MILITARY SPOUSE Employment REPORT







February 2014





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Table of Contents

Executive Summary	4
Introduction and Background	8
Literature Review	8
Method and Approach	11
American Community Survey	12
Military Spouse Employment Survey	12
Survey Method and Sample	13
Key Demographics	14
Race/Ethnicity	14
Age	15
Educational Attainment	16
Service Characteristics	19
State of Residence	20
PCS Moves	21
Children	23
Months Deployed	24
Residing in a Different Geographical Location	25
Economic Characteristics	26
Unemployment	26
Income	32
Underemployment	45
Selected Key Topics	66
Interrupted Education	66
Difficulty Finding a Job	68
Reasons Why a Spouse Is Unemployed	
Would You Tell an Employer That You Are a Military Spouse	69
Employer Resources and Programs	70
Licensing	72
Most Important Reason for Why You Work	
Policy Programs That Have Worked or Not Worked	77
Unemployment Benefits	80
Childcare	81
Age Earnings	
Survey Specific Conclusions	
Unemployment and Underemployment	85
Income	
Jobs and Occupations	
Programs	
Military Specific Characteristics	
Sample Population Statistics and General Demographics	
Recommendations Based on the Survey Conclusions	
Overall Conclusions	
Recommendations	
References	93

Executive Summary

According to data from the Department of Defense (DoD) Defense Manpower Data Center (DMDC), there were approximately 725,877 spouses of DoD Active Duty members and approximately 413,295 spouses of Reserve and Guard members in 2010. According to the Veterans Administration's (VA) 2010 National Survey of Veterans, it is estimated that there are more than 15 million veterans' spouses in the United States and more than 5.8 million surviving spouses of veterans in the U.S. Studies by RAND (2004) have shown that female Armed Forces spouses are employed at lower rates and earn less thanfemale civilian spouses, on average. Female civilian spouses with the same characteristics as female Armed Forces spouses have better employment outcomes than the average female Armed Forces spouse. RAND (2004) has also shown that female Armed Forces spouses are employed at lower rates and earn less than female civilian spouses, on average. In this study, the majority of Armed Forces spouses believe that the military lifestyle — including frequent moves, deployments, living in areas with poor local labor market conditions, and long hours that keep service members from assisting with parenting — has negatively affected their employment opportunities. Almost half believe that their educational opportunities have suffered. Armed Forces spouses work for different reasons, based on their own education level, their service member's pay grade, and their financial situation. Another study by the Department of the Treasury and the DoD (2012), using data from 2008 DMDC survey, found that nearly 35 percent of Armed Forces spouses in the labor force require licenses or certification for their profession, and that Armed Forces spouses are ten times more likely to have moved across state lines in the last year compared to their civilian counterparts, further complicating this need for licensing or certification.

The overarching objective of this research project was to evaluate the cumulative economic impact on Armed Forces spouses who may be unable to sustain employment due to Permanent Change of Station (PCS) moves, licensure constraints, and lack of career enhancing opportunities. This research project contributes to a body of knowledge that provides policy makers with the information necessary to pool resources for military families and spouses, in order to increase the spouses' chances of obtaining steady employment, earning wages equivalent to those of their civilian peers, and advancing along professional career paths in spite of PCS moves. This research effort will benefit society at large through expanding the knowledge base of challenges for working spouses and working parents and will identify areas for improvement in public policy that can benefit working families. This research will drive new policies and initiatives that will provide benefits to all military spouses and families by providing them with resources to overcome the economic challenges of pursuing a career as a military spouse or a military spouse with children.

Research Method and Approach

Two data sources analyzed for this research effort – the American Community Survey (ACS) and the Military Spouse Employment Survey. The ACS is an ongoing statistical survey by the U.S. Census Bureau that samples a small percentage of the population every year. Data is available from 2000 to 2012. Beginning in 2005, the ACS sample was comprised of over 2 million observations, rising each year to over 3 million observations in 2008 and every year since. The ACS data compares the demographics and wage earnings of Armed Forces spouses to their civilian counterparts.

Although the ACS provides depth and richness of data comparing Armed Forces and civilian spouses in terms of demographics, education, unemployment and income, data was limited and did not provide information on PCS moves and aspects of underemployment. In response to this limitation, the Military Spouse Employment Survey was created to further explore the challenges that military spouses face when pursuing employment.

The Military Spouse Employment Survey was administered online from September 16, 2013 to October 16, 2013. The portion of the survey sample used for the analyses in this report comprised of female respondents with active duty spouses. The two groups which were removed for the analyses performed below were male respondents with active duty spouses and male/female respondents with non-active duty spouses (veterans). Female respondents with active duty spouses comprise the largest group of the full sample, with 2,059 individuals (77.87 percent of the 2,644 total respondents). Although the current report is focused on and limited to female spouses of active duty service members, we acknowledge that there are unique challenges facing male spouses and spouses of veterans as well. In future reports, we will analyze the data separately for each of these groups, so that we can provide a clear picture of the demographics, concerns, and challenges facing male spouses and veteran spouses compared to those of active duty female spouses as a group. Because public policy and interventions which impact women spouses of active duty military members will inform and impact the post-service life course of women veteran spouses and their families, and because the sample is largest for this component, it was appropriate to begin with this report as a first step.

Key Highlights

The data provided several conclusions concerning the demographics of military spouses.

- Active military spouses are predominantly female (95 percent).
- Active military spouses are significantly younger compared to their civilian and veteran counterparts; active duty military spouses are, on average, 33 years of age compared to 47 years of age for civilian spouses and 60 years of age for veteran spouses.
- The active military spouse community has a larger proportion of ethnic/racial minorities as compared to the broader civilian population.
- Active military spouses are more likely to have children (18 and under) at home compared to their civilian counterparts (74 percent versus 59 percent).
- The educational attainment rates of active military spouses are as follows: 22 percent have a high school diploma or less, 33 percent have some college credit, 12 percent have an associate degree, and 25 percent have a bachelor's degree.
- Active military spouses are more likely to have moved within states, across states, and abroad, compared to their civilian and veteran counterparts. The increased likelihood of moving from one geographic location to another by active military spouses interacts with economic issues for these families as indicated by an average personal income which is over 38 percent less than their civilian counterparts.

Unemployment

The characteristics of military spouses which differentiate them from their counterparts contribute to their differentiated economic conditions (employment and compensation). The data provided several conclusions with respect to unemployment for Armed Forces spouses.

In 2012, 18-24 year-old Armed Forces female spouses had the highest unemployment rates at 30 percent (almost three times higher than their civilian counterparts, which were 11 percent). 25-44 year-old Armed Forces female spouses had the second highest unemployment rates at 15 percent (almost three times higher than their civilian counterparts, which were 6 percent). In general, Armed Forces female spouses exhibit higher unemployment rates than their civilian counterparts regardless of:

- Time period (2000-2012)
- Educational attainment
- Age groups (18-24, 25-34, 35-44, and 45-54)
- Whether they have moved or not moved in the last year (though the difference for Armed Forces spouses who have moved is substantially higher)
- Geographical location of their residence
- Whether or not they have children of their own in the home
 - o This holds true when considering the ages of children in the home, as well

Income

The data provided several conclusions with respect to Armed Forces spouses' total personal income. In 2012, Armed Forces female spouses made 38% less than their civilian counterparts. In general, Armed Forces female spouses exhibit lower average total personal income than their civilian and/or veteran counterparts regardless of:

- Time period (2000-2012)
- Educational attainment
- Age groups (18-24, 25-34, 35-44, and 45-54)
- Whether they have moved or not moved in the last year (though the difference for Armed Forces spouses who have moved is substantially higher than that of either civilian or veteran female spouses)
- Geographical location of their residence

Underemployment

A large percentage of respondents are "underemployed" based on two key definitions – education and experience. Underemployment with respect to education is defined as possessing more formal education than is needed at their current/most recent position; this applies to approximately 33 percent of our sample. Underemployment with respect to experience is defined as possessing more years of experience than is needed at their current/most recent position; this applies to approximately 10 percent of our sample. Underemployment with respect to education and experience is defined as possessing more formal education and experience that is needed at their current/most recent position; this applies to about 47 percent of our sample. In total, 90 percent of our employed female respondents reported being underemployed with respect to education, experience and/or both.

Overall, military spouses have been shown to exhibit the effects of an economic disadvantage compared to civilian spouses with respect to unemployment, income and career advancement while at the same time possessing, on average, more advanced education than their civilian counterparts.

Introduction and Background

According to the data from the Department of Defense (DoD) Defense Manpower Data Center (DMDC), there were approximately 725,877 spouses of DoD Active Duty members and approximately 413,295 spouses of Reserve and Guard members in 2010. According to the Veterans Administration's (VA) 2010 National Survey of Veterans, it is estimated that there are more than 15 million veterans' spouses in the United States and more than 5.8 million surviving spouses of veterans in the U.S. RAND (2004) has shown that female Armed Forces spouses are employed at lower rates and earn less than female civilian spouses, on average. Female civilian spouses with the same characteristics as female Armed Forces spouses have better employment outcomes than the average female Armed Forces spouse. RAND (2004) has also shown that female Armed Forces spouses are employed at lower rates and earn less than female civilian spouses, on average. In this study, the majority of Armed Forces spouses believe that the military lifestyle — including frequent moves, deployments, living in areas with poor local labor market conditions, and long hours that keep service members from assisting with parenting — has negatively affected their employment opportunities. Almost half believe that their educational opportunities have suffered. Armed Forces spouses work for different reasons, based on their own education level, their service member's pay grade, and their financial situation. Another study by the Department of the Treasury and the DoD (2012), using data from 2008 DMDC survey, found that nearly 35 percent of Armed Forces spouses in the labor force require licenses or certification for their profession, and that Armed Forces spouses are ten times more likely to have moved across state lines in the last year compared to their civilian counterparts, further complicating this need for licensing or certification.

This research project was conducted by the Institute for Veterans and Military Families (IVMF) at Syracuse University, and was sponsored by the Military Officers Association of America (MOAA). The overarching objective of this research project was to evaluate the cumulative economic impact on Armed Forces/Veteran spouses who may be unable to sustain employment due to Permanent Change of Station (PCS) moves, licensure constraints, and lack of career enhancing opportunities. This research project contributes to a body of knowledge that provides policy makers with the information necessary to pool resources for military families and spouses, in order to increase the spouses' chances of obtaining steady employment, earning wages equivalent to those of their civilian peers, and advancing along professional career paths in spite of PCS moves. This research effort will benefit society at large through expanding the knowledge base of challenges for working spouses and working parents and will identify areas for improvement in public policy that can benefit working families. This research will drive new policies and initiatives that will provide benefits to all military spouses and families by providing them with resources to overcome the economic challenges of pursuing a career as a military spouse or a military spouse with children.

Literature Review

As of 2011, more than 2 million people made up America's all volunteer force, which includes the National Guard, Reserve and active duty service members. More than half of these service members are married, and about 40 percent of them have children (White House 2011). In order to successfully recruit and retain military service members, the needs of both service members and their families must be taken into consideration, in terms of overall well-being. Specifically, there need to be provisions for economic stability and job satisfaction for both service members and their spouses in order for

members of the Armed Forces to be motivated to perform at their best (Castaneda & Harrell 2007). A major factor in determining the quality of life of military spouses is whether they have the ability to pursue a career or employment outside of the home if they choose to do so (Castaneda & Harrell 2007). However, spouses of military service members often face significant challenges in the pursuit of a career over the long term, including the inability to sustain employment due to PCS moves, licensing constraints, and a lack of employment opportunities. Consequently, the difficulty that military spouses face in finding jobs and career advancement opportunities may be related to military personnel leaving the service for other careers (Castaneda & Harrell 2007).

Although there is a significant amount of research on veterans' employment, there is much less available on the employment patterns of military spouses, especially related to their long-term career trajectories. Labor market research is beginning to provide data on employment outcomes among military spouses, however, little is known about the link between marriage, their spouses' military service, and long-term career trajectories (Kleyklamp 2012). Earlier time period differences in the employment patterns of civilian and military spouses naturally accounted for a difference in earnings, however, changes in labor market participation since then have not resulted in equal opportunities for career advancement and earnings. In the early 1970s, wives of military service members were much less likely to work outside the home than wives of civilians (Grossman 1981). Rising prices in cost of living, low military pay, and diminished benefits combined with greater societal acceptance of working wives and mothers resulted in increased labor force activity among service members' wives over the decade, until the participation rate of military wives equaled that of civilian wives (Grossman 1981). However, military spouses are still less likely to be employed compared to the average civilian spouse (Harrell et al. 2004). Military spouses are also more likely to be unemployed, compared to their civilian counterparts (Harrell et al. 2004). Although there are programs supporting employment for military spouses, the effectiveness of these programs is limited by the fact that many spouses are unaware of them, according to the results of the 2012 Military Family Lifestyle Survey. Although about 51% of military spouses were familiar with some of the available resources, among this group only one-third knew about the Military Spouse Employment Partnership (MSEP), and even fewer knew of branchspecific services which targeted spouses (Greentree et al. 2012).

Compared to both military spouses with similar observed characteristics, civilian spouses overall tend to have better employment outcomes. Among those who do work, research has shown that military spouses earn lower hourly wages than civilian spouses, both regionally and nationally (Harrell et al 2004). Military and civilian spouses appear to have similar occupational choices, most commonly holding lower-paid administrative jobs and holding similar rankings in terms of teaching and healthcare jobs (Harrell et al 2004). Although it does not appear that military spouses are being deterred from their chosen professions, there are differences in the willingness to work in lower level positions and the likelihood of higher-paid administrative careers between military and civilian spouses. Military spouses seem to be more likely to accept retail positions, more likely to work in child care, and less likely to have access to administrative positions with higher level earnings, which rank second among civilian spouses. Military spouses also appear to be less likely to work in blue collar, and often male-dominated occupations compared to civilian wives (Harrell et al. 2004).

Military spouses themselves believe that the military has a negative impact on their careers (Castaneda & Harrell 2007), and research findings have supported this belief. However, the issues for military spouses and employment go beyond financial considerations, as military spouses work for a variety of

reasons. Previous studies have shown individuals with multiple roles, specifically those who work outside the home, to be healthier both mentally and physically. This implies that military spouses who pursue employment will be happier and healthier, and therefore more capable of supporting their military service member (Castaneda & Harrell 2007). In a survey performed by the Blue Star Families organization, 41% of military spouses were found to be employed, while over 50% of those who were not employed outside the home reported that they would prefer to be employed (Greentree et al. 2012). Although many spouses are motivated to work for more than economic or career-related reasons, this does not discount the importance of their work in terms of providing financial stability for military families. Researchers have found that two-thirds of spouses in pay grades at and below E-5 had financial difficulties, and many needed or wanted to work (Bureika, Reiser, Salvuccci, Maxfield, Simmons 1999). The study also found that spouses of Marine Corps service members who were wholly dependent on military income were the least satisfied with their lives, while those whose with a higher proportion of their household income from other sources were most satisfied, which emphasizes the importance of spousal employment in military communities (Decision Engineering Associates 2002).

Over the short term, military spouses often have to deal with multiple moves and relocations that make it difficult to hold one job for very long. Military spouses have reported that employers often hesitate to hire them because of perceptions of high turnover, and the likelihood that they will move within a few years (Greentree et. al. 2012). These challenges are even more difficult for women, who already earn much less than their male counterparts, and spouses with other familial caregiving obligations. Because many more women are now entering the military, researchers are now able to begin to analyze the impact of military spouse status on earnings and compare findings for both men and women (Little & Hisnanick 2007). Research has shown that migration results in a decline in overall employment, as well as a decline in hours worked per week in wives of military personnel, among those who were able to remain employed (Cooke & Speirs 2005). For husbands of military personnel, migration also results in a decline in employment, however the decline in employment for men is much smaller than the decline for women (Cooke & Speirs 2005). Another study found that military husbands earned 70% of what civilian husbands earned, while military wives earned 50% of the earnings of civilian wives (Little & Hisnanick 2007). Although being a tied migrant, in terms of having to follow the lead of a military spouse, is detrimental to the labor force participation of both military wives and husbands, military wives are disproportionately impacted by this as many more military spouses are women, and the impacts on women's employment are greater than the impact on men's employment.

Spouses with children are also more vulnerable to hardships stemming from these economic challenges, as the cost of childcare and other necessities continues to rise. Many military families have children, and family responsibilities falling to the military spouse can contribute to employment difficulties as well (Grossman 1981; Strengthening Our Military Families 2011). In the 1980s, children were present in about 75% of all military families, and about 60 percent had one or more children under the age of 6 (Grossman 1981). Relocations can be particularly challenging for military spouses who are responsible for managing their home life, their careers, and the education of their children as well (US Department of Defense 2008). These families also have fewer social safety nets, as many military spouses are unable to qualify for a majority of the nation's labor and workforce development opportunities (US Department of Defense 2008). Because military spouses are not considered to be residents of the states in which their active duty spouse resides, they are not eligible for programs like unemployment compensation and in-state tuition, which could potentially address some of their financial burdens (US Department of Defense 2008). In addition, military bases are not included in national unemployment rate calculations,

which results in the exclusion of military spouses from participation in state-run dislocated worker programs (US Department of Defense 2008).

Further, many military spouses hold jobs in fields that require certifications and licensing, which may not transfer from state to state or in international moves. Although these licensing programs are necessary to ensure that practitioners meet a certain level of competency in their field, there are few uniform measures for licensing across states (US Department of Treasury & US Department of Defense 2012). Each state determines its own requirements for licensing and certification, which results in variation across state lines and a lack of license portability. Military spouses are then unable to transfer existing licenses across state lines, and need to comply with a new application process and new application requirements (US Department of Treasury & US Department of Defense 2012). These administrative and financial processes can act as a significant and time-consuming obstacle to employment to military spouses especially, and repeatedly, as many military spouses undergo multiple moves and relocations (US Department of Treasury & US Department of Defense 2012). Almost 35 percent of working military spouses have a profession that requires licenses or certification, and military spouses are ten times more likely, compared to civilian spouses, to have moved across state lines in the last year (US Department of Treasury & US Department of Defense 2012). In the 2012 Military Family Lifestyle Survey, 92% of military spouses cited job market alignment as a reason for not working, meaning that they were overqualified for local jobs or could not find a job in their field (Greentree et al. 2012).

In order to ensure the quality of life of military families, it is essential that the multiple obstacles to long-term employment for military spouses be identified and overcome. Although many military spouses are in the labor market, they have difficulty finding jobs, advancing along their career paths, and earning wages equal to those of their civilian counterparts because of challenges related to military life. Data also show that limited career opportunities for military spouses may impact whether military personnel leave the service (Harrell et al 2004). Additional research is needed on labor market outcomes for military spouses, especially in terms of the potential damage to their long term earnings and career advancement, and on policy and interventions which may improve labor market outcomes for spouses, and on the long term implications for the all-volunteer force. In this report, the focus is on employment outcomes for military spouses, including both their earnings and career advancement and, when possible, comparing to those of their civilian counterparts.

Method and Approach

The overarching objective of this research project is to evaluate the cumulative economic impact on Armed Forces/Veteran spouses who may be unable to sustain employment due to Permanent Change of Station (PCS) moves, licensure constraints, and lack of career enhancing opportunities. The research effort was performed in three phases.

- Phase 1 Examine existing data to provide demographics and compare wage earnings of Armed Forces/Veterans spouses to civilian counterparts in most populated occupations.
- Phase 2 & 3 Create, Disseminate, Analyze, and Report from Military Spouse Employment Survey.



American Community Survey

In general, there were three main data sources used to evaluate the economic and cumulative impacts of active and veteran military spouses: the American Community Survey (ACS), Current Population Survey (CPS) and Defense Manpower Data Center (DMDC) 2010 Military Family Life Project (MFLP) data. The analyses performed and reported rely mainly on the annual ACS generated data samples which have been collected since 2000 and last updated in 2012. The ACS is generated by the U.S. Census Bureau and is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, social, economic, and housing data every year. The federal government uses the ACS information to evaluate the need for federal programs and to run those programs effectively. Nongovernmental organizations use the ACS in a variety of ways to monitor trends among important subgroups of the population, often at the state level. Journalists use ACS data to report on new or emerging social trends, or to put a piece of anecdotal evidence into a broader context. State and local governments are using ACS information to keep track of year-to-year changes in their jurisdictions. Sample sizes for the annual ACS have varied substantially starting with 2000 which has the smallest total sample, about 371,600 records. The following year, 2001, has over 1.19 million records, and the annual sample remained this size through 2004. Beginning in 2005, the ACS sample was comprised of over 2 million observations, rising each year to over 3 million observations in 2008.

Military Spouse Employment Survey

Although Phase 1 provided depth and richness of data comparing active military, veterans and civilian spouses in terms of demographics, education, occupation, unemployment, and income, the data was limited and did not provide information on PCS moves and underemployment. Through Phase 2 and Phase 3, we were able to collect this additional information and provide further insight to accomplish the overall objective.

The Military Spouse Employment Survey was created to explore the challenges that military spouses face when pursuing employment. The survey allowed participants to tell the stories of military spouses and detail the specific challenges facing military spouses, including challenges to both employment and career advancement as a result of the military lifestyle. This report provides the results from the survey and a thorough analysis of the data collected to increase knowledge and awareness of military spouses' needs and experiences. In addition, this report provides practical and policy recommendations to improve the resources available to military spouses and positively impact their career trajectories.

Survey Method and Sample

The survey was administered online from September 16, 2013 to October 16, 2013. Participation in the survey was voluntary. Responses were confidential and identifying information, such as the participant's name and email address, was not collected. The research effort was reviewed and approved by Syracuse University Institutional Review Board (IRB) under procedures for research involving human subjects. The survey questions primarily consisted of the participant's employment experiences, PCS moves/relocations, and demographics.

The portion of the survey sample used for the analyses to follow is comprised of female respondents with active duty spouses. The two groups which were removed for the analyses performed below were male respondents with active duty spouses and male/female respondents with non-active duty spouses (veterans). Female respondents with active duty spouses comprise the largest group of the full sample, with 2,059 individuals (77.87 percent of the 2,644 total respondents).

One of the key reasons for removing the respondents with veteran spouses is that they more closely resemble civilians, compared to female respondents with active duty spouses with respect to employment and earnings in the workplace. Many of the key issues which plague respondents with active duty spouses, such as PCS moves, are no longer an issue for spouses of veterans. Male respondents with active duty spouses were removed from the analysis sample because they exhibit different job and employment characteristics than their female counterparts. Male respondents with active duty spouses comprise less than four percent of the sample of respondents with active duty spouses. The jobs pursued by male respondents with active duty spouses are generally in different occupations than their female counterparts. Female respondents with active duty spouses tend to be a very homogeneous group for analytical purposes with the only key exception arising between female respondents with officer versus enlisted spouses.

Although the current report is focused on and limited to female spouses of active duty service members, we acknowledge that there are unique challenges facing male spouses and spouses of veterans as well. In future reports, we will analyze the data separately for each of these groups, so that we can provide a clear picture of the demographics, concerns, and challenges facing male spouses and veteran spouses compared to those of active duty female spouses as a group.

Sample Selection for Analysis

99.77% of the respondents to the survey indicated that their spouses had served in the active duty military, in the past or presently. Active duty includes serving in the U.S. Armed Forces as well as activation from the Reserves or National Guard. The respondents who selected "Yes, currently serving" in Table 1, will form the basis for the analysis.

Table 1. Served on Active Duty

Status	Freq.	Percent	Cumulative Percent
Yes, in the past, but not now	412	16.06	16.06



Yes, currently serving	2,147	83.70	99.77
No, never on active duty except for initial/basic training	1	0.04	99.81
No, never served in the Armed Forces	5	0.19	100.00
Total	2,565	100.00	

The percentage of female respondents with active duty spouses, 96.04 percent, is expected since the active duty military force is still comprised principally of males. This percentage is consistent with the 2012 ACS which indicates that 95.17 percent (weighted) of the spouses in active duty households are female (Table 2). The basis for the remaining analyses will be female respondents with active duty spouses, comprised of 2,059 respondents which comprises 80.43 percent of the valid responding sample (Table 3).

Table 2. Gender

Gender	Freq.	Percent	Cumulative Percent	2012 ACS Percent
Male	85	3.96	3.96	4.83
Female	2,059	96.04	100.00	95.17
Total	2,144	100.00		100.00

Table 3. Female Respondents with Spouses who Served on Active Duty

Gender	Males		Females		Percent of
Status	Freq.	Percent	Freq.	Percent	Females
Yes, in the past, but not now	18	17.31	392	15.96	95.61
Yes, currently serving	85	81.73	2,059	83.84	96.03
No, never on active duty except for initial/basic training	1	0.96	0	0.00	N/A
No, never served in the Armed Forces	0	0.00	5	0.20	100.00
Total	104	100.00	2,456	100.00	95.94
Female Respondents with Active Duty Spouses -					
Percent of Total Relevant Sample				80.43	

Key Demographics

Race/Ethnicity

The results of Table 4 show that over 80 percent of female respondents with active duty spouses indicated that they are Caucasian (some respondents indicated belonging to more than one ethnic group) which is consistent with the 2012 ACS percentage of 81.29 percent (weighted). Over 8 percent of the respondents indicated that they were Hispanic/Latino, followed by over 5.5 percent African American. For the 2012 ACS, Hispanic and African American comprised 14.69 percent and 9.24 percent of the female spouses of active duty personnel, which is obviously higher than the survey respondents.

Table 4. Race/Ethnicity



Race/Ethnicity	Freq.	Percent	Cumulative Percent	2012 ACS Percent
American Indian or Alaska Native	43	2.06	2.06	1.74
Asian or Pacific Islander	70	3.36	5.42	7.67
African American	115	5.52	10.94	9.24
Hispanic/Latino	173	8.30	19.24	14.69
Caucasian	1,683	80.76	100.00	81.29
Total	2,173	100.00		

Age

Table 5 presents the calculated age for respondents in years based on responses to questions Q17, "What year were you born" and Q18, "What Month were you born." The results of Table 5 are presented for female respondents with active duty spouses. Ninety percent of the respondents are under the age of 45, while 50 percent of the respondents are under the age of 34. The average age for the respondent sample is 33.80 years of age (standard deviation of 7.65) with a median age of 33 years of age. The average age of the female respondents of active duty spouses is consistent with the average age reflected by the ACS 2012 of 32.64 years of age (weighted). The age distribution is quite skewed to the right (toward older ages) as Figure 1 demonstrates. As the average age, approximately 34 years of age, and the 'skewness' of the distribution indicate, the female respondents with active duty spouses are a young population with 90 percent of the sample population under the age of 45 years of age

Figure 1 also presents the age distribution for female respondents with non-active duty spouses (veterans). The distribution for female respondents with non-active duty spouses in Figure 1 is skewed more to the left (toward younger ages) with an average age of 52.81 years of age (standard deviation of 12.92) and a median age of 53 years of age. Thus, the female respondents with non-active duty spouses are a much older population, on average, than their female counterparts with active duty spouses. Analyzing these two sample populations together would provide mixed results in terms of employment, income, children, etc., and, thus, analyzing the female respondents with active duty spouses as a separate sample population is appropriate.

Table 5. Computed Age in Years for Female Respondents with Active Duty Spouses

Age Groups	Freq.	Percent	Cumulative Percent
18-24	186	9.43	9.43
25-34	937	47.52	56.95
35-44	655	33.22	90.16
45 and older	194	9.84	100.00
Total	1,972	100.00	



6 5 4 Percent 3 2 1 0 18 27 36 45 54 63 73 Age Active Duty Spouses Non-Active Duty Spouses

Figure 1. Female Respondents' Age Distribution for Respondents With and Without Active duty

Spouses

Educational Attainment

Table 6 and Figure 2 presents the distribution of educational attainment among female respondents with active duty spouses. Nearly 60 percent of the female respondents with active duty spouses exhibit a Bachelor's degree or Master's degree. Only a few of the respondents (0.15 percent) exhibit less than a high school degree or GED equivalent. Over 96 percent of the respondents possess some college credit or more with over 11 percent exhibiting one or more years of college credit, but no degree. The high level of education exhibited by this respondent spousal group (with active duty spouses) reflects the education level required of the active duty population, and the fact that educated individuals tend to marry similarly educated individuals. The fact that over 45 percent of the female respondents of active duty spouses have spouses who are officers also contributes to this highly educated percentage. When comparing the survey respondents' educational attainment with the 2012 ACS, there is an over representation for the Bachelor's, Master's, Professional and Doctoral degrees and an under representation of high school diploma or less and some college (see Figure 2 for comparison).

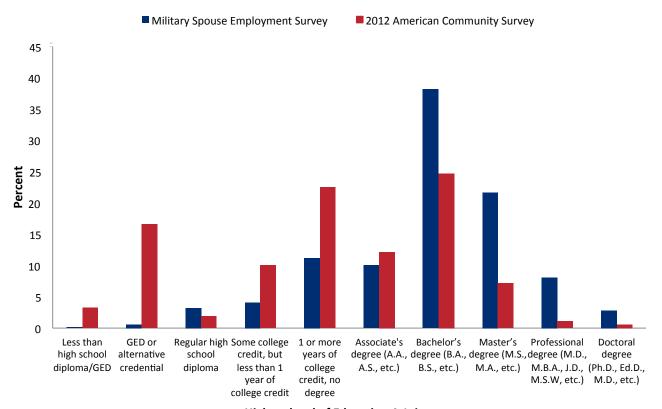
Table 6. Educational Attainment of Female Respondents with Active Duty Spouses

Response	Freq.	Percent	Cumulative Percent	2012 ACS Percent
Less than high school diploma/GED	3	0.15	0.15	3.26
Regular high school diploma	65	3.21	3.36	16.63
GED or alternative credential	11	0.54	3.91	1.89

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Some college credit, but less than 1 year of college credit	83	4.10	8.01	10.04
1 or more years of college credit, no degree	226	11.18	19.19	22.53
Associate's degree (A.A., A.S., etc.)	203	10.04	29.23	12.16
Bachelor's degree (B.A., B.S., etc.)	772	38.18	67.41	24.71
Master's degree (M.S., M.A., etc.)	439	21.71	89.12	7.14
Professional degree (M.D., M.B.A., J.D., M.S.W, etc.)	163	8.06	97.18	1.07
Doctoral degree (Ph.D., Ed.D., M.D., etc.)	57	2.82	100.00	0.56
Total	2,022	100.00		

Figure 2. Educational Attainment of Female Respondents with Active Duty Spouses



Highest level of Education Attainment

Table 7 presents the educational attainment of the female respondents (whose spouses are active duty) by officer and enlisted status of their active duty spouses. Table 7 results are based on responses to question Q33, the highest degree or level of school that the respondent has completed. The distribution of educational attainment for female respondents by the enlisted/officer status of their active duty spouses is very similar, contrary to what Table 6 exhibited. The correlation between the distributions of educational attainment for enlisted and officer is 0.8062, which indicates that the two distributions are statistically significantly positively correlated with each other.



As Figure 3 clearly exhibits, the respondents of active duty officers exhibit higher percentages for Bachelor's degree and above compared to their enlisted counterparts. Over 88 percent of the officer spouses possess a Bachelor's degree or higher while less than 65 percent of the enlisted spouses possess a Bachelor's degree or higher. Though the educational attainment of the female respondents with officer spouses is less than the 95 percent reflected in Table 6, the educational attainment of the female respondents with enlisted spouses is nearly three times higher than their active duty enlisted spouses of 22 percent (Table 7 and Figure 3).

Table 7. Educational Attainment of Female Respondents by Officer/Enlisted Status of the Female Respondents' Active Duty Spouses

		Enlisted	<u> </u>		Office	r
			Cumulative			Cumulative
Educational Attainment	Freq.	Percent	Percent	Freq.	Percent	Percent
Less than high school						
diploma/GED	3	0.28	0.28	0	0.00	0.00
Regular high school						
diploma	60	5.54	5.82	5	0.54	0.54
GED or alternative						
credential	10	0.92	6.74	1	0.11	0.65
Some college credit, but						
less than 1 year of						
college credit	74	6.83	13.57	9	0.98	1.63
1 or more years of						
college credit, no degree	184	16.99	30.56	42	4.55	6.18
Associate's degree (A.A.,						
A.S., etc.)	156	14.40	44.97	47	5.09	11.27
Bachelor's degree (B.A.,						
B.S., etc.)	381	35.18	80.15	385	41.71	52.98
Master's degree (M.S.,						
M.A., etc.)	160	14.77	94.92	271	29.36	82.34
Professional degree						
(M.D., M.B.A., J.D.,						
M.S.W, etc.)	44	4.06	98.98	118	12.78	95.12
Doctoral degree (Ph.D.,						
Ed. D., M.D., etc.)	11	1.02	100.00	45	4.88	100.00
Total	1,083	100.00		923	100.00	
Correlation between						
Officer and Enlisted	0.8062					

■ Enlisted ■ Officer 45 = 40 35 30 **Bercent** 25 20 15 10 5 0 Educational Attainment Naster's degree M.S.

Figure 3. Educational Attainment of Female Respondents by Officer/Enlisted Status of the Female **Respondents' Active Duty Spouses**

Service Characteristics

Table 8 provides the distribution of military personnel by service and rank/grade as of August 31, 2013. As the table indicates, the Army is the largest of the four principle branches, followed by the Navy and the Air Force. The ratio of enlisted to officer personnel across the branches of service is 4.82, i.e., for every 4.82 enlisted personnel, there is one officer. This ratio has varied over time, ranging as high as 5.34 in 1995, and, as Table 8 indicates, the ratio varies by branch of service with a high of 8.10 for the Marine Corps and a low of 4.06 for the Air Force. These numbers are important for understanding how the survey sample compares to the actual force.

Table 8. Military Personnel by Rank and Branch of Service, August 2013 (Defense Manpower Data Center, DMDC)

Rank	Army	Navy	Marine Corps	Air Force	Total
Total Officer	98,423	52,855	21,776	65,020	238,074
Total Enlisted	447,075	261,072	176,417	263,917	1,148,481
Ratio of Enlisted to Officer	4.544	4.9394	8.1014	4.0590	4.8241



Table 9 (respondents with active duty spouses, only) indicates that the highest number of responses comes from the Army, which is the largest branch of service (Table 8), followed by the Air Force (the second largest branch of service). Though the percentages by the four primary branches of service (Army, Navy, Air Force and Marine) from the sample do not exactly match the actual percentages from Table 8, the percentages for each branch of service (Army, Navy, Air Force and Marine) are very close, all of which are less than a single percentage point off from the Table 8 percentages for the four major branches of service.

Table 9. Branch of Service

Status	Freq.	Percent	Cumulative Percent	Actual Percent, August, 2013 (DMDC)
Army	707	33.43	33.43	34.32
Navy	531	25.11	58.53	24.46
Air Force	566	26.76	85.30	27.09
Marine Corps	311	14.70	100.00	14.13
Total	2,115	100.00		100.00

State of Residence

This question was displayed only to spouses who had indicated that they currently reside in the U.S. The state with the largest percentage of female respondents (with active duty spouses) as residents is Virginia with 14.12 percent followed by California with 12.10 percent. The 2012 ACS provides similar results though the order of the top four states changes.

Table 10. In Which U.S. State Do You Currently Reside? Top 10 States

Military Spouse Employment Survey			ACS 2012		
State	Freq.	Percent	State	Percent	
Virginia	252	14.12	California	11.41	
California	216	12.10	Texas	10.04	
North Carolina	137	7.68	North Carolina	9.80	
Texas	124	6.95	Virginia	9.16	
Florida	108	6.05	Georgia	5.53	
Washington	96	5.38	Florida	4.78	
Georgia	87	4.87	Washington	4.59	
Maryland	71	3.98	Hawaii	3.57	
Hawaii	67	3.75	New York	3.19	
South Carolina	42	2.35	Colorado	2.94	

PCS Moves

This question was displayed only to spouses who had indicated that they had experienced a PCS move during their spouse's active duty career. Over 79 percent of the female respondents with active duty spouses had made a PCS move across state lines or abroad in the past five years.

Table 11. Number of PCS Moves Across State Lines and Abroad Within the Past Five Years?

Response	Freq.	Percent	Cumulative Percent
0	432	20.98	20.98
1	595	28.90	49.88
2	577	28.02	77.90
3	300	14.57	92.47
4	99	4.81	97.28
5	36	1.75	99.03
6	11	0.53	99.56
7	5	0.24	99.81
10 or more	4	0.20	100.00
Total	1,840	100.00	

Figure 4. Number of PCS Moves Across State Lines and Abroad Within the Past Five Years?

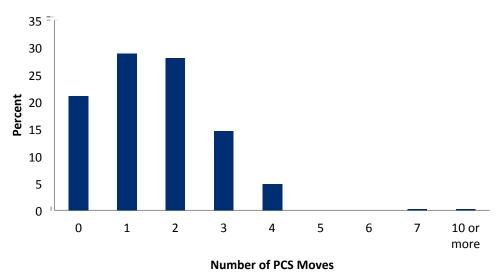
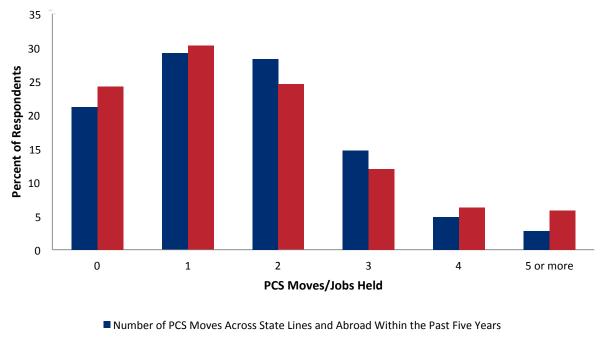


Figure 5 presents the number of PCS moves, across state lines and/or abroad, within the past five years and the number of jobs held in the past five year by female respondents with active duty spouses in the same figure. The trend between the two data series is obvious and expected – the more often respondents move, the more frequently they will change jobs. This is a part of the military lifestyle which, through assignment and training policy, can be lessened (fewer moves, and, thus, fewer job changes) but cannot be eliminated. Of course, these PCS moves can adversely affect total personal income and career advancement, as well as create tendencies for higher unemployment.



Figure 5. Number of PCS Moves Across State Lines and Abroad Within the Past Five Years and the Number of Jobs Held in the Past Five Years



■ Number of Jobs Held Within the Past Five Years

The question, "During/after your last PCS move, please indicate the items for which the military provided you with resources," was displayed only to spouses who had indicated that they had experienced a PCS move during their spouse's active duty career. The largest percentage exhibited in Table 12 is for healthcare (32.30%), followed by housing (27.28%), and local military support programs (13.89%).

Table 12. During/After Your Last PCS Move, Please Indicate the Items for Which the Military Provided You With Resources. Select all that Apply.

Response	Percent	Cumulative Percent
Employment opportunities	7.32	7.32
Childcare	7.57	14.89
Housing	27.28	42.17
Schooling for children/dependents	8.44	50.61
Education/Vocational training	3.21	53.82
Local military-support programs	13.89	67.70
Healthcare	32.30	100.00

Table 13 presents the results of the question, "During the past 5 years, how many jobs have you held, not including unpaid or volunteer positions?" Table 13 indicates that the 29.35 percent of the respondents held two jobs in the past five years (excludes "Prefer not to answer" responses) which is high, given that the average job tenure in the workforce is 4.6 years (Bureau of Labor Statistics,

September, 2012). Over 47 percent of the respondents have held three or more jobs in the past five years. The average job tenure in the national workforce has been rising over the last ten years from 3.7 years in 2002 to 4.6 years in 2012 and has risen by 0.5 years since January, 2008 (http://www.bls.gov/news.release/pdf/tenure.pdf). Workplace stability is difficult to maintain for female respondents with active duty spouses due to the regularity of PCS moves imposed upon their active duty spouses.

Table 13. During the Past 5 Years, How Many Jobs Have You Held, not Including Unpaid or Volunteer Positions?

Response	Freq.	Percent	Cumulative Percent
1	437	23.49	23.49
2	546	29.35	52.85
3	443	23.82	76.67
4	216	11.61	88.28
5	113	6.08	94.35
6	49	2.63	96.99
7	22	1.18	98.17
8	17	0.91	99.09
9	5	0.27	99.35
10	8	0.43	99.78
More than 10, specify	4	0.22	100.00
Total	1,860	100.00	

Children

Table 14 and Figure 6 present the responses to question "How many children do you (or your spouse) have, living at home with you either part-time or full-time, in each of six age groups: Less than 1 year old, 1 year to less than 2 years old, 2-5 years old, 6-12 years old, 13 to 15 years old, and 16 to less than 18 years old. The highest percentages exhibited in Table 14 are for the age group "6 to 12 years old" at 33.73 percent, followed by "2 to 5 years old" at 24.82 percent and "13 to 15 years old" at 15.50 percent. Respondents could have children in more than one age group and, thus, the second part of Table 14 provides the number of children per respondent based off responses to the question. As the table indicates, 40.21 percent of the respondents have no children living at home, either part-time or full-time and 46.87 percent of the respondents have 2 or less children living at home. Parts of this do not compare well with the 2012 ACS results, which indicate that over 29 percent of the female spouses of active duty personnel have no children living at home.

Table 14. Age Groups of Children Under the Age of 18, Living at Home, Part-Time or Full-Time, with Female Respondents of Active Duty Spouses

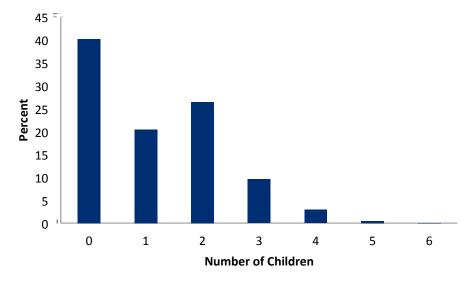
						2012
						ACS
Response	Freq.	Percent	Response	Freq.	Percent	Percent



Less than 1 year old	175	9.01
1 year to less than 2 years old	165	8.50
2 to 5 years old	482	24.82
6 to 12 years old	655	33.73
13 to 15 years old	301	15.50
16 to less than 18 years old	164	8.44
Total	1,942	100.00
Percent of total - sample of		
female respondents with		
active duty spouses		93.32

0 children	828	40.21	29.32
1 child	420	20.40	25.43
2 children	545	26.47	28.23
3 children	197	9.57	11.99
4 children	59	2.87	4.10
5 children	9	0.44	0.82
6 children	1	0.05	0.11
Total	2,059	100.00	100.00

Figure 6. Number of Children Under the Age of 18 Living at Home, Part-Time or Full-Time for Female Respondents with Active Duty Spouses



Months Deployed

The question, "During your spouse's active duty career how many TOTAL MONTHS has he/she been deployed (include all deployments)? Only include the months that qualified for family separation allowance," was displayed only to spouses who had indicated that they had a deployment/separation for more than 30 consecutive days. The mean response value for Table 15 is about 24 months while the median response value is 21 months. Of course, the longer in individual is on active duty service, the likelihood of more months of deployment would be expected to rise.

Table 15. During Your Spouse's Active Duty Career How Many TOTAL MONTHS Has He or She Been Deployed (Include All Deployments)? Only Include the Months That Qualified for Family Separation Allowance.

			Cumulative		
Month Groups	Freq.	Percent	Percent	Percent	Cumulative Percent



NA	29	1.58	1.58		
0 month	7	0.38	1.96	0.40	0.40
1 - 12 months	509	27.68	29.64	29.17	29.57
13 - 24 months	538	29.26	58.89	30.83	60.40
25 - 36 months	325	17.67	76.56	18.62	79.03
More than 37 months	366	19.90	96.47	20.97	100.00
Prefer not to answer	65	3.53	100.00		
Total	1,839	100.00		100.00	

Residing in a Different Geographical Location

For the question, "Have you ever resided in a different geographical location from your spouse," over 59 percent of the female respondents with active duty spouses have resided in a geographical location that was different from the geographical location of their spouse (Table 16).

Table 16. Have You Ever Resided in a Different Geographical Location From Your Spouse?

Response	Freq.	Percent	Cumulative Percent
Yes	1,222	59.61	59.61
No	828	40.39	100.00
Total	2,050	100.00	

The question, "Please indicate the reasons why you have resided in a different geographical location from your spouse. Select all that apply," was displayed only to spouses who had indicated that they resided in a different geographical location from their spouse. The response option with the highest percentage of responses by female respondents with active duty spouses is "Deployment/Family Separation" with 34.06 percent (excluding "Other, please specify" and "Prefer not to answer" responses), followed by "To maintain a career after PCS move" with 18.06 percent of the responses. Five of the options exhibit double digit percentages, thus, there is no one particular reason, beyond "Deployment/Family Separation," posed that tends to dominate the other reasons.

Table 17. Please Indicate the Reasons Why You Have Resided in a Different Geographical Location From Your Spouse. Select All That Apply

Response	Percent	Cumulative Percent
To maintain a career after PCS move	18.06	18.06
To maintain enrollment in educational program/training	13.22	31.28
To afford student loan payments/student obligations	2.77	34.06
Lack of employment opportunities in spouse's location	14.63	48.69
Familial obligations	10.75	59.43
Deployment/Family Separation	34.06	93.49
Educational program	6.51	100.00

Economic Characteristics

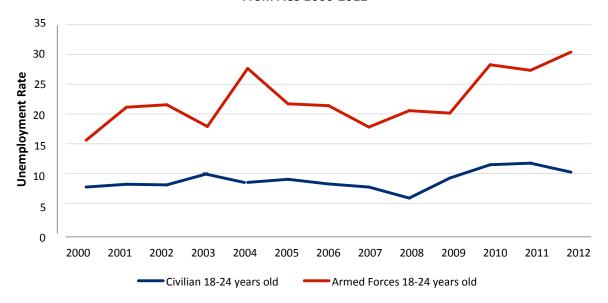
Unemployment

Table 20 and Figures 7 through 9 present the annual unemployment rates for Civilian and Armed Forces female spouses for the age groups 18 to 24 years, 25 to 44 years, and 45 years and older over the 2000 to 2012 time period (developed from the ACS). For age groups 18 to 24 years and 25 to 44 years, the gap (difference) between the unemployment rate of Armed Forces female spouses and civilian female spouses has not declined. In fact, for all three age groups the average (over the 13 years) of the gap between the unemployment rates of Armed Forces female spouses versus civilian female spouses has been positive, 13.06, 5.10, and 1.96, respectively (18 to 24 years, 25 to 44 years, and 45 years and older). Thus, only the 45 years and older group has exhibited a small gap which has generally declined between the unemployment rates of Armed Forces female spouses and civilian female spouses over the 2000 to 2012 time period, actually turning in favor of the Armed Forces female spouses in 2012. The rise and fall in the economy can be blamed for the variation in the unemployment rates over time, but the gap between Armed Forces and civilian female spouses is driven by other factors, such as number of PCS moves/spousal deployments and all of the job related/affected aspects that accompany such moves/deployments.

Table 20. Unemployment Rates for Civilian and Armed Forces Female Spouses by Age Group Over the 2000 to 2012 Time Period, ACS

Year	Civilian 18-24 years old	Armed Forces 18-24 years old	Civilian 25- 44 years old	Armed Forces 25-44 years old	Civilian 45 years and over	Armed Forces 45 years and over
2000	8.08	15.49	3.32	7.23	2.73	3.44
2001	8.54	21.07	4.07	8.77	3.16	3.72
2002	8.43	21.44	5.09	8.83	3.68	14.78
2003	10.30	17.83	5.27	7.82	3.84	6.76
2004	8.83	27.58	5.07	14.38	3.73	4.47
2005	9.38	21.60	4.89	8.57	3.53	4.29
2006	8.59	21.33	4.33	8.22	3.16	3.91
2007	8.05	17.71	4.11	8.31	3.00	3.87
2008	6.22	20.45	3.92	6.60	3.11	6.21
2009	9.60	20.03	6.15	11.45	5.06	5.69
2010	11.80	28.19	6.72	12.01	5.86	6.69
2011	12.10	27.23	6.47	14.59	5.39	8.65
2012	10.59	30.32	5.80	14.78	4.89	4.18
Average	9.27	22.33	5.02	10.12	3.93	5.90
Average Gap - Armed						
Forces Minus Civilian		13.06		5.10		1.96

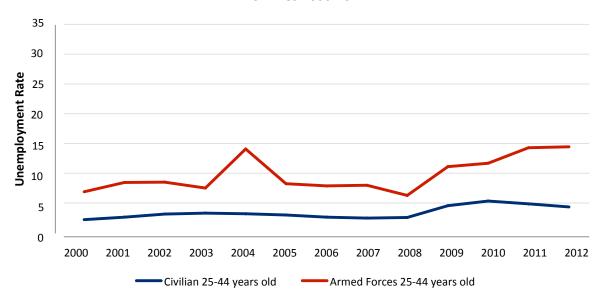
Figure 7. Unemployment Rates for Civilian and Armed Forces Female Spouses, Aged 18 to 24 Years
From ACS 2000-2012



Note: Population in the labor force.

Data source: American Community Survey, 2000-2012

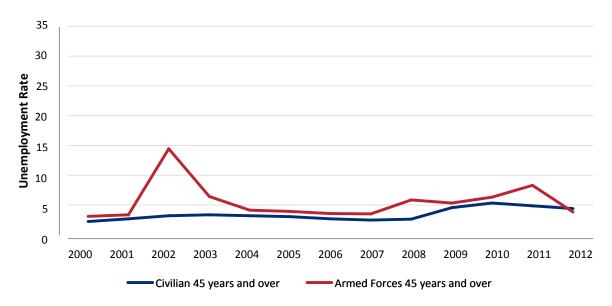
Figure 8. Unemployment Rates for Civilian and Armed Forces Female Spouses, Aged 25 to 44 Years
From ACS 2000-2012



Note: Population in the labor force.

Data source: American Community Survey, 2000-2012

Figure 9. Unemployment Rates for Civilian and Armed Forces Female Spouses, Aged 45 Years and Older From ACS 2000-2012



Note: Population in the labor force.

Data source: American Community Survey, 2000-2012

Table 21 presents the unemployment rates for the female respondents with active duty spouses and with veteran spouses. The calculation of unemployment rates for the two groups uses the same procedure and questions which are utilized by the Census Bureau. The unemployment rates presented in Table 21 indicate that female respondents with active duty spouses are 1.464 times more likely to be unemployed than that female respondents with veteran spouses. When comparing the unemployment rates exhibited by the survey respondents to the 2012 ACS unemployment rates, the survey unemployment rates are consistently higher. As indicated earlier, the survey sample over-represents officers relative to enlisted active duty personnel and therefore the educational attainment of Armed Forces female spouses in the survey respondents. In both cases, one would expect the unemployment rates to be lower for the survey respondents than the 2012 ACS, not higher, due to the particular types of over-representations. The ACS does not report whether the individuals identified as active duty personnel are enlisted or officer.

Table 21. Unemployment Rate

Group	Military Spouse Employment Survey Unemployment Rate	ACS 2012 Unemployment Rate
Females with active duty spouses	32.17	16.58
Females with veteran spouses	21.83	5.01
Ratio of female respondents with active duty spouses		
compared to female respondents with veteran spouses	1.474	3.309
Civilian female spouses		5.43

Table 22 presents the unemployment rate for female respondents with active duty spouses by age group. The last two age groups have too few observations (single digit or zero) for a reliable estimate of their unemployment rate. Two obvious results exhibited in Table 22 are: (1) each of the four age group specific unemployment rates is over 29 percent, reaching a high of 35.46 at age group 35 to 44 and (2) the unemployment rates by age group exhibit a significant increase as the age group increases from age group 25 to 34 to age group 35 to 44, i.e., age groups 16 to 34 reflect about a 29 percent unemployment rates while age groups 35 to 54 reflect about a 35 percent unemployment rate (see Figure 10).

Table 22. Unemployment Rate by Age Group for Female Respondents of Active Duty Spouses

Age Group	Military Spouse Employment Survey Unemployment Rate	Percent of Survey Total Sample	ACS 2012 Unemployment Rate
16 to 24	29.37	9.77	29.68
25 to 34	29.73	47.34	17.07
35 to 44	35.46	33.13	12.38
45 to 54	35.04	9.36	4.79

Figure 10. Unemployment Rates for Female Respondents of Active Duty Spouses by Age Groups

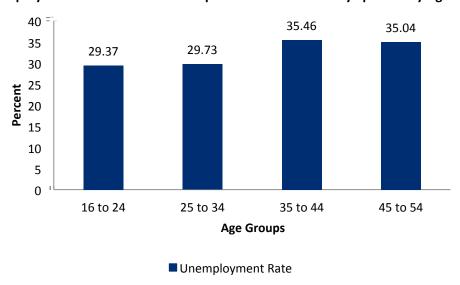


Table 23 presents the unemployment rates for female respondents with active duty spouses by population size of area of residence. The highest unemployment rate for the total sample is exhibited by "Other" population areas, which are comprised of "rural area but not a farm or ranch" or "farm or ranch," 40.18 percent. No other unemployment rates by population size of area of residence is close for the total sample of female respondents (see Figure 11).



Table 23. Unemployment Rates by Population Size of Geographic Location of Residence and Enlisted/Officer Status of Respondent's Active Duty Spouse

	Total
Large Metropolitan Area (over 500,000)	29.71
Large city (250,000 - 500,000)	33.51
Medium-sized city (50,000-250,000)	33.67
Small city or town (under 50,000)	29.91
Other (Rural Area but Not a Farm or Ranch and Farm or Ranch)	40.18

Figure 11. Unemployment Rates for Female Respondents of Active Duty Spouses by Population Size of Geographic Location of Residence

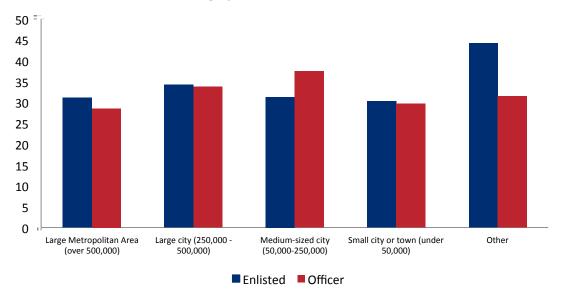


Table 24 presents the unemployment rates for the female respondents with active duty spouses based on responses question "What is the highest degree or level of school that you have completed?" The unemployment rate for respondents that have attained a Doctoral degree is 15.56 percent, the lowest across the levels of educational attainment, while the highest unemployment rate is displayed by Associate's degree at 46.53 percent. Respondents with a Bachelor's degree or more exhibit lower unemployment rates than respondents with less than a Bachelor's degree (Figure 12).

Table 24. Unemployment Rates by Educational Attainment of Respondent

Educational Attainment	Military Spouse Employment Survey Unemployment Rate	ACS 2012 Unemployment Rate
Less than high school diploma/GED	Small Numbers	29.35
Regular high school diploma	40.43	21.23
GED or alternative credential	Small Numbers	
Some college credit, but less than 1 year of college credit	33.33	22.37



1 or more years of college credit, no degree	36.36	16.69
Associate's degree (A.A., A.S., etc.)	46.53	16.25
Bachelor's degree (B.A., B.S., etc.)	29.07	13.07
Master's degree (M.S., M.A., etc.)	30.95	13.52
Professional degree (M.D., M.B.A., J.D., M.S.W, etc.)	28.57	3.16
Doctoral degree (Ph.D., Ed. D., M.D., etc.)	15.56	3.40
Total	31.90	16.58

Figure 12. Unemployment Rates for Female Respondents of Active Duty Spouses by Educational Attainment

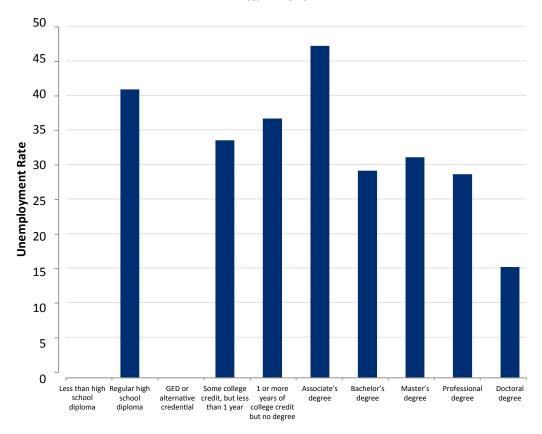
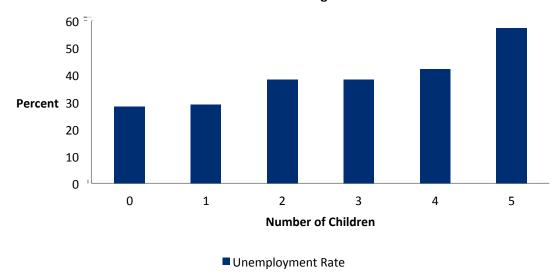


Table 25 presents the unemployment rates for female respondents with active duty spouses based on responses to question "How many children do you (or your spouse) have, living at home with you either part-time or full-time, in each age group?" The unemployment rate for respondents tends to increase as the number of children under the age of 18 living at home increases (see Figure 13). This upward trend in the unemployment rate may be a reflection of the lack of flexibility with which the female respondents of active duty military spouses are confronted, the lack of reliable childcare matching the hours of work, and/or insufficient employment opportunities. This upward trend is also exhibited by the ACS 2012 data for female spouses of active duty personnel and civilian female spouses, though not as high.

Table 25. Unemployment Rates by Number of Children under the Age of 18 Living at Home

Number of Children	Military Spouse Employment Survey Unemployment Rate	Percent of Sample	ACS 2012 Armed Forces Female Spouses	ACS 2012 Civilian Female Spouses
0	28.32	45.15	15.35	5.02
1	28.98	18.66	15.81	5.39
2	38.17	24.52	16.02	5.28
3	38.17	8.64	12.35	6.45
4	42.11	2.50	9.83	8.80
5	57.14	0.46	22.56	8.76

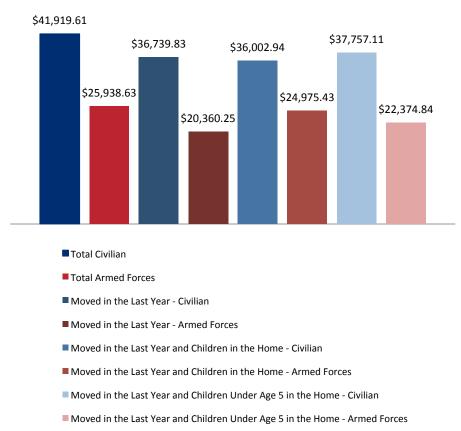
Figure 13. Unemployment Rates for Female Respondents of Active Duty Spouses by Number of Children Under 18 Living at Home



Income

In 2012, Armed Forces female spouses had an average total personal income that was over 38% less than that of their civilian counterparts. For individuals who have moved in the last year, Armed Forces female spouses exhibited an average total personal income that was 44% percent less than their civilian counterparts. If they did not move in the last year, the difference in average total personal income between Armed Forces and civilian female spouses would have been shown a lower gap, at about 31% less for Armed Forces female spouses. Adding children under the age of five in the home to the analysis increases the difference in average total personal income between Armed Forces and civilian female spouses to over 40%. Moving in the last year and having children in the home definitely reduce the earning potential for Armed Forces female spouses compared to their civilian counterparts.

Figure 14. Average Total Personal Income for Armed Forces and Civilian Female Spouses from the ACS 2012



Note: Population in the labor force.

Data source: American Community Survey, 2012

The income gap between Armed Forces and civilian female spouses is not a recent phenomenon. Table 26 presents the total personal income for Armed Forces and civilian female spouses based on the ACS for 2000 to 2012. Not only is the difference between Armed Forces and civilian female spouses significant, but it also increases over the 2000 to 2012 time period, as reinforced by Figure 15.

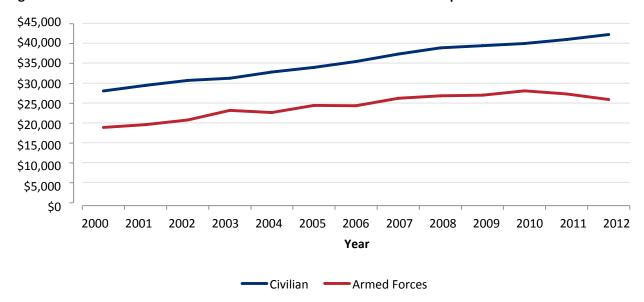
Table 26. Total Personal Income for Civilian and Armed Forces Female Spouses

Year	Civilian	Armed Forces	Difference (Civilian minus Armed Forces)
2000	\$27,682	\$18,894	\$8,788
2001	\$29,105	\$19,599	\$9,506
2002	\$30,364	\$20,798	\$9,566
2003	\$30,926	\$23,183	\$7,743
2004	\$32,456	\$22,635	\$9,821
2005	\$33,638	\$24,462	\$9,176
2006	\$35,106	\$24,323	\$10,783
2007	\$37,019	\$26,230	\$10,789



2008	\$38,578	\$26,826	\$11,752
2009	\$39,086	\$26,979	\$12,107
2010	\$39,607	\$28,105	\$11,502
2011	\$40,660	\$27,341	\$13,319
2012	\$41,920	\$25,939	\$15,981

Figure 15. Total Personal Income for Civilian and Armed Forces Female Spouses From ACS 2000-2012



Note: Population in the labor force.

Data source: American Community Survey, 2000-2012

Table 27 presents the income figures deduced from "What was your personal income (from wages, salary, commissions, bonuses, or tips) during 2013: Exclude your spouse's (if appropriate) income." The total respondent's population with valid responses to the 2013 income question (1,856 respondents) exhibited an average income of \$24,491. When the respondents sample population was divided between active and non-active duty spouses, respondents with active duty spouses exhibited an average income of \$23,132, while respondents with non-active duty spouses exhibited an average income of \$31,393. On average, respondents with non-active spouses exhibit a 35.71 percent higher income for 2013 than respondents with active duty spouses, and this difference is statistically significant at the 99 percent level of confidence.

Comparing respondents of spouses who were officers versus enlisted personnel (Table 27), respondents with officer spouses exhibit an average 2013 income of \$26,900 versus \$19,677 for respondents with enlisted spouses. Female respondents with officer spouses exhibit average income which is 36.71 percent higher, on average, than female respondents with enlisted spouses, and this difference is statistically significant at the 99 percent level of confidence.

Table 27. Comparison of Income for Respondents

			Standard		ACS 2012
Subpopulation of Respondents	Observations	Mean	Deviation	Median	Mean
Total Respondents	1,856	24,490.92	34,427.99	10,000	
Respondents with Active Duty Spouses	1,604	23,132.28	32,944.16	10,000	23,830.20
Respondents without Active Duty					
Spouses	216	31,393.20	40,948.16	20,000	27,841.04
Officer Spouses (Active Duty spouses)	760	26,899.85	39,598.16	10,000	
Enlisted Spouses (Active Duty spouses)	838	19,676.95	24,791.04	9,000	

Table 28 presents the total gross (before tax) income for the past 12 months by size of geographic location in which the respondent resides (Census Bureau definitions). In every type of community (by population size), female respondents with officer spouses exhibit higher average gross income than their enlisted counterparts. As one would expect, one of the key drivers in this result are the differences in the level of educational attainment between female respondents of officer versus enlisted spouses (refer to Table 7). Table 28 also suggests that more populated areas offer better job and earnings opportunities, regardless of the officer/enlisted status of the respondents' spouses (see Figure 16); this is reinforced by the decline in gross income as respondents indicate that they reside in less populated areas.

Table 28. Total Personal Income by Size of Geographic Location of Residence

	Enlisted	Officer	Total
Large Metropolitan Area (over 500,000)	40158.45	51994.56	47338.44
Large city (250,000 - 500,000)	30094.00	41464.65	35868.11
Medium-sized city (50,000-250,000)	28826.64	38079.36	32573.60
Small city or town (under 50,000)	28396.42	39284.61	33070.20
Other	24612.71	31903.57	26986.48

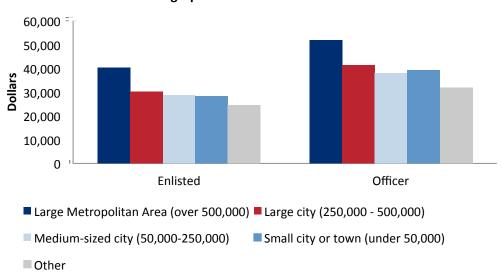


Figure 16. Average Gross Income Over the Last 12 Months of Female Respondents by Size of Geographic Location of Residence

Table 29 presents the average gross (before taxes) income for female respondents (based on question Q19) by career field/occupation of respondents' current/most recent employment (based on question Q125). The career fields with small numbers of observations (of which there are five career fields) are: transportation/moving/warehousing (bus driver, truck drivers, air/rail/water transportation workers), agricultural occupations (farming, fishing, forestry, conservation), construction, law enforcement and protective services (police officers, firefighters, security guards, private detectives), and maintenance and repair work. The five career fields with very small numbers of observations are generally not career fields into which females gravitate.

The three highest average gross income career fields for the female respondents with active duty spouses are: (1) information technology (e.g., network analysts, database administrators) with 41 observations and an average gross income of \$57,137, (2) legal professions (e.g., attorneys, paralegals) with 56 observations and an average gross income of \$57,137, and government employees (contracting, defense, government relations, or Federal/State/Local government employee) with 164 observations and an average gross income of \$50,389 (see Figure 17). These are closely followed by health care/health services (e.g., nurses, dental hygienists, pharmacy technicians) with 125 observations with an average gross income of \$42,883. The career field/occupation with the second highest number of observations is education (e.g., teachers, teacher's assistants), which exhibits an average gross income of \$27,158. The average gross income for the education career field/occupation is below the average and median values across career fields/occupations. Administrative services (e.g., administrative assistant, secretary) had 74 observations, with an average gross income of \$23,111. Community and social services (social worker, marriage and family therapists, mental health counselor, rehabilitation, school guidance counselors) is also well represented, with 62 observations and an average grow income of \$32,231.

Table 29. Average Gross Income for the Last 12 Months by Career Field/Occupation of Current/Most Recent Employment for Female Respondents of Active Duty Spouses

Career Field/Occupation	Mean	Median	Observations
Health care/health services (e.g., nurses, dental hygienists,			
pharmacy technicians)	42,883.33	40,000	125
Information technology (e.g., network analysts, database			
administrators)	57,137.20	52,000	41
Education (e.g., teachers, teacher's assistants)	27,157.73	20,000	147
Financial and business services (e.g., claim adjusters, credit			
analysts, real estate agent)	45,138.05	39,000	109
Retail/customer service (e.g., cashier, sales person, customer			
service representative)	14,942.74	10,000	84
Personal care and service (Fitness workers, Barbers,			
Hairdressers, Hairstylists and Cosmetologists)	14,373.33	10,000	15
Hospitality (e.g., restaurant server, cleaner)	17,095.30	9,000	33
Administrative services (e.g., administrative assistant,			
secretary)	23,110.72	21,129	74
Child care/child development	12,457.74	5,000	31
Legal Profession (e.g., attorneys, paralegals)	53,962.11	35,500	56
Government Employee (Contracting, Defense, Government			
Relations, or Federal/State/Local government employee)	50,388.92	45,000	164
Community and Social Services (Social worker, marriage and			
family therapists, mental health counselor, rehabilitation,			
school guidance counselors)	32,231.27	28,500	62
Transportation/Moving/Warehousing (Bus driver, truck			
drivers, air/rail/water transportation workers)			1
Agricultural Occupations (Farming, fishing, forestry,			
conservation)			2
Construction			3
Law enforcement and protective services (Police officers,			
firefighters, security guards, private detectives)			3
Arts, Design, Entertainment, Sports, and Media Occupations	28,303.72	21,600	43
Maintenance and Repair work			2
Science and Engineering occupations	48,204.34	45,000	29
Military Occupation	45,324.61	50,000	13
Total	36,014.23	30,000	1,037

Figure 17. Gross Income Over the Last 12 Months for Female Respondents of Active Duty Spouses by Career Field of Current/Most Recent Job

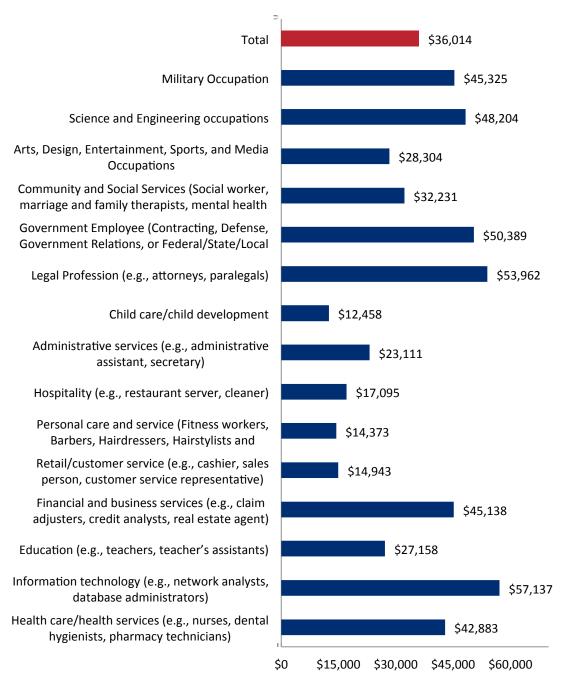


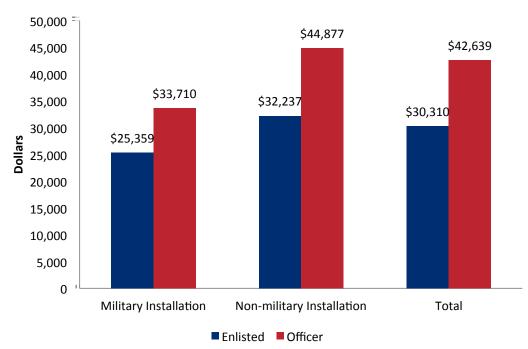
Table 30 presents the responses to "Do you currently reside on a military installation?" and "What was your total gross (before tax) income for the past 12 months? Exclude your spouse's (if appropriate) income)." As Table 30 indicates, the respondent's gross income varies significantly by whether the respondent and her family is living on a military installation, regardless of whether the female respondent's active duty spouse is enlisted or officer (see Figure 18). The gross income for the

respondents is statistically significantly different and lower when residing on a military installation versus not residing on a military installation. Living on a military installation affects nearly 26 percent of the female respondent sample whose spouses are active duty. Though living on a military installation may be less expensive than living off-base and may be convenient for the active duty spouse, on average, it can mean as a \$9,826 dollar sacrifice in gross income for the female respondent.

Table 30. Total Personal Income by Residence on a Military Installation by Officer/Enlisted Status of the Female Respondents' Active Duty Spouses

Residence on a Military Installation	Enlisted	Officer	Total		
Yes	25358.72	33710.22	28570.84		
No	32236.72	44877.22	38396.58		
Total	30309.56	42639.45	36014.23		

Figure 18. Gross Income (Last 12 Months) for Female Respondents by Residence on a Military Installation



Average total gross income is statistically significantly different (at the 99 percent level of confidence) between respondents who are in their preferred career field, \$32,886, and respondents who are not in their preferred career field, \$16,506 (see Table 31). This suggests that if the nearly 39 percent of the female respondents who are not in their preferred career field were in their preferred career field, then their average gross income would be higher. This hypothesis is another form of underemployment (Jensen and Slack, 2003).

Table 31. Average Gross Income for the Last 12 Months by Career Field of Current/Most Recent Job and by Preferred/Non-Preferred Career Field for Female Respondents with Active Duty Spouses

	Preferred	Non- Preferred	Difference in Income Between Preferred	Percent Change from Non- Preferred
	Career	Career	and Non-	to
Career Field of Current/Most Recent Employment	Field	Filed	Preferred	Preferred
Health care/health services (e.g., nurses, dental				
hygienists, pharmacy technicians)	\$32,283	\$14,353	\$17,930	124.92
Information technology (e.g., network analysts,				
database administrators)	\$51,740	\$35,917	\$15,823	44.05
Education (e.g., teachers, teacher's assistants)	\$21,006	\$11,240	\$9,766	86.89
Financial and business services (e.g., claim adjusters,				
credit analysts, real estate agent)	\$41,977	\$25,407	\$16,570	65.22
Retail/customer service (e.g., cashier, sales person,				
customer service representative)	\$10,428	\$8,103	\$2,326	28.70
Personal care and service (Fitness workers, Barbers,				
Hairdressers, Hairstylists and Cosmetologists)	\$4,514	\$13,115	-\$8,601	-65.58
Hospitality (e.g., restaurant server, cleaner)	\$15,818	\$11,098	\$4,720	42.53
Administrative services (e.g., administrative				
assistant, secretary)	\$18,574	\$14,291	\$4,283	29.97
Child care/child development	\$6,725	\$8,256	-\$1,531	-18.55
Legal Profession (e.g., attorneys, paralegals)	\$51,673	\$17,929	\$33,745	188.22
Government Employee (Contracting, Defense,				
Government Relations, or Federal/State/Local				
government employee)	\$44,953	\$31,928	\$13,025	40.79
Community and Social Services (Social worker,				
marriage and family therapists, mental health				
counselor, rehabilitation, school guidance				
counselors)	\$26,659	\$26,567	\$93	0.35
Agricultural Occupations (Farming, fishing, forestry,		4		
conservation)	N/A	\$2,500	N/A	N/A
Law enforcement and protective services (Police				
officers, firefighters, security guards, private	¢0.700	A1 / A	21/2	21/2
detectives)	\$9,733	N/A	N/A	N/A
Arts, Design, Entertainment, Sports, and Media	¢24.20C	¢0 444	¢14044	15714
Occupations Maintenance and Beneir work	\$24,286	\$9,444	\$14,841	157.14
Maintenance and Repair work	\$24,327	\$22,100	\$2,227	10.08
Science and Engineering occupations	\$38,255	\$29,500	\$8,755	29.68
Military Occupation	\$43,556	\$26,174	\$17,381	66.41
Total	\$32,886	\$16,506	\$16,380	99.24

Figure 19. Average Gross Income for the Last 12 Months by Career Field of Current/Most Recent Job and by Preferred/Non-Preferred Career Field for Female Respondents with Active Duty Spouses

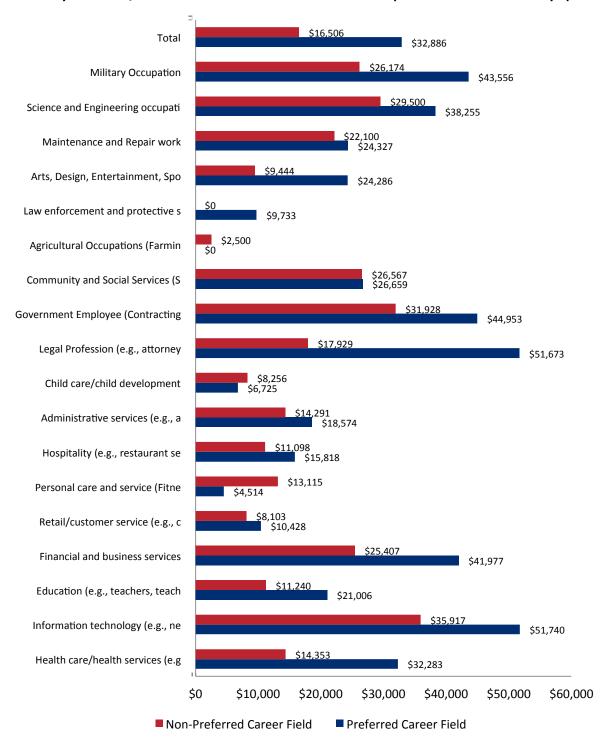


Figure 20 presents the average gross personal income for the last 12 months reported by the female respondents with active duty spouses by level of educational attainment of the female respondent.

Female respondents with a Bachelor's degree and above exhibit the highest levels of average gross personal income. All levels of educational attainment between a high school diploma and a Bachelor's degree exhibit the lowest levels of average gross personal income with GED or alternative credential exhibiting the lowest average gross personal income, \$8,956. As Figure 20 clearly indicates, educational achievement is definitely rewarded with income gains, but for those who decide to forgo a college education, a high school diploma is obviously invaluable.

Figure 20. Average Gross Income for the Last 12 Months the Female Respondents with Active Duty Spouses

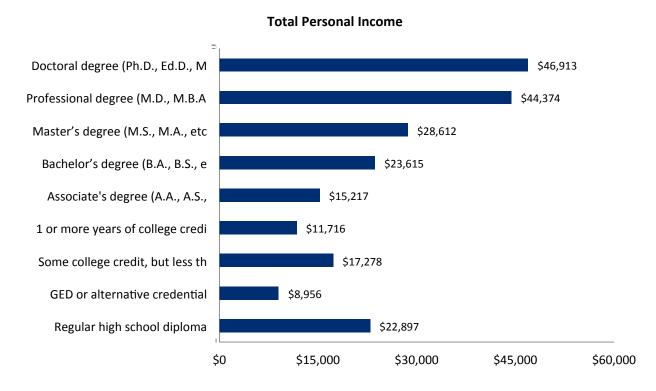


Figure 21 presents the average total personal income by educational attainment for female spouses for Armed Forces and Civilians using the 2012 ACS. The average total personal income for civilian female spouses is statistically higher than the average total personal income for Armed Forces female spouses across educational attainment levels, with the exception of "Less than a High School Diploma or GED." In the case of "Less than a High School Diploma or GED," Armed Forces female spouses comprise a very small sample as the basis for the weighted calculation. In fact, the difference between Armed Forces and civilian female spouses' incomes increases as the level of educational attainment increases. Thus, the gap between Armed Forces and civilian female spouses incomes increase with higher levels of educational attainment. No doubt, the cause of this income gap may be the result of career interruptions caused by PCS moves and deployments.

■ Civilian
■ Armed Forces \$81,790 Doctoral degree \$97,438 Professional degree \$53,982 \$57,551 Masters degree \$30,257 \$45,784 Bachelor's degree \$27,391 \$34,131 Associate degree \$22.116 \$30,366 Some College \$19,549

\$22,912

\$15,826

\$14,787

\$19,091

\$25,000

Figure 21. Average Total Personal Income for Armed Forces and Civilian Female Spouses from the ACS 2012

Note: Population in the labor force.

Less than HSG or GED

Data source: American Community Survey, 2012

\$0

HSG or GED

For the question, "Which best describes the current/most recent financial condition of you and your spouse (if appropriate)," the average value for the distribution of female respondents with active duty spouses presented in Table 32 is 2.3118. The average value of 2.3118 lies between "Able to make ends meet without much difficulty" and "Occasionally have some difficulty making ends meet" responses. The majority of the respondents fit in these two categories, 63.77 percent (see Figure 22). Only 2.35 percent of the responses indicated that they were "In over their heads" and only 24.16 percent indicate that they are "In over their heads" or "Tough to make ends meet but keeping our heads above water." The results presented in Table 32 are re-enforced in Figure 22.

\$50,000

As additional information/influencing factors, Figure 23 presents the average gross income for the last 12 months provided by the respondents. The average gross income for the last 12 months are notably lower for the financial descriptions, "In over their heads" or "Tough to make ends meet but keeping our heads above water" as compared to the average gross income for the financial descriptions, "Very comfortable and secure" or "Able to make ends meet without much difficulty." In fact, the average

\$100,000

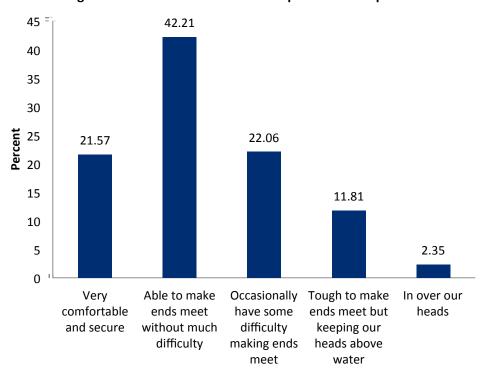
\$75,000

gross income increases over 80 from the financial description "In over their heads" to the financial description "Very comfortable and secure."

Table 32. Financial Condition of Respondent and Spouse

Response	Freq.	Percent	Cumulative Percent
Very comfortable and secure	440	21.57	21.57
Able to make ends meet without much difficulty	861	42.21	63.77
Occasionally have some difficulty making ends meet	450	22.06	85.83
Tough to make ends meet but keeping our heads above water	241	11.81	97.65
In over our heads	48	2.35	100.00
Total	2,040	100.00	
Mean (Values 1 through 5)		2.3118	
Median (Values 1 through 5)		2	

Figure 22. Financial Condition of Respondent and Spouse



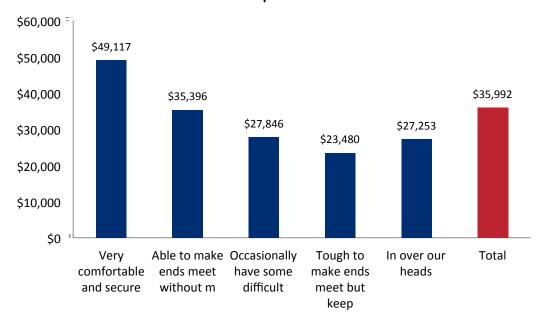


Figure 23. Average Gross Income for the Last 12 Months by Financial Condition of Respondent and Spouse

Underemployment

There is not a current standardized definition of underemployment, and, thus, researchers tend to define underemployment differently depending on the context of their research, available variables, and their particular field of study. Broader definitions of underemployment include a large and varied population group: those who seek full time work but are only working part time, those who work full time but are underpaid, those who are actively looking for work, discouraged workers who have given up on looking for a job but would accept one if available, and those whose current jobs do not match their educational or skill level (Jensen & Slack 2003).

Some studies have defined underemployment as including all of those who are unemployed, as well as the Bureau of Labor Statistics classifications of involuntary part-time workers and discouraged workers (Julian, Hall, & Yerger, 2010). Researchers have grouped these characteristics into visible and invisible forms of underemployment, however, they have also been referred to as time-related underemployment, skills-related underemployment, and labor hoarding (Jensen & Slack 2003, Wilkins & Wooden 2011).

Researchers tend to define underemployment according to their disciplinary focus, since, as stated above, underemployment can be defined by low hours, income mismatch, or occupational mismatch (Jensen & Slack 2003). Economists focus on the impact of labor force underutilization on the labor market and wages, while sociologists tend to focus on the impact on society and social structures, and management scholars focus on individual and organizational outcomes as a result of underemployment (McKee-Ryan & Harvey 2011). Some researchers have utilized direct self-assessment to determine underemployment, while other studies use indirect self-assessment by asking respondents for the level

of education or experience required for their jobs and their actual levels of education (McKee-Ryan & Harvey 2011).

In a study of recent graduates with Bachelor's degrees, the authors defined underemployment as either possessing more formal education than is needed at their current position, being involuntarily employed in a different field than their formal education, possessing higher level skills than required at their current job, being an involuntary part-time or temporary worker, or earning 20% less than the average for their cohort within the same occupation (Scurry & Blenkinsopp 2011). Similar to this study of recent graduates, researchers focused on military spouses have recommended a broader definition to allow for more in-depth analysis of the degree of underemployment in this population, ideally utilizing the Labor Utilization Framework (LUF). This framework can capture the more subtle differences among those who are unemployed, including those who have stopped looking for work due to frustration with the job search, military spouses not yet searching for work due to recently completed PCS moves, and those who have taken temporary work for needed income, for which they may be overqualified, underpaid, or both (Lim & Schulker 2010).

Using the LUF framework, the population is divided into those who are utilized adequately and utilized inadequately, and the latter group is further divided into those who are utilized inadequately by unemployment, by hours of work, by income level, and by mismatch of occupation and education (Lim & Schulker 2010). In line with this recommended framework, underemployment for military spouses in this study will be defined as being employed in a position that requires fewer or lower qualifications than they currently possess. Specifically, military spouses will be considered underemployed if they currently hold jobs that are not a match for their skills, educational attainment, and experience.

Using two questions from the survey, Q33 and Q141, one version of a measure of underemployment can be constructed. Question Q33 asks about the highest degree or level of school that the respondent have completed. Question Q141 asks about the education requirement for the respondent's current/most recent job. By comparing these two questions, one can determine the proportion of respondents that possess education levels that are equal to or beyond what they have identified as the education level requirement for their current/most recent job. Those who have an education beyond the minimum requirement for their most recent/current job can be considered to be underemployed with respect to education.

Table 33 provides the comparison of the Q33 and Q141 minus the responses "Prefer not to answer" and "Other, please specify" for Q33 and minus the responses "Prefer not to answer," "Other, please specify," and "Do not know" for Q141. The education levels for Q33 are: Less than high school diploma/GED, Regular high school diploma, GED or alternative credential, Some college credit, but less than 1 year of college credit, 1 or more years of college credit, no degree, Associate's degree (A.A., A.S., etc.), Bachelor's degree (B.A., B.S., etc.), Master's degree (M.S., M.A., etc.), Professional degree (M.D., M.B.A., J.D., M.S.W, etc.), and Doctoral degree (Ph.D., Ed.D., M.D., etc.). These same education levels apply for Q141 with the addition of "No education required."

Table 33 provides the results of the comparison of questions Q33 and Q141. The bolded numbers in Table 33 represent those levels of education that match between the two questions, i.e., the level of education required for the respondent's current/most recent job is the same as the level of education possessed by the respondent. Of the 1,638 female respondents with active duty spouses to questions

Q33 and Q141, 671 or 40.96 percent of the respondents are exactly qualified in terms of the education requirements for their current/most recent job. The numbers above the bolded numbers in Table 33 represent those respondents who possess an education level beyond the education level required for their current/most recent job.

Table 33 indicates that there are 741 respondents (45.24 percent) who possess an education level that is higher than the educational level required for their current/most recent job, and, thus, are overqualified for their current/most recent job. Figure 24 emphasizes the underemployment rate problem by level of educational attainment of the respondent. The underemployment rate drops below the average underemployment rate for the total sample (45.24 percent for 1,638 respondents) to 38.66 percent once the Bachelor's degree is reached. This is not surprising given that as individuals progress through higher levels of educational attainment, they become more specialized in their knowledge and training and, thus, tend to migrate to jobs that more closely match their specific training and areas of education (computer science, mathematics, accounting, engineering, etc.).

Prior to the Bachelor's degree requirement, the level of educational attainment with the largest number of the respondents is regular high school diploma (321 respondents), which exhibits an 89.40 percent underemployment rate. Once again, not surprising, since jobs with minimum education requirements of a high school diploma can be staffed by individuals with a broad range of levels of educational attainment. One would expect that individuals in jobs with minimum education requirements (such as high school diploma) below their level of educational attainment are finding/accepting employment while continuing to look for job opportunities that better match their educational level and training/knowledge.

The underemployment rate (with respect to minimum educational requirements), for respondents who are in the labor force (1,297 observations of females with active duty spouses, see Table 34), is 45.10 percent which is still higher than the 30.84 unemployment rate for the same sample. Underemployment is serious issue facing female respondents with active duty spouses, regardless of level of educational attainment.

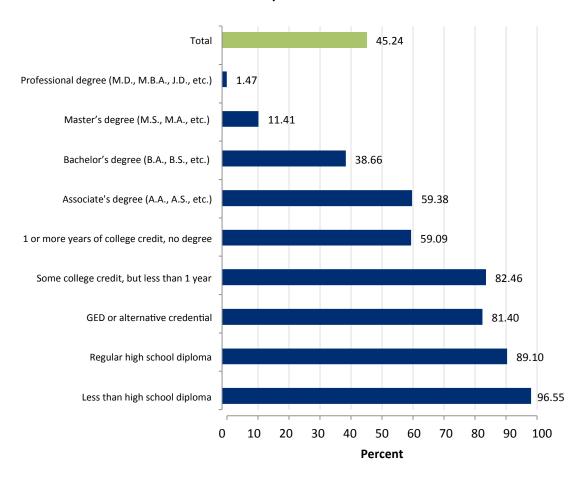
Table 33. Comparison of Questions Q33 and Q141 Concerning Education for Female Respondents with Active Duty Spouses

	What	is the	highe	st deg	ree or le	vel of	school t	hat you	ı have co	mple	ted?
What is the education requirement for your current/most recent job?	Less than high school diploma	Regular high school diploma	GED or alternative credential	Some college credit, but less than 1 year	1 or more years of college credit, no degree	Associate's degree (A.A., A.S., etc.)	Bachelor's degree (B.A., B.S., etc.)	Master's degree (M.S., M.A., etc.)	Professional degree (M.D., M.B.A., J.D., etc.)	Doctoral degree (Ph.D., Ed.D., M.D., etc.)	Total
No education required	2	9	4	8	33	23	63	26	11	1	180
Less than high school diploma	1	3	0	2	9	4	6	3	0	1	29
Regular high school diploma	0	34	1	26	50	56	112	35	6	1	321
GED or alternative credential	0	4	4	5	8	4	15	3	0	0	43
Some college credit, but less than 1 year	0	0	0	10	13	7	17	10	0	0	57
1 or more years of college credit, no degree	0	0	0	0	18	7	14	3	1	1	44
Associate's degree (A.A., A.S., etc.)	0	0	0	0	7	45	53	18	5	0	128
Bachelor's degree (B.A., B.S., etc.)	0	1	0	4	11	7	334	168	52	5	582
Master's degree (M.S., M.A.,	0		U	7	11	,	334	100	32	,	302
etc.)	0	0	0	1	0	0	6	125	11	6	149
Professional degree (M.D.,	U	0	U		<u> </u>	0	0	123	11	U	143
M.B.A., J.D., etc.)	0	0	0	0	0	0	3	0	64	1	68
Doctoral degree (Ph.D., Ed D.,	0	0	0	J	<u> </u>	J	3	0	04		
M.D., etc.)	0	0	0	0	0	0	0	1	0	36	37
Total	3	51	9	56	149	153	623	392	150	52	1,638
		7-	,	50					_55	Ŭ -	_,000

Table 34. Comparison of Questions Q33 and Q141 Concerning Education for Female Respondents with Active Duty Spouses

	Total S	ample	In the Labor Force			
Category	Freq.	Percent	Freq.	Percent		
Exactly Qualified	671	40.96	278	21.43		
Over-Qualified,			410	31.61		
Underemployment	741	45.24				
Under-Qualified	226	13.80	609	46.95		
Total	1,638	100.00	1,297	100.00		

Figure 24. Underemployment by Educational Attainment for Female Respondents with Active Duty Spouses



Using the responses provided in question Q111 "Please select all that CURRENTLY apply to you" of the survey questions, the percentage of female respondents with active duty spouses who are unemployed is estimated at 32.90 percent. Using the methodology of the Census Bureau and the Bureau of Labor Statistics for defining unemployment, the unemployment rate for female survey respondents with active duty spouses becomes 32.17 percent. Comparing the estimated unemployment rate to the underemployment rate estimated above from Table 34, 45.24 percent (based on education

requirements for the current/most recent job and the respondent's attained level of education), reinforces that underemployment is just as serious an issue confronting female spouses of active duty personnel as unemployment with both income (present and future) and career progression being sacrificed.

Table 35. Employment Status for Female Respondents of Active Duty Spouses

Response	Percent	Cumulative Percent
I am only employed full time	39.86	39.86
I am only employed part time	20.61	60.47
I have multiple paid jobs	6.63	67.10
I am currently unemployed and seeking part-time or full-time employment	32.90	100.00

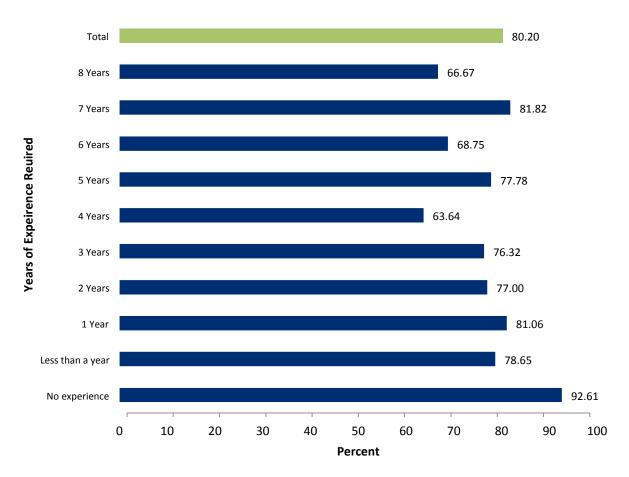
To add to the underemployed discussion, Question Q136 and question Q146 can be used to estimate the percentage of overqualified respondents with respect to required years of experience for their specified job, another means of measuring underemployment. Question Q136 is "How Many Years of Experience Do You Have For Your Current/Most Recent Job?" and question Q146 is "What Is the Minimum Level of Experience for Your Current/Most Recent Job?" Table 36 presents the results of this dual analysis minus the responses "Prefer not to answer" for Q136 and minus the responses "Prefer not to answer" and "Do not know" for Q146. The bolded numbers in Table 36 represent those levels of experience that match between the two questions, i.e., the level of experience required for the respondent's current/most recent job is the same as the level of experience possessed by the respondent.

Of the 1,591 respondents to questions Q136 and Q142 in Table 36, 201 or 12.63 percent of the respondents are exactly qualified in terms of the experience requirement for their current/most recent job. The numbers above the bolded numbers in Table 36 represent those respondents that possess an experience level beyond the experience level required for their current/most recent job. Table 36 indicates that there are 1,276 respondents (80.20 percent) that possess an experience level that is higher than the experience level required for their current/most recent job, and, thus, overqualified and underemployed for their current/most recent job in terms of experience. One must be cautious about the terminology for underemployment based on experience; stated minimum years of experience for a job/position can represent a placeholder for preferences by the employer for more years than the stated minimum, which may be accompanied by additional compensation. The subgroup of 1,266 who are in the labor force exhibits an unemployment rate of 30.81 percent. Once again, the underemployment rate is much higher than the unemployment rate, indicating the seriousness of the underemployment rate.

Table 36. Comparison of Minimum Number of Years of Experience Required for Current/Most Recent Job (Q142) with Years of Experience for Current/Most Recent Job (Q136) for Female Respondents with Active Duty Spouses

	Wha	t is the m	inimur	n years	of exp	erien	ce for y	our c	urrent	/mos	t rec	ent job?	
How many years of				•	•		•			-			
experience do you have													
for your		Less										10 or	
current/most	No	than a										More	
recent job?	experience	year	1	2	3	4	5	6	7	8	9	years	Total
No													
experience	38	7	1	3	0	0	2	0	0	0	0	0	51
Less than a													
year	101	31	21	9	2	3	3	0	0	0	0	1	171
1	56	20	35	11	9	0	4	0	0	0	0	0	135
2	74	32	47	26	5	3	5	0	1	0	0	0	193
3	45	23	49	25	11	4	3	0	0	1	0	1	162
4	39	13	26	20	10	6	4	0	1	2	0	1	122
5	44	10	30	29	19	3	7	2	0	0	0	2	146
6	18	7	16	11	8	4	6	3	0	1	0	1	75
7	23	7	21	19	11	5	8	3	2	0	0	1	100
8	14	5	11	6	3	1	14	2	1	1	0	0	58
9	6	3	5	7	4	1	7	0	1	0	1	0	35
10 or more													
years	56	20	39	47	32	14	63	6	16	10	0	40	343
Total	514	178	301	213	114	44	126	16	22	15	1	47	1,591

Figure 25. Underemployment Rate by Minimum Number of Years of Experience Required for Current/Most Recent Job (Q142) with Years of Experience for Current/Most Recent Job (Q136) for Female Respondents with Active Duty Spouses



Combining the analyses from Table 33 and Table 36, one can determine from Table 37 that over 90 percent of the female respondents with active duty spouses report being underemployed, **either** through education requirements or experience requirements (though the experience requirements may have some interpretation issues). Over 47 percent of the sample are underemployed through **both** education and experience requirements for their current/most recent job. This percentage is much higher than the unemployment rate estimated based on Table 35 of 32.90 percent. This suggests that military spouses maybe sacrificing experience and education to avoid unemployment and obtain gainful employment.

Table 37. Comparison of Underemployment Based on Education Versus Underemployment Based on Years of Experience for Female Respondents with Active Duty Spouses

	Underemployed by Experience						
Underemployed by Education	No	Yes					
No	9.68	32.71					
Yes	10.10	47.51					

Figure 26. Comparison of Underemployment Based on Education Versus Underemployment Based on Years of Experience for Female Respondents with Active Duty Spouses

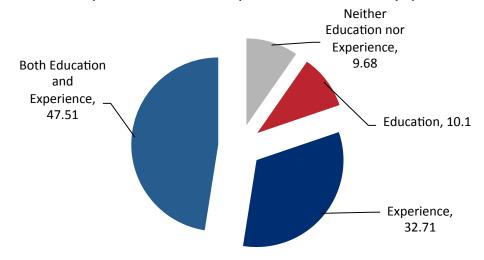


Table 38 provides the comparison of questions Q33 and Q141 for respondents with active duty spouses who are officers. Question Q33 asks about the highest degree or level of school that the respondent have completed. Question Q141 asks about the education requirement for the respondent's current/most recent job. The bolded numbers in Table 38 represent those levels of education that match between the two questions, i.e., the level of education required for the respondent's current/most recent job is the same as the level of education possessed by the respondent.

Of the 760 respondents with active duty officer spouses in Table 38, 359 or 47.24 percent of the respondents are exactly qualified in terms of the education requirements for their current/most recent job. The numbers above the bolded numbers in Table 38 represent those respondents that possess an education level beyond the education level required for their current/most recent job. Table 38 indicates that there are 388 respondents (51.05 percent) that possess an education level that is higher than the educational level required for their current/most recent job, and, thus, are overqualified for their current/most recent job. The subgroup of 586 who are in the labor force exhibits an unemployment rate of 31.06 percent. Once again, the underemployment rate is much higher than the unemployment rate, indicating the seriousness of the underemployment rate.

Table 38. Comparison of Questions Q33 and Q141 Concerning Education for Female Respondents with Active Duty Officer Spouses

	What is the highest degree or level of school that you have completed?												
What is the education requirement for your current/most recent job?	Regular high school diploma	GED or alternative credential	Some college credit, but less than 1 year	1 or more years of college credit, no degree	Associate's degree (A.A., A.S., etc.)	Bachelor's degree (B.A., B.S., etc.)	Master's degree (M.S., M.A., etc.)	Professional degree (M.D., M.B.A., J.D., etc.)	Doctoral degree (Ph.D., Ed.D., M.D., etc.)	Total			
No education required	0	0	0	5	4	27	9	8	0	53			
Less than high school diploma	0	0	0	1	1	5	2	0	1	10			
Regular high school diploma	4	1	3	4	13	44	23	3	1	96			
GED or alternative credential	0	0	0	0	0	6	2	0	0	8			
Some college credit, but less than 1 year	0	0	0	3	1	5	3	0	0	12			
1 or more years of college credit, no degree	0	0	0	6	2	7	2	1	1	19			
Associate's degree (A.A., A.S., etc.)	0	0	0	1	11	24	15	4	0	55			
Bachelor's degree (B.A., B.S.,													
etc.)	0	0	0	3	0	179	105	37	4	328			
Master's degree (M.S., M.A., etc.)	0	0	0	0	0	5	80	7	4	96			
Professional degree (M.D.,													
M.B.A., J.D., etc.)	0	0	0	0	0	3	0	48	0	51			
Doctoral degree (Ph.D., Ed D.,													
M.D., etc.)	0	0	0	0	0	0	1	0	31	32			
Total	4	1	3	23	32	305	242	108	42	760			

Table 39 provides the comparison of questions Q33 and Q141 for respondents with active duty spouses who are enlisted personnel. The bolded numbers in Table 39 represent those levels of education that match between the two questions, i.e., the level of education required for the respondent's current/most recent job is the same as the level of education possessed by the respondent.

Of the 865 respondents with active duty officer spouses in Table 39, 305 or 35.26 percent of the respondents are exactly qualified in terms of the education requirements for their current/most recent



job. The numbers above the bolded numbers in Table 39 represent those respondents that possess an education level beyond the education level required for their current/most recent job. Table 39 indicates that there are 543 respondents (62.77 percent) that possess an education level that is higher than the educational level required for their current/most recent job, and, thus, are overqualified for their current/most recent job. The subgroup of 700 who are in the labor force exhibits an unemployment rate of 30.86 percent. Once again, the underemployment rate is much higher than the unemployment rate, indicating the seriousness of the underemployment rate.

Table 39. Comparison of Questions Q33 and Q141 Concerning Education for Female Respondents with Active Duty Enlisted Spouses

	Wh	nat is th	ne hig	hest d	egree or	level c	of schoo	l that y	ou have (comple	ted?
What is the education requirement for your current/most recent job?	Less than high school diploma	Regular high school diploma	GED or alternative credential	Some college credit, but less than 1 year	1 or more years of college credit, no degree	Associate's degree (A.A., A.S., etc.)	Bachelor's degree (B.A., B.S., etc.)	Master's degree (M.S., M.A., etc.)	Professional degree (M.D., M.B.A., J.D., etc.)	Doctoral degree (Ph.D., Ed.D., M.D., etc.)	Total
No education required	2	9	4	8	28	19	35	17	3	1	126
Less than high school											
diploma	1	3	0	2	8	3	1	1	0	0	19
Regular high school diploma	0	30	0	23	46	43	68	11	3	0	224
GED or alternative					10				3		
credential	0	4	4	5	8	4	9	1	0	0	35
Some college credit, but less than 1 year	0	0	0	10	10	6	12	7	0	0	45
1 or more years of college credit, no degree	0	0	0	0	12	5	7	1	0	0	25
Associate's degree (A.A., A.S., etc.)	0	0	0	0	6	34	28	3	1	0	72
Bachelor's degree (B.A., B.S., etc.)	0	1	0	4	8	7	152	60	15	1	248
Master's degree (M.S.,	0	0	0		0	0		42	4	2	
M.A., etc.) Professional degree (M.D.,	U	U	U	1	0	U	1	42	4		50
M.B.A., J.D., etc.)	0	0	0	0	0	0	0	0	16	1	17



Doctoral degree (Ph.D., Ed											
D., M.D., etc.)	0	0	0	0	0	0	0	0	0	4	4
Total	3	47	8	53	126	121	313	143	42	9	865

Table 40 provides the average gross (before taxes) income over the last 12 months (Q19) for underemployed female respondents whose spouses are on active duty. Underemployed is defined as: (1) respondents whose most recent/current job's minimum education requirements (Q141) is less than the respondent's educational level of attainment (Q33), as presented in Table 33 and (2) respondents whose most recent/current job's minimum experience requirements (Q142) is less than the respondent's years of experience in their most recent/current job (Q136), as presented in Table 36. As Table 40 indicates, regardless of the definition used for underemployment, the average gross income over the last 12 months is higher for respondents who are not underemployed. The differences in gross income are statistically significantly different in 3 of the 4 comparisons, though the one case in which the two-tailed test is insignificant, the one-tailed test is significant at the 0.0901 level of significance. Thus, respondents settling for jobs for which they are over-qualified in terms of education or experience, costs the individuals in terms of forgone potential gross income.

Table 41 provides the comparison of underemployed (using education and experience as the basis for underemployed) to not underemployed by years of job tenure ("How Long Have You Been/Were You at Your Current/Most Recent Job?"). Table 41 shows reduced levels of job tenure have lower gross income. Furthermore, regardless of whether the individual is underemployed or not underemployed, but the underemployed individuals are additionally penalized with smaller levels of gross income compared to the not underemployed group. Each of the tenure comparisons in average gross income between underemployed and not underemployed are statistically significant, and the difference between underemployed and not underemployed gross income increases as the tenure rises.

Table 40. Comparison of Gross Income Across Definitions of Underemployed for Female Respondents with Active Duty Spouses

	Underem	Underemployed		Not Underemployed	
					T-test,
Underemployment		Number		Number	Level of
Definition	Mean	of Obs.	Mean	of Obs.	Significance
Education	28,960.24	560	46,131.07	493	0.0000
Experience	35,436.36	846	39,032.44	203	0.1802
Education and					
Experience	28,049.68	441	44,333.67	511	0.0000
Education or					
Experience	35,053.87	965	49,188.75	99	0.0001
Total	36,014.23	1,211	•		_



Figure 27. Comparison of Gross Income Across Definitions of Underemployed for Female Respondents with Active Duty Spouses

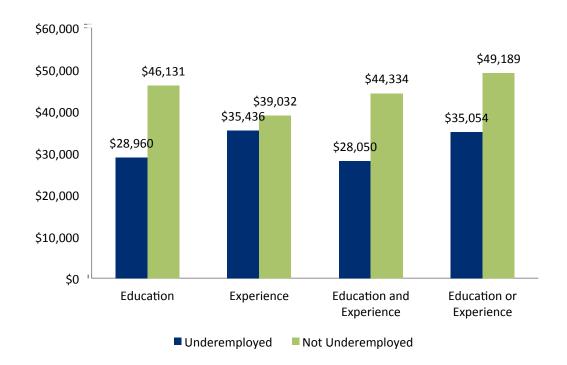


Table 41. Comparison of Gross Income Across Education and Experience Definitions of Underemployed by Years of Job Tenure for Female Respondents with Active Duty Spouses

	Underem	ployed	Not Underemployed		Two-Tailed	
Years of Job Tenure	Mean	Number of Obs.	Mean	Number of Obs.	Difference	T-test, Level of Significance
2 Years or less	25444.17	328	40128.09	375	14683.92	0.0000
3 to 5 years	33367.86	78	51422.93	90	18055.07	0.0010
6 or more years	41774.36	34	66441.02	44	24666.66	0.0150
Total	28049.68	441	44333.67	511	16283.99	0.0000



Figure 28. Comparison of Gross Income Across Education and Experience Definitions of Underemployed by Years of Job Tenure for Female Respondents with Active Duty Spouses

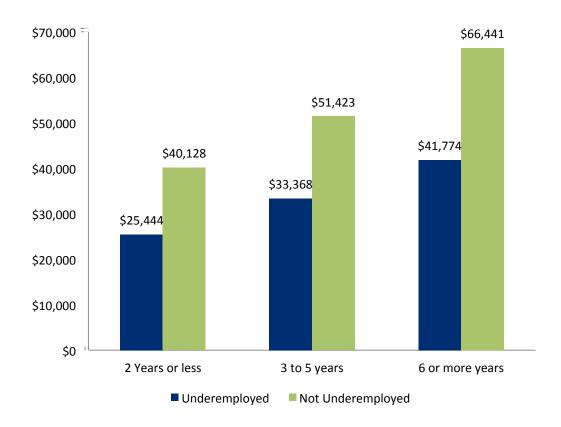


Table 42 presents the responses to Q125 (In what career field is your current/most recent employment?), Q126 (Is this your preferred career field?), and Q19 (What was your total gross (before tax) income for the past 12 months? Exclude your spouse's (if appropriate) income.). As Table 29 indicates, gross incomes vary considerably by career field/occupation. The highest earning occupation is Information technology at \$59,881 while the lowest earning occupation (with at least one percent of the total sample) is child care/child development at \$12,458, a non-trivial difference between the highest and the lowest paid career fields. The career field with the highest percentage of female respondents in their preferred career field is health care (19.14 percent) followed by education (18.82 percent) and government employee (15.68%).

The career field with the highest percentage of female respondents not in their preferred career field is retail/customer service with 88.96 percent not in their preferred career field (using only those career fields with one percent or more of the respondents sample in the career field), followed by hospitality at 73.47 percent. Child care/child development and administrative services exhibit similar percentages to hospitality, 72.88 and 72.48, respectively. These could be considered career fields in which obtaining employment with little experience or training is representative and where short-term employment and/or high turnover are normal or accepted.

Average total gross income is statistically significantly different (at the 99 percent level of confidence) between respondents who are in their preferred career field, \$32,886, and respondents who are not in



their preferred career field, \$16,506. This suggests that if the nearly 39 percent of the female respondents who are not in their preferred career field, were in their preferred career field, then their average gross income would be higher. This hypothesis is another form of underemployment (Jensen and Slack, 2003).

Table 42. Average Gross Income for the Last 12 Months by Career Field of Current/Most Recent Job and by Preferred Career Field for Female Respondents with Active Duty Spouses

	١	⁄es		No	Total		Percent	
Career Field of		Percent		Percent			No by	
Current/Most Recent		of Total		of Total		Percen	Career	Mean
Employment	Freq.	Yes	Freq.	No	Freq.	t	Field	Income
Health care/health								
services (e.g., nurses,								
dental hygienists,								
pharmacy technicians)	188	19.14	23	3.72	212	12.95	10.85	42,980.57
Information								
technology (e.g.,								
network analysts,								
database								
administrators)	35	3.56	25	4.05	61	3.73	40.98	59,880.56
Education (e.g.,								
teachers, teacher's								
assistants)	185	18.84	61	9.87	249	15.21	24.50	27,415.70
Financial and business								
services (e.g., claim								
adjusters, credit								
analysts, real estate								
agent)	92	9.37	44	7.12	138	8.43	31.88	45,646.43
Retail/customer								
service (e.g., cashier,								
sales person, customer								
service representative)	14	1.43	145	23.46	163	9.96	88.96	14,856.07
Personal care and								
service (Fitness								
workers, Barbers,								
Hairdressers,								
Hairstylists and								
Cosmetologists)	10	1.02	14	2.27	25	1.53	56.00	13,725.00
Hospitality (e.g.,								
restaurant server,								
cleaner)	12	1.22	36	5.83	49	2.99	73.47	17,095.30
Administrative services								
(e.g., administrative								
assistant, secretary)	35	3.56	108	17.48	149	9.10	72.48	23,278.86
Child care/child	15	1.53	43	6.96	59	3.60	72.88	12,457.74



Career Field of	١	⁄es	ı	No	To	otal	Percent	Mean
development								
Legal Profession (e.g.,								
attorneys, paralegals)	59	6.01	7	1.13	68	4.15	10.29	53,120.67
Government Employee								
(Contracting, Defense,								
Government Relations,								
or Federal/State/Local								
government								
employee)	154	15.68	69	11.17	232	14.17	29.74	51,347.64
Community and Social								
Services (Social								
worker, marriage and								
family therapists,								
mental health counselor,								
rehabilitation, school								
guidance counselors)	71	7.23	13	2.10	85	5.19	15.29	32,231.27
Transportation/Movin	/ 1	7.23	13	2.10	83	3.13	13.23	32,231.27
g/Warehousing (Bus								
driver, truck drivers,								
air/rail/water								
transportation								
workers)	1	0.10	1	0.16	2	0.12	50.00	35,000.00
Agricultural								
Occupations (Farming,								
fishing, forestry,								
conservation)	1	0.10	2	0.32	3	0.18	66.67	7,500.00
Construction	3	0.31	0	0.00	3	0.18	0.00	26,240.00
Law enforcement and								
protective services								
(Police officers,								
firefighters, security								
guards, private	_		_		_			
detectives)	7	0.71	1	0.16	9	0.55	11.11	47,800.00
Arts, Design,								
Entertainment, Sports,								
and Media	E 4	F F0	4.2	2.40	60	4 22	10.04	20 202 72
Occupations Maintenance and	54	5.50	13	2.10	69	4.22	18.84	28,303.72
Maintenance and Repair work	0	0.00	2	0.32	2	0.12	100.00	10 050 00
Science and	U	0.00	۷	0.52		0.12	100.00	19,050.00
Engineering								
occupations	36	3.67	2	0.32	38	2.32	5.26	47,435.19
Military Occupation	10	1.02	9	1.46	21	1.28	42.86	42,781.33
ivilitary Occupation	10	1.02	9	1.46	21	1.28	42.86	42,/81.33

Career Field of	Y	'es	I	No	To	otal	Percent	Mean
Total	982	100.00	618	100.00	1,637	100.00		36584.49

Table 43. Average Gross Income for the Last 12 Months by Career Field of Current/Most Recent Job and by Preferred/Non-Preferred Career Field for Female Respondents with Active Duty Spouses

	Preferre d Career	Non- Preferre d Career	Differenc e in Income Between Preferred and Non- Preferred Career	Percent Change from Non- Preferre d to Preferre d Career
Career Field of Current/Most Recent Employment	Field	Filed	Field	Field
Health care/health services (e.g., nurses, dental	400.000	444050	447.000	424.00
hygienists, pharmacy technicians)	\$32,283	\$14,353	\$17,930	124.92
Information technology (e.g., network analysts,	4-1-10	40-01-	4 000	
database administrators)	\$51,740	\$35,917	\$15,823	44.05
Education (e.g., teachers, teacher's assistants)	\$21,006	\$11,240	\$9,766	86.89
Financial and business services (e.g., claim adjusters,				
credit analysts, real estate agent)	\$41,977	\$25,407	\$16,570	65.22
Retail/customer service (e.g., cashier, sales person,				
customer service representative)	\$10,428	\$8,103	\$2,326	28.70
Personal care and service (Fitness workers, Barbers,				
Hairdressers, Hairstylists and Cosmetologists)	\$4,514	\$13,115	-\$8,601	-65.58
Hospitality (e.g., restaurant server, cleaner)	\$15,818	\$11,098	\$4,720	42.53
Administrative services (e.g., administrative assistant,				
secretary)	\$18,574	\$14,291	\$4,283	29.97
Child care/child development	\$6,725	\$8,256	-\$1,531	-18.55
Legal Profession (e.g., attorneys, paralegals)	\$51,673	\$17,929	\$33,745	188.22
Government Employee (Contracting, Defense, Government Relations, or Federal/State/Local				
government employee)	\$44,953	\$31,928	\$13,025	40.79
Community and Social Services (Social worker, marriage and family therapists, mental health counselor,				
rehabilitation, school guidance counselors)	\$26,659	\$26,567	\$93	0.35
Agricultural Occupations (Farming, fishing, forestry, conservation)	N/A	\$2,500	N/A	N/A
Law enforcement and protective services (Police				-
officers, firefighters, security guards, private detectives)	\$9,733	N/A	N/A	N/A
Arts, Design, Entertainment, Sports, and Media		-		-
Occupations	\$24,286	\$9,444	\$14,841	157.14
Maintenance and Repair work	\$24,327	\$22,100	\$2,227	10.08
Science and Engineering occupations	\$38,255	\$29,500	\$8,755	29.68

Military Occupation	\$43,556	\$26,174	\$17,381	66.41
Total	\$32,886	\$16,506	\$16,380	99.24

Figure 29. Average Gross Income for the Last 12 Months by Career Field of Current/Most Recent Job and by Preferred/Non-Preferred Career Field for Female Respondents with Active Duty Spouses

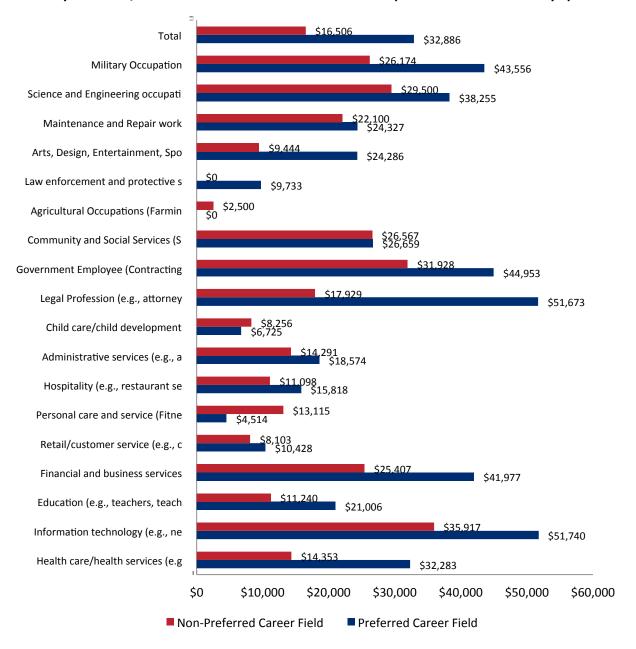


Table 44 presents the underemployment rate as defined above by education for the female respondents by their level of educational attainment (question Q33, What is the highest degree or level of school that you have completed?). The underemployment rates are provided for those levels of respondent educational attainment that have sufficient observations (over 10 respondents). The lowest underemployment rate is for respondents with a "regular high school diploma" at 25.49 percent. The two highest underemployment rates are for "some college credit, but less than 1 year" at 73.21 percent and "1 or more years of college credit, no degree" at 75.84 percent. In both of these cases, the respondent has no advanced degree but education beyond a high school diploma. This could be a reflection of individuals in transition who are continuing their education beyond high school or pursuing a career path requiring additional educational attainment. Table 44 also exhibits the unemployment rate by educational attainment. With the exception of "Regular high school diploma," all underemployment rates are higher than their unemployment counterparts. For Bachelor's degree and above the ratios of underemployment to unemployment indicate that the underemployment rates over 1.5 as high as the unemployment rates.

Table 44. Underemployment by Educational Attainment for Female Respondents with Active Duty Spouses

		Unemployment	Ratio of
	Underemployment	Rate by	Underemployment
Educational Attainment	Rate by Education	Education	to Unemployment
Regular high school diploma	25.49	40.43	0.630
GED or alternative credential	44.44	28.57	1.555
Some college credit, but less than 1 year	73.21	33.33	2.197
1 or more years of college credit, no degree	75.84	36.36	2.086
Associate's degree (A.A., A.S., etc.)	66.01	46.53	1.419
Bachelor's degree (B.A., B.S., etc.)	44.94	29.07	1.546
Master's degree (M.S., M.A., etc.)	67.86	30.95	2.193
Professional degree (M.D., M.B.A., J.D., etc.)	57.33	28.57	2.007
Doctoral degree (Ph.D., Ed D., M.D., etc.)	28.85	15.56	1.854
Total	56.23	31.90	1.763

Figure 30. Underemployment by Educational Attainment for Female Respondents with Active Duty Spouses

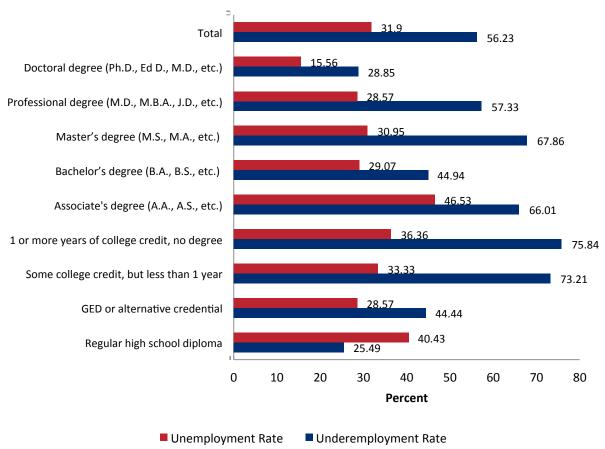
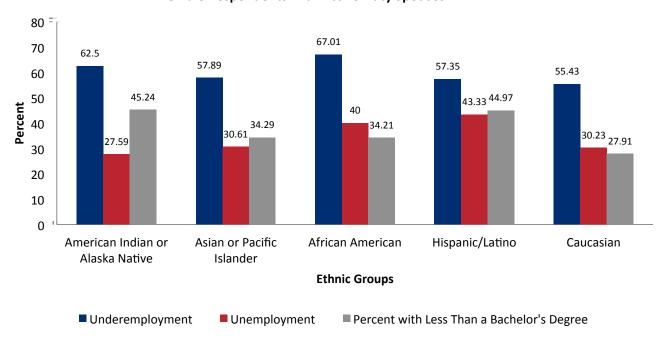


Table 45 presents the underemployment rate as defined above by education for the female respondents by their ethnicity (question Q16, What is your race/ethnicity?). The underemployment rates are provided for five ethnic groups: Caucasian, African America, Hispanic/Latino, American Indian or Alaska Native, and Asian or Pacific Islander. The highest underemployment rate is for African American female respondents with 67.01 percent, followed by American Indian or Alaska Native at 62.50 percent. The lowest underemployment rate was exhibited by Caucasians at 55.43 percent. Table 45 also presents the unemployment rates exhibited by each ethnic group. The correlation between the ethnic group underemployment rates and the ethnic group unemployment rates is 0.1989, which though positive is quite low and not statistically significant.



Ethnicity	Underemployment Rate Defined by Education	Unemployment Rate	Percent With Less Than Bachelor's Degree
American Indian or Alaska Native	62.50	27.59	45.24
Asian or Pacific Islander	57.89	30.61	34.29
African American	67.01	40.00	34.21
Hispanic/Latino	57.35	43.33	44.97
Caucasian	55.43	30.23	27.91
Total	56.23	32.17	29.23

Figure 31. Underemployment, Unemployment, and Percent with Less Than a Bachelor's Degree for Female Respondents with Active Duty Spouses



Selected Key Topics

Interrupted Education

Over 32 percent of the female respondents attended only one school (Table 46), and over 51 percent attended one or two schools, which, considering the levels of PCSs which occur during an active duty service career, is not very high. Slightly over 33 percent of the female respondents indicated that they had received their education before their active duty spouse was on active duty. Table 44 indicates that the unemployment rates are higher for female respondents (with active duty spouses) who did not complete their education before their spouses were on active duty. Somewhat surprising is that the unemployment rate declines after having attended two schools. Average gross income over the last 12 months exhibits variation similar to unemployment rates (last column of Table 46). Not completing one's education before their spouse enters active duty exhibits a constant penalty across the number of schools attended.

Table 46. Number of Schools Attended

Response	Freq.	Percent	Cumulative Percent	Number of School Attended Percent	Unemployment Rate	Average Gross Income over the Last 12 Months
None, I received my education before my						
spouse was on active						
duty	622	33.09	33.09		26.77	27,459
One	607	32.29	65.37	48.25	34.15	22,179
Two	357	18.99	84.36	28.38	38.55	21,763
Three	172	9.15	93.51	13.67	31.06	25,784
Four or More	122	6.49	100.00	9.70	30.85	21,679
Total	1,988	100.00				

About 17 percent of the female respondents with active duty spouses indicated that they were students, part-time or full-time.

Table 47. Currently a Student

Response	Freq.	Percent	Cumulative Percent
Currently a part-time student	162	7.89	7.89
Currently a full-time student	195	9.50	17.39
No	1,696	82.61	99.71
Total	2,053	100.00	

The question, "Why are you pursuing additional education? Select all that apply," was displayed only to spouses who had indicated that they were either currently a part time or full time student. The



response with the highest percentage in Table 48 is "To advance my career," which encompasses over 31 percent of the female respondents with active duty spouses. The next highest percentage is "To increase my earning potential," a close second, 29.48 percent, followed by "Self-fulfillment/intellectual curiosity, 22.50 percent. These three responses comprise over 83 percent of the total responses (excluding "Other, please specify" and "Prefer not to answer" responses).

Table 48. Reason for Pursuing Additional Education. Select All That Apply

Response	Percent	Cumulative Percent
To advance my career	31.29	31.29
To increase my earning potential	29.48	60.77
Self-fulfillment/intellectual curiosity	22.50	83.27
No employment opportunities at my current education level	9.27	92.54
No employment opportunities in my current field	7.46	100.00

The question, "How did you primarily fund your education for your highest degree earned," was displayed only to spouses who had indicated some college credit or higher to the highest education received. Table 49 indicates that students loans comprise over 44 percent of the sources of funding for the highest degree earned by the female respondents with active duty spouses (excluding "Other, please specify" and "Prefer not to answer").

Table 49. Source of Funding for Highest Degree Earned. Select All That Apply

Response	Percent	Cumulative Percent
Employment	11.99	11.99
Post 9/11 GI Bill	5.22	17.21
Scholarships	10.91	28.12
Financial Aid	14.99	43.11
Student Loans	44.42	87.53
Savings	12.47	100.00

Have you encountered any problems transferring academic credits? The question, "Have you encountered any problems transferring academic credits," was displayed only to spouses who had indicated that they were either currently a part time or full time student. Over two-thirds of the respondents indicate that they have not encountered any problems transferring academic credits.

Table 50. Have You Encountered Any Problems Transferring Academic Credits?

Response	Freq.	Percent	Cumulative Percent
Yes	111	31.62	31.62
No	240	68.38	100.00
Total	351	100.00	

The question, "Primarily, you complete your coursework through:" was displayed only to spouses who had indicated that they were either currently a part time or full time student. Over 63 percent of respondents indicate that they will complete their coursework through distance learning.

Table 51. Method for Completing Coursework

Response	Freq.	Percent	Cumulative Percent
Distance learning (online)	225	64.29	64.29
Traditional classroom courses	66	18.86	83.14
A hybrid of both	59	16.86	100.00
Total	350	100.00	

Difficulty Finding a Job

For the question, "Was it difficult to find your current/most recent job," over 55 percent of the female respondents with active duty spouses indicated that it was difficult finding their current/most recent job.

Table 52. Was It Difficult to Find Your Current/Most Recent Job

Response	Freq.	Percent	Cumulative Percent
Yes	937	55.38	55.38
No	755	44.62	100.00
Total	1,692	100.00	

Reasons Why a Spouse Is Unemployed

The question, "Which of the following are reasons for you not currently working? Select all that apply." was displayed only to spouses who had indicated they were currently "unemployed and seeking part-time or full-time employment" or "were looking for employment in the past but have given up, and currently am NOT employed" or "not employed and not seeking any employment." Table 53 indicates that the most often selected reason for not currently working is "I could not find work that matched my skills/education level" at 27.82 percent. This is followed by "I cannot find work flexible enough to accommodate my spouse's schedule" at 17.37 percent and "I want to be able to stay home to care for my children" at 11.16 percent. The response "I have child care problems (e.g., too costly, lack of availability)" also exhibits 11.00 percent.

Table 53. Reasons for Not Currently Working. Select All That Apply

Response		Cumulative Percent
I cannot find work flexible enough to accommodate my spouse's schedule	17.37	17.37
We do not need the additional income	2.47	19.85
I do not want to work	1.92	21.77

My spouse does not want me to work	1.87	23.64
I could not find work that matched my skills/education level	27.82	51.46
I am preparing for/recovering from a PCS/move	10.23	61.68
I want to be able to stay home to care for my children	11.16	72.84
I lack the necessary schooling, training, skills, or experience	7.04	79.88
I have child care problems (e.g., too costly, lack of availability)	11.11	90.98
I am attending school or other training	4.12	95.11
I am not physically able to work (e.g., pregnant, sick, disabled)	1.37	96.48
I am unable to work while my spouse is deployed	3.52	100.00

Would You Tell an Employer That You Are a Military Spouse

For the question, "Regardless of your current employment status, during an interview, would you inform a prospective employer that you were a military spouse?" nearly 59 percent of the female respondents with active duty spouses in Table 54 indicated that they would inform a prospective employer that they were a military spouse, but over 40 percent indicated that they would not.

Table 54. Regardless of Your Current Employment Status, During an Interview, Would You Inform a Prospective Employer that You Were a Military Spouse?

Response	Freq.	Percent	Cumulative Percent
Yes	1,086	58.73	58.73
No	763	41.27	100.00
Total	1,849	100.00	

The question, "If you would not inform a prospective employer that you are/were a military spouse, why not? Select all that apply," was displayed only to spouses who had indicated that they would not inform a prospective employer that you were a military spouse. In Table 55, the response option receiving the highest percentage of responses was "I think it would make an employer less likely to hire me" at 58.92 percent, followed by "I do not think it's relevant" at 27.92 percent. That military spouses believe that revealing the fact that they are a military wife would adversely affect their likelihood of gaining employment with a prospective employer is somewhat troubling but probably not overstated. High turnover or reduced tenure periods for employees is not only troubling for employers but also costly, especially in terms of training costs and lost productivity during transition periods for new employees. One potential option for reducing these adverse monetary effects to employers for hiring military spouses is to subsidize hiring of military spouses, thus reducing the incurred additional costs to the employer.

Table 55. If You Would Not Inform a Prospective Employer That You Are/Were a Military Spouse, Why Not? Select All That Apply.

_	_	
Response	Percent	Cumulative Percent



I do not think it's relevant	27.92	27.92
I think it would make an employer less likely to hire me	58.92	86.83
Employers do not usually ask	13.17	100.00

The question, "If you would inform a prospective employer that you are/were a military spouse, why? Select all that apply," was displayed only to spouses who had indicated that they would inform a prospective employer that you were a military spouse. Of the three options provided in Table 56 for why the spouses would inform a prospective employer that you are/were a military spouse, the one most often selected is "I think it's important for my employer to know" at over 67 percent. Over 23 percent of the respondents indicated that "Employers usually ask."

Table 56. If You Would Inform a Prospective Employer That You Are/Were a Military Spouse, Why? Select All That Apply.

Response		Cumulative Percent
I think it's important for my employer to know	67.88	67.88
I think it would make an employer more likely to hire me	8.85	76.74
Employers usually ask	23.26	100.00

For the question, "Have you ever been asked by a potential employer if you are/were a military spouse?" nearly 47 percent of the female respondents with active duty spouses indicated that a potential employer has asked whether the spouse was a military spouse. This is more than enough to be disconcerting to military spouses seeking employment, especially in today's troubling economic times.

Table 57. Have You Ever Been Asked By a Potential Employer If You Are/Were a Military Spouse?

Response	Freq.	Percent	Cumulative Percent
Yes	882	47.62	47.62
No	970	52.38	100.00
Total	1,852	100.00	

Employer Resources and Programs

As Table 58 indicates, most employers do not have resources allocated to programs specifically directed at military spouses. Of those that do have resources allocated to programs specifically directed at military spouses, the most often cited is "Flexible Scheduling/Telecommuting."

Table 58. Current Organizational Culture at Current/Most Recent Employer. Select All That Apply

Response	Percent	Cumulative Percent
None	60.36	60.36
Peer Mentoring programs	1.99	62.35
Military-Affiliated Employees Club/Organization	2.92	65.27



Flexible Scheduling/Telecommuting	10.75	76.02
Child care or assistance finding childcare	2.77	78.79
Educational opportunities	4.43	83.22
Housing/Relocation assistance	1.75	84.97
Other	3.02	87.99
NA	12.01	100.00

Table 59 indicates that the most important resources that would be most useful to employed military spouses would be "Flexible Scheduling/Telecommuting" at 26.01 percent, followed by "Educational opportunities" at 20.15 percent and "Child care or assistance finding childcare" at 17.31 percent. All of the programs identified do reflect a positive degree of importance as a resource to the employed military female spouse.

Table 59. Resources Most Useful To Military Spouse Employees? Select All That Apply.

Response		Cumulative Percent
Peer Mentoring programs	10.64	10.64
Military-Affiliated Employees Club/Organization	15.41	26.05
Flexible Scheduling/Telecommuting	26.01	52.06
Child care or assistance finding childcare	17.31	69.36
Educational opportunities	20.12	89.48
Housing/Relocation assistance	10.52	100.00

The highest cited reason for the female respondents with active duty spouses having left a former employer for other employment opportunities is "PCS Moves/Relocations" at over 33 percent, not surprising among military spouses. No other reason comes close to the percentage attributed to "PCS Moves/Relocations."

Table 60. As a Military Spouse, Please Select the Reasons You Have Left a Former Employer for Other Employment Opportunities. Select All That Apply.

Response	Percent	Cumulative Percent
PCS Moves/Relocations	33.48	33.48
Increased Salary/Benefits elsewhere	8.56	42.03
A need for more flexible hours	8.67	50.70
A lack of military-friendly work environment	4.27	54.97
A lack of family-friendly work environment	4.00	58.96
A need for telecommuting options	3.16	62.12
A desire for increased responsibility/promotion	7.16	69.28
A lack of career development opportunities	7.47	76.75
Dissatisfaction with Organizational Strategy	6.12	82.87
Lack of Job Security	2.53	85.40
Issues with Manager	4.76	90.16
Issues with Colleagues	1.35	91.51
Lack of Opportunity for Personal & Career Development	5.69	97.20

Issues within Working Experience	2.80	100.00

Licensing

Table 61 presents the results of the question, "Does your chosen career field require any licensing or certification?" for female respondents with active duty spouses. A slight majority of female respondents, 50.33 percent, indicate that their chosen career field requires licensing or certification. On average, female respondents indicated that they pay \$223.03 to renew their state license. If zero responses to the question are excluded, respondents pay about \$280 to renew their state license.

Table 61. Does Your Chosen Career Field Require Any Licensing Or Certification by Officer/Enlisted
Status of the Female Respondents' Active Duty Spouses

	Total		
Response	Freq.	Percent	
Yes	925	50.33	
No	913	49.67	
Total	1,838	100.00	

The question, "In deciding to renew your license, how important is cost?" was displayed only to spouses who indicated that they are in a career field that requires licensing or certification. On average, the cost of state license renewal is "Moderately important" as indicated by the average value for the responses of 2.79, which falls between "Important" and "Moderately important," though closer to "Moderately important."

Table 62. Importance of Cost in State License Renewal

Response	Freq.	Percent	Cumulative Percent	Percent	Cumulative Percent
Very Important	205	22.09	22.09	27.37	27.37
Important	142	15.30	37.39	18.96	46.33
Moderately Important	139	14.98	52.37	18.56	64.89
Of Little Importance	128	13.79	66.16	17.09	81.98
Unimportant	135	14.55	80.71	18.02	100.00
Prefer not to answer	14	1.51	82.22		
NA	165	17.78	100.00		
Total	928	100.00		100.00	
Average for valid responses (1 through 5)				2.7944	

Table 63 presents the results of the question, "Does this licensing or certification need to be renewed/re-issued after a PCS (Permanent Change of Duty Change) move?" for female respondents

with active duty spouses. A large majority of female respondents, 72.46 percent, indicate that the licensing/certification for their chosen career field requires renewal/re-issuing after a PCS move.

Table 63. Does This Licensing or Certification Need to be Renewed/Re-Issued After a PCS (Permanent Change Of Duty Station) Move by Officer/Enlisted Status of the Female Respondents' Active Duty Spouses

	Total			
Response	Freq.	Percent		
Yes	655	72.46		
No	249	27.54		
Total	904	100.00		

The question, "How often have you had problems or delays in renewing/reissuing your license or certification?" was displayed only to spouses who indicated that they are in a career field that requires licensing or certification and were aware of state-level initiatives aimed at making it easier to transfer licenses across state lines. Table 64 indicates that nearly 51 percent of the female respondents with active duty spouses have not had problems or delays in renewing/reissuing your license or certification (excludes "Prefer not to answer" and "NA" responses). Over 40 percent of the respondents have had problems or delays in renewing/reissuing your license or certification one or two times.

Table 64. How Often Have You Had Problems or Delays In Renewing/Reissuing Your License or Certification?

Response	Freq.	Percent	Cumulative Percent	Percent	Cumulative Percent
None	321	34.59	34.59	50.95	50.95
Once	152	16.38	50.97	24.13	75.08
Twice	101	10.88	61.85	16.03	91.11
Three	24	2.59	64.44	3.81	94.92
Four	11	1.19	65.63	1.75	96.67
Five	7	0.75	66.38	1.11	97.78
More than six	14	1.51	67.89	2.22	100.00
Prefer not to answer	27	2.91	70.80		
NA	271	29.20	100.00		
Total	928	100.00		100.00	_

Most Important Reason for Working

Two questions are answered in Table 65: (1) Do you need to work and (2) Do you want to work. To both questions, the majority of the responses were "Yes," 55.42 percent for the "Need to Work" and 90.75 percent for the "Want to Work."

Table 65. Regardless of your current employment status, do you (1) Need to Work and (2) Want to Work

Need to work	Freq.	Percent	Cumulative Percent
Yes	1,105	55.42	55.42
No	889	44.58	100.0
Total	1,994	100.00	
Want to Work	Freq.	Percent	Cumulative Percent
Want to Work Yes	Freq. 1,816	Percent 90.75	Cumulative Percent 90.75

Figure 32 presents the results of responses to the above table of statements where each respondent rated each statement on a 1 to 5 scale, from "Not important" (1) to "Very important" (5). For four of the six statements, the majority of the respondents rated the statement "Important" or "Very Important." For "Need money for basic expenses" and "Want extra money to use now" the majority of the respondents rated the statements between "Important" or "Moderately Important." The smallest majority was attached to the statement "Need money for basic expenses." The statement with the highest average value was "Want to save money for the future," and the lowest average was exhibited by "Need money for basic expenses." Each average value presented is above three and four of the average values are above four. Thus, it is correct to state that each of these statements are considered to be important to the respondents, on average.

Figure 32. Regardless of Your Current Employment Status, How Important are Each of the Following Reasons for Why You Work, Want to Work, or Need to Work?

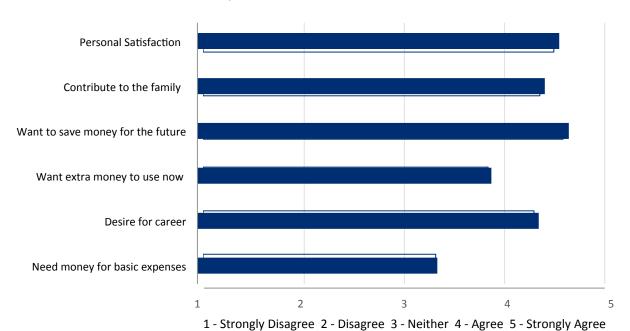


Table 66 presents the results of the question "Which of the following helped you find your current/most recent position? Select only one." Of the five programs provided, the program cited most often as being utilized during their search for employment was "Online job boards and career tools (Military.com, LinkedIn, Monster.com, etc.)" at 32.10 percent (excluding "Other, please specify" and Prefer not to answer" responses), followed by "Directly contacting employers/HR" at 26.80 percent. Four of the five program options received double digit responses, with only "Career Fairs" receiving less than double digit responses. Once again, there are a variety of avenues being used to search for employment by military spouses.

Table 66. Which of the Following Helped Find Most Current/Recent Employment? Select All That Apply.

		Cumulative
Response	Percent	Percent
Networking through military friends/ connections	17.46	17.46
Networking through family/friends	20.06	37.51
Online job boards and career tools (Military.com, LinkedIn, Monster.com, etc.)	32.10	69.61
Career fairs	3.59	73.20
Directly contacting employers/HR	26.80	100.00

Table 67 presents the results of the question, "If you had your choice, would you rather work full time or part time?" Over 63 percent of the female respondents with active duty spouses indicated that they would prefer to work full-time (excluding "Prefer not to answer" and "Neither" responses).

Table 67. If You Had Your Choice, Would You Rather Work Full Time or Part Time?

Response	Freq.	Percent	Cumulative Percent
Full time	1,239	61.28	61.28
Part time	727	35.95	97.23
Neither	56	2.77	100.00
Total	2,022	100.00	

Table 68 presents the results of the question, "Select the three characteristics you feel most accurately describe military spouses." Four of the 14 characteristics in Table 68 were selected at a double digit rate to accurately describe military spouses (including only responses for "Adaptable" through "Loyal"): Adaptable (18.85 percent), Resilient (15.97 percent), Independent (13.13 percent), and Flexible (12.26 percent).

Table 68. Select the Three Characteristics You Feel Most Accurately Describe Military Spouses? Select All That Apply

Response	Percent	Cumulative Percent
Adaptable	18.85	18.85
Flexible	12.26	31.12
Critical Thinkers	2.68	33.80
Resilient	15.97	49.77
Independent	13.13	62.90
Creative	3.20	66.10
Hard workers	6.88	72.98
Leaders	2.78	75.76
Motivated	4.14	79.90
Skilled Communicators	1.93	81.84
Skilled Managers	1.93	83.77
Problem Solvers	8.48	92.25
Mentors	1.59	93.84
Loyal	6.16	100.00

The respondents were asked to rate a series of statements concerning military spouses. Figure 33 presents the results of the rating of these statements by female respondents with active duty spouses. Each respondent rated each statement on a 1 to 5 scale, from "Strongly Disagree" (1) to "Strongly Agree" (5). For two of the statements, the majority of the respondents rated the statement "Agree" or "Strongly Agree." The statements which exhibited tendencies to agree by the respondents were: "Military spouses often have more varied work experience than their civilian counterparts," "Military spouses need more benefits/accommodations than their civilian counterparts," "Military spouses often make better leaders/managers than civilian employees," and "It is difficult for military spouses to get hired," in order of strength of respondent agreement. The statement exhibiting the highest level of disagreement was "Military spouses need more training than civilian employees." For statements "Military spouses often have more work experience than their civilian counterparts," and "Military spouses need more benefits/accommodations than their civilian counterparts," ratings indicated, on average, respondents neither agreed nor disagreed with the statements.

Military spouses often make better leaders/managers than civilian employees

Military spouses need more training than civilian employees

It is difficult for military spouses to get hired

Military spouses need more benefits/accommodations than their civilian counterparts

Military spouses often have more varied work experience than their civilian counterparts

Military spouses often have more work experience than their civilian counterparts

Figure 33. Level of Agreement With the Following Statements

1 - Strongly Disagree 2 - Disagree 3 - Neither 4 - Agree 5 - Strongly Agree

Policy Programs That Have Worked or Not Worked

The question, "Have you used the MyCAA (My Career Advancement Account) for your educational advancement," was displayed only to spouses who had indicated that they were either currently a part time or full time student. Over 72 percent of the female respondents with active duty spouses indicate that they have not used the MyCAA for their educational advancement.

Table 69. Have You Used the MyCAA (My Career Advancement Account) for Your Educational Advancement?

Response	Freq.	Percent	Cumulative Percent
Yes	99	27.97	27.97
No	255	72.03	100.00
Total	356	100.00	

The question, "Please indicate, why you have not used the MyCAA (My Career Advancement Account)," was displayed only to spouses who had indicated that they had not used MyCAA for their educational advancement. The majority of the female respondents with active duty spouses, 68.7 percent, indicate that they did not qualify (excludes "Never heard of it," "Other, please specify," and "Prefer not to answer" responses) and over 31.30 percent of the total female respondents had never heard of the program.

Table 70. Why Have You Not Used the MyCAA (My Career Advancement Account)

Response	Freq.	Percent	Cumulative Percent
Did not qualify based on spouses pay grade	104	39.69	39.69
Did not qualify based on level of education	57	21.76	61.45
Did not qualify based on other criteria, please specify	19	7.25	68.70
Never heard of it	82	31.30	100.00
Total Responses	262	100.00	

Department of Defense/Military-sponsored employment assistance programs offer services to job-seekers. Such services include career counseling and resume preparation. Respondents were asked the question, "Were you aware of these sponsored employment assistance programs during your most recent job search?" Though only about 36 percent of the respondents in Table 71 indicated that they were not aware of the employment assistance programs offered by Department of Defense to job-seekers, the percentage is high enough to warrant seeking alternatives for spreading awareness of these programs.

Table 71. Awareness of Defense/Military Sponsored Employment Assistance Programs

Response	Freq.	Percent	Cumulative Percent
Does not apply; have never sought employment	33	1.78	1.78
No, I was not aware	643	34.64	36.42
Yes, I was aware but did not use them	745	40.14	76.56
Yes, I was aware and used them	435	23.44	100.00
Total Responses	1,856	100.00	

The question, "How satisfied were you with the Department of Defense/Military-sponsored employment assistance programs," was displayed only to spouses who had indicated that they were aware and have used Department of Defense/Military-sponsored employment assistance program. Table 72 indicates that over 46 percent of the respondents are "Very dissatisfied" or "Dissatisfied" with the Department of Defense/Military-sponsored employment assistance programs. The mean value for the responses provided in Table 72 is 3.2807, which places it between "Neither satisfied or dissatisfied" and "Dissatisfied." The largest percentage of responses are provided to "Dissatisfied" at 26.45 percent. Obviously, one would hope that military spouses would be mostly satisfied with the Department of Defense/Military-sponsored employment assistance programs, however the results displayed in Table 72 indicate otherwise. These programs may need to be evaluated in the future to determine specific pathways for improvement.

Table 72. Level of Satisfaction with Defense/Military Sponsored Employment Assistance Programs

Response	Freq.	Percent	Cumulative Percent
Very satisfied	34	7.89	7.89
Satisfied	95	22.04	29.93
Neither satisfied or dissatisfied	103	23.90	53.83
Dissatisfied	114	26.45	80.28
Very dissatisfied	85	19.72	100.00
Total	431	100.00	
Mean		3.2807	
Median		3	

The question, "Did you secure employment from these Department of Defense/Military-sponsored employment assistance programs," was displayed only to spouses who had indicated that they were aware and have used Department of Defense/Military-sponsored employment assistance program. Table 73 indicates that only 11.49 percent of the female respondents with active duty spouses secured their employment through the Department of Defense/Military-sponsored employment assistance programs. One would hope this percentage would be higher, which would indicate that the Department of Defense/Military-sponsored employment assistance programs are achieving what they were designed to accomplish. The small number of observations reflected in Table 73 may not lend itself to a generalization concerning the success or failure of the Department of Defense/Military-sponsored employment assistance programs, however, it may be worthwhile to further examine these programs in terms of what works best for military spouses seeking employment.

Table 73. Did You Secure Employment From These Department Of Defense/Military-Sponsored Employment Assistance Programs?

Response	Freq.	Percent	Cumulative Percent
Yes	50	11.68	11.68
No	378	88.32	100.00
Total	428	100.00	

Unemployment Benefits

Table 74 presents the results for the question, "Has Your Application for Unemployment Benefits Been Denied This Year or Last Year?" The percentage with denial of unemployment benefits 29.06 percent.

Table 74. Has Your Application for Unemployment Benefits Been Denied This Year or Last Year?

	Total			
Response	Freq.	Percent		
Yes	59	29.06		
No	144	70.94		
Total	203	100.00		

Table 75 presents the current state of residence for the respondents by the response to the question, "Has your application for unemployment benefits been denied this year or last year?" The distribution of responses to the question "Has your application for unemployment benefits been denied this year or last year?" by state of residence is not statistically significantly different between the "Yes" and "No" responses. No one state of residence exhibits an inordinate percentage of denials suggesting the denial of unemployment benefits is not a state issue for the female respondents of active duty spouses. California, Texas and Virginia exhibit the highest percentage of the denials (all double digits) which is not surprising considering the population density of the states and the location of major military installations.

Table 75. State of Residence by Has Your Application for Unemployment Benefits Been Denied This Year or Last Year? Top 10 States

	Yes, Denied		No, Not Denied	
State	Freq.	Percent	Freq.	Percent
California	7	15.91	13	9.29
Virginia	6	13.64	13	9.29
Texas	5	11.36	9	6.43
Florida	3	6.82	7	5
Georgia	3	6.82	8	5.71
Maryland	3	6.82	4	2.86
Hawaii	2	4.55	4	2.86
Missouri	2	4.55	1	0.71
North Carolina	2	4.55	14	10
South Carolina	2	4.55	2	1.43

Childcare

For the question, "Are you currently using any sort of childcare arrangements for any of your children?" over 69.5 percent of the female respondents with active duty spouses indicated that they were not using childcare arrangements.

Table 76. Using Childcare Arrangements for Children

Response	Freq.	Percent	Cumulative Percent
Yes	372	30.42	30.42
No	851	69.58	100.00
Total	1,223	100.00	

The question, "What type of childcare arrangements do you use? Select all that apply," was displayed only to spouses who had indicated that they are currently using some sort of child care arrangement. The three most common types of child care identified in Table 77 by female respondents with active duty spouses are Department of Defense affiliated Child Development Center (CDC), 25.37 percent, Private day care center, 24.63 percent, and before and after school care, 21.39 percent. The average total cost of childcare arrangements for all of the children of female respondents (per week) is \$179.25 (standard deviation of 131.75).

Table 77. Using Childcare Arrangements for Children. Select All That Apply

Response		Cumulative Percent
In-home daycare aboard a military installation	2.49	2.49
In-home daycare off installation	5.97	8.46
Department of Defense affiliated Child Development Center (CDC)	25.37	33.83
Private day care center	24.63	58.46
Head Start or other publicly-funded day care center	1.00	59.45
Before or after school care	21.39	80.85
Child Care Co-op	0.50	81.34
Family Member	8.46	89.80
Private nanny/Au pair	10.20	100.00

Age Earnings

A common thesis, supported by existing literature, is that, in general, earnings are directly related to age. ACS data provides an excellent source to mathematically and statistically represent this age to earnings phenomenon for Armed Forces and civilian female spouses.

The age to earnings relationship can be expressed in several mathematical forms. One of the most common is age and age squared as a function of income (a linear form which will result in a non-linear, mathematical, inverted U-shaped relationship), expressed as:

 $E=a_0 + a_1Age + a_2Age*Age$

Using ordinary least squares regression, this function was estimated for spouses using total personal income from the ACS 2011. All coefficients were statistically significant at the 99 percentile and had the expected signs, resulting in the common inverted u-shaped distribution for the age range of 18 to 75 years. The maximum earnings for this function occurs at about 56 years of age reflecting over \$53,306.

This original estimated function was a simple specification with only age and age squared used as the explanatory variables to capture the variation in the dependent variable, total personal income. The Coefficient of Variation, referred to as R-squared, for the estimated function was 0.0106 which is quite low given the maximum value for R-squared is one (1). This low R-squared is indicative of a poor specification, i.e., the factors or variables that affect the variation in earnings over time have not all been included in the equation specification.

A more advanced specification was estimated which included 61 explanatory variables. The restrictions imposed upon the sample used to estimate the advanced specified equation are: (a) total personal income must be greater than zero (0); (b) total personal income cannot be equal to 9999999 (missing value); (c) only spouses are included in the estimation; (d) age is restricted to 18 to 70 years of age; (e) individual must be in the labor force (f) individual cannot be a member of the Armed Forces; and (g) individual cannot be a veteran. The R-squared for the more advanced specification is 0.2172, a much better result than the simple specified equation (see Figure 34). Thus, the expanded specification has improved the explanatory power of the estimated age earnings function. Of the 61 coefficients estimated for the equation, only 15 are not statistically significant at the 90 percentile or higher: 11 of these are dealing with aspects of ethnicity (Asian, Pacific Islander, American Indian and Race, Other) and 4 are specifications concerning geographical region of the United States. Of the 47 statistically significant explanatory variables, only 4 are not statistically significant at the 99 percentile.

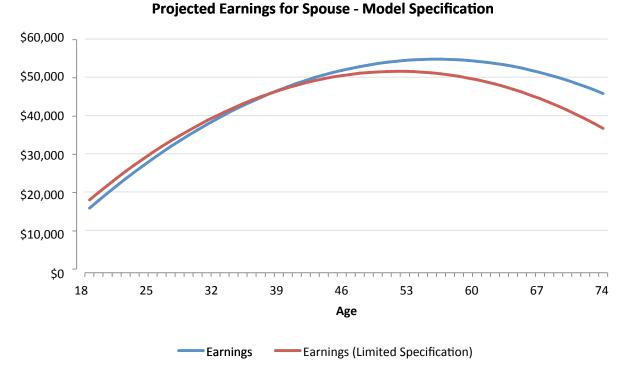
The maximum earnings for this advanced specified function occurs at about 58 years of age reflecting over \$54,369. To estimate the age earnings function, the mean values for the explanatory variables, over the estimation sample, were used as values for the explanatory variables in the calculation, with the exception of age. Even with the expanded specification, the projected age earnings functions are very similar with only a modest change in the maximum earnings and corresponding age.

The most significant advantage of the expanded specification is the ability to project earnings for subgroups within the sample population. For example, projected earnings for male spouses can be compared to projected earnings for female spouses. Male spouses have much higher projected

earnings than female spouses, though their maximum earnings occurs at the about the same age, 58 years of age, \$70,197 for males and \$46,113 for females, a \$24,083 difference.

The projected age earnings functions for Civilians, Armed Forces and Veterans spouses in the labor force are functionally similar, reaching maximum projected earnings at the same age, 58. Civilians and veterans spouses projected earnings are close in magnitude followed by Armed Forces spouses, e.g., the maximum earnings for Armed Forces, veterans and civilians spouses are \$49,148.08, \$53,406.67 and \$54,851.07, respectively.

Figure 34. Estimated Age Earnings Function Based on Simple and Expanded Specification for Spouses



Data source: American Community Survey, 2011

Figure 35 presents the graphical representation of the estimated age earnings functions for civilians, Armed Forces and veterans spouses in the labor force. The projected age earnings functions are functionally similar reaching maximum projected earnings at the same age, 57. Civilians and veterans spouses projected earnings are close in magnitude followed by Armed Forces spouses, e.g., the maximum earnings for Armed Forces, veterans and civilians female spouses are \$41,405, \$45,503 and \$46,584, respectively. These differences in age-earnings between civilian, Armed Forces and veterans spouses is consistent with earlier findings which represent veteran spouses as more like civilian spouses, though older, on average. The other key issues that contribute to this result are radical differences in age distributions and the frequent occurrence of geographical moves for Armed Forces spouses versus their civilian and veteran counterparts. All of these factors for Armed Forces spouses contribute to a lower (less income) age-earnings function than their civilian and/or veteran counterparts.

Figure 35. Estimated Age Earnings Function Based on Expanded Specification for Female Spouses

Projected Earnings for Female Spouses by

Civilian, Armed Forces and Veteran \$50,000 \$40,000 \$30,000 \$20,000 \$10,000 \$0 18 25 32 39 46 53 60 67 74 Age

Armed Forces

Data source: American Community Survey, 2011

The estimated age earnings functions for five SOCs for spouses in the labor force were estimated: SOC 25xxxx (education, training and library occupations), SOC 29xxxx (healthcare practitioners and technical occupations), SOC 39xxxx (personal care and service occupations), SOC 41xxxx (sales and related occupations) and SOC 43xxxx (office and administrative support occupations). The projected age earnings functions are functionally similar reaching maximum projected earnings at the same age, 58. SOC 29xxxx, healthcare practitioners and technical occupations, exhibits the highest age earnings over the 18 to 75 years of age, while SOC 25xxxx, education, training and library occupations, exhibits the lowest age earnings over the 18 to 75 years of age.

Veterans

Civilians

Survey Specific Conclusions

The Military Spouse Employment Survey was created to explore the challenges that military spouses face when pursuing employment. The individual question responses, along with the cross tabulations among the questions, allow the participants to tell the stories of military spouses and detail the specific challenges facing military spouses, including challenges to both employment and career advancement as a result of the military lifestyle. This report provides the results from the survey in an effort to increase knowledge and awareness of military spouses' needs and experiences. In addition, this report provides practical and policy recommendations supported by the survey results to improve the resources available to military spouses and positively impact their career trajectories. The discussion of the question responses has provided numerous conclusions which are highlighted and emphasized in the following discussion. The respondents sample from which these conclusions and recommendations are drawn is comprised of and limited to female respondents to the survey whose spouses are members of the of active duty military.

Unemployment and Underemployment

- Respondents from the collected sample exhibit a high unemployment rate of over 32 percent for the September/October 2013 time frame in which the sample was collected. No significant difference is observed whether the respondent's active duty spouse is officer or enlisted.
- Over 28 percent of the unemployed respondents indicated "I could not find work that matched
 my skills/education level" as the most often identified reason for not currently working. This is
 followed by "I cannot find work flexible enough to accommodate my spouse's schedule" at 17
 percent and "I want to be able to stay home to care for my children" at 11 percent. The
 response "I have child care problems (e.g., too costly, lack of availability)" also exhibited 11.00
 percent.
- The unemployment rate for respondents varies significantly by level of educational attainment: slightly over 29 percent for respondents with a Bachelor's degree or higher and over 40 percent for respondents with less than a Bachelor's degree.
- Underemployment with respect to education applies to over 53 percent of the employed female respondent sample while underemployment with respect to experience applies to over 80 percent.
- When taken together (i.e., the individual is underemployed by both education and experience), underemployment by education and experience applies to over 46 percent of the employed female respondent sample. When taken as either or (i.e., the individual is underemployed either by education or experience), education and/or experience applies to over 90 percent of the employed female respondent sample.
- Part of the severity of the underemployment numbers for respondents can be explained by the
 presence of the poor economy since 2008 in which these individuals were seeking and have
 obtained employment.
- Regardless of the basis of the definition used for underemployment, education and/or experience, the average gross income over the last 12 months is statistically significantly lower for respondents who are underemployed. Thus, respondents settling for jobs for which they are over-qualified in terms of education or experience, costs the individuals in terms of forgone potential gross income.
- Over 55 percent of the respondents indicated that it was difficult finding their current/most recent job.
- Over 58 percent of the respondents indicated that informing a prospective employer that they
 are a military spouses would make a prospective employer less likely to hire them. Over 46
 percent of the respondents indicated that they had been asked by a potential employer if they
 were a military spouse.
- The reasons most often cited for not currently working by female respondents were "I could not find work that matched my skills/education level" (over 27 percent) and "I cannot find work flexible enough to accommodate my spouse's schedule" (over 17.37 percent).
- Over 55 percent of the female respondents indicate that they "Need to work" while over 90 percent indicated that they "Want to work."

Income

- Nearly 39 percent of the respondents indicated that they were not currently/most recently working in their preferred career field. Average total gross income over the last 12 months is statistically significantly different between respondents who are in their preferred career field (average of \$32,886), compared to respondents who are not in their preferred career field (average of \$16,506). This suggests that if the nearly 39 percent of the female respondents who are not in their preferred career field, were in their preferred career field, then their average gross income would be higher.
- Female respondents whose spouses are officers tend to believe they are in better financial
 condition than their enlisted counterparts. This is not completely surprising since officer pay
 scales are higher than enlisted pay scales.
- The career field/occupation of the female respondents current/most recent employment with
 the highest number of observations is government employee (contracting, defense, government
 relations, or Federal/State/Local government employee), which exhibits an average gross
 income of \$50,389. The average gross income for the government employee career
 field/occupation is above the average and median values across career fields/occupations.
- The career field/occupation of the female respondents current/most recent employment with
 the second highest number of observations is education (e.g., teachers, teacher's assistants),
 which exhibits an average gross income of \$27,158. The average gross income for the education
 career field/occupation is below the average and median values across career
 fields/occupations.
- The three highest average gross income career fields for the female respondents with active duty spouses are: (1) information technology (e.g., network analysts, database administrators) with an average gross income of \$57,137, (2) legal profession (e.g., attorneys, paralegals) with an average gross income of \$57,137, and government employee (contracting, defense, government relations, or Federal/State/Local government employee) with an average gross income of \$50,389

Jobs and Occupations

- With respect to their current/most recent job, over 15 percent of the respondents were
 in government employee (contracting, defense, government relations, or Federal/State/Local
 government employee), followed by education (e.g., teachers, teacher's assistants) with over 14
 percent and health care/health services (e.g., nurses, dental hygienists, pharmacy technicians)
 with over 12 percent.
- Over 50 percent of the respondents indicate that their chosen career field requires licensing or certification and, of these, over 72 percent indicate that the license or certification needs to be renewed/re-issued after a PCS move.
- The career field with the highest percentage of female respondents in their preferred career field is health care (19.14 percent) followed by education (18.82 percent) and government employee (15.68%)
- Female respondents identified "health care/health services" as their preferred career field (nearly 22 percent), followed by "education" (over 16.76 percent) and "community and social services" (over 10 percent).

• Over 39 percent of the female respondents indicated that their current/most recent employment was not in their preferred career field.

Programs

- The majority of the respondents who are pursuing further education, over 57 percent, indicate
 that they did not qualify for the MYCAA program and over 31 percent had never heard of the
 program.
- Of the five programs or approaches to finding employment provided as options in the survey, the option cited most often as being utilized during their search for employment was "Online job boards and career tools (Military.com, LinkedIn, Monster.com, etc.)" at 32.10 percent (excluding "Other, please specify" and Prefer not to answer" responses), followed by "Directly contacting employers/HR" at 26.80 percent.
- Over 35 percent of the respondents were not aware of the Defense/Military sponsored Employment Assistance Programs. Of the subsample that used these programs, less than 30 percent were very satisfied or satisfied with their program experience, and less than 12 percent secured employment through the employment assistance programs.

Military Specific Characteristics

- Over 79 percent of the female respondents with active duty spouses had made a PCS move across state lines or abroad in the past five years.
- The average number of months deployed is about 24 months while the median response value is 21 months.
- Over 59 percent of the respondents have resided in a geographical location that was different from the geographical location of their active duty spouse, with over 34 percent of these separations due to deployment/family separation, but with significant numbers related to maintaining careers, completing education, or meeting family obligations.

Sample Population Statistics and General Demographics

- The survey sample of respondents is representative of respondents with respect to branch of service and ethnicity, but differs somewhat on education and significantly with respect to the ratio of officers to enlisted personnel.
- Slightly over 19 percent of the female respondents are minorities (American Indian or Alaska Native, Asian or Pacific Islander, African American or Hispanic/Latino).
- The sample population of respondents are a young population (mean of 34 years of age) compared to the female respondents with non-active duty spouses (mean of nearly 53 years of age). Analyzing these two sample populations together would provide mixed results in terms of employment, income, children, etc., and, thus, analyzing the female respondents with active duty spouses as a separate sample population if appropriate.
- The female respondents are well educated with over 71 percent of the respondents possessing a Bachelor's degree or higher and over 96 percent possessing some college credit or more.

- Over 88 percent of the female respondents who are officer spouses possess a Bachelor's degree or higher while less than 65 percent of the female respondents who are enlisted spouses possess a Bachelor's degree or higher.
- Nearly 60 percent of the female respondents with active duty spouses possess a Bachelor's
 degree or Master's degree. Only a few of the respondents (0.15 percent) exhibit less than a high
 school degree or GED equivalent. Over 96 percent of the respondents possess some college
 credit or more with over 11 percent exhibiting one or more years of college credit, but no
 degree.
- Female respondents with active duty spouses are a highly educated sample and, thus, the percent who are in school is relatively small, less than 18 percent.
- The female respondents indicate that student loans comprised over 44 percent of the sources of funding for the highest degree earned by the female respondents.
- About 17 percent of the respondents indicated that they were students, part-time or full-time.
- Slightly over 60 percent of the female respondents have children under the age of 18 living at home, either part-time or full-time. This is consistent with the young age of this population sample.
- Over 58 percent of the female respondents have children between the ages of 2 and 12 living at home

Recommendations Based on the Survey Findings

Several recommendations naturally arise from the survey based findings presented above. The recommendations presented below were developed based on the results and findings from the survey and with as little speculation as possible.

- Female spouses of active duty personnel, officer or enlisted, experience PCS moves as an integral part of the military lifestyle. These PCS moves, throughout the military career of the active duty spouses, affect the earnings and employment opportunities of the female respondents (wives). Any personnel policy or recommended modification to personnel management within the Armed Forces, which reduces the frequency of PCS moves, will benefit the female spouses with respect to career advancement/promotion, increased earnings potential, and improved job/occupation opportunities. In addition, the overall well-being of the family will rise as their sacrifices caused by PCS moves decline.
- Certain career fields in the military (such Air force Specialties, Military Occupation Specialties
 and Ratings, officer and enlisted) may not require the same frequency of PCS moves. Those
 career fields that do require more frequent PCS moves should consider more proactive
 programs to support the relocation of the family, especially in terms of job seeking
 opportunities and childcare services. Families should be made aware of programs and points of
 contact to facilitate the PCS move and their assimilation into the new community.
- Programs directed at enhancing the flexibility of the female spouses during the work day, such
 as extended/expanded childcare hours, or flexible work arrangements including flexible stop
 and start times or telecommuting options, likely will enhance career advancement/promotion,
 increased earnings potential, improved job/occupation opportunities.
- An increased effort should be made to expand the awareness of female spouses with respect to Government/private sector programs specifically designed to assist female spouses of active duty personnel in obtaining reliable childcare and seeking optimal employment opportunities,

especially in communities to which they are making a PCS move or have recently made a PCS move.

- An effort should be made to address what constitutes a "voluntary" versus "involuntary" move
 with respect to qualifying for unemployment benefits for military spouses. Clarification or
 adjustment of this criteria for unemployment benefits for spouses of active duty personnel
 would avoid denial of unemployment benefits to female spouses who would otherwise qualify
 for the unemployment benefits. PCS moves are not necessarily voluntary for the military family,
 since involuntary family separation is rarely an option taken, much less desired.
- Given that online education was cited by over 50 percent of the responding sample as the
 means for completing their ongoing efforts at further education, it might prove beneficial for
 the military to consider programs and/or policies that would facilitate online accredited
 education opportunities for military spouses, and to provide information about how to value
 online degree programs.
- Given that (1) over 14 percent of the survey respondents were currently/recently government employees (contracting, defense, government relations, or Federal/State/Local government employee) and (2) civil servants often remain in government service once entering the government workforce, then the federal government might consider providing military spouses preference for civil service job openings, especially for opportunities geographically located near military installations or bases. These hiring preferences could also be extended to military contractors. Additionally, those government service careers with telecommuting options may be ideally suited to mobile military spouses given their existing representation in that sector.
- Overall, providing easily accessible means for obtaining information on educational and job
 opportunities and assistance programs, as well as addressing licensing and certification
 requirements across states for various occupations, can reduce the transaction costs of PCS
 moves and facilitate assimilation into new locations without losses in career advancement,
 gainful employment and income.
- One option for facilitating the transfer of knowledge concerning information on educational programs, job opportunities in the local communities, and assistance programs, as well as addressing licensing and certification requirements across states for various occupations, would be the development and maintenance of a central Internet website to house all the information in a format which would provide quick, easy access. This might also necessitate the availability of a facility for each base/installation where spouses and family members of active duty personnel could go to access the website, primarily for individuals who do not have access to the Internet at home. Until knowledge of programs to assist active duty families in all aspects of the transition to new geographical locations becomes the norm, action/programs directed at facilitating acquisition of knowledge is needed.

Overall Conclusions

The data analyzed provided several conclusions concerning the demographics of military spouses.

- Active military spouses are predominantly female (95 percent).
- Active military spouses are significantly younger compared to their civilian and veteran counterparts. Active duty military spouses are, on average, 33 years of age compared to 47 years of age for civilian spouses and 60 years of age for veteran spouses.
- The active military spouse community has a larger proportion of ethnic/racial minorities as compared to the broader civilian population.
- Active military spouses are more likely to have children (18 and under) at home compared to their civilian counterparts (74 percent versus 59 percent).
- The educational attainment rates of active military spouses are as follows: 22 percent have a high school diploma or less, 33 percent have some college credit, 12 percent have an associate degree and 25 percent have a bachelor's degree.
- Active military spouses are more likely to have moved within states, across states, and abroad, compared to their civilian and veteran counterparts. The increased likelihood of moving from one geographic location to another by active military spouses interacts with economic issues for these families as indicated by an average personal income which is over 38 percent less than their civilian counterparts.

Unemployment

The characteristics of military spouses differentiates them from their counterparts and contributes to their differentiated economic conditions (employment and compensation). The data provided several conclusions with respect to unemployment for Armed Forces spouses.

In 2012, 18-24 year-old Armed Forces female spouses had the highest unemployment rates at 30 percent (almost three times higher than their civilian counterparts, which were 11 percent). 25-44 year-old Armed Forces female spouses had the second highest unemployment rates at 15 percent (almost three times higher than their civilian counterparts, which were 6 percent). In general, Armed Forces female spouses' exhibit higher unemployment rates than their civilian counterparts regardless of:

- Time period (2000-2012)
- Educational attainment
- Age groups (18-24, 25-34, 35-44, and 45-54)
- Whether they have moved or not moved in the last year (though the difference for Armed Forces spouses who have moved is substantially higher)
- Geographical location of their residence
- Whether or not they have children of their own in the home
 - o This holds true when considering the ages of children in the home, as well

Income

The data provided several conclusions with respect to Armed Forces spouses' total personal income. In 2012, Armed Forces female spouses made 38% less than their civilian counterparts. In general, Armed Forces female spouses exhibit lower average total personal income than their civilian and/or veteran counterparts regardless of:

- Time period (2000-2012)
- Educational attainment
- Age groups (18-24, 25-34, 35-44, and 45-54)
- Whether they have moved or not moved in the last year (though the difference for Armed Forces spouses who have moved is substantially higher than that of either civilian or veteran female spouses)
- · Geographical location of their residence

Age-earnings

The age-earnings relationship of Armed Forces female spouses reflects the effect of a negative penalty which is never recovered throughout their working years, unless their spousal counterparts separate from service. Though, on average, veteran female spouses exhibit lower average total personal income than their civilian counterparts, this negative difference declines with age and can actually be reversed at older ages. In addition, the difference between civilian and veteran female spouses' average total personal income is much smaller than the difference between civilian and Armed Forces female spouses' average total personal income.

Underemployment

A large percentage of respondents are "underemployed" based on two key definitions, education and experience. Underemployment with respect to education (alone) applies to over 42 percent of the employed female respondent sample while underemployment with respect to experience and education applies to over 80 percent. When taken together (i.e., the individual is underemployed by both education and experience), underemployment by education and experience applies to over 46 percent of the employed female respondent sample. When taken as either or (i.e., the individual is underemployed either by education or experience), education and/or experience applies to over 90 percent of the employed female respondent sample.

Part of the severity of the underemployment numbers for respondents can be explained by the presence of the poor economy since 2008, in which these individuals were seeking and have obtained employment. Regardless of the basis of the definition used for underemployment, education and/or experience, the average gross income over the last 12 months is statistically significantly lower for respondents who are underemployed. Thus, respondents settling for jobs for which they are overqualified in terms of education or experience, costs the individuals in terms of forgone potential gross income.

Recommendations

Based on the conclusions cited above, several obvious recommendations follow, some of which have already been addressed with government and private sector programs. Armed Forces female spouses exhibit several characteristics which are not representative of the civilian or veteran female spouses. First, and foremost, Armed Forces female spouses move geographically more often than their civilian or veteran counterparts, and this undoubtedly contributes to substantially higher unemployment rates for Armed Forces female spouses. As indicated in the DMDC 2010 Survey Military Family Like Project, Armed Forces female spouses continue to use networking and direct communication with the employer to seek employment; any program which reduces the time it takes to identify and meet with the appropriate (given the existing skill set of the job seeker), perspective employer will help to minimize the cost to the Armed Forces female spouses in terms of unemployment, duration of unemployment and compensation.

Geographically moving every two to three years significantly increases the burden to the Armed Forces female spouses with respect to identifying and obtaining gainful employment and increases chances of under-employment. The fact that Armed Forces female spouses are well educated compared to their civilian and veteran counterparts, but predominantly participate in jobs that are generally occupied by the less educated (Office And Administrative Support Occupations and Sales And Related Occupations which comprise over 31% of the jobs for Armed Forces female spouses in 2011), suggests that the likelihood of moving (short-term) for the Armed Forces female spouses adversely affects their ability to obtain opportunities for career advancement comparable to their skill set. Regardless of how unemployment and Armed Forces female spouses are stratified, e.g., education, location, job types, presence of children in the home, etc., Armed Forces female spouses exhibit consistently higher unemployment rates than their civilian and/or veteran counterparts. The only factor unexplored, which does not lend itself to analysis with the existing ACS data, is the effect of the employer's attitude toward hiring Armed Forces female spouses who are always accompanied by a high likelihood of re-location within 18 to 24 months. This is the ghost in the closet, i.e., employer uncertainty, which is prohibiting normal job search and successful employment comparable to their skill set for Armed Forces female spouses.

Any program which addresses or attempts to ameliorate the impact if frequent PCSs by their active duty spouse on the likelihood of finding gainful employment will be a major asset, not only for the careers of Armed Forces female spouses but the retention of enlisted and officer personnel across services. Such a program must find an approach which will reduce or eliminate the effect of the high likelihood of short term employment on the hiring likelihood of the perspective employee. There are jobs that do not consider an 18 month to two year job horizon for a perspective employee to be a factor in hiring decisions, but, unfortunately, many of these types of jobs are temporary, low skill and/or low pay as compared to those representing career progression and advancement with longer time horizons of employment availability. Issues of licensing and training required by some occupations can be overcome, though these may contribute to time delays in obtaining employment after any PCS move, but the employer's perspective concerning the high likelihood of turnover in the next 18 to 24 months for the potential hire is a much more difficult issue which not only affects employment and career progression, but compensation, as well.

References

- Blakely, G., Hennessy, C., Chung, M., & Skirton, H. (2012). A systematic review of the impact of foreign postings on accompanying spouses of military personnel. *Nursing and Health Sciences*, 14, 121–132.
- Bureika, R., Reiser, M., Salvuccci, S. Maxfield, B., Simmons, R. (1999). Effective Strategies to Assist Spouses of Junior Enlisted Members with Employment: Analysis of the 1997 Survey of Spouses of Enlisted Personnel (DMDC Report no. 99-007). Arlington, Va.: Defense Manpower Data Center.
- Castaneda, L.W., & Harrell, M.C. (2007). Military Spouse Employment: A Grounded Theory Approach to Experiences and Perceptions. Armed Forces & Society, 34 (3), 389-412.
- Cooke, T. J., & Speirs, K. (2005). Migration and Employment Among the Civilian Spouses of Military Personnel. *Social Science Quarterly, 86* (2), 343-355.
- Decision Engineering Associates (2002). 2002 Quality of Life in the U.S. Marine Corps Study. Dumfries, Va.: Decision Engineering Associates.
- Defense Manpower Data Center. (2010). *Military Family Life Project*. Retrieved from http://www.dod.mil/pubs/foi/submit_foiaform.html.
- Gill, H.L. & Haurin, D. R. (1998). Wherever He May Go: How Wives Affect Their Husband's Career Decisions. *Social Science Research*, 27, 264–279.
- Greentree, V. W., Dagher, L., Johnson, S., Lee, K., Levingston, K., Elquist Lo Re', C., Taylor, J., & White, A.M. (2012). 2012 Military Family Lifestyle Survey Comprehensive Report. Blue Star Families, Department of Research and Policy. Washington, DC.
- Grossman, A.S. (1981). The Employment Situation for Military Wives. *Monthly Labor Review, 104* (2), 60-64.
- Hansen, M. & Nataraj, S. (2011). Expectations About Civilian Labor Markets and Army Officer Retention.

 RAND Corporation, Santa Monica, CA. Retrieved from

 http://www.rand.org/pubs/monographs/MG1123.html.
- Harrell, M. C., Lim, N., Castaneda, L. W., & Golinelli, D. (2004). Working Around the Military: Challenges to Military Spouse Employment and Education. RAND Corporation, Santa Monica, CA. Retrieved from http://www.rand.org/content/dam/rand/pubs/monographs/2004/RAND_MG196.pdf.
- Jensen, L., & Slack, T. (2003). Underemployment in America: Measurement and evidence. *American Journal of Community Psychology*, 32(1-2), 21-31.
- Julian Jr, J. D., Hall, C. E., & Yerger, D. B. (2010). Rural Pennsylvania Underemployment And Its Determinants. *Journal of Business & Economics Research (JBER)*, 8(3).

- Joining Forces Mentoring Plus & Business and Professional Women's Foundation. (2012). Military Spouses: Employment and Careers Issue Brief. Retrieved from http://www.bpwfoundation.org/documents/uploads/Military Spouses Issue Brieffinal.pdf.
- Kleyklamp, M. (2012). Labor Market Outcomes among Veterans and Military Spouses. In Wilmoth, J.M. & London, A.S. (Eds.), *Life Course Perspectives on Military Service*. New York: Routledge.
- Lancaster, A., Klein, R. & Wetzel, E. (2004). *U.S. Department of Defense Retention Trends*. Presentation, International Military Testing Association Conference.
- Lim, N. & Schulker, D. (2010). *Measuring Underemployment Among Military Spouses*. RAND. Accessed from: http://www.rand.org/content/dam/rand/pubs/monographs/2010/RAND_MG918.pdf.
- Little, R. D., & Hisnanick, J.J. (2007). The Earnings of Tied-Migrant Military Husbands. *Armed Forces & Society 33*(4), 547-570.
- McKee-Ryan, F. M., & Harvey, J. (2011). "I have a job, but...": A review of underemployment. *Journal of Management*, 37(4), 962-996.
- Miller, L., Meadows, S., Hanser, L. & Taylor, S. (2011). *Year of the Air Force Family: 2009 Survey of Active duty Spouses*. RAND Corporation, Santa Monica, CA.
- Parillo, V. N. (Ed.). (2008). Encyclopedia of Social Problems. (pp. 967). Thousand Oaks, CA: SAGE Publications Inc.
- Repetti, R. L., Matthews, K. A., & Waldron, I. (1989). Employment and women's health. *American Psychologist*, 44, 1394-1401.
- Schnittker, J. (2007). Working more and feeling better: women's health, employment, and family life, 1974-2004. *American Sociological Review*, 72(2), 221-238.
- Schwartz, J., Wood, L. & Griffith, J. (1991). The Impact of Military Life on Spouse Labor Force Outcomes. *Armed Forces & Society* 17, 385-407.
- Scurry, T., & Blenkinsopp, J. (2011). Under-employment among recent graduates: a review of the literature. *Personnel Review*, 40(5), 643-659.
- United States Census Bureau. (2000). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs/downloads/pums/.
- United States Census Bureau. (2001). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs/downloads/pums/.

- United States Census Bureau. (2002). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs/downloads/pums/.
- United States Census Bureau. (2003). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs/downloads/pums/.
- United States Census Bureau. (2004). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs/downloads/pums/.
- United States Census Bureau. (2005). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs/downloads/pums/.
- United States Census Bureau. (2006). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs/downloads/pums/.
- United States Census Bureau. (2007). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs2007_1yr/pums/.
- United States Census Bureau. (2008). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs2008_1yr/pums/.
- United States Census Bureau. (2009). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs2009_1yr/pums/.
- United States Census Bureau. (2010). *American Community Survey (ACS): Public Use Microdata Sample (PUMS)* [Data file and codebook]. Retrieved from http://www2.census.gov/acs2010_1yr/pums/.
- United States Census Bureau. (2010). Weighting and Estimation. In American Community Survey: Design & Methodology (Chapter 11). Retrieved from http://www.census.gov/acs/www/Downloads/survey_methodology/acs_design_methodology.p df.
- United States Census Bureau. (2011). *American Community Survey (ACS): Public Use Microdata Sample (PUMS)* [Data file and codebook]. Retrieved from http://www2.census.gov/acs2011_1yr/pums/.
- United States Census Bureau. (2012). American Community Survey (ACS): Public Use Microdata Sample (PUMS) [Data file and codebook]. Retrieved from http://www2.census.gov/acs2011_1yr/pums/.
- United States Department of Defense. (2008). *Report on Military Spouse Education and Employment*. Office of the Deputy Under Secretary of Defense, Military Community & Family Policy.

- United States Department of Defense. (2010). Report on the Impact of Deployment of Members of the Armed Forces on Their Dependent Children. Retrieved from http://www.militaryonesource.mil/12038/MOS/Reports/Report_to_Congress_on_Impact_of_D eployment_on_Military_Children.pdf.
- United States Department of Treasury & US Department of Defense. (2012). Supporting Our Military Families: Best Practices for Streamlining Occupational Licensing Across State Lines. Retrieved from http://www.defense.gov/home/pdf/Occupational_Licensing_and_Military_Spouses_Report_vFl NAL.PDF.
- The White House. (2011). Strengthening Our Military Families: Meeting America's Commitment.

 Retrieved from
 http://www.defense.gov/home/features/2011/0111_initiative/strengthening_our_military_january_2011.pdf.
- The White House, Executive Office of the President. (2012). *Military Skills for America's Future:*Leveraging Military Service and Experience to Put Veterans and Military Spouses Back to Work.

 Retrieved from http://www.whitehouse.gov/sites/default/files/docs/veterans_report_5-31-2012.pdf.
- The White House, Executive Office of the President. (2013). The Fast Track to Civilian Employment:

 Streamlining Credentialing and Licensing for Service Members, Veterans, and their Spouses.

 Retrieved from

 http://www.whitehouse.gov/sites/default/files/docs/military_credentialing_and_licensing_report_2-24-2013_final.pdf.
- Wilkins, R., & Wooden, M. (2011). Economic approaches to studying underemployment. In *Underemployment* (pp. 13-34). Springer New York.