The Impact of Community Satisfaction on Retention among Army Personnel

Thesis

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By

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Abstract

In an effort to retain high quality service members in its All-Volunteer Force, the United States military has emphasized quality of life programs to increase satisfaction among service members and their families. This study focused on community factors in Army towns and found that community satisfaction has a significant positive effect on retention. Analysis of survey data from the 2005 Status of Forces Survey of Active Duty Members found that there is a significant positive relationship between some community factors and retention intentions, that rank and length of time at one’s duty station have a significant positive relationship on community satisfaction, and that there are significant differences in community satisfaction between the four branches of service. Individuals who live on-base showed higher levels of satisfaction with traffic congestion, safety, distance to work, and distance to health care services, while those who lived off-base were more satisfied with housing quality, privacy, space, distance to airports, and the availability of spouse employment.
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Table of Contents

Abstract .............................................................................................................................. ii
Acknowledgments ........................................................................................................... iii
Vita ................................................................................................................................ iv
List of Tables .................................................................................................................. vii
Chapter 1: Introduction ................................................................................................. 1
Chapter 2: Literature Review ......................................................................................... 10
Chapter 3: Methods ......................................................................................................... 28
Chapter 4: Results ........................................................................................................... 41
Chapter 5: Conclusions ................................................................................................. 53
References ....................................................................................................................... 57
Appendix A: Survey Instrument ...................................................................................... 61
Appendix B: Summary Statistics ...................................................................................... 85
Appendix C: Regression Models ...................................................................................... 86
List of Tables

Table 1. Active Duty Personnel by Service .................................................................30
Table 2. Community Satisfaction Variables ...............................................................34
Table 3. Demographic Variables ..............................................................................35
Table 4. CONUS Army Installations and Adjacent Cities ........................................38
Table 5. Livability Factors .......................................................................................39
Table 6. Summary Statistics of Satisfaction with the Military ..................................41
Table 7. Summary Statistics of Retention Intention ..................................................42
Table 8. Regression Model: Dependent Variable Retention Intention ....................43
Table 9. Comparison of Community Satisfaction by Branch of Service ..................48
Table 10. Summary Statistics of Community Satisfaction .........................................85
Table 11. Regression Model: Dependent Variable Privacy .......................................86
Table 12. Regression Model: Dependent Variable Quality of Residence .................86
Table 13. Regression Model: Dependent Variable Housing, in General ..................86
Table 14. Regression Model: Dependent Variable Amount of Space .....................87
Table 15. Regression Model: Dependent Variable Neighborhood Quality ............87
Table 16. Regression Model: Dependent Variable Safety .......................................87
Table 17. Regression Model: Dependent Variable Distance to Work .....................87
Table 18. Regression Model: Dependent Variable Spouse Employment ...............88
Table 19. Regression Model: Dependent Variable Distance to Airports .................88
<table>
<thead>
<tr>
<th>Table</th>
<th>Regression Model: Dependent Variable</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>School Quality</td>
<td>88</td>
</tr>
<tr>
<td>21</td>
<td>Traffic</td>
<td>88</td>
</tr>
<tr>
<td>22</td>
<td>Cost of Residence</td>
<td>89</td>
</tr>
<tr>
<td>23</td>
<td>Distance to Health Care</td>
<td>89</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

When every Army component failed to reach recruiting goals in 2005 in the midst of two wars and an Army transformation campaign, the Army scrambled to find ways to solve its retention problems. They increased re-enlistment bonuses and offered Captains incentive options including bonus money, graduate school, military schools, branch of choice, and post of choice (Coates, Silvernail, Fulton, and Ivanitskaya, 2011). With their Menu of Incentives Program, the Army recognized that, for some people, money is not always a convincing reason to stay in the service. The option for post of choice in this program, as well as similar offers for enlisted personnel shows that fundamental livability factors are missing at some Army bases, and the impact is great enough to impact service members’ satisfaction and retention.

So what makes an Army base good, and why are some Army personnel worried about being stuck at “bad” bases? Is this concern about community quality enough to significantly impact a service member’s intentions of staying in the Army? These are important questions, and the answers could have significant policy implications. If satisfaction differs across military installations and researchers can identify the community factors that have the greatest impact on satisfaction, these findings will help installation commanders establish priorities for base improvements. This could also become an important component in improving current Army quality of life programs.
which do not account for differences in individual installations. Finally, this study will increase our understanding of how community satisfaction varies across the Army and how these differences may impact retention.

In the literature review, I examine the relationship between community satisfaction, satisfaction with the military, and retention within a larger quality of life framework. First there is a broad overview of quality of life research and how community satisfaction relates to overall satisfaction. Then I further discuss which community factors and demographic characteristics are significant predictors of community satisfaction. Throughout the literature review, I incorporate military research on satisfaction and retention to show how the results from civilian studies apply to service members. Although research on community satisfaction in the military is limited, community satisfaction in general is a widely studied, multi-disciplinary topic, and research from the general population applies to military personnel too.

**Quality of Life**

Livability is a prominent term in today’s planning and public policy forums, and the concept of livable cities is rooted in quality of life studies. Communities are constantly seeking new ways to attract businesses and residents, and the definitions of livability and quality of life are often as varied as the number of cities using them. In addition to academic research on the topic, numerous economic and business research groups also study quality of life. Forbes, Money Magazine, and the Economist Intelligence Unit all provide lists of what they consider the most livable cities in America (Levy, 2010; Best Places to Live, 2011; Global Livability Report, 2012). Quality of life is
not just important to local governments, however. The Department of Defense has also focused on improving the quality of life of its military members for several decades.

When the U.S. military transitioned to the All-Volunteer Force in 1973, quality of life emerged as a concern because the military was forced to compete with the civilian job market. The Department of Defense realized it was important to address numerous discrepancies with the civilian sector in the areas of pay, benefits, housing and family services to balance the additional stress of deployments and training placed on soldiers and their families. As the military’s recruiting structure changed, motivations to join the military also shifted. The U.S. military became less of an institution based on values and norms and moved towards an occupational model more similar to civilian enterprises which are economically driven. Under the occupational military model, soldiers are no longer motivated to serve because of a calling, but instead have their own self-interests as their top priority (Moskos, 1977, 1986).

Many researchers have tested Moskos’ institutional/occupational theory, and their results confirm the shift towards an occupational military (Cotton, 1981; Stahl, McNichols, & Manley, 1981; Moskos & Wood, 1988). Some findings have shown, however, that the two are not exclusive, and the current military model is one of “pragmatic professionalism.” Under this model, soldiers still have a sense of calling and want to serve their country. But to them, military service is still a job, and pay and benefits are an important factor in their decision to join the military and stay in longer than their original commitments (Segal, 1986). To address these occupational motivations, the Army has provided enlistment bonuses and attempted to bring military
salaries to equivalent levels with civilian counterparts. The military also acknowledged the significance of family support programs, and today, the Department of Defense manages dozens of quality of life programs (Department of Defense, 2009).

**Measuring Quality of Life**

Quality of life is generally defined as an individual’s well-being, happiness, or satisfaction with his or her life and environment based on that individual’s needs, desires, lifestyle, and personal preferences (Wilson, 1966; Smith, Nelischer, & Perkins, 1997). Researchers use either objective or subjective measures of individual satisfaction to measure quality of life. Objective measures are quantitative, factual indicators that can be found through common data sources such as summary statistics on health, crime, employment rates, and cost of living. Subjective measures describe how people perceive their environment and evaluate the conditions around them based on their self-expectations. The validity of subjective measures is debated because they are based on individual perceptions which change over time; however, objective measures do not account for differences in individual preferences affecting satisfaction (Lee and Marans, 1980; Widgery, 1995). For example, a residential neighborhood might have a neighborhood association fee, and some people might find this a burden because it raises their housing costs, while others might see the association fee as a status symbol.

Social expectations and comparisons to previous places also influence community satisfaction. Some findings suggest that individuals who lived in other places that were significantly different from their current community were less satisfied with their current community, neighborhood, and housing (Campbell, Converse, and Rodgers, 1976). Since
military personnel move frequently, one would expect them to report lower levels of satisfaction because of their comparisons to alternatives.

This negative influence from multiple life experiences may be tempered, however, when length of time at a residence increases. As individuals accommodate to their current situations, the effects of other alternatives decrease and satisfaction increases (Campbell et. al., 1976). This accommodation effect may be seen in military personnel who have longer times between moves, but findings show the accommodation effect does not occur until an individual has remained at the same residence for approximately five or more years (Campbell et. al. 1976). So among military personnel who move every two to three years, there may not be any chance for accommodation to balance the negative impact of frequent relocations.

These findings show how different life experiences can have significant effects on satisfaction. Despite these various influences on subjective measures, studies have found significant relationships between objective and subjective indicators of quality of neighborhood life. There is a significant correlation between objective and subjective indicators of overall neighborhood quality, such as upkeep or conditions of neighboring houses and signs of neglect (Marans and Rodgers, 1975; Widgery, 1995). When comparing perceived racial composition of an individual’s neighborhood to objective measures, there is also a significant relationship between these measures, and individuals generally report accurate estimations of racial composition within their neighborhoods (Marans and Rodgers, 1975; Campbell et. al., 1976).
The relationship between objective and subjective measures appears to be the strongest at smaller scales; however, Lee and Marans (1980) found that when comparing crime statistics and perceived safety, the relationship was strongest among individuals who reported their neighborhood as a larger geographical area. Crime statistics are also measured by larger geographic areas, so this finding supported their hypothesis that scale discordance can influence subjective measures (Lee and Marans, 1980). This indicates that subjective measures can be comparable to objective measures when they are measured on the same scale, and when asking individuals about satisfaction on different levels from neighborhood to city, it is important to define what a neighborhood or city is for greater reliability.

**Spillover Theory**

Life satisfaction is a common measure for quality of life, and overall satisfaction with life is influenced by satisfaction with specific life domains (Campbell et. al., 1976). According to the bottom-up spillover theory, life satisfaction is the top tier in the quality of life hierarchy which is influenced by satisfaction with various life domains, such as community, health, family, work, friendship, and housing (Sirgy, Rahtz, Cicic and Underwood, 2000). Satisfaction in these life domains are influenced by specific life concerns in each category. Therefore, satisfaction with the lower level concerns spills over, influencing satisfaction within the life domain which then spills over influencing overall satisfaction with life (Sirgy, Rahtz, Cicic and Underwood, 2000). In addition to bottom-up spillover, the horizontal spillover theory states that satisfaction in one life domain can influence satisfaction in other life domains. For example, satisfaction in the
community domain may affect satisfaction in the work domain and vice versa (Sirgy, Efraty, Siegel, and Lee, 2001).

One of the objectives of this study is to determine the relationship between community satisfaction and retention. Retention is an individual decision to remain in the military, and when satisfaction with military life falls below an individual’s tolerable threshold, he or she will decide to find another career path. It might seem like satisfaction with the Army is a measure of work satisfaction, which would be the determinant of retention. Military careers, however, are a lifestyle choice, and many of the life domains are constrained by the military lifestyle.

Housing is an example of a life domain that is constrained by military life. On-post housing at most bases is limited to service members with families, and some single soldiers are required to live in barracks without the option of living off-post. Housing is also assigned by availability and rank, so families who live on post do not have a choice in which house they live in (DOD, October 28, 2010). These housing constraints are based on military policy and would not occur in a civilian job. Housing is one example of a community factor that influences satisfaction with life in the Army, and many family factors affect overall satisfaction as well. Therefore, it is important to understand how all of the life domains influence overall satisfaction with the Army and retention intentions.

Military research on satisfaction with the Army is consistent with the spillover theories. Three primary factors directly affect satisfaction with life in the Army: work-related factors include the perception that leaders care about families, employment satisfaction, work benefits, and comparison with civilian jobs; family-related factors
include spouse satisfaction with the Army, spouse employment satisfaction, spouse support for retention, presence of children, and child care services; and community-related factors include satisfaction with support services, housing, community quality, and the opportunity to make friends (Segal and Harris, 1993).

In quality of life studies in the general population, work factors have shown a stronger correlation to overall satisfaction, followed by friendships, family factors, and then community factors (Campbell et. al., 1976). Consistent with horizontal spillover theory, there are positive correlations between different domain satisfaction measures, and domains with similar content had the strongest correlations and can be grouped accordingly. Family life and marriage were two similar domains that could be grouped, and neighborhood, community, and housing also have strong correlations (Campbell et. al., 1976). Military personnel are expected to follow the same trends, and work will most likely be the strongest domain influencing satisfaction with the Army since work is both a job and a lifestyle to service members.

The focus of this study is on how community satisfaction and its subcomponents are related to retention, but in examining this relationship, it is also important to consider influences from other domains. Since satisfaction in one life domain is positively related to satisfaction in other domains, a thorough examination of all of the influences on retention and satisfaction with Army life will provide a comprehensive understanding of service member retention decisions. First, I will examine common indicators of community satisfaction and how these relate to unique military situations. Then I will
discuss additional work and family influences on satisfaction in both the general quality of life research and military studies.
Chapter 2: Literature Review

There are innumerable community variables that can be studied to determine their impacts on satisfaction, and every study uses a different set of these variables to measure community satisfaction. Despite this, common indicators emerge showing the most significant influences on community satisfaction. After discussing measurement scale, analysis of previous research will show which community factors have a positive relationship with community satisfaction, which variables lead to lower levels of satisfaction, and how some demographic factors also impact community satisfaction.

Measurement Scale

Community factors related to satisfaction can be measured on several different scales. Community satisfaction is a measure of satisfaction with one’s city, county or metropolitan area. Neighborhood satisfaction measures satisfaction in a smaller geographic area, from as small as just the neighboring houses up to larger defined areas within a city or residential community. Housing satisfaction is related to an individual’s specific residence. All three of these measures have strong positive correlations with each other, and they may be so closely linked because neighborhoods and housing are components of the larger community (Campbell et. al., 1976).

This nested concept is rooted in ecological systems theory. According to this model, human development is influenced not only by an individual’s immediate settings, but also by successive levels of surrounding environments. The microsystem is the
smallest level and includes the relationships between an individual and his or her immediate settings. The housing or residential satisfaction scale would fit in with the microsystem. The microsystem is embedded within the mesosystem which consists of all of the settings or environments where major interrelations occur during a set period in an individual’s life. This includes school, church, work, and interactions with friends and family. The neighborhood satisfaction scale would fall within the mesosystem (Bronfenbrenner, 1977).

The next level in the social ecological model is the exosystem which includes social structures and institutions that may not directly impact an individual but do influence the settings within the lower level systems. This includes government, media, transportation, work, and communities, which is consistent with the community satisfaction scale. Throughout all of the system levels there is a fourth system called the macrosystem which provides the underlying social framework of the model and includes cultural patterns, norms, and values that informally govern society (Bronfenbrenner, 1977).

Since community, neighborhood, and housing satisfaction are subjective measures influenced by individual life experiences, it is not surprising that they are strongly interrelated. Human development occurs within multiple social systems and nested geographic areas simultaneously, so the cumulative effects result in similar levels of individual satisfaction for all three measurement scales. One might expect satisfaction with housing and neighborhood qualities to have a stronger correlation to overall life satisfaction than community qualities because people are more familiar with their
immediate environments. However, few studies compare the relationships of the three measurement scales to overall satisfaction.

Studies have shown mixed results on which measurement scale has the strongest correlation with overall life satisfaction. Campbell, Converse, and Rodgers (1976) found that community satisfaction and housing satisfaction had the same correlation coefficient and showed only a slightly higher relationship to overall satisfaction compared to neighborhood satisfaction. In a later study, Campbell (1981) found that housing had the strongest relationship of the three (.30) to overall satisfaction, but this was only slightly stronger than neighborhood and community satisfaction which had the same correlation coefficients (.29). All three domains ranked lower than family (.45) and work (.37), which supports the findings in his earlier study (Campbell, 1981; Campbell et. al., 1976). Finally, Marans and Rodgers (1975) also found negligible differences between neighborhood and community satisfaction.

Since all three measurement scales are so closely related and have similar relationships to overall life satisfaction, the different measurement scales will provide similar results for community satisfaction. Because of this, community satisfaction can be used as a general term to encompass community, neighborhood, and housing qualities, and using components from all three levels will provide a comprehensive measure of overall community satisfaction. So the question that follows is which components of community satisfaction are the most significant?

**Factors with Positive Relationships to Community Satisfaction**

Across multiple studies the most often cited indictors with positive significant relationships with community satisfaction are length of time at residence, presence of
friendly neighbors, upkeep of neighboring structures, perceived homogeneity with
neighbors, and the quality of public schools (Wilson, 1966; Marans & Rodgers, 1975;
Campbell et. al., 1976; Lee & Guest, 1983). Other factors that have significant positive
correlations include quality of housing, privacy, and access to outdoor space (Marans and
Rodgers, 1975; Campbell et. al., 1976; Connerly and Marans, 1985; Rohall, 2005).
Interviews with military members indicate that quality of medical care, quality of child
care, and availability of leisure activities are also important, but the relationship between
satisfaction with these services and overall satisfaction was not tested (Rohall, 2005).

**Length of Time at Residence**

As previously discussed, increased time at one residence leads to higher
community satisfaction because of an accommodation effect (Campbell et. al.1976). The
positive effects of neighborhood friendships could be related to length of time at a
residence. The longer a person lives in one place, the more time there is to get to know
the neighbors and build friendships. Since military members move frequently, they may
not be at any place long enough to see the effects of increased time, but it is expected that
service members with longer time between moves would have higher levels of
community satisfaction.

Studies on relocation and retention indicate that unmarried service members have
less time between moves than those who are married with dependents, and the average
time between relocations was two years. Service members with less time between moves
were less satisfied with the military and reported they were less likely to stay in the
military or make the military a career. They also found that more frequent moves led to a
higher number of spouses wanting their service member to leave the military. Some of
the common reasons for dissatisfaction with military moves were changes in the cost of living, waiting for permanent housing, reduction in the spouse’s income, and spouse employment (U.S. GAO, 2001). The relocation impacts on spouse satisfaction will be examined further in the discussion on family satisfaction.

**Upkeep and Quality of Neighborhood Structures**

The upkeep and maintenance of neighboring structures has a strong relationship with community satisfaction. For service members living in on-base housing, the quality and upkeep of installation facilities are also expected to influence community satisfaction. The military struggles to keep up with infrastructure repairs and balance the high costs of fighting the global war on terror. Because of this, the services are short billions of dollars needed to repair their facilities, and the budget is prioritized to improve training facilities, airfields, and other readiness facilities (Cahlink, 2002). Service members who are stationed at installations with poorly kept housing and facilities are expected to have lower levels of community satisfaction.

**Housing**

Housing is one of the primary concerns of service members, and anxiety about the length of time waiting for permanent housing and changes in cost of housing from their last installations are some military concerns that impact satisfaction (GAO, 2001; Rohall, 2005). Housing may be a stronger indicator for community satisfaction among military personnel than the civilian population because of the limited housing options available, the frequency of relocations, and restrictions on who can live on post or receive housing allowances for off post housing.
Housing options available in the Army include civilian housing that is rented or owned in the local area, military family housing on base, privatized military housing for rent on base, or unaccompanied personnel housing for single soldiers who are not authorized housing allowance. Each service component determines which personnel are required to live in unaccompanied personnel housing, commonly referred to as the barracks (DOD, October 28, 2010). In the Army, most single enlisted soldiers in the rank of E-5 or below are required to live in barracks on the installation and are only authorized housing allowances in special situations or if there is a shortage of barracks space (DOD, October 28, 2010).

Additionally, most on-base family housing is restricted to military members with dependents only, so single soldiers who are authorized a housing allowance are required to live off-post at most duty stations. Finally, family housing is assigned by pay grade, and families in similar pay grades are often assigned to live in neighborhoods together on post to separate potential rank-related conflicts or prevent fraternization (DOD, October 28, 2010). All of these specific requirements limit housing choices for military personnel.

Housing constraints may have the most significant impact on single soldiers required to live in the barracks. Soldiers living in the barracks or aboard ships account for 20% of active duty personnel (Johnson, Zusman, and Lipari, 2011). The Status of Forces of Active Duty Personnel Survey administered in June 2010 shows that service members living in barracks are less satisfied with the military and their day-to-day lives compared to those living in privatized military housing rented on base. Service members living in barracks also reported being less likely to stay on active duty service than those who lived in all other types of housing (Johnson et. al., 2011). Despite changes to barracks
configurations and the minimum requirements for barracks space, the lowest ranking soldiers are still assigned to smaller living spaces and are at a disadvantage when it comes to housing (DOD, October 28, 2010). Married personnel will likely have the highest community satisfaction since they have the most options for housing, and enlisted personnel living in the barracks, especially those in older barracks, are expected to have lower levels of community satisfaction.

**Perceived Homogeneity**

As mentioned previously, military personnel who live on-base are assigned to housing areas based on rank and family size, so their neighbors are likely to have similar lifestyles and have children of the same age groups (DOD, October 28, 2011). They also share a common profession since they are all military personnel. Studies show that individuals who perceive their neighbors to be like them have higher levels of community satisfaction, but how an individual determines likeness was not specifically defined (Marans and Rodgers, 1975; Connerly and Marans, 1985). Individuals living on-post might have higher levels of perceived homogeneity with their neighbors compared to military members living off-post in the civilian population, so those in on-post housing might have higher levels of community satisfaction.

**Factors with Negative Relationships to Community Satisfaction**

The community qualities discussed so far are positively related to community satisfaction; however, as community size increases, community satisfaction decreases. Other community factors that are common in larger cities, such as density, crowding, and noise, all have negative relationships to community satisfaction as well (Marans and Rodgers, 1975; Connerly and Marans, 1985). The Department of Defense has three size
categories for its installations based on the total plant replacement value (PRV) of the base: large sites, medium sites, and small sites. In the United States, there are approximately 111 large sites (Total PRV greater than $1.715 billion), 104 medium sites (Total PRV between $915 million and $1.715 billion), and 3,503 small sites (Total PRV between $0 and $915 million) (DOD, 2010). The majority of active duty Army personnel are stationed at large and medium sites, while National Guard and Reserve installations tend to be small sites (DOD, 2010). The largest Army installations have similar population sizes, but the adjacent city populations vary widely, so the size of adjacent communities may have a significant effect on community satisfaction among military personnel.

Frequent relocations may also cause an adaptation effect among military personnel. Adaptation theory states that individuals will experience different levels of stimuli when they move to new cities based on their experience and the city size of their previous residence. This means that individuals moving from small cities to intermediate-sized cities will experience higher levels of stimuli and may perceive more crowding, noise, traffic, and density compared to individuals moving from larger cities into the same intermediate-sized city (Wohlwill and Kohn, 1973). This effect will most likely be the strongest for people who have moved more recently since people accommodate to their surroundings the longer they live at a residence.

**Demographic Variables with Significant Effects**

In addition to community characteristics that influence community satisfaction, some demographic factors also have a significant relationship with community satisfaction. Studies have generally found few differences in satisfaction based on gender
and occupation (Durand and Eckart, 1973; Campbell et. al., 1976; Jeffres and Dobos, 1995). However, minorities and individuals with more education are less satisfied with their communities, while income, age, and marriage are all positively related to community satisfaction (Marans and Rodgers, 1975; Campbell et. al., 1976; Connerly and Marans, 1985; Jeffres and Dobos, 1995).

**Racial Influences on Community Satisfaction**

Race has a significant negative impact on community satisfaction, and this is one of the most consistent findings throughout studies comparing race and satisfaction. The majority of studies examined distinguished race by white or non-white or white and black comparisons. Only more recent studies considered all minorities, but the findings were the same, and minority groups report lower levels of satisfaction across all life domains (Campbell et. al., 1976). Throughout American history, minority groups, particularly Native American, African Americans, and immigrant groups have faced widespread discrimination that placed them at distinct social disadvantages. Army personnel represent similar racial compositions compared to the general U.S. population; however, the Army has a slightly higher proportion of blacks and a lower proportion of Hispanics than the total population (Department of the Army, 2010).

Individuals in any disadvantaged social group may have lower levels of satisfaction, and some studies support this idea. Segments of the population that lack the resources to secure desirable neighborhood settings are more dissatisfied with their neighborhoods (Lee and Guest, 1983), and people are more satisfied when they perceive equal opportunities in the community for work (Fitzsimmons and Ferb, 1977). Race is expected to have similar impacts on community satisfaction in the military population as
in the general population, and rank may be an important factor if lower enlisted personnel consider themselves to be at a significant disadvantage.

**Education**

Education also has a negative relationship with community satisfaction, which means the most highly educated people show lower levels of satisfaction with their communities (Marans and Rodgers, 1975; Campbell et. al., 1976). This seems counterintuitive since we expect more educated individuals to have higher income and a higher standard of living which results in higher satisfaction. The education effect might occur because more educated people have more life experiences which sharpen their sense of alternatives. People who have lived in other places that were different from their current community were less satisfied with their current community which had a significant influence on community satisfaction (Campbell et. al., 1976). If the experiences of different communities are the underlying cause of the negative effect of education, then education among military personnel may not have the same relationship to community satisfaction since all military personnel move frequently and have experiences with different communities.

**Income**

While race and education showed negative relationships with community satisfaction, higher income results in greater satisfaction (Marans and Rodgers, 1975; Campbell et. al., 1976; Connerly and Marans, 1985; Jeffres and Dobos, 1995). It is not a surprising finding that individuals with higher income also have higher levels of community satisfaction. Higher incomes mean people can afford higher quality housing and are more likely to live in well-kept neighborhoods, which are both qualities that also
result in higher levels of community satisfaction. Military personnel are expected to show similar results and have higher satisfaction with higher income levels.

**Age**

Age is another demographic variable that shows a positive correlation with community satisfaction. As people get older they report higher levels of satisfaction (Marans and Rodgers, 1975; Campbell et. al., 1976; Jeffres and Dobos, 1995). Older people usually have spent more time in their current life situations and have accommodated to their situations, whether it is within their communities, family situations or jobs. This is the same accommodation effect that is experienced with length of time at residence. As people age and settle in to their communities, they often report higher levels of satisfaction because the appeal of other alternatives fades (Campbell et. al., 1976). Among military personnel, age may not have the same effect because frequent moves result in fewer opportunities to settle in to a community; however, age may have positive effects on other life domains that also influence community satisfaction through horizontal spillover.

**Family Status**

In addition to income and age, marital status has a significant positive correlation with community satisfaction (Marans and Rodgers, 1975; Campbell et. al., 1976; Connerly, 1985). Young single people and people who are divorced are less satisfied with their communities than those who are married (Campbell et. al., 1976). More than half of active duty Army personnel are married (59%), and of those married, 9% are dual military marriages. Army women are more likely to be in dual military marriages (40% compared to 5% of men), and officers are more likely to be married than enlisted
(Department of the Army, 2010). Family status is likely to have a similar effect on military personnel as the general population when it comes to community satisfaction; however, additional family-related factors may have significant impacts on overall satisfaction which will be discussed later.

**Rank**

Military rank establishes the social class structure in the Army, and the demographic variables of education, income, age, and family status tend to follow rank patterns as well. The Army rank structure consists of Commissioned Officers (grades O-1 to O-9), Warrant Officers (grades WO1 to CW5), and Enlisted Soldiers (grades E-1 to E-9). Officers earn the highest incomes, and generally fall within the age range of 24-54 years. Warrant officers earn a middle pay range and are within the age range of 18-39 years. Enlisted personnel earn lower incomes, are usually within the ages of 18-24 years. Enlisted personnel are also less likely to be married and more likely to be single with children than officers. Finally, the majority of enlisted personnel have a high school degree as their highest level of education while the majority of officers have a bachelors or master’s degree (Department of the Army, 2010).

As mentioned earlier, lower enlisted personnel who are not married and who do not have children are often required to live in military barracks on-post, and those living in barracks report lower retention intentions (Johnson et. al., 2011). Recently, the Department of Defense has recognized that the younger, Millennial generation has different expectations when they join the military, and they expect a certain quality of life will be provided, including quality housing (DOD, 2009; DOD, October 28, 2010). The military has recognized that soldiers need additional privacy and newer barracks, and
they recently updated minimum barracks configuration and privacy standards which provide additional living space and kitchen space in the barracks (DOD, October 28, 2010). However, despite the fact that the military is trying to provide additional privacy to junior enlisted soldiers, the square footage assignments increase with rank, so the lowest ranking soldiers are provided smaller living spaces (DOD, October 28, 2010).

So in addition to lower satisfaction caused by lower income, younger ages, and less chances of being married, lower ranking soldiers living in barracks also have less privacy. Less privacy also results in lower levels of community satisfaction (Marans and Rodgers, 1975). Considering this cumulative effect of demographic factors which parallel the military rank structure, it is expected that rank will have the strongest relationship to community satisfaction among military personnel, and higher ranking service members will have higher levels of community satisfaction.

**Summary of Community Satisfaction**

As the research has shown, satisfaction with the community is a multi-dimensional variable that can change with individual factors. The literature has established a base of community characteristics used to evaluate community satisfaction, and military research is consistent with these findings. Overall, the literature shows that community satisfaction is positively related to overall satisfaction, and overall satisfaction with military life is positively related to retention. The most significant community characteristics are length of time at residence, presence of friendly neighbors, upkeep of neighboring structures, perceived homogeneity with neighbors, the quality of public schools, and community size. Demographic variables also influence community satisfaction, and among military personnel, rank is expected to have the most significant
impact because it parallels the effects of multiple significant demographic characteristics, particularly age, income, and family status.

**Family and Work Satisfaction**

Life satisfaction is comprised of satisfaction with multiple domains, and each life domain is positively related to one another. Family and work satisfaction have stronger relationships with overall satisfaction than community satisfaction (Campbell et. al., 1976; Campbell, 1981). Since all of the domains are interrelated, it is important to consider some of the work and family factors that influence military retention. Only a few studies have assessed the relationship between community quality, satisfaction with the Army, and retention, and they show that community satisfaction and family life are intertwined concepts among service members. Retention is positively related to perceived quality of Army community life, which was measured by five factors: quality of place for children to grow up, quality of medical care for family members, programs and services for families, quality of the community one lives in, and the opportunity to make good friends (Griffith, Rakoff, and Helms, 1992).

The longer an individual remains in the military, the more likely it is that work and family factors become more important than community factors. The relationship between the quality of Army community life and retention was strongest for junior enlisted members, and overall, it was more important for enlisted personnel than for officers (Griffith et. al., 1992). Additionally, satisfaction with location was not as strong of a predictor for retention for those who were married or who had been in the Army longer (Vernez and Zellman, 1987). This could be evidence that over one’s life course, factors that impact satisfaction change, and family-related factors may be more important
than community factors once a service member is married and has family concerns. Community quality may also decrease in importance as rank increases because job-related factors, such as job satisfaction and retirement plans, have a greater impact on retention than community factors (Griffith, et. al., 1992).

**Work Impacts on Satisfaction**

Among the general population, work related factors have a strong correlation to overall satisfaction, and among military personnel work satisfaction is also expected to have a strong relationship with retention. Research shows that job and supervisor satisfaction, work rewards, pay, and opportunities for promotion are all positively related to retention and satisfaction with the military (Vernez and Zellman, 1987; Bowen, 1989; Griffith et. al., 1992). There is also evidence that the longer an individual remains in the Army and moves closer to retirement, the negative impacts of the military, such as less personal freedom and work-family conflicts, decrease (Griffith et. al., 1992).

In addition to traditional work factors, military personnel must manage stress from deployments and family separations. Long separations from families and work-family interferences both result in less satisfaction and lower retention (Vernez and Zellman, 1987; Bowen, 1989). Increased numbers of hostile deployments also result in higher levels of stress and result in lower intentions to reenlist (Hosek and Martorell, 2009). Deployments may have a negative effect on community satisfaction because service members who deploy often do not have time to accommodate to their communities. Therefore, deployments could have a horizontal spillover effect and result in decreased community satisfaction as well.
**Family Impacts on Satisfaction**

In addition to work factors, service members are influenced by family factors. As people stay in the Army longer, it is more likely they will get married and have children. This also means the people with greater institutional knowledge, specialized skills and higher training levels also have more family concerns to manage. Because the Army wants to retain these skilled soldiers for the length of a career, family services and satisfied spouses are significant components of retention (Segal and Harris, 1993).

Satisfaction with the environment for families in the military leads to greater satisfaction with the military as a way of life, though the significance level varies depending on life cycle groups. For officers and enlisted members married to civilian spouses with no children, family environment was not a significant predictor of satisfaction with the military way of life (Bowen, 1989). This indicates that the absence of children and lower spouse participation in military-related social activities leads to less reliance on military support systems and less of an impact on overall military satisfaction.

Another important component of satisfaction with the military is spouse satisfaction. Spouses who perceive their service members to be happy with their Army life, and those who believe military leaders care about families are more likely to support the soldier staying in the Army (Segal and Harris, 1993). Spouse satisfaction may also have an additive impact on soldier’s reenlistment intentions, and if a spouse is not satisfied with the Army, this could outweigh the soldier’s individual preferences (Segal and Harris). Because spouse satisfaction has such a significant impact on soldier retention, it is important to understand which factors are most important to Army spouses.
**Spouse Employment**

An important component of spouse satisfaction is the ability to find employment. The most significant variables that impact labor force participation and employment rates among Army spouses are proximity to population centers, length of time at the same location, availability of spouse employment centers, and education level (Schwartz, Wood, and Griffith, 1991). Spouses who live closer to population centers and who have access to spouse employment programs through their Army installations are more likely to participate in the labor force and be employed. Spouses who live at the same location for longer periods of time are also more likely to use their training and skills for their jobs, while spouses with shorter durations at their location are more likely to be underemployed. Finally, higher education levels result in higher employment rates (Schwartz et. al.). This indicates that Army programs aimed at increasing education and job skills among spouses could help increase spouse employment levels and improve their chances of being employed in jobs using their achieved skill level.

Frequent military relocations make it difficult for spouses to find jobs. It may take longer for a military spouse to complete his or her education, which results in lower-skilled jobs that pay less. Spouses also lose time to job searching at a new duty location and there may not be a variety of available jobs. Some military installations are located in rural areas with limited diversity, fewer jobs, and more competition for the jobs that are available. Those who are stationed at locations closer to large population centers have better chances of finding employment because the economy is larger. Research also shows that in military towns, women have higher unemployment rates and lower annual earnings than those in non-military areas (Booth, Falk, Segal, and Segal, 2000). This
again is due to a high demand for jobs, and high turnover in jobs because of frequent moves, which prevent a spouse from working at a job long enough to be promoted and earn higher pay.

**Summary of Family and Work Satisfaction**

This was a brief look at some of the variables impacting family and work satisfaction in the military. Work related factors may have the strongest impact on satisfaction the longer individuals remain in the military, and number of deployments is expected to have a significant negative effect on community satisfaction, work satisfaction, and retention. The most important factor for spouse satisfaction is employment because frequent relocations have a negative impact. These work and family factors are expected to have spillover effects on community satisfaction, and satisfaction in all three domains is expected to have positive correlations with overall satisfaction and retention intentions.
Chapter 3: Methods

Overall quality of life and satisfaction with life in the Army are influenced by multiple life domains. These domains include work, family, and community, and there is a positive relationship between satisfaction in each domain and overall satisfaction. Overall satisfaction with military life also results in increased retention. Therefore, if work satisfaction, family satisfaction, and community satisfaction are high, then retention will also be high.

Each of the life domains has a set of domain-specific factors that influence satisfaction with that domain. This study focuses on the community factors that influence overall community satisfaction and retention. Previous research has shown that length of time at residence, presence of friendly neighbors, upkeep of neighboring structures, perceived homogeneity with neighbors, the quality of public schools, and community size all have significant relationships with community satisfaction. Education, age, income, family status, and rank are additional demographic variables that influence community satisfaction.

Based on these findings, I expect that if length of time at duty station, housing quality, and school quality are high, then retention will be high. I expect rank to be the most significant demographic variable, and if rank is high, then community satisfaction will be high. I also examined other community factors such as child care services,
educational opportunities, local services, and convenience to determine if additional community factors have significant relationships with retention.

In addition to these aggregate measures of satisfaction and retention, I expect there to be significant differences in satisfaction with community factors between different military installations and between different branches of service. Since there is a gap in the literature which has not determined the common differences in community qualities between installations, this study aims to identify which factors, if any, vary by location. I will also determine how these differences impact retention levels at different locations. As the military services struggle to recruit and retain quality personnel in the armed forces, leaders must consider all aspects of quality of life. This study will provide a better understanding of the retention implications of inconsistent community features across various Army bases and how improving community conditions could improve the overall quality of life for service members and their families.

**Survey Instrument**

For this research, I used secondary data collected by the Defense Manpower Data Center (DMDC). The DMDC surveys active duty members two to three times a year. Each survey asks a standard set of questions on retention, satisfaction, tempo, stress, and readiness, and the surveys have additional questions on specific topic areas. The August 2005 Status of Forces Survey (SOFs) of Active Duty Members asked questions on housing, support programs and services, commissaries and exchanges, health care, military versus civilian comparisons, and work-life balance. Many of the questions on housing, support programs, and services on this survey are closely related to common community satisfaction measures.
Participants

The sample consisted of active duty Army, Navy, Marine and Air Force members with at least six months of service chosen using a single-stage, non-proportional stratified random sampling procedure (DMDC, 2006). Active duty members were categorized into homogenous groups based on gender and service component, and then a random sample was selected from each group. Small groups were oversampled and weighted to allow for analysis of the results. The participant sample for the August 2005 SOFS consisted of 35,461 individuals, and completed surveys were returned by 10,406 eligible respondents which resulted in a weighted response rate of 35% (DMDC, 2006).

Of the 10,406 respondents, the final valid sample was 8,086 participants who responded to all of the retention, community, and demographic questions. The sample was 34.3% Army (N=2,775), 23.6% Navy (N=1,911), 19.1% Marines (N=1,545), and 22.9% Air Force (N=1,855) personnel. The proportion of Army, Navy and Air Force personnel are slightly underrepresented compared to the actual proportion of active duty service members in 2005 while the Marines are overrepresented. Table 1 shows the comparison of the sample to the military population.

Table 1

Active Duty Personnel by Service (DMDC, 2006).

<table>
<thead>
<tr>
<th></th>
<th>Sample Population</th>
<th>Active Duty Population in 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>34.3%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Navy</td>
<td>23.6%</td>
<td>26.1%</td>
</tr>
<tr>
<td>Air Force</td>
<td>22.9%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Marines</td>
<td>19.1%</td>
<td>13.1%</td>
</tr>
</tbody>
</table>
In 2005, the U.S. Army consisted of approximately 486,483 active duty members. Army personnel are categorized by different rank structures, with enlisted personnel in the pay grade of E1-E9, warrant officers in the pay grade of W1-W5, and officers in the pay grade of O1-O9. In 2005, enlisted personnel were the majority (83.3%) of Army personnel, while warrant officers were the smallest group at 2.5%, and officers represented approximately 14.2% of the Army population (Department of the Army, 2005). Officers and warrant officers were overrepresented in the sample which consisted of 59.6% enlisted (N=1,654), 16.1% warrant officers (N=446), and 24.3% officers (N=675).

The active duty Army population in 2005 was 85.7% male and 14.3% female, and the sample represented this population with 83.3% male (N=2311) and 16.7% female (N=464). The sample results for race and ethnicity were recoded for confidentiality and only show the white and minority population. The sample was 60.9% white (N=1,691) and 39.1% minority (N=1084) which represents the total Army population in 2005 of 60.8% white, 21.6% black, 10.5% Hispanic, 4.0% Asian and 3.1% other. The Army population also had a similar racial composition compared to the general U.S. population in the same age ranges, except for the proportion of blacks which was slightly higher in the Army population (Department of the Army, 2005).

There are also a wide variety of family situations in the Army. Approximately 54% of active duty members were married in 2005 and of those married, 9.1% were dual military couples with both spouses serving in the Army. Another 6.9% of the Army was single with children (Department of the Army, 2005). In the sample population, 83.4% of respondents were married (N=2,315), and 12.1% were dual military (N=460). Married
and dual military personnel were overrepresented and single soldiers were underrepresented in the sample population. Single parents were also underrepresented with 4.6% of the sample reporting they were single with children.

**Procedures**

The survey began on August 9, 2005 when notifications were sent to all members of the selected sample (DMDC, 2006). There were several e-mail and postal reminders sent that encouraged participation in the survey, and the DMDC collected responses from the web-administered survey between August 19, 2005 and September 29, 2005. The survey instrument consisted of 115 total questions divided into 15 topic areas. The topic areas included background information, satisfaction, retention, tempo, readiness, stress, deployments since September 11, 2001, commitment, housing, programs and services, commissaries and exchanges, details on deployments, health care, military/civilian comparisons, and balancing work life.

I obtained access to the August 2005 SOFS of Active Duty Members by submitting a request through the DMDC Data Request System. This system provides access to all of the surveys conducted by the DMDC and their data sets. See Appendix A for a copy of the full survey instrument.

**The Effect of Community Satisfaction on Retention**

The first hypothesis tests the relationship between community satisfaction and retention. The null hypothesis ($H_0$) is that there will be no relationship between community satisfaction and retention. The alternate hypothesis ($H_1$) is: if satisfaction with community factors is high, then retention will be high.
Dependent Variable

Since I wanted to test the effects of community satisfaction on retention, the dependent variable for the first hypothesis is retention intention (R). Retention intention was measured using participants’ responses to the question, “Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?” This question was scored on a five-point Likert scale with answers ranging from very unlikely to very likely.

Independent Variables

There are 13 community variables that were analyzed to determine their effects on retention. These variables asked respondents how satisfied they were with a variety of community conditions, including housing and neighborhood quality, schools, safety, and proximity to services. There was not a general question that measured overall community satisfaction, so the community variables were analyzed using a stepwise linear regression model to determine which ones have a significant effect on retention intention. Satisfaction was measured on a five point Likert scale with answers ranging from very dissatisfied to very satisfied. All of the survey questions related to community satisfaction are shown in Table 2.
Table 2
Community Satisfaction Variables (DMDC, 2006).

<table>
<thead>
<tr>
<th>Community Satisfaction Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
</tr>
<tr>
<td>C2</td>
</tr>
<tr>
<td>C3</td>
</tr>
<tr>
<td>C4</td>
</tr>
<tr>
<td>C5</td>
</tr>
<tr>
<td>C6</td>
</tr>
<tr>
<td>C7</td>
</tr>
<tr>
<td>C8</td>
</tr>
<tr>
<td>C9</td>
</tr>
<tr>
<td>C10</td>
</tr>
<tr>
<td>C11</td>
</tr>
<tr>
<td>C12</td>
</tr>
<tr>
<td>C13</td>
</tr>
</tbody>
</table>

The Effect of Demographics on Community Satisfaction

After testing the relationship between community satisfaction and retention, I also tested the impact that demographic variables have on community satisfaction among Army personnel. Previous research has shown that education, age, income, and family status are all factors that influence community satisfaction. Since rank in the military indicates income and individuals of the same rank often have similar education and ages, rank is the primary demographic variable that should impact community satisfaction. My second null hypothesis is that no demographic variables will have an effect on community satisfaction. The alternate hypotheses are:

H2: If rank and length of time at one’s duty station are higher, community satisfaction will be higher.

H3: I also expect that if individuals are married or have children, then community satisfaction will be higher.
**Dependent Variables**

For this hypothesis, I wanted to see how the demographic variables influenced satisfaction with various aspects of the community, so I ran 13 separate stepwise linear regression models with each of the 13 community satisfaction variables (C1-C13) as the dependent variable.

**Independent Variables**

I used a set of twelve demographic variables (D1-D12) to test their impact on community satisfaction. Dummy variables were created from categorical demographic variables for analysis, and I used cross-products to create variables for female single mothers and females in dual-military marriages to further explore the effects of gender. The demographic variables are shown in Table 3.

**Table 3**

Demographic Variables (DMDC, 2006).

<table>
<thead>
<tr>
<th>Demographic Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1  Gender*</td>
</tr>
<tr>
<td>D2  Rank</td>
</tr>
<tr>
<td>D3  Marital Status*</td>
</tr>
<tr>
<td>D4  Education*</td>
</tr>
<tr>
<td>D5  Family Status (children or no children)*</td>
</tr>
<tr>
<td>D6  Race/Ethnicity*</td>
</tr>
<tr>
<td>D8  Living in on-base or off-base housing*</td>
</tr>
<tr>
<td>D9  Length of time living at current duty station</td>
</tr>
<tr>
<td>D10 Years of Active Duty service</td>
</tr>
<tr>
<td>D11 Female in a dual-military marriage*</td>
</tr>
<tr>
<td>D12 Female single mother*</td>
</tr>
</tbody>
</table>

* Indicates variables were recoded into dummy variables for analysis.
Differences in Community Satisfaction by Service

Next, I wanted to test differences in retention and community satisfaction across different branches of service to see if there were notable differences in certain community factors. Each service manages their bases and housing programs separately, and the Department of Defense gives them minimal guidance so they can accommodate the needs of their service members. There are some functional differences between branches that cause them to locate in different types of communities. Navy and Marine bases are usually located in coastal areas near large bodies of water, whereas Army bases are inland on very open areas of land with large training spaces. Air Force bases require space for large airfields and hangars without interference with commercial air operations, and they can also be co-located with Army, Navy, and Marine bases.

Therefore, my next null hypothesis (H₀) is that there will not be any differences in satisfaction with community factors between the branches of service. The alternative hypothesis (H₄) is that there will be differences in community satisfaction between the Army, Navy, Marines and Air Force. The dependent list of variables whose mean scores were compared consisted of the 13 community factors, C₁-C₁₃.

Livability Index

Since specific location data was not available in the DMDC dataset, I developed a set of livability factors to determine if there were any common community indicators that could be found from public data that have a significant relationship with retention rates at different Army installations. If a standard set of factors can be identified to create an index, it could be helpful in predicting how community factors impact retention rates.
I used the U.S. Department of Housing and Urban Development’s (HUD) six livability principles as a basis for developing a livability index. The six livability principles outlined by HUD measure a wide range of community qualities. These principles include (HUD, 2009):

1. Provide more transportation choices,
2. Promote equitable, affordable housing,
3. Enhance economic competitiveness,
4. Support existing communities,
5. Coordinate and leverage federal policies and investment, and
6. Value communities and neighborhoods

**Army Base Selection**

I analyzed livability at ten large Army installations and their adjacent communities. In 2009 there were 39 Army bases that were classified as large sites, and of these, I selected the ten largest installations based on the number of active duty personnel assigned to the base (DOD, 2009). I had to expand this selection after searching for Census data until I found the 10 largest bases with American Community Survey Data available from the U.S. Census. The installations are shown in Table 4, which also shows the total populations of each installation and adjacent city.
### Table 4

CONUS Army Installations and Adjacent Cities 2009

<table>
<thead>
<tr>
<th>Army Installation</th>
<th>Personnel Assigned</th>
<th>Adjacent City</th>
<th>Population (2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Hood, TX</td>
<td>69,412</td>
<td>Killeen, TX</td>
<td>113,194</td>
</tr>
<tr>
<td>Fort Lewis, WA</td>
<td>41,020</td>
<td>Tacoma, WA</td>
<td>196,118</td>
</tr>
<tr>
<td>Fort Campbell, KY</td>
<td>38,015</td>
<td>Clarksville, TN</td>
<td>118,390</td>
</tr>
<tr>
<td>Fort Leonard Wood, MO</td>
<td>31,437</td>
<td>Waynesville, MO</td>
<td>3,839</td>
</tr>
<tr>
<td>Fort Bliss, TX</td>
<td>28,612</td>
<td>El Paso, TX</td>
<td>602,672</td>
</tr>
<tr>
<td>Fort Carson, CO</td>
<td>23,782</td>
<td>Colorado Springs, CO</td>
<td>397,913</td>
</tr>
<tr>
<td>Fort Knox, KY</td>
<td>23,539</td>
<td>Elizabethtown, KY</td>
<td>23,826</td>
</tr>
<tr>
<td>Fort Drum, NY</td>
<td>22,368</td>
<td>Watertown, NY</td>
<td>27,331</td>
</tr>
<tr>
<td>Fort Stewart, GA</td>
<td>21,723</td>
<td>Hinesville, GA</td>
<td>30,049</td>
</tr>
<tr>
<td>Fort Riley, KS</td>
<td>21,528</td>
<td>Junction City, KS</td>
<td>19,880</td>
</tr>
</tbody>
</table>

**Dependent Variable**

The livability factors were analyzed to determine their effects on the dependent variable which was retention rate. The U.S. Army Recruiting Command (USAREC) provided retention data from the year 2009 which showed each unit’s recruiting mission and accomplishment rate. Each year, Army units determine a recruiting mission based on the number of soldiers they need to retain, and then they report on their accomplishment rate in terms of their initial mission. Therefore, the retention rate data is not a pure calculation of actual retention rates, but is a ratio of mission accomplishment rates. This is not a perfect measure for retention, but it does show differences in retention across different units and at different installations.

**Independent Variables**

Using the HUD livability principles and the results from the DOD Status of Forces Survey, which indicated that distance to work, neighborhood quality, and school...
quality were important community factors among Army personnel, I developed an index of 15 livability factors which measured health, safety, housing, transportation, education, and economic indicators.

The data was compiled from the 2005-2009 U.S. Census American Community Survey 5-year estimates (U.S. Census, 2009), County Health Rankings (Population Health Institute, 2011), the Housing and Transit Affordability Index (Center for Neighborhood Technology, 2012), and school district report cards for all recommended school districts listed on each Army installation’s website. This data is all at the city or county level, so it measures livability factors on a larger, community scale. A full list of the variables is shown in Table 5.

**Table 5**

Livability Factors

<table>
<thead>
<tr>
<th>Livability Factors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 Adult Obesity Rate</td>
<td></td>
</tr>
<tr>
<td>L2 Infant Mortality Rate</td>
<td></td>
</tr>
<tr>
<td>L3 Violent Crime Rate</td>
<td></td>
</tr>
<tr>
<td>L4 Property Crime Rate</td>
<td></td>
</tr>
<tr>
<td>L5 Mean Travel Time to Work</td>
<td></td>
</tr>
<tr>
<td>L6 Percent who Drive Alone to Work</td>
<td></td>
</tr>
<tr>
<td>L7 Housing-Transit Cost greater than 45% of Income</td>
<td></td>
</tr>
<tr>
<td>L8 Housing-Transit Cost greater than 30% of Income</td>
<td></td>
</tr>
<tr>
<td>L9 Ratio of Housing Allowance to Selected Monthly Owner Cost</td>
<td></td>
</tr>
<tr>
<td>L10 Vacancy Rate</td>
<td></td>
</tr>
<tr>
<td>L11 Median Housing Age</td>
<td></td>
</tr>
<tr>
<td>L12 Poverty Rate</td>
<td></td>
</tr>
<tr>
<td>L13 Unemployment Rate</td>
<td></td>
</tr>
<tr>
<td>L14 High School Education Proficiency in English and Math</td>
<td></td>
</tr>
<tr>
<td>L15 Ratio of Adjacent City Population to Installation Population</td>
<td></td>
</tr>
</tbody>
</table>
Overall these methods examine a broad range of relationships between community satisfaction and retention, the demographic influences on community satisfaction, and differences in satisfaction among the various military service components. I also examined various livability factors using readily available objective data to see if any of these variables effect retention rates at Army bases. Overall, this is a comprehensive set of factors to analyze community satisfaction among Army personnel and to determine how it impacts retention.
Chapter 4: Results

The focus of this study is on the Army population, so the results are based on the analysis of Army respondents and comparisons between the Army and other branches of service. The majority of Army respondents reported being either satisfied with the military way of life (49.8%) or very satisfied (11.4%). When asked how likely it is that they would choose to stay on active duty, 29.5% reported it was likely and 25.2% reported very likely. Junior enlisted soldiers reported the lowest levels of satisfaction with the military way of life and reported being less likely to choose to remain on active duty than all other pay grade groups. Those with less than three years of service reported they were less likely to remain on active duty. The full summary data for satisfaction with the military and retention intentions are shown in Table 6 and Table 7.

Table 6

Summary Statistics of Satisfaction with the Military.

<table>
<thead>
<tr>
<th>Overall Satisfaction with the Military Way of Life</th>
<th>Army</th>
<th>Navy</th>
<th>Marine Corps</th>
<th>Air Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>11.4%</td>
<td>16.0%</td>
<td>21.1%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>49.8%</td>
<td>51.9%</td>
<td>54.3%</td>
<td>55.4%</td>
</tr>
<tr>
<td>Neither Satisfied nor Dissatisfied</td>
<td>19.9%</td>
<td>18.2%</td>
<td>13.9%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>15.0%</td>
<td>11.0%</td>
<td>8.4%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>3.9%</td>
<td>3.0%</td>
<td>2.3%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
Table 7
Summary Statistics of Retention Intention.

<table>
<thead>
<tr>
<th>How likely is it you would choose to stay on Active Duty</th>
<th>Army</th>
<th>Navy</th>
<th>Marine Corps</th>
<th>Air Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Likely</td>
<td>25.2%</td>
<td>35.4%</td>
<td>36.6%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Likely</td>
<td>29.5%</td>
<td>30.0%</td>
<td>28.0%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Neither Likely nor Unlikely</td>
<td>13.0%</td>
<td>12.5%</td>
<td>10.4%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Unlikely</td>
<td>17.6%</td>
<td>12.4%</td>
<td>14.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Very Unlikely</td>
<td>14.7%</td>
<td>9.7%</td>
<td>10.9%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Consistent with previous community satisfaction studies, respondents were generally satisfied with all aspects of their communities. Army personnel were most satisfied with distance to work, safety of the area, distance to health care and quality of neighborhood. They reported being least satisfied with cost of residence, traffic congestion, and availability of spouse employment. Summary data for all community satisfaction variables are shown in Appendix B.

The Effect of Community Satisfaction on Retention

After calculating the summary statistics, I used a linear stepwise regression to test the relationship between the independent variables for community satisfaction (C) and the dependent variable, retention (R). The regression model is represented by the equation:

\[ R = \alpha_0 + \sum_{i=1}^{13} \beta_i C_i \]
The final model found three community factors with a significant positive relationship to retention: quality of the neighborhood ($\beta = .083$, $p = .002$), distance to work ($\beta = .087$, $p = .001$), and quality of schools ($\beta = .058$, $p = .030$) with an adjusted $R$ square of 0.022 ($F_{3,1550} = 12.6$, $p < .0005$). Table 8 shows the full details of the regression model which is represented by the following equation:

$$ R = .154 + .083C_5 + .087C_{12} + .058C_9 $$

### Table 8

Regression Model: Dependent Variable Retention Intention

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>$B$</th>
<th>$t$-value</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>C12 Distance to Work</td>
<td>0.125</td>
<td>3.443</td>
<td>0.087</td>
</tr>
<tr>
<td>C5 Neighborhood Quality</td>
<td>0.109</td>
<td>3.141</td>
<td>0.083</td>
</tr>
<tr>
<td>C9 School Quality</td>
<td>0.074</td>
<td>2.177</td>
<td>0.058</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .025$, Adjusted $R^2 = .022$, $p < .05$, $N = 1554$

The results showed partial support for the hypothesis that there is a positive significant relationship between satisfaction with community factors and retention. There was a positive relationship between retention and three community variables: satisfaction with neighborhood quality, satisfaction with school quality, and distance to work. These findings support previous research which found that upkeep of neighboring structures, which is similar to neighborhood quality, and school quality are two of the most significant community characteristics related to satisfaction (Marans & Rodgers, 1975; Campbell et. al., 1976). Distance to work is a measure of convenience, and since military personnel often work long hours and have unusual schedules, this may have a significant
influence on retention because less travel time to work results in more time spent with their families.

The low R-square is consistent with previous research which found that community satisfaction has the smallest effect on overall satisfaction compared with satisfaction with work and family domains (Campbell et. al., 1976). The low R-square also indicates that this model alone could not be used to predict retention; however, it gives an indication that some community factors are important when Army personnel consider staying in the military.

**The Effect of Demographics on Community Satisfaction**

After testing the relationship between community satisfaction and retention, I used stepwise linear regression to test the impact of the 12 independent variables for demographics (D) on 13 separate dependent variables for community satisfaction (C). All of the regression models showing the relationship between demographics and satisfaction with community factors are shown in Appendix C. This regression model is represented by the equation:

$$ C_i = \alpha_0 + \sum_{l=1}^{12} \beta_l D_l $$

The most significant variable that had an effect on 11 out of 13 community factors was whether individuals lived on-base or off-base. In general, individuals who lived on-base were more satisfied with safety, traffic congestion, distance to work and distance to health care services while people who lived off-base were more satisfied with quality and condition of their residences, amount of space, privacy, availability of spouse employment, distance to airports and their housing in general. These findings indicate
that individuals who live on base are satisfied with the convenience of living close to work and the security offered by the Army base; however, individuals who live off-base are more satisfied with their housing. This indicates a discrepancy in housing conditions between on-base and off-base housing and that there may be a need for upgraded on-base housing with more space and privacy.

These results could also be influenced by a large number of enlisted personnel living in the barracks. The dataset only provides data for on-base or off-base housing and does not provide further details of individuals living specifically in the barracks. However, over half of the sample population was enlisted, so a large number of respondents likely lived in the barracks.

Rank had a significant positive relationship with 10 out of 13 community factors, which confirmed my second hypothesis. As expected, higher ranking individuals were more satisfied with cost of residence, quality and condition of residence, amount of space in their residence, privacy, neighborhood quality, safety, availability of spouse employment, traffic congestion, distance to airports, and their housing in general. Higher ranking personnel receive higher pay and higher housing allowances, so they can afford to live in higher quality neighborhoods with better housing. Higher ranking personnel are also authorized to live off-post whereas on most installations, enlisted soldiers in the rank of E-5 or below live in barracks.

An individual’s length of time at their duty station had a significant positive relationship with 6 out of 13 community factors. The longer an individual lived at their duty station, the more satisfied they were with cost of residence, quality and condition of their residence, availability of spouse employment, distance to health care, distance to
work, and their housing in general. This demonstrates the expected accommodation effect which occurs as people get used to their new location over time.

I also expected that marital status and family status would have a significant effect on community satisfaction. The results showed that married individuals were more satisfied with the amount of space in their residence, and individuals with children were more satisfied with neighborhood quality, safety, school quality, and cost of residence. These results are not surprising since individuals who are married or who have children receive higher housing allowances to accommodate their dependents, so they can afford better housing.

An unexpected result showed that gender had a significant effect on satisfaction with housing in general, neighborhood quality, safety, and distance to work, and women were more satisfied with all four of these community factors. Since previous research had not found any differences in community satisfaction between genders, I created two additional demographic variables to see if they could help explain the significance of gender.

First, I created a variable with the cross-product of gender and family status to see if single mothers could explain the difference; however, adding this new variable (D12) did not change the regression models. Next, I created a variable with the cross-product of gender and dual-military status, and this new variable (D11) did explain some of the significance. When I removed gender from the regressions and replaced it with a variable for dual-military females, the new variable (D11) had a significant relationship with satisfaction with housing and neighborhood quality with a slightly lower R-square value than the models using gender. Dual-military females were more satisfied with housing
and neighborhood quality than all other personnel; however, dual-military female status did not have a significant effect on satisfaction with safety and distance to work like gender did.

A Pearson correlation showed that gender had a strong correlation with dual-military females (r = .736, p < .0005) and a weak correlation with the variable for single mothers (r = .299, p < .0005). Dual-military status may help explain why gender has a significant effect on satisfaction with housing and neighborhood quality because married personnel receive higher housing allowances and can afford better living conditions. The finding that women are more satisfied with safety and distance to work cannot be explained by their housing location since the majority of women (73%) live in off-base housing.

**Differences in Community Satisfaction by Service**

My third hypothesis was that there would be a significant difference in community satisfaction between the different military service components. A one-way ANOVA test comparing all 13 community satisfaction variables showed significant differences between the four services in every community variable except quality of schools and distance to health care. The largest between group differences were satisfaction with the availability of spouse employment (F3,6292 = 34.7, p < .0005), quality and condition of residence (F3,7851 = 29.4, p < .0005), and safety of the area (F3,7906 = 26.9, p < .0005). The full ANOVA results for all of the significant community variables are shown in Table 9.
Table 9
Comparison of Community Satisfaction by Service Component.

<table>
<thead>
<tr>
<th>Community Variables</th>
<th>df</th>
<th>F</th>
<th>Between-Subject</th>
<th>Within Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of Spouse Employment</td>
<td>3</td>
<td>34.74*</td>
<td>44.64</td>
<td>1.29</td>
</tr>
<tr>
<td>Quality and Condition of Residence</td>
<td>3</td>
<td>29.39*</td>
<td>36.17</td>
<td>1.23</td>
</tr>
<tr>
<td>Safety of the Area</td>
<td>3</td>
<td>26.88*</td>
<td>21.80</td>
<td>0.81</td>
</tr>
<tr>
<td>Quality of Neighborhood</td>
<td>3</td>
<td>25.33*</td>
<td>27.63</td>
<td>1.09</td>
</tr>
<tr>
<td>Privacy</td>
<td>3</td>
<td>23.81*</td>
<td>30.59</td>
<td>1.29</td>
</tr>
<tr>
<td>Traffic Congestion</td>
<td>3</td>
<td>22.28*</td>
<td>35.04</td>
<td>1.57</td>
</tr>
<tr>
<td>Your Housing, in General</td>
<td>3</td>
<td>21.92*</td>
<td>23.65</td>
<td>1.08</td>
</tr>
<tr>
<td>Amount of Livable Space</td>
<td>3</td>
<td>21.42*</td>
<td>30.51</td>
<td>1.42</td>
</tr>
<tr>
<td>Cost of Residence</td>
<td>3</td>
<td>16.14*</td>
<td>25.05</td>
<td>1.55</td>
</tr>
<tr>
<td>Distance to Work</td>
<td>3</td>
<td>8.47*</td>
<td>8.76</td>
<td>1.04</td>
</tr>
<tr>
<td>Distance to Airports</td>
<td>3</td>
<td>6.19*</td>
<td>6.65</td>
<td>1.07</td>
</tr>
<tr>
<td>Distance to Health Care</td>
<td>3</td>
<td>1.73</td>
<td>1.58</td>
<td>0.91</td>
</tr>
<tr>
<td>Quality of Schools</td>
<td>3</td>
<td>0.51</td>
<td>0.60</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Note: *indicates significant at the p < .05 value

I used a post-hoc Bonferroni adjustment to determine how Army respondents’ satisfaction with distance to work and neighborhood quality compared to the other services since these variables both had a significant positive effect on retention intention among Army personnel. There was a significant between-group difference for distance to work ($F_{3,7920} = 8.5, p < .0005$), and Army personnel were more satisfied with distance to work than Navy ($p = .006$) and Marine ($p = .017$) respondents while there was not a significant difference between Army and Air Force respondents. Many Air Force bases
are located adjacent to larger Army bases, so this could explain why there was no difference between Army and Air Force personnel.

There was also a significant between group difference for neighborhood quality \((F_{3,7773} = 25.3, p < .0005)\), and Army respondents were less satisfied with neighborhood quality than Navy \((p < .0005)\), Marine \((p < .0005)\), and Air Force \((p < .0005)\) respondents. Army personnel were less satisfied than the other three services when it came to neighborhood quality, housing quality, amount of livable space, safety, privacy, availability of spouse employment, and housing in general. These results indicate that Army policies might contribute to lower levels of community satisfaction since satisfaction is lower than the other services in many community factors.

**Livability Index**

Finally, for my fourth hypothesis, I used a linear stepwise regression to determine if any objective livability factors have a significant effect on the dependent variable, retention rate. The results showed that the infant mortality rate \((\beta = .665, t=2.581, p = .036)\) was the only significant variable with an adjusted R square value of .372, and it had a positive relationship with retention rate which was not expected. This meant that according to these results, Army bases that were located near cities with higher infant mortality rates had lower retention rates.

**Limitations**

There were several limitations that resulted from using secondary data. In 2005, the DMDC began asking more specific location information, so the respondents who live in the United States could select which installation they lived at. However, the DMDC classified location variables as confidential, and location data was recoded to either in the
United States or overseas. Therefore, I could not test differences in community satisfaction across locations using the DMDC dataset. I also wanted to test the hypothesis that if work satisfaction, family satisfaction, and community satisfaction were high, then retention would be high. The independent variables represent the three life domains that have a direct effect on overall satisfaction, and therefore are expected to have a similar effect on retention. However, due to data limitations, I was not able to test this hypothesis because there were no variables that measured overall satisfaction with work, family or community.

Another limitation from using secondary data was that there was no control over which questions were asked on the survey. There was not a question for overall community satisfaction, so I had to rely on a variety of community factors as measures of community satisfaction which are not as valid as one general question. There were also some community factors, including walkability, availability of open space, and multi-modal transit options which were not included in the survey. Additionally, the absence of location data made it difficult to determine differences in community satisfaction across installations. Comparisons of the branches of service provided limited insight that is difficult to generalize to individual location differences.

There are many limitations to the data used for the livability analysis. First, the measure for retention rate was a constructed variable using USAREC’s mission achievement rate, instead of the actual retention rates which were not available. The actual retention rates might have shown different results across locations. The retention rates are also influenced by incentives used to keep personnel in the Army, such as cash
bonuses and training, which may be strong enough incentives to overcome community factors.

The measures used for the livability factors have many limitations as well. The Census data was from the 5-year ACS estimates which is less accurate, but it was the only estimate that had data for all of the Army bases and their adjacent cities. The data was also compiled at the county or city scale, and research has shown that people are most influenced by their immediate surroundings (Bronfenbrenner, 1977). This data might have been at too large of a scale, especially since it used objective measures which have a smaller correlation with subjective measures at larger scales (Marans & Rodgers, 1975; Lee & Marans, 1980). Individuals can also make decisions on where to live within their community to counter the effects of high poverty or crime rates that may be present in the larger community as a whole, so these objective indicators will have a smaller impact on their personal satisfaction.

These results show that the livability factors chosen in this study were not significantly related to an individual’s retention decisions, and it is likely that work and family factors and smaller scale neighborhood factors have greater impacts on retention than these larger community scale factors. The data used for livability analysis at individual Army bases was so limited that no logical results could be drawn from the analysis. The data used for the dependent variable, retention rate, was not an accurate portrayal of actual retention rates, and the public data used for the livability factors for health, education, crime, transportation, and cost of living were all at a larger community scale which may have reduced the effect that these factors have on individual community satisfaction.
Overall the sample population was representative of the actual military population in 2005 except for the disproportionately high percentages of officers and married personnel. This limits the generalizability of some results and future research should target the enlisted and single populations for better representation. The majority of respondents in this study were married personnel, so these results do not accurately reflect the perspectives of the single soldiers. Another limitation was that the analysis was based entirely on subjective criteria and self-reported satisfaction measures rather than objective assessments of the location itself, so there could be some reliability issues if respondents interpreted community variables differently.

Finally, this data was taken from the year 2005, during which time, the U.S. military was fighting two simultaneous wars in Afghanistan and Iraq. This resulted in a high operational tempo with many deployments, more time spent training, and higher levels of stress than during a time of peace. Previous research has shown that work factors have the most significant impact on overall satisfaction, and for military personnel who are serving in a time of war, work factors are likely to have an even stronger impact on satisfaction and retention decisions, which could overcome the influence of community satisfaction.
Chapter 5: Conclusions

The results of this study supported the first three hypotheses: that there is a significant positive relationship between some community factors and retention intentions; that rank and length of time at one’s duty station have a significant positive relationship on community satisfaction; and that there are significant differences in community satisfaction between the four branches of service. There was no support, however, for the fourth hypothesis that objective livability indicators would have a significant relationship with retention rates at different Army bases. Other significant findings included higher levels of satisfaction with traffic congestion, safety, distance to work, and distance to health care services among individuals who lived on-base, while those who lived off-base were more satisfied with housing quality, privacy, space, distance to airports, and the availability of spouse employment.

Consistent with previous research in the general population, housing quality, neighborhood quality, and school quality were important community factors among Army personnel. The significant relationship between these community satisfaction variables and retention fits within the framework of the bottom-up spillover theory in which satisfaction with a specific life domain has a positive influence on overall satisfaction, which in turn impacts retention decisions. Although community satisfaction variables do not fully explain retention intention, they do have a significant influence on Army personnel as they make the decision to remain in active duty service.
One unusual finding was that gender was a significant demographic factor for satisfaction with housing, neighborhood quality, safety, and distance to work, and this was partly explained by dual-military marital status. Female service members who were married to another service member were more satisfied with their housing and neighborhood quality, most likely because they receive additional housing allowance pay and can afford higher quality housing. However, further research is needed to study the intricate differences between male and female service members and between families that are dual-military or those who have civilian spouses. The amount of involvement in the community or with military support groups could have different impacts on satisfaction depending on family or marital status.

The recent lift of the Don’t Ask Don’t Tell policy may also have significant implications for differences in satisfaction based on marital status if the military does not recognize same-sex marriages or provide the same benefits to same-sex couples. Homosexual soldiers living in barracks with less privacy may also show lower levels of satisfaction. With this recent policy change, gender, marital status, family status, and even sexual orientation may be interesting demographic variables to study in greater detail.

There are several broad implications of these findings that military leaders and planners in military towns should consider. The availability of quality housing that is close to military bases will improve community satisfaction and will have a positive effect on retention. Base housing authorities should evaluate the quality of the on-base housing stock, and upgrade not only housing but also barracks facilities that are in poor condition. Local communities adjacent to the bases should plan for adequate housing to
support the military population that cannot live on-base to improve housing satisfaction. Future research could evaluate the various types of housing to see if there is a difference in satisfaction with on-base housing compared to off-base housing or privatized military housing developments.

Since rank has a significant effect on community satisfaction, a closer examination of barracks quality and implementation of the new barracks configurations will improve housing for the younger, lower-enlisted soldiers who are in their first term of service and at most risk for attrition. Although the DOD has made recent changes to minimum barracks configurations to provide more privacy and to improve barracks conditions, it is evident that these changes are not enough to keep lower enlisted soldiers satisfied. It also takes a long time for all of the barracks to be converted to the newer standards; so many soldiers must live in lower quality barracks. Installation commanders should be aware of the barracks conditions across their location and should place equal, if not greater, attention to providing quality barracks as they do for family housing since enlisted soldiers make up the majority of the Army population.

There is still very little understanding of how community satisfaction varies across different locations, and comparison studies of community characteristics at different bases should focus on those factors that are directly related to overall satisfaction. On-base housing quality and the quality of barracks are important factors to Army personnel, so base commanders should closely evaluate their housing stock and barracks configurations to ensure the highest possible standard of living on their installations.
Additional research focused on single soldiers, and soldiers who live in the barracks will fill a gap that is missing from the current research. There is a breadth of research on military families, but very little on satisfaction among single soldiers, especially on the impacts of barracks conditions on overall satisfaction. It would also be helpful to examine responses to military spouse surveys and compare their satisfaction responses with service members to see if different community variables or demographics impact spouse satisfaction with the military way of life. Finally, additional survey questions that address transit, walkability, availability of open space, and additional livability factors should be examined to see if these community characteristics are also important to military personnel.

The military has placed a heavy focus on quality of life programs to improve satisfaction among service members and their families, and this study has found that community satisfaction has a significant impact on retention decisions. It is important for military leaders to continue their efforts at improving housing and barracks conditions which directly impact satisfaction with the military and will help retain quality service members. A multi-dimensional approach to quality of life programs in the Army will improve satisfaction across multiple life domains and have the largest positive effect on overall satisfaction with the military, and further research can clarify additional livability factors that impact community satisfaction among Army personnel. If the Army wants to retain quality soldiers, it must be provide communities with good schools, quality housing, and convenient amenities for its service members.
References


Survey Instrument
Welcome!

Thank you for your participation. You have been selected to take a survey on your attitudes and perceptions of personnel policies. When you click the Continue button below, you will be asked to:

- Read the Privacy Act Statement.
- Answer some questions giving us your attitudes and opinions about military life.

Thank you, again, for your time and participation.

Continue

FAQs / How to Contact Us
PRIVACY ACT STATEMENT FOR STATUS OF FORCES SURVEYS

In accordance with the Privacy Act, this notice informs you of the purpose of the Status of Forces Surveys and how the findings of these surveys will be used. Please read it carefully.

AUTHORITY: 10 United States Code, Sections 136, 1782, and 2358.

PRINCIPAL PURPOSE: Information collected in this survey will be used to report attitudes and perceptions about personnel programs and policies. This information will assist in the formulation of policies which may be needed to improve the working environment. Reports will be provided to the Office of the Secretary of Defense, the Military Department and the Joint Chiefs of Staff. Findings will be used in reports and testimony provided to Congress. Some findings may be published by the Defense Manpower Data Center (DMDC) or in professional journals, or presented at conferences, symposia, and scientific meetings. In no case will the data be reported or used for identifiable individuals.

ROUTINE USES: None.

DISCLOSURE: Providing information on this survey is voluntary. There is no penalty if you choose not to respond. However, maximum participation is encouraged so that the data will be complete and representative. Your survey responses will be treated as confidential. Identifying information will be used only by persons engaged in, and for purposes of, the survey research.

SECURITY PROTECTION ADVISORY

WEB SITE PRIVACY: The Department of Defense and Data Recognition Corporation will collect no personal information about you when you visit this Web site unless you choose to provide it yourself. If you supply us with personal information, it will be treated as confidential.

In addition, our system does not enable "cookies," which are files placed on your computer's hard drive in order to monitor your use of the site or the Web. For more information about your privacy rights, please read the Privacy Act Notice at the start of the survey.

This Web site does gather and store certain data from your visit. This non-personal information makes the site helpful to you by recognizing the types of technology you use. The data collected appear below:

1. Your Internet host or domain (for example, "youragency.mil" if you connect from a military domain; "yourschool.edu" if you connect from a university's domain; or "yourcompany.com" if you use a private Internet access account). Other examples of domains are compuserve.com and aol.com.
2. Your Internet Protocol (IP) address (for example, www.compuserve.com, www.aol.com, 122.3.55.34). Depending on your Internet service provider, IP addresses may identify your computer. In other cases, they identify no more than your Internet service provider (such as AOL or Earthlink). This is stored for troubleshooting technical problems.
3. The type and version of the browser and operating system you use to access our site.
4. The date and time you access this site.
5. The pages you visit.

None of this information will be revealed publicly or used to identify you.

ABOUT THIS QUESTIONNAIRE

What is the Status of Forces Survey (SOFs) Program?

- SOFS is a Department of Defense (DoD) personnel survey program that features short, Web-based surveys sponsored by the Under Secretary of Defense for Personnel and Readiness.
- These surveys enable the DoD on a regular basis to quickly and accurately gauge the attitudes and opinions of the entire DoD community – active duty or Reserve component members and spouses, and DoD civilian employees – on the full range of personnel issues.

Why should I participate?

- This is your chance to be heard on issues that directly affect you.
- Some examples of topics include: quality of life, retention, retirement, and satisfaction.
- Your answers on a survey make a difference. For example, results from previous surveys have played an important role in deliberations on pay rate adjustments, cost of living and housing allowances, and morale and retention programs.
How do I participate?
- To participate, you are asked to (1) read the Privacy Act Statement if you choose, (2) verify contact information, and (3) provide us e-mail address(es) so we can notify you when the survey is ready. We would appreciate your doing this step now. To participate now, click the Continue Now button.

How did you pick me?
- We use well-established, scientific procedures to select a sample that represents the Defense community.
- This sampling procedure sets up clusters of people based on combinations of demographic characteristics (e.g., Service, rank, etc.).
- You were selected at random from one of these clusters of people.

Why am I being asked to use the Web?
- Web administration enables us to get survey results to senior Defense leaders faster.

Why are you using a .net instead of a .mil domain to field your survey?
- When the SOIFS program was established, a .net domain was chosen for two reasons:
  1. The SOIFS operations contractor, Data Recognition Corp., consolidates both Web and paper survey data for DoD and it is more efficient for the Government to collect it at their single site.
  2. This makes it as easy as possible for everyone to access the survey, even from a non-government computer.

Do I have to take the survey in one sitting?
- No, it is not necessary to complete the survey in one sitting. Just click the “Save and Return Later” button and the work you completed will be saved.
- When you return to the survey, merely enter your Ticket Number again. Entering your Ticket Number will bring you to the place in the survey where you had stopped.

Why does the survey ask personal questions?
- The Defense Manpower Data Center (DMDC) traditionally reports not only overall results, but also results by race/ethnicity, paygrade, etc.
- To complete these analyses, we must ask respondents for this type of demographic information.
- Analyzing results in this way provides Defense leaders information about the attitudes and concerns of all subgroups of personnel (e.g., enlisted/officer, males/females) so that no groups are overlooked.
- Sensitive questions are sometimes also asked about topics like personal finances. Such information will be used to improve personnel policies, programs, and practices. As with all questions on the surveys, your responses will be held in confidence.

Will my answers be kept private?
- Your privacy will be safeguarded in accordance with the Privacy Act of 1974 (Public Law 93-579).
- Only group statistics will be reported. Individual data will not be reported.

Will I ever see the results of the survey?
- This survey’s briefings and reports will be posted on the following Website:
  http://www.dmdc.osd.mil/surveys/
- When you complete a survey, you can request to be notified by e-mail when results are posted on the Web.

What is DMDC?
- DMDC maintains the largest archive of personnel, manpower, training, and financial data in DoD. It also conducts Joint-Service surveys and operates the Status of Forces Survey Program for the DoD. To learn more, visit the DMDC web site:
  http://www.dmdc.osd.mil/

How do I know this is an official, approved DoD survey?
- In accordance with DoD Directive 5910.1, all data collection in the Department must be licensed and show that license as a Report Control Symbol (RCS) with an expiration date. The RCS for the SOIFS is DD-P&R(AR)2145, expiring 05/23/05.

What is ADSurvey@osd.pentagon.mil?
- The official e-mail address for communicating with active duty members about Status of Forces Surveys. The name is short for Active-Duty Survey.
How to Contact Us

- If you have questions or concerns about this survey, you have three ways to contact the Survey Operations Center:
  Call 1-800-891-5507
  Or
  E-mail us using the following link: ADSurvey@osd.pentagon.mil
  Or
  Send us a fax at 1-703-268-3011
1. In what Service were you on active duty on July 26, 2005?
   - Army
   - Navy
   - Marine Corps
   - Air Force
   - None, you were separated or retired

2. Are you...?
   - Male
   - Female

3. What is your current paygrade? Mark one.
   - E-1
   - E-2
   - E-3
   - E-4
   - E-5
   - E-6
   - E-7
   - E-8
   - E-9
   - W-1
   - W-2
   - W-3
   - W-4
   - W-5
   - W-6
   - O-1/O-1E
   - O-2/O-2E
   - O-3/O-3E
   - O-4
   - O-5
   - O-6 or above

4. What is your marital status?
   - Married
   - Separated
   - Divorced
   - Widowed
   - Never married

5. [Ask if Q4 = "Divorced" OR Q4 = "Widowed" OR Q4 = "Never married"] How many years have you been in a relationship with your current significant other (that is, girlfriend or boyfriend)?
   - Does not apply; I do not have a girlfriend/boyfriend
   - Less than 1 year
   - 1 year to less than 5 years
   - 5 years to less than 10 years
   - 10 years or more

In the following section, you will be asked question(s) about your spouse's employment status in enough detail to ensure comparability with national employment surveys.

6. [Ask if Q4 = "Married" OR Q4 = "Separated"] Is your spouse currently serving on active duty (not a member of the National Guard or Reserve)?
   - Yes
   - No

7. [Ask if Q4 = "Married" OR Q4 = "Separated"] AND Q6 = "No" Is your spouse currently serving as a member of the National Guard or Reserve in a full-time active duty program (AGR, TAR, AR)?
   - Yes
   - No

8. [Ask if Q4 = "Married" OR Q4 = "Separated"] AND Q6 = "No" AND Q7 = "No" Is your spouse currently serving as a member of another type of National Guard or Reserve unit (e.g., drilling unit, IMA, IRR, military technician)?
   - Yes
   - No

9. [Ask if Q4 = "Married" OR Q4 = "Separated"] AND Q6 = "No" AND Q7 = "No" Last week, did your spouse do any work for pay or profit? Mark "Yes" even if your spouse worked only one hour, or helped without pay in a family business or farm for 15 hours or more.
   - Yes
   - No

10. [Ask if Q4 = "Married" OR Q4 = "Separated"] AND Q6 = "No" AND Q7 = "No" AND Q8 = "No" Last week, was your spouse temporarily absent from a job or business?
    - Yes, on vacation, temporary illness, labor dispute, etc.
    - No

11. [Ask if Q4 = "Married" OR Q4 = "Separated"] AND Q6 = "No" AND Q7 = "No" AND Q8 = "No" AND Q9 = "No" AND Q10 = "No" Has your spouse been looking for work during the last 4 weeks?
    - Yes
    - No
12. [Ask if Q4 = “Married” OR Q4 = “Separated”]
   AND Q6 = “No” AND Q7 = “No” AND Q9 = “No” AND Q10 = “No” AND Q11 = “Yes”]
   Last week, could your spouse have started a job if offered one, or returned to work if recalled?
   □ Yes, could have gone to work
   □ No, because of his/her temporary illness
   □ No, because of other reasons (in school, etc.)

13. What is the highest degree or level of school that you have completed? Mark the answer that describes the highest grade or degree that you have completed.
   □ 12 years or less of school (no diploma)
   □ High school graduate—traditional diploma
   □ High school graduate—alternative diploma (home school, GED, etc.)
   □ Some college credit, but less than 1 year
   □ 1 or more years of college, no degree
   □ Associate’s degree (e.g., AA, AS)
   □ Bachelor’s degree (e.g., BA, AB, BS)
   □ Master’s, doctoral, or professional school degree (e.g., MA, MS, MEng, MBA, MSW, PhD, MD, JD, DVM)

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

14. Do you have a child, children, or other legal dependents based on the definition above?
   □ Yes
   □ No

15. [Ask if Q14 = “Yes”]
   How many children or other legal dependents do you have in each age group? Mark one answer in each row. To indicate none, select “0”. To indicate nine or more, select “9”.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 4 years and younger</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 5-12 years old</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 13-17 years old</td>
<td></td>
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<tr>
<td>d. 18-22 years old</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 23 years and older</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

16. Are you Spanish/Hispanic/Latino?
   □ No, not Spanish/Hispanic/Latino
   □ Yes, Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, or other Spanish/Hispanic/Latino

17. What is your race? Mark one or more races to indicate what you consider yourself to be.
   □ White
   □ Black or African American
   □ American Indian or Alaska Native
   □ Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
   □ Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian or Chamorro)

18. Where is your permanent duty station (homeport) located?
   □ In one of the 50 states, DC, Puerto Rico, a U.S. territory or possession
   □ Europe (e.g., Bosnia-Herzegovina, Germany, Italy, Serbia, United Kingdom)
   □ Former Soviet Union (e.g., Russia, Tajikistan, Uzbekistan)
   □ East Asia and Pacific (e.g., Australia, Japan, Korea)
   □ North Africa, Near East or South Asia (e.g., Bahrain, Diego Garcia, Kuwait, Saudi Arabia)
   □ Sub-Saharan Africa (e.g., Kenya, South Africa)
   □ Western Hemisphere (e.g., Cuba, Honduras, Peru)
   □ Other or not sure

[Ask if Q18 = “In one of the 50 states, DC, Puerto Rico, a U.S. territory or possession”]
Please select from the list below your permanent duty station location within one of the 50 states, DC, Puerto Rico, a U.S. territory or possession.

[Ask if Q18 = “Other or not sure”]
Please enter the name of the country or installation.

602 DMDC
19. Where do you live at your permanent duty station?
- Aboard ship
- Barracks/dorm/BEQ/UEPH/BOQ/UEPH military facility
- Military family housing, on base
- Military family housing, off base
- Privatized military housing that you rent on base
- Privatized military housing that you rent off base
- Civilian housing that you own or pay mortgage on
- Civilian housing that you rent
- Other

[Ask if Q19 = “Other”] Please specify where you live at your permanent duty station.

20. Taking all things into consideration, how satisfied are you, in general, with each of the following aspects of being in the military?

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

a. Your total compensation (i.e., base pay, allowances, and bonuses)
b. The type of work you do in your military job
c. Your opportunities for promotion
d. The quality of your coworkers
e. The quality of your supervisor

21. Overall, how satisfied are you with the military way of life?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

22. How many years of active-duty service have you completed (including enlisted, warrant officer, and commissioned officer time)? To indicate less than 1 year, enter “0”. To indicate 35 years or more, enter “35”.

23. Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?
- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely

24. [Ask if Q4 = “Married” OR Q4 = “Separate”]
OR (Q4 = “Divorced” OR Q4 = “Widowed” OR Q4 = “Never married”) AND (Q5 = “Less than 1 year” OR Q5 = “1 year to less than 6 years” OR Q5 = “6 years to less than 10 years” OR Q5 = “10 years or more”)

25. Does your spouse or significant other think you should stay on or leave active duty?
- Strongly favors staying
- Somewhat favors staying
- Has no opinion one way or the other
- Somewhat favors leaving
- Strongly favors leaving

26. Have you ever PCSed?
- Yes
- No
27. [Ask if Q26 = "Yes"] How many months has it been since your last PCS? To indicate less than 1 month, enter "0". To indicate more than 99 months, enter "99".

[ ] Months

28. In the past 12 months, how many days have you had to work longer than your normal duty day (i.e., overtime)? To indicate none, enter "0".

[ ] Days

29. In the past 12 months, how many nights have you been away from your permanent duty station because of your military duties? To indicate none, enter "0".

[ ] Nights

30. [Ask if Q29 > 0] Are you currently on a deployment of 30 days or more?

☒ Yes
☒ No

31. [Ask if Q30 = "Yes"] Where are you currently deployed?

☒ In one of the 50 states, DC, Puerto Rico, a U.S. territory or possession
☒ Afghanistan
☒ Iraq
☒ Other North Africa, Near East or South Asia country (e.g., Bahrain, Diego Garcia, Kuwait, Saudi Arabia)
☒ Europe (e.g., Bosnia-Herzegovina, Germany, Italy, Serbia, United Kingdom)
☒ Former Soviet Union (e.g., Russia, Tajikistan, Uzbekistan)
☒ East Asia and Pacific (e.g., Australia, Japan, Korea)
☒ Sub-Saharan Africa (e.g., Kenya, Liberia, South Africa)
☒ Western Hemisphere (e.g., Cuba, Honduras, Peru)
☒ Other or not sure

[Ask if Q31 = "Other or not sure"] Please enter the name of the country or installation.

☐

32. In the past 12 months, have you spent more or less time away from your permanent duty station than you expected when you first entered the military?

☒ Much more than expected
☒ More than expected
☒ Neither more nor less than expected
☒ Less than expected
☒ Much less than expected

33. What impact has time away (or lack thereof) from your permanent duty station in the past 12 months had on your military career intentions?

☒ Greatly increased your desire to stay
☒ Increased your desire to stay
☒ Neither increased nor decreased your desire to stay
☒ Decreased your desire to stay
☒ Greatly decreased your desire to stay

34. Overall, how well prepared are you to perform your wartime job?

☑ Very well prepared
☒ Well prepared
☒ Neither well nor poorly prepared
☒ Poorly prepared
☒ Very poorly prepared

35. Overall, how well prepared is your unit to perform its wartime mission?

☑ Very well prepared
☒ Well prepared
☒ Neither well nor poorly prepared
☒ Poorly prepared
☒ Very poorly prepared
36. How well has your training prepared you to perform your wartime job?
  □ Very well
  □ Well
  □ Neither well nor poorly
  □ Poorly
  □ Very poorly

37. Overall, how would you rate the current level of stress in your work life?
  □ Much less than usual
  □ Less than usual
  □ About the same as usual
  □ More than usual
  □ Much more than usual

38. Overall, how would you rate the current level of stress in your personal life?
  □ Much less than usual
  □ Less than usual
  □ About the same as usual
  □ More than usual
  □ Much more than usual

39. Since September 11, 2001, how many times have you been deployed for any of the following operations? Mark one answer in each row. To indicate none, select “0”. To indicate 3 or more, select “3”.

   | Times | Operation
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noble Eagle</td>
</tr>
<tr>
<td></td>
<td>Enduring Freedom</td>
</tr>
<tr>
<td></td>
<td>Iraqi Freedom</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

40. Since September 11, 2001, how many times have you been deployed?

   Times

41. Were you deployed to any of the following locations? Mark “Yes” or “No” for each item.

<table>
<thead>
<tr>
<th>Country</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>In one of the 50 states, DC, Puerto Rico, a U.S. territory or possession</td>
<td></td>
</tr>
<tr>
<td>Afghanistan</td>
<td></td>
</tr>
<tr>
<td>Iraq</td>
<td></td>
</tr>
<tr>
<td>Other North Africa, Near East or South Asia country (e.g., Bahrain, Diego Garcia, Kuwait, Saudi Arabia)</td>
<td></td>
</tr>
<tr>
<td>Europe (e.g., Bosnia-Herzegovina, Germany, Italy, Serbia, United Kingdom)</td>
<td></td>
</tr>
<tr>
<td>Former Soviet Union (e.g., Russia, Tajikistan, Uzbekistan)</td>
<td></td>
</tr>
<tr>
<td>East Asia and Pacific (e.g., Australia, Japan, Korea)</td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa (e.g., Kenya, Liberia, South Africa)</td>
<td></td>
</tr>
<tr>
<td>Western Hemisphere (e.g., Cuba, Honduras, Peru)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

42. What is the total number of days you have been away from your permanent duty station since September 11, 2001?

   Days
43. [Ask if Q39 a > "0" OR Q39 b > "0" OR Q39 c > "0" OR Q39 d > "0"] Have you been deployed to a combat zone or an area where you drew imminent danger or hostile fire pay since September 11, 2001?
   ☒ Yes
   ☐ No

44. [Ask if Q39 a > "0" OR Q39 b > "0" OR Q39 c > "0" OR Q39 d > "0" AND Q43 = "Yes"] How many days have you been deployed to a combat zone since September 11, 2001?

45. [Ask if Q39 a > "0" OR Q39 b > "0" OR Q39 c > "0" OR Q39 d > "0" AND Q43 = "Yes"] For your most recent deployment, how many months have you been deployed to an area where you drew imminent danger or hostile fire pay? Include partial months. For example, even if you were deployed to a combat zone for 2 days, but those days were in different months, enter "2".

46. [Ask if Q39 a > "0" OR Q39 b > "0" OR Q39 c > "0" OR Q39 d > "0"] Were you involved in combat operations?
   ☒ Yes
   ☐ No

47. [Ask if Q39 a > "0" OR Q39 b > "0" OR Q39 c > "0" OR Q39 d > "0" AND Q43 = "Yes"] Are you still deployed to a combat zone or an area where you are drawing imminent danger or hostile fire pay?
   ☒ Yes
   ☐ No

48. [Ask if Q39 a > "0" OR Q39 b > "0" OR Q39 c > "0" OR Q39 d > "0"] Were any of your deployments since September 11, 2001 longer than you expected?
   ☒ Yes
   ☐ No

49. Since September 11, 2001, have you been under stop-loss at anytime?
   ☒ Yes
   ☐ No

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

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
</tr>
</thead>
</table>
   a. I enjoy serving in the military.          | X X X X |
   b. Serving in the military is consistent with my personal goals. | X X X X |
   c. If I left the military, I would feel like I’m starting all over again. | X X X X |
   d. I would feel guilty if I left the military. | X X X X |
   e. Generally, on a day-to-day basis, I am happy with my life in the military. | X X X X |
   f. It would be difficult for me to leave the military and give up the benefits that are available in the Service. | X X X X |
   g. I would not leave the military right now because I have a sense of obligation to the people in it. | X X X X |
   h. I really feel as if the military’s values are my own. | X X X X |
   i. I would have difficulty finding a job if I left the military. | X X X X |
   j. Generally, on a day-to-day basis, I am proud to be in the military. | X X X X |
   k. If I left the military, I would feel like I had let my country down. | X X X X |
   l. I continue to serve in the military because leaving would require considerable sacrifice. | X X X X |
   m. I feel like being a member of the military can help me achieve what I want in life. | X X X X |
   n. One of the problems with leaving the military would be the lack of available alternatives. | X X X X |
   o. I am committed to making the military my career. | X X X X |
51. How satisfied are you with the following characteristics of your current residence and community at your permanent duty station?

Not applicable

Very dissatisfied

Dissatisfied

Neither satisfied nor dissatisfied

Satisfied

Very satisfied

<table>
<thead>
<tr>
<th>a. Cost of residence</th>
<th>x</th>
<th>x</th>
<th>x</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Quality and condition of residence</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>c. Amount of livable space in residence</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>d. Privacy</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>e. Quality of the neighborhood</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>f. Safety of the area</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>g. Availability of spouse employment</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>h. Traffic congestion</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>i. Quality of schools attended by your children</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>j. Distance to airports</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>k. Distance to health care</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>l. Distance to work</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>m. Your housing, in general</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

52. Did you have a choice in where to live at your current permanent duty station?

- Yes
- No

53. [Ask if Q52 = “Yes”] How would you rate your choice of housing?

- Excellent
- Very good
- Good
- Fair
- Poor

54. What type of housing are you currently occupying?

- Single family home
- Duplex
- Townhouse
- Apartment
- Barracks/dorms/boarding ship
- Other

55. How many bedrooms does this housing unit contain?

- None – efficiency or studio
- One
- Two
- Three
- Four or more

56. How many bathrooms does this housing unit contain?

- None – bathroom is shared with another unit
- One
- One and a half
- Two
- Two and a half
- More than two and a half

57. What is your monthly rent or mortgage payment? If you live in military-provided housing and you do not pay rent, enter “0”.

[ ] Dollars:

DMDC: 607
58. What is your typical monthly expenditure on the following? If utilities are included in your rent or you have other living arrangements where you do not pay utilities, enter “0”.
   a. Water and sewerage
   b. Electricity
   c. Heat or heating oil

59. Suppose when you first arrived at your current duty station that the quality of both on-base housing and the type of off-base housing you could afford with your housing allowance were the same. Which would you have preferred?
   - Military housing, on base
   - Military operated housing, off base
   - Rent civilian housing
   - Buy civilian housing
   - Privatized housing on military installation

60. Assuming cost, quality, and wait time for housing were the same, how important would each of the following be in your decision on whether to live on or off base?

<table>
<thead>
<tr>
<th>Not important</th>
<th>Somewhat important</th>
<th>Moderately important</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
</table>
   a. Access to support services and facilities on base (e.g., child care, fitness centers, commissaries, exchanges) ...
   b. Quality of schools
   c. Safety of the neighborhood
   d. Distance to work

61. During the past 12 months, have you used any of the following military-provided educational programs and services? Mark one answer in each row.

<table>
<thead>
<tr>
<th>No, not available</th>
<th>Yes</th>
</tr>
</thead>
</table>
   a. Adult continuing education counseling
   b. Tuition assistance programs for college/higher education
   c. Technical/Vocational programs
   d. Basic skills education

62. Would you or the members of your family benefit from English as a Second Language (ESL) services?
   - Yes
   - No

63. [Ask if Q52 = "Yes"] Who would benefit from English as a Second Language (ESL) services?
   - Myself
   - My family members
   - Both myself and my family members

64. [Ask if Q15b = "0" OR Q15c = "0"] How many children did you have attending each of the following types of schools last year? Mark one answer in each row. To indicate none, select "0". To indicate nine or more, select "9".

   | a. Public school off base...
   | b. Public school on base...
   | c. Department of Defense run school (DDOSS) at state side locations or DDOSS at overseas locations...
   | d. Home school...
   | e. Private school...
   | f. Charter school...
   | g. Other...

608
66. [Ask if Q64 b > 0] How satisfied are you with off-base public school(s) attended by your child(ren)?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

66. [Ask if Q64 a > 0] How satisfied are you with on-base public school(s) attended by your child(ren)?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

67. [Ask if Q64 c > 0] How satisfied are you with Department of Defense-run school(s) attended by your child(ren)?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

68. [Ask if Q64 d > 0] How satisfied are you with home schooling your child(ren)?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

69. [Ask if Q64 e > 0] How satisfied are you with private school(s) attended by your child(ren)?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

70. [Ask if Q64 f > 0] How satisfied are you with charter school(s) attended by your child(ren)?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

71. [Ask if Q64 g > 0] How satisfied are you with other school(s) attended by your child(ren)?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

72. During the past 12 months, have you used any of the following on-base (government operated) programs or services? *Mark one answer in each row.*

<table>
<thead>
<tr>
<th>Program</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Outdoor recreation programs or facilities (e.g., family campgrounds, checkout equipment, trips, picnic areas, beaches or pools, boating, stables)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Golf course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Bowling center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Arts and crafts, skill development programs or facilities (e.g., hobby, crafts, framing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Do-it-yourself automotive facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Community (recreation) center programs or facilities (e.g., cyber cafes, special events, talent shows, tournaments, social programs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Recreation programs for deployed Service members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Information ticket and tours services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Libraries</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
73. [Ask if Q72a = "Yes"] Mark your level of satisfaction with on-base outdoor recreation programs or facilities (e.g., family campgrounds, checkout equipment, trips, picnic areas, beaches or pools, boating, stables).
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

74. [Ask if Q72b = "Yes"] Mark your level of satisfaction with on-base golf courses.
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

75. [Ask if Q72c = "Yes"] Mark your level of satisfaction with on-base bowling centers.
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

76. [Ask if Q72d = "Yes"] Mark your level of satisfaction with on-base arts and crafts skill development programs or facilities (e.g., hobby, crafts, framing).
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

77. [Ask if Q72e = "Yes"] Mark your level of satisfaction with on-base do-it-yourself automotive facilities.
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

78. [Ask if Q72f = "Yes"] Mark your level of satisfaction with on-base community (recreation) center programs or facilities (e.g., cyber cafes, special events, talent shows, tournaments, social programs).
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

79. [Ask if Q72g = "Yes"] Mark your level of satisfaction with recreation programs for deployed Service members.
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

80. [Ask if Q72h = "Yes"] Mark your level of satisfaction with on-base information tickets and tours services.
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

81. [Ask if Q72i = "Yes"] Mark your level of satisfaction with on-base libraries.
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

82. Overall, does the military provide programs that meet the unique cultural and ethnic needs of military members and their families?
   - Yes
   - No
83. [Ask if Q82 = "No"] What programs would be helpful in meeting the unique cultural and ethnic needs of military members and their families?

- More programs in native languages
- English as a Second Language classes
- More programs that incorporate cultural traditions
- More programs and information in Spanish
- Other

[Ask if Q82 = "No" AND Q83 = "Other"] Specify what type of program would be helpful in meeting the unique cultural and ethnic needs of military members and their families.

84. During the past 12 months, have you, or anyone in your family, used a commissary to purchase groceries?

- Yes
- No
- No, not available

85. [Ask if Q84 = "Yes"] How satisfied are you with the following aspects of your local commissary?

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

- a. Quality of merchandise
- b. Quality of service you receive
- c. Cost of groceries
- d. Convenience
- e. Hours of operation
- f. Value for your money
- g. Your commissary, overall

86. [Ask if Q84 = "Yes"] How do the following aspects of your local commissary compare to other stores in your community?

- Much better at stores in community
- Better at stores in community
- No difference
- Better at commissary
- Much better at commissary

- a. Merchandise assortment
- b. Customer service
- c. Average check-out time
- d. Quality of meats
- e. Quality of produce
- f. Quality of groceries
- g. Safety and security

87. [Ask if Q84 = "Yes"] How long does it normally take to get to the commissary closest to you?

- 10 minutes or less
- 11-20 minutes
- 21-30 minutes
- 31-60 minutes
- More than 60 minutes

88. During the past 12 months, have you or anyone in your family used an exchange when purchasing goods or services?

- Yes
- No
- No, not available

89. [Ask if Q88 = "Yes"] How satisfied are you with the following aspects of your local exchange?

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

- a. Quality of merchandise
- b. Quality of service you receive
- c. Cost of items
- d. Availability of military uniforms
- e. Convenience
### Details on Deployments

92. [Ask if Q88 = "Yes"] How were the following aspects of your most recent deployment, to what extent were they the following a concern?

<table>
<thead>
<tr>
<th>Not a concern</th>
<th>Small extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Managing expenses and bills</td>
<td>x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>b. Household repairs, yard work, or car maintenance</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>c. Major home repair or replacement due to casualty, theft, fire, or severe weather (e.g., hurricane, flood, earthquake, tornado)</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>d. Storage or security of personal belongings</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>e. Pet care</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>f. Interruption of off-duty education</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>g. Loss of part-time job</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>h. Your ability to communicate with family</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>i. Your family's ability to contact you</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>j. Feelings of anxiety or depression</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>k. Safety of your family in their community</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>l. Serious health or emotional problems of spouse, child, parent, sibling, or elderly family member</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>m. Major financial hardship or bankruptcy within your family</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>n. Birth or adoption of a child</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>o. Elder care</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>p. Death of a family member</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x</td>
<td>x x x x x x</td>
</tr>
</tbody>
</table>

### Questionnaire

90. [Ask if Q88 = "Yes"] How do the following aspects of your local exchange compare to other stores in your community?

- Much better at stores in community
- Better at stores in community
- No difference
- Better at exchange
- Much better at exchange

91. [Ask if Q88 = "Yes"] How long does it normally take to get to the exchange closest to you?

- 10 minutes or less
- 11-20 minutes
- 21-30 minutes
- 31-60 minutes
- More than 60 minutes
### Question 93
**[Ask if Q4 = "Married" OR Q4 = "Separated"
AND (Q39 a = "0" OR Q39 b = "0" OR Q39 c = "0" OR Q39 d = "0")]
While you were away during your most recent deployment, to what extent were the following a concern?**

<table>
<thead>
<tr>
<th>Extent</th>
<th>Not a concern</th>
<th>Small extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Question 94
**[Ask if Q15 a = "0" OR Q15 b = "0" OR Q15 c = "0" OR Q15 d = "0"
AND (Q39 a = "0" OR Q39 b = "0" OR Q39 c = "0" OR Q39 d = "0")]
While you were away during your most recent deployment, to what extent were the following a concern?**

<table>
<thead>
<tr>
<th>Extent</th>
<th>Not a concern</th>
<th>Small extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Question 95
**[Ask if Q39 a = "0" OR Q39 b = "0" OR Q39 c = "0" OR Q39 d = "0"]
During your most recent deployment, did you (and/or your spouse) lose money or have any additional expenses because of the following items?**

<table>
<thead>
<tr>
<th>Item</th>
<th>Does not apply</th>
<th>Small extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td></td>
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<td></td>
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<tr>
<td>e.</td>
<td></td>
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<tr>
<td>f.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Question 96
**[Ask if Q39 a = "0" OR Q39 b = "0" OR Q39 c = "0" OR Q39 d = "0"]
How important is each of the following to you in being able to cope with deployments?**

<table>
<thead>
<tr>
<th>Item</th>
<th>Not important</th>
<th>Somewhat important</th>
<th>Moderately important</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>d.</td>
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<td></td>
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<tr>
<td>e.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>f.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>h.</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### Question 97
**[Ask if Q39 a = "0" OR Q39 b = "0" OR Q39 c = "0" OR Q39 d = "0" AND Q39 = "W"]
After your deployment, to what extent were you likely to...?**

*Mark one answer in each row.*
HEALTH CARE

98. In the past 12 months, have you visited a military health care provider (i.e., Military Treatment Facility)?
   - Yes
   - No

99. How satisfied are you with the following aspects of your military health care benefit at Military Medical Treatment Facilities?
   - Very dissatisfied
   - Dissatisfied
   - Neither satisfied nor dissatisfied
   - Satisfied
   - Very satisfied

   a. Availability of medical care for yourself
   b. Quality of medical care for yourself
   c. Out-of-pocket cost for care
   d. Skill of physicians and other medical providers
   e. Availability of specialists
   f. Ability to get appointments

100. Overall, how satisfied are you with your military health care benefit?
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

101. [Ask if Q4 = "Married" OR Q4 = "Separated" OR Q14 = "Yes"] In the past 12 months, have you used military-provided health care (including care at both Military Medical Treatment Facilities and through TRICARE)?
   - Yes
   - No

102. [Ask if Q4 = "Married" OR Q4 = "Separated" OR Q14 = "Yes"] How satisfied are you with the following aspects of your family's military-provided health care benefit (including care at both Military Medical Treatment Facilities and through TRICARE)?
   - Very dissatisfied
   - Dissatisfied
   - Neither satisfied nor dissatisfied
   - Satisfied
   - Very satisfied

   a. Availability of medical care for your family
   b. Quality of medical care for your family
   c. Out-of-pocket cost for care
   d. Skill of physicians and other medical providers
   e. Availability of specialists
   f. Ability to get appointments
103. [Ask if Q4 = "Married" OR Q4 = "Separated" OR Q14 = "Yes"] Overall, how satisfied are you with your family’s military-provided health care benefit (including care at both Military Medical Treatment Facilities and through TRICARE)?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
</tr>
</thead>
</table>

104. In the past 12 months, have you visited a military dentist on base (or DTF), to include civilian or contract dentists on base?

| Yes | No |

105. How satisfied are you with the following aspects of your military dental care benefit?

<table>
<thead>
<tr>
<th>Very dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Availability of dental care for yourself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Quality of dental care for yourself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Out-of-pocket cost for care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Skill of dentists and other dental providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

106. Overall, how satisfied are you with your military dental care benefit?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
</tr>
</thead>
</table>

107. [Ask if Q4 = "Married" OR Q4 = "Separated" OR Q14 = "Yes"] In the past 12 months, have any of your family members obtained dental care from a military source (i.e., TRICARE Dental)?

| Yes | No |

108. [Ask if Q4 = "Married" OR Q4 = "Separated" OR Q14 = "Yes"] How satisfied are you with the following aspects of your family’s military-provided dental care benefit (i.e., TRICARE Dental)?

<table>
<thead>
<tr>
<th>Very dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Availability of dental care for your family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Quality of dental care for your family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Out-of-pocket cost for care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Skill of dentists and other dental providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**August 2005 Status of Forces Survey of Active-Duty Members**

### BALANCING WORK LIFE

111. How often has your job kept you from concentrating on important things in your life?
- Daily
- A couple of times a week
- A couple of times a month
- A couple of times a year
- Almost never/never

112. How often has your personal or family life kept you from concentrating on your job?
- Daily
- A couple of times a week
- A couple of times a month
- A couple of times a year
- Almost never/never

---

### MILITARY/CIVILIAN COMPARISONS

110. How do the following opportunities in the military compare to opportunities in the civilian world?

<table>
<thead>
<tr>
<th>Much better in the military</th>
<th>Somewhat better in the military</th>
<th>No difference</th>
<th>Somewhat better as a civilian</th>
<th>Much better as a civilian</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Promotion opportunities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Amount of personal/family time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Hours worked per week.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Vacation time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Education and training opportunities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Total compensation (e.g., pay, bonuses, allowances).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

109. [Ask if Q4 = "Married" OR Q4 = "Separated" OR Q14 = "Yes"] Overall, how satisfied are you with the dental care benefit the military provides for your family (i.e., TRICARE Dental)?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

---

**DMDC**
113. How much do you agree or disagree with each of the following statements about how well you (and your family) balance your military requirements with your family/personal responsibilities?

| Strongly disagree | | |
|-------------------|---|---
| Disagree          |   |   |
| Neither agree nor disagree | | |
| Strongly agree    |   |   |

- a. Deployments have made work-life balance more difficult to achieve
- b. Deployments have helped achieve skills that have assisted with balancing work and life requirements
- c. Increased work hours when not deployed have made work-life balance more difficult to achieve
- d. Potential work-life related problems (divorce, absence from work, family related discharges) can be minimized with proper preparation

114. How important is each of the following in your ability to improve work-life balance?

| Not important | | |
|---------------|---|---
| Somewhat important | | |
| Moderately important | | |
| Important | | |
| Very important | | |

- a. On-base housing
- b. Off-base housing
- c. Child care
- d. Financial counseling and financial well-being
- e. Increased pay
- f. Predictability in deployment
- g. Predictability in non-deployed workload
- h. Family/marriage counseling\retreats
- i. Spousal employment
- j. Unit readiness/support groups

115. If you have comments or concerns that you were not able to express in answering this survey, please enter them in the space provided. Any comments you make on this questionnaire will be kept confidential, and no follow-up action will be taken in response to any specifics reported.
## Appendix B: Summary Statistics

### Table 10

Summary Statistics of Community Satisfaction Among Army Personnel

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neither Satisfied nor Dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to work</td>
<td>21.5%</td>
<td>53.0%</td>
<td>13.0%</td>
<td>6.8%</td>
<td>3.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Safety</td>
<td>18.3%</td>
<td>53.8%</td>
<td>15.4%</td>
<td>7.5%</td>
<td>2.5%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Distance to health care</td>
<td>17.6%</td>
<td>55.4%</td>
<td>14.9%</td>
<td>6.1%</td>
<td>3.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Neighborhood Quality</td>
<td>17.2%</td>
<td>44.3%</td>
<td>18.9%</td>
<td>8.8%</td>
<td>6.4%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Your housing, in general</td>
<td>14.8%</td>
<td>48.3%</td>
<td>16.0%</td>
<td>10.7%</td>
<td>6.8%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Privacy</td>
<td>14.1%</td>
<td>42.0%</td>
<td>17.5%</td>
<td>14.2%</td>
<td>9.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Quality and Condition of Residence</td>
<td>13.7%</td>
<td>44.2%</td>
<td>16.6%</td>
<td>14.0%</td>
<td>8.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Amount of livable space</td>
<td>13.7%</td>
<td>40.7%</td>
<td>15.0%</td>
<td>17.0%</td>
<td>10.7%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Distance to airports</td>
<td>12.5%</td>
<td>42.3%</td>
<td>25.0%</td>
<td>10.5%</td>
<td>5.3%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Quality of schools</td>
<td>9.6%</td>
<td>27.1%</td>
<td>17.2%</td>
<td>5.9%</td>
<td>4.3%</td>
<td>35.8%</td>
</tr>
<tr>
<td>Cost of Residence</td>
<td>7.8%</td>
<td>32.7%</td>
<td>19.2%</td>
<td>18.7%</td>
<td>12.8%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Traffic</td>
<td>7.1%</td>
<td>29.4%</td>
<td>22.6%</td>
<td>20.1%</td>
<td>16.0%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Availability of spouse employment</td>
<td>6.3%</td>
<td>24.9%</td>
<td>23.7%</td>
<td>14.0%</td>
<td>10.5%</td>
<td>20.6%</td>
</tr>
</tbody>
</table>
Appendix C: Regression Models for Community Satisfaction

Table 11
Regression Model: Dependent Variable Privacy

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8  On or Off-Base Housing</td>
<td>-0.832</td>
<td>-17.873</td>
<td>-0.324</td>
</tr>
<tr>
<td>D2  Rank</td>
<td>0.146</td>
<td>8.886</td>
<td>0.164</td>
</tr>
<tr>
<td>D6  Race/Ethnicity</td>
<td>-0.122</td>
<td>-2.797</td>
<td>-0.050</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .153$, Adjusted $R^2 = .152$, $p < .05$, N = 2698

Table 12
Regression Model: Dependent Variable Quality of Residence

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8  On or Off-Base Housing</td>
<td>-0.748</td>
<td>-16.276</td>
<td>-0.299</td>
</tr>
<tr>
<td>D2  Rank</td>
<td>0.129</td>
<td>8.018</td>
<td>0.149</td>
</tr>
<tr>
<td>D9  Time at Duty Station</td>
<td>0.041</td>
<td>2.770</td>
<td>0.050</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .137$, Adjusted $R^2 = .136$, $p < .05$, N = 2685

Table 13
Regression Model: Dependent Variable Housing in General

<table>
<thead>
<tr>
<th>Model Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8  On or Off-Base Housing</td>
<td>-0.634</td>
<td>-14.191</td>
<td>-0.265</td>
</tr>
<tr>
<td>D2  Rank</td>
<td>0.102</td>
<td>6.520</td>
<td>0.123</td>
</tr>
<tr>
<td>D1  Gender</td>
<td>0.156</td>
<td>2.897</td>
<td>0.053</td>
</tr>
<tr>
<td>D9  Time at Duty Station</td>
<td>0.033</td>
<td>2.266</td>
<td>0.042</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .107$, Adjusted $R^2 = .106$, $p < .05$, N = 2683
### Table 14

Regression Model: Dependent Variable Amount of Space

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>$B$</th>
<th>t-value</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8 On or Off-Base Housing</td>
<td>-0.729</td>
<td>-15.586</td>
<td>-0.274</td>
</tr>
<tr>
<td>D2 Rank</td>
<td>0.099</td>
<td>5.685</td>
<td>0.107</td>
</tr>
<tr>
<td>D3 Marital Status</td>
<td>0.157</td>
<td>2.529</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .106$, Adjusted $R^2 = .105$, $p < .05$, $N = 2692$

### Table 15

Regression Model: Dependent Variable Neighborhood Quality

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>$B$</th>
<th>t-value</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2 Rank</td>
<td>0.168</td>
<td>10.762</td>
<td>0.205</td>
</tr>
<tr>
<td>D8 On or Off-Base Housing</td>
<td>-0.431</td>
<td>-9.594</td>
<td>-0.181</td>
</tr>
<tr>
<td>D1 Gender</td>
<td>0.185</td>
<td>3.387</td>
<td>0.063</td>
</tr>
<tr>
<td>D5 Family Status</td>
<td>0.124</td>
<td>2.775</td>
<td>0.052</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .098$, Adjusted $R^2 = .097$, $p < .05$, $N = 2653$

### Table 16

Regression Model: Dependent Variable Safety

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>$B$</th>
<th>t-value</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2 Rank</td>
<td>0.142</td>
<td>10.573</td>
<td>0.205</td>
</tr>
<tr>
<td>D1 Gender</td>
<td>0.170</td>
<td>3.639</td>
<td>0.069</td>
</tr>
<tr>
<td>D5 Family Status</td>
<td>0.117</td>
<td>3.083</td>
<td>0.059</td>
</tr>
<tr>
<td>D8 On or Off-Base Housing</td>
<td>0.085</td>
<td>2.227</td>
<td>0.043</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .050$, Adjusted $R^2 = .048$, $p < .05$, $N = 2704$

### Table 17

Regression Model: Dependent Variable Distance to Work

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>$B$</th>
<th>t-value</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8 On or Off-Base Housing</td>
<td>0.413</td>
<td>10.505</td>
<td>0.198</td>
</tr>
<tr>
<td>D9 Time at Duty Station</td>
<td>0.033</td>
<td>2.586</td>
<td>0.049</td>
</tr>
<tr>
<td>D1 Gender</td>
<td>0.104</td>
<td>2.160</td>
<td>0.041</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .041$, Adjusted $R^2 = .040$, $p < .05$, $N = 2711$
Table 18
Regression Model: Dependent Variable Spouse Employment

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2  Rank</td>
<td>0.123</td>
<td>6.512</td>
<td>0.140</td>
</tr>
<tr>
<td>D8  On or Off-Base Housing</td>
<td>-0.179</td>
<td>-3.272</td>
<td>-0.069</td>
</tr>
<tr>
<td>D9  Time at Duty Station</td>
<td>0.049</td>
<td>2.824</td>
<td>0.060</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .034$, Adjusted $R^2 = .032$, $p < .05$, $N = 2204$

Table 19
Regression Model: Dependent Variable Distance to Airports

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2  Rank</td>
<td>0.088</td>
<td>5.798</td>
<td>0.113</td>
</tr>
<tr>
<td>D8  On or Off-Base Housing</td>
<td>-0.206</td>
<td>-4.669</td>
<td>-0.091</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .025$, Adjusted $R^2 = .025$, $p < .05$, $N = 2656$

Table 20
Regression Model: Dependent Variable School Quality

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D5  Family Status</td>
<td>0.256</td>
<td>3.320</td>
<td>0.084</td>
</tr>
<tr>
<td>D10 Years of Service</td>
<td>0.083</td>
<td>2.909</td>
<td>0.074</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .017$, Adjusted $R^2 = .016$, $p < .05$, $N = 1781$

Table 21
Regression Model: Dependent Variable Traffic

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8  On or Off-Base Housing</td>
<td>0.300</td>
<td>5.680</td>
<td>0.112</td>
</tr>
<tr>
<td>D2  Rank</td>
<td>0.071</td>
<td>3.878</td>
<td>0.077</td>
</tr>
<tr>
<td>D3  Marital Status</td>
<td>0.160</td>
<td>2.410</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .017$, Adjusted $R^2 = .016$, $p < .05$, $N = 2643$
Table 22

Regression Model: Dependent Variable Cost of Residence

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D9   Time at Duty Station</td>
<td>0.097</td>
<td>5.300</td>
<td>0.114</td>
</tr>
<tr>
<td>D2   Rank</td>
<td>0.072</td>
<td>3.446</td>
<td>0.079</td>
</tr>
<tr>
<td>D10  Years of Service</td>
<td>-0.087</td>
<td>-2.848</td>
<td>-0.075</td>
</tr>
<tr>
<td>D5   Family Status</td>
<td>-0.116</td>
<td>-2.060</td>
<td>-0.044</td>
</tr>
</tbody>
</table>

Notes: $R^2 = 0.017$, Adjusted $R^2 = .016$, $p < .05$, $N = 2530$

Table 23

Regression Model: Dependent Variable Distance to Health Care

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>t-value</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8   On or Off-Base Housing</td>
<td>0.189</td>
<td>4.857</td>
<td>0.093</td>
</tr>
<tr>
<td>D6   Race/Ethnicity</td>
<td>-0.085</td>
<td>-2.313</td>
<td>-0.044</td>
</tr>
<tr>
<td>D9   Time at Duty Station</td>
<td>0.026</td>
<td>2.030</td>
<td>0.039</td>
</tr>
</tbody>
</table>

Notes: $R^2 = .012$, Adjusted $R^2 = .011$, $p < .05$, $N = 2708$