parks and Playgrounds (Question #5I) and Amount of Space (Question #5e) were examined.

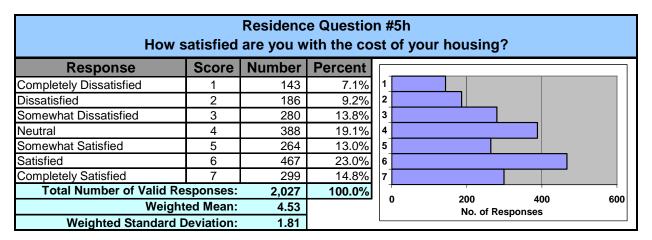


Figure 6-5. Satisfaction with Amount of Residence Space for the Family Member Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with residence for the Family Member respondents was performed. The results are shown in Figure 6-6. The relative range of the influence of the facets (as shown on the vertical scale) occurred over a somewhat compressed scale, with nearly all facet influence values falling in a range from 0.018 to 0.187. The results indicated that overall satisfaction with residence was most strongly influenced by satisfaction with the Condition of the housing and with Parks and Playgrounds, followed by (in decreasing order), the Safety, the Attractiveness of the housing, and the Layout of the housing. Cost and Location had influence values that were somewhat below those facets. Given the clustering of the influence values of these facets for the Residence life domain, the mean satisfaction scores also were an important consideration for analysis. In addition to being relatively strong influences on overall satisfaction, the Condition and Parks and Playgrounds facets also had mean satisfaction scores that fell below the overall mean satisfaction score, indicating that these facets had high potential as areas for improvement that could influence higher overall satisfaction with their residence for the Family Member respondents. Parks and Playgrounds, because it had an influence only slightly below that of Condition (0.178 vs. 0.187) but a mean score that was noticeably smaller (4.84 vs. 5.28), might be the facet with the biggest payoff in this area. The Attractiveness and the Layout of the housing, which were slightly less influential facets, had mean satisfaction scores that were only slightly above the overall mean for this domain and also were considered facets with high potential for improvement.

¹¹⁷ Note that the Amenities facet had a very small, negative correlation with/influence on overall domain satisfaction, and therefore was marked with an asterisk (since the magnitude of the influence is shown in the figure).

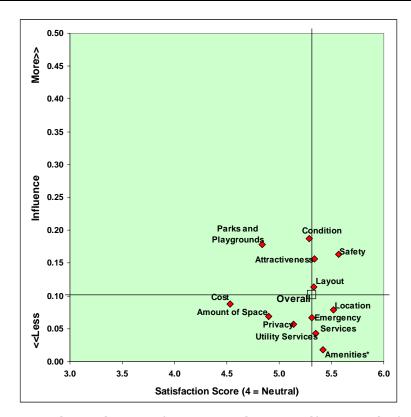


Figure 6-6. Key Driver Diagram for the Residence Life Domain for the Family Member Respondents

Visual comparison of the figure above with the analogous figure from the 2002 QoL Study showed few similarities. In that earlier study, Attractiveness had both the largest influence and a mean score below that to the overall mean. Parks and Playgrounds had the second highest influence, but Condition was only ranked fourth.

6.4.2 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Residence life domain were examined. The results are presented below.

Question #1 asked the Family Member respondents to indicate where they were living with respect to their Marine spouse. Figure 6-7 shows the distribution of responses to this question. The great majority of the respondents lived with their Marine spouse, together at the same location.

Residence Question #1 Where are you and your spouse living?						
Response	Number	Percent				
Together at the Same Location	1,576	77.4%				
Apart at Separate Locations by Choice, i.e., Geographic Bachelor	116	5.7%				
Apart at Separate Locations Due to Military Requirements, e.g., Spouse on Deployment Unaccompanied Tour, etc.	343	16.9%				
Total Number of Valid Responses:	2,035	100.0%	0 500 1,000 1,500 No. of Responses			

Figure 6-7. Where Family Member Respondents Were Living with Respect to Their Marine Spouse

Question #3 asked the Family Member respondents to indicate how long it would take them to get to the nearest military installation from their residence. Table 6-15 shows the percentage of responses to this question for each base/station. The majority of the respondents indicated that they lived less than 30 minutes away at every base or station. In fact, the only installations where more than 25 percent of the respondents lived more than 30 minutes away were Camp Pendleton (30.1 percent) and MCRD San Diego (25.6 percent). These results probably reflected the high cost of housing in and the long commutes faced by many residents of Southern California, although the equivalent figure for MCAS Miramar was only 17.5 percent.

Table 6-15. Time to Nearest Military Installation: Percentage of Family Member Responses for Each Base/Station

Base/Station	Does Not Apply	Less Than 15 Minutes	15-30 Minutes	More Than 30 Minutes but Less Than an Hour	1-2 Hours	More Than 2 Hours
MCAS Beaufort	10.0%	44.0%	32.0%	12.0%	0.0%	2.0%
MCB Camp Butler	47.8%	28.7%	13.0%	6.1%	1.7%	2.6%
MCB Camp Lejeune	10.9%	31.8%	37.8%	8.0%	2.9%	8.6%
MCB Camp Pendleton	34.2%	15.4%	20.4%	16.9%	10.7%	2.5%
MCAS Cherry Point	23.1%	37.5%	26.9%	6.7%	2.9%	2.9%
MCB Hawaii	54.9%	14.6%	18.3%	4.9%	4.9%	2.4%
Headquarters Battalion Henderson Hall	6.7%	36.7%	33.3%	16.7%	6.7%	0.0%
MCAS Iwakuni	86.4%	4.5%	0.0%	4.5%	0.0%	4.5%
MCAS Miramar	8.8%	35.0%	38.8%	12.5%	5.0%	0.0%
MCAS New River	16.0%	40.7%	27.2%	13.6%	0.0%	2.5%
MCRD Parris Island	25.0%	12.5%	41.7%	16.7%	4.2%	0.0%
MCB Quantico	17.2%	15.5%	43.1%	18.1%	5.2%	0.9%
MCRD San Diego	0.0%	30.2%	44.2%	23.3%	2.3%	0.0%
MCAGCC (Twentynine Palms)	38.5%	26.0%	14.6%	8.3%	4.2%	8.3%
MCAS Yuma	27.7%	34.0%	36.2%	0.0%	0.0%	2.1%

Question #4 asked the Family Member respondents to indicate how often they went to the nearest military installation from their residence. Table 6-16 shows the percentage of responses for each base/station to this question. Ignoring the responses from MCAS lwakuni, where 21 of the 23 respondents to this question lived on base, the largest percentage of respondents that did not live on base indicated that they went to the nearest military installation "Once a week" at eight of the 14 remaining base/stations in the table. The largest percentage of respondents indicated that they went to the nearest military installation "Several times a week" at four of the 14 remaining base/stations. At the other three bases, the most frequently chosen responses were "Everyday" at Camp Butler, and "Once a month" at Camp Pendleton and MCAS Miramar.

Table 6-16. Frequency of Visits to the Nearest Military Installation: Percentage of Family Member Responses for Each Base/Station

Base/Station	I Live on Base	Never- No Military Installation Nearby	Everyday	Several Times a Week	Once a Week	Once a Month		Once or Twice a Year	Have Never Visited
MCAS Beaufort	16.7%	0.0%	6.3%	20.8%	25.0%	20.8%	4.2%	4.2%	2.1%
MCB Camp Butler	51.6%	1.6%	22.1%	10.7%	6.6%	1.6%	0.8%	4.1%	0.8%
MCB Camp Lejeune	11.8%	3.7%	7.6%	19.2%	28.5%	12.7%	7.3%	5.9%	3.4%
MCB Camp Pendleton	35.6%	1.9%	6.5%	10.5%	10.5%	15.5%	11.1%	5.6%	2.8%
MCAS Cherry Point	24.5%	1.9%	12.3%	23.6%	19.8%	12.3%	1.9%	3.8%	0.0%
MCB Hawaii	57.1%	1.2%	3.6%	13.1%	11.9%	3.6%	3.6%	3.6%	2.4%
Headquarters Battalion Henderson Hall	6.7%	0.0%	0.0%	13.3%	46.7%	13.3%	16.7%	3.3%	0.0%
MCAS Iwakuni	91.3%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%
MCAS Miramar	10.7%	1.2%	7.1%	17.9%	25.0%	25.0%	7.1%	4.8%	1.2%
MCAS New River	17.5%	1.3%	6.3%	18.8%	27.5%	17.5%	5.0%	3.8%	2.5%
MCRD Parris Island	8.3%	16.7%	16.7%	8.3%	20.8%	16.7%	8.3%	0.0%	4.2%
MCB Quantico	17.1%	0.9%	3.4%	15.4%	24.8%	17.1%	16.2%	4.3%	0.9%
MCRD San Diego	0.0%	0.0%	7.0%	20.9%	30.2%	11.6%	14.0%	9.3%	7.0%
MCAGCC (Twentynine Palms)	37.2%	7.4%	9.6%	17.0%	9.6%	5.3%	4.3%	7.4%	2.1%
MCAS Yuma	29.5%	2.3%	13.6%	20.5%	15.9%	11.4%	4.5%	2.3%	0.0%

6.4.3 Conclusions for the Residence Life Domain for the Family Member Respondents

Satisfaction in the Residence life domain for the spouses of Marines improved somewhat in 2007 when compared with the results from the 2002 QoL Study, and satisfaction with Residence generally was at or above the "Somewhat Satisfied" level. A number of differences with practical significance in satisfaction were seen when the results were examined by Pay Grade Group, the base or station to which the respondents' spouses were assigned, and the type of housing in which the respondent lived. Higher Pay Grade Groups were more satisfied, as were those in Personally-Owned Housing. Respondents at OCONUS locations were less satisfied with their residence. The respondents expressed some concerns with the cost of housing, the parks and playgrounds near their residence, and the amount of space in their residence, based on the lower satisfaction scores seen for those facets. Satisfaction with parks and playgrounds also was a primary influence on overall satisfaction, as was satisfaction with the condition of the respondents' residence.

6.5 THE RELOCATION LIFE DOMAIN

6.5.1 Satisfaction - Cognitive Evaluation of the Relocation Life Domain

The weighted mean cognitive or satisfaction score (Question #4h) in the Relocation life domain for the Family Member respondents in 2007 was 4.75, i.e., between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Member respondent sample in the Relocation life domain is shown in Figure 6-8. In the overall sample, the highest percentage of respondents, 37.4 percent, responded that they were "Satisfied" with their Relocation overall. It can be seen that 62.7 percent of the respondents expressed some degree of satisfaction with their Relocation, while 16.9 percent of the respondents expressed some degree of dissatisfaction with their Relocation.

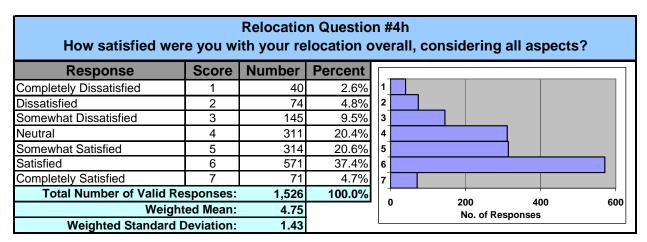


Figure 6-8. Distribution of the Overall Satisfaction Responses in the Relocation Life Domain for the Family Member Respondents

Trends in the weighted mean Relocation satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-9. The 2007 weighted mean satisfaction score for Relocation increased slightly (by 0.20) from the 2002 weighted score, but this increase had no practical significance, since its Cohen's *d* statistic was only 0.14.

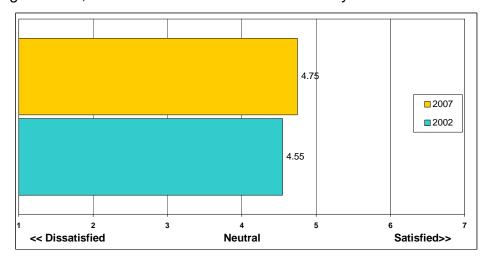


Figure 6-9. Trends in Overall Satisfaction in the Relocation Life Domain for the Family Member Respondents

Overall satisfaction in the Relocation life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses, parental status, and the respondents' number of relocations. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Relocation life domain, decomposed by Pay Grade Group, are shown in Table 6-17.

Table 6-17. Satisfaction with Relocation by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	84	4.21	1.45
E-4/E-5	393	4.70	1.45
E-6/E-7	405	4.75	1.41
E-8/E-9	142	5.15	1.28
WO	53	5.30	1.28
O-1 to O-3	224	4.81	1.42
O-4 to O-10	225	5.09	1.26

The mean satisfaction score increased with Pay Grade Group through the enlisted and Warrant Officers. The minimum satisfaction score, 4.21, was seen for the E-2/E-3 Pay Grade Group. The maximum satisfaction score, 5.30, was seen for the WO Pay Grade Group. There were differences with practical significance between the minimum (E-2/E-3) score and the score of both the WO and O-4 to O-10 Pay Grade Groups (Cohen's *d* statistics of 0.80 and 0.65, respectively).

When the trends in overall satisfaction with the Relocation life domain were examined by Pay Grade Group, as shown in Figure 6-10, increases were seen in every Pay Grade Group except the E-2/E-3 Pay Grade Group between the results from 2002 and those from 2007; however, none of the differences had any practical significance.

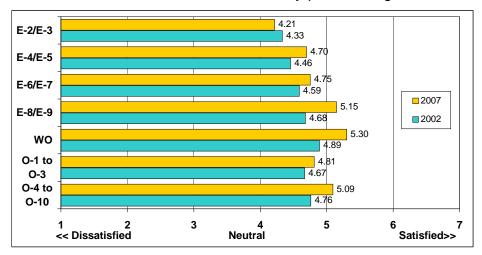


Figure 6-10. Trends in Satisfaction in the Relocation Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Parental Status. The means and standard deviations of the satisfaction scores for the Relocation life domain, decomposed by parental status, are shown in Table 6-18. The mean satisfaction score for the Married with Children respondents was 4.84, 0.09 greater than that for the Married without Children respondents. This difference had no practical significance.

Table 6-18. Satisfaction with Relocation by Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,089	4.84	1.39
Married without Children	401	4.75	1.47

Number of Relocations. The means and standard deviations of the satisfaction scores for the Relocation life domain, decomposed by the number of relocations that a respondent had experienced, are shown in Table 6-19. The mean satisfaction scores varied from a minimum of 4.72 (three relocations) to a maximum of 5.30 (nine relocations), and the mean satisfaction scores tended to increase slightly as the number of relocations increased beyond three, perhaps showing a resiliency or adaptability on the part of the respondents to cope with and accept the stresses of relocation. However, the differences between mean satisfaction scores seen in the table had no practical significance.

Table 6-19. Satisfaction with Relocation by Number of Relocations Experienced by Family Member Respondents

Number of Relocations	Count	Mean	Std. Dev.
One	394	4.81	1.44
Two	313	4.75	1.38
Three	239	4.72	1.47
Four	163	4.87	1.35
Five	125	4.91	1.44
Six	82	4.88	1.36
Seven	46	4.96	1.40
Eight	32	5.13	1.18
Nine	20	5.30	1.17
Ten or More Relocations	47	5.09	1.41

In addition to asking the Family Member respondents about their overall satisfaction with their Relocation, Question #4 also asked about satisfaction with a series of seven separate facets of Relocation. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 6-11.

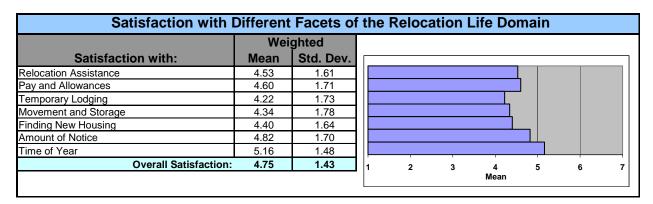


Figure 6-11. Satisfaction with Facets of Relocation for the Family Member Respondents

The two minimum weighted mean scores (and the two highest standard deviations) were seen for Temporary Lodging during relocation and Movement and Storage. Figure 6-12 shows the histogram of responses for satisfaction with Temporary Lodging. It can be seen that 30.0 percent of the Family Member respondent sample indicated some degree of dissatisfaction with the Temporary Lodging during relocation, and 8.0 percent responded that they were "Completely Dissatisfied."

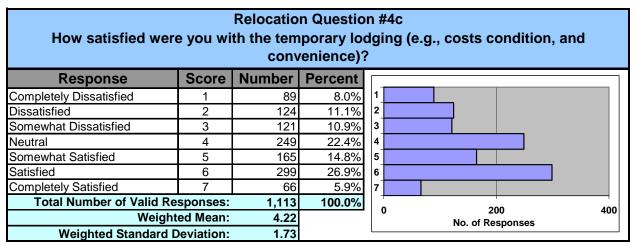


Figure 6-12. Satisfaction with Temporary Lodging during Relocation for the Family Member Respondents

Further analysis indicated that the reason for the lower mean satisfaction score for Temporary Lodging was that there were some disparities in satisfaction for those Relocation facets between Pay Grade Groups. When the responses to Question #4c were examined by Pay Grade Group, the minimum mean score, 3.80 for E-2/E-3 respondents, and the maximum mean score, 4.68 for O-4 to O-10 respondents, differed by 0.88. Not surprisingly, this difference had practical significance (Cohen's *d* statistic was 0.51).

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with Relocation for those Family Member respondents was performed. The results are

shown in Figure 6-13. The relative range of the influence of the facets (as shown on the vertical scale) occurred over a somewhat compressed scale, with all facet influence values falling in a range from 0.096 to 0.231. The results indicated that overall satisfaction with Relocation was most strongly influenced by satisfaction with Movement and Storage of belongings during relocation and the process of Finding New Housing. In addition to being relatively strong influences on overall satisfaction, the Movement and Storage, Finding New Housing, and Relocation Assistance facets also had mean satisfaction scores that fell below the overall mean satisfaction score, denoting that these facets had higher potential as areas for improvement that could influence higher overall satisfaction with Relocation for the Family Member respondents.

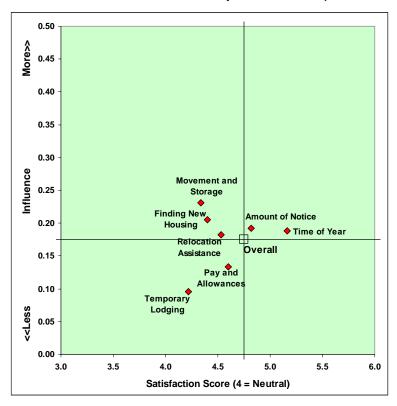


Figure 6-13. Key Driver Diagram for the Relocation Life Domain for the Family Member Respondents

Visual comparison of the figure above with the analogous figure from the 2002 QoL Study revealed a number of similarities. In both cases, Movement and Storage and Finding New Housing were the two most influential facets of satisfaction examined, and both had mean scores below that of the overall mean satisfaction. Relocation Assistance also appeared in the same place relative to the overall mean. The influence levels of Amount of Notice and Time of Year climbed in 2007 to a point above the overall mean, while that of Temporary Lodging dropped noticeably. Thus, although it was a facet in which satisfaction was very low, Temporary Lodging had little influence on overall satisfaction in the Relocation life domain, indicating the potentially limited impact of any improvements in this area on domain satisfaction.

6.5.2 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Relocation life domain were examined. The results are presented below.

Question #1 asked the Family Member respondents to indicate how many times they had been relocated with their spouse. Figure 6-14 shows the distribution of responses to this question. The highest percentage of respondents, 24.5 percent, had experienced no relocations, and the percentage of responses generally declined as the number of relocations increased, from 20.8 percent (one relocation) to 2.4 percent (10 or more relocations). 118

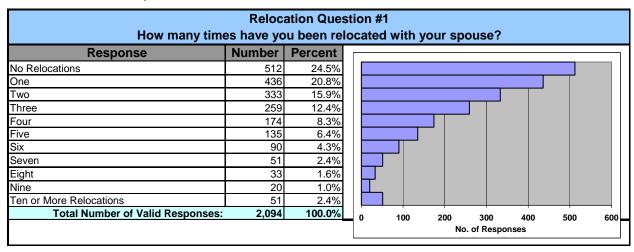


Figure 6-14. Number of Relocations of Family Member Respondents

Question #2 asked the Family Member respondents to indicate which selection best described their family's decision in regard to military housing. Table 6-20 shows the percentage of responses for each selection by the base or station at which the respondent was located, as well as the percentage of responses for the overall Family Member sample. For the overall Family Member sample, the highest percentage of respondents, 40.5 percent, said they had "Applied for and Accepted Military Housing." This was also the selection most frequently chosen at nine of the 15 bases/stations (in descending order by percentage, MCAS Iwakuni, Camp Butler, MCB Hawaii, MCAS Beaufort, MCRD San Diego, MCRD Parris Island, MCAGCC (Twentynine Palms), Camp Pendleton, and MCAS Miramar). Note that all three OCONUS bases ranked at the top of the list, and that it also included the three bases in high-cost areas of southern California (i.e., Camp Pendleton, MCAS Miramar and MCRD San Diego). For the overall Family Member sample, the second highest percentage of respondents, 32.7 percent, selected that they "Did Not Apply for Military Housing." This was also the selection most frequently chosen at six of the 15 bases/stations (in descending order by percentage, MCAS New River, Camp Lejeune, Headquarters Battalion Henderson Hall, MCAS Yuma, MCAS Cherry Point, and MCB Quantico). Notably, a fairly large

¹¹⁸ Note that the values included in the "Number" column shown in this Figure generally exceed, but do not necessarily match, those in the earlier table that showed satisfaction by number of relocations because the latter required valid answers to two separate questions.

percentage of respondents selected the "Military Housing Was Not Available" at Headquarters Battalion Henderson Hall and MCB Quantico (25.9 percent and 22.2 percent, respectively).

Table 6-20. Military Housing Decision: Percentage of Family Member Responses

	Fa	Family Actions and Decisions Regarding Miliitary Housing						
Base/Station	Was Not Available	Did Not Apply	Applied for and Accepted	Applied for and Rejected	Applied but Could Not Wait for Assignment	Not an Option Due to Family Medical Needs	Other	
MCAS Beaufort	2.6%	25.6%	59.0%	5.1%	2.6%	2.6%	2.6%	
MCB Camp Butler	4.2%	12.5%	67.5%	5.8%	0.0%	0.0%	10.0%	
MCB Camp Lejeune	6.3%	48.4%	26.9%	3.6%	4.0%	0.4%	10.3%	
MCB Camp Pendleton	4.3%	30.8%	43.3%	1.4%	6.7%	0.0%	13.5%	
MCAS Cherry Point	2.6%	42.1%	36.8%	5.3%	2.6%	1.3%	9.2%	
MCB Hawaii	5.8%	5.8%	66.7%	10.1%	7.2%	1.4%	2.9%	
Headquarters Battalion Henderson Hall	25.9%	48.1%	11.1%	3.7%	3.7%	0.0%	7.4%	
MCAS Iwakuni	0.0%	9.1%	72.7%	0.0%	0.0%	0.0%	18.2%	
MCAS Miramar	10.9%	26.6%	39.1%	3.1%	12.5%	0.0%	7.8%	
MCAS New River	5.4%	58.9%	23.2%	0.0%	1.8%	0.0%	10.7%	
MCRD Parris Island	0.0%	38.1%	52.4%	0.0%	4.8%	0.0%	4.8%	
MCB Quantico	22.2%	33.3%	14.8%	2.8%	15.7%	0.0%	11.1%	
MCRD San Diego	3.3%	33.3%	56.7%	0.0%	6.7%	0.0%	0.0%	
MCAGCC (Twentynine Palms)	3.1%	20.3%	50.0%	3.1%	9.4%	0.0%	14.1%	
MCAS Yuma	6.1%	42.4%	27.3%	0.0%	15.2%	0.0%	9.1%	
Overall	7.0%	32.7%	40.5%	3.4%	6.2%	0.3%	9.9%	

Question #3 asked the Family Member respondents who had opted not to apply for military housing to select a reason for that decision. Table 6-21 shows the percentage of responses for each selection for Question #3 by the base or station at which the respondent was located, as well as the percentage of responses for the overall Family Member sample.

Table 6-21. Reasons for Not Applying for Military Housing: Percentage of Family Member Responses

Base/Station	Too Long a Wait To Be Assigned Housing	Quality of Military Housing	Location of Military Housing	Privacy Concerns	Quality of Schools	Simply Preferred To Live Off Base	Other
MCAS Beaufort	3.0%	27.3%	3.0%	15.2%	3.0%	36.4%	12.1%
MCB Camp Butler	5.9%	27.5%	9.8%	9.8%	2.0%	25.5%	19.6%
MCB Camp Lejeune	16.7%	23.8%	4.3%	13.5%	2.8%	30.5%	8.5%
MCB Camp Pendleton	20.5%	19.9%	5.1%	7.4%	6.3%	26.7%	14.2%
MCAS Cherry Point	6.9%	29.3%	1.7%	3.4%	6.9%	46.6%	5.2%
MCB Hawaii	31.3%	18.8%	0.0%	12.5%	6.3%	25.0%	6.3%
Headquarters Battalion Henderson Hall	17.0%	17.0%	19.1%	10.6%	12.8%	14.9%	8.5%
MCAS Iwakuni	0.0%	20.0%	0.0%	0.0%	0.0%	60.0%	20.0%
MCAS Miramar	20.4%	6.1%	12.2%	12.2%	12.2%	20.4%	16.3%
MCAS New River	9.4%	29.7%	1.6%	15.6%	1.6%	29.7%	12.5%
MCRD Parris Island	0.0%	15.8%	10.5%	26.3%	5.3%	42.1%	0.0%
MCB Quantico	24.1%	11.5%	3.4%	10.3%	2.3%	34.5%	13.8%
MCRD San Diego	15.4%	19.2%	19.2%	15.4%	7.7%	15.4%	7.7%
MCAGCC (Twentynine Palms)	23.5%	5.9%	2.9%	5.9%	2.9%	29.4%	29.4%
MCAS Yuma	11.1%	7.4%	3.7%	18.5%	0.0%	44.4%	14.8%
Overall	16.0%	20.3%	5.7%	11.4%	4.6%	30.0%	11.9%

For the overall Family Member sample, the highest percentage of respondents, 30.0 percent, selected that they "Simply Preferred To Live Off Base." Ignoring MCAS Iwakuni (for which there were only five valid responses), this also was the selection most frequently chosen at 10 of the 14 bases/stations (in descending order by percentage, MCAS Cherry Point, MCAS Yuma, MCRD Parris Island, MCAS Beaufort, MCB Quantico, Camp Lejeune, MCAS New River, MCAGCC (Twentynine Palms), Camp Pendleton, and MCAS Miramar). At three other bases/stations, MCAS New River (note that 29.7 percent of the respondents at this installation chose both this response and the off base preference), Camp Butler, and MCRD San Diego, "Quality of Housing" was the primary reason for not applying for military housing. Thus, there may be some concern in this area. It can be seen that, at three other bases/stations -MCAS Cherry Point, MCAS Beaufort and Camp Lejeune – more than 20 percent of the respondents indicated that poor quality was the reason for not applying for military housing. Further, more than 15 percent of the respondents chose that option at four other bases/stations: MCRD Parris Island, Camp Pendleton, MCB Hawaii and Headquarters Battalion Henderson Hall. Thus, at least 15 percent of the Family Member respondents at 10 of the 14 bases/stations with more than five respondents indicated that the major reason for not applying for military housing was the quality of that housing. Concern with that factor might also have driven up the number of respondents who "Simply Preferred To Live Off Base."

At two bases/stations, MCB Hawaii and MCAS Miramar, the most frequently chosen response was that there was "Too Long a Wait To Be Assigned Housing." At two other bases/stations, MCRD San Diego and Headquarters Battalion Henderson Hall, the most frequently chosen reason was the Location of the military housing.

Question #5 asked the Family Member respondents to indicate which selection best described their family's experience with regard to the sponsorship program for relocation. Table 6-22 shows the percentage of responses for each response option in Question #5 by the base/station at which the respondent was located, as well as the percentage of responses for the overall Family Member sample. For the OCONUS locations, the highest percentage of responses indicated that the respondents had "Requested and Were Assigned a Sponsor" (40 percent for MCB Hawaii and about 74 percent for the two bases/stations in Japan). For all but one of the CONUS locations, the highest percentage of responses indicated that they "Were Not Aware That Sponsors Were Available." The exception was Headquarters Battalion Henderson Hall, where the highest number of respondents indicated that they were aware of the availability of sponsors, but did not request one.

Table 6-22. Sponsorship Program Experiences: Percentage of Family Member Responses

Base/Station	Requested and Assigned a Sponsor	Requested a Sponsor But Not Assigned	Aware Sponsors Available but Did Not Request	Not Aware Sponsors Were Available	Other
MCAS Beaufort	5.6%	5.6%	13.9%	58.3%	16.7%
MCB Camp Butler	74.3%	3.7%	6.4%	5.5%	10.1%
MCB Camp Lejeune	2.3%	2.8%	32.4%	52.8%	9.7%
MCB Camp Pendleton	2.4%	1.0%	21.2%	54.8%	20.7%
MCAS Cherry Point	6.7%	2.7%	22.7%	49.3%	18.7%
MCB Hawaii	40.0%	9.2%	9.2%	23.1%	18.5%
Headquarters Battalion Henderson Hall	7.4%	3.7%	44.4%	33.3%	11.1%
MCAS Iwakuni	73.9%	4.3%	0.0%	4.3%	17.4%
MCAS Miramar	7.0%	5.3%	26.3%	54.4%	7.0%
MCAS New River	0.0%	3.8%	15.4%	59.6%	21.2%
MCRD Parris Island	4.3%	0.0%	21.7%	65.2%	8.7%
MCB Quantico	3.0%	1.0%	24.0%	54.0%	18.0%
MCRD San Diego	3.4%	6.9%	24.1%	55.2%	10.3%
MCAGCC (Twentynine Palms)	0.0%	1.6%	23.8%	58.7%	15.9%
MCAS Yuma	3.0%	6.1%	21.2%	48.5%	21.2%
Overall	13.7%	3.1%	21.7%	46.3%	15.1%

6.5.3 Conclusions for the Relocation Life Domain for the Family Member Respondents

Satisfaction in the Relocation life domain for the spouses of Marines improved slightly in 2007 when compared with the results from the 2002 Study, and satisfaction with Relocation was generally above the "Neutral" rating. Notable differences in satisfaction were seen when examined by Pay Grade Group: As has been the case fairly consistently in this and earlier studies, higher Pay Grade Groups generally were more satisfied. Respondents also were more satisfied with their Relocation experiences after about their third relocation. The respondents expressed some concerns with temporary lodging during relocation, as well as with the movement and storage of their belongings during relocation based on the lower satisfaction scores seen for those facets. Satisfaction with movement and storage also was a primary influence on overall satisfaction, as was satisfaction with the process of finding new housing.

6.6 THE LEISURE AND RECREATION LIFE DOMAIN

6.6.1 Satisfaction – Cognitive Evaluation of the Leisure and Recreation Life Domain

The weighted mean cognitive or satisfaction score (Question #2c) in the Leisure and Recreation life domain for the Family Member respondents in 2007 was 4.67, i.e., between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Member respondent sample in the Leisure and Recreation life domain is shown in Figure 6-15. The response chosen by the

highest percentage of respondents was "Neutral" (30.1 percent) followed closely by a response of "Satisfied" (29.0 percent). A total 52.4 percent of the respondents expressed some level of satisfaction with their leisure time, while 17.4 percent expressed some level of dissatisfaction with their leisure time.

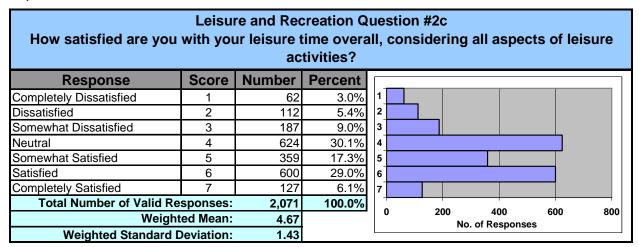


Figure 6-15. Distribution of the Overall Satisfaction Responses in the Leisure and Recreation Life Domain for the Family Member Respondents

Trends in the weighted mean Leisure and Recreation satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-16. The 2007 weighted mean satisfaction score for Leisure and Recreation increased very slightly (by 0.03) from the 2002 weighted score. The increase had no practical significance.

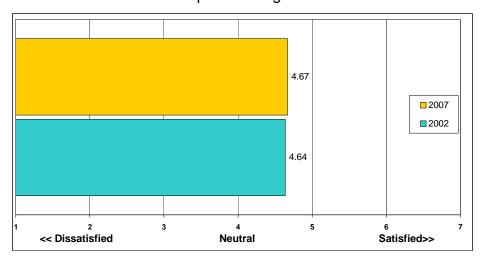


Figure 6-16. Trends in Overall Satisfaction in the Leisure and Recreation Life Domain for the Family Member Respondents

Overall satisfaction in the Leisure and Recreation life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group, the base/station to which the respondents' spouses were assigned, and parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by Pay Grade Group, are shown in Table 6-23.

Table 6-23. Satisfaction with Leisure and Recreation by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	195	4.35	1.40
E-4/E-5	657	4.53	1.39
E-6/E-7	493	4.44	1.48
E-8/E-9	163	4.92	1.32
WO	61	5.16	1.50
O-1 to O-3	252	4.89	1.45
O-4 to O-10	250	5.06	1.28

As seen for other measures, the mean satisfaction scores generally increased with pay grade through the enlisted Pay Grade Groups, with the exception of the E-4/E-5 Pay Grade Group. The means for five of the Pay Grade Groups were between "Neutral" and "Somewhat Satisfied." The WO and O-4 to O-10 Pay Grade Groups had means slightly above "Somewhat Satisfied." The minimum satisfaction score, 4.35, was seen for the E-2/E-3 Pay Grade Group and the maximum score, 5.16, for the Warrant Officers. The Cohen's *d* statistic for the difference between these two means was 0.56, indicating a difference with practical significance. The difference between the means of the E-2/E-3 Pay Grade Group and the O-4 to O-10 Pay Grade Group also had practical significance (Cohen's *d* statistic was 0.53).

When the trends in overall satisfaction with the Leisure and Recreation life domain were examined by Pay Grade Group, as shown in Figure 6-17, increases were seen in every group between the results from 2002 and those from 2007, with two exceptions: The E-6/E-7 and O-4 to O-10 Pay Grade Groups, where satisfaction declined by 0.13 and 0.23, respectively.

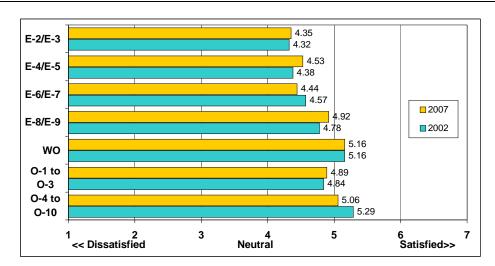


Figure 6-17. Trends in Satisfaction in the Leisure and Recreation Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by the base/station to which the respondents' spouses were assigned (for the 15 largest installations), are shown in Table 6-24.

Table 6-24. Satisfaction with Leisure and Recreation by Installation for the Family Member Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	51	4.37	1.44
MCB Camp Butler	125	5.14	1.25
MCB Camp Lejeune	349	4.58	1.36
MCB Camp Pendleton	323	4.85	1.32
MCAS Cherry Point	107	4.35	1.66
MCB Hawaii	82	5.09	1.17
Headquarters Battalion Henderson Hall	30	4.80	1.30
MCAS Iwakuni	25	5.16	1.43
MCAS Miramar	85	5.07	1.17
MCAS New River	81	4.38	1.37
MCRD Parris Island	23	3.83	1.40
MCB Quantico	114	4.70	1.48
MCRD San Diego	41	5.02	1.37
MCAGCC (Twentynine Palms)	96	4.18	1.52
MCAS Yuma	47	4.23	1.42

The mean satisfaction scores varied from a minimum of 3.83 at MCRD Parris Island (slightly below "Neutral") to a maximum of 5.16 for MCAS Iwakuni. The value of the Cohen's *d* statistic for the difference between the means of these two installations was 0.94, indicating a large effect size/difference of practical significance. Note that the score for MCRD Parris Island was the only one that fell below "Neutral"; the next lowest score was 4.18, for MCAGCC (Twentynine Palms). Other bases/stations with relatively

low satisfaction scores were MCAS Yuma (4.23), MCAS Cherry Point (4.35), MCAS Beaufort (4.37), and MCAS New River (4.38). The highest scores were seen for the three OCONUS bases/stations and the three in the San Diego/Oceanside area.

Parental Status. The means and standard deviations of the satisfaction scores for the Leisure and Recreation life domain, decomposed by parental status, are shown in Table 6-25. The Married with Children subgroup had a mean of 4.64, only 0.03 less than the mean of the Married without Children subgroup, so no practical significance existed between the two subgroups.

Table 6-25. Satisfaction with Leisure and Recreation by Marital/Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,350	4.64	1.43
Married without Children	670	4.67	1.44

In addition to asking the respondents about their overall satisfaction with their leisure and recreation activities, Question #2 also asked about satisfaction with two separate facets of leisure and recreation. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 6-18. It can be seen that the Cost of leisure activities had the lower weighted mean satisfaction score of 4.45, compared with the weighted mean of 4.71 for the Variety of leisure activities. The difference between these two weighted means had no practical significance.

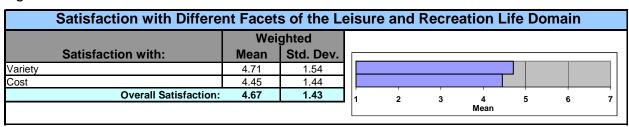


Figure 6-18. Satisfaction with Facets of Leisure and Recreation for the Family Member Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with leisure and recreation for the Family Member respondents was performed. The results are shown in Figure 6-19. Note that, the influence scale in this figure ranges from 0.00 to 0.60. The magnitudes of the influence coefficients for the two facet satisfactions ranged from 0.41 for the Cost of Leisure Activities to 0.53 for Amount of Leisure Time. While the Variety of Activities Available had the most influence on overall domain satisfaction, the fact that the Cost of Leisure Activities had a mean score below the overall mean implies that facet might present more opportunities for improving satisfaction of the Family Members in this life domain.

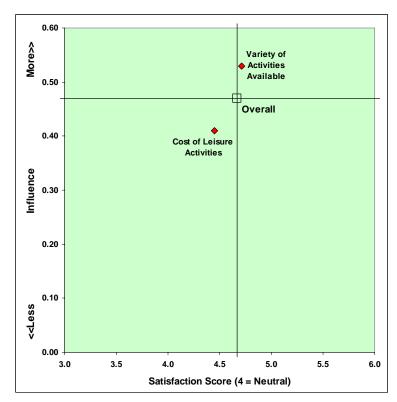


Figure 6-19. Key Driver Diagram for the Leisure and Recreation Life Domain for the Family Member Respondents

6.6.2 Other Life Domain-Specific Analyses

Question #1 asked the respondents to indicate how frequently they used seven different military programs and services available at many installations. The responses ranged on a seven-point scale from "Not Available" to "Never" and "Occasionally" to "Several Times a Week" and "Daily."

Figure 6-20 shows the reported utilization of each of the activities for the entire Family Member respondent sample (after the "Not Available" responses were grouped with the "Never" responses). Decompositions by individual bases/stations can be found in Appendix L. The most frequently used programs were 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). Both of these activities also were the most frequently used in 2002. However, overall utilization of the programs and services was relatively low: More than 50 percent of the respondents never took advantage of the programs/services available or did so only occasionally. Visual comparison of the figure below and of the analogous figure in the 2002 QoL Study Report also indicated that reported utilization of the programs and services available had declined since 2002.

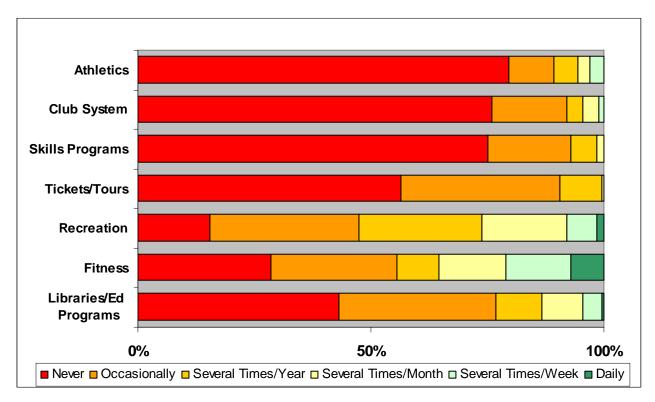


Figure 6-20. Activity Utilization Diagram for the Family Member Respondents Living with Their Spouses

6.6.3 Conclusions for the Leisure and Recreation Life Domain for the Family Member Respondents

The Family Member respondents reported being "Neutral" to "Somewhat Satisfied" with their leisure and recreation activities. Differences from the overall result of the 2002 QoL Study were very minor, with no differences with practical significance. However, differences were seen between Pay Grade Groups and between the locations with the lowest and highest means. The variety of leisure activities available was the key driver of this life domain with a mean between "Neutral" and "Somewhat Satisfied," but the utilization of existing programs and activities by the Family Members was relatively low.

6.7 THE SUPPORT SYSTEMS LIFE DOMAIN

6.7.1 Satisfaction – Cognitive Evaluation of the Residence Life Domain

The weighted mean cognitive or satisfaction score (Question #1p) in the Support Systems life domain for the Family Member respondents in 2007 was 4.60, i.e., below "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Member respondent sample in the Support Systems life domain is shown in Figure 6-21. In the overall sample, the highest percentage of respondents, 35.8 percent, responded that they were "Neutral" toward their support systems. Slightly under half of the respondents, 46.3 percent, expressed some degree

of satisfaction with their residence, and 17.9 percent expressed some degree of dissatisfaction.

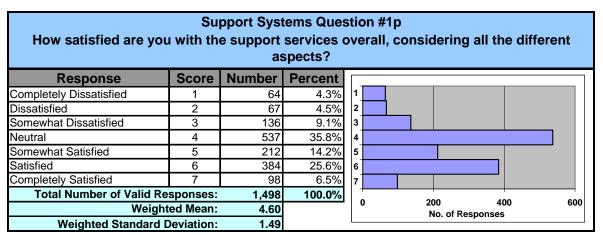


Figure 6-21. Distribution of the Overall Satisfaction Responses in the Support Systems Life Domain for the Family Member Respondents

Trends in the weighted mean Support Systems satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-22. The 0.01 increase in the weighted mean satisfaction score since 2002 had no practical significance.

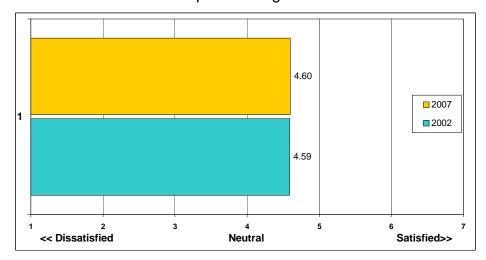


Figure 6-22. Trends in Overall Satisfaction in the Support Systems Life Domain for the Family Member Respondents

Overall satisfaction in the Support Systems life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses, the base/station to which the respondents' spouses were assigned, and parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Support Systems life domain, decomposed by spouse's Pay Grade Group, are shown in Table 6-26.

Table 6-26.	Satisfaction with Support Systems by Pay Grade Group of the
	Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	115	4.59	1.64
E-4/E-5	491	4.38	1.46
E-6/E-7	359	4.45	1.51
E-8/E-9	122	4.59	1.30
WO	52	5.02	1.57
O-1 to O-3	179	4.68	1.43
O-4 to O-10	180	4.82	1.23

The minimum satisfaction score, 4.38, was seen for the E-4/E-5 Pay Grade Group. The maximum satisfaction score, 5.02, was seen for the WO Pay Grade Group which was the only Pay Grade Group with a mean above 5.0. The differences between these two means had no practical significance (with a Cohen's *d* statistic of 0.42).

When the trends in overall satisfaction with the Support Systems life domain were examined by Pay Grade Group, as shown in Figure 6-23, increases were seen in three out of the seven Pay Grade Groups examined (E-2/E-3, E-6/E-7, and WO), with the largest increase, 0.16, seen for the E-2/E-3 Pay Grade Group. However, this difference had no practical significance, based on the Cohen's *d* statistic of 0.11. The mean score of the E-8/E-9 Pay Grade Group was unchanged since 2002, while the means of the other Pay Grade Groups decreased. The largest decrease (0.20) was seen in the O-4 to O-10 Pay Grade Group but was not considered significant (based on a Cohen's *d* statistic of 0.16).

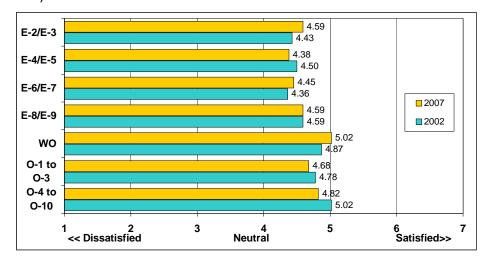


Figure 6-23. Trends in Overall Satisfaction in the Support Systems Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Support Systems life domain, decomposed by the base/station to which the respondents' spouses were assigned (for the 15 largest installations), are shown in Table 6-27.

Table 6-27. Satisfaction with Support Systems by Installation for the Family Member Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	40	4.65	1.33
MCB Camp Butler	96	4.75	1.23
MCB Camp Lejeune	263	4.49	1.56
MCB Camp Pendleton	231	4.48	1.42
MCAS Cherry Point	85	4.56	1.45
MCB Hawaii	65	4.86	1.22
Headquarters Battalion Henderson Hall	21	4.90	1.45
MCAS Iwakuni	23	4.74	1.18
MCAS Miramar	66	4.82	1.47
MCAS New River	60	4.67	1.26
MCRD Parris Island	17	4.35	1.58
MCB Quantico	71	4.75	1.47
MCRD San Diego	30	4.53	1.61
MCAGCC (Twentynine Palms)	74	4.61	1.43
MCAS Yuma	41	4.68	1.19

The mean at each base/station fell between the responses of "Neutral" and "Somewhat Satisfied." The mean score for Headquarters Battalion Henderson Hall (4.90) was the highest and the mean score for MCRD Parris Island (4.35) was the lowest. There was no difference of practical significance between these extrema (Cohen's *d* statistic of 0.36).

Parental Status. The means and standard deviations of the satisfaction scores for the Support Systems life domain, decomposed by parental status, are shown in Table 6-28. The score for the Married with Children subgroup was greater than the Married without Children subgroup, but the difference, 0.18, had no practical significance. Both subgroups had means that corresponded to a response between "Neutral" and "Somewhat Satisfied."

Table 6-28. Satisfaction with Support Systems by Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,004	4.60	1.44
Married without Children	450	4.42	1.45

In addition to asking the respondents about their overall satisfaction with their support systems, Question #1 also asked about satisfaction with a series of 15 separate facets

of support systems. The weighted mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 6-24.

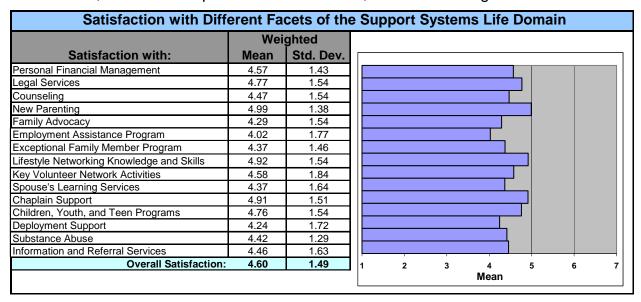


Figure 6-24. Satisfaction with Facets of Support Systems for the Family Member Respondents

The weighted mean of each facet corresponded to a response between "Neutral" and "Somewhat Satisfied." The lowest weighted mean of 4.02 was found in the Employment Assistance Program. The highest weighted mean of 4.99 was found in the New Parenting facet. A difference with practical significance existed between these extrema with a Cohen's *d* statistic of 0.61. The only other differences with practical significance were between the mean for the lowest scoring Employment and the means for Lifestyle Networking Knowledge and Skills and Chaplain Support, both of which had a Cohen's *d* statistic of 0.54.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with support systems for the Family Member respondents was performed. The results are shown in Figure 6-25. The magnitudes of the influence factors ranged from 0.001 to 0.277. Overall satisfaction with Support Systems was most strongly influenced by Family Advocacy, followed by Information and Referral Services, Spouse's Learning Services, and Deployment Support. These facets each had influences greater than that of the overall mean, and improvements in them would be expected to have the greatest impact on satisfaction in this life domain. They also (along with Counseling) were essentially the same facets as were found in the 2002 QoL Study to have the greatest degree of influence. The facets with the least amount of influence were New Parenting and Children, Youth, and Teen Programs. The first of these also was among the least influential facets in 2002.

¹¹⁹ Note that the Legal Services, Counseling, New Parenting and Lifestyle Networking Knowledge and Skills facets were negatively correlated with overall domain satisfaction, and therefore were marked with an asterisk (since the magnitude of the influence is shown in the figure).

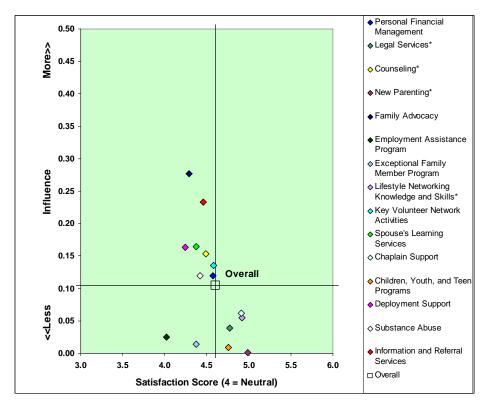


Figure 6-25. Key Driver Diagram for the Support Systems Life Domain for the Family Member Respondents

6.7.2 Conclusions for the Support Systems Life Domain for the Family Member Respondents

The Family Member respondents were "Neutral" to "Somewhat Satisfied" in their opinions of Marine Corps-provided Support Systems overall. No practical difference existed between the 2002 and 2007 means. Decomposing the overall satisfaction by Pay Grade Group, parental status, or spouse's base/station did not disclose any differences with any practical significance. The key driver diagram in 2007 looked fundamentally like its 2002 counterpart with Family Advocacy remaining the key driver. The only differences with any practical significance between the support program facets were found between the lowest scoring facet, New Parenting, and the three highest scoring facets.

6.8 THE HEALTH CARE LIFE DOMAIN

6.8.1 Satisfaction - Cognitive Evaluation of the Health Care Life Domain

The weighted mean cognitive or satisfaction score (Question #6j) in the Health Care life domain for the Family Members in 2007 was 5.00 or "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Member respondent sample in the Health Care life domain is shown in Figure 6-26. In the overall sample, the highest percentage of respondents, 37.2 percent, responded

that they were "Satisfied" with their Health Care overall. Note also that 18.2 percent of the respondents were to some degree dissatisfied with their Health Care in any way while 66.2 percent said they were to some degree satisfied.

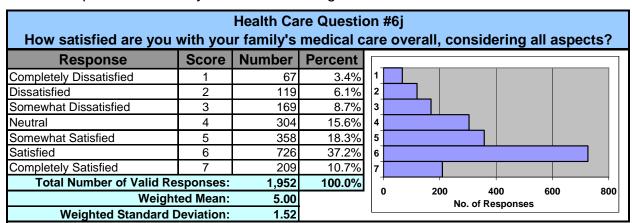


Figure 6-26. Distribution of the Overall Satisfaction Responses in the Health Care
Life Domain for the Family Member Respondents

Trends in the weighted mean Health Care satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-27. The 2007 weighted mean satisfaction score for Health Care increased by 0.31 from the 2002 weighted score, but this increase had no practical significance, since its Cohen's *d* statistic was only 0.20.

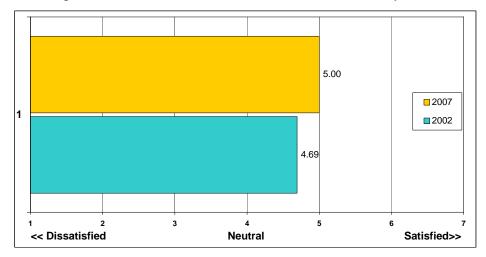


Figure 6-27. Trends in Overall Satisfaction in the Health Care Life Domain for the Family Member Respondents

Overall satisfaction in the Health Care life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses, the base/station to which the respondents' spouses were assigned, and parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Health Care life domain, decomposed by spouses Pay Grade Group, are shown in Table 6-29.

Table 6-29. Satisfaction with Health Care by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	186	5.16	1.43
E-4/E-5	614	4.86	1.63
E-6/E-7	462	4.87	1.57
E-8/E-9	160	5.08	1.59
WO	59	5.00	1.49
O-1 to O-3	236	4.92	1.43
O-4 to O-10	235	5.00	1.46

No overall trends for this life domain were seen here. The mean scores were tightly clustered, with the E-4/E-5 subgroup having the lowest with a score, 4.86, and the E-2/E-3 Pay Grade Group having the highest, 5.16. None of the differences seen here had practical significance.

When the trends in the overall satisfaction with the Health Care life domain were examined by Pay Grade Group, as shown in Figure 6-28, all Pay Grade Groups saw an increase with the maximum change (0.45) in the E-2/E-3 Pay Grade Group. However, none of the changes seen here had any practical significance.

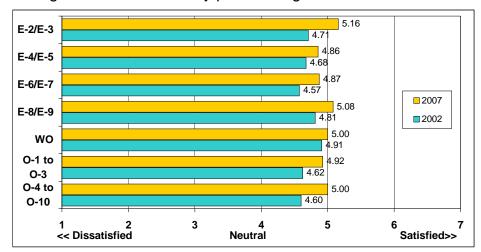


Figure 6-28. Trends in Satisfaction in the Health Care Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Health Care life domain, decomposed by the base/station to which the respondents' spouses were assigned, are shown in Table 6-30. The mean satisfaction scores varied widely, from a minimum score of 4.13 at MCRD Parris Island to a maximum satisfaction score of 5.40 for MCAGCC (Twentynine Palms). In fact, the score for MCRD Parris Island was 0.35 below that of the next lowest scoring base/station (Headquarters

Battalion Henderson Hall). Not only was there a practical difference between the extrema, but the mean score for MCRD Parris Island was found to have a difference of practical significance with each of the next five highest scoring bases/stations (in order, MCAS Yuma, MCRD San Diego, MCAS Beaufort, MCB Hawaii and MCAS Miramar. The mean score of the second lowest scoring base/station, Headquarters Battalion Henderson Hall, was found to have a difference of practical significance with each of the same six installations except MCAS Miramar. Practical differences also were found between the third lowest scoring base/station, MCAS Cherry Point, and MCAGCC (Twentynine Palms) and MCAS Yuma, and between MCB Quantico and MCAGCC (Twentynine Palms).

Table 6-30. Satisfaction with Health Care by Installation for the Family Member Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	46	4.22	1.59
MCB Camp Butler	117	4.91	1.45
MCB Camp Lejeune	333	5.01	1.58
MCB Camp Pendleton	305	4.93	1.54
MCAS Cherry Point	102	4.55	1.56
MCB Hawaii	75	5.20	1.36
Headquarters Battalion Henderson Hall	29	4.48	1.40
MCAS Iwakuni	23	4.83	1.44
MCAS Miramar	81	5.19	1.52
MCAS New River	76	4.82	1.51
MCRD Parris Island	23	4.13	2.12
MCB Quantico	107	4.60	1.73
MCRD San Diego	39	5.21	1.44
MCAGCC (Twentynine Palms)	92	5.40	1.35
MCAS Yuma	43	5.33	1.11

Parental Status. The means and standard deviations of the satisfaction scores for the Health Care life domain, decomposed by parental status, are shown in Table 6-31. Although the difference between those with and without children did not have practical significance, it can be seen that those without children scored marginally (by 0.06) lower.

Table 6-31. Satisfaction with Health Care by Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,290	4.97	1.56
Married without Children	615	4.91	1.50

In addition to asking the respondents about their overall satisfaction with their Health Care, Question #6 also asked about satisfaction with a series of six separate facets of Health Care. The weighted mean and standard deviation scores for each of these facets are shown in Figure 6-29. The lowest weighted score and the highest weighted

standard deviation were seen in how satisfied the respondents were with Availability of Appointments (4.24). Only Satisfaction with the Hours the medical facility was open (5.02) scored above the overall satisfaction and above "Somewhat Satisfied."

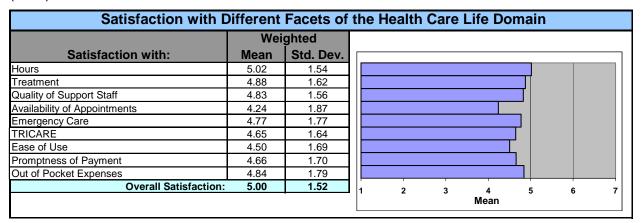


Figure 6-29. Satisfaction with Facets of Health Care for the Family Member Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with Health Care for the Family Member respondents was performed. The results are shown in Figure 6-30. The magnitudes of the influence values ranged from 0.004 to 0.352. The three most influential facets were Treatment, Out of Pocket Expenses, and Promptness of Payments. Each of these had an influence greater than average on the overall mean and had mean scores below the overall mean, indicating that improvements in these areas both were possible and likely would result in improvements in satisfaction in this life domain. The two most influential facets and their relation to the overall mean (i.e., above and to the left) were identical to the results seen in the 2002 QoL Study. Of potential interest, between 2002 and 2007, the mean satisfaction with the Hours the medical facilities are open stayed about the same, while the mean satisfaction scores of everything else portrayed in the figure appear to have increased.

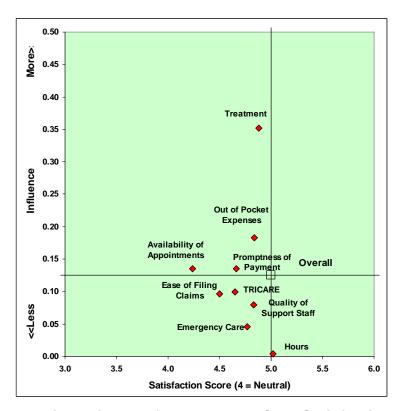


Figure 6-30. Key Driver Diagram for the Health Care Satisfaction Facets for the Family Member Respondents

6.8.2 Effect of Health Care on Plans To Remain on Active Duty

Question #5 asked about the effect of the medical care available to the Family Member respondents and their families on their desire to remain a part of the Marine Corps. The results are shown in Figure 6-31. The weighted mean score for this question was 2.79, falling well toward the upper end of the "No Effect" to "Positive Effect" range. The largest portion of the respondents (38.3 percent) said that their Health Care had a "Positive Effect" on this measure. Only 10.7 percent of the respondents felt there was some degree of negative effect, while 65 percent felt that their Health Care had some degree of positive effect on their desire to be a part of the Marine Corps.

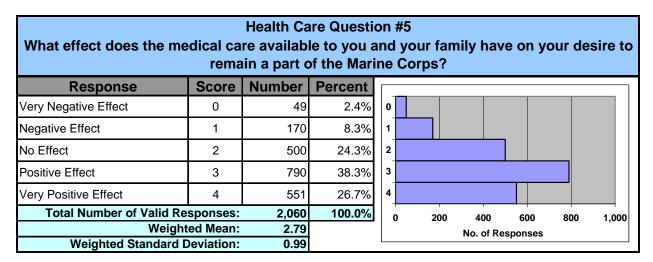


Figure 6-31. Effect of Available Medical Care on Desire of the Family Member Respondents To Remain a Part of the Marine Corps

6.8.3 Other Life Domain-Specific Analyses

Question #4 asked the respondents to indicate whether any of their dependent family members had special medical needs. The results are shown in Table 6-32. A large majority of the respondents (73.5 percent) indicated that none of their dependents had special medical needs. Almost 15 percent of the respondents indicated that they had special medical needs, and 12.5 percent said they had dependent children living with them who had such needs.

Table 6-32. Family Member Respondents with Dependent Family Members with Special Medical Needs

Health Care Question #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)?					
Response	Number	Percent*			
None Have Special Needs	1,596	73.5%			
I Have Special Needs 322 14.8					
Child(ren) Living with Me 272 12.5					
Child(ren) Not Living with Me 38 1.7%					
Legal Ward(s) Living with Me 7 0.3%					
Dependent Parent(s) or Other Relative(s) 8 0.4%					
* Total does not sum up to 100% since respondents may have multiple dependent family members with special medical needs.					

6.8.4 Conclusions for the Health Care Life Domain for the Family Member Respondents

Family Member respondent satisfaction with Health Care was rated relatively well ("Somewhat Satisfied") and had increased since 2002; however, although the change

was relatively large, 0.31 on the seven-point satisfaction scale, it had no practical significance. Decomposing satisfaction with health care by base/station revealed a wide range of opinions and a large number of differences with practical significance between installations. The key driver diagram in 2007 looked fundamentally like its 2002 counterpart with satisfaction with treatment and out of pocket expenses remaining the two most influential drivers of domain satisfaction examined.

6.9 THE SEPARATION LIFE DOMAIN

6.9.1 Happiness – Affective Evaluation of the Separation Life Domain

The weighted mean affective or happiness score (Question #1) for the Separation life domain for the Family Member Respondents for 2007 was 4.19, slightly above "Neither Unhappy Nor Pleased" on the seven-point D-T scale. A histogram of the responses to the affective question with the weighted overall mean and standard deviation values for the Family Members respondent sample in this life domain is shown in Figure 6-32. It can be seen that 48.6 percent of the Family Member Respondents answered that they were in some way pleased with the frequency with which they had seen their spouse, while 28.6 percent were in some way unhappy.

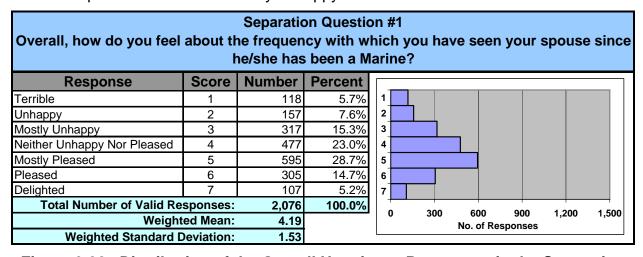


Figure 6-32. Distribution of the Overall Happiness Responses in the Separation Life Domain for the Family Member Respondents

Trends in the weighted mean Separation happiness scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-33. The 2007 weighted mean Separation D-T score decreased (by 0.21) from the 2002 weighted score. This decrease, while noticeable, was still above "Neither Unhappy Nor Pleased" and did not have practical significance.

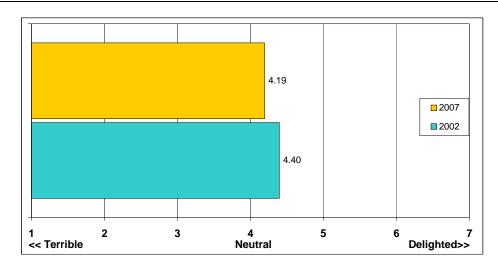


Figure 6-33. Trends in Overall Happiness in the Separation Life Domain for the Family Member Respondents

Overall happiness in the Separation life domain life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses and parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the happiness scores for the Separation life domain, decomposed by Pay Grade Group, are shown in Table 6-33.

Table 6-33. Happiness with Separation by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	206	3.58	1.63
E-4/E-5	650	4.07	1.61
E-6/E-7	491	4.48	1.39
E-8/E-9	164	4.87	1.19
WO	59	4.42	1.39
O-1 to O-3	249	4.09	1.48
O-4 to O-10	257	4.61	1.15

The E-2/E-3 Pay Grade Group had the lowest mean affective score of all the Pay Grade Groups (3.58) and was below "Neither Unhappy Nor Pleased." The E-8/E-9 Pay Grade Group had the highest mean affective score (4.87). The differences in the extremes seen here was of practical significance, having an effect size of 0.90 as calculated by the Cohen's *d* statistic. In fact, the differences between the E-2/E-3 Pay Grade Groups and between the E-6/E-7, WO and O-4 to O-10 Pay Grade Groups were all found to have practical significance. The only other differences of practical significance that were found were between the E-8/E-9 Pay Grade Group and the E-4/E-5 and O-1 to O-32 Pay Grade Groups (Cohen's *d* statistic were 0.57 and 0.58, respectively). All Pay Grade Groups other than the E-2/E-3 Pay Grade Group had their means above "Neither

Unhappy Nor Pleased," with a generally increasing trend seen across the enlisted, but not the officer, Pay Grade Groups.

When the trends in overall happiness with the Separation life domain were examined by Pay Grade Group, as shown in Figure 6-34, only the E-8/E-9 Pay Grade Group saw an increase from its 2002 value. The other six Pay Grade Group scores decreased. Although the Warrant Officers had the largest change in value between 2002 and 2007 (a decrease of 0.40), this change had no practical significance (Cohen's *d* statistic was 0.28).

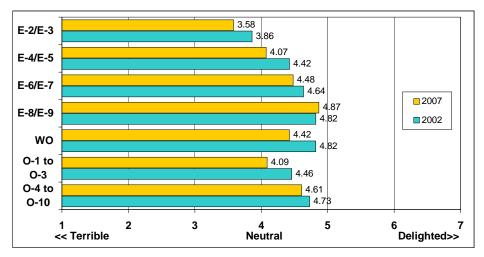


Figure 6-34. Trends in Happiness in the Separation Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Parental Status. The means and standard deviations of the happiness scores for the Separation life domain, decomposed by parental status, are shown in Table 6-34. The respondents with children scored 0.28 higher than those without children but the difference had no practical significance.

Table 6-34. Happiness with Separation by Marital/Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,353	4.35	1.43
Married without Children	677	4.07	1.61

6.9.2 Satisfaction – Cognitive Evaluation of the Separation Life Domain

The weighted mean cognitive or satisfaction score (Question #4g) in the Separation life domain for the Family Member respondents for 2007 was 3.87, i.e., between "Somewhat Dissatisfied" and "Neutral" on the seven-point satisfaction scale and below the value seen for the affective measure. A histogram of the responses to the satisfaction question as well as the weighted overall mean and standard deviation values for the Family Members respondent sample in the Separation life domain are shown in Figure 6-35. In the overall sample, 34.9 percent of the respondents said they were in some way satisfied with their Separation from their spouse and 37.7 percent

were in some way dissatisfied. The distribution of responses also was interesting. The most frequently chosen response was "Neutral," followed by "Satisfied." However, while only 2.9 percent of the respondents chose "Completely Satisfied," more than three times as many (9.7 percent) chose "Completely Dissatisfied," forcing the weighted mean below the neutral score of 4.0.

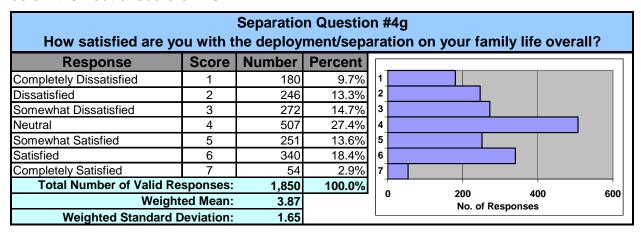


Figure 6-35. Distribution of the Overall Satisfaction Responses in the Separation Life Domain for the Family Member Respondents

Trends in the weighted mean Separation satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-36. Despite its relatively low value, the 2007 weighted mean satisfaction score in this life domain <u>increased</u> by 0.16 from the 2002 weighted score, although this change had no practical significance.

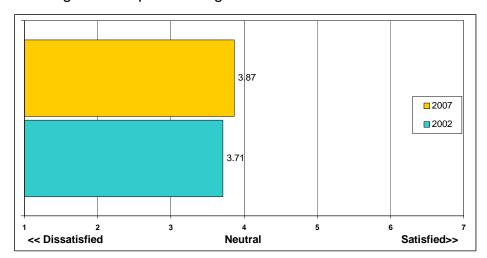


Figure 6-36. Trends in Overall Satisfaction in the Separation Life Domain for the Family Member Respondents

Overall satisfaction in the Separation life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to Pay Grade Group of the respondents' spouses and parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Separation life domain, decomposed by Pay Grade Group, are shown in Table 6-35.

Table 6-35. Satisfaction with Separation by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	167	3.30	1.64
E-4/E-5	583	3.56	1.61
E-6/E-7	441	4.07	1.61
E-8/E-9	149	4.44	1.56
WO	54	4.46	1.45
O-1 to O-3	219	3.85	1.68
O-4 to O-10	237	4.31	1.51

The subgroup scores ranged from "Somewhat Dissatisfied" to just above "Somewhat Satisfied" with a trend towards increased score as Pay Grade Group increased, seen across the enlisted, but not the officer Pay Grade Groups. The Warrant Officers had the highest mean (4.46), and the E-2/E-3 Pay Grade Group had the lowest score (3.30). The difference between the extrema had practical significance, having an effect size of 0.75 as calculated by the Cohen's *d* statistic. In fact, the differences between the E-2/E-3 Pay Grade Group and the E-8/E-9 and O-4 to O-10 Pay Grade Groups and between the E-4/E-5 Pay Grade Group and the same two high-scoring groups also had practical significance.

The trends in the overall satisfaction with the Separation life domain were examined by Pay Grade Group and are shown in Figure 6-37. Four of the seven Pay Grade Groups saw increases with the increase in the E-2/E-3 Pay Grade Group being the largest, although it did not have practical significance.

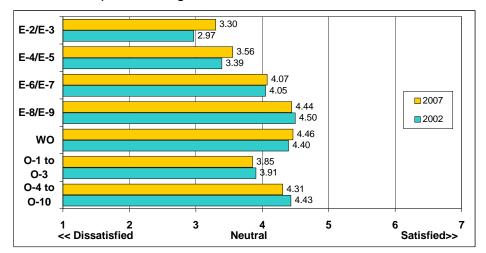


Figure 6-37. Trends in Satisfaction in the Separation Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Parental Status. The means and standard deviations of the satisfaction scores for the Separation life domain, decomposed by parental status, are shown in Table 6-36. It can

be seen that the respondents with children were somewhat more satisfied than those without children, scoring 0.43 higher. However, this difference had no practical significance (Cohen's *d* statistic was only 0.26).

Table 6-36. Satisfaction with Separation by Marital/Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,214	4.02	1.60
Married without Children	587	3.59	1.67

In addition to asking the respondents about their overall satisfaction with separation, Question #4 also asked about satisfaction with a series of six separate facets of this life domain. The weighted mean and standard deviation scores for each of these facets are shown in Figure 6-38. The lowest weighted scores were seen for Departure and Return Predictability as well as Information Timeliness (4.09, 4.08 and 4.02 respectively) although all these facets had weighted means above the "Neutral" score of 4. The respondents were most satisfied with the "Amount of Contact" they had with their spouse during separations.

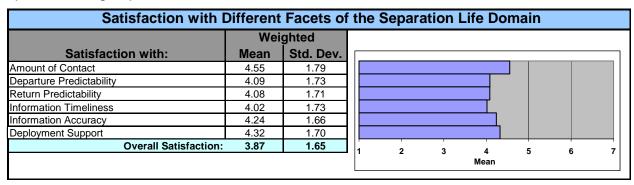


Figure 6-38. Satisfaction with Facets of Separation for the Family Member Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with separation for the Family Member respondents was performed. The results are shown in Figure 6-39. The magnitudes of the influence coefficients ranged from 0.005 to 0.264. The most influential facet was Deployment Support (in contrast with the results from the 2002 QoL Study, in which this was one of the least influential facets), indicating that the Family Members would be more satisfied with separation if they were satisfied with the support they received before, during and after their spouse's deployment. Somewhat lesser influence was seen for the Amount of Contact during separation and the Return Predictability of their spouse. An increase in any of these three facets would have the most impact on the satisfaction of the Family Member respondents; however, note that since the mean scores of all the facets were above that

¹²⁰ Note that the Information Accuracy facet had a very small, negative correlation with/influence on overall domain satisfaction, and therefore was marked with an asterisk (since the magnitude of the influence is shown in the figure).

of the overall mean, it is likely that some significant facet of dissatisfaction was not addressed in the response options provided.

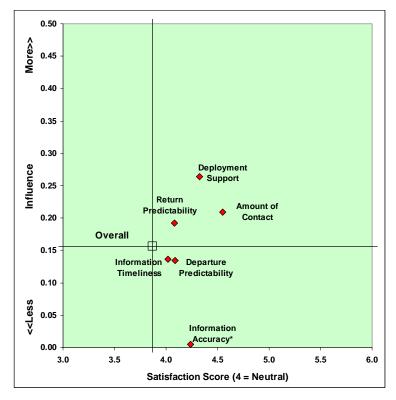


Figure 6-39. Key Driver Diagram for the Separation Satisfaction Facets for the Family Member Respondents

6.9.3 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Separation life domain were examined. The results are presented below.

Question #2 asked the Family Member respondents to indicate how many months their spouse had been away from home due to military duties over the past year. Responses ranged from 0 to 12 months (responses greater than 12 were set equal to 12) with the selection of "Less than 1 month" deemed to be half a month; the average amount of separation was calculated to be 4.10 months.

The number of months the respondents and their spouses were separated then was plotted against the total percentage of respondents who answered that they had been separated for that many months or more in the past year. The results are shown in Figure 6-40. Not unexpectedly, the amount of separation experienced by the 2007 Family Member respondents was greater than that experienced by the 2002 Family Member respondents. The figure shows, for example, that 59.8 percent of the respondents in 2002 had been separated from their spouses for 1 month or more, while 71.2 percent of the respondents made the same claim in 2007. Similarly (as shown by the horizontal lines drawn to the vertical axis), 21.6 percent of the respondents in 2002

said they had been separated from their spouses for 6 months or more; the same response was given by 35.7 percent of the respondents in 2007, 65 percent more respondents.

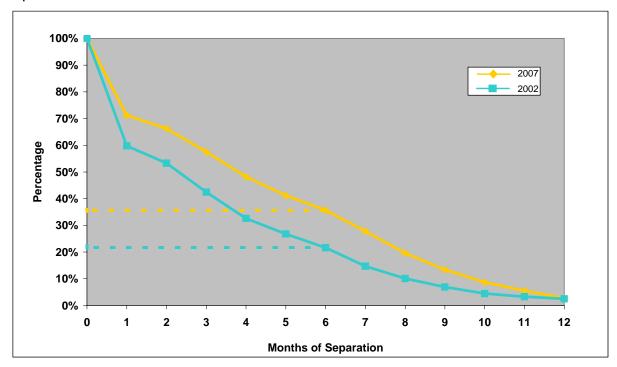


Figure 6-40. Months of Separation in the Past Year Due to Military Duties for the Family Member Respondents

Further analysis was conducted on the responses to Question #2. Figure 6-41 displays the respondents' mean affective or happiness score plotted against the average number of months separated from their spouses for both the 2002 and 2007 Family Member respondent groups. It was clear in both studies that the less time Family Member respondents spent separated from their spouses, the happier they were. However, the changes in the responses represented by the lines were of note. The respondent who answered "Neither Unhappy nor Pleased" (the score of 4) in 2002 was separated from their spouse for an average of 3.26 months; the respondent who gave the same response in 2007 was separated from their spouse for an average of 4.78 months, an increase of almost 50 percent. That trend held up across the spectrum of response options: Family Member respondents in 2007 consistently reported levels of happiness equal to their counterparts in 2002 despite having spent more time separated from their spouses. Looked at another way, the average Family Member respondent in 2002 who had been separated from his/her spouse for 4 of the previous 12 months had an affective/happiness score of 3.21; the equivalent figure for a member of the 2007 Family Member respondent group was 4.49.

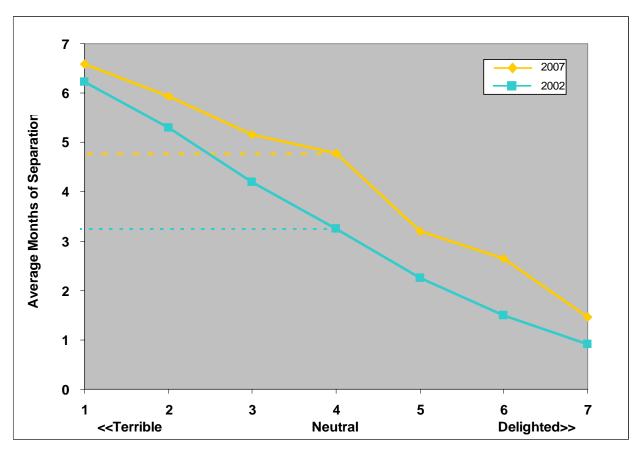


Figure 6-41. Happiness as a Function of the Average Number of Months of Separation in the Last Year for the Family Member Respondents

These results may help to explain the apparent contradiction seen in the happiness and satisfaction scores for 2002 and 2007. Remember that happiness scores declined from 4.40 to 4.19, while satisfaction scores climbed from 3.71 to 3.87. The former can be explained by the fact that Family Members were less happy when the amount of time that they were separated from their spouses increased, and the amount of time apart increased greatly between 2002 and 2007. At the same time, the satisfaction scores may reflect the differences between the affective and cognitive components of quality of life. Whether Marine Corps spouses/Family Members were proud of the roles their spouses are playing in the Global War on Terror and, as a result, more satisfied with their lives despite the increased amount of separation they experienced in 2007 or, remembering the construct presented earlier in Table 1-2, whether they merely were resigned to the increasing frequency and duration of the separations they had to endure can not be ascertained from the collected data. However, that data can be interpreted to indicate a tolerance for/acceptance of the increased deployments and separations experienced by the Family Member respondents since the commencement of OIF/OEF.

Question #3 asked the respondents to indicate how capable they felt they would be in taking responsibility for various aspects of life if military duties took their spouse away for 6 or more months. The data were scored on a scale of "Not at all capable"

(assigned a score of 0) to "Extremely capable" (assigned a score of 4) in Figure 6-42. The respondents had the most confidence (a score of 3.24) in their capability to take full responsibility for childcare, although that area had the fewest number of respondents that picked "Not applicable" as their response. The respondents had the least confidence (a score of 2.75) in their capabilities to deal with emotional or parenting matters, although the rating assigned was just below "Very Capable."

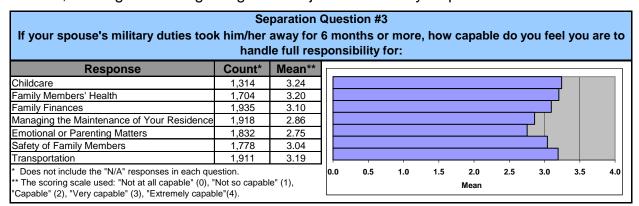


Figure 6-42. Self-Assessment of the Capabilities of the Family Member Respondents

6.9.4 Conclusions for the Separation Life Domain for the Family Member Respondents

Since the 2002 QoL Study was performed, Family Member happiness with the frequency of separation from their spouses decreased. This, however, was not unexpected as the increased OPTEMPO of the Marine Corps since the commencement of OIF and OEF has resulted in much greater frequency of separation and longer, more stressful separations. Note, however, that the decrease in the weighted mean happiness score had no practical significance. In contrast, the degree of satisfaction of the 2007 Family Member respondent group with deployment/separation and the impact on their family life overall increased from the level reported in 2002, although, again, the increase had no practical significance. The most important facet of satisfaction in this life domain was deployment support, followed by the amount of contact with their spouse during the spouse's deployment and the predictability of the spouse's return.

Decomposing the responses by the demographic groups considered in this study (i.e., Pay Grade Group and parental status) showed that the spouses of the members of the lowest Pay Grade Groups were by far the least happy and least satisfied, although their satisfaction levels had increases since 2002. The Family Member respondents with children also were both happier and more satisfied. In general, the Family Members thought that they were more than capable of assuming a number of family responsibilities if their spouses' military duties were to take them away for 6 months or more.

6.10 THE CHILDREN QUALITY OF LIFE DOMAIN

6.10.1 Satisfaction – Cognitive Evaluation of the Children Quality of Life Domain

The weighted mean cognitive or satisfaction score (Question #1p) in the Children Quality of Life domain for the Family Member respondents in 2007 was 5.23, i.e., above "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Member respondent sample in the Children Quality of Life domain is shown in Figure 6-43. In the overall sample, the highest percentage of respondents, 41.3 percent, responded that they were "Satisfied" with their children's quality of life overall. Slightly under three-fourths of the respondents, 73.2 percent, expressed some degree of satisfaction with the quality of life of their children, and only 9.8 percent expressed any degree of dissatisfaction.

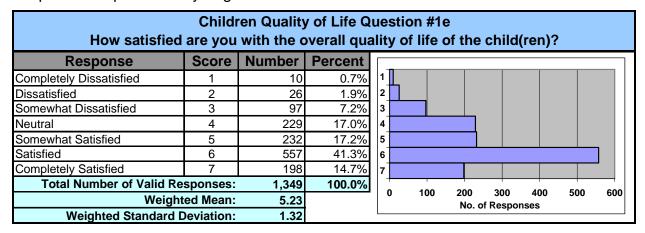


Figure 6-43. Distribution of the Overall Satisfaction Responses in the Children Quality of Life Domain for the Family Member Respondents

Trends in the weighted mean Children Quality of Life satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-44. The weighted mean satisfaction score of 5.23 increased by 0.05 since 2002, but this increase had no practical significance.

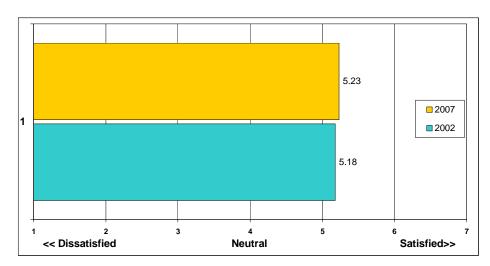


Figure 6-44. Trends in Overall Satisfaction in the Children Quality of Life Domain for the Family Member Respondents

Overall satisfaction in the Children Quality of Life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses and the base/station to which the respondents' spouses were assigned. The results are discussed below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Children Quality of Life domain, decomposed by Pay Grade Group, are shown in Table 6-37.

Table 6-37. Satisfaction with Children Quality of Life by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	73	4.85	1.40
E-4/E-5	355	5.19	1.29
E-6/E-7	391	5.31	1.36
E-8/E-9	133	5.55	1.14
WO	47	5.51	1.35
O-1 to O-3	148	5.34	1.24
O-4 to O-10	202	5.42	1.16

The mean satisfaction scores ranged between "Somewhat Satisfied" and "Satisfied" with the exception of the E-2/E-3 Pay Grade Group which had a mean slightly below "Somewhat Satisfied." The E-2/E-3 Pay Grade Group had the smallest mean of 4.85 and the E-8/E-9 Pay Grade Group had the largest mean of 5.55. The only difference with practical significance was found when these extrema were compared (Cohen's *d* statistic of 0.55).

When the trends in overall satisfaction with the Children Quality of Life domain were examined by Pay Grade Group, as shown in Figure 6-45, no clear trends were seen. Since 2002, the mean satisfaction scores for the WO and O-4 to O-10 Pay Grade

Groups declined, the mean satisfaction score in the E-6/E-7 Pay Grade Group remained unchanged, and the mean satisfaction scores in the other four Pay Grade Groups increased. The largest decrease (0.24) was seen in the O-4 to O-10 Pay Grade Group while the largest increase (0.19) was seen in the E-4/E-5 Pay Grade Group. However, none of these changes had practical significance.

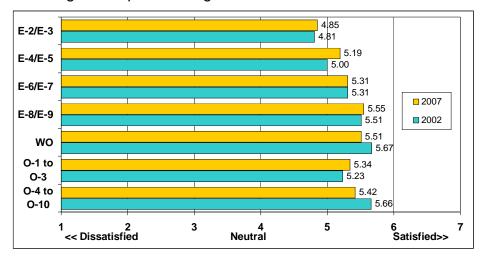


Figure 6-45. Trends in Satisfaction in the Children Quality of Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Children Quality of Life domain, decomposed by the base or station to which the respondent's spouse was assigned, are shown in Table 6-38.

Table 6-38. Satisfaction with Children Quality of Life by Installation for the Family Member Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	32	5.31	1.06
MCB Camp Butler	94	5.50	1.12
MCB Camp Lejeune	210	5.27	1.30
MCB Camp Pendleton	182	5.28	1.38
MCAS Cherry Point	68	5.18	1.21
MCB Hawaii	48	5.27	1.32
Headquarters Battalion Henderson Hall	27	5.59	1.05
MCAS Iwakuni	16	5.19	1.17
MCAS Miramar	57	5.30	1.22
MCAS New River	52	5.48	1.08
MCRD Parris Island	16	5.00	1.26
MCB Quantico	80	5.73	1.06
MCRD San Diego	26	4.92	1.52
MCAGCC (Twentynine Palms)	55	5.33	1.32
MCAS Yuma	36	5.06	1.55

The mean scores for the bases/stations were generally clustered between "Somewhat Satisfied" to "Satisfied." However, one location, MCRD San Diego (4.92), scored lower than "Somewhat Satisfied." MCB Quantico had the greatest mean (5.73). Differences with practical significance were found between these extrema (Cohen's *d* statistic of 0.62) and between MCRD San Diego and Headquarters Battalion Henderson Hall (Cohen's *d* statistic of 0.51). With the exception of those two high-scoring Washington, D.C.-area locations, the mean scores of all the other bases/stations were separated by only 0.58, having had means between 4.92 and 5.50.

Figure 6-46 shows the satisfaction of families with their children's quality of life by the age of the children. Satisfaction with the Under 1 Year subgroup was the lowest, with a mean of 5.10. Satisfaction with the 13 to 15 Year subgroup was the highest, with a mean of 5.46. When these two extrema were compared no significant difference was found (Cohen's *d* statistic was 0.28).

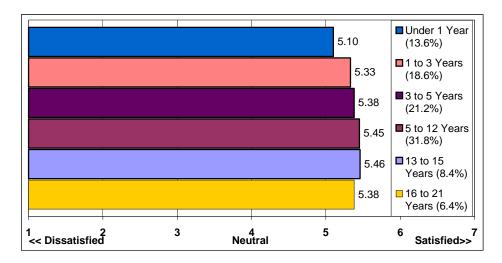


Figure 6-46. Trends in Satisfaction by Child Age Group in the Children Quality of Life Domain for the Family Member Respondents

Direct comparison with the analogous figure from the 2002 QoL Study (Figure 3-94 on page 3-140 of the 2002 QoL Study Report) was difficult due to a change in the age groups used in the questions in the two different surveys (the 2007 survey used age groups identical to those in the Active Duty Marine survey for consistency between those two surveys, rather than the age groups used in the 2002 Family Member survey). Satisfaction with the Under 1 Year subgroup was still the lowest, with a mean of 5.10. The 2002 subgroup with which the Family Member respondents had the highest satisfaction was the 13 to 18 Year subgroup, which might be considered to be similar to the 2007 subgroup with which the respondents had the highest level of satisfaction, the 13 to 15 Year subgroup, although satisfaction with the 16-21 Year subgroup also was

6-58

¹²¹ The percentages of the total population shown in the legend were calculated based on the 2,377 valid responses to the question, and not on the total of 2,855 children under the age of 21 claimed by the total sample of Family Member Respondents .

very high. None of the changes in satisfaction with the subgroups had practical significance.

In addition to asking the respondents about their overall satisfaction with their children's quality of life, Question #1 also asked about satisfaction with a series of four separate facets of their children's quality of life. The weighted mean and standard deviation scores for each of these facets are shown in Figure 6-47. The lowest weighted mean score of 4.46 was seen in how satisfied the respondents were with the activities available. The military child facet (asking how well the children handle being military children) scored the highest of all facets (4.94) but still below the overall weighted mean of 5.23 for this life domain. The differences between the facets had no practical significance.

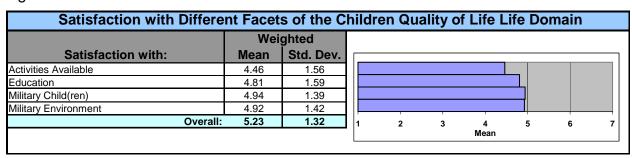


Figure 6-47. Satisfaction with Facets of Children Quality of Life Domain for the Family Member Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with children's quality of life for the Family Member respondents was performed. The results are shown in Figure 6-48. The magnitudes of the influence factors ranged from 0.075 to 0.476. Overall satisfaction with children's quality of life was most strongly influenced by Military Environment and Handles Military Environment/being military children. These two facets each had influences greater than that of the overall mean, and improvements in them would be expected to have the greatest impact on satisfaction in this life domain. Since their mean satisfaction scores were lower than that of the overall mean, they also are areas where improvements are likely to be possible. These results differed markedly from those seen in the 2002 QoL Study: The facets in earlier study that had the greatest influence were Childcare Quality and Military Environment. In 2007, Childcare Quality had the least influence.

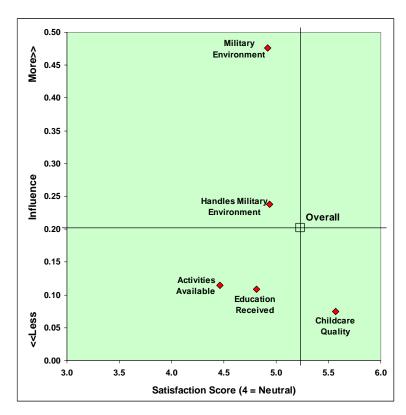


Figure 6-48. Key Driver Diagram for the Children Quality of Life Domain for the Family Member Respondents

6.10.2 Other Life Domain-Specific Analyses

Question #2 asked about the effect of the overall educational opportunities available to their children on the respondents' plans to remain a part of the Marine Corps. A histogram of the responses to that question is shown in Figure 6-49. The highest percentage of respondents, 46.5 percent, responded that the educational opportunities available to their children had "No Effect" on their desire to remain part of the Marine Corps. A total of 42.4 percent of the respondents expressed some degree of satisfaction with their educational opportunities available to their children, and 11.1 percent expressed some degree of dissatisfaction.

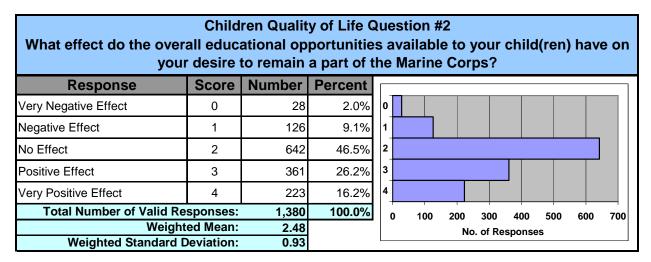


Figure 6-49. Effect of Children Educational Opportunities on Desire to Remain Part of the Marine Corps for Family Member Respondents

Question #3 asked the respondents to indicate the usual primary care provider for their youngest child when the respondent was not available. The results are shown in Figure 6-50. It was evident from the histogram that the largest group of respondents, 49.2 percent, relied on their spouses to watch their youngest child when they were not available. Two other types of primary care providers that were frequently cited were "Relative or Other Siblings" (32.6 percent) and "Friend" (28.3 percent).

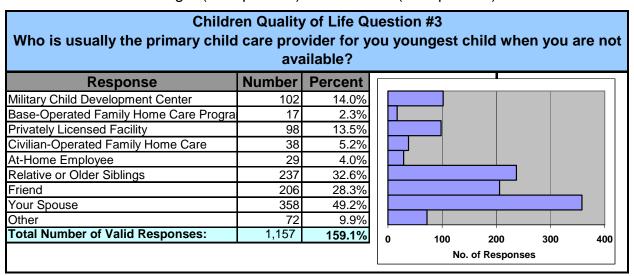


Figure 6-50. Primary Care Provider for the Family Member Respondents

Questions #4 asked the respondents about their satisfaction with aspects of childcare. A histogram comparing the five facets of childcare and the overall satisfaction with childcare for the 255 respondents who had indicated that they used professional childcare (i.e., the first four responses to Question #3 above) is shown in Figure 6-51. The lowest score as well as the highest standard deviation was seen in how satisfied the respondents were with Cost of Childcare. The Cost of Childcare and Availability of Childcare were the two facets that scored below the "Somewhat Satisfied" score of 5.

Quality of Life (QoL) in the U.S. Marine Corps Study Final Report

Handles Being Cared for by Others and Safety received the highest scores of all the facets (5.82).

Satisfaction with Different Facets of Childcare									
Mean	Std. Dev.								
4.52	1.89								
5.47	1.47								
4.22	1.87								
5.82	1.21								
5.82	1.05								
II: 5.69	1.25	1	2	3	4	5	6	7	
	<u> </u>				Mean			-	
	Mean 4.52 5.47 4.22 5.82 5.82	Mean Std. Dev. 4.52 1.89 5.47 1.47 4.22 1.87 5.82 1.21 5.82 1.05	Mean Std. Dev. 4.52 1.89 5.47 1.47 4.22 1.87 5.82 1.21 5.82 1.05	Mean Std. Dev. 4.52 1.89 5.47 1.47 4.22 1.87 5.82 1.21 5.82 1.05	Mean Std. Dev. 4.52 1.89 5.47 1.47 4.22 1.87 5.82 1.21 5.82 1.05	Mean Std. Dev. 4.52 1.89 5.47 1.47 4.22 1.87 5.82 1.21 5.82 1.05 III: 5.69 1.25	Mean Std. Dev. 4.52 1.89 5.47 1.47 4.22 1.87 5.82 1.21 5.82 1.05 III: 5.69 1.25	Mean Std. Dev. 4.52 1.89 5.47 1.47 4.22 1.87 5.82 1.21 5.82 1.05 III: 5.69 1.25	

Figure 6-51. Satisfaction with Facets of Childcare Facets for the Family Member Respondents

The overall satisfaction with childcare (again, only for the users of professional childcare, which resulted in a low number of respondents for many locations), decomposed by base/station, is shown in Figure 6-52.

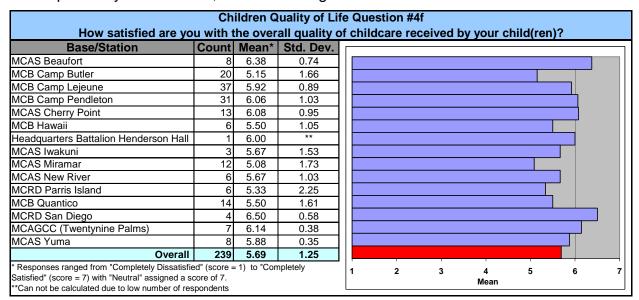


Figure 6-52. Satisfaction with Overall Childcare by Base/Station for the Family Member Respondents

The overall satisfaction with childcare was scored above midway between "Somewhat Satisfied" and "Satisfied" (5.69). It can be seen that the number of responses from some of the bases/stations was small (e.g., one for Headquarters Battalion Henderson Hall and less than 10 for MCAS Beaufort, MCB Hawaii, MCAS Iwakuni, MCAS New River, MCRD Parris Island, MCRD San Diego, MCAGCC (Twentynine Palms) and MCAS Yuma). The range of responses was fairly broad. The satisfaction scores ranged from a low of 5.08 for MCAS Miramar to a high of 6.50 at MCRD San Diego (this difference had practical significance, having a Cohen's *d* statistic of 1.10). Satisfaction

¹²² The relatively small number of respondents from some of the bases/stations should be kept in mind when reviewing the discussion of this and the other graphics related to this question.

with professional childcare also was high at MCAS Beaufort (6.38), MCAGCC (Twentynine Palms) (6.14), MCAS Cherry Point (6.08) and Camp Pendleton (6.06). In addition to MCAS Miramar, satisfaction with childcare was relatively low at Camp Butler (5.15) and MCRD Parris Island (5.33).

In order to determine the factors that were key to the reported childcare satisfaction in this life domain, multiple regression of the facets of satisfaction of childcare satisfaction with the children quality of life for the Family Member respondents was performed. The results are shown in Figure 6-53. The magnitudes of the influence factors ranged from 0.094 to 0.446. The figure shows that the single most influential facet of overall satisfaction with childcare was Safety. Improvements in that area would be expected to have the greatest impact on satisfaction in this life domain despite the fact that facet had a mean satisfaction score greater than the mean score for the life domain. All the other facets fell below the overall mean in influence. Visual comparison with the results from the 2002 QoL Study Report highlighted the marked drop in influence for the Handles Caring by Others facet, which, while still the second most influential facet, had an influence below that of the mean in 2007, while its influence was well above the mean in 2002.

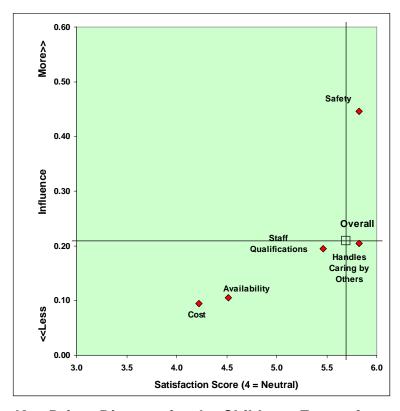


Figure 6-53. Key Driver Diagram for the Childcare Facets from the Children Quality of Life Domain for the Family Member Respondents

Figure 6-54 shows the decomposition by base/station of satisfaction with the availability of childcare (again only the opinions of the users of professional childcare were included in this assessment, which resulted in a low number of respondents for many locations).

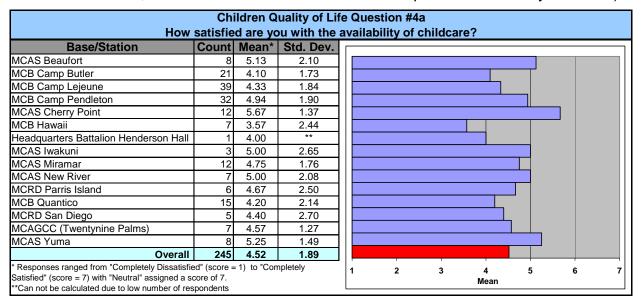


Figure 6-54. Satisfaction with Availability of Childcare by Base/Station for the Family Member Respondents

The overall satisfaction with this facet of childcare fell midway between "Neutral" and "Somewhat Satisfied" (4.52). Several bases/stations scored noticeably lower than that level. MCB Hawaii had the lowest score (3.57), but Headquarters Battalion Henderson Hall (4.00, with one respondent), Camp Butler (4.10) and MCB Quantico (4.20) also received relatively low marks. On the other end of the spectrum, MCAS Cherry Point (5.67) received the highest satisfaction score. Other locations that received high satisfaction scores were MCAS Yuma (5.25), and MCAS Beaufort (5.13). The difference between the extrema (MCB Hawaii and MCAS Cherry Point) had practical significance, with a Cohen's *d* statistic of 1.06.

Figure 6-55 shows the decomposition by base/station of satisfaction with the qualifications of childcare providers (again only the opinions of the users of professional childcare were included in this assessment, which resulted in a low number of respondents for many locations).

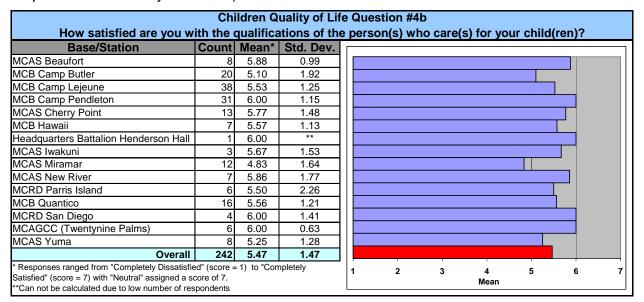


Figure 6-55. Satisfaction with Staff Qualifications by Base/Station for the Family Member Respondents

The overall satisfaction with this facet of childcare was midway between "Somewhat Satisfied" and "Satisfied." One base/station, MCAS Miramar (4.83), scored noticeably lower than the overall mean and Camp Butler (5.10) also was rated poorly. The bases/stations that scored the highest were Camp Pendleton, Headquarters Battalion Henderson Hall (with one respondent), MCRD San Diego, and MCAGCC (Twentynine Palms), all with scores of 6.00). A practical difference existed between MCAS Miramar and the four locations with the highest score (a maximum Cohen's *d* statistic of 0.94).

Figure 6-56 shows the decomposition by base/station of satisfaction with the cost of childcare providers (again only the opinions of the users of professional childcare were included in this assessment, which resulted in a low number of respondents for many locations).

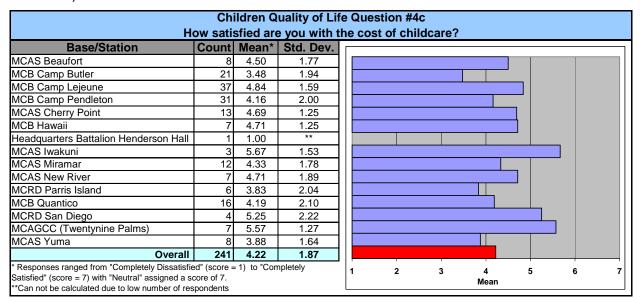


Figure 6-56. Satisfaction with Cost of Childcare by Base/Station for the Family Member Respondents

This was the facet of professional childcare with which the respondents were least satisfied: The overall mean for this question was only 4.22, although it was still above the "Neutral" score of 4. The cost of professional childcare at Headquarters Battalion Henderson Hall received the lowest score of 1.00, or "Completely Dissatisfied," from the one respondent from that location. Three other locations, Camp Butler (3.48), MCRD Parris Island (3.83), and MCAS Yuma (3.88) scored below "Neutral." The highest score was given by the three respondents from MCAS Iwakuni (5.67). Two other locations scored above "Mostly Satisfied": MCAGCC (Twentynine Palms) (5.57) and MCRD San Diego (5.25).

Figure 6-57 shows the decomposition by base/station of satisfaction with the safety of children while with the childcare providers (again only the opinions of the users of professional childcare were included in this assessment, which resulted in a low number of respondents for many locations).

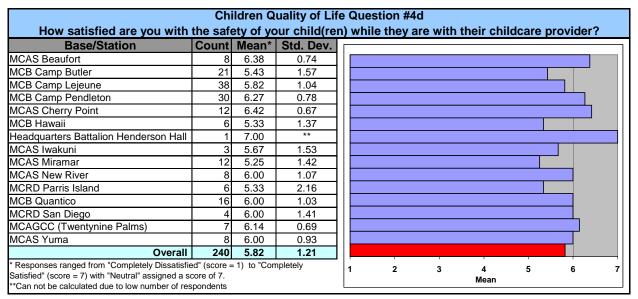


Figure 6-57. Satisfaction with Safety by Base/Station for the Family Member Respondents

This facet was tied for being the facet with the highest overall mean with a score of 5.82. The highest score was received by Headquarters Battalion Henderson Hall (7.00, but again there was only one respondent from that location). Four other locations scored above "Satisfied": MCAS Cherry Point (6.42), MCAS Beaufort (6.38), Camp Pendleton (6.27), and MCAGCC (Twentynine Palms) (6.14). The lowest scoring locations were MCAS Miramar (5.25), and MCRD Parris Island and MCB Hawaii (both with means of 5.33), although it should be noted that these means were relatively high (i.e., well above "Somewhat Satisfied").

Figure 6-58 shows the decomposition by base/station of satisfaction with how the respondents' children handle being cared for by others (again only the opinions of the users of professional childcare were included in this assessment, which resulted in a low number of respondents for many locations).

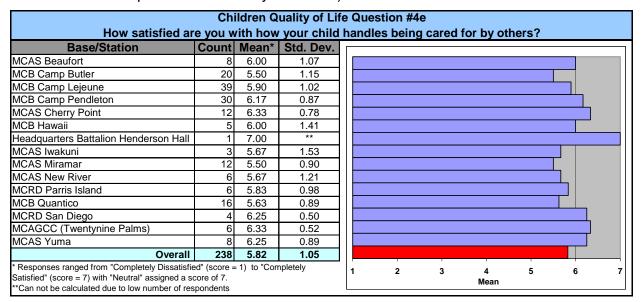


Figure 6-58. Satisfaction with Child's Reaction to Care Provider by Base/Station for the Family Member Respondents

This facet of childcare was tied for being the facet with the highest mean of 5.82. The means were relatively closely clustered, between 5.50 and 6.33 (Actually, the largest mean was 7, but it was based on only one respondent). The highest scoring locations were Headquarters Battalion Henderson Hall (7.00 with one respondent), MCAS Cherry Point and MCAGCC (Twentynine Palms) (each with a mean of 6.33), MCRD San Diego and MCAS Yuma (each with a mean of 6.25) and Camp Pendleton (6.17). The lowest scoring locations were: Camp Butler and MCAS Miramar (both with a mean of 5.50) and MCB Quantico (5.63). Comparing the extreme values resulted in a practical difference, primarily due to the small standard deviations that were at many of the highest scoring locations.

6.10.3 Conclusions for the Children Quality of Life Domain for the Family Member Respondents

Satisfaction in the Children Quality of Life domain increased in 2007 when compared with the results from the 2002 Study, but the changes had no practical significance. Decomposing the responses by Pay Grade Group and location resulted in few differences with practical significant. No base/stations consistently had the lowest or highest mean satisfaction score for the childcare facets. The key driver diagrams illustrated that children's quality of life was most strongly influenced by Military Environment and the way in which they handle the military environment and also that satisfaction with professional childcare was most influenced by the Safety of the child. The lowest scored facets of childcare satisfaction were cost and availability of childcare.

However, the locations with the lowest satisfaction scores varied by facet, so no clear trends were seen.

6.11 THE PAY & BENEFITS LIFE DOMAIN

6.11.1 Satisfaction – Cognitive Evaluation of the Pay & Benefits Life Domain

The weighted mean cognitive or satisfaction score (Question #4g) in the Pay & Benefits life domain for the Family Member respondents in 2007 was 4.43, i.e., about midway between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Member respondent sample in the Pay & Benefits life domain is shown in Figure 6-59. In the overall sample, the highest percentage of respondents, 30.1 percent, responded that they were "Satisfied" with their pay and benefits overall. It can be seen that 58.0 percent of the respondents expressed some degree of satisfaction with their pay and benefits, and 28.0 percent of the respondents expressed some degree of dissatisfaction.

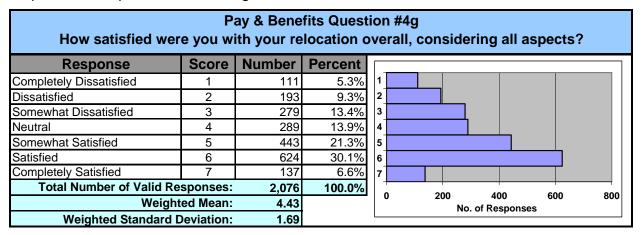


Figure 6-59. Distribution of the Overall Satisfaction Responses in the Pay & Benefits Life Domain for the Family Member Respondents

Trends for the Marine Corps QoL studies in the weighted mean Pay & Benefits satisfaction scores are shown in Figure 6-60. The 2007 weighted mean satisfaction score for Pay & Benefits increased (by 0.30) from the 2002 weighted score, but this increase had no practical significance, since its effect size was only 0.18 as calculated by Cohen's *d* statistic.

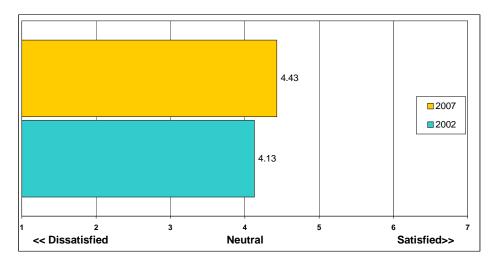


Figure 6-60. Trends in Overall Satisfaction in the Pay & Benefits Life Domain for the Family Member Respondents

Overall satisfaction in the Pay & Benefits life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses, the base/station to which the respondents' spouses were assigned, parental status, and the percentage of family income comprised by the military pay of the respondents' spouses'. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Pay & Benefits life domain, decomposed by Pay Grade Group, are shown in Table 6-39.

Table 6-39. Satisfaction with Pay and Benefits by the Respondent's Spouse's Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	206	3.62	1.69
E-4/E-5	655	4.14	1.61
E-6/E-7	495	4.54	1.65
E-8/E-9	162	5.09	1.55
WO	60	4.65	1.59
O-1 to O-3	247	5.03	1.40
O-4 to O-10	251	5.42	1.28

The mean satisfaction score increased with Pay Grade Group through both the enlisted and officer Pay Grade Groups. An exceedingly low minimum satisfaction score, 3.62, was seen for the E-2/E-3 Pay Grade Group. The maximum satisfaction score, 5.42, was seen for the O-4 to O-10 Pay Grade Group. A large number of differences of practical significance were found when the data for the Pay Grade Groups were compared. Such difference existed between the minimum (E-2/E-3) score and all other Pay Grade Groups except the E-4/E-5 subgroup, between the E-4/E-5 Pay Grade Group and the E-8/E-9, O-1 to O-3 and O-4 to O-10 Pay Grade Groups, and between

the E-6/E-7 Pay Grade Group and the O-4 to O-10 Pay Grade Groups. Clearly, the Family Member respondents whose spouses were in the two lowest enlisted Pay Grade Groups, and especially in the E-2/E-3 Pay Grade Group, were much less satisfied with their pay and benefits than were the spouses of more highly-ranked Marines.

When the trends in overall satisfaction with the Pay & Benefits life domain were examined by Pay Grade Group, as shown in Figure 6-61, increases were seen in every Pay Grade Group, including the low-scoring E-2/E-3 Pay Grade Group, between the results from 2002 and those from 2007; however, none of the differences had any practical significance.

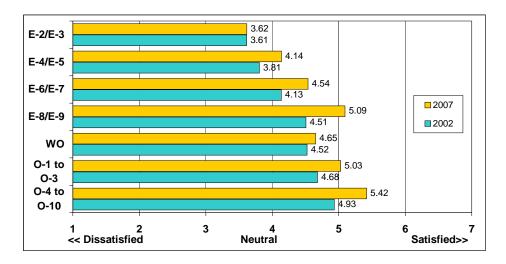


Figure 6-61. Trends in Satisfaction in the Pay & Benefits Life Domain by Respondent's Spouse's Pay Grade Group of the Spouses of the Family Member Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Pay & Benefits life domain, decomposed by the base/station to which the respondents' spouses were assigned (for the 15 largest installations), are shown in Table 6-40. The mean satisfaction scores varied from a minimum of 3.90 at MCAS Miramar to a maximum of 5.50 for Headquarters Battalion Henderson Hall, and this difference had a large practical significance (Cohen's d statistic of 1.16). The 11 bases/stations with the lowest mean satisfaction scores were (in ascending order) MCAS Miramar, MCAS Beaufort, MCAGCC (Twentynine Palms), Camp Lejeune, Camp Pendleton, MCRD San Diego, MCAS Yuma, MCAS Cherry Point, MCB Hawaii, MCB Quantico and MCRD Parris Island; there were differences of practical significance between the highest mean satisfaction score (5.50 for Headquarters Battalion Henderson Hall) and each of these 11 locations. The two means that were extrema were indeed extreme: the mean for MCAS Miramar was 0.34 lower than that of any other installation and the mean for Headquarters Battalion Henderson Hall was 0.43 higher than that of any other installation. Disregarding those two extremes and considering only the second highest (Camp Butler, 5.07) and the second lowest (MCAS Beaufort, 4.24) bases/stations, a

Cohen's *d* statistic of 0.50 was found, just at the threshold of practical significance as defined in this study.

Table 6-40. Satisfaction with Pay and Benefits by Installation for the Family Member Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	51	4.24	1.80
MCB Camp Butler	123	5.07	1.49
MCB Camp Lejeune	356	4.35	1.71
MCB Camp Pendleton	320	4.39	1.67
MCAS Cherry Point	110	4.66	1.52
MCB Hawaii	84	4.68	1.42
Headquarters Battalion Henderson Hall	30	5.50	0.94
MCAS Iwakuni	23	4.96	1.74
MCAS Miramar	82	3.90	1.70
MCAS New River	80	4.98	1.42
MCRD Parris Island	24	4.88	1.36
MCB Quantico	112	4.70	1.64
MCRD San Diego	44	4.61	1.75
MCAGCC (Twentynine Palms)	96	4.27	1.73
MCAS Yuma	45	4.64	1.57

No clear discernable geographic or other patterns were obvious. The non-U.S. bases scored fairly well: Camp Butler had the second highest mean score and MCAS Iwakuni had the fourth highest mean. MCB Hawaii ranked in the middle of the group at seventh. West Coast bases/stations were scored somewhat low (ninth, tenth, eleventh, thirteenth and fifteenth), but while MCAS Miramar was rated poorly (fifteenth), MCRD San Diego and Camp Pendleton were rated highly in this group (tenth and eleventh).

Parental Status. The means and standard deviations of the satisfaction scores for the Pay & Benefits life domain, decomposed by parental status, are shown in Table 6-41. The mean satisfaction score for the Married with Children respondents was 4.54, equivalent to the mean satisfaction score for the Married without Children respondents.

Table 6-41. Satisfaction with Pay and Benefits by Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	1,342	4.54	1.67
Married without Children	687	4.54	1.61

In addition to asking the Family Member respondents about their overall satisfaction with their pay and benefits, Question #4 also asked about satisfaction with a series of six separate facets of pay and benefits. The mean and standard deviation scores for each of these facets, on the seven-point satisfaction scale, are shown in Figure 6-62.

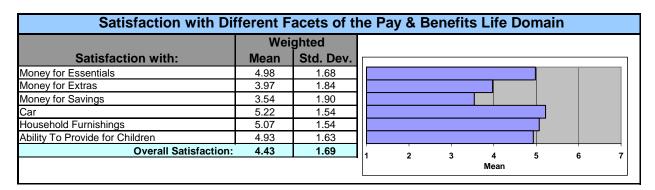


Figure 6-62. Satisfaction with Facets of Pay and Benefits for the Family Member Respondents

The two minimum weighted mean scores (and the two highest standard deviations) were seen for Money for Savings and Money for Extras. Figure 6-63 shows the histogram of responses for satisfaction with Money for Savings. The distribution of the responses was interesting: The most frequently chosen response was "Satisfied" but the three lowest responses each were selected by nearly as many respondents. Overall, 51.2 percent of the Family Member respondent sample indicated some degree of dissatisfaction with Money for Savings and 17.3 percent responded that they were "Completely Dissatisfied."

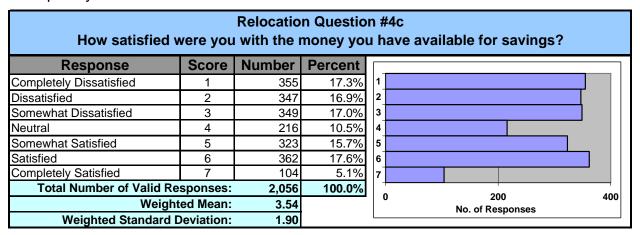


Figure 6-63. Satisfaction with Money for Savings for the Family Member Respondents

Further analysis indicated that the reason for the lower mean satisfaction score for Money for Savings was that there were some disparities in satisfaction between Pay Grade Groups. When the responses to Question #4c were examined by Pay Grade Group, the minimum mean score of 2.61 was found for the E-2/E-3 respondents, and the maximum mean score of 4.89 was found for the O-4 to O-10 respondents. While this type of trend was not surprising, the magnitude of the difference was striking. Similar trends were seen when the facet of Money for Extras (Question #4b) was examined.

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with Pay & Benefits for the Family Member respondents was performed. The results are shown in Figure 6-64. The results indicated that overall satisfaction with Pay & Benefits was most strongly influenced by satisfaction with Money for Extras, Ability To Provide for Children, Money for Savings, and Money for Essentials. In addition to being relatively strong influences on overall satisfaction, the Money for Extras and Money for Savings facets also had mean satisfaction scores that fell well below the overall mean satisfaction score, denoting that these facets had high potential as areas for improvement that could influence higher overall satisfaction with their pay and benefits for the Family Member respondents. In contrast, the Ability To Provide for Children had the second highest influence, but its potential for improving satisfaction in the Pay & Benefits life domain were limited by its relatively high satisfaction score.

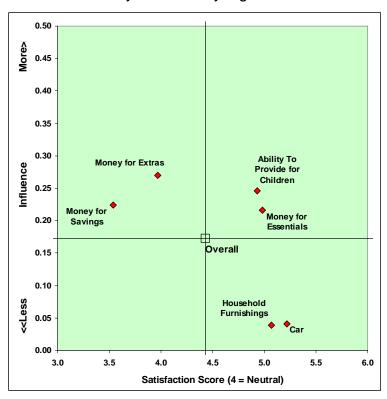


Figure 6-64. Key Driver Diagram for the Pay & Benefits Life Domain for the Family Member Respondents

It was difficult to compare directly the results seen in the figure above with the results for this life domain from the 2002 QoL Study. Instead of six facets of satisfaction, that earlier study included only four: the three "Money for ..." facets seen here and one called "Housing Allowance," which had both high influence and a mean score below that of the overall mean. Money for Extras was the most influential facet in both studies, but the influences of Money for Savings and Money for Essentials were much greater in 2007, with the influences of both of those facets falling above that of the overall mean.

6.11.2 Other Life Domain-Specific Analyses

The responses to a number of other questions specific to the Pay & Benefits life domain were examined. The results are presented below.

Question #1 asked the respondents if they had experienced any of a set of financial hardships since arriving at their present duty location. Table 6-42 shows the percentage of responses to each hardship for the 2007 Family Member respondent sample, as well as response percentages from the 2002 Marine Corps QoL Study. 123

Table 6-42. Financial Hardships Experienced by Family Member Respondents in the 2007 and 2002 Marine Corps QoL Studies

	Percentage Who Experienced		
Financial Hardship	2002	2007	
Difficulty Meeting Monthly Obligations	28.2%	28.2%	
Letter of Indebtedness to Your Command	2.0%	2.8%	
Reposession of Something Purchased	0.9%	0.9%	
Bankruptcy	1.1%	0.4%	
Crisis Loan from Military Relief	3.8%	2.8%	
Trouble over Child Support Payments	1.9%	1.7%	
None of the Above	66.3%	64.1%	

The results between the 2007 and 2002 studies were nearly equivalent: About 65 percent of the respondents in both surveys had experienced none of the financial hardships listed and "Difficulty Meeting Monthly Obligations" continued to be the second most frequently chosen response, with 28.2 percent of the Family Members responding that they had experienced that hardship. All other financial hardships had relatively trivial response rates.

Question #2 asked the respondents to estimate how much of their family's total income came from their spouse's military pay. The data provided were grouped by the five response options to the question and were combined with the responses to the domain satisfaction question (Question #4g) to produce Table 6-43. The mean satisfaction scores varied from a minimum of 4.39 (for families in which the spouse's military pay provided only 25 percent or less of the family's total income), climbed to a maximum of 4.86 (for families in which the spouse's military pay provided between 50 percent and 75 percent of the family's total income) but then decreased as the percentage of the family's income provided by the spouse's military pay climbed through 75 percent and up to 100 percent. All scores were in the middle of the "Neutral" to "Somewhat Satisfied" range and the differences between the mean satisfaction scores had no practical significance, but the trend seen was interesting. Respondents in families in which the spouse's military pay provided almost all or all of the family's income were about as satisfied as respondents in families in which the spouse's military pay provided less than one-quarter of the family's total income. From the data available, it is difficult

¹²³ Note that the "Difficulty Meeting Monthly Obligations" response option, which was new to the 2007 Active Duty Marine survey, had been included in the 2002 Family Member survey, so a direct comparison of results was possible.

to tell the motivation behind this trend. Perhaps the Family Members were most satisfied when they were able to contribute on an equal basis to with their Marine spouse to the family's income. Perhaps those who were solely, or almost solely, dependent on their spouse's military pay were unsatisfied to some degree by the reliance on military pay, while those Family Members who were making 75 percent or more of the family's income were dissatisfied by the financial burden placed on their shoulders.

Table 6-43. Satisfaction with Pay and Benefits by Percentage of Family Income by Family Member Respondents

Percent of Family's Total Income Coming from Spouse's Military Pay	Count	Mean	Std. Dev.
100%	1,035	4.41	1.69
More Than 75%, but Not All	439	4.43	1.60
Between 50% and 75%	481	4.86	1.48
Between 25% and 50%	97	4.79	1.75
25% or Less	23	4.39	2.23

Question #3 asked the Family Member respondents to select how much money certain Marine Corps-provided benefits saved them by choosing one of the following answers: "Does Not Apply," "Nothing at All," "A Little," "Some," "Quite a Bit," or "A Great Deal." Table 6-44 shows the percentage of respondents at each base/station who answered that these amenities or benefits saved them either "Quite a Bit" or "A Great Deal," which will be collectively referred to as the percentage of respondents who 'reported favorably' on a benefit. The results for each of the five benefits will be discussed in turn.

Table 6-44. Percentages of Family Member Respondents Who Save "Quite a Bit' or "A Great Deal" Using Marine Corps Benefits and Amenities (by Base/Station)

	Percentage of Respondents Answering That These Aspects Save Them "Quite a Bit" or "A Great Deal"				
Base/Station	Base Exchange	Commissary	Military Childcare	Health Care Benefits	Military Housing
MCAS Beaufort	6.0%	54.9%	16.7%	80.0%	22.0%
MCB Camp Butler	22.6%	48.8%	15.2%	77.2%	43.9%
MCB Camp Lejeune	7.7%	38.4%	15.4%	77.7%	12.7%
MCB Camp Pendleton	10.4%	46.2%	28.3%	76.2%	24.0%
MCAS Cherry Point	16.4%	48.2%	11.8%	88.2%	19.1%
MCB Hawaii	26.5%	66.7%	31.3%	78.3%	30.1%
Headquarters Battalion Henderson Hall	13.8%	60.0%	40.0%	80.0%	13.3%
MCAS Iwakuni	12.0%	44.0%	33.3%	72.0%	72.0%
MCAS Miramar	13.3%	45.1%	35.3%	91.4%	31.3%
MCAS New River	8.6%	45.0%	36.4%	75.3%	8.6%
MCRD Parris Island	4.3%	39.1%	16.7%	78.3%	16.7%
MCB Quantico	6.0%	48.7%	33.3%	78.4%	18.3%
MCRD San Diego	15.9%	54.5%	27.3%	83.7%	40.9%
MCAGCC (Twentynine Palms)	10.5%	50.5%	35.3%	83.5%	31.6%
MCAS Yuma	0.0%	43.2%	14.3%	88.1%	24.4%

- The Base Exchange saved from 0.0 percent to 26.5 percent of the respondents "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting favorably on this benefit were at MCAS Yuma (percentage given above), MCRD Parris Island (4.3 percent), and MCB Quantico and MCAS Beaufort (both with 6.0 percent). The highest percentages of respondents reporting favorably on this benefit were at MCB Hawaii (percentage given above), Camp Butler (22.6 percent), MCAS Cherry Point (16.4 percent), and MCRD San Diego (15.9 percent). Note that two of the three OCONUS locations were included on the list of highest percentages of favorable responses for savings at the Base Exchange.
- The Commissary saved from 38.4 percent to 66.7 percent of the respondents "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting favorably on this benefit were at Camp Lejeune (percentage given above) and MCRD Parris Island (39.1 percent). The highest percentages of respondents reporting favorably on this benefit were at MCB Hawaii (percentage given above) and Headquarters Battalion Henderson Hall (60.0 percent), both located in relatively high-cost areas.
- Military Childcare was treated somewhat differently from the other benefits/amenities examined in this question since many respondents e.g., non-parents (who were instructed to answer "Does not apply"), did not take advantage of that option. To get a better perspective on the opinions of the respondents who did take advantage of this option, the percentages shown in the table were computed using only the respondents who gave a valid response other than "Does not apply." The number of such "applicable" respondents ranged from 5 at Headquarters Battalion Henderson Hall) to 63 at Camp Pendleton.
 - Using these criteria, the 15 bases/stations broke down into three groups. At the lowest end were six bases/stations (MCAS Cherry Point, MCAS Yuma, Camp Butler, Camp Lejeune, MCAS Beaufort, and MCRD Parris Island) at which 10 percent to 20 percent of the applicable respondents reported favorably on Military Childcare. The second group comprised MCRD San Diego and MCB Camp Pendleton, at which from 20 to 30 percent of the applicable respondents reported favorably on Military Childcare. The third group comprised the remaining seven bases/stations at which the number of applicable respondents who reported favorably on Military Childcare ranged from 30 percent to 40 percent. At the top of the list was Headquarters Battalion Henderson Hall, where 40.0 percent of the applicable respondents reported favorably on Military Childcare.
- Health Care Benefits saved from 72.0 percent to 91.4 percent of the respondents "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting favorably on this benefit were at MCAS Iwakuni (percentage given above), MCAS New River (75.3 percent) and Camp Pendleton (76.2 percent). The highest percentages of respondents reporting favorably on this benefit were at MCAS Miramar (percentage given above), MCAS Cherry Point (88.2 percent), and MCAS Yuma (88.1 percent).
- Military Housing saved from 8.6 percent to 72.0 percent of the respondents "Quite a Bit" or "A Great Deal." The lowest percentages of respondents reporting favorably

on this benefit were at MCAS New River (percentage given above), MCB Camp Lejeune (12.7 percent), and Headquarters Battalion Henderson Hall (13.3 percent). The highest percentages of respondents reporting favorably on this benefit were at MCAS Iwakuni (percentage given above), Camp Butler (43.9 percent), and MCRD San Diego (40.9 percent). Note that two of the OCONUS locations were on this list of highest percentages of favorable responses for savings from Military Housing.

When looked at in the aggregate, several insights could be drawn. Health Care Benefits had the most favorable responses of any of the benefits listed. Typically, the savings from the Commissary had the second highest percentage of favorable responses. OCONUS locations typically had a high percentage of favorable responses for the Base Exchange, Commissary, and Military Housing Benefits.

6.11.3 Conclusions for the Pay & Benefits Life Domain for the Family Member Respondents

Satisfaction in the Pay & Benefits life domain for spouses of Marines improved in 2007 when compared with the results from the 2002 QoL Study, and satisfaction with Pay and Benefits was generally above average, with the exception of the lower Pay Grade Groups. Notable differences in satisfaction were seen when examined by Pay Grade Group (higher Pay Grade Groups were generally more satisfied) and the base or station to which the respondent's spouse was assigned (but only for the highest and lowest scoring bases/stations). The respondents expressed some concerns with Money for Savings and Money for Extras, which tended to drive some of the general dissatisfaction with Pay and Benefits, especially in the lower Pay Grade Groups. The level of financial hardships experienced by Family Member respondents was similar to results from responses during the 2002 QoL Study, with some concern expressed about the inability to meet monthly financial obligations. Health Care Benefits received especially favorable responses in terms of the savings incurred from that particular benefit.

6.12 THE YOUR JOB/PROFESSIONAL DEVELOPMENT LIFE DOMAIN

6.12.1 Satisfaction – Cognitive Evaluation of the Your Job/Professional Development Life Domain

The weighted mean cognitive or satisfaction score (Question #5h) in the Your Job/Professional Development life domain for the Family Members in 2007 was 4.78 or between "Neutral" and "Somewhat Satisfied" on the seven-point satisfaction scale. A histogram of the responses to the satisfaction question with the weighted overall mean and standard deviation values for the Family Members sample in the Your Job/Professional Development life domain is shown in Figure 6-65. In the overall sample, the highest percentage of respondents, 33.6 percent, responded that they were "Satisfied" with their job/professional development overall. Note also that 20.3 percent of the respondents were dissatisfied with their job/professional development in some way while 62.2 percent of the respondents were at least "Somewhat Satisfied."

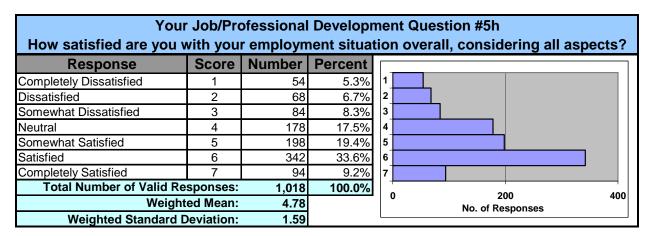


Figure 6-65. Distribution of the Overall Satisfaction Responses in the Your Job/Professional Development Life Domain for the Family Member Respondents

Trends in the weighted mean Your Job/Professional Development satisfaction scores over the two Marine Corps QoL studies that collected data on the Family Members as a separate respondent group are shown in Figure 6-66. The 2007 weighted mean satisfaction score increased (by 0.40 points) from the 2002 weighted score, but that increase had no practical significance, since its Cohen's *d* statistic was only 0.24.

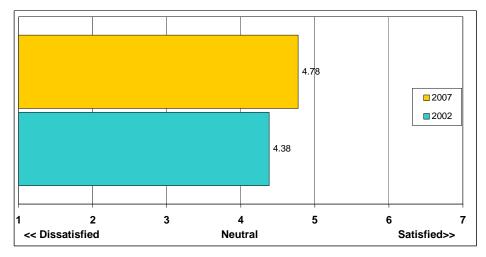


Figure 6-66. Trends in Overall Satisfaction in the Your Job/Professional Development Life Domain for the Family Member Respondents

Overall satisfaction in the Your Job/Professional Development life domain also was analyzed by decomposing the respondent data into subgroups to examine differences in satisfaction according to the Pay Grade Group of the respondents' spouses, the base/station to which the respondents' spouses were assigned and parental status. Each is discussed in turn below.

Pay Grade Group. The means and standard deviations of the satisfaction scores for the Your Job/Professional Development life domain, decomposed by spouse's Pay Grade Group, are shown in Table 6-45.

Table 6-45. Satisfaction with Your Job/Professional Development by Pay Grade Group of the Spouses of the Family Member Respondents

Pay Grade Group	Count	Mean	Std. Dev.
E-2/E-3	98	4.52	1.49
E-4/E-5	333	4.74	1.52
E-6/E-7	258	4.77	1.71
E-8/E-9	91	5.09	1.64
WO	29	5.10	1.45
O-1 to O-3	110	4.54	1.77
O-4 to O-10	99	4.99	1.59

The E-2/E-3 and O-1 to O-3 subgroups had the lowest scores, 4.52 and 4.54, respectively, about halfway between "Neutral" and "Somewhat Satisfied." The highest satisfaction was seen in the WO (5.10) and E-8/E-9 (5.09) Pay Grade Groups; the only subgroups with scores above "Somewhat Satisfied." No practical significance was seen between the extrema of the Pay Grade Group breakdown.

When the trends in the overall satisfaction with the Your Job/Professional Development life domain were examined by Pay Grade Group, as shown in Figure 6-67, all Pay Grade Groups saw an increase with a maximum increase occurring in the E-2/E-3 Pay Grade Group (0.54). None of these changes had any practical significance: The largest effect size was only 0.33 (for the E-2/E-3 Pay Grade Group).

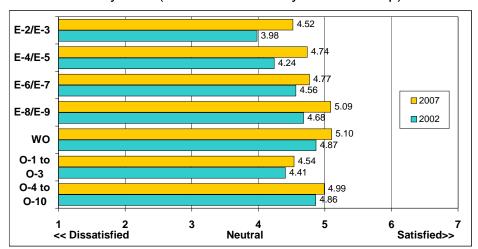


Figure 6-67. Trends in Satisfaction in the Your Job/Professional Development Life Domain by Pay Grade Group of the Spouses of the Family Member Respondents

Base/Station. The means and standard deviations of the satisfaction scores for the Your Job/Professional Development life domain, decomposed by the base/station to which the respondents' spouses were assigned, are shown in Table 6-46. The mean satisfaction scores varied widely, from a minimum of 4.48 at MCAS Beaufort to a maximum of 5.25 at Headquarter Battalion Henderson Hall. There were practical differences between Headquarter Battalion Henderson Hall and MCB Hawaii, the two

highest scoring locations, and MCAS Cherry Point (Cohen's *d* statistics of 0.51 and 0.52, respectively), but no practical significance was seen in the differences with MCAS Beaufort due to the large standard deviation of the mean at that location.

Table 6-46. Satisfaction with Your Job/Professional Development by Installation for the Family Member Respondents

Base/Station	Count	Mean	Std. Dev.
MCAS Beaufort	23	4.48	1.88
MCB Camp Butler	53	5.00	1.33
MCB Camp Lejeune	180	4.62	1.68
MCB Camp Pendleton	182	4.96	1.51
MCAS Cherry Point	48	4.54	1.47
MCB Hawaii	37	5.24	1.21
Headquarters Battalion Henderson Hall	12	5.25	1.29
MCAS Iwakuni	11	5.00	1.95
MCAS Miramar	38	4.63	1.32
MCAS New River	36	4.78	1.40
MCRD Parris Island	14	4.86	1.46
MCB Quantico	58	5.07	1.40
MCRD San Diego	26	4.92	1.79
MCAGCC (Twentynine Palms)	38	4.66	1.60
MCAS Yuma	26	4.77	1.75

Parental Status. The means and standard deviations of the satisfaction scores for the Your Job/Professional Development life domain, decomposed by parental status, are shown in Table 6-47. Although the difference did not have practical significance, it can be seen that those without children scored marginally lower (by 0.07) than their counterparts.

Table 6-47. Satisfaction with Your Job/Professional Development by Parental Status for the Family Member Respondents

Parental Status	Count	Mean	Std. Dev.
Married with Children	550	4.80	1.64
Married without Children	443	4.73	1.59

In addition to asking the respondents about their overall satisfaction with their job/professional development, Question #5 also asked about satisfaction with a series of six separate facets of their job/professional development. The weighted mean and standard deviation scores for each of these facets are shown in Figure 6-68. The lowest weighted mean score and the highest weighted standard deviation were seen in the satisfaction with the Marine Corps' assistance in helping the respondents find a job. The weighted mean score for this facet was barely above "Somewhat Dissatisfied." Only satisfaction with Relation to Your Skills (5.04) scored above the overall weighted satisfaction level and above "Somewhat Satisfied."

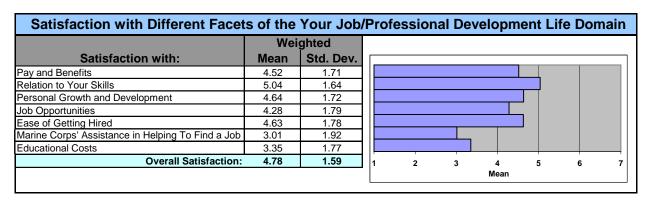


Figure 6-68. Satisfaction with Facets of Your Job/Professional Development for the Family Member Respondents

In order to determine the factors that were key to the reported overall satisfaction in this life domain, multiple regression of the facets of satisfaction on the overall satisfaction with job/professional development for the Family Member respondents was performed. The results are shown in Figure 6-69. 124

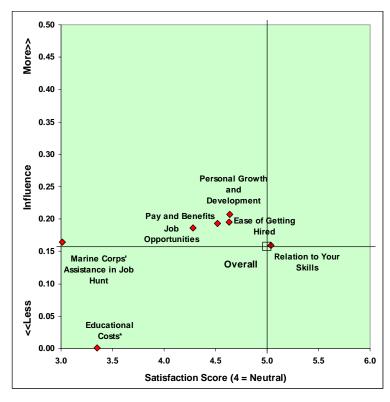


Figure 6-69. Key Driver Diagram for the Facets of the Your Job/Professional Development Life Domain for the Family Member Respondents

The magnitudes of the influence factors ranged from 0.001 to 0.207. The three most influential facets were all close to each other in satisfaction score and influence on the

¹²⁴ Note that the Educational Costs facet had a very small, negative correlation with/influence on overall domain satisfaction, and therefore was marked with an asterisk (since the magnitude of the influence is shown in the figure).

Your Job/Professional Development life domain. They were Personal Growth and Development, Ease of Getting Hired, and Pay and Benefits. These also were the three most influential facets found in the 2002 QoL Study for employed spouses, although the order of their influence was somewhat different. Other than those three, however, the similarities found between the results of the two Marine Corps QoL studies start to fade. In 2007, Job Opportunities and Marine Corps' Assistance in Job Hunt had influence above the average and, along with the first three facets mentioned, would increase satisfaction in the overall Personal Development life domain if increases in satisfaction were seen in those facets. In 2002, neither of those facets had an influence higher than the overall domain mean and the influence of Marine Corps' Assistance in Job Hunt was zero. In fact, given the 2007 results, the low satisfaction assigned to the Marine Corps' Assistance in Job Hunt facet and the slightly higher than average influence of that facet would combine to make it a potential area where overall increases in domain satisfaction might be achievable. The facet with the least amount of influence and the only facet negatively correlated with the overall mean was Educational Costs (this also was the least influential facet in the 2002 QoL Study).

6.12.2 Other Life Domain-Specific Analyses

Question #1 asked the respondents to indicate their paid employment status. The results are shown in Table 6-48. The nine possible responses (ignoring "Other") were aggregated into the three groups shown in the table.

Table 6-48. Employment Status of the Family Member Respondents

Employment Status	Percent
Employed	53.2%
Unemployed by Choice	33.6%
Unemployed by Chance	13.2%

Question #2 asked the respondents to indicate the reason why they were employed. The results are shown in Figure 6-70. The most common responses were "To Earn Additional Income for Basic Family Expenses" and "To Earn Additional Income for Extras." These two responses comprised 40.0 percent of all responses.

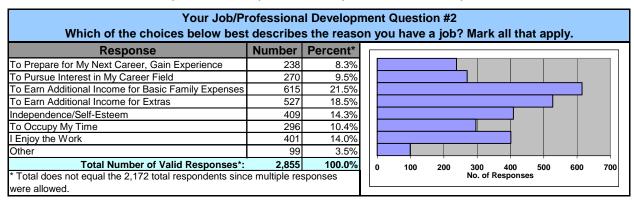


Figure 6-70. Reason for Employment of the Family Member Respondents

The responses to Question #2 that indicated that the respondent was working to earn additional income (response options #3 and #4 to the question) were examined by base/station. The results are shown in Table 6-49.

Table 6-49. Employment by Base/Station of the Family Member Respondents

Number of Respondents Indicating the Main Reason for a Second Job Was:

Base/Station	Number of Respondents with a Job	To Earn Additional Income for Basic Needs (Option 3)	To Earn Additional Income for Extras (Option 4)	Percentage Selecting Option 3 or Option 4
MCAS Beaufort	61	17	11	45.9%
MCB Camp Butler	159	22	28	31.4%
MCB Camp Lejeune	501	120	87	41.3%
MCB Camp Pendleton	492	105	91	39.8%
MCAS Cherry Point	112	24	23	42.0%
MCB Hawaii	108	22	19	38.0%
Headquarters Battalion Henderson Hall	29	4	7	37.9%
MCAS Iwakuni	40	3	7	25.0%
MCAS Miramar	110	25	20	40.9%
MCAS New River	112	23	18	36.6%
MCRD Parris Island	42	8	8	38.1%
MCB Quantico	159	35	30	40.9%
MCRD San Diego	69	19	16	50.7%
MCAGCC (Twentynine Palms)	111	24	22	41.4%
MCAS Yuma	67	14	13	40.3%

The two non-U.S. locations, MCAS Iwakuni and Camp Butler, had the lowest percentages of respondents working for the primary reason of earning additional income for basics or extras (25.0 percent and 31.4 percent, respectively). The percentages for the other bases ranged from 36.6 percent (at MCAS New River) to 50.7 percent (at MCRD San Diego). No clear geographic trend to the percentages could be discerned.

Question #4 asked the respondents to indicate how many hours they worked in a typical week. Figure 6-71 shows the responses to that question. Only those responses indicating that the respondent worked at least 8 hours per week were considered valid and included in the calculations. Most respondents (43.9 percent) answered they worked 40 to 49 hours per week, although 343 of those 434 respondents answered they worked 40 hours per week (34.5 percent of all respondents). The valid responses were distributed fairly evenly among the other ranges considered.

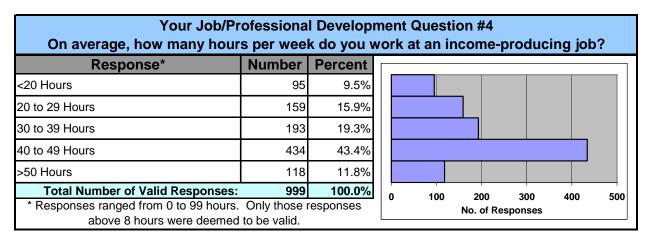


Figure 6-71. Histogram of Average Number of Hours Worked Each Week by the Family Member Respondents

Figure 6-72 compares the average number of hours worked each week by the Family Member respondents in the 2002 and 2007 QoL Studies. A slight decrease, from 36.4 to 35.6 hours per week, was seen.

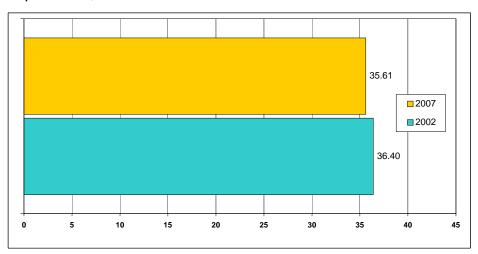


Figure 6-72. Average Number of Hours Worked Each Week by the Family Member Respondents

6.12.3 Conclusions for the Your Job/Professional Development Life Domain for the Family Member Respondents

Satisfaction of the Family Member respondents with their job/professional development increased in the 2007 Marine Corps QoL Study when compared with the results of the 2002 QoL Study, although the increase did not have practical significance. No differences with practical significance were seen when the mean scores for the individual Pay Grade Groups were compared, or when the changes from 2002 were considered. A small number of differences with practical significance were seen when the results for the individual bases/stations were examined. The facet of job/professional development with the lowest satisfaction rating was the Marine Corp's

Assistance in Helping To Find a Job. Although this was not the most influential facet (satisfaction with Personal Growth and Development held that position), its influence was slightly greater than average and its low satisfaction score indicated great potential for improvement.

Around 40 percent of the respondents had a job for which the main reason for working was to earn additional money either for basic needs or extras but, other than noting that the prevalence of this was lower at the Marine Corps' two non-U.S. locations, no clear trends were seen. The average work week for the Family Members who did work was 35.6 hours, although the most common length of a work week was 40 hours.

6.13 LIFE AS A WHOLE OR GLOBAL QUALITY OF LIFE FOR THE FAMILY MEMBER RESPONDENTS

Life as a Whole/Global Quality of Life for the Family Member respondents was assessed using the responses to two separate questions -- one that appeared in the Life as a Whole section at the beginning of the survey instrument (immediately after the Background section and preceding the Residence life domain) and one in the Life as a Whole section at the end of the survey instrument (immediately following the Marine Corps Life & You section). It also included responses to the two questions in the Marine Corps Life & You section of the survey. The analyses performed included an assessment of Global Quality of Life and Measures of Military Importance.

6.13.1 Assessment of Global Quality of Life and Trend Analyses

6.13.1.1 *Methodology*

The Global Quality of Life assessment for the Family Member respondents was performed using a methodology somewhat similar to that used for the Active Duty Marine respondents groups, with the main difference being the number of Life as a Whole questions used to calculate the quality of life composite value. For the Family Members, there were only two Life as a Whole questions, which are listed in Table 6-50

Question	Question Statement
Part 1, #1	Life as a Whole Affective Question: First, which point on the scale below best describes how you feel about your life as a whole at this time? (Used seven-point D-T scale.)
Part 2, #1	Satisfaction with Life (SWL): Please indicate how much you agree or disagree with the statements below. (Five-part question with seven response options, ranging from "Completely Disagree" to "Completely Agree," for each part.)

Table 6-50. Life as a Whole Questions in the Family Member Survey

The Life as a Whole composite was calculated as the average of the mean respondent scores for the two questions shown above. The mean respondent scores for each part of the multi-part SWL question were averaged to provide input values for use in the composite. As was done in the 2002 QoL Study, the third part of the SWL question

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(where the respondent was asked their agreement with the statement "I am satisfied with my life") was used as a third parameter in calculating the composite. Thus, the calculation can be summarized as:

LAW Composite = Mean (LAW 1-1, Mean SWL, LAW 2-1 part C)

Given this approach, a criterion slightly different than that used for the Active Duty Marines was used for selecting the respondents to include in the Family Member Life as a Whole composite calculation. In order to be included, a respondent must have provided an answer to LAW 2-1 part C and also must have provided an answer either to LAW 1-1 or to at least two of the three parts of the SWL question. These criteria resulted in the inclusion of 2,098 of the total of 2,172 Family Member respondents (96.6 percent) in the Life as a Whole composite calculations. As was the case for the two Active Duty Marine respondent groups included earlier in this volume, the Life as a Whole Composite for the Family Members was calculated on a seven-point scale.

Cronbach's Alpha was calculated to assess the internal consistency of using the combination of the three Life as a Whole questions as a single uni-dimensional construct for measuring Global Quality of Life. The calculated value of Cronbach's Alpha for the 2007 Family Member respondent sample was 0.804. A value of 0.70 or higher is generally considered acceptable in social science research applications. With a Cronbach's Alpha of 0.804, the three-part Life as a Whole composite provided adequate internal consistency in serving as a metric for Global Quality of Life.

6.13.1.2 Results and Analysis

The weighted 2007 Global Quality of Life score for Family Member Respondents was determined to be 5.09 (see Figure 6-73). The score represented a positive perception of overall Global Quality of Life. This was a slight improvement in the weighted Global Quality of Life score from 2002, which was re-calculated to be 4.94. However the difference had no practical significance (Cohen's *d* statistic of 0.10). Note that the Global Quality of Life score for 2002 was re-calculated from the raw, Government-furnished 2002 data provided to the Study Team, in accordance with the methodology set forth in Section 6.12.1.1 above. Of the 4,184 responses in the 2002 survey, 3,970 responses (94.9 percent) met the valid answer criteria of the 2007 methodology and were included in the recalculation of the 2002 Global Quality of Life.

¹²⁵ As explained in Section 4.1.1, all the 2002 scores included in this report were recalculated using the same weighting methodology as was applied to the 2007 data in order to maximize the comparability of the numbers reported for these two studies. This recalculation almost invariably resulted in changes, so the reader is reminded that the 2002 scores seen in this report may not match those in the original 2002 QoL Study Report.

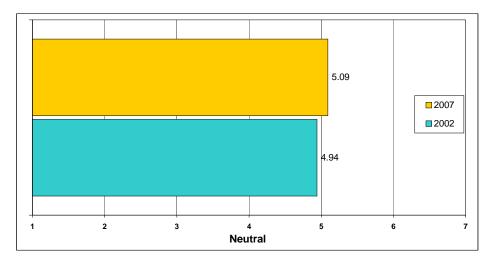


Figure 6-73. Trends in Global Quality of Life for the Family Member Respondents 6.13.2 Analysis by Demographic Subgroup

As was done in the 2002 QoL Study Report, the Global Quality of Life scores for the Family Member Respondents were calculated for two demographic groups, Pay Grade Group of the spouse of the respondent and whether the respondent were living with their spouse and/or children. Because the vast majority of the respondents were female, decomposition by gender was not performed. Also, decomposition by race/ethnicity was not possible as the survey did not include the requisite question.

Each decomposition will be discussed in turn.

6.13.2.1 Pay Grade Group

The spouses of Marines in all Pay Grade Groups indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life. Figure 6-74 shows the Global Quality of Life assessment by Pay Grade Group.

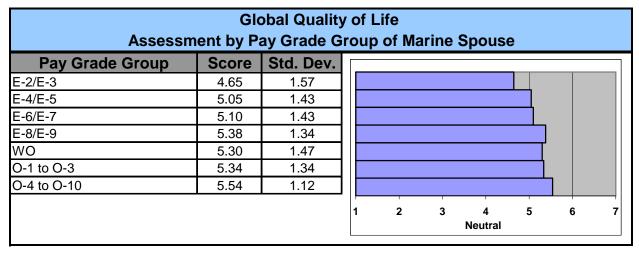


Figure 6-74. Global Quality of Life by Pay Grade Group of the Spouses of the Family Member Respondents

The Global Quality of Life score was highest for the O-4 to O-10 Pay Grade Group, 5.54, and lowest for the E-2/E-3 Pay Grade Group, 4.65. The E-2/E-3 Pay Grade Group appeared to be much less satisfied with their Global Quality of Life than the other Pay Grade Groups. The differences between the score of the E-2/E-3 Pay Grade Group and the scores of the E-8/E-9 and O-4 to O-10 Pay Grade Groups both had practical significance, with Cohen's *d* statistics equal to 0.50 and 0.65, respectively. Comparisons of the scores between all other pairs of Pay Grade Groups showed no other differences that had practical significance.

The breakdown of Global Quality of Life scores by Pay Grade Group for both 2007 and 2002 are shown in Figure 6-75. The results for this decomposition were very similar across the two studies and reflected slight improvement for all but one of the Pay Grade Groups (the exception was the WO Pay Grade Group, where the mean Global Quality of Life score fell by 0.01). None of the differences between the 2007 and 2002 scores had practical significance. Both showed that the E-2/E-3 Pay Grade Group had the lowest perceived Global Quality of Life score and O-4 to O-10 the highest.

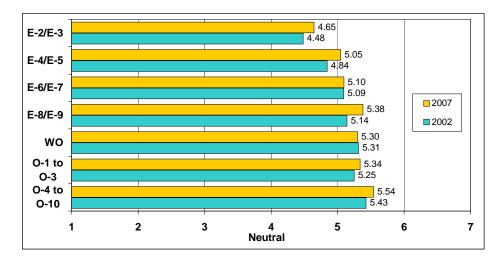


Figure 6-75. Trends in Global Quality of Life by Pay Grade Group for the Family Member Respondents

6.13.2.2 Living with/without Spouse and/or Children

As was done in 2002, respondents were broken into four groups based upon whether they were living with their spouses and/or children. These groups included:

- Living with Spouse and Children;
- Living without Spouse, but with Children;
- Living with Spouse, No Children
- Living without Spouse, No Children

Respondents in each group indicated a positive perception (i.e., above the neutral score of 4.0) of their Global Quality of Life, as shown in Figure 6-76. The subgroup of Family Member respondents Living with Spouse and Children had the highest Global Quality of

Life score at 5.29 and the subgroup of Family Member respondents Living without Spouse, No Children had the lowest at 4.73. Note that the two highest and the two lowest scoring groups had very similar scores and that a clear trend was evident: Respondents living with their spouse had Global Quality of Life scores about 0.5 better than those not living with their spouses, regardless of whether or not there were any children in the marriage. None of the differences seen here had any practical significance, with Cohen's *d* statistics of 0.39 or below calculated.

Global Quality of Life Living with/without Spouse and/or Children									
Living Situation	Score	Std. Dev.							
Living with Spouse and Children	5.29	1.31							
Living without Spouse, but with Children	4.74	1.56							
Living with Spouse, No Children	5.24	1.41							
Living without Spouse, No Children	4.73	1.54							
			1	2	3	4 Neutral	5	6	7

Figure 6-76. Global Quality of Life for Family Member Respondents Living with/without Spouse and/or Children

Figure 6-77 shows the breakdown of Global Quality of Life scores for Family Member Respondents Living with/without Spouse and/or Children for both 2002 and 2007. The scores for 2002 were recalculated from the raw 2002 survey data to maximize comparability of the results. The scores for 2007 were slightly higher than 2002 with the largest improvement seen in the Living with Spouse and Children subgroup. However, the difference had no practical significance (Cohen's *d* statistic of 0.13).

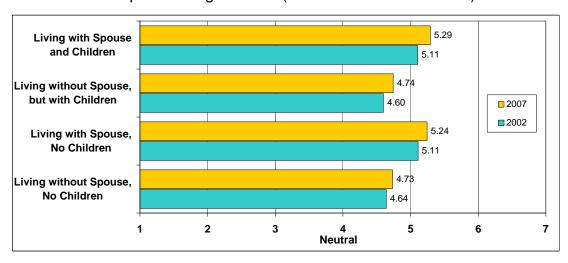


Figure 6-77. Trends in Global Quality of Life for Family Member Respondents
Living with/without Spouse and/or Children

6.13.3 Key Drivers of Global Quality of Life

In order to determine the factors that were key to the reported overall satisfaction with Global Quality of Life, multiple regression of the individual life domain satisfactions on the Life as a Whole composite was performed for the Family Member respondents. This analysis was performed separately for respondent groups with and without children (as was done in the 2002 QoL Study Report.) The results are shown in two key driver diagrams. In these diagrams, the overall life domain responses are located vertically in relation to their influence on the Global Quality of Life assessment as indicated by the regression analysis. Any life domain having a negative correlation to the Composite Quality of Life and is marked with an asterisk.

Figure 6-78 is the diagram for those Family Member respondents with children. The three most influential domain satisfactions were satisfaction with Marine Pay & Benefits, Children Quality of Life, and Separation. Visual comparison with Figure 3-106 of the 2002 QoL Study Report revealed that these three life domains also were found to be the top drivers in that study; however, the order of precedence was different (Separation was first, followed by Children Quality of Life). Noteworthy were the large decreases in influence for both the Separation and Your Job/Professional Development (shown as "Spouse Job") life domains in 2007. The least influential life domains were Childcare and Your Job/Professional Development. In the 2002 QoL Study, Childcare was one of two life domains with the lowest influence, but Your Job/Professional Development, as mentioned earlier, was much more influential in 2002 (the fourth most influential and a good opportunity for improvement) than in 2007. Separation and Marine Pay & Benefits represented the best opportunities for improvement in 2007, as they did in 2002. Aside from Your Job/Professional Development and Childcare (where the mean fell below that of the composite value in 2007), all other domains remained in the same quadrant of the diagram as in 2002.

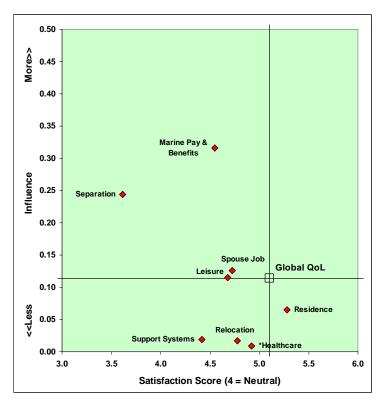


Figure 6-78. Key Drivers of Global Quality of Life for Family Member Respondents with Children

Figure 6-79 is the diagram for those Family Member respondents without children. For this subgroup of respondents, the top three most influential domain satisfactions were satisfaction with Marine Pay & Benefits, Separation and Your Job/Professional Development (again, shown as "Spouse Job"). Visual comparison with Figure 3-107 of the 2002 QoL Study Report revealed that these three domains also were found to be the top drivers in that study; however the influence of Your Job/Professional Development was much lower in 2007 than in 2002 (being second highest in 2002 and third highest, and just barely above the composite influence, in 2007). The least influential life domains were Health Care, Relocation, and Support Systems. In 2002 Health Care, Support Systems and Residence showed the lowest influence, and Relocation had much more influence (the fourth most influential and a good opportunity for improvement). Their combination of high influence and low satisfaction scores made Separation and Marine Pay & Benefits the best opportunities for improvement in 2007; in 2002, Separation and Spouse Job provided the best opportunities for improvement. Aside from Relocation, the influence of which had dropped noticeably from above the composite mean to almost zero, all other domains remained in the same quadrant of the diagram as in 2002.

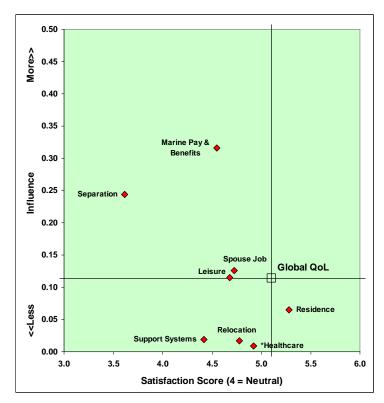


Figure 6-79. Key Drivers of Global Quality of Life for Family Member Respondents without Children

6.13.4 Measures of Military Importance

The measures of military importance assessed the respondents' desires for their spouses to remain in the Marine Corps and for the respondents themselves to remain a part of the Marine Corps. The assessments were performed based on the responses to the two questions in the Marine Corps Life & You section of the survey.

6.13.4.1 General Retention Desires

The first question asked "Which of the following statements best describes YOUR DESIRE regarding a future with the Marine Corps?" The response options to this question were categorized as generally indicating a desire to stay in the Marine Corps, a desire to leave the Marine Corps prior to retirement, or an unsure desire. The categorizations were selected based upon those used in the 2002 QoL Study Report to maximize comparability. Table 6-51 lists each response, along with the assigned categorization.

Table 6-51. Categorization of the Response Options to Family Member Survey
Military Life & You Question #1

Military Life & You Question #1 Response Options	Assigned Category
I would prefer my spouse to remain with the Marine Corps until eligible for retirement	Stay
My spouse is eligible to retire, but I would prefer him/her to stay in	Stay
My spouse is eligible to retire, and I would prefer that he/she leave the Marine Corps	Leave
I would prefer him/her to stay in, but not until retirement 126	Leave
I would prefer him/her to leave the Marine Corps as soon as he/she can	Leave
I'm not sure what I would prefer him/her to do	Not Sure
My spouse intends to remain on active duty, but is being involuntarily separated	*Not Included*

These Family Members' retention desires were compared with the career intentions of the Base and Station respondents, as indicated by the responses to Background Question #15 of the Active Duty Marine survey (*Which of the following statements best describes your career intentions at this time?*). This provided a comparison of Marine intentions and spouse desires similar to that provided in the 2002 QoL Study Report. The response options from the Active Duty Marine survey were worded differently than in the Family Member survey, however, they were categorized into the same general categories as the Family Member responses, as shown in Table 6-52.

Table 6-52. Categorization of the Response Options to Active Duty Marine Survey Background Question #15

Active Duty Marine Background Question #15 Response Options	Assigned Category
I intend to remain in the Marine Corps until eligible for retirement	Stay
I am eligible for retirement, but intend to stay in	Stay
I intend to stay in, but not until retirement	Leave
I'm not sure what I intend to do	Not Sure
I intend to leave the Marine Corps as soon as I can	Leave
I intend to remain on active duty, but I am being involuntarily separated	*Not Included*
Medical separation	*Not Included*

¹²⁶ This response option was new for the 2007 QOL Family Member survey.

For both questions, responses designated as "Not Included" were so categorized because a comparable response option was not included in the 2002 version of the applicable survey and/or because they gave no indication of the respondent's desire/intention.

Figure 6-80 shows the Family Member responses, by Pay Grade Group of the spouse of the respondent, along with the responses from the 2007 Base and Station Marine respondents from the Active Duty Marine survey with red indicating a desire/intention to leave the Marine Corps, yellow representing an unsure desire/intention, and green representing a desire/intention to stay in the Marine Corps until retirement.

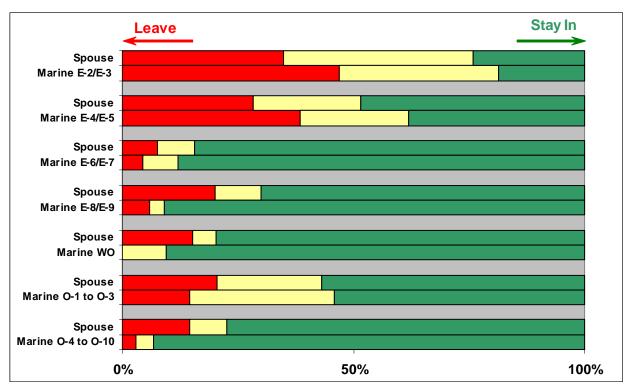


Figure 6-80. Family Member and Base and Station Marine Desires/Intentions To Remain a Part of the Marine Corps

The general pattern of responses follows that seen in the responses to the 2002 QoL survey, with the highest desires/intentions to leave the Marine Corps seen for the two lowest enlisted Pay Grade Groups (and for both spouses and Marines) and the highest desires/intentions to stay in the Marine Corps seen for the O-4 to O-10 Pay Grade Group. Interestingly, for the E-2/E-3 and E-4/E-5 Pay Grade Groups, the spouses showed higher desire to stay and lower desire to leave the Marine Corps when compared with the responses of the Base and Station Marines in those two Pay Grade Groups. Conversely, for the other Pay Grade Groups, the spouses showed lower desire to stay and higher desire to leave when compared with the intentions of the Base and Station Marine respondents in the corresponding Pay Grade Groups.

6.13.4.2 Life Domain Impacts on Retention Desires

The respondent's desire for their spouses to remain in the Marine Corps also was addressed in the second question of the Marine Corps Life & You section of the survey. This question asked the Family Member respondents to indicate how each aspect of their life, as defined by the nine other life domains of the survey, influenced their desire to remain part of the Marine Corps. Table 6-53 lists the life domains. Response options were provided on a seven-point scale, with one end of the scale indicating a domain influence to stay with the Marine Corps, the center of the scale indicating No Influence, and the other end of the scale indicating a domain influence to leave the Marine Corps.

Table 6-53. Domains Influencing the Desire To Remain in the Marine Corps in Question #2 of the Marine Corps Life & You Section of the 2007 Family Member Survey

Life Domain
Residence
Relocation
Leisure and Recreation
Support Systems
Health Care
Separation
Children Quality of Life
Pay & Benefits
Your Job/Professional Development

Figure 6-81 shows the results of the assessment for this question.

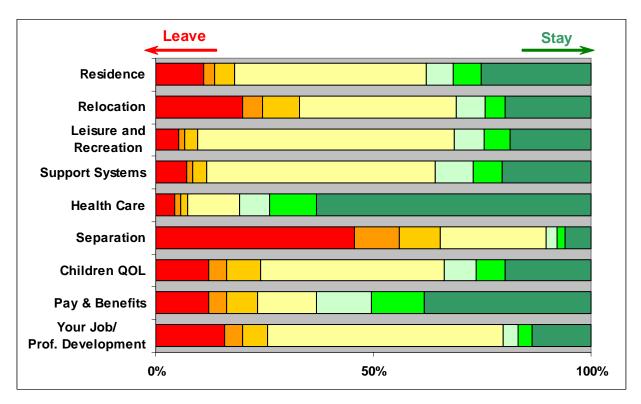


Figure 6-81. Domain Influences on Desire To Remain a Part of the Marine Corps for the Family Member Respondents

A number of different insights can be drawn from the figure.

- **Positive Impacts.** The responses were looked at in terms of positive impact on desire to remain a part of the Marine Corps (i.e., the total percentages of respondents who answered using one of the three response options above the "No Influence" selection). By this measure, all of the life domains except Separation and Professional Development could be said to have had positive impacts because more than about 30 percent of the respondents chose the three favorable responses to the applicable parts of the question. The most positive influences were found in the Health Care and Pay & Benefits domains, with 80.7 percent and 63.0 percent of the respondents, respectively, selecting one of the three response options above the "No Influence" option.
- Negative Impacts. The responses were looked at in terms of negative impact on desire to remain a part of the Marine Corps (i.e., the total percentages of respondents who answered using one of the three response options below the "No Influence" selection). By this measure, three of the life domains (Relocation, Separation, and Your Job/Professional Development) could be said to have had negative impacts because more than 25 percent of the respondents chose the three unfavorable responses to the question. The most negative influence was found in the Separation domain, with 65.3 percent of the respondents selecting one of the three response options below the "No Influence" option.

- Polarizing Impacts. These were defined as life domains for which less than 50 percent of the respondents chose the "No Influence" response. By this measure, six of the nine life domains (Residence, Relocation, Health Care, Separation, Children Quality of Life, and Pay & Benefits) qualified as having polarizing impacts. Of these six life domains.
 - Health Care was not truly polarizing since the low number of "No Influence" responses was driven by the overwhelming number of positive responses;
 - Separation was not truly polarizing since the low number of "No Influence" responses was driven by the overwhelming number of negative responses; and
 - Residence, Relocation, and Pay & Benefits also had positive effects on the respondents' desires; and
 - Relocation, with 31.0 percent positive responses and 33.1 percent negative responses, could be said to have been the most truly polarizing life domain, as it was classified as having both positive and negative impacts on the desire to remain a part of the Marine Corps.
- Based upon responses to the 2002 Family Member survey, domain influences on the desire to remain a part of the Marine Corps appeared very similar in the 2002 and 2007 studies. Noticeable differences in two life domains were noted, however. The impact of Separation saw a 5 percent increase in its negative influence on desire to remain a part of the Marine Corps. Pay & Benefits saw a 10 percent increase in positive influence and a 12 percent decrease in negative influence on desire to remain a part of the Marine Corps.

6.13.5 Conclusions for Life as a Whole/Global Quality of Life for the Family Member Respondents

Overall the Global Quality of Life assessment for the Family Member respondents in 2007 did not show any large divergence from the assessments of the 2002 QoL Study. This included Trends by Pay Grade Group and those respondents living with/without Spouse and/or Children. The Pay & Benefits and Separation life domains remained key drivers of Global Quality of Life, for both respondents with and without children, and good opportunities for improvement.

Measures of military performance also were very similar to the results of the 2002 QoL Study, including the determination of which life domains had the greatest positive and negative impacts on desires to remain a part of the Marine Corps. Two important items noted in that assessment were that the impact of Separation had a noticeable increase in its negative influence on desire to remain a part of the Marine Corps, while Pay & Benefits saw a noticeable increase in positive influence and decrease in negative influence on desire to remain a part of the Marine Corps. Still, the retention intention results, especially when it is remembered that they were collected after 4.5 years of Marine Corps commitments to both OIF and OEF, were encouraging, with approximately 62 percent of Family Member survey respondents indicating a desire to remain a part of the Marine Corps.

6.14 SUMMARY OF THE RESPONSES OF THE FAMILY MEMBERS

The opinions of the Family Members are summarized in the following graphics.

Table 6-54 shows the ranking of the overall weighted mean satisfaction scores from the nine life domains for which such data were collected (Note that the results from the Marine Corps Life and You section of the survey were considered along with the data from the two Life as a Whole sections of the Family Member survey). Contrary to the results seen earlier in this report for the two Active Duty Marine respondent groups, Residence received the highest weighted satisfaction score from the Family Member respondents, one-third of the way between "Somewhat Satisfied" and "Satisfied." Separation received the lowest score, and was the only life domain for which the weighted mean satisfaction score was below "Neutral."

Table 6-54. Overall Weighted Mean Satisfaction Scores in Each Life Domain for the 2007 Family Member Respondents

Satisfaction						
How Satisfied Are You Overall with:	Mean ¹					
Residence	5.31					
Children Quality of Life	5.23					
Health Care	5.00					
Your Job/Professional Development	4.78					
Relocation	4.75					
Leisure and Recreation	4.67					
Support Systems	4.60					
Pay & Benefits	4.43					
Separation	3.87					

 $^{1. \ \} Cognitive/Satisfaction \ Scale: \ 1 = Completely \ Dissatisfied;$

Table 6-55 compares the mean happiness (for the one life domain, Separation that contained an affective question) and satisfaction scores for the spouses of Marines in the seven Pay Grade Groups. In general (and with the very notable exception of the Health Care life domain), satisfaction scores were lowest for the spouses of Marines in the E-2/E-3 Pay Grade Group: Mean satisfaction scores for this group were the lowest seen in seven of the nine life domains examined (this subgroup also had the lowest mean happiness score). In the other two life domains – Support Systems and Health Care – the lowest scores were seen for the spouses of Marines in the E-4/E-5 Pay Grade Group (with the spouses of Marines in the E-6/E-7 Pay Grade Group close behind). Overall, the spouses of Marines in the E-2/E-3 Pay Grade Group also had the lowest Global Quality of Life score.

^{4 =} Neutral; 7 = Completely Dissatisfied

Table 6-55. Overall Mean Happiness and Satisfaction Scores for the Family Member Respondents in the Family Member Life Domains – by Pay Grade Group of the Spouses of the Family Member Respondents

	Overall Mean Cognitive (Satisfaction) Scores										
Pay Grade Group	Residence	Relocation	Leisure and Recreation	Support Systems	Health Care	Separation: Happiness	Separation: Satisfaction	Children Quality of Life	Pay & Benefits	Your Job/ Professional Development	Global QoL
E-2/E-3	4.98	4.21	4.35	4.59	5.16	3.58	3.30	4.85	3.62	4.52	4.65
E-4/E-5	5.10	4.70	4.53	4.38	4.86	4.07	3.56	5.19	4.14	4.74	5.05
E-6/E-7	5.29	4.75	4.44	4.45	4.87	4.48	4.07	5.31	4.54	4.77	5.10
E-8/E-9	5.67	5.15	4.92	4.59	5.08	4.87	4.44	5.55	5.09	5.09	5.38
wo	5.69	5.30	5.16	5.02	5.00	4.42	4.46	5.51	4.65	5.10	5.30
O-1 to O-3	5.51	4.81	4.89	4.68	4.92	4.09	3.85	5.34	5.03	4.54	5.34
O-4 to O-10	5.60	5.09	5.06	4.82	5.00	4.61	4.31	5.42	5.42	4.99	5.54
Overall	5.31	4.75	4.67	4.60	5.00	4.19	3.87	5.23	4.43	4.78	5.09

Looking at the highest-scoring groups, the story was markedly different. The highest satisfaction scores were seen for the spouses of Warrant Officers in six of the nine life domains, while the spouses of members of the E-8/E-9 Pay Grade Group had the highest scores in three of the nine life domains (and also the highest happiness score in the Separation life domain). The spouses of Marines in the O-4 to O-10 Pay Grade Group had the highest score in one of the nine life domains (perhaps not surprisingly, Pay & Benefits). However, while they almost never were the highest scoring subgroup, the spouses of Marines in the O-4 to O-10 Pay Grade Group consistently ranked among the highest scoring subgroups in all/most of the life domains. That consistency in satisfaction with their quality of life no doubt contributed to the members of that subgroup having the highest Global Quality of Life score.

Table 6-56 compares the satisfaction scores in selected life domains decomposed by the base or station to which the respondent's spouse was permanently assigned. Several installations stood out on either end of the spectrum for having either a number of the highest or lowest scores. Headquarters Battalion Henderson Hall and MCB Quantico generally received higher than average scores for satisfaction (with the exception of Health Care), a reflection of the more-senior pool of Marines assigned to those installations. On the other hand, MCAS Beaufort and MCRD Parris Island stood out for having received low scores in multiple life domains.

Table 6-56. Overall Mean Satisfaction Scores for the Family Member Respondents in Selected Family Member Life Domains – by Base/Station

Overall Mean Cognitive (Satisfaction) Scores										
Base/Station	Residence	Leisure and Recreation	Support Systems		Children Quality of Life	Pay & Benefits	Your Job/ Professional Development			
MCAS Beaufort	4.98	4.37	4.65	4.22	5.31	4.24	4.48			
MCB Camp Butler	4.96	5.14	4.75	4.91	5.50	5.07	5.00			
MCB Camp Lejeune	5.36	4.58	4.49	5.01	5.27	4.35	4.62			
MCB Camp Pendleton	5.32	4.85	4.48	4.93	5.28	4.39	4.96			
MCAS Cherry Point	5.16	4.35	4.56	4.55	5.18	4.66	4.54			
MCB Hawaii	4.96	5.09	4.86	5.20	5.27	4.68	5.24			
Headquarters Battalion Henderson Hall	5.72	4.80	4.90	4.48	5.59	5.50	5.25			
MCAS Iwakuni	5.30	5.16	4.74	4.83	5.19	4.96	5.00			
MCAS Miramar	5.29	5.07	4.82	5.19	5.30	3.90	4.63			
MCAS New River	5.53	4.38	4.67	4.82	5.48	4.98	4.78			
MCRD Parris Island	5.50	3.83	4.35	4.13	5.00	4.88	4.86			
MCB Quantico	5.64	4.70	4.75	4.60	5.73	4.70	5.07			
MCRD San Diego	5.58	5.02	4.53	5.21	4.92	4.61	4.92			
MCAGCC (Twentynine Palms)	5.07	4.18	4.61	5.40	5.33	4.27	4.66			
MCAS Yuma	5.41	4.23	4.68	5.33	5.06	4.64	4.77			
Overall	5.31	4.67	4.60	5.00	5.23	4.43	4.78			

Based on the results of the decomposition by parental status, shown in Table 6-57, the respondents with children were more satisfied and, in the one life domain that measured it, happier than their childless cohorts. The biggest differences between the respondents with children and the respondents without children were found in the happiness and satisfaction with Separation. In both cases, the respondents with children were happier and more satisfied, and by fairly large margins. The Global Quality of Life composite score was computed for four groups, depending on whether the respondent was living with or without either their spouses and/or their children. Those Family Member respondents who were not living with their spouses were found to have essentially the same Global Quality of Life score regardless of whether they were living with or without children. The same was true for those Family Member respondents who were living with their spouses: Their Global Quality of Life scores were only slightly higher (by 0.05) if they also were living with their children.

Table 6-57. Overall Mean Happiness and Satisfaction Scores for the Family Member Respondents in Eight Family Member Life Domains – by Parental Status

Overall Mean Cognitive (Satisfaction) Scores													
Marital/Parental Status	Residence	Relocation	Leisure and Recreation	Support Systems	Health Care	Separation: Happiness	Separation: Satisfaction	Pay & Benefits	Your Job/ Professional Development	Global QoL*			
Married with Children	5.33	4.84	4.64	4.60	4.97	4.35	4.02	4.54	4.80	5.29 4.74			
Married without Children	5.27	4.75	4.67	4.42	4.91	4.07	3.59	4.54	4.73	5.24 4.73			
Overall	5.31	4.75	4.67	4.60	5.00	4.19	3.87	4.43	4.78	5.09			

^{*}The topmost of each pair of numbers represent the satisfaction scores for those Family Members living with their spouses, while the lower pair are the scores for those not living with their spouses.

Figure 6-82 shows the trends in the overall weighted mean cognitive/satisfaction scores across the Family Member life domains for both of the Marine Corps QoL studies that collected data on the Family Members as a separate respondent group. Between 2002

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and 2007, weighted mean satisfaction scores increased in each of the Family Member life domains, with the largest increases seen in the Your Job/Professional Development (0.40), Health Care (0.31) and Pay & Benefits (0.30) life domains. The only area in which the weighted scores decreased was in the happiness with Separation (shown in a unique color scheme in the figure to denote that it is an affective, and not a cognitive, measure). The weighted mean happiness score decreased by 0.21, but remained above the "Neither Unhappy Nor Pleased" level. At the same time, the weighted mean satisfaction in the Separation life domain increased by 0.16, although that score remained below "Neutral."

Thus, in general, there was in increase in the satisfaction of Family Members from 2002 to 2007, although none of the differences seen here had practical significance. An increase of 0.15 in the Global Quality of Life composite score also was seen, resulting in a value of 5.09.

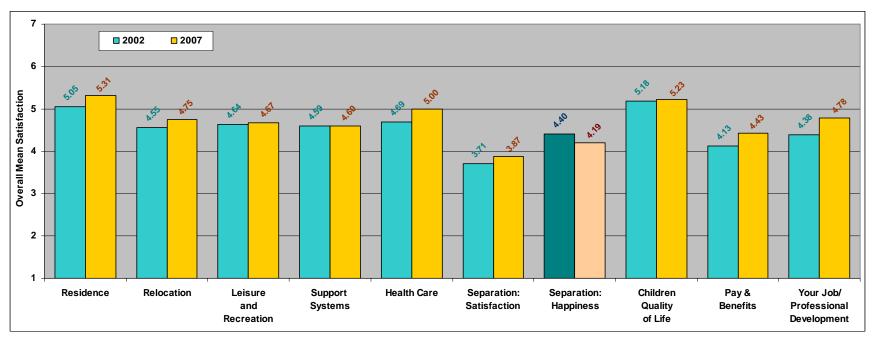


Figure 6-82. Trends in Overall Weighted Mean Happiness and Satisfaction Scores in the Family Member Life Domains

7. QUALITY OF LIFE MODELS: THE STRUCTURAL EQUATION MODELING

7.1 BACKGROUND AND INTRODUCTION

Understanding the antecedents and consequences of quality of life involves a complex set of factors, many of which have been discussed in previous sections of this report. The concept of life domain has been used throughout these discussions as a framework for presenting results in a way in which the survey results data can be interpreted and converted to actionable recommendations by Marine Corps decision-makers. In real life, however, individuals' lives are not so clearly compartmentalized and concerns in one area of life frequently spill over to affect other areas.

To fully understand the relationships among life domains as well as their combined effects on Global Quality of Life, and ultimately on the military outcomes of personal readiness and retention, it is advantageous to consider all relevant factors and their interrelationships simultaneously. This is best achieved by using Structural Equation Modeling (SEM), an analytic technique that requires statistical tools that go beyond conventional regression analysis and analysis of variance. Such a technique was used in all three prior Marine Corps QoL studies.

The thrust of this chapter was to reconfirm the structural equation models that came out of the 2002 QoL Study based on applying updated 2007 survey data to the models originally developed in that earlier study. In addition, whenever one of the models established in 2002 could not be confirmed, this chapter presents an alternative model that was supported by the 2007 survey data.

The introductory discussion that follows borrows extensively from Chapter 4 of the 2002 QoL Study Report.

7.1.1 What Is Structural Equation Modeling?

Structural Equation Modeling allows the analyst not only to look at a single relationship between a set of independent variables and a dependent variable, as in a more traditional regression, but also to examine a series of relationships simultaneously. In a sense, it analyzes a set of linked regressions which may 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,

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primarily over the past 40+ years, to assess how good of a job a theory is doing with respect to explaining the relationships of interest.

Several software packages are available for developing and testing structural equation models. The package utilized in this 2007 QoL Study was EQS 6.1, a later version of the EQS system that was used in the 2002 and 1998 QoL Studies. EQS has been reported to be the most flexible of the packages. 127

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 <u>latent</u>) variables. Unlike the physical sciences, there are few places in social science, beyond economics, where a case can be made 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 were 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. Thus, in a multiple regression of domain satisfaction over facet/aspect satisfactions, the computed effect coefficients will be equivalent to the true value plus the measurement error, without being able to determine the magnitude of the latter.

The classic route to reducing measurement error in a variable is to average multiple measurements. For example, in the SEM analysis, the cognitive, affective, and expectancy measures in each life domain were averaged to calculate a set of domain quality of life values. In this case, the theoretical construct of domain quality of life, designed to capture the common ground of the domain cognitive, affective, and expectancy assessments, was no longer treated as a latent variable but was "objectivized." The life domain quality of life values then could be related, under normal regression, to a similarly "objectivized" Global Quality of Life value constructed as a six-component average (for the Active Duty Marines) following the procedures explained toward the ends of Chapters 4 and 5.

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 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

¹²⁷ Of note, in order to produce the key driver diagrams presented in Chapters 4, 5 and 6, SEM was used in its simple single regression form: (1) the overall domain satisfaction was formulated as a linear equation in the facet/aspect satisfactions, and (2) each of those satisfactions was a directly measured variable coming from the response, on a seven-point Likert scale, to its own specific question in the 2007 QoL survey instrument. This was done through the EQS system because it allowed the Study Team to incorporate Pay Grade Group weighting, to handle missing values through pair-wise present covariance calculations, and to compensate for non-normality in the Likert-scale distributions using the robust methods built into the EQS system.

complete solution to the measurement model (see *Bollen* (1989) ¹²⁸) and that two indicators will usually work in practice since there typically are several latent variables.

Note that SEM employing latent variables also is data-expensive because the guidance for a SEM solution is to have 10 cases per variable (indicators are also variables) in order to obtain results with acceptable accuracy. When there are too few cases for the number of variables included in a model, 129 it is best to "objectivize" the model's variables. However, due to the large size and complexity of the model used in this study (introduced in Figure 7-1 below), it was found to be necessary to "objectivize" the variables in order to run the model for all the demographic groups considered, regardless of their size. As a result, in order to compare SEM results across all respondent groups appropriately, domain and Global Quality of Life variables were always "objectivized" in this study. 130

7.1.2 Path Diagrams, Variables and Indicators

The general model and conceptual framework used in the 2007 SEM analysis is shown in Figure 7-1. Note the use of the convention that ellipses represent latent variables and rectangles represent measured, or objective, variables.

The figure was adapted from Figure 5 of the 1993 QoL Study Report ¹³¹ to reflect the realities/changes made to the SEM analyses done in the 1998 and 2002 Marine Corps QoL Studies. Following the lead of the 1998 QoL Study, the 2002 QoL Study streamlined the original 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. Note that PE Fit played a role in the 1993 structural equation models but that, as a key ingredient of Military Job domain quality of life, it was somewhat duplicative of the Military Job life domain.

In addition: (1) a Self-Esteem indicator was added to supplement the Optimism indicator; (2) a third indicator was added to the computation of quality of life for each life domain, 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, also from the MDT.

¹²⁸ The 2002 QoL Study Report references "Bollen (1989)" but does not include a bibliographic reference that could be included in this study report.

¹²⁹ Typically under 200 (according to p. 4-3 of the 2002 QoL Study Report) for the models used in that study.

¹³⁰ 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*).

¹³¹ See p. 140 of the referenced report.

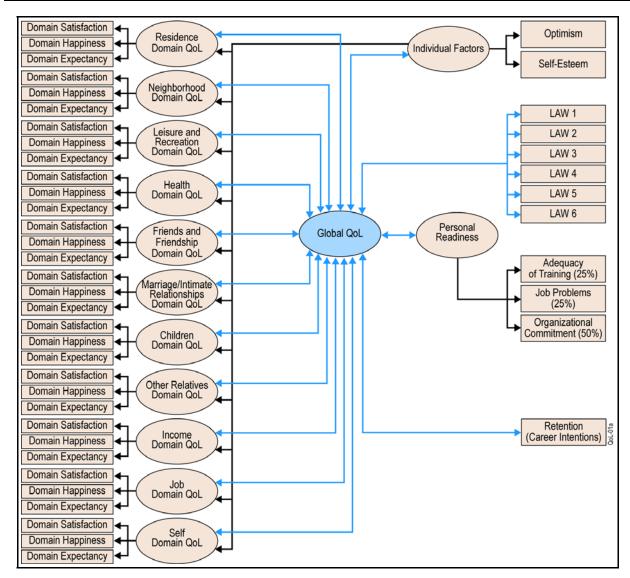


Figure 7-1. General Framework for the Active Duty Marine SEM Analyses
Performed in the 2007 QoL Study

The principal hypothesis underlying this general model was that Global QoL is a function of domain quality of life and in turn influences the military organizational outcomes of Retention and Personal Readiness. In this regard, the Study Team followed the 2002 and 1998 Study Reports in using only simple models that conformed to acceptable levels of goodness of fit under maximum likelihood estimation methods. Model parameters for this 2007 QoL Study were evaluated with the robust maximum likelihood estimation methods in the EQS 6.1 system that allowed the Study Team to incorporate missing value methods and to compensate for non-normality in the observed variables.

In the 2002 QoL Study Report, the most common situation for a simple but effective SEM result was to find three or four domains influencing Global Quality of Life, to find Global Quality of Life and Military Job influencing Personal Readiness, and to find

Global Quality of Life alone, without other domains or factors, influencing Retention (Career Intentions). An example from the 2002 Study Report is shown in Figure 7-2.

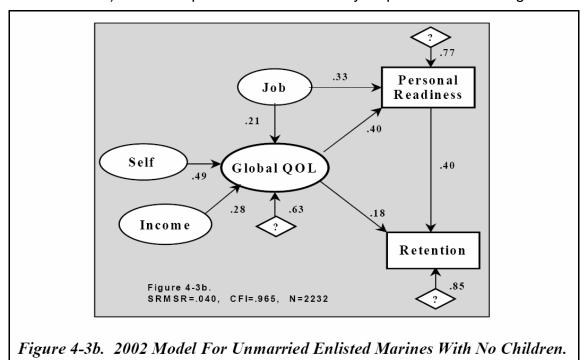


Figure 7-2. Example SEM Result from the 2002 QoL Study

The figure 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, it can be seen that it is positively impacted by the QoL of three life domains (Yourself, Income and Standard of Living, and Military Job) as indicated by the incoming arrows with positive coefficients. The largest impact came from the Yourself life domain with its 0.49 coefficient. This 0.49 value means that, all other things being equal, a one standard deviation increase in QoL in the Yourself life domain would induce a 0.49 standard deviation increase in Global QoL. The second largest impact was from the Income and Standard of Living life domain with its 0.28 coefficient and the third largest impact was from the Military Job life domain with its 0.21 coefficient. Other domains had impact as well, but they had sufficiently small impacts that their explicit inclusion did not materially improve the SEM fit. However, they did have an implicit effect which is more or less "matrixed" into the coefficients of the explicitly-represented domains.

The 1998 Study Report showed non-causal relationships using a two-headed arrow with its correlation coefficient indicating the strength of the association between the two variables. These correlations, which generally occurred between all pairs of individual life domains, result from the best fit to the SEM input data represented by the set of all covariances between variables. Since it is known that the measurement of the quality

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of life of any one domain is typically positively correlated with any another, ¹³² and that the reasons for such correlation have never been fully discussed, this 2007 QoL Study follows the convention of the 2002 and 1993 Study Reports (but not that of the 1998 Study Report) of <u>not</u> showing the two-headed arrows. ¹³³

In addition, the influence of factors not in the model is depicted as a one-headed arrow with no origin, such as the arrow labeled with 0.63 and pointing toward the Global QoL oval. These one-headed arrows are interpreted differently from those between variables. They are used to compute the SEM equivalent of the regression R^2 . The SEM R^2 is computed as $0.60 = 1 - 0.63^2$ indicating that 60 percent of the variance in Global Quality of Life is explained by this SEM model and 40 percent (= 0.63^2) is not explained. This 2007 QoL Study Report uses a diamond question mark to represent the unexplained influences, as did the 2002 Study Report.

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 7-2 the arrow from Global QoL to Personal Readiness carries a weight of 0.40, so this SEM result says that a one standard deviation increase in Global QoL will induce a 0.40 standard deviation increase in Personal Readiness, all other things being equal. Nevertheless, other influences carry substantial weight since 59 percent (= 0.77²) of the variance in Personal Readiness (some of which is attributable to measurement error) is not explained by Global QoL. Note that for Retention, although Global QoL has positive impact, it is small enough that 72 percent (= 0.85²) of the observed variance in Retention was not explainable by the variance of Global QoL under this SEM result.

Note also that the Military Job life domain was found to have a direct causal relationship with Personal Readiness, with a positive correlation of 0.33. Again, all other things being equal, this means that a one standard deviation increase in quality of life in the Military Job life domain would result in a 0.33 standard deviation increase in Personal Readiness. This result was not completely unexpected when it is recalled that the Personal Readiness composite military outcome variable was composed of the results of three questions from the Military Job life domain (Organizational Commitment, Adequacy of Training, and Job Problems). Similarly, Personal Readiness was found to have a direct causal relationship with Retention, with a correlation coefficient of 0.40.

As in 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 2002 and 1998 QoL Study Reports, the 1998 SEM report of *Craiger and Weiss (1999)*, and the general guidance in the literature for SEM by accepting a model when SRMSR < 0.05 and CFI > 0.90 (the CFI used was the one generated under robust maximum likelihood methods). The Study Team also followed the 2002 QoL Study Report and the 1998 SEM report in preferring

¹³² 2002 QoL Study Report, p. 4-6, which refers the reader to an unidentified "Section 3" of that report.

¹³³ Although they are not shown, the inclusion of these relationships is critical to getting credible results from EQS.

parsimony over perfect fit — one can almost always get a better fit by piling on more variables.

7.1.3 Model Directionality

All three previous Marine Corps Quality of Life studies supported a bottom-up model of the relationship between domain QoL and Global QoL, i.e., the direction of causality was from domain QoL to Global QoL. This enabled the previous studies to identify life domains where improvements were expected to impact Global QoL positively. During the 1993 QoL Study, attempts were made in the SEM analysis to allow relationships to be top-down, but it was determined that the bottom-up model had the best fit. ¹³⁴ In the 1998 QoL Study, it is not known whether alternative-direction models were considered.

In the 2002 QoL Study, the primary goal also was to identify domains which had a direct and significant impact on Global QoL, re-enlistment intentions, and personal readiness. Similar to the 1993 and 1998 QoL Studies, strong bottom-up associations of the quality of life from various life domains to Global QoL were found; however, once those associations were identified, two top-down tests were performed: (1) reversing the strong bottom-up associations one-at-a- time, and (2) adding, again one-at-a-time, a weaker domain association with Global QoL from each direction.

- 1) In the case of the strong association reversals, it was found that none of the modified models 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. It was concluded that the causal influences were still bottom-up even though the 2002 survey instrument, in contrast to the previous instruments, included a (then) new MDT expectancy indicator for each domain.
- 2) In the case of the strong bottom-up association reversals, it was 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.

Thus, the 2002 QoL Study concluded, for all of the respondent groups analyzed, that the causal influences were still bottom-up even though the 2002 survey instrument, in contrast to the ones used in previous surveys, included an MDT expectancy indicator for each domain. ¹³⁵

As a result, the 2007 QoL Study began its SEM efforts with a bottom-up design, but also explored the validity of both top-down and bi-directional models. The data for the respondents in each demographic group were first run through the full model build portrayed in Figure 7-1 to ensure that the model sufficiently represented the data. The

¹³⁴ Kerce, personal communication, 2001, as reported on p. 4-6 of the 2002 QoL Study Report.

¹³⁵ 2002 QoL Study Report, p. 4-7 and 2002 Production Recruiter QoL Study Report, p. 4-7.

2007 responses then were run against the 2002 QoL best-fit model for each demographic group with the results reported below. Several instances occurred where the 2007 data failed to produce acceptable values (i.e., CFI > 0.90 and SRMSR < 0.05), indicating that the 2002 model was an insufficient representation of the 2007 data. On these occasions, a new model was created that met the criteria designated for a sufficient model that used life domains that had been shown in this and in past Marine Corps QoL studies to have had a significant impact on Global QoL, re-enlistment intentions, and personal readiness. No claims are made that the new models represent the best possible or optimal fit to the data available but they were adequate to satisfy the goodness-of-fit criteria used in this and past Marine Corps QoL studies.

7.1.4 Models for Demographic Groups

In order to make comparisons with the results of the 2002 QoL Study, the data for the 2007 Active Duty Marine respondent group samples were partitioned into the following six groups based on marital and parental status and rank:

- 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.

To maximize comparability of the results, this 2007 QoL Study, as did the 2002 QoL Study, followed the convention used in the 1998 QoL Study, dividing the sample between officers and enlisted (the 1993 QoL Study did not). This was done in the 1998 Study to compensate for the differential response rates between the two groups which might otherwise have been improperly dominated by the officer respondents (due to the higher response rate from those respondents). The EQS system did not have a respondent weighting scheme when the 1998 QoL Study was performed.

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.

7.1.5 Weighting Data by Pay Grade Group in the SEM Analysis

The 2002 Study Report stated that "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." However, such weighting was not attempted in this

¹³⁶ 2002 QoL Study Report, p. 4-8.

2007 QoL Study despite the explicit desire to maximize comparability with its immediate predecessor. Weighting by Pay Grade Group (as had been done for measures such as overall mean life domain happiness and satisfaction) was not done because the Pay Grade Group data available to and used by the Study Team on the overall Marine Corps population did not support weighting by the six (Active Duty Marine) or four (Family Member) demographic groups considered in the SEM analyses. That is, while it was deemed appropriate to use the available population data to weight the respondent samples by Pay Grade Group to compute overall life domain measures, no data were available to indicate what weights should be given to single officers with children as opposed, for example, to married officers without children.

7.1.6 Indicator Variables Used

7.1.6.1 Active Duty Marine Respondent Group Models

The variables used as indicators for each of the latent variables included in the Active Duty Marine SEM analyses already have 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 included in the two Life as a Whole sections of the Active Duty Marine survey instrument, consistent with prior QoL studies, specifically the 1998 and 2002 QoL Studies. Included were the Overall Delighted-Terrible Scale, the 7-item Life Characteristics Scale (LCS), the Index of Well Being (IWB), Satisfaction with Life as a Whole, and the 5-item Satisfaction with Life (SWL) scale. As in the 2002 QoL Study, Global Life Expectations derived from the Multiple Discrepancy Theory) was used as the sixth indicator variable.

Individual Life Domains. The 11 domains used in the three prior QoL studies continued to be employed as was shown in Figure 7-1. For each domain, three indicators, as in the 2002 QoL Study, were utilized: (1) overall domain happiness (D-T scale), (2) overall domain satisfaction, and (3) (as added in the 2002 QoL Study), a measure of domain expectations derived from Multiple Discrepancy Theory.

Individual Differences. As begun in the 1993 QoL Study, measures of individual differences were included. For this 2007 QoL Study, two multiple-item indicators were used: Optimism and Self-Esteem. Also, note that there is a theoretical debate on whether or not perceptions of quality of life are trait- or personality-determined.

Personal Readiness. This indicator variable is the one that has changed the most over the four Marine Corps QoL studies. Using the recommendation made in the 2002 QoL Study, a three-part composite variable in which each part was itself composed of a multi-part question from the Military Job life domain was used in this 2007 QoL Study. The three component questions were: Adequacy of Training (Military Job Question #4, which comprised 25 percent of the overall indicator variable), Organizational Commitment (Military Job Question #13, which comprised 50 percent of the overall indicator variable) and Job Problems (Military Job Question #16, which comprised 25 percent of the overall indicator variable)

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Retention. As in the 2002 QoL Study, a single indicator was used to measure the respondents' intentions to remain in the Marine Corps. This indicator (Yourself Question #11) asked the respondents for their degree of 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."

7.1.6.2 Family Members Respondent Group Models

This section describes the variables used as indicators for each of the latent variables included in the Family Member SEM analyses. As with the Active Duty Marine models, not every graphic shows all domains.

Spouse 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 five-item Satisfaction with Life (SWL) Scale. These two questions were included in the two Life as a Whole sections of the Family Member survey instrument.

Individual Life Domains. Nine life domains were included: these were: Residence, Leisure and Recreation, Health Care, Children Quality of Life, Pay & Benefits, Your Job/Professional Development, Separation, Support Systems, and Relocation. Note that Marine Corps Life and You, while called a "life domain" in previous graphics, actually comprised only two questions and was used more as a contributor to life as a whole-type analyses, as discussed immediately below. 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 respondent samples, was used to measure the spouses' desires for their Marine spouses to remain in Marine Corps until retirement. Specifically, the responses to the first question in the Marine Corps Life and You portion of the Family Member survey, which asked the respondents "Which of the following statements best describes YOUR DESIRE regarding a future with the Marine Corps" were used to create this variable. 137

7.2 RESULTS OF THE SEM ANALYSES FOR THE BASE AND STATION MARINE RESPONDENTS

In the introduction to this chapter, it was stated that the initial focus of the SEM effort was to reconfirm the structural equation models that came out of the 2002 QoL Study for the Base and Station Marine demographic groups based on applying updated 2007 survey data to the models originally developed in that earlier study. In the case of the discussion of the SEM results for the 2007 Base and Station Marines, graphics (and the structural equation models that they portray) taken from the section of Chapter 4 of the 2002 QoL Study labeled "Active Duty Marines Assigned to Bases and Stations" were used as the starting point of the effort. Thus, it is believed that the comparisons made in this section represent valid comparisons of the results of the two cohorts of Base and

¹³⁷ Note that this was used in lieu of the second question in the Marine Corps Life and You portion of the survey, which asked the respondents to "indicate how each aspect of your life ... <u>influences</u> [emphasis added] YOUR DESIRE to remain a part of the Marine Corps" because this latter question focused on influence on retention desire rather than on intention desire itself.

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Station Marines, and were not confounded by results from the 2002 effort's Active Duty Marine Composite.

7.2.1 Single Base and Station Marines with No Children

Results for the single 138 officer and enlisted Base and Station Marines without children will be presented in turn.

7.2.1.1 Single Base and Station Marine Officers with No Children

Figure 7-3 displays the 2002 model for single Base and Station Marine officers with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was approximately equivalent to, or slightly better than, the 2002 results, with a CFI value of 0.993 and an SRMSR value of 0.032, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, more of variance in Global QoL was explained by variance in the Self life domain factor, while less variance in Global QoL was explained by the Job and Relatives life domain factors. The Job life domain factor had considerably more influence on Personal Readiness and Global QoL had less influence on Personal Readiness than in 2002. The figure shows that most of the variance in Global QoL and Personal Readiness was explained by the model (64 and 51 percent, respectively), while most of the variance in Retention was caused by unexplained factors, as was the case in the 2002 QoL Study.

¹³⁸ The 2002 QoL Study Report used the terminology "unmarried" rather than the "single" used here. That is not believed to have resulted in any real difference. For this 2007 QoL Study, "single" was taken to be anyone who had never been married, or who was divorced or widowed. Respondents who identified themselves as being "married but separated" on Background Question #6 were included in the group of married respondents in the SEM analysis.

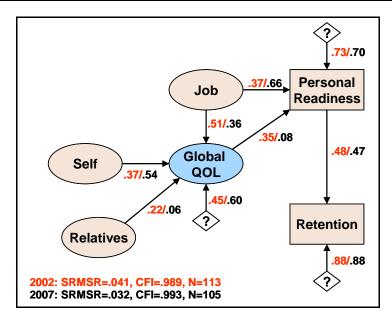


Figure 7-3. 2002 Model for Single Base and Station Marine Officers with No Children (Updated to 2007)

7.2.1.2 Single Enlisted Base and Station Marines with No Children

Figure 7-4 displays the 2002 model for single enlisted Base and Station Marines with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was better than in 2002, with a CFI value of 0.987 and an SRMSR value of 0.026, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, the Self life domain factor remained the primary predictor for Global QoL; however more of the variance in Global QoL was explained by variance in the Job life domain factor than in 2002, and less of the variance in Global QoL was explained by the Income life domain factor. The Job life domain factor had considerably more influence on Personal Readiness than in 2002. The figure shows that most of the variance in Global QoL was explained by the model (70 percent) and that most of the variance in Retention was caused by unexplained factors, as was the case in the 2002 QoL Study. Half of the variance in Personal Readiness was explained by the model.

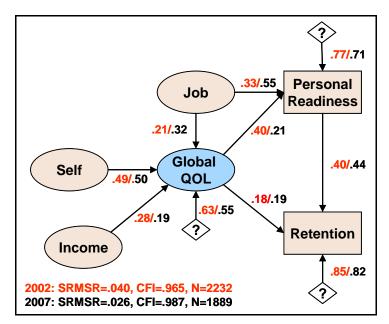


Figure 7-4. 2002 Model for Single Enlisted Base and Station Marines with No Children (updated to 2007)

7.2.2 Married Base and Station Marines with No Children

7.2.2.1 Married Base and Station Marine Officers with No Children

Figure 7-5 displays the 2002 model for married Base and Station Marine officers with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was considerably worse than in 2002, with a CFI value of 0.911 (satisfying the established threshold of CFI > 0.90) but an SRMSR value of 0.077 (above the established threshold of SRMSR < 0.05), indicating that this model was not a useful relational representation for the 2007 respondent data from this demographic group.

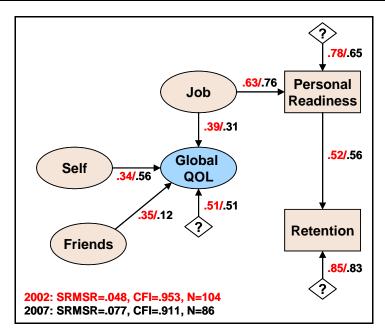


Figure 7-5. 2002 Model for Married Base and Station Marine Officers with No Children (Updated to 2007)

Analysis was performed to derive a model that, using the 2007 respondent data, met the established goodness-of-fit criteria. Figure 7-6 depicts the resulting model, which had a CFI value of 0.981 and an SRMSR value of 0.032. The life domain factors of Self, Job, and Income (in descending order with respect to influence on Global QoL) were found to be the primary predictors of Global QoL. The Job life domain factor also had a considerable influence on both Personal Readiness and Retention.

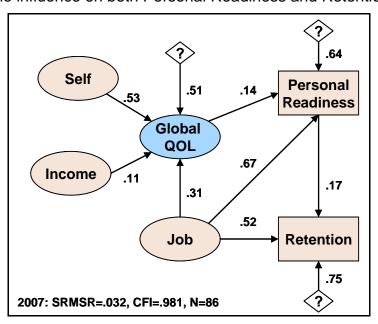


Figure 7-6. 2007 Model for Married Base and Station Marine Officers with No Children

7.2.2.2 Married Enlisted Base and Station Marines with No Children

Figure 7-7 displays the 2002 model for married enlisted Base and Station Marines with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was better than in 2002, with a CFI value of 0.992 and an SRMSR value of 0.019, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was generally similar when compared to the 2002 results. For 2007, the Self life domain factor remained the primary predictor of Global QoL, and similar correlation values were seen for all other relationships in the model when compared to the results from 2002. The figure shows that most of the variance in Global QoL was explained by the model (70 percent), while most of the variance in Personal Readiness and Retention was caused by unexplained factors, as was the case in the 2002 QoL Study.

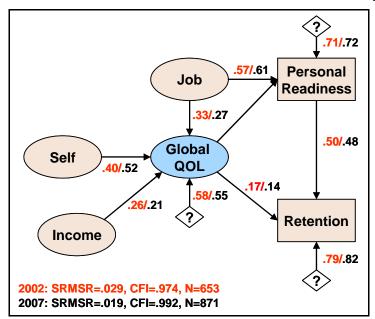


Figure 7-7. 2002 Model for Married Enlisted Base and Station Marines with No Children (Updated to 2007)

7.2.3 Married Base and Station Marines with Children

7.2.3.1 Married Base and Station Marine Officers with Children

Figure 7-8 displays the 2002 model for married Base and Station Marine officers with children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was worse than in 2002, with a CFI value of 0.895 (slightly below the established threshold of CFI > 0.90) and an SRMSR value of 0.067 (above the established threshold of SRMSR < 0.05), indicating that this model was not a useful relational representation for the 2007 respondent data.

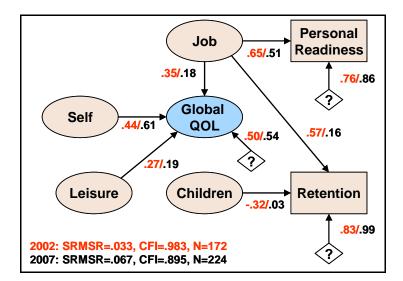


Figure 7-8. 2002 Model for Married Base and Station Marine Officers with Children (Updated to 2007)

Analysis was performed to derive a model that, using the 2007 respondent data, met the established goodness-of-fit criteria. Figure 7-9 depicts the resulting model, which had a CFI value of 0.992 and an SRMSR value of 0.024. The life domain factors of Self, Income, and Job (in descending order with respect to influence on Global QoL) were found to be the primary predictors of Global QoL. The Job life domain factor also had a considerable influence on Personal Readiness, and in this model, Personal Readiness also had an important influence on Retention.

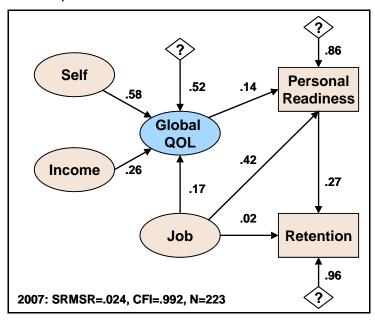


Figure 7-9. 2007 Model for Married Base and Station Marine Officers with Children

7.2.3.2 Married Enlisted Base and Station Marines with Children

Figure 7-10 displays the 2002 model for married enlisted Base and Station Marines with children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was better than in 2002, with a CFI value of 0.989 and an SRMSR value of 0.021, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was generally similar when compared to the 2002 results. For 2007, The Self life domain factor remained the primary predictor of Global QoL, and similar correlation values were seen for all other relationships in the model when compared to the results from 2002. The figure shows that most of the variance in Global QoL was explained by the model (71 percent), while most of the variance in Personal Readiness and Retention was caused by unexplained factors, as was the case in the 2002 QoL Study.

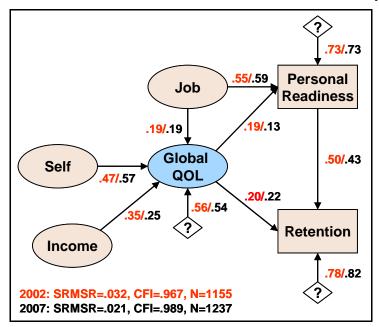


Figure 7-10. 2002 Model for Enlisted Married Enlisted Base and Station Marines with Children (Updated to 2007)

7.2.4 Observations for the Base and Station Marine Respondents

It was apparent that the models developed in the 2002 QoL Study for the Base and Station Marine respondents generally remained good representations of the relationships between life domain factors for the Base and Station Marine demographic groups: Only two of the six demographic group models developed in 2002 were found not to be representative. It must be remembered, however, that no claim of optimality for any of the models has been made, only that they met the established goodness-of-fit criteria used in all previous Marine Corps QoL studies. This result contrasts with that which occurred in the 2002 QoL Study, in which none of the 1998 models was found to be representative of the 2002 data. These results may reflect the greater comparability

of the Base and Station Marine respondent groups in the 2002 and 2007 data when compared with the comparability of the 2002 Base and Station Marine data with the 1998 data, which did included all non-Production Recruiter Active Duty Marines.

As shown in Table 7-1, for nearly all the Base and Station Marine demographic groups, the structural equation models that were either re-validated or developed so that they met the established CFI and SRMSR criteria used in this study showed that the primary predictors of Global QoL were the Self, Job, and Income life domain factors, with Self being the most influential of these factors (as indicated by the "XX" entries in the table) for each of the demographic groups. Single Base and Station Marine Officers with No Children were the exception: For this demographic group, the Income life domain factor was replaced by the Relatives life domain factor as a primary predictor.

Table 7-1. Summary of the Primary Predictors of Global QoL for the Base and Station Marine Demographic Groups

Life Domains	Single, Officer, No Children	Single, Enlisted, No Children	Married, Officer, No Children	Married, Enlisted, No Children	Married, Officer, With Children	Married, Enlisted, With Children
Residence						
Neighborhood						
Leisure and Recreation ("Leisure")						
Health						
Friends and Friendships						
Marriage and Intimate Relationship ("Spouse")						
Your Relationship with Your Children						
Your Relationship with Other Relatives ("Relatives")	Х					
Income and Standard of Living ("Income")		Х	Х	Х	Х	Х
Military Job ("Job")	Х	Х	Х	Х	Х	Х
Yourself ("Self")	XX	XX	XX	XX	XX	XX

7.3 RESULTS OF THE SEM ANALYSES FOR THE INDEPENDENT DUTY MARINE RESPONDENTS

As was the case for the Base and Station Marine demographic groups, the initial focus of this effort was to reconfirm the structural equation models that came out of the 2002 QoL Study for the Independent Duty Marine demographic groups based on applying updated 2007 survey data to the models originally developed in that earlier study. It must be remembered that, although the term "Independent Duty Marine" was used in both studies, the specific definition of that term differed greatly. In the 2002 QoL Study, it represented that portion of the HQMC-identified Independent Duty Marine community (including Production Recruiters) without Military Community Support (defined as being more than 100 miles from the nearest military installation). In this 2007 QoL Study, it represented that portion of the HQMC-identified Independent Duty Marine community, excluding Production Recruiters.

7.3.1 Single Independent Duty Marines with No Children

7.3.1.1 Single Independent Duty Marine Officers with No Children

Figure 7-11 displays the 2002 model for single Independent Duty Marine officers with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007

respondent data as input, the goodness-of-fit was approximately equivalent to the 2002 results, with a CFI value of 0.953 and an SRMSR value of 0.047, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, considerably more of the variance in Global QoL was explained by variance in the Self life domain factor (the Self life domain factor was the primary predictor of Global QoL in the model using the 2007 respondent data), while considerably less variance in Global QoL was explained by the Leisure life domain factor. The Job life domain factor had somewhat less influence on Personal Readiness, and Personal Readiness had considerably less influence on Retention. The figure shows that most of the variance in Global QoL was explained by the model (88 percent), while most of the variance in Personal Readiness and Retention was caused by unexplained factors, as was generally the case in the 2002 QoL Study.

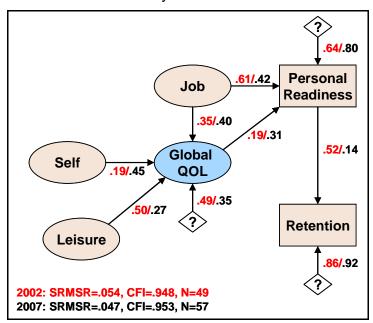


Figure 7-11. 2002 Model for Single Independent Duty Marine Officers with No Children (Updated to 2007)

7.3.1.2 Single Enlisted Independent Duty Marines with No Children

Figure 7-12 displays the 2002 model for single enlisted Independent Duty Marines with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was slightly better than in 2002, with a CFI value of 0.972 and an SRMSR value of 0.036, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, The Self life domain factor remained the primary predictor of Global QoL (among life domain

factors); however, there were differences in the correlation coefficients for the relationship between the Job and Leisure life domain factors with Global QoL: In 2007, the Job life domain factor had more influence while the Leisure domain had much less (about half of what it had in 2002). The figure shows that most of the variance in Global QoL, and Personal Readiness was explained by the model (81 and 54 percent, respectively), while most of the variance in Retention was caused by unexplained factors, as was the case in the 2002 Study.

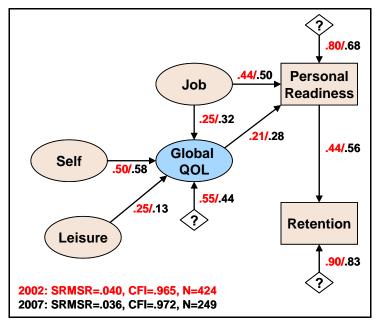


Figure 7-12. 2002 Model for Single Enlisted Independent Duty Marines with No Children (Updated to 2007)

7.3.2 Married Independent Duty Marines with No Children

7.3.2.1 Married Independent Duty Marine Officers with No Children

Figure 7-13 displays the 2002 model for married Independent Duty Marine officers with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was slightly worse than in 2002, with a CFI value of 0.955 and an SRMSR value of 0.049; however, these values were still within the acceptable established range (CFI > 0.90 and SRMSR < 0.05), indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, the Spouse life domain factor became the primary predictor of Global QoL in this model, and the Job life domain factor had considerably less influence on Global QoL. The figure shows that most of the variance in Global QoL was explained by the model (73 percent), while most of the variance in Personal Readiness and Retention was caused by unexplained factors, as was the case in the 2002 Study.

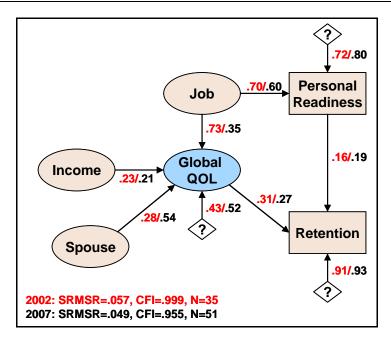


Figure 7-13. 2002 Model for Married Independent Duty Marine Officers with No Children (Updated to 2007)

7.3.2.2 Married Enlisted Independent Duty Marines with No Children

Figure 7-14 displays the 2002 model for married enlisted Independent Duty Marines with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was slightly worse than in 2002, with a CFI value of 0.961 and an SRMSR value of 0.051. Note that, while the CFI value was still well within the acceptable established range (CFI > 0.90), the calculated SRMSR value for this model of 0.051 was slightly above the established threshold of 0.050. However, that difference was considered very marginal given the relatively consistent way in which the 2002 models had been reconfirmed for both the Independent Duty and Base and Station Marine respondent groups. Thus, this model was deemed to be acceptable. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, the Self life domain factor remained the primary predictor on Global QoL (among life domain factors); however, there were differences in the correlation coefficients for the relationship between the Job and Spouse life domain factors to Global QoL: In 2007, the Job life domain factor had less influence while the Spouse life domain factor had more influence than in 2002. The figure shows that most of the variance in Global QoL was explained by the model (72 percent), while most of the variance in Personal Readiness and Retention was caused by unexplained factors. as was the case in the 2002 QoL Study.

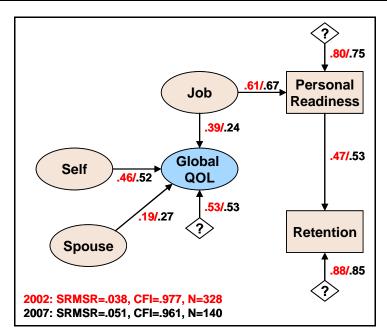


Figure 7-14. 2002 Model for Married Enlisted Independent Duty Marines with No Children (Updated to 2007)

7.3.3 Married Independent Duty Marines with Children

7.3.3.1 Married Independent Duty Marine Officers with Children

Figure 7-15 displays the 2002 model for married Independent Duty Marine officers with children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit as measured by the CFI value (0.979) was better than in 2002, but the calculated SRMSR value of 0.085 was markedly above the established threshold (of SRMSR < 0.05), indicating that this model may not be a useful relational representation for the 2007 respondent data from this demographic group.

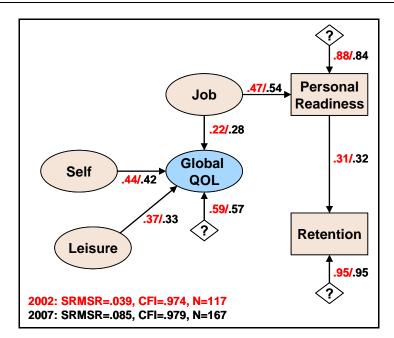


Figure 7-15. 2002 Model for Married Independent Duty Marine Officers with Children (Updated to 2007)

Analysis was performed to derive a model that, using the 2007 respondent data, met the established goodness-of-fit criteria. Figure 7-16 depicts the resulting model, which had a CFI value of 1.00 and an SRMSR value of 0.020. The life domain factors of Self, Job, and Income (in descending order with respect to influence on Global QoL) were found to be the primary predictors of Global QoL. The Job life domain factor also had a considerable influence on Personal Readiness, and in this model, Personal Readiness also had a considerable influence on Retention.

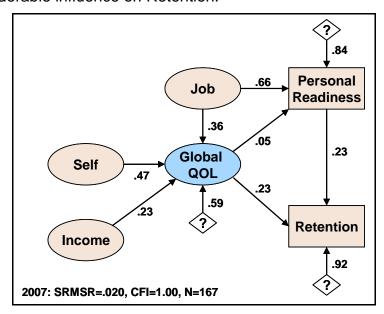


Figure 7-16. 2007 Model for Married Independent Duty Marine Officers with Children

7.3.3.2 Married Enlisted Independent Duty Marines with Children

Figure 7-17 displays the 2002 model for married enlisted Independent Duty Marines with children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was slightly better than in 2002, with a CFI value of 0.983 and an SRMSR value of 0.030, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was generally similar when compared to the 2002 results. For 2007, the life domain factors of Self, Job, and Income (in descending order with respect to influence on Global QoL) were found to be the primary predictors of Global QoL. Like the 2002 results, the Job life domain factor had a considerable influence on Personal Readiness. The figure shows that most of the variance in Global QoL was explained by the model (66 percent), while most of the variance in Personal Readiness and Retention was caused by unexplained factors, as was the case in the 2002 QoL Study.

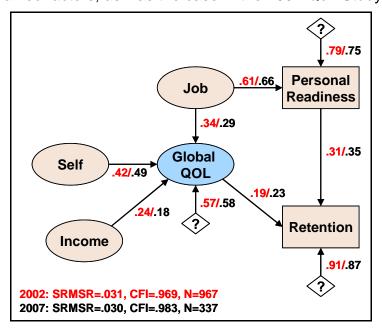


Figure 7-17. 2002 Model for Married Enlisted Independent Duty Marines with Children (Updated to 2007)

7.3.4 Observations for the Independent Duty Marine Respondents

As was the case for the Base and Station Marines, it was apparent that the models developed in the 2002 QoL Study for that study's definition of the Independent Duty Marine respondent group generally remained good representations of the relationships between life domain factors for the 2007 definition of that respondent group. Only one of the six demographic group models developed in 2002 was found not to be representative. Again, however, it must be remembered that no claim of optimality for any of the models has been made, only that they met the established goodness-of-fit criteria used in all previous Marine Corps QoL studies.

As shown in Table 7-2, for the Independent Duty Marine respondent demographic groups, the structural equation models that were either re-validated or developed so that they met the established CFI and SRMSR criteria used in this study showed that the primary predictors for Global QoL generally consisted of the Self and Job life domain factors, with Self being the most influential factor for five of the six demographic groups. For both Single Independent Duty Marine Officers with No Children and Single Enlisted Independent Duty Marines with No Children, the Leisure life domain factor also was a primary predictor. For both Married Independent Duty Marine Officers with Children and Married Enlisted Independent Duty Marines with Children, the Income life domain factor also was a primary predictor.

Table 7-2. Summary of the Primary Predictors of Global QoL for the Independent Duty Marine Demographic Groups

Life Domains	Single, Officer, No Children	Single, Enlisted, No Children	Married, Officer, No Children	Married, Enlisted, No Children	Married, Officer, With Children	Married, Enlisted, With Children
Residence						
Neighborhood						
Leisure and Recreation ("Leisure")	Х	Х				
Health						
Friends and Friendships						
Marriage and Intimate Relationship ("Spouse")			XX	Х		
Your Relationship with Your Children						
Your Relationship with Other Relatives ("Relatives")						
Income and Standard of Living ("Income")			Х		Х	Х
Military Job ("Job")	х	Х	Х	Х	Х	Х
Yourself ("Self")	XX	XX		XX	XX	XX

7.4 RESULTS OF THE SEM ANALYSES FOR THE FAMILY MEMBER RESPONDENTS

Although the results for the Family Members were not directly comparable to those of the two Active Duty Marine respondent groups discussed previously, it again was the case that the initial focus of this effort was to reconfirm the structural equation models that came out of the 2002 QoL Study for the Family Member demographic groups based on applying updated 2007 survey data to the models originally developed in that earlier study.

It also should be noted that the 2002 QoL Study Report stated that, "without comparisons to make, and for future reference, the study team suspended parsimony to find models encompassing all domains with statistically significant impact." Since this 2007 QoL Study desired to make comparisons with and re-confirm, wherever possible, the models developed in 2002, the preference for parsimony again was abandoned.

7.4.1 Families with No Children

7.4.1.1 Officer Families with No Children

Figure 7-18 displays the 2002 model for Marine officer families with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent

¹³⁹ 2002 QoL Study Report, p. 4-23.

data as input, the goodness-of-fit was better than in 2002, with a CFI value of 0.989 and an SRMSR value of 0.051. Note that, while the CFI value was still well within the acceptable established range (CFI > 0.90), the calculated SRMSR value for this model of 0.051 was slightly above the established threshold of 0.050. However, as was the case for one of the Independent Duty Marine demographic groups, that difference again was considered very marginal and this model was deemed to be acceptable. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, the Separation life domain factor became the primary predictor of Global QoL and the Pay & Benefits and Leisure life domain factors had more influence on Global QoL than in 2002. The Relocation life domain factor was found to be negatively correlated to Global QoL in this model when using the 2007 data. The figure shows that most of the variance in Global QoL and the factor representing the spouse's desire to "Stay with USMC" was caused by unexplained factors (relative to the other factors), as was generally the case in the 2002 Study. Note that the higher number of life domain factors in this model influencing Global QoL diminished distinctions of importance among these factors to some degree.

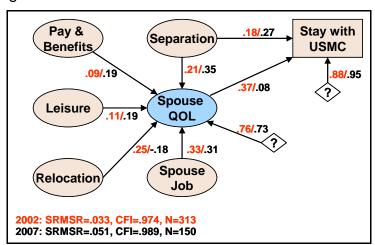


Figure 7-18. 2002 Model for Marine Officer Families with No Children (Updated to 2007)

7.4.1.2 Enlisted Families with No Children

Figure 7-19 displays the 2002 model for enlisted Marine families with no children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was worse than in 2002, with a CFI value of 0.974 (still within the established threshold of CFI > 0.90), but a calculated SRMSR value of 0.104 (well above the established threshold of SRMSR < 0.05), indicating that this model may not be a useful relational representation for the 2007 respondent data from this demographic group.

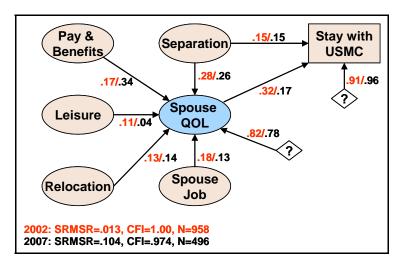


Figure 7-19. 2002 Model for Enlisted Marine Families with No Children (Updated to 2007)

Analysis was performed to derive a model that, using the 2007 respondent data, met the established goodness-of-fit criteria. Figure 7-20 depicts the resulting model, which had a CFI value of 0.966 and an SRMSR value of 0.030. The life domain factors of Pay & Benefits, Separation, Relocation, Spouse Job and Leisure (in descending order with respect to influence on Global QoL) were found to be the primary predictors of Global QoL. The Relocation and Separation life domain factors also had some influence on the factor representing a family's desire to "Stay with USMC." The figure shows that, despite the good fit achieved, most of the variance in Global QoL and the factor representing the spouse's desire to "Stay with USMC" was caused by unexplained factors, as was the case in the original 2002 model. Note that the higher number of life domain factors in this model influencing Global QoL diminished distinctions of importance among these factors to some degree.

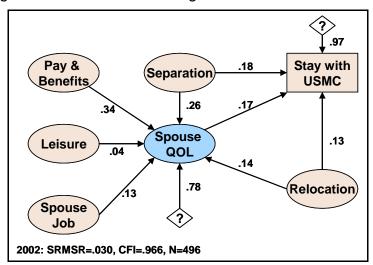


Figure 7-20. 2007 Model for Enlisted Marine Families with No Children

7.4.2 Families with Children

7.4.2.1 Officer Families with Children

Figure 7-21 displays the 2002 model for Marine officer families with children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was somewhat worse than in 2002, with a CFI value of 0.945 and an SRMSR value of 0.040, although both values still fell within the established threshold criteria., indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective factors was somewhat different when compared with the 2002 results. For 2007, the Separation life domain factor was the primary predictor of Child QoL, and, subsequently, the Child QoL and the Pay & Benefits life domain factors were the primary predictors of Spouse QoL. Spouse QoL, Separation and Child QoL (in descending order with respect to influence on the factor representing the spouse's desire to "Stay with USMC") were the primary predictors of that factor. The figure shows that most of the variance in Child QoL, Spouse QoL, and the factor representing the spouse's desire to "Stay with USMC" was caused by unexplained factors, as was the case in the 2002 QoL Study.

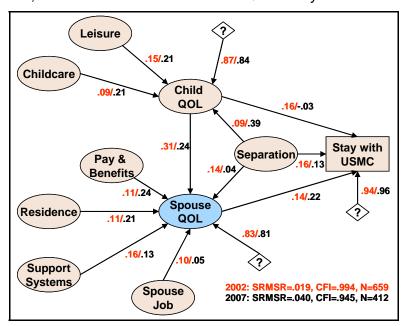


Figure 7-21. 2002 Model for Marine Officer Families with Children (Updated to 2007)

7.4.2.2 Enlisted Families with Children

Figure 7-22 displays the 2002 model for enlisted Marine families with children, updated with the 2007 correlation coefficients and goodness-of-fit values (CFI and SRMSR) for comparison. When the same model was run using the 2007 respondent data as input, the goodness-of-fit was worse than in 2002, with a CFI value of 0.979 and an SRMSR

value of 0.026, although both values still fell within the established threshold criteria, indicating that this model remained a useful relational representation for this demographic group. With respect to the correlation coefficients for the model, the relative influence between the respective model factors was somewhat different when compared with the 2002 results. For 2007, the Separation life domain factor was the primary predictor of Child QoL, and the Pay & Benefits life domain factor was the primary predictor of Spouse QoL. Separation, Spouse QoL, and Child QoL (in descending order with respect to influence on the factor representing a family's desire to "Stay with USMC") were the primary influencers of that factor. The figure shows that most of the variance in Child QoL, Spouse QoL, and the factor representing the spouse's desire to "Stay with USMC" was caused by unexplained factors, as was the case in the 2002 QoL Study.

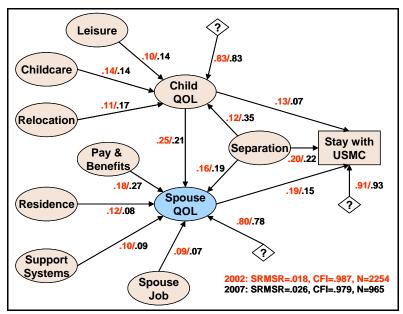


Figure 7-22. 2002 Model for Enlisted Marine Families with Children (Updated to 2007)

7.4.3 Observations for the Family Member Respondents

It was apparent that the models developed in the 2002 QoL Study for the Family Member respondents generally remained good representations of the relationships between life domain factors for the Family Member demographic groups: Three of the four demographic group models developed in 2002 were found to be adequately representative. It must be remembered, however, that no claim of optimality for any of the models has been made, only that they met the established goodness-of-fit criteria used in all previous Marine Corps QoL studies.

As shown in Table 7-3, the structural equation models that were either re-validated or developed so that they met the established CFI and SRMSR criteria used in this study showed that the primary predictors of Spouse QoL for Marine families with no children (regardless of whether the spouse of the Family Member respondent was an officer or

an enlisted Marine) were the Relocation, Leisure, Separation, Pay & Benefits and Spouse Job life domain factors, with Separation (for Officer Families with No Children) and Pay & Benefits (for Enlisted Families with No Children) being the most influential of these factors (as indicated by the "XX" entries in the table). For Marine families with children, the primary predictors of Spouse QoL were the Residence, Support Systems, Separation, Child QoL, Pay & Benefits and Spouse Job life domain factors, with Pay & Benefits being the most influential of these factors (note that for Officer Families with Children, Child QoL was equivalently influential).

Table 7-3. Summary of the Primary Predictors of Spouse QoL for the Family Member Demographic Groups

Life Domains	Officer Families with No Children	Enlisted Families with No Children	Officer Families with Children	Enlisted Families with Children
Residence			Х	Х
Relocation	Х	Х		
Leisure and Recreation ("Leisure")	Х	Х		
Support Systems			Х	Х
Health Care				
Separation	XX	Х	Х	Х
Children Quality of Life ("Child QoL")			XX	Х
Pay & Benefits	Х	XX	XX	XX
Your Job/Professional Development ("Spouse Job")	Х	Х	Х	Х

As shown in Table 7-4, the structural equation models that were re-validated from the 2002 QoL Study showed that the primary predictors of Child QoL for Marine families with children were the Leisure and Separation life domain factors and the Childcare factor, with Separation being the most influential of these factors (Note that the Relocation life domain factor also was a primary predictor of Child QoL for Enlisted Families with Children).

Table 7-4. Summary of the Primary Predictors of Child QoL for the Family Member Demographic Groups

Life Domains	Officer Families with Children	Enlisted Families with Children
Residence		
Relocation		Х
Leisure and Recreation ("Leisure")	Х	Х
Support Systems		
Health Care		
Separation	XX	XX
Pay & Benefits		
Your Job/Professional Development ("Spouse Job")		
Childcare	Х	х

¹⁴⁰ Note that Childcare is a separate factor within the Children Quality of Life domain, and thus is not a "life domain factor" *per se*, although it was treated as if it were one in SEM analyses performed for the Family Member demographic groups.

APPENDIX A: ACRONYMS

RAH	Basic Allowance for Housing
	Basic Allowance for Flodding
	Bachelor Officers' Quarters
	Continental United States
D-T	Delighted-Terrible
	Environmental Protection Agency
	Government-Furnished Materiel
	Headquarters, Marine Corps
IDMw/MCSInd	ependent Duty Marine with Military Community Support
	ndent Duty Marines without Military Community Support
	Invitational Travel Orders
IWB	Index of Well Being
	Life as a Whole
	Life Characteristics Scale
	Marine Corps Air-Ground Combat Center
	Marine Corps Combat Development Command
	Marine Corps Recruiting Command
	Marine Corps Recruit Depot
	Marine Expeditionary Force
	Multiple Discrepancies Theory
	Military Occupational Specialty
NPRDC	Naval Personnel Research and Development Center
	Operations Analysis Division
OCONUS	Outside of the Continental United States
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OMR	Optical Mark Reader
	Öperational Tempo
	Person-Environment
	Point of Contact
PRw/MCS	Production Recruiter with Military Community Support
PRW/oMCS P	roduction Recruiter without Military Community Support
CEM	
	Structural Equation Modeling
3KIVI3K	Standardized Root Mean Square Residual

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Quality of Life (QoL) in the U.S. Marine Corps Study Final Report

	Sample Selection Plan
SWL	Satisfaction with Life
TBP	To Be Provided
USMC	United States Marine Corps
USPS	U.S. Postal Service
w/MCS	with Military Community Support
w/oMCS	without Military Community Support
WESTPAC	Western Pacific
	Warrant Officer