ABSTRACT

Title of Dissertation: THE FINANCIAL WELL-BEING OF MILITARY
FAMILIES

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Entry into the military is a major turning point in the lives of many young adults; however, little is known about the financial well-being of military families compared to their civilian peers or about the differential effects of aspects of service within the military community. Using representative samples of the United States population and of active-duty military members, this study analyzes 1) differences between military and civilian families in financial well-being; and 2) how characteristics of service affect the financial well-being of military families. Results vary based on the measure of financial well-being examined and by age, race/ethnicity, paygrade/organizational seniority, and spouse employment status. The results generally indicate that the military may be a good place to start because young military families have comparable or more positive financial well-being than their civilian peers, but staying in the military negatively impacts financial well-being. Overall, military families experience a lower level of financial well-being than their civilian peers in regard to income and total household savings (controlling for dual income status, age, number of children, race/ethnicity, and education). Of those families experiencing lower financial well-being, civilian and military spouses share many of the same characteristics, such as being young, being race/ethnic minority members, and having less education.

The analysis indicates that the unique aspects of military life do have differential effects on financial well-being. Military families who have experienced longer separations tend to have lower financial well-being, but number of separations and relocations does not have a significant negative impact on financial well-being. Military spouses who are underemployed have less total household income and less positive perceived financial well-being compared to spouses who are not underemployed. Voluntarily exiting the workforce is positively related to perceived financial well-being and saving habits. Suggestions for future research include creating a single measure of wealth, expanding the types of debt analyzed, conducting a longitudinal study of single and married service members to monitor the development of their financial well-being, and conducting more detailed research on the impact of relocations and separations.

THE FINANCIAL WELL-BEING OF MILITARY FAMILIES

by

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DEDICATION

This paper is dedicated to my father, Colonel John A. Noble, U.S. Army (Retired) for making me an Army brat and to my husband, Michael J Lipari, for helping me become the woman I am today.

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CHAPTER I: INTRODUCTION

Overview

Though the United States is one of the most affluent nations in the world, the financial well-being of individual citizens remains a concern, as significant numbers of Americans live below the poverty line or experience financial distress. Periods of financial insecurity over the course of an individual's life are unintended. Seemingly innocuous choices made every day can result in changes in an individual's financial well-being. For example, purchasing lottery tickets can result in a financial windfall; but can also act as a slow financial drain. Personal choices made at pivotal transition points in an individual's life course are more likely to have lasting financial repercussions than choices made at other times. One such transition point occurs upon the completion of high school. At this point, many Americans choose to obtain a college degree and accept that to do so they will assume extensive financial debt. In addition, individuals frequently accept a lower income level while in college with the expectation that their post-graduation income will compensate for the lost income and incurred college debts. As an alternative, individuals transitioning out of high school may choose to join the military. Military recruiting efforts, as well as the popular press, have helped to construct a perception of the military as a "good job." Hence, military service is often not associated with either accruing debt or accepting a lower level of financial well-being.

Reflecting on the effect of military service on an individual's financial well-being from a life course perspective can facilitate our understanding of this complex issue. The life course perspective takes into account multiple factors that can affect financial well-being, including timing within the life course, implications for embedded relationships, and human agency. Historically, the military has proven to be a good place to start

because of the skills and benefits derived from military service, and military service has acted as a "bridge" for some from a lower socioeconomic status to a higher one, especially for men from racial/ethnic minority groups (Browning, Lopreato, and Poston 1973; Gade, Lakhani, and Kimmel 1991). However, the historical context in which military service occurs has an impact on its usefulness as a means for attaining a higher socioeconomic status. Much of the work on the bridging effect of military service was conducted on World War II or Vietnam era service members.

Expectations regarding the benefits of military service may be exaggerated in the popular conception because of previous research on the economic success of World War II era service members. More recent work indicates that military service has detrimental effects on the socioeconomic well-being of women who serve (Cooney 1997). The expansion of higher education has made college a better investment of time than military service. However, about half of military retirees indicated in a 2003 survey that they were doing better economically as compared with others their age who did not have a military career, although a third thought they were about the same economically (DMDC 2004). The socioeconomic situation of military members may be affected by the employment status of their wives with whom they have linked lives. Booth, Falk, Segal, and Segal (2000) found that civilian women, including wives of military members, living near military bases experienced depressed wages and higher unemployment. About a third of military retirees indicated that their active duty service was a hindrance to their spouse's career (DMDC 2004).

Individuals transitioning into the military may choose this life course because previous generations have demonstrated that military service can be a successful means

for Americans to expand their opportunities and to attain or maintain an acceptable standard of living. Although the military may still act as a bridge for young adults, historical changes in the United States and in the military may mean that military service is a less successful channel for reaching a higher socioeconomic status. An example of the disparity between the idea of the military as a means to attain higher financial well-being and the current experiences of service members are the financial problems faced by some service members and their families. Military families are eligible for food stamps, a domestic food and nutrition assistance program administered by the U.S. Department of Agriculture's Food and Nutrition Service (FNS) (Thompson, 2000). Military pay is intended to be sufficient to meet the basic needs of all service members—this is a fundamental premise of the All Volunteer Force. Military members who are eligible for the food stamp program challenge the feasibility of the military as a life course bridge. As military members defend the United States, it is not unreasonable to expect that the government will ensure that the standard of living of military members and their families is equitable compared to the society that members defend. If a significant portion of the military population is in financial distress, it is imperative to identify that segment of the population in order to develop initiatives directed towards raising their standard of living.

In this analysis, "financial well-being" is used to refer to the overall economic status of an individual or household. The evaluation of economic status is derived from combinations of the following elements: income level, amount of debt, level of savings, and personal assessment of financial state. To distinguish households that are experiencing any financial difficulty, from those households that 1) are either at or near to the poverty line; 2) have large debt/little savings; or 3) have a financial status that

causes anxiety, the phrases "financial distress", "financial instability", or "experiencing financial difficulties" are used to modify the more general financial well-being terminology.

The United States military, as the largest employer of youth in the nation, both reflects the economic status of many Americans and affects the greater economy (Todaysmilitary.com 2004). Military personnel constitute a bounded subset of American society in which it is reasonable to anticipate that factors contributing to financial distress among members of the civilian society would have a similar effect in the lives of military members. However, military personnel live within a unique organizational culture that may impact how factors associated with financial instability operate. For example, the frequent relocations required of service members can make it difficult for members of the military to purchase a house, a valuable economic resource for many families. Segal (1986) describes the military as a greedy institution in which service members are subject to a pattern of demands from the military, such as geographic mobility, residence in foreign countries, and marital separation, which typically do not occur in the same combination or frequency for other occupations. Characteristics of service members and their families experiencing financial distress may not exactly mirror those in the civilian society, but the negative effect of financial distress on quality of life occurs in both military and civilian contexts.

To understand the financial well-being of military members and their families, it is important to know who experiences financial distress in civilian society. Among families, those headed by women, young adults, and racial/ethnic minorities tend to be in the worst financial position (Iceland 2000). Families with these characteristics tend to

have lower incomes and proportionally more expenses. However, low income is only part of the problem because experiencing financial distress can result from poor saving habits, excessive spending, and other ill-advised financial decisions. Drawing upon civilian research, this study presents a model for understanding financial distress in the military.

Contribution to the Field

There are several reasons to study military personnel who experience financial difficulties. First, it is only recently that data have been collected which allow for the systematic study of the financial well-being of military members and their families. In most sociological studies of financial well-being in the United States, members of the military are either an invisible presence or omitted entirely. Military personnel are specifically excluded from many sociological studies because they are not considered part of the general population; instead, service members and their families are relegated to a special population status as a result of their "institutionalization" within the military (Booth 2000). With the transition to the All Volunteer Force, members of the military are neither draftees removed from traditional society nor intentionally paid subsistence wages for their short period of enlistment. They are members of society who have chosen the military as their most attractive employment option. Indeed, most military families do not live in military housing on-base and are thus integrated into the civilian community. This housing arrangement is especially true of married junior enlisted personnel, who are at most financial risk. As a result of these changes, the financial well-being of military personnel needs to be studied to complete the sociological understanding of financial well-being.

Another argument for researching the military is to test pre-existing models on a new population. Typically, researchers attempt to validate existing models by applying similar models within foreign nations. Such cross-cultural studies test whether the explanatory powers of models are limited to a particular set of cultural constraints in a nation. While poverty studies in sociology routinely strive to specify characteristics associated with financial distress in American society, researchers have not considered how the same factors would operate within the military context. The application of pre-existing models to the military context allows sociologists to ascertain whether relationships are influenced by the social and occupational organization of the larger society because the military differs from civilian society. Unlike most sociological studies of financial well-being which rely on income as the sole indicator of financial well-being, this study will follow the emerging trend among sociologists to analyze not only income, but also more complex measures of financial well-being (Keister and Moller 2000).

In contrast to other sociological studies, this dissertation focuses on military families to establish whether results of previous research linking race and family composition to poor financial well-being are applicable to the military context. This study attempts to determine whether members of the military have lower financial well-being in comparison to their civilian peers. This study seeks to establish whether military members are more likely than their civilian peers to have children earlier and to have more children to determine if this is a primary contributor to financial distress in the military population, as it is in civilian populations (Casper, McLanahan, and Garfinkel 1994). In addition, this study analyzes how unique characteristics of military service

affect the financial well-being of military members and their families. In this regard, this study also examines the effect of military spouse employment on financial well-being. Military spouses, through their linked lives with military members, have been more likely to experience unemployment and underemployment. Specifically, this study analyzes the effects of the nature of spouse unemployment on the military family's financial well-being. Unlike previous studies of the financial well-being of military families, this analysis does not focus solely on the financial problems of junior enlisted families because it attempts to create a portrait of the long term effects of military service on financial well-being by examining service members in all paygrades.

Research Strategy

All members of the military are employed full-time, but some military members and their families, particularly among the lower enlisted ranks, do experience financial instability (Thompson, 2000). To determine what characteristics are associated with a greater likelihood of experiencing poor financial well-being in the military, literature drawing upon civilian samples is analyzed to help provide insight into the most important factors relating to financial management. In addition, a comparison of civilians and military families is conducted to determine whether military members have more children, which is hypothesized to contribute to lower financial well-being. As family financial security is becoming increasingly reliant upon maintaining dual incomes, this study also examines spouse employment among military families to determine whether spouse unemployment negatively affects the financial well-being of military members.

In the broadest sense, this study suggests that the financial well-being of military members and their families is a function of three major factors, which can be used to frame our understanding of the relationship between military service and financial well-

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being. These points of intersection include 1) the unique social and demographic characteristics of military service, 2) the employment status of military spouses, and 3) financial management values and practices that are present within the military community.

In summary, this study draws on a variety of literatures, including research on military members and their families, research on military spouse employment, research on family formation, and the sociology of poverty and finance. Together, these perspectives establish a baseline for understanding the financial well-being of military members and their families and provide a framework for examining how the unique characteristics of military life can contribute to or aggravate poor financial well-being among military members and their families. This study creates a demographic profile of the financial well-being of military families and analyzes the effects of demographic characteristics on financial well-being.

Following a review of the literature, this study proposes a set of hypotheses regarding the relationship between military service and the financial well-being and behaviors of military families that are subsequently tested using data on both civilians and military households. The 1998 Survey of Consumer Finances provides civilian data. Data on military families are drawn from the 1999 Survey of Spouses of Active Duty Personnel (1999 ADS). Methodologically, a variety of quantitative techniques are employed. These analyses include both civilian-military comparisons, based on matched samples drawn from the civilian and military datasets, and within military comparisons. To test the hypotheses, measures of financial behavior (accumulation of debt, prevalence of savings, etc.) for various demographic subgroups within the military community are

compared. Statistical techniques used for these analyses center on multivariate

regression.

CHAPTER II: LITERATURE REVIEW

The Life Course Perspective

The life course perspective, the sociological study of adult development, has emerged as a unique way of making sense of the changes in human lives over time. In the United States, there are norms for the appropriate ages and sequence for making major life transitions, such as entry into and out of school/work and entry into marriage/parenthood (Rindfuss, Swicegood, and Rosenfeld 1987: 785). The study of these transitions forms the basis for life course research and despite social norms, there is considerable variation in the duration and order of role transitions. "In America the experience of becoming an adult is different for individuals in different race and class groups as well as different for those of the two sexes" (Hogan and Astone 1986: 110-111). Some transitions, particularly the transitions into and out of school/work, are not unidirectional. Indeed, even the transition to adulthood can be reversed. For some life course trajectories, such as non-career military service, it is traditional for individuals to enter adult roles for their service commitment and then return to a "pre-adult" status afterwards by returning to the family home and becoming economically dependent on their parents (Rindfuss, Swicegood, and Rosenfeld 1987). In short, the life course perspective is a means for understanding how the timing and ordering of the transitions during early life of individuals leads to heterogeneous outcomes later in life (O'Rand and Krecker 1990: 250).

Although there is no unified theory of the life course, the life course perspective has developed several common principles (George 1993: 358). The first is that "the life course of individuals is embedded in and shaped by the historical times and places they experience over their life time" (Elder 1998: 961). The historical context in which

development occurs impacts the life course decisions that individuals make. For example, children born in the early 1920s had the course of their lives greatly influenced by the Great Depression, including marital timing and educational attainment (Elder 1999). The second principle, the timing of lives, is that "the developmental impact of a life transition or event is contingent on when it occurs in a person's life" (Elder 1998: 961). For example, Elder (1998) found that the experience of the Great Depression and of military service can have differential effects depending on the age at which either are experienced (Elder 1998). The third principle is that of linked lives, which states that all individuals are "embedded in social relationships with kin and friends across the lifespan" (Elder 1994: 6). The transitions in an individual's life course can be caused by and can affect the people in their lives, such as friends, family, and others. For example, discordant relations between parents can affect their offspring's ability to sustain enduring relationships (Elder 1999). The fourth component of the life course perspective is human agency. "Individuals construct their own life course through the choices and actions they take within the constraints and opportunities of history and social circumstances" (Elder 1998: 961-962). For example, children in the Great Depression who found work had higher self-efficacy and were perceived as more adult-oriented (Elder 1999). In this analysis, the life course perspective provided a lens through which to view how the decision to serve in the military impacts financial well-being and how even those within the military can experience differential effects of military service on their financial well-being.

Conceptualizing the Military in the Life Course

For many Americans, the transition to adulthood is marked by graduation from high school. Though financial independence and geographical separation from one's

parents may not occur immediately, the transition out of high school is pivotal in the life course. After departing high school, young people often choose either to pursue additional education or to enter the labor market. Though many students combine some work experience with school, their post-graduation employment is likely to be more encompassing than their labor force participation while in secondary school. This is a major turning point in their life course (Elder 1998). It is also the point in most people's lives when they begin to establish their credit rating and to accumulate debt.

The current era allows for a more individualized process of becoming an adult, though societal norms still provide strong guidelines, and most young adults eventually seek full-time employment (Lowe 2001: 38). Each year many young Americans choose to experience their transition into adulthood through military service. Many youths enter the military directly after high school graduation. For young adults who choose to go to college directly after graduating from high school, the military is an employment option after attaining some college credit or after college graduation. Each year between 170,000 and 180,000 non-prior service individuals join the enlisted ranks of the U.S. military; for example, of the 182,825 who joined the active duty enlisted ranks in 2004, 176,026 were non-prior service individuals (Department of Defense 2005a).

The military has served as a "bridge" for some from youth to adult roles; and for some members of society who are economically disadvantaged, the military provides a means for socioeconomic improvement. Research on the "bridging effect" indicates that there are socioeconomic advantages to military service as a means for attaining education and training, interpersonal skills, self-discipline, and educational benefits (Browning, Lopreato, and Poston 1973). Although recent research (Cooney 1997) indicates that

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military service is no longer as effective a bridge to higher socioeconomic statuses as it was for the WWII generation, the military does still provide an effective pathway to adulthood for American youth. "The work role is an important factor in stabilizing early adult identity" (Mortimer and Simmons 1978: 443). Young adults who make the transition to adulthood within the military context may develop an identity that encompasses the values and norms within the military culture. "It is reasonable to suppose that both selection and socialization processes operate: that first individuals select themselves to (and are selected by) occupations on the basis of previously developed characteristics; and that subsequently these initial differences are heightened by occupational socialization over time" (Mortimer and Simmons 1978: 445).

Entering the military is a turning point in the lives of military members, which will have implications for their earning capacity and their financial well-being. Military service may be a financial asset, but it is difficult to discern the comprehensive economic effect of a military career on a family's financial well-being because financial well-being is dependent upon total household income. In both the civilian and military sectors, families are increasingly dependent upon a second income to meet their financial obligations and to maintain a comfortable standard of living, but previous research indicates military spouses' entry into the labor market lags that of their civilian counterparts (Scarville and Bell 1993). Even if a career in the military is beneficial to the service member, it may negatively affect the member's financial well-being through the non-military spouse, because military service frequently has a negative impact on the earning capacity of the spouses of military personnel.

The Military – Disparate Demographics within a Unique Culture

The study of the military complements the study of the civilian society from which it is drawn by providing a locus for analyzing similar factors under vastly different demographic conditions. The military is disproportionately comprised of men (85% in 2004), with a significant racial/ethnic minority presence for both women and men (Department of Defense 2005b). More than half of enlisted women and a third of female officers are minority members, with a significant proportion being African American—accounting for a higher percentage of military women than military men (Manning 2005). In addition, members of the military have notably high rates of secondary school graduation, as 99% of enlisted members and 100% of officers have at least a high school diploma or its equivalent (Department of Defense 2005b). In contrast, approximately 85% of the adult US population had at least a high school diploma in 2003 (Stoops 2004).

The majority of military members range in age between 17 and 50 years old because of the entry-level educational requirements and the age-related retirement regulations (Department of Defense 2004). In 2003, the mean age of enlisted members was approximately 27 and for officers it was 34 (Department of Defense 2004). In 2003, approximately 81% of active duty enlisted personnel and 55% of officers were ages 17 to 35, whereas only 36% of the civilian labor force was in this age range (Department of Defense 2004). Members of the military tend to be younger than the civilian labor force because of the disproportionately large number of young service members who are only employed for a short period of time and because the military career is shorter than the civilian career (Segal et al. 1976). Most military members sign up for a specific length of service (2 to 6 years), which they do not extend, and as a result, "the average length of service is less than 10 years" (Segal and Segal 2004: 10). In addition, members of the

military who are not promoted are not encouraged or allowed to remain in the military, further maintaining the youthfulness of the force. For those who do remain in the military, a full career (20 years) is shorter than is typical of civilian occupations, where retirement occurs much later. "Enlisted personnel who enter at around age 18 can retire with benefits before age 40; officers who are commissioned around age 22 can retire in their early 40s" (Segal and Segal 2004: 16).

The force structure of the military is not static. The military force structure has changed significantly since World War II and the Vietnam Era. With the end of the Cold War, coupled with technological advances, the military needs fewer service members. For example, the number of active-duty members in the four military services declined during the 1980s and 1990s from approximately 2,138,157 in 1984 to 1,610,490 in 1994 to 1,414,198 in 2004 (Department of Defense 2005b). In addition to decreasing manpower, technological changes require the smaller force to undergo more extensive training. As the military invests more in the training of active-duty members now than it did under conscription, it also seeks to keep members in service longer than the historical two-year conscription period (Segal 1989). Thus, the changes in the force structure and technology require a greater emphasis on retention rather than single term enlistments.

Since the inception of the All Volunteer Force in 1973, the composition of the American armed forces has continued to evolve. The need to retain members longer has led to a change in the age distribution. The mean age of enlisted members has risen from 25 in 1980 to 27 in 2003, whereas it has risen from 33 to 34 for officers during the same time period (Department of Defense 2004). The gender distribution also has changed. The percentage of women serving on active duty has risen dramatically since the

transition to the All Volunteer Force in 1973. The number of women serving in the armed forces nearly doubled between 1973 and 1976 and the number of women on active duty nearly doubled again between 1976 and 1999 (Department of Defense 2000a). In 2004, women represented 15.4% of officers and 14.7% of enlisted active-duty members (Department of Defense 2005b). Although women remain underrepresented in the military, there are a large percentage of race/ethnic minority members in the military. In 2002, 36% of enlisted men, 51% of enlisted women, and 17% of officers (both sexes) were race/ethnic minority members (Segal and Segal 2004).

As employees of the federal government, members of the military are paid equally based on paygrade group. Thus, members of minorities and women do not suffer from the same income disparity they might face in the civilian economy. For women and racial minorities who have been disadvantaged in the civilian workforce, the military provides a channel for social mobility. Historically, African Americans have found the military to be an institution in which their advancement was less affected by their race, and as a result, they have had disproportionately high enlistment and reenlistment rates (Armor 1996; Moskos and Butler 1996; Segal 1989). Enlistment rates of African Americans have experienced a decline in recent years from 20 percent of non-prior service accessions in 2000 to about 15 percent in 2004 (Segal and Segal 2005). Women and members of minorities in the military can experience economic discrimination to the extent that they are not promoted to higher paygrades at the same rate as their male or white peers. In different historical periods, both women and African Americans have had their ability to proceed to the highest ranks within the military limited by formal and informal barriers to their full participation in the military, although the military has still

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provided a better opportunity for social and economic advancement than many civilian

jobs (Moskos and Butler 1996; Segal 1989). It is therefore anticipated that racial

minorities in the military would have an economic status more similar to their non-

minority service members than to their civilian peers.

Transitioning to Adult Roles in the Military

The demographic composition of the military has implications for the likelihood

of financial distress among service members. In the process of transitioning to

adulthood, youth who enter the military have an advantage because military service

enables them to assume financial independence. However, if service members are

developing financial problems, it may be that there is a disjuncture in the timing of this

transition. Although many officers and enlisted members enter into the military with

student loans, it is also common for service members to join the military as a means for

attaining college funding without accruing as much debt.

People who enter the military either to alleviate or avoid debt may be exchanging

one set of factors related to financial distress for another. Anecdotal evidence indicates

that young service members are targeted by local businesses offering loans and credit

lines to military members because service members have guaranteed employment that

can be garnished if the member defaults on a loan. Additionally, financial practices in

surrounding communities, such as charging high interest rates (20+ percent) for car loans

or charging a 10-20 percent fee for cashing a post-dated check, also compound problems

(Office of the Assistant Secretary of Defense [Personnel and Readiness] 1993: 6-2).

Previous research on junior enlisted military members has found that enlisted members

have more financial problems than their civilian counterparts, regardless of marital status

(Buddin and Do 2002). Among junior enlisted personnel, "an average of 20 percent of

the military population reports being pressured by creditors compared with 10 percent of the civilian population. When it comes to paying bills, 27 percent of the military experiences problems compared with 19 percent of the comparable civilian group" (Buddin and Do 2002: xiii). Military members may assume adult roles before they have the skills needed to manage adult responsibilities.

Military service enables young people to assume adult roles quickly, perhaps more quickly than their civilian peers. Increasingly, normative life course trajectories involve longer stages of dependence on parents, such as remaining financially dependent on parents or living in the parental household until marriage and delayed entry into adult roles (Lowe 2001: 39). In the military, young people are less able to delay entry into adult roles by relying on parental support because they are often geographically separated from their parents. "Older siblings and parents can help young adults monitor their finances through their advice and shared experiences. Military members miss this mentoring by living at a base distant from their relatives" (Buddin and Do 2002: 6). Even if military pay and compensation is comparable to civilian employment options, the military may not provide an adequate basis for the development of sound financial practices. However, if the older siblings and parents of military members are poor financial mentors, the separation forced by the military may prevent the transfer of their poor financial habits.

Family Formation and Military Service

The role sequences associated with the military career have shifted from the World War II or Vietnam era. The adoption of social roles typically occurs in an order relative to other social roles, but the timing of transitions is frequently not predetermined (Elder 1998). A latent function of the need for longer retention of service members and

the suspension of conscription is the rise in the number of military families. In 2004, over 65% of active duty enlisted personnel and 50% of officers had spouses and many active duty personnel also had children (Department of Defense 2005b). In the past, the military discouraged enlisted personnel from getting married and starting families during their period of service (Office of the Assistant Secretary of Defense [Personnel and Readiness] 1993). However, family formation patterns in the military have modified since World War II. "Between 1952 and 1972, the percent of enlisted men in the Army who are married increased from 29.7 to 52.6," with more than half the rise occurring between 1969 and 1972 (Segal et al. 1976: 136). Under the All Volunteer Force, it is likely that early family formation has become increasingly common, both in regard to getting married and having children. Previous research indicates that low paygrade does not deter family formation, both entering into marriage and having children, which is a relatively new phenomenon. For example, junior enlisted women and men are more likely to be married than their civilian peers, with enlisted men in the four lowest pay grades almost twice as likely to be married as civilian male high school graduates of about the same age: 18 to 24 years (25% compared to 13%) and junior enlisted women are also more likely to be married (31% compared to 24%) than their civilian peers (Segal and Segal 2004: 35). "During FY 1991, 18,825 civilian wives of first-term enlisted men gave birth to their first child. This represents approximately 13 percent of the entire pool of civilian wives of first-term enlisted men" (Office of the Assistant Secretary of Defense [Personnel and Readiness] 1993: 4-17). The military benefits system provides adequate coverage for family members, which may be lacking in other entry-level jobs for high school graduates with no further education. This health benefit

may make marrying and , even more so, having children at a younger age appear more financially feasible.

The military career cycle may also have an impact on the family formation practices of service members by affecting the timing of transitions. Previous research on military families has found that the military career cycle might encourage early family formation (Segal et al. 1976). The military career cycle requires relocations that may cause service members to get married when the service member relocates rather than risk a relationship terminating or deteriorating due to geographic separation. The military career cycle may also affect family formation because it may encourage members to time their childbearing to coincide with duty stations that enable more time at home (Segal et al. 1976). Although historically military members were found to be more likely to be married than civilians, comparing 2003 active-duty marriage rates to 2003 civilian data from the Bureau of Labor Statistics' Current Population Survey data indicate that military members may have lower rates—58% of the civilian labor force 17 and older is married versus 49% for enlisted members and 32% of officers (Department of Defense 2004). However, members of the military may still be entering marriage earlier than their peers. Although data on comparable age groups are not available, there is some indication that military members marry at younger ages; whereas 5.7% of enlisted men and 10.4% of enlisted women ages 17 to 19 are married, 3.8% of civilian men and 5.3% of civilian women ages 15 to 19 are married (Department of Defense 2004; Kreider and Simmons 2003).

The military can influence family formation among service members indirectly through military policy. For example, the military may influence the financial well-being

and family formation patterns of service members through the military housing policy. Marriage qualifies service members to live off-base instead of in military barracks. Many young enlisted members see this as a social benefit. For service members, the military is a greedy institution and for young enlisted members living on-base, the military approaches becoming a total institution (Segal 1986). Through housing young men and women on-base, the military is able to maintain a tighter control over their behavior and to ensure they are ready for deployments. A latent function of this controlling environment may be encouraging service members to marry as a means to escape life in the barracks; however there has not been sufficient research on this subject to confirm this hypothesis. Ironically, military housing is also an economic benefit for military members because it minimizes their monthly financial liabilities, although it may also retard the development of financial responsibility among young members by enabling them to depend on the military to provide adequate housing and free utilities.

Early family formation and large families are likely to contribute to financial instability. Marriage and childbearing aggravate financial management problems because many service members are unprepared for household costs. The military provides housing for single service members and for military families, but the number of on-base quarters is limited. Living on base is usually financially advantageous for military members even though it lowers their take-home income (as housing allotments are not paid to service members living on-base). "The allowance members forfeit to live in base housing covers their costs in full while a cash allowance by law is supposed to cover only 85 percent of off-base housing costs—but actually cover only 81 percent on average, according to DoD statistics" (Rhem 2000: 1). Junior officers and senior enlisted

personnel stated that the "initial cost outlay to set up a household begins a downward spiral" for junior enlisted families (Office of the Assistant Secretary of Defense [Personnel and Readiness] 1993: 6). The military career cycle compounds this problem because military members also have to re-establish households after each relocation throughout the military career, which occur more frequently than if they were employed in the civilian sector (Segal 1986). Each time they relocate will cost military families additional out-of-pocket non-reimbursed expenses, which occur when the family has lost any additional income from a spouse's employment or the second job of an active-duty member (Wolpert et al. 2000).

Young service members engaging in early/large family formation are most at risk of developing financial problems because they have the fewest resources. "A raw recruit earns $930 a month, and even a sergeant with 10 years in uniform is paid less than $22,000 a year. Nearly half the members of the Army and Marine Corps, along with 26% of Navy and 18% of Air Force personnel, make less than $20,000. And this is where family size becomes key. Close to 60% of military families eligible for food stamps have six members or more" (Thompson 2000: 1). In addition to having the lowest pay rate of the military, young service members have the least experience managing household expenses. In a study of Air Force members and spouses, 18% of E1-E6s reported monthly or bimonthly difficulty paying bills, and among junior enlisted spouses (E1-E4), 26% reported difficulty (Caliber 1995). In 2005, 33% of enlisted active-duty members and 10% of officers indicated that they had experienced at least one financial problem (e.g., bounced checks, failed to make minimum monthly payments on credit cards, had telephone or other home services shut off, etc.) in the previous 12 months

(DMDC 2005a). The younger members of the military are of particular interest in the current study because they are at the point in their life course where they are undergoing the greatest number of pivotal life course transitions but have the fewest resources for adjusting to change.

Linked Lives: Spouse Employment and the Military

A critical component of military family financial well-being is derived from spouse employment. As the United States became industrialized, the economic structure of the U.S. was built upon the ideal of the male employee, who either had no family commitments or had a spouse managing the household and family, freeing the male employee of most family concerns and responsibility beyond the breadwinner role. This ideal resulted in the two-person, one-income career, which was the model for military marriages (Papanek 1973; Segal 1986). However, the social norms regarding women's employment have changed greatly over time. "For every decade since 1940, the percentage of married women in the labor force has increased 10 percentage points" (Goldin 1990: 10). The dramatic increase in married women's employment has made the two-person career less viable, in the military and in civilian society, because women have to devote time to their own career; rather than focusing their time and energy to their husband's career. As the military is primarily a male occupation, the rising employment of women affects the military as more wives of male service members participate in the market economy and as more women enter the military, particularly with working husbands. Military spouses are linked to the military most often through the service of their spouse, although 9% of military families are dual military marriages (Military Family Resource Center 2000).

Military spouses are no longer expected to perform all the unpaid functions associated with the two-person, one-income career model, although some (particularly officers' wives) feel that expectations for their role as military spouses have actually increased, with wives' performance a feature of the officer evaluation process (Harrell 2001). Regardless of the paygrade of their military husbands/wives, military spouses often believe that their association with the military continues to affect their employment status. This relationship is in accordance with life course theory. "Not only do specific institutions shape the individual life course as such, but gendered life-course differences are required by, and meet the needs of, institutions" (Kruger 2001: 413). Nowhere is this more apparent than in the military where the career cycle is structured to provide the service member continual opportunities for the acquisition of human capital (Dowd 2001: 233), while hindering the advancement of the service member's spouse, particularly wives. The military seeks to develop service members through the provision of a variety of experiences, which are provided by frequent relocations, remote training/deployments, and long work days, and this career cycle can limit military spouses' ability to develop their own human potential, leading them to choose household roles over market work.

Research indicates that "families in which the husband is the sole breadwinner or the main provider have slightly more children on average than other families" (Cheal 1996: 121), which is relevant to the military because military service is conducive to the male breadwinner model. As previously mentioned, the military career cycle might encourage early family formation, which negatively affects spouse employment (Segal et al. 1976). Most married mothers participate in some level of market work, including full-time work (Bianchi and Spain 1996; Presser 1989), but for many working women with

pre-school aged children, the solution to the conflict between work and family has been to scale back their market work (Bianchi 2000). Indeed, Paula England's research has suggested that women incur a wage penalty for every additional birth (Bianchi 2000). Earlier research on the Army also found that mothers with pre-school aged children were less likely to be employed at all and, if they were employed, they were more likely to be employed part-time (Schwartz, Wood, and Griffith 1990).

Greedy Characteristics of Military Service and their Effects on Spouse Employment

The military is characterized as a greedy institution that demands its members and their families make sacrifices and endure heightened risk of death or injury, residence in foreign countries, geographic mobility, and separation, which are greater than they would have experienced in a civilian occupation (Segal 1986). In this analysis, the primary focus is on the effect of relocations and separations on military family financial well-being, particularly as these factors operate through spouse employment. The greedy characteristics of military service hinder military spouse employment (Segal 1986). Williams, Lipari, and Wetzel (2002) found that spouses of active-duty members were more likely to be out of the labor force (e.g., unemployed and not looking for work) than their civilian peers, as measured by the Bureau of Labor Statistics, and they also noted that the unemployment rate for military wives was three times that of the national rate for women, and, for military husbands, the rate was twice as high as for civilian men.

Previous research has found that military spouses have lower incomes than their civilian counterparts, partially due to their time out of the labor force during relocations (Scarville and Bell 1993: 14). Military families experience more frequent geographic relocation, with military families about twice as likely to move each year as civilian families (Segal and Segal 2004). "Between 2000 and 2001, 37 percent of military

personnel moved to a new residence, compared with 15 percent of civilians" (Segal and Segal 2004: 7). Military families are also more likely to experience geographic separations than civilian families; both relocations and separations disrupt education and employment for military spouses (Segal 1986). For example, each move military spouses experience is associated with a loss of 2% of their annual earnings (Cooney 2003: 257).

In addition to moving more frequently than civilians, military moves are often over greater distances (Hosek et al. 2002). "Compared with civilians, military personnel were nine times more likely to move to another state, and four times more likely to move from abroad" (Segal and Segal 2004: 8). Civilian spouses of military members often find it difficult to maintain steady employment because of frequent moves. "Spouses who move work fewer weeks and the greater the distance of the move, the fewer weeks worked in general" (Hosek et al. 2002: 63). Disruptions in employment negatively affect the earning potential of spouses of military personnel. "A relocation consequently costs wives who were forced to leave their jobs in order to relocate almost a year's worth of earnings" (Payne, Warner, and Little 1992: 336).

There are similar problems associated with relocations and separations. For military spouses the combination of work and family is particularly difficult because of the frequent relocations and separations required by military service. The military has always required service members to undergo periodic separations from their families, but the frequency and duration of these separations appears to be rising as a result of military downsizing and today's military missions. In Segal's (1986) original assessment of the greediness of the military, she reported that 55% of enlisted personnel and 63% of officers had been separated from their families during the year prior to the 1978-79 DOD

survey (p. 85). In March 2005, 67% of active-duty members reported spending at least one night away from home in the previous 12 months, and on average they spent 57 nights away from home (DMDC 2005a). Separations can have a significant effect on the financial well-being of military members and their families. Among junior enlisted, "any type of financial separation increased the likelihood of having financial problems by 7 to 12 percentage points compared with comparable members living with the family members" (Buddin and Do 2002: 47).

Frequent separations required by military service make it difficult for spouses to work because it makes their schedules less predictable. Consequently, military spouses may be more likely to accept lower paying jobs that offer greater flexibility in work hours (Hosek et al. 2002). Separations force one parent to adopt the role of a single parent, which can create difficulty in providing child care particularly if the remaining spouse is employed (Segal 1986; Wood et al. 1995). In addition, stresses related to separation can also affect a spouse's ability to cope with familial problems, making the job of juggling multiple roles (parent, employee, etc.) more difficult. Separations can also directly contribute to financial problems for families that can range in severity from the exceptional (e.g., maintaining a second temporary residence for the absent spouse) to the more mundane (e.g., balancing the family checkbook). The ability of spouses to deal effectively with the stress associated with separation has a direct effect on children and can also affect deployed service members' psychological well-being and their readiness (Aldridge et al. 1997; Bell, Stevens, Segal 1996).

To compound the negative effects of moving, previous research indicates that military spouses may be disadvantaged by their proximity to a military installation.

Booth's (2000) study of the labor markets around military bases found that not only military spouses, but also wives of civilian men in such labor markets, experienced depressed wages and higher unemployment. Civilian wives of military men had even greater income loss than those married to civilians (Booth 2000). Hosek et al. (2002) found that, contrary to their expectations, military wives were not concentrated in rural areas, and that the income of those in rural areas was not a lot less than the income of military wives in urban or suburban areas.

The Underemployment of Military Spouses

Women in the United States have traditionally had to balance employment and household duties either by foregoing participation in one realm for the other or by juggling participation in both realms. "Modern societies have been constructed so that market work and nurturing work are extremely difficult to combine" (Risman and Ferree 1993: 777). As previous research indicates, military spouse employment appears to be particularly difficult to maintain, but the contribution of a second income may be critical for maintaining sound financial well-being and implementing financial planning, such as increased saving. In addition, the lowest paid members of the military may be especially hurt by the barriers to spouse employment associated with military service because analysis of the civilian data indicates that "the income advantages of dual-earner couples are greatest among low-income families" (Cheal 1996: 119). However, research on Department of Defense employees comparing those married to military members to those married to civilians found that spouses with higher education levels experienced more of a wage penalty for being married to a military member (Wardynski et al. 1996). For example, military spouses with only a high school diploma have weekly earnings 11% less than their civilian counterparts, but among those with a college education, the

difference is 16% (Hosek et al. 2002: 38). Military spouses are often forced to accept underemployment, and spouses with higher education levels have more to lose.

Many military spouses experience underemployment—as defined by being forced to work fewer hours than they would like, working in jobs for which they are overeducated, and working in jobs that do not provide opportunities to use their skills (Scarville and Bell 1993). In a study of Air Force spouses, 51% of officers' spouses and 40% of enlisted spouses report that their affiliation with the Air Force has a negative impact on their career plan (Caliber 1995: VI-4). Spouses who have linked lives with service members have high opportunity costs associated with this life course trajectory. Over the period from 1987 to 1999, among civilian families, husband-and-wife earnings averaged $51,115 with wives earning on average $15,884, and in contrast, military husband-and-wife earnings averaged only $40,587, with military wives earning $10,528 on average (Hosek et al. 2002: 32-33). The wage penalty military families incur is only likely to be repaid if the service member remains in the military until retirement. "The military retirement system can now be seen not only as deferred compensation for soldiers, but also for military households. Indeed, foregone spousal earnings due to military service can reach one-third of the expected present value of officer military retirement pay at 20 years of service. For enlisted personnel, this burden can represent 22% of military retirement earnings" (Wardynski et al. 1996: 29).

Although the literature indicates that military spouses are more likely to be unemployed or underemployed in comparison to their civilian peers (Hosek et al. 2002; Segal 1986; Wardynski et al. 1996), this may not result in poor financial well-being. The unemployment and underemployment among military spouses is a known financial

hazard of military service, and as a result, military families may adjust their spending, savings and financial expectations to accommodate the lower total household income that may result from the negative impact of military service on spouse employment earnings. The military provision of free or low cost support services (e.g., child care, commissary/exchange shopping privileges, and housing allowances) may play a role in mitigating the negative effect of spouse unemployment and underemployment in the military, which would not be available to their civilian peers. This study examines how single income military families compare to single income civilian families to assess whether single income status has a greater negative impact on the financial well-being of civilian families than military families.

Financial Management Among Military Members

Because members of the military are drawn from and shaped by civilian society, national trends should be reflected in the social characteristics of military society. However, previous research on the military indicates that financial distress in the military may occur for different reasons from civilian society. "While a majority of civilian bankruptcies are filed for reasons such as loss of income, or interruption and/or termination of medical benefits, Navy service members who file tend to be younger, enjoy a steady income, and have access to health care" (Luther et al. 1997: 16). While in the military, service members avoid some of the primary causes of financial distress because they are guaranteed employment and healthcare. Thus, it may be that members of the military experience both a positive and a negative effect on finances from their service in the military.

The cultural views regarding the financial management values and the actual practices of military members should be similar to those of civilians who share the same

socio-economic background. However, their association with the military may also shape the practices and values of military members toward financial planning that have a positive effect on their financial well-being. The military services have instituted a variety of formal and informal programs to provide financial management training before problems arise and to address financial management problems after they have developed. "Unit leaders are a primary source of financial advice for junior enlisted members… Local creditors sometimes contact leaders about delinquent bills and ask the leaders to help assure them that the member will meet his or her financial obligations" (Buddin and Do 2002: 7). In recent years, formal required training has been implemented. For example, in 1997 the Air Force began requiring that all personnel receive financial management training at their first assignment and a 1999 Congressional report recommended that all members receive a financial management class during the first six months of service with a mandatory follow-up class for the first four years of service (Buddin and Do 2002: 7-8).

In addition to training, the military also tries to provide service members with benefits and programs that would help alleviate financial obligations. The military has traditionally provided many "in-kind" benefits and services to military personnel and their families. These include the provision of base housing (including free utilities), meals for single service members at the dining facilities, subsidized child care, medical and dental services, and lower cost goods available at the base commissary and exchange. These benefits and programs reflect the paternalistic and institutional nature of the military embodying the ideal that the "military takes care of its own." However, in-kind

benefits may also encourage a certain degree of dependency because members may calculate into their budget a reliance on the provision of these benefits and programs.

The military may help service members internalize good financial behavior by providing access to financial training and by creating an environment in which financial irresponsibility is not tolerated. "The military community sets up common values for its members and provides them with a sense of place that is complete with a standard by which its members can assess their conduct" (Hopkins 1996: 46). The military community provides a setting in which service member or spouse economic values are reinforced by their perception that their values correspond to those within the military. Military leaders recognize that financial matters can negatively affect performance and try to prevent problems from arising by counseling members on how to avoid financial problems (Buddin and Do 2002: 7).

The military community could also partially minimize the negative psychological effects of lower financial well-being by providing a context in which a lower standard of living is normative. Keeping up with the Joneses "describes a common belief that people make social comparisons with others in their community and that their happiness declines when others' income or possessions increase" (Hagerty 2000: 764). If military members and their families judge their own financial well-being, in part, by their relative standing in the military community, they may feel less psychological distress because within their paygrade, there should be a good deal of parity. Although a person's own income has been found to have the largest effect on happiness, social comparisons based on the range of incomes in a person's community also affect happiness, such that as maximum income in a community increases, happiness declines for a given level of income (Hagerty 2000).

As incomes in the military community are typically bounded by the military pay system, the income range among military members in a given community would be similar and would, potentially, make their social comparisons more positive.

However, the military could also have a negative effect on the financial well-being of military families because of the greedy nature of military service. Research on civilians has found that situations which may create severe financial problems include: changes in family income, changes in employment status, loss of ability to fulfill home responsibilities, birth of a child, major unexpected bills and changes in consumer prices (Garmen, Leech, and Grable 1996: 163). Military members may be more susceptible to some of these problems because of the relocations, separations/deployments, and other aspects of the military culture.

Service members experiencing financial distress may also have a different attitude towards programs designed to ameliorate their situation. For example, although in American society access to government assistance is considered a citizenship right that is unrelated to citizenship responsibilities (Schwarz 1997: 18), the need for financial assistance programs, such as food stamps, by military members and their families is portrayed very negatively in the media because military members are fulfilling their citizenship obligations. The media portrayal of military families in need, as well as possible norms within the military community, may lower the number of service members who seek help through such programs, and thus change the ways in which financial distress can be measured and ameliorated in the military.

During the late 1990s and early 2000s, the problem of financial distress among military members came under scrutiny after a series of media stories about military

families on food stamps. Based on a 1995 survey, DoD had operated under the

assumption that roughly 12,000 active-duty members were receiving food stamps (0.8%

of the force), but a more recent DoD survey found that only 6,300 members were

receiving this benefit (Kozaryn 1997; Kozaryn 2000). The issue of military families on

food stamps (or those in financial distress) addresses a perceived disjuncture between

asking military troops to put their lives on the line in service to the nation while their

families live in housing that is often comparable to inner-city public housing projects and

are having trouble making ends meet (Stone 2001).

In addition to national or state aid programs, there are service-related

organizations such as the Navy-Marine Corps Relief Society and the Army Emergency

Relief Fund to which military members can turn for financial assistance. These

organizations have a special relationship to, and understanding of, the concerns of

military members and their families. For example, the Navy-Marine Corps Relief

Society is sponsored (although not funded) by the Navy and has been aiding Navy and

Marine Corps members with financial difficulties since 1904 (Navy-Marine Corps Relief

Society 2001). During 2001, the Navy-Marine Corps Relief Society provided financial

assistance for nearly 52,000 cases, disbursing more than $41 million in interest free loans

and grants primarily to help service members pay for food, shelter, vehicle repairs,

household set-up costs, medical/dental work, funeral expenses, and emergency

transportation (Navy-Marine Corps Relief Society 2001). The average amount disbursed

per assistance was less than $750, but it was critical to service member quality of life,

financial stability, and peace of mind (Navy-Marine Corps Relief Society 2001). As

these members and their families seek financial assistance from outside the federal or

state assistance programs, it may be that they are not included in calculations of financial distress in the U.S. To attain a better understanding of who may be experiencing financial distress, it is important to review the civilian literature. Although most Americans, particularly military members and their families, are unlikely to be below the poverty line, the characteristics of those at the bottom of the financial ladder can help identify those members of the military most likely to be experiencing financial distress.

The Transition to Adulthood, Financial Well-being and the Life Course

Entering military service is an example of a transition that can have a lasting impact on financial well-being. However, financial well-being is influenced by many factors. One of the primary factors in determining financial well-being, particularly during early adulthood, is parent's socioeconomic status. "Growing up poor or in low-income families is associated with large reductions in men's labor supply, hourly wages, annual earnings, family incomes, and family income/needs" (Corcoran 1995: 248). The financial well-being of young adults is strongly influenced by their linked lives with their parents. Parent's socioeconomic status affects the factors that have a lasting influence on economic attainment, such as education, age of first marriage, and age of first birth. "Children raised in poverty acquire less schooling, achieve much lower incomes, and are much more likely to be poor in early adulthood than are children raised in non-poor families" (Corcoran 1995: 247). The financial well-being of the parent's household is determined by income, family size, marital status, parent race, parent education, and other factors. Parental households will be less likely to give financial support (intergenerational transfers) to offspring, including money for college, when the household income is lower, family size is larger, parents are divorced (not remarried) or single, parents are part of a race/ethnic minority, and parents have less education (Hao

1996). The military may provide a particularly enticing opportunity for individuals with poor socioeconomic background, which is why some call for the reinstatement of the military draft (Fears 2003). However, reinstating the draft might penalize the low socioeconomic status volunteers by denying them access to the job opportunities in the military. In addition, recent research on the socioeconomic status of active-duty members found that, on the whole, the socioeconomic status of parents of those entering active duty service is comparable to that of the civilian population (DMDC 2005b). For example, although the educational attainment of parents of military members was generally the same as civilians, the employment income of the military parents was above the average employment income of civilians in the population, and this held true for both officers and enlisted members and did not vary by race/ethnicity (DMDC 2005b).

Regarding education, a parent's emotional and financial support for education impacts educational attainment. Graduating from high school is a critical factor in determining financial well-being. Failing to achieve a high school degree is a primary characteristic of those experiencing persistent poverty or those who are members of the underclass (Haveman, Wolfe, Spaulding 1991: 134). Although a high school education should be available to every member of the U.S. population as a citizenship right, a college education is increasingly needed to maintain a middle class standard of living, and achieving a college degree is largely dependent on access to parental financial resources. "The American system of higher education is predicated on the assumption that parents, even those in the lowest income brackets, should shoulder the lion's share of college expenses" (Steelman and Powell 1991: 1506). Accumulating college debt also has become normative among young adults. This economic burden can contribute to

financial instability among young adults, especially when they have the additional economic burdens associated with marriage and parenthood.

One of the first steps towards adulthood is leaving the parental home. For many youth, their first independent residence does not mark true entry into adulthood; rather, they are in an intermediate transition state (Hogan and Astone 1986). For example, youth in college frequently establish a residence apart from their familial home, but it occurs within an institutional framework (college dormitory) that allows them to learn how to live independently prior to assuming personal financial responsibility (Hogan and Astone 1986). Even students living off-campus in apartments during college are typically financially dependent on their parents. Historically, independent living in military barracks was also viewed as an intermediary state. This concept may not be as applicable to service members under the All Volunteer Force model because military service is not based on a short period of conscripted service removed from mainstream society. Non-career service members may view their military time as "real" employment rather than a rite of passage to adulthood.

As individuals enter into adult roles, they establish the foundations for their financial well-being. The timing of entry into many adult roles, including school completion, labor force entry, marriage and parenthood, are tied to parental education, occupation, number of siblings, and family income (Hogan and Astone 1986; Marini 1984). Entry into marriage or parenthood is a critical component in determining financial well-being. Typically, individuals try not to enter these roles without adequate financial resources. "While a young couple may be technically able to survive on a meager income, they may still feel that they lack the resources to become married— which is,

after all, simply the social sanctioning of their potentially reproductive union" (Clarkberg 1999: 949). As it is during the childbearing/raising years that families have the highest consumption and the fewest financial resources, individuals typically have a higher "reservation income" for entry into marriage and parenthood than they would for other adult roles, such as cohabitation or moving out of the parental home (Henretta 1987). The "reservation income" is the minimum income level a couple requires before entering marriage or planning parenthood and corresponds to the minimum income the couple believes is necessary to sustain their married household or a household with children. Early or out of sequence entry into adult roles can have detrimental effects on the financial well-being of individuals. "Men who experienced disorderly sequences earned less money, had less prestigious jobs, and were more likely to divorce than men with orderly sequences" (George 1993).

Economic Trends in the United States

Most people, both those employed in the civilian sector and those in the military, will, on occasion, make poor financial decisions. It is only when poor financial decisions become chronic and individuals have trouble meeting their financial responsibilities that we describe them as being in a state of financial distress. "Poor financial behaviors are personal and family money management practices that have consequential, detrimental and negative impactions on one's life at home and/or work" (Garmen, Leech, and Grable 1996: 158). To understand the financial well-being of military members, it is first important to understand the factors known to contribute to financial distress among civilians. Understanding financial distress in the civilian society requires a basic knowledge of the rising availability of credit in the United States in recent decades and knowledge of the ways in which financial distress can be defined and measured.

An understanding of one's own current personal financial well-being is important because it helps an individual plan for retirement; however, many Americans do have misperceptions about their financial well-being. In a representative random sample of 2,000 Americans age 29-47, the majority (68%) of respondents described their personal finances as fairly secure or very secure, but approximately a third of the respondents expected better standards of living in retirement (Kotlikoff and Bernheim 2001: 445). Further analysis revealed that there was a moderately strong relationship between actual and perceived financial vulnerability. However, there was an unrealistic degree of optimism, with 54% of respondents in the lowest financial quartile regarding their personal finances as fairly secure or very secure and 45% reporting they were very well or somewhat prepared for retirement (Kotlikoff and Bernheim 2001: 446-447).

Credit Cards and Debt

The United States has undergone significant economic changes since the 1960s. One aspect of the economic transformation in the U.S. has been the proliferation of personal credit and the corresponding rise in personal unsecured debt (credit card debt). In the post-World War II economy, consumer credit was used primarily for the purchase of durable goods, such as refrigerators and cars, but in the 1970s, there was a shift in behavior towards credit card use for consumption items (Manning 2000). With the rise in inflation in the 1970s, credit cards proliferated and became part of American culture. Credit cards allow Americans to indulge in competitive consumption, enabling lower income groups to attain a middle class lifestyle while higher income groups engaged in hedonistic consumption (Manning 2000: 32). Since the 1970's, Americans have accumulated greater levels of consumer debt by relying on their credit cards to augment declining wages and to alleviate periods of unemployment (Manning 2000). Credit cards

have become available to individuals in almost every economic category. "Credit cards democratized credit, making it possible for the masses to obtain at least a minimal amount" (Ritzer 1995: 10).

When the credit card industry saturated the adult market in the upper, middle and lower classes, it began marketing to young adults, particularly college students, because they are highly impressionable, trend-conscious and eager to attain economic "freedom" (Manning 2000: 167). In the 1990s, about 82% of full-time college students had credit cards, and "the number of undergraduates with credit cards increased by 37% between 1988 and 1990" (Ritzer 1995: 13). Credit cards enable young adults to engage in entertainment-related activities and to establish their own social identity without relying upon their parents and thus being subject to parental controls. The Puritan ethos emphasizing savings over consumption has been replaced by the reliance on credit cards among adults. "In the course of the twentieth century, the United States has gone from a nation that cherished savings to one that reveres spending, even spending beyond one's means" (Ritzer 1995: 5). This problem is acute among young adults because credit cards have become part of the normal transition to adulthood. "Credit card debt is portrayed as simply a new rite of passage. Like experimenting with alcohol, credit card debt is presented as a normal part of college life and youthful inexperience" (Manning 2000: 15). Many college students are able to draw upon their student loans or their parents to make payments on their credit cards when they exceed their income (Ritzer 1995). Members of the military are also attractive to the credit card industry because they are gainfully employed by an employer that garnishes wages to ensure debts are repaid.

Credit cards enable individuals of all ages to live beyond their means, which can eventually lead them to financial distress, bankruptcy, and even poverty as their debt becomes insurmountable. The availability of credit is only a concern if individuals are revolving their credit (carrying a balance from month to month). In this regard, "the credit card business operates to the advantage of the relatively well-to-do and to the disadvantage of those who are not so well off economically" (Ritzer 1995: 2) because those with poorer financial well-being are more likely to revolve their credit. In addition, increasingly, the practice of revolving credit does not carry a negative stigma in American society (Manning 2000). "About two-thirds of credit card users are 'revolvers' carrying balances from month to month and paying interest on the unpaid amount; one third are 'convenience users' who pay off their accounts in full each month" (Ritzer 1995: 34). For young people, when home mortgage, car loans, and student loans are excluded, credit cards represent a major source of debt. In this study, the extent to which military members have accrued debt and how they perceive their financial well-being provides the foundation for analysis and understanding financial well-being.

Financial Management Practices in Civilian and Military Society

While financial distress arises from low income, a major cause of this distress is also poor financial management habits, such as not having savings to buffer unexpected outlays or job loss. "Most people have little or no financial reserves to sustain them if they should find themselves unemployed and without a steady income" (Ritzer 1995: 7). A study of the Navy found that "those who experience financial difficulty often do so as a result of poor planning and a lack of financial preparedness rather than not having adequate funds" (Luther et al. 1997: 13). For example, many single people and families do not have savings to act as a cushion during financial crises. In a study of 1,637

financial decision-makers (18 or older) conducted by Princeton Survey Research

Associates, 53% of households reported they sometimes, most of the time, or always live

from paycheck to paycheck, and this percentage rises to 64% for households with

moderate incomes ($20,000 to $50,000) and 79% for households with low incomes (less

than $20,000) (Consumer Federation of America 2001). The Consumer Federation of

America reports that those most likely to file for bankruptcy are not extravagant

spenders; rather, they tend to be lower-middle income earners who have accumulated a

large amount of debt (Burke 1998). Even when members of a household live within their

means, an unexpected decline in income or increase in expenses can quickly lead to the

accumulation of large debts and only substantial savings can alleviate the distress caused

by such events.

One element of financial well-being is the level of savings a household has to

draw upon during periods with unexpected increases in financial expenses. There has

been a long-term decline in savings in the U.S., with the net national savings dropping

from 12.3% of income in 1950 to 3.5% in 1994 (Gokhale, Kotlikoff, and Sabelhaus 2001:

17). Although most Americans expect to receive Social Security benefits in their senior

years, a reliance on this income is inadvisable because it is not likely to maintain pre-

retirement standards of living, and as a result, Americans should be saving for retirement

as well. In addition, it is unlikely that Social Security benefits will be paid in full for

future generations and with the exception of households with incomes less than $15,000,

the median recommended savings rate ranges from 17% to 23% (Bernheim et al. 2001:

484). Most Americans do not save enough to maintain their pre-retirement standards of

living, in part because they know little about managing personal finances. Financial

management skills need to be developed as a person matures—knowledge and habits that facilitate financial well-being cannot be instantaneously acquired when an individual reaches adulthood. However, although financial training prior to adulthood has a profound effect on financial choices in adulthood, not all young adults will develop sound financial behaviors (Kotlikoff and Bernheim 2001: 447-9).

Defining Poverty

Even before the credit card revolution, there were Americans in poverty; although the credit card industry may have affected the way in which people are able to escape the reality of their financial condition, poverty remains a problem in the United States. The U.S. Census Bureau reported that in 1998, 12.7% of the U.S. population lived in poverty and this percentage rose to 15.2% for families with children (Iceland 2000). Among families with children, 7.8% of those in which family members worked full-time were in poverty, although the majority of families with children experiencing poverty were only working part-time (59.9%) or were nonworking (80.8%) (Iceland 2000). This Census Bureau estimate of poverty is based on an individual/household's before-tax cash income, which ignores non-cash resources such as food stamps, housing subsidies, and government/employer provided health insurance (Burtless and Smeeding 2001: 30). This is a very crude measure of poverty, which makes it difficult to compare civilian and military poverty rates because the military provides many in-kind non-cash benefits. Indeed, most studies comparing military and civilian pay do not look at absolute comparisons of pay, rather they measure the pay gap between military and civilians by comparing the relative pay growth from a given base point (Hosek, Peterson, and Heilbrunn 1994: 4).

As comparing absolute pay can be problematic, an alternative measure that can be used to compare military members and civilians is "wealth poverty," which measures an individual's level of savings and debt. Most people with low income also suffer from limited wealth (Burtless and Smeeding 2001: 34). Examining wealth poverty provides a measure of a household's ability to draw upon saved resources to sustain themselves during periods of decreased income or increased consumption (Burtless and Smeeding 2001: 34). Estimations of household levels of personal savings and debt would generate a higher poverty rate than the income-based poverty rate because most low-income households do not have high financial wealth.

An approach to understanding poverty that can be used in conjunction with the life course perspective is the membership theory of poverty. This theory hypothesizes that socioeconomic outcomes are dependent on the composition of the groups in which an individual is a member over the course of his/her life (Durlauf 2001: 393). Membership in these groups can be based upon both ascribed and achieved characteristics, such as ethnicity, residential neighborhood, and occupation. Group membership can exert causal influence on individual outcomes by peer group effects, role model effects, social learning, and social complementarities (Durlauf 2001: 393). Similarly, within organizational theory, it is posited that organizations develop a specific subculture with an occupational identity that becomes part of the worker's personality (Hopkins 1996: 37-38). Hence, it is possible that members of the military will share similar socioeconomic outcomes because of their association with the military through work and military housing, the availability of positive role models, and access to

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financial training in the military. This association may prove stronger than the affiliations individuals may have due to race and ethnicity.

Race/Ethnic Variations in Financial Well-Being

To a large extent in the United States, race and ethnicity remain intricately tied to poverty, although there are segments of society, such as the military, where the relationship between race and ethnicity and financial well-being is less prominent. Understanding the relationship between race and ethnicity and poverty enables researchers to anticipate what segments of society are likely to be experiencing financial distress. White Americans have the lowest rate of poverty, although poverty among Asians and Pacific Islanders is not much higher than among Whites (Burtless and Smeeding 2001: 56). In contrast, African Americans suffer from the highest poverty rates, although declining poverty rates among African Americans in the 1990s have led to greater parity in poverty rates among African Americans and Americans of Hispanic descent (Burtless and Smeeding 2001: 56). The influx of Hispanic immigrants with little education and few marketable skills during the 1980-90s has inflated Hispanic poverty rates, which would also generate higher poverty rates among Whites when race is reported without considering ethnicity (Burtless and Smeeding 2001: 56).

Interpreting the level of savings held by an individual or household can be difficult. For example, in the analysis of racial differences in savings rates for data from the 1930s to the 1950s, African Americans frequently had higher savings rates than White Americans (Galenson 1972). This finding could be interpreted in a number of ways, including that African Americans had "better" saving habits or that African Americans saved because they had less access to credit (Galenson 1972). Previous research does indicate that, given their income level, African Americans do tend to save

more than Whites, but this is not true for all minorities, as there is no difference between the saving habits of White and Asian Americans (Mason 1996: 796). Except at the very low incomes, saving habits also tend to differ among single people by gender with women saving less than men at the same age and income levels (Brown 1998). These findings are for members of the civilian society and may not be replicated within the military population because of the parity of income among members within officer and enlisted ranks regardless of race/ethnicity and the potential difference in access to financial management training and more conservative financial management values among military members.

Life on the Edge: The Working Poor

Although it is critical to understand the nature of poverty in civilian society before attempting to understand it within the military population, it is also important to recall basic differences in the demographic characteristics of both populations. It is unlikely that the most desperate forms of poverty will arise within the military population because it is a relatively educated and an employed segment of society. Among working families, those most likely to experience poverty are unmarried, young (less than 25 years old), minority members, and have less than a high school degree (Iceland 2000). Among North American families, the primary cause of poverty is that the household head does not have regular employment and the second cause is that regular employment is not year-round (Cheal 1996: 102). In the military, at least one member of the household is employed full-time, year round. As a result, knowledge of the characteristics of members of civilian society who are in poverty can provide guidance for examining financial distress in the military, but it is unlikely that many military members meet the Census Bureau's definition of poverty. Therefore, the appropriate comparison group for military

families is working families because military service ensures at least one member of the household is employed full-time.

As with the study of poverty, there are multiple definitions of working poor that can be applied. Kasarda (1995) defines people in this category in two ways. The first is the working poor who are "those persons age 16 and older who have worked for at least 27 weeks the previous year, usually for at least 20 hours a week, and who lived in families with incomes below the official poverty threshold" (Kasarda 1995: 47). This definition takes into account total family income, which can include income from multiple sources such as: earnings for all members of the family, interest, social security and retirement income, and public assistance. Kasarda (1995) offers another definition of the working poor called poverty-wage workers which are "those persons 16 and over who work full-time (50 or more weeks per year, including paid vacation, usually for 35 hours or more per week) and whose personal income is not enough to lift a family of four out of poverty" (p. 47). Working full-time is typically not associated with poverty, but in 1992, there was a full-time worker in at least one-third of poor married couples (Blank and London 1995: 91).

Many low earners do not meet the official criteria for being in poverty because the official poverty measure is based on total family income. Thus, if low wage earners are in a small family or if earners or other members of their family either work or receive government assistance, then the low wage earners and their family would not be below the poverty line but they could still be living on the edge of poverty (Danziger and Gottschalk 1995: 70). Analyses of civilian populations within and outside of the United States have found family's economic status is determined by the household income and

number of dependents (relative to the number of wage earners) (Casper, McLanahan, and Garfinkel 1994). Thus, increasing the number of children without increasing the number of wage earners in a family increases the likelihood of poverty. "Family composition is a key element in determining the link between work and poverty. Two adult workers who are married to each other are much less likely to face poverty than are two workers who are the single heads of two separate households" (Blank and London 1995: 87). This finding is important to the financial well-being of military families because the military may have a notable effect of the timing of major life course events, such as the timing of first births, and it may also affect the number of children in the household. Previous research on the Navy has provided support for the relationship between financial distress and family formation by finding that "debtors in the Navy are typically younger and have more dependents than their civilian counterparts" (Luther et al. 1997: 13).

Examining the characteristics of individuals who fall into Kasarda's (1995) definitions of the working poor reveals some differences from those individuals described above who meet the Census Bureau's definition of poverty. Among the working poor in 1990, Americans of Hispanic descent had the highest rate (8.0%) with African Americans having the second highest rate (6.8%). This trend is similar for poverty-wage workers where the rate was 28.2% for Hispanics and 22.8% for African Americans (Kasarda 1995). Similar to those in poverty, a decline in African Americans who meet the working poor criteria and the poverty-wage worker criteria has occurred at a time when the rate for Hispanics is rising.

As would be expected based on data on those in poverty, higher education is associated with lower rates of being working poor or poverty-wage workers. High school

graduates made up 33.9% of all workers and 21.4% of the poverty wage-workers in 1990 (Danziger and Gottschalk 1995). High school graduates are twice as likely to be low earners as college graduates (Danziger and Gottschalk 1995: 74). In addition, the percentage of the population who are poverty wage-workers is higher among those 16 to 34. "Workers aged 16 to 34 made up slightly less than 40 percent of the full-time workers in 1990 but 51 percent of poverty wage workers" (Kasarda 1995: 58). The closest comparison to the military would be high school graduates (typically ages 18-40) who meet the poverty wage-worker criteria. Military members typically have at least a high school equivalency, but the remaining risk characteristics (e.g., large families, minority status, single income households) are also likely to be prevalent among military families experiencing financial distress.

In the methodological considerations for this study and the analysis of results, reminders of the differences in the civilian and military population are highlighted. This review of the literature regarding the military culture and the civilian financial distress and poverty literature forms the basis for the hypotheses developed for this study. The synthesis of these disparate literatures enhances and informs the development of theoretical models for researching and understanding financial distress in the military.

Hypotheses

This study is intended to expand our knowledge of the financial well-being of military families by providing a comparison of military and civilian households and by undertaking an in-depth analysis of financial well-being within the military community. To this end, multiple models are analyzed to address both components of interest. The models incorporate demographic characteristics and financial well-being variables that are described in Table 1.

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Table 1.
Variables in the Models

Dependent Variables	Definition of Variables
Household income	Total pre-tax household income from earnings, and income or financial support (11 categories)
Level of debt	Total personal unsecured debt after most recent payment, includes credit cards, debt consolidation loans, student loans, and other personal loans; excludes home mortgage and car loans (11 categories)
Level of savings	All funds in bank accounts, IRAs, money market accounts, certificates of deposit (CDs), savings bonds, mutual funds, and stocks/bonds, excluding pension accounts (13 categories)
Saving habits	Self-assessment of the degree to which families spend all of their income, as much as their income, or less than their income in an average month (3 categories)
Perceived financial condition	Self-assessment of the family's financial condition ranging from "very comfortable" to "in over your head" (5 categories with very comfortable as the high value)

Independent Variables	Definition of Variables
Military indicator	Indicates whether the respondent is married to a civilian (2 categories)
Age	Continuous variable measuring respondent's current age, limited to ages 18-44 years old.
Race/ethnicity	Indicates whether the respondent is Non-Hispanic White (2 categories)
Number of children	Continuous variable measuring number of children in the household
Education level	The highest degree or level of school the respondent has completed (3 categories)
Spouse employment status	Employed either full-time or part-time
Spouse voluntarily out of the workforce	Self-identification by the respondent as being not employed and not looking for work
Spouse underemployment	Combination of two self-assessments of underemployment: the extent to which the respondent's current primary job match his/her qualifications and to what extent the respondent's current primary job uses his/her skills and training (2 categories)
Paygrade	Indicates whether the respondent's active-duty husband/wife serves as a military officer (2 categories)
Organizational Seniority	Indicates whether the respondent's active-duty husband/wife serves in the higher paygrades of E4-9 and O4-6 (2 categories)
Length of current residence	Measure of how long the respondent has lived at their current residence ranging from less than one month to more than one year (6 categories)
Number of moves	Measure of number of times the respondent has moved to a new location because of the respondent's husband/wife's military service ranging from zero to 10 or more times (11 categories)
Costs of relocations	Continuous composite measure of the number of cost-related problems the respondent experienced as a result of their most recent move ranging from zero to 60 costs related to relocation
Number of times away from home	The number of times the respondent's spouse has been away from home for at least one night in the past twelve months ranging from zero to 13 or more times (7 categories)
Total length of time away	Sum of all the nights away the respondent's spouse has spent away from his/her permanent duty station ranging from zero to 10-12 months (6 categories)

To address the basic differences between the military and civilian populations, this analysis is limited to married respondents in households with at least one employed member for both the military and civilian samples. Listed below are six hypotheses tested in this dissertation. For several of the hypotheses, secondary research hypotheses are listed underneath the primary hypothesis. These secondary research hypotheses represent ways in which the primary hypotheses are tested. In addition, some of the secondary research hypotheses provide potential explanations for the findings, if the primary hypothesis is supported empirically. Lists of the models' components are described in the Methods section of this proposal.

Military-Civilian Hypotheses

1. Military families have lower financial well-being than their civilian peers.
2. In comparison to their civilian peers, military spouses who are from racial or ethnic minorities have higher financial well-being.
3. There will be more financial parity between the races for military peers than for civilian peers.
4. Unlike their civilian peers, single income households in the military do not have lower financial well-being.
5. Consistent with their civilian peers, military families with more children have lower financial well-being.

Military Hypotheses

6. Involuntary spouse unemployment or underemployment negatively affects financial well-being.
   a) Employed spouses have higher financial well-being than other spouses.
   b) Involuntarily unemployed spouses have lower financial well-being than other spouses who are not employed.
   c) Underemployed spouses have lower financial well-being than other working spouses.
7. Military families who more frequently experience "greedy" characteristics of military service have lower financial well-being than other military families.
   a) Relocation decreases financial well-being—sharply in the short run, less so over time.
   b) There is a cumulative negative effect of moves on financial well-being.
   c) Military families who have had more/longer separations have lower financial well-being than other military families.

Notes on Causality

Because of an interest in the effects of military service on the financial well-being of military families, assumptions about causal directions have been made. This study uses the life-course perspective as a lens through which to view research on the financial well-being of military families. In the absence of longitudinal data, the true nature of the causal relationships cannot be determined. For each hypothesized relationship, arguments could be made for the reverse causal direction. For example, individuals with greater financial need (such as existing personal debt) may be more likely to enter military service to attain stable employment resulting in lower indicators of financial well-being among military members that are not causally related to military service. Analysis of the military was additionally complicated by the nature of the military promotion system, which allows the military to terminate the service of military service members who are experiencing severe financial difficulties. This dissertation is designed to test a small part of the larger causal network of relationships using all means currently available.

CHAPTER III. METHODS

Samples

The military population is typically excluded from social science surveys because they are considered an institutionalized population (Booth 2000). As a result, it is necessary to utilize multiple data sources to analyze the financial well-being of military families because no single dataset contains complete financial information (including level of debt and perception of financial well-being) about both civilian and military populations.

Military Sample

Data on the U.S. military spouse population were collected via postal mail by Defense Manpower Data Center in 1999 (Wright et al. 2000). The 1999 Survey of Spouses of Active Duty Personnel (1999 ADS) is a large-scale survey of the spouses of all active-duty Army, Navy, Marine Corps, Air Force, and Coast Guard members (including Reservists serving permanently on active duty), below the rank of admiral or general, with at least nine months of active-duty service at the time of survey mailings. A service member married to another service member would be eligible for the spouse survey based on their spouse's military status, not their own; however there are very few dual military couples in the sample. Data collection efforts resulted in a weighted response rate (corrected for non-proportional sampling) of 51%. The 1999 ADS spouse sample consisted of 38,901 spouses with 16,103 eligible spouses returning usable surveys (Wright et al. 2000).

Civilian Sample

To obtain a civilian comparison group, data from the 1998 Survey of Consumer Finances (1998 SCF) are used. The 1998 SCF data are collected via computer-assisted

personal interviewing (CAPI) by the National Opinion Research Center at the University

of Chicago (Kennickell and Woodburn 1997). This dataset was chosen because the

financial questions for the 1999 ADS were modeled on the 1998 SCF and, thus, the 1998

SCF provides the most comparable civilian data. The 1998 SCF is based on a dual frame

sample, which is designed to yield a higher response rate on sensitive financial issues

across a large sample. Of the 4,309 completed interviews, 2,813 are from the first

sampling frame and 1,496 are from the second. The first set of survey cases was selected

from a standard multi-stage area-probability design and achieved 70% response rate. The

other set of survey cases was selected to obtain a sufficient representation of wealthy

households from a list sample from statistical records derived from tax data collected by

the Statistics of Income Division of the Internal Revenue Service (SOI) and only a 35%

response rate was achieved.[1] Though 1998 SCF sampling design and response rate are

not believed to be problems for making military-civilian comparisons, such comparisons

to the military must be undertaken with these aspects of the sampling in mind,

particularly during analysis. The dataset includes summary variables that are constructed

according to Federal Reserve Board guidelines for reporting income, debt, and savings

(Kennickell, Starr-McCluer, and Surette 2000).

     The analysis in this study is conducted on pre-existing datasets, which raises

multiple problems. Secondary analysis of already existing data has both advantages and

disadvantages. Secondary analysis is an inexpensive source for data that minimizes the

burden on respondents. However, a drawback to secondary data analysis is that the data

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[1] The wealthy were over-sampled because previous iterations of the Survey of Consumer Finances revealed
this population tends to refuse participation. In the part of the second sample containing the wealthiest
respondents, the response rate was only 10%.

were collected with some specific aim, which often only partially addresses the explicit questions to be answered in the secondary analysis. In this study, the limitation posed by secondary data analysis is particularly acute because the information gathered in both studies was neither collected with the aim of studying the life course impact of military service on financial well-being, nor with the goal of comparing the military and civilian datasets. Hence, concessions are made to make the data comparable and the scope of the analysis is limited by the data available. The variable transformations necessary to make the variables measured in the civilian and military datasets more comparable are described below.

In addition to these drawbacks related to use of secondary datasets, there is also the potential that the methodological differences in the data collection techniques could create bias in this analysis. The military data were collected via a postal mail survey, whereas the civilian dataset was a combination of a CAPI and statistical records from tax data. Data from personal interviews may be more reliable because the interviewer can provide explanations regarding the nature of the information being collected and can question responses that do not make sense based on previous answers. However, telephone interviews are limited to those respondents who have access to and answer a telephone. Tax records should provide the most correct information for financial data because it is based on tax documents, which eliminate respondent error related to faulty memory. Another difference between the two datasets that could create bias is that the respondents to the military survey are all spouses who tend to be women who were selected for the survey because of their marriage to an active-duty member, whereas the respondents to the civilian survey were equally likely to be men or women who were

selected for the survey because to be representative of the general United States population.

Constructing Matched Datasets

As this study relies upon multiple secondary data sources that represent demographically distinct populations, the data are also modified to make the samples comparable. (For the military-only analysis, the entire military sample is used.) In the military-civilian comparison analyses, the matched samples include only married people from 18-44 years of age. The civilian sample is limited to those couples where there is at least one person employed full-time. It would have been difficult to find individuals in both military and civilian datasets with the same combination of characteristics, even though the sample sizes for the datasets are large. For this analysis, the demographic characteristics to be matched are age, education, and race. Gender was initially considered as a matching variable but was discarded because this analysis focuses on households, rather than individuals.

The basic demographic characteristics of the military and civilian populations are quite disparate. To create even more comparable datasets, it is necessary to have matched samples. For this analysis, samples are drawn that are proportionally matched at the cell level for the three relevant variables (age, education, and race). This type of matched sample was selected as the most appropriate for facilitating comparisons while retaining the maximum number of cases in both datasets. The sampling procedure used to create the matched samples is one in which there are equivalent percentage distributions in the cells when a three-way cross of the matching variables is conducted (e.g., age by education by and race). This creates a proportional number of cases for all cells in both samples. To retain as many observations as possible, the threshold for

matches was established such that the one-way frequencies differed by no more than 4

percentage-points (Table 2). Although the distributions are not identical, they are

reasonably close (i.e. within 5 percentage-points). For the analysis, percentage

distribution at the cell level was the best method of creating matched samples because it

created samples that would be reasonable to compare.

Table 2.
Frequencies of the Final Military Sample Allocation and Civilian Dataset – Proportional Matching

	Military Matched Sample		Civilian Dataset	
Age Categories	*Frequency*	*%*	*Frequency*	*%*
18-25	341	7.8	275	7.4
26-30	707	16.2	570	15.4
31-35	1019	23.3	820	22.1
36-40	1312	30.1	1056	28.5
41-44	987	22.6	985	26.6
Total	*4366*	*100*	*3706*	*100*
Education Level	*Frequency*	*%*	*Frequency*	*%*
HS diploma/GED or less	1439	33.0	1213	32.7
Some college	910	20.8	732	19.8
College degree/higher	2017	46.2	1761	47.5
Total	*4366*	*100*	*3706*	*100*
Racial Categories	*Frequency*	*%*	*Frequency*	*%*
Minority	927	21.2	746	20.1
(Non-Hispanic) White	3439	78.8	2960	79.9
Total	*4366*	*100*	*3706*	*100*

Description of Variables

The dependent and independent variables included in this analysis are selected

because they help test aspects of the life course implications of military service.

Assigning applicable variables to the component of the life course perspective to which it

relates is a helpful way of categorizing the concepts the variables represents and helps

organize the discussion. As previously mentioned, the life course perspective has several

components including timing, linked lives, and human agency. Figure 1 identifies each

relevant component of life course theory and the variables in the analysis that are associated with it.

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                    ┌──────────────────────────┐
                    │  Life Course Perspective │
                    └──────────────────────────┘
          ┌──────────────────┬──────────────────┐
    ┌───────────┐      ┌───────────────┐    ┌──────────────┐
    │  Timing   │      │  Linked Lives │    │    Human     │
    └───────────┘      └───────────────┘    │    Agency    │
                                            └──────────────┘
```

Timing	Linked Lives	Human Agency
• Paygrade/Age • Number of children • Length of current residence • Number of moves • Number of times away	• Spouse employment • Spouse underemployment • Household income • Costs of relocations • Race/Ethnicity	• Level of debt • Level of savings • Saving/spending habit • Perceived financial condition • Educational level

Figure 1.
The Life Course Perspective and the Variables Included in the Analysis

Analysis in this dissertation includes two primary components—a military vs. civilian comparison and a military-only analysis. In both components of the analysis, indicators of financial well-being are analyzed. To provide a frame of reference for understanding financial well-being in the military, the military-civilian component of the analysis compares the military population with civilian society. The second part of this dissertation includes an analysis of the relationship between financial well-being and military service by taking into account aspects of the military that are either unique to its culture or are otherwise unavailable for analysis in the civilian comparison dataset.

Military-Civilian Dependent Variables

Financial well-being is difficult to operationalize through a single measure. "Sociologists typically focus on income, or the flow of money received by an individual or household, as an indicator of financial well-being" (Keister and Moller 2000: 64). However, this ignores the level of debt and savings held by a household that can be used to calculate the net worth, which is a better measure of financial well-being because it is

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an indicator of both long term and short term financial security (Keister and Moller 2000). For example, financial well-being can be defined by total household income; however, a family can have high total income but have spending habits resulting in high debt that leaves them on the verge of financial collapse. Similarly, "many families who are below the poverty line based solely on current income may be living quite comfortably on assets acquired during more prosperous years" (Keister and Moller 2000: 65). To address the complexity of financial well-being, multiple indicators are used in this dissertation to operationalize financial well-being to provide a robust portrait of the financial well-being of military families (Figure 2). The variables (i.e., income, savings, saving habits, debt, perceived financial condition) examined in this dissertation are selected because they represent a range of indicators of financial well-being. Although income, savings, and debt cannot be combined to create a net worth measure due to the way in which the data were collected, these measures will be analyzed individually to show the complexity of financial well-being. The measure of saving habits provides an indicator of the family's financial planning and resources because it is an indicator of whether the family is building wealth on a monthly basis. The perceived financial well-being measure provides one of the most well-rounded indicators of financial well-being because it asks the respondent to take into consideration all aspects of their financial well-being and to give an assessment of how their family is faring.

```
Age ───────────────────────────►
 │
Number of ─────────────────────►
Children                          ┌─────────────┐     ┌──────────┐
 │                                │             │ ──► │Household │
Race/ ─────────────────────────► │  Household  │     │Debt      │
Ethnicity ──► ┌───────────┐      │  Income     │     └──────────┘
              │ Spouse    │ ──►  │             │     ┌──────────┐
Education ──► │Employment │      └─────────────┘ ──► │Saving/   │
              └───────────┘                          │Spending  │
                       ──────────►                   │Habit     │
                                                     └──────────┘
                                                     ┌──────────┐
                                                     │Household │
                                                     │Savings   │
                                                     └──────────┘
```
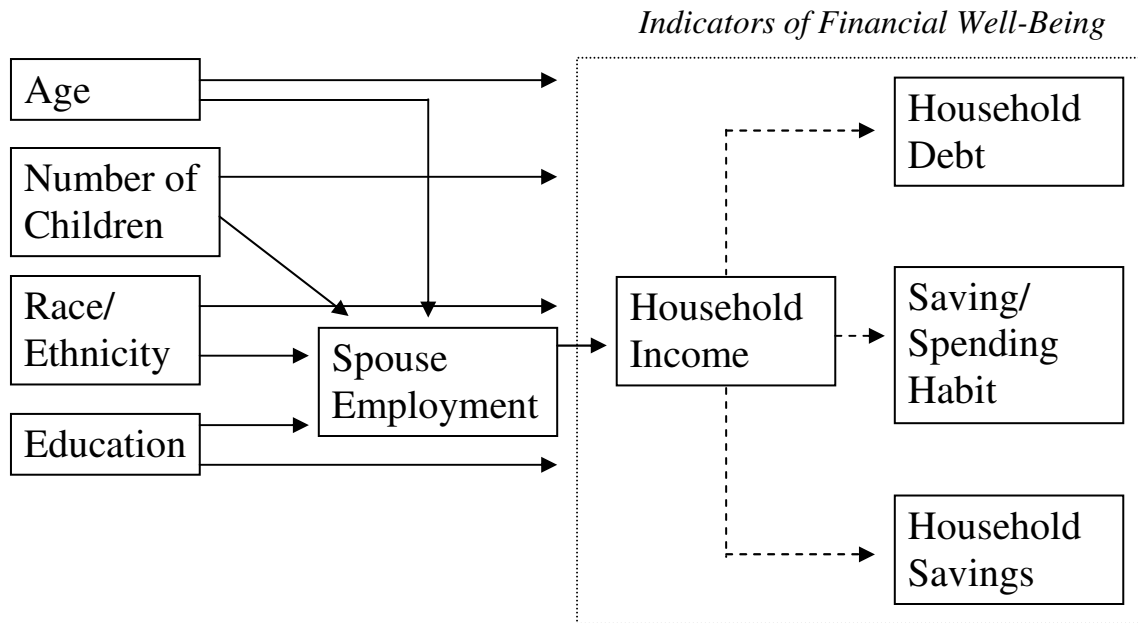
Figure 2.
Military-Civilian Model

For this analysis, the methods for operationalizing financial well- being are based

on previous research by Kennickell, Starr-McCluer, and Surette (2000). The

measurement of financial well-being is limited by the extent to which adequate and

comparable indicators are included in both the civilian and military datasets. As a result,

the four basic measures of financial well-being are included as dependent variables in the

military-civilian comparison component of analysis and an additional measure, perceived

financial well-being is included in the military-only analysis. There are multiple ways to

operationalize financial well-being, each of which would paint a different picture of a

family's financial well-being. Because little is known about financial well-being in the

military, this dissertation compares similar economic indicators in the civilian and

military populations to determine whether critical demographic predictors of financial

well-being operate in the same way in both populations. The analysis of multiple

measures of financial well-being that capture the different ways in which families have

positive and negative financial health characteristics will make the final assessment of

who is better or worse off financially difficult. The strongest measures of financial well-

being in the military-civilian analysis are total household income and level of savings,

and in the military-only analysis, these two measures and the measure perceived financial

well-being are the strongest measures. The two other measures of financial well-being

included in this dissertation, level of debt and saving habits, are less direct measures of

financial well-being, which are useful for creating a full picture of financial health.

However, the measure of debt in this analysis is limited to a specific type of debt and will

not capture the full spectrum of debt behaviors. The saving habits measure is also a

weaker measure of financial health because it focuses on typical monthly spending

habits, which may vary greatly from month to month.

The first measure of financial well-being included in the military-civilian

comparison section of the analysis is total household income. For the civilian dataset, the

question asked is "How much was the total income you and your family living here

received in 1997 from all sources, before taxes and other deductions were made?" and

this variable is continuous. A similar question in the military dataset is "What is your

total monthly gross (before-tax) household income from all sources? (Please include

your spouse's military earnings, your earnings, and income or financial support from any

other source.)" This question has eleven monthly income categories which are coded

with low numbers corresponding to low dollar amounts and which could be recoded to

the mid-point of the dollar range[2]:

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[2] An alternative to adopting the lowest value of the top income, debt, or savings ranges as the highest value
for the category would be to use a Pareto estimation to assign a midpoint to the open ended category. As
the full range of potential income, debt, or savings values is unknown for the military sample, this method
is not used in this analysis.

1 =	$1-1,000	=	500
2 =	$1,001-2,000	=	1,500
3 =	$2,001-3,000	=	2,500
4 =	$3,001-4,000	=	3,500
5 =	$4,001-5,000	=	4,500
6 =	$5,001-6,000	=	5,500
7 =	$6,001-7,000	=	6,500
8 =	$7,001-8,000	=	7,500
9 =	$8,001-9,000	=	8,500
10 =	$9,001-10,000	=	9,500
11 =	$10,001 and above	=	10,001

To attain a more parallel analysis, the civilian income data are recoded into the monthly income categories available in the military dataset. One limitation to military-civilian comparisons of financial well-being is the disparity in income distribution between the military and civilian society. The military income of service members has upper and lower bounds, and although military members may have other sources of household income, there are likely to be more civilians in the upper income categories. However, if this does result in military families consistently having lower income, then choosing a military life course will have negative implications for the financial well-being of military members. Income is also included as an independent variable in the regression models with the exception of the model where income is the dependent variable.

The second measure of financial well-being is the total amount of household savings. This variable includes funds in bank accounts, IRAs, money market accounts, certificates of deposit (CDs), savings bonds, mutual funds, and stocks/bonds. This measure of savings does not include pension accounts, which made it more comparable to the military measure because military retirement pay would not be included in service members' calculations of savings. In the civilian dataset, respondents were asked to report a dollar amount for each of the financial assets listed above. Data on household

savings for the military is assessed in one question: "Roughly, what is the total amount of savings you and your spouse have? (Please include funds in bank accounts, IRAs, money market accounts, Certificates of Deposit (CDs), Savings Bonds, mutual funds, stocks and/or bonds)." Analysis values for the response categories and the mid-points for each dollar range are as follows:

0 =	$0	= 0
1 =	$1-1,000	= 500
2 =	$1,001-2,500	= 1,750
3 =	$2,501-5,000	= 3,750
4 =	$5,001-7,500	= 6,250
5 =	$7,501-10,000	= 8,750
6 =	$10,001-12,500	= 11,250
7 =	$12,501-15,000	= 13,750
8 =	$15,001-17,500	= 16,250
9 =	$17,501-20,000	= 18,750
10 =	$20,001-50,000	= 35,000
11 =	$50,001-100,000	= 75,000
12 =	$100,001 and above	= 100,001

The multiple measures in the civilian sample are combined and then the continuous variables are recoded in the response categories available in the military dataset.

The third measure of financial well-being is the total amount of household housing debt, the measurement of which is similar to that of the household savings. Mortgage debt is not included in this analysis because data on mortgages are not collected for the military dataset. This methodology removes one of the major sources of civilian debt; however, this choice is made because excluding mortgage debt makes the civilian and military measures more comparable. The debt measure does include credit card debt, installment loans, and other kinds of debt. For the civilian dataset, dollar values for each type of debt are combined and then recoded to approximate more closely the data available for the military sample. The military data come from the following

question: "After the last payment was made on personal unsecured debt, what was the

total amount you and your spouse still owed? (Include all credit cards, debt consolidation

loans, AAFES loans, NEXCOM loans, student loans, and other personal loans; exclude

home mortgage and car loans)." The response categories for this measure are:

0 =	$0	= 0
1 =	$1-1,000	= 500
2 =	$1,001-2,500	= 1,750
3 =	$2,501-5,000	= 3,750
4 =	$5,001-7,500	= 6,250
5 =	$7,501-10,000	= 8,750
6 =	$10,001-12,500	= 11,250
7 =	$12,501-15,000	= 13,750
8 =	$15,001-17,500	= 16,250
9 =	$17,501-20,000	= 18,750
10 =	$20,001 and above	= 20,001

Although information on car loans is available in both civilian and military

surveys, this information is excluded from debt calculations because it would be difficult

to combine accurately the categorical ranges used to measure the debt and car loan

information in the military datasets.

A fourth dependent variable included in the military-civilian comparisons analysis

is intended to capture financial management ideology. To measure this type of ideology,

respondents are asked about their saving/spending habits. Savings and spending are

interrelated for this measure because saving is being interpreted as not spending all

available income. Civilian respondents were asked "Over the past year, would you say

that your spending exceeded your income, that it was about the same as your income, or

that you spent less than your income?" and their response options are coded 1=spending

exceeded income; 2=spending equaled income; and 3=spending less than income. The

military spouses were asked a similar question: "Which of the following statements

comes closest to describing the saving habits of you and your spouse?" The available

response options are comparable to those available to civilians: 1 = Don't save – usually

spend more than income; 2 = Don't save – usually spend about as much as income; 3 =

Save whatever is left over at the end of the month – no regular plan; 4 = Save income of

one family member, spend the other; 5 = Spend regular income, save other income; 6 =

Save regularly by putting money aside each month. Military data are collapsed to three

levels to match the civilian data, but when analyzing the military alone, this variable is

expanded to the original six-level form.

As previously mentioned, the data require recoding to attain parity in the civilian-

military analyses. To summarize the data manipulations required, the second and third

measures of financial well-being (total savings and nonresidential debt) are continuous

variables in the civilian dataset, but these measures are represented by categorical

variables in the military datasets. To standardize the methodology, the civilian data are

grouped into categories based on the military standard. The data from the civilian sample

are also in 1998 dollars and are converted to 1999 dollars before they are collapsed into

categories. The fourth dependent variable (saving habits) is recoded to three levels

because it is represented by a six level variable in the military survey and a three level

variable in the civilian survey.

Military-Civilian Independent Variables

Previous research in the field has found significant relationships between financial

well-being and demographic characteristics (Iceland 2000). Therefore, demographic

variables are the independent variables in this analysis. Iceland (2000) found that

families in financial distress were more likely to be headed by young adults and members

of race/ethnic minorities. As financial well-being is also tied to the number of children

relative to the number of earners, this study also looks at the impact of number of

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children on financial well-being (Casper, McLanahan, and Garfinkel 1994). In addition, previous research also has suggested that characteristics of military service encourage young adults to enter into parenthood at earlier age, which will also be examined in this study (Office of the Assistant Secretary of Defense [Personnel and Readiness] 1993). Respondent education level and spouse employment status are included as independent variables because of their direct effect on income, particularly total household income. In addition, the two samples are combined for the final correlation and regression analyses and an indicator of whether the respondent is from the military vs. the civilian dataset is included. This is included to facilitate hypothesis testing in the correlation and regression analysis.

In the military dataset, respondents were asked "What age were you on your last birthday?" The responses are then coded into six categories. The age categories and values for the cross-tab analysis are 1 = 18-25 years; 2 = 26-30 years; 3 = 31-35 years; 4 = 36-40 years; and 5 = 41-44 years. Respondent age is a continuous variable that has been limited to those ages 18-44 to facilitate the creation of matched samples. The continuous age variables from both datasets are used in the regression and correlation analyses, although the collapsed age variable is used for cross tabulations.

Military respondents were asked, "Are you Spanish/Hispanic/Latino?" and "What is your race?" Responses to these questions are combined into a single race/ethnicity variable. In both military and civilian datasets, race/ethnicity is recoded into a dummy variable (non-Hispanic) White[3]=0 and all others=1. Given that the majority of members of the military and their spouses are White, collapsing race/ethnicity to a dichotomous variable will ensure that small cell sizes will not create instability in the variance.

Similarly, the majority of respondents to the civilian survey are also White. Reducing race/ethnicity to a dichotomous variable is also appropriate for this study because previous research on the civilian population has found that White Americans have different financial characteristics and experiences than Americans who are minority members, with the possible exception of Asian Americans, who are a small part of the military population (Burtless and Smeeding 2001; Mason 1996).

To assess the impact of parenthood on the life courses of civilians and military members, a measure of the number of children is also included in the model for both military and civilian datasets. The civilian dataset includes a count of how many children are present in the household. Respondents to the military surveys were asked "How many children or other legal dependents do you have in each age group?" For the military, the definition of "child or children" or "other legal dependents" includes "anyone in your family, except your spouse, who has or is eligible to have a Uniformed Services identification card (military ID card) or is eligible for military health care benefits and is enrolled in the Defense Enrollment Eligibility Reporting System (DEERS)." The presence of children has been tested in military models and found significant. Previous research has found that having any children and the number of children are predictive of spouse employment and financial well-being (Caliber 1995; Scarville and Bell 1993).

Another demographic variable included is respondent education. Education level is measured by a three-level variable that is derived from the question "What is the highest degree or level of school that you have completed?" In both datasets, the responses are recoded to the following three levels: 1 = High School Diploma or GED, 2

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[3] Non-Hispanic Whites are referred to as "White" through the remainder of this study.

= Some College, and 3 = College Degree or higher. As previously stated, the military and civilian datasets are matched on this variable.

Respondents to both samples are limited to households with at least one full-time employed spouse. Spouse employment status is also included in the military-civilian comparison as a dummy variable, which codes respondents as either working=1 or not working=0. In this analysis, working includes those employed both full-time and part-time. In the military sample, 10% of the respondents were part of a dual military household, which is consistent with the demographic composition of the active duty force at that time (Military Family Resource Center 2000). Although dual military families may face double the burden from the greedy characteristics of military life, they also represent a portion of the military sample that do not lose one of their household's incomes every time they move as a result of their military service. Respondents who are part of dual military households are not excluded from this study because all dual income families are of substantial interest in this analysis.

Military Dependent Variables

The dependent variables used in the military-only analysis consist of the four variables used in the military-civilian comparisons (household income, household debt, household savings, and household saving habits) and one new dependent variable, perceived financial status (Figure 3; dependent variables added in the military-only analysis are presented in italics). Using a five-point scale, respondent's rate their financial condition based on the following question: "Which of the following best describes the financial condition of you and your spouse?" The response options available are: 5 = "Very comfortable and secure"; 4 = "Able to make ends meet without

much difficulty"; 3 ="Occasionally have some difficulty making ends meet"; 2 = "Tough

to make ends meet but keeping your head above water"; and 1 = "In over your head".
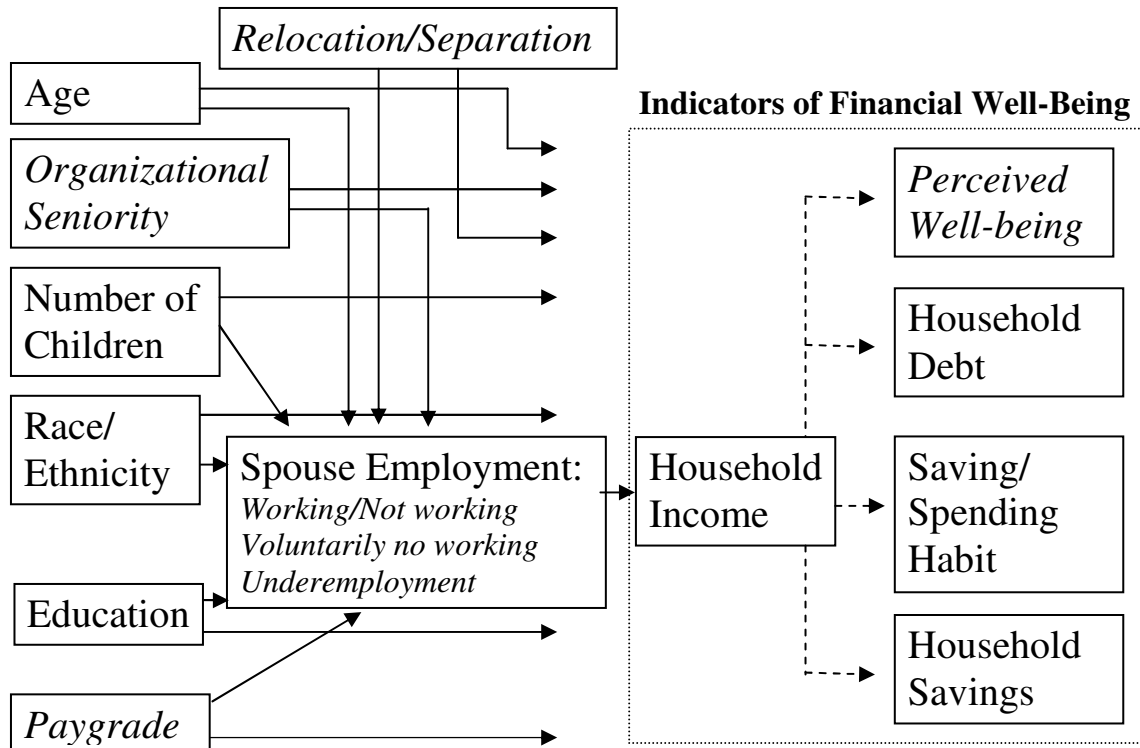
Figure 3.
Military Model

Military Independent Variables

      The independent variables used in the military-civilian component of analysis are

also analyzed to test their effects on the additional dependent variables added in the

military component of the analysis. Spouse employment and underemployment variables

are included as independent variables in this research because of their predicted

relationship to financial well-being.[5] Additional independent variables are added to

determine the effect of unique characteristics of military life on financial well-being. In

considering the additional independent variables, it is useful to think of these as

pertaining to two distinct sets of explanatory variables.

The first set is demographic and includes the military-civilian independent

variables of age, race/ethnicity, gender, number of children, and education. Additional

measures include the active-duty member's paygrade group and organizational seniority.

Military paygrade is collapsed to two levels: 1 = Enlisted and 2 = Officers from the

original seven-level measure: 1 = E1-E3, 2 = E4, 3 = E5-E6, 4 = E7-E9, W1-W5[6], 6 =

O1-O3, and 7 = O4-O6. A dichotomous variable measuring organizational seniority is

constructed from military paygrade. It is coded 1 = 'Junior' which includes E1-3 and

O1-3 and 2 = 'Senior' which includes E4-9 and O4-6. For cross-tabulations, a summary

of the combination of these two variables is also presented: Junior Enlisted (E1-3),

Senior Enlisted (E4-9), Junior Officers (O1-3), and Senior Officers (O4-6).

The second set of independent variables in the military-only analysis is designed

to capture the effect of two greedy aspects of military life on financial well-being.

Relocation and separation are aspects of military service that have negative effects on

spouse employment and have also been linked to increased household expenses for

military families (Booth 2000; Payne, Warner, and Little 1992; Scarville and Bell 1993;

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[5] An expansion of this dissertation topic would be to investigate the linked lives effect of military service on spouse employment status, by conducting similar regression models that use spouse employment as a dependent variable. This type of analysis may be undertaken following the completion of this dissertation, but it was not included in the scope of this project.

Segal 1986). As a result, measures of relocation and separation included in this model.

A detailed description of the greedy institution variables follows.

Three relocation variables are included to capture the frequency of relocation and

the costs of the most recent relocation. Length of current residence is measured by

responses to the question, "How long have you lived at your current location?"

Responses available for this question include: 1 = "Less than one month"; 2 = "1-3

months"; 3 = "4-6 months"; 4 = "7-9 months"; 5 = "10-12 months"; and 6 = "More than a

year". This variable is an indicator of the extent to which respondents have had time to

adjust after their most recent move, which could have effects on financial well-being

because of the costs incurred during moves and the loss of a second income (either the

spouse's job or the member's second job).

Number of permanent change of stations (PCSs) is included to determine how

often military members and their families have moved. Respondents were asked "During

your spouse's active duty career, how many times did you and/or your family members

move to a new location because of your spouse's permanent changes of station (PCSs)?"

and their response options ranged from "None" to "10 or more". Frequent relocations are

expected to have an additive negative effect on financial well-being of military families

(Payne, Warner, and Little 1992).

Finally, a relocation-related composite measure of the extent to which

respondents experienced problems related to the costs of their most recent move is also

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[6] Warrant officers (W1-W5) are eliminated from the military sample. Warrant officers are a difficult group
to classify, as they fall in between officers and enlisted. They have greater variety in their age, education,
and income ranges and including them in the analysis as officers (as is sometimes done) can mask the
differences between commissioned officers and enlisted members. In addition, they comprise a small sub-
population in the military that is not distributed evenly across military branches, which makes reporting
findings related to them difficult because the small cell sizes have unstable variance.

included in this analysis. Respondents were asked "When you and/or your family members made the <u>most recent</u> PCS move, were any of the following a problem?" (five-point scale ranging from 5 = "Serious problem" to 1 = "Not a problem" with a "Does not apply" option). Table 3 lists the relocation-related variables that were analyzed by factor analysis and included in the relocation composite measure.

Table 3.
Problems Related to Costs of Recent Move

• Selling or renting out your former residence	• Transferability of entitlements (e.g., Supplemental Security Income)
• Purchasing or renting your current residence	• Costs of setting up new residence (e.g., curtains, carpeting, painting).
• Non-reimbursed transportation costs	• Shipping/storing household goods
• Temporary lodging expenses	• Change in cost of living
• Costs related to security deposit(s)	• Loss or decrease of your income
• Cost of moving pets	• Your employment
• Cost of moving vehicles	• Settling damage claims
• Accuracy of reimbursements	• Timeliness of reimbursements

Two measures of separation are included in the analysis. Separation is measured by the time away from their permanent duty station. Separations can remove service members from either a second job or normal opportunities for spending. It can also cause spouses with children at home to reduce the number of hours they work or to increase their child care costs while they assume a single parent role for the duration of the separation. The first measure of separation is the number of times the respondent's spouse has been away from home for at least one night in the past twelve months. "In the past 12 months, how many separate times was your spouse away from his/her permanent duty station for at least one night because of military duties?" The SAS values for the response options and the mid-points for the number of times away are as follows:

```
0 =     0 times away        = 0
1 =     1-2 times           = 1.5
2 =     3-4 times           = 3.5
3 =     5-6 times           = 5.5
4 =     7-8 times           = 7.5
5 =     9-10 times          = 9.5
6 =     11-12 times         = 11.5
7 =     13 times or more    = 13.
```

The second measure of separation is the total length of time in the past twelve months the respondent's spouse has been away from his/her permanent duty station. The question on the military survey reads: "In the past 12 months, what was the total length of time your spouse was away from his/her permanent duty station because of military duties? (ADD UP ALL NIGHTS AWAY FROM HIS/HER PERMANENT DUTY STATION.)" There were seven levels of responses for which SAS values and mid-point values are assigned:

```
0 =     None                              = 0
1 =     Less than 1 month                 = 0.5
2 =     1 month to less than 3 months     = 2
3 =     3 months to less than 5 months    = 4
4 =     5 months to less than 7 months    = 8
5 =     7 months to less than 10 months   = 9
6 =     10 months to 12 months            = 11
```

Measures related to spouse employment are included in the model regarding the effect of the greedy aspects of military service on financial well-being. The spouse employment variable used in the military-civilian analysis is included in the military analysis. In addition, a dummy variable is included in the analysis that captures whether the spouse is not employed by choice (value = 1) or if the spouse is unemployed and looking for work (value = 0). Unintentional periods of spouse unemployment was hypothesized to have a stronger negative association with financial well-being than intentionally not being employed.

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Previous research indicates that military spouses are penalized for their frequent relocations by either being unemployed or underemployed (Booth 2000; Payne, Warner, and Little 1992; Segal 1986). "Underemployment is a multi-dimensional concept that refers to inadequacies in employment or employment-related hardship, as indicated by less than full-time employment (including unemployment) and by employment that is inadequate with respect to training or economic needs" (Morrison and Lichter 1988: 161). In this study, spouses were asked to rate the extent to which their current primary job matched their qualifications and to what extent their current primary job used their skills and training. These two measures of spouse underemployment are combined to create a spouse underemployment measure. The first component of the underemployment measure is: "How well do your qualifications match the work you do in your <u>current primary job</u>?" and the response options are: 5 = "I am greatly overqualified for the work"; 4 = "I am somewhat overqualified for the work"; 3 = "My qualifications are appropriate for the work"; 2 = "I am somewhat under qualified for the work"; and 1 = "I am greatly under qualified for the work". The second component of underemployment is: "To what extent does your <u>current primary job</u> allow you to use your skills and training?" and the response options are: 3 = "To a large extent"; 2 = "To a minor extent"; and 1 = "Not at all". These two variables are combined into a single composite with values of 2 = "Not underemployed" and 1 = "Underemployed." Spouses who indicate that they are greatly or somewhat overqualified for their work or who indicate their job uses their skills to a minor extent or not at all are considered underemployed. Spouses who chose the other response options in either variable are not considered underemployed.

Analytic Approach and Summary of Remaining Chapters

The analysis contains two major components: 1) the analysis of the military-civilian comparison and 2) the military-only analysis. To conduct the most robust analysis possible, these two components are treated separately. For example, although the military data for both the military-civilian comparison and the military-only analysis are drawn from the same dataset, the samples for each component differ. In the military-civilian analysis, matched datasets are drawn, which greatly reduced the sample size. For the military-only analysis, the full military dataset is presented. In addition, the military-civilian analyses are unweighted. The purpose of drawing matched samples is to make the two populations as similar as possible on key demographic variables, and weighting the samples up to their respective populations would negate the purpose of drawing matched samples. However, in the military-only analysis, weights are applied to the data.

For each component of the study, a results chapter is presented including the descriptive statistics, correlations, and regression analyses for that component of the study (e.g., the military-civilian comparison or the military-only analysis). For the correlation and regression analysis for the military-civilian comparisons, the two samples are combined to a single dataset with an indicator of whether the respondent is from the military or the civilian sample. Regression analyses that are conducted on the military-only analysis, with three models considered: all respondents, respondents from dual income households, and respondents from single income households. The final chapter of this study includes a discussion of conclusions that summarizes the results of the analysis. The implications of the analysis, paying particular attention to potential policy implications are discussed. In addition, recommendations for future analysis are presented.

Due to the complexity of the military models proposed, structural equation modeling may provide a simple but sophisticated way to analyze the data. However, the drawback to this method is that standard structural equation modeling programs assume that the endogenous variables are all continuous (Bollen 1989). The variables in the military-civilian models include both Likert variables and dichotomous variables. As a result, analyses of the models in this dissertation rely on standard OLS regression.

CHAPTER IV. RESULTS OF MILITARY-CIVILIAN COMPARISONS

Description of Demographic Characteristics of Military and Civilian Households

Households in the military should be largely similar to civilian households because military personnel constitute a bounded subset of American society. However, neither military nor civilian households are homogenous groups, and the ways in which households differ may affect whether families experience financial distress. For example, families who are at higher risk in civilian society for developing financial distress are those headed by young adults and racial/ethnic minorities (Iceland 2000).

This chapter provides descriptive statistics for the dependent and independent measures included in both the civilian and military matched samples to explore the differences in these selected demographic characteristics. These measures include respondent age, presence of children, number of children, gender, respondent's age at first birth, dual income household, and race.

Matched Demographic Characteristics

Even though the samples were matched prior to conducting this analysis, understanding the demographic characteristics of the military and civilian households is important for exploring the relationships between the respondents in the two samples and the relationship between the respondents' characteristics and their level of financial distress. As the samples are matched in regards to the respondent's age category, level of educational achievement, and status as a race/ethnic minority, the two samples are very similar on these demographic characteristics (Table 2). The mean age of respondents in the civilian sample is 35.5 and the military respondents are only slightly younger (35.0). In regard to the race/ethnic background, 20.1% of civilian respondents and 21.2% of

military respondents report they are race/ethnic minority members. These similarities are not surprising because the samples are constrained to ensure comparability in the age and race/ethnic distributions.

The military and civilian samples are matched on the combination of age group and race/ethnicity and as a result, the distribution of race/ethnicity by age group is similar in the two samples (Table 4). The greatest disparity occurs for members of the oldest age group. In creating the matched samples, all members of the oldest age group in the military were retained.

Table 4.
Race/Ethnicity of the Civilian and Military Samples by Age Group (Percentages)

	Percent Minority Members	
	Civilian Sample	Military Sample
18-25 years	23.6	23.8
26-30 years	26.3	26.3
31-35 years	22.6	22.6
36-40 years	24.0	23.9
41-44 years	9.4	11.8

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

The two samples are matched on educational attainment. As a result, the distributions are about the same (Table 5 totals). Similarly, the samples are matched based on the combination of age group and education. Hence, the distribution of educational attainment by age group is similar in the two samples (Table 5 cells). The greatest disparity occurs between members of the civilian and military samples in the oldest age group (41-44 years) who have taken some college credits without attaining a degree; 5% more of the military sample is in this category.

Table 5.
Educational Background of the Civilian and Military Samples by Age Group (Percentages)

	High School Diploma or GED		Some College		College Degree	
	C	**M**	**C**	**M**	**C**	**M**
Total	32.7	33.0	19.8	20.8	47.5	46.2
18-25 years	45.5	45.5	23.6	23.8	30.9	30.8
26-30 years	31.6	31.5	22.8	22.8	45.6	45.7
31-35 years	35.4	35.3	18.9	18.9	45.7	45.7
36-40 years	38.5	38.6	16.7	16.7	44.8	44.7
41-44 years	21.4	19.8	20.9	25.9	57.7	54.3

Note: For each row, the military and civilian cells sum separately to 100%.
Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

Other Demographic Characteristics

The samples are also very similar on characteristics that are not part of the matched sample plan (Table 6). For example, in both samples the average number of children is 1.8, with 81.6% of the civilian families and 81.3% of the military families indicating that they have children in their households.

Table 6.
Characteristics of the Civilian and Military Samples (Means and Percentages)

	Civilian Sample	**Military Sample**
Percentage of Respondents who are Women	52.6	95.1
Percent with Children	81.6	81.3
Average Number of Children	1.8	1.8
Percent of Dual Income Families	63.0	59.4

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

The civilian spouses are slightly more likely than military spouses to indicate that both they and their spouse are employed (63.0% vs. 59.4%). This lower employment rate among military spouses is consistent with previous research on military families (Scarville and Bell 1993; Williams, Lipari, and Wetzel 2002). The percentage of women

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respondents in the military sample is more than forty points higher than in the civilian sample. The military sample is from a survey of spouses of active-duty members; since 85% of active-duty forces are men (and military men are more likely than military women to be married); it is not surprising the sample is primarily comprised of women. In contrast, the civilian sample is from a representative sample of all U.S. households; hence, women are as likely as men to be asked to respond to the survey. As the purpose of this study is to compare military and civilian households rather than individuals, the gender difference in the two samples is not considered to be a problem.

Consistent with the overall distribution of female respondents in the military and civilian samples (Table 6), the majority of the military sample, across all age groups, is comprised of women (94.3-96.5%), whereas the percentages in the civilian sample are more even distributed between women and men (Table 7). The percentage of the civilian sample who are women range from a low of 48.2% for those in the 31-35 year group to a high of 67.3% for those in the youngest age group (18-25 years). Age group and race/ethnicity are two variables on which the matched samples are drawn for the military-civilian analysis. Hence, the distribution of minority and non-minority spouses by age group is similar in the two samples, with the greatest disparity (still only 2.4%) in the oldest age group (41-44 years).

Table 7.
Characteristics of the Civilian and Military Samples by Age Group (Means and Percentages)

	Percent Women		Percent with Children		Percent of Dual Income Families		Percent Minority Members	
	C	M	C	M	C	M	C	M
18-25 years	67.3	96.5	52.7	50.4	56.4	55.4	23.6	23.8
26-30 years	55.3	94.3	73.7	73.4	69.3	55.2	26.3	26.3
31-35 years	48.2	96.0	87.2	84.2	57.1	54.1	22.6	22.6
36-40 years	48.8	95.0	84.8	90.0	59.7	62.1	24.0	24.0
41-44 years	54.8	95.0	86.3	83.4	68.0	65.7	9.4	11.8

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

Across all age groups except 36-40, military families are as likely as or slightly less likely than civilian families to have children (Table 7), and this pattern remains consistent when military wives are examined separately (not shown). Although there are some differences between the two samples, the overall similarity between military and civilian families in regard to whether they have children may indicate that this will not be an important variable.

In all but one of the age categories (36-40 years), the civilians are more likely to be part of dual income families than the military spouses. The difference is largest (14.1%) among those aged 26-30. This may be because the military spouses have more young children than their civilian peers. Although most married mothers are typically part of the labor force (Bianchi and Spain 1996; Presser 1989), those with pre-school aged children often scale back their market work (Bianchi 2000) or leave the workforce entirely while their children are young (Schwartz, Wood, and Griffith 1990). In the youngest age group (18-25), about half of the military and civilian families are single income households, but the data indicate that military families are more likely than their

civilian peers to stay single income households as they age. This finding may reflect the impact of frequent relocations on military spouse employment.

Description of Financial Well-Being Characteristics

The previous section provides a general description of the military and civilian samples. The primary purpose of this portion of the chapter is to describe how the military and civilian households compare on the characteristics of financial well-being. First, the two samples are compared on each of the financial well-being variables. Then, the financial well-being variables are analyzed by demographic characteristics.

Financial Well-Being Characteristics

Although demographically the two samples are very similar (Table 2 and Tables 4-7), the military and civilian families differ substantively on the indicators of financial well-being (Table 8). Overall, members of the military sample are more likely than members of the civilian sample to indicate that they have a savings plan (76.8% vs. 51.0%). This may reflect the formal and informal financial management training that members of the military are either required to take or have available to them (Buddin and Do 2002). However, the members of the military sample have less positive indicators of financial health for almost all of the other financial well-being variables. For example, members of the military sample are more likely to have at least some personal debt (difference of 4.8%). Although more military families have some debt, they have less debt on average than civilian families ($7,107 vs. $8,461). However, military families have less money put aside (9.2% fewer with savings) as savings than civilian families (difference of about $15,000). In addition, members of the military sample tend to have less monthly household income than members of the civilian sample—$1,000 less on the median and $871 less on the mean.

Table 8.
Characteristics of the Civilian and Military Samples (Means and Percentages)

	Civilian Sample	Military Sample
Percent w/Savings Plan	51.0	76.8
Mean Monthly Income	$5,596	$4,725
Median Monthly Income	$5,500	$4,500
Mean Total Savings	$35,981	$21,135
Percent with Savings	94.9	85.7
Mean Total Debt	$8,461	$7,107
Percent with Debt	75.3	80.1

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

Financial Well-Being Characteristics By Demographic Characteristics

Overall, there is a large difference in the savings/spending habits of military and civilian families, which are also evident by age group. More than 75% of military families but only 51% of civilian families indicate that they spend less than their income. The percentage of those in both samples who spend less than their income is lowest for those in the youngest age group (18-25 years) and highest for those in the oldest age group (41-44 years). In all age groups, the military respondents report more financially responsible spending habits (e.g., more likely to be spending less than their income).

Table 9.
Saving Habits of the Civilian and Military Samples by Age Group (Percentages)

	Spending Exceeded Income		Spending Equaled Income		Spending Less Than Income	
	C	M	C	M	C	M
Total	16.2	3.5	32.8	19.8	51.0	76.8
18-25 years	14.6	6.3	49.1	28.6	36.4	65.2
26-30 years	16.7	5.3	44.7	26.7	38.6	68.0
31-35 years	15.9	2.4	34.8	31.6	49.4	76.0
36-40 years	16.1	3.8	30.8	17.1	53.1	79.1
41-44 years	16.8	1.8	21.8	13.4	61.4	84.8

Note: For each row, the military and civilian cells sum separately to 100%.
Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

Although military families may have better financial planning intentions, this does not translate into tangible measures of their financial well-being. Overall, civilian families are more likely than military families to have at least some savings (94.9% vs. 85.7%), and they are slightly less likely to have personal debt (75.3% vs. 80.1%) (Table 10). Examining the percent of households with savings by age group reveals that, regardless of age, the civilian respondents are more likely to report that their household has savings. This difference between the samples is greatest among respondents ages 30 and younger. In contrast, the percentage of households with debt is about the same in both samples for those ages 30 and younger; for those over 30 years old, civilians are less likely to indicate their household has any personal debt.

Table 10.
Financial Well-being Measures for the Civilian and Military Samples by Age Group (Means and Percentages)

	Households w/Savings (%)		Households w/Debt (%)	
	C	M	C	M
Total	94.9	85.7	75.3	80.1
18-25 years	85.8	70.3	85.5	85.6
26-30 years	93.0	75.8	84.9	83.3
31-35 years	94.5	86.6	73.3	81.5
36-40 years	95.3	89.5	72.9	80.3
41-44 years	98.5	92.7	71.2	74.0

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

Overall, civilian households have higher total household income levels (as measured by both the mean and the median) and more savings, although they also have more debt. When these indicators are examined by age group, the younger military respondents have more positive indicators of financial well-being than their civilian peers (Table 11). The military may very well be a good place to start for young adults because

it does provide stable employment paying more than minimum wage (Gade, Lakhani, and

Kimmel 1991); however, the data in this analysis indicate that the wage benefit of

military service may diminish over time. Military respondents ages 18-25 report slightly

higher mean income than their civilian age peers (difference of $609). Although there is

only a very small difference in the savings level of 18-25 year old respondents in the

civilian and military samples ($4,943 vs. $4,267), the civilian respondents in this age

group report having nearly twice as much debt. Among the older age groups, the

respondents in the civilian samples begin to "catch up" in regard to their financial well-

being indicators. There is little difference in the incomes of military and civilian

respondents ages 26-30 (mean difference of $100), but for the three oldest age groups the

civilian respondents had higher monthly household income than the military respondents.

Although 26-30 year olds in both samples report having more savings, on average, than

the 18-25 year olds, the increase is greater among the civilians, who have higher savings

levels than the military respondents of the same age.

Table 11.
**Financial Well-being Measures for the Civilian and Military Samples by Age Group
(Means and Percentages)**

	Mean Monthly Income ($)		Median Monthly Income ($)		Mean Savings ($)		Mean Debt ($)		Mean Debt to Income Ratio	
	C	**M**	**C**	**M**	**C**	**M**	**C**	**M**	**C**	**M**
Total	$5,596	$4,824	$5,500	$4,500	$35,981	$21,135	$8,461	$7,107	2.4	2.1
18-25 years	$2,454	$3,063	$2,500	$2,500	$4,943	$4,267	$9,149	$5,324	6.2	2.3
26-30 years	$3,947	$3,874	$3,500	$3,500	$14,752	$11,896	$9,271	$7,464	3.6	2.6
31-35 years	$5,479	$4,544	$4,500	$3,500	$33,496	$19,565	$8,549	$7,278	2.0	2.1
36-40 years	$6,010	$4,959	$5,500	$4,500	$37,859	$23,381	$7,570	$7,218	1.6	2.0
41-44 years	$7,064	$5,823	$7,500	$5,500	$56,986	$32,891	$8,681	$7,163	1.7	1.6

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

The disparity in savings levels between the civilian and military households becomes more acute as age increases. Similarly, when debt is examined, it appears that the low level of debt ($5,324) held by the youngest military respondents rises to more than $7,000 for 26-30 year olds. In contrast, there is little difference in the amount of debt carried by civilians ages 18-25 and those ages 26-30. This trend regarding the youngest members of the military and civilian samples remains when the debt to income ratio is examined. Although reported debt level does not change substantively for the older military age groups, the civilian debt level decreases between the ages of 26-30 and 36-40, but it is higher for 41-44 year olds.

An examination of the financial well-being measures draws out the contrasts between members of race/ethnic minorities in both datasets and differences between minority and non-minority members. Although race/ethnicity is known only for the respondent, research on marriage indicates that people with similar characteristics tend to marry (Fields and Casper 2001). On this basis, this study assumes that if the respondent is a minority member, it is likely that his/her partner is a minority member as well. Future studies of this kind should have race/ethnic data on both partners.

The military families have a different pattern of saving/spending from the civilian families (Table 9), and these differences remain when analyzed by race/ethnicity (Table 12). In particular, minority members in the military are less likely to spend more than their income in contrast to civilian minorities (4.0% vs. 15.8%). When minority spending/saving habits are examined by age group (not shown), this pattern remains, although for 18-25 year old minority members there is no difference between civilians and military members regarding if they spend more than their income. Minority

members of the military tend to stay in service for longer periods than non-minority

members, which would make them older on average. For both military and civilian

respondents, Whites are more likely than minorities to indicate they spend less than their

income; however, this trend is much more pronounced in the civilian sample than in the

military sample.

Table 12.
Saving Habits of the Civilian and Military Samples by Minority Status (Percentages)

	Spending Exceeded Income		Spending Equaled Income		Spending Less Than Income	
	C	M	C	M	C	M
Minority	15.8	4.0	46.9	21.4	37.3	74.6
Non-Minority	16.3	3.3	29.2	19.4	54.5	77.3

Note: For each row, the military and civilian cells sum separately to 100%.
Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

Families headed by racial/ethnic minorities tend to be in the worst financial

position (Iceland 2000), reflected in the percentages of racial/ethnic minorities with

limited savings and debt for both samples. White civilians have the highest percentage of

households with savings and race/ethnic minority members in the military have the

lowest percentage with savings (Table 13). Regardless of race, military households are

less likely to have savings than civilian households; however, minority members in the

civilian sample are slightly more likely to have savings than minority members in the

military sample. In the military racial/ethnic minority members are more comparable to

their White peers in regard to having savings than is found for civilians.

Table 13.

Financial Well-being Measures for the Civilian and Military Samples by Minority Status (Means and Percentages)

	Households w/Savings (%)		Households w/Debt (%)	
	C	**M**	**C**	**M**
Minority	82.6	78.7	69.7	85.4
Non-Minority	98.0	87.5	76.7	78.7

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

The analysis of debt indicates minorities in the military not only have more debt than civilian minority members, but the difference between minority and non-minority members is greater in the military sample than in the civilian sample. Respondents in the military sample who are race/ethnic minority members have the highest percentage of households with debt and respondents in the civilian sample who are race/ethnic minority members have the lowest percentage of households with debt. There is only a slight difference (2%) between the military and civilian samples in the percentage of White households with debt.

When income is examined by race/ethnic status, there is no difference between minority members from the military and civilian samples (Table 14). However, there is a smaller difference between the income of military families by race/ethnicity than is found for civilian families. This finding may reflect the pay equity in the military and the minimal barriers to advancement by race/ethnicity within the military promotion system noted by Moskos and Butler (1996). The amount of debt and savings reported by military and civilian respondents differs substantively both within each sample by race/ethnic status and also across samples by race/ethnic status. In terms of average level of savings, White civilians have the highest level of savings and race/ethnic minority members in the military have the lowest level of savings. Regardless of minority status,

the military families have a lower average level of savings than the civilian families.

Military respondents who are race/ethnic minority members have a slightly higher level

of debt than civilian respondents who are race/ethnic minority members; however, there

is no difference in the income to debt ratio for minority members by civilian status. In

contrast, Whites have higher levels of debt if they are civilian than if they are military.

Although there is no race/ethnic difference in the military sample in the average level of

debt, in the civilian sample Whites have much higher levels of debt than minority

members.

Table 14.
Financial Well-being Measures for the Civilian and Military Samples by Minority Status (Means and Percentages)

	Mean Monthly Income ($)		Median Monthly Income ($)		Mean Savings ($)		Mean Debt ($)		Mean Debt to Income Score	
	C	M	C	M	C	M	C	M	C	M
Minority	$4,053	$4,099	$2,500	$3,500	$18,871	$11,443	$6,508	$7,124	2.4	2.4
Non-Minority	$5,985	$4,891	$5,500	$4,500	$40,293	$23,676	$8,953	$7,103	2.3	2.0

Note: Unweighted sample size for the military data presented in this table is 4366 and 3706 for the civilian sample.

Correlations

As preparation for the regression analyses, correlations among the variables in the

military sample, the civilian sample, and a combined military and civilian dataset are

calculated. The correlations among the financial well-being variables and demographic

characteristics for each of these samples are analyzed below.

Correlations for the Military Sample

The correlations in the military sample indicate that there are primarily significant

relationships between the financial well-being variables and the independent variables

(Table 15). As expected, there is a significant positive relationship between income and

savings, such that as income increases, savings increase. Similarly, the positive

relationship between income and saving habits indicates that as income increases, saving

habits tend to be more positive. There is a significant positive relationship between age

and income, indicating that older respondents have higher income. Although this is a

study of spouses, the age of the spouse is often very close to the age of the active-duty

member (Williams, Lipari, and Wetzel 2002), and within the military age is closely tied

to paygrade within the officer and enlisted ranks. In addition, because of the military's

"up or out" system, those who do not advance are not allowed to stay in the military. As

paygrade determines income, it is not surprising that older respondents, who tend to be in

the higher paygrades, have more income.

Table 15.
Correlation Table for the Military Sample

	Income	Saving	Saving Habits	Debt	Age	Number of Kids	Employ	Race/ Ethnic
Income	1							
Saving	.365**	1						
Saving Habits	.175**	.297**	1					
Debt	-.003	-.306**	-.211**	1				
Age	.310**	.269**	.148**	.036*	1			
# of Kids	.002	-.069**	-.118**	.083**	.231**	1		
Dual Income	.211**	.007	.053‡	.085**	.079**	-.100**	1	
Race/Ethnic	.124**	.155**	.027	-.001	.088**	-.001	.045‡	1
Education	.244**	.360**	.162**	-.028	.116**	-.090**	.089**	.173**

Note: Unweighted sample size for the military data presented in this table is 4366.
‡ Correlation is significant at the 0.05 level (2 tailed)
* Correlation is significant at the 0.01 level (2 tailed)
** Correlation is significant at the 0.001 level (2 tailed)
High values:
    White
    Dual income households
    Higher Saving Habits scores indicate spending less than income.
    Higher education scores indicate more education.

Being part of a dual income household is positively correlated with higher levels

of household income. Race/ethnicity is positively correlated with income, which

indicates that Whites have higher levels of income; however, the correlation may reflect

the race distribution by paygrade in the military because there are fewer minority members in the officer corps, where pay is higher. Number of children is not significantly related to income. There is not a significant relationship between level of debt and income.

Level of savings is also significantly positively associated with having financially beneficial saving habits, age, education, and being White. There is a significant negative relationship between level of savings and level of debt, indicating that those with more savings tend to have lower levels of debt. Similarly, saving habits are also positively correlated with age, dual income households, and higher levels of education. There is a negative relationships between level of savings and saving habits and number of children, such that those with fewer children tend to have higher levels of savings and better saving habits.

There are small, but significant, positive relationships between level of debt and age of respondent, number of children, and dual income households. These relationships indicate that those who are older, who have more children, and who are in dual income households tend to have higher levels of debt. Number of children is negatively related to dual employment households, being White, and level of education. The correlations also indicate that respondents from dual income households tend to be Whites and to have higher levels of education. In addition, being White is also positively correlated with level of education.

Correlations for the Civilian Sample

The correlations for the civilian sample are largely similar to those found for the military sample. There are significant positive relationships between all the variables in Table 16 and level of income. Similar to the patterns found in the military sample, in the

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civilian sample there is a significant positive relationship between income and savings

and saving habits indicating that as income increases, level of savings and saving habits

are more positive. In the civilian sample, unlike in the military sample, there is a slight

positive relationship present between level of debt and income, which indicates that as

income increases, so does level of debt. The positive relationships between income and

age, dual employment, and education are in the expected direction.

Table 16.
Correlation Table for the Civilian Sample

	Income	Saving	Saving Habits	Debt	Age	Number of Kids	Employ	Race/ Ethnic
Income	1							
Saving	.706**	1						
Saving Habits	.391**	.376**	1					
Debt	.066**	-.051*	-.175**	1				
Age	.426**	.391**	.104**	-.040‡	1			
# of Kids	.174**	.134**	.005	.014	.261**	1		
Dual Income	.055‡	-.035‡	-.042‡	.090**	.029‡	-.132**	1	
Race/Ethnic	.246**	.211**	.091**	.119**	.125**	.000	.018	1
Education	.415**	.412**	.180**	.113**	.127**	-.005	.068**	.175**

Note: Unweighted sample size for the civilian data presented in this table 3706.
‡ Correlation is significant at the 0.05 level (2 tailed)
* Correlation is significant at the 0.01 level (2 tailed)
** Correlation is significant at the 0.001 level (2 tailed)
High values:
  White
  Dual income households
  Higher Saving Habits scores indicate spending less than income.
  Higher education scores indicate more education.

There is a positive relationship between income and number of children, which is

consistent with the idea that couples wait until they reach a "reserve wage" before

expanding their family size, but it is not consistent with the research that has found that

the number of children relative to the number of earners is key to financial well-being

(Casper, McLanahan, and Garfinkel 1994). As in the military sample, race/ethnicity is

positively correlated with income, showing that respondents who are White tend to have

higher levels of income than those who are minority members, although there is a greater

magnitude of the correlation in the civilian sample that may indicate that there is a greater penalty associated with race/ethnicity for civilian families than military families.

As with the military sample, level of savings and saving habits are positively associated with each other, age, and education, and they are negatively correlated with level of debt. Level of savings is positively correlated with number of children but this relationship is not significant for saving habits. As with income, the positive correlation between not being a minority member and savings and saving habits is of a greater magnitude than was found in the military sample. There is a small, but significant, negative correlation between having dual incomes and both level of savings and saving habits.

With the exception of number of children, level of debt is significantly related to all the independent variables in the model and to the other dependent variables. Unlike the correlations for the military sample, level of debt is negatively related to age of the respondent, which indicates that older respondents had lower levels of debt than younger respondents. However, in both samples, the correlation between age and level of debt is very small. Level of debt is positively associated with dual employment, race/ethnicity, and education. This finding indicates that those with higher levels of debt tend to have dual incomes, to be White, and to have more education. The directions of these relationships are contrary to what was expected. Debt does not appear to operate at the bivariate level in the manner anticipated, although this may change when simultaneous controls are used.

Correlations for the Combined Military and Civilian Sample

For a better understanding of the correlations between the financial distress variables and the demographic characteristics in the military and civilian sample, the two

samples are combined. A variable distinguishing whether the respondent is from a military or civilian household is included in the analysis. Being from the civilian sample is associated with each of the dependent variables and independent variables, with the exception of number of children, race/ethnicity and education (Table 17). There is a slight, but significant, positive relationship between being civilian and having more income, savings, and debt. With the exception of debt, these relationships indicate that members of the military have poorer financial well-being than their civilian peers. There is a negative relationship between being civilian and saving habits, which indicates that military spouses tend to have more positive financial planning habits.

Age is one of the variables on which the samples are matched and, although the samples are constructed to be quite similar, there is a slight, but significant ($p < .05$), positive correlation between being a member of the civilian sample and age. Race/ethnicity and education, the other matching variables, are not significantly correlated to being a member of the civilian sample. Although the relationship is slight, being civilian is positively correlated with having dual income, as would be expected based on previous research (Scarville and Bell 1993).

Table 17.
Correlation Table for the Combined Military and Civilian Samples

	Civilian^	Income	Saving	Saving Habits	Debt	Age	# of Kids	Employ	Race/Ethnic
Civilian ^	1								
Income	.150**	1							
Saving	.200**	.577**	1						
Saving Habits	-.291**	.246**	.269**	1					
Debt	.088**	.048**	-.140**	-.205**	1				
Age	.041‡	.370**	.334**	.103**	.001	1			
# of Kids	.002	.090**	.038‡	-.046**	.047**	.245**	1		
Dual Income	.032*	.133**	-.009**	-.009	.089**	.058**	-.114**	1	
Race/Ethnic	.014	.185**	.181**	.056**	.060**	.106**	-.001	.033*	1
Educ	.001	.033**	.380**	.160**	.044**	.121**	-.051**	.080**	.174**

Note: Unweighted sample size for the combined military and civilian data presented in this table is 8072.
^ The variable Civilian indicates whether the respondent is from the civilian sample.
‡ Correlation is significant at the 0.05 level (2 tailed)
* Correlation is significant at the 0.01 level (2 tailed)
** Correlation is significant at the 0.001 level (2 tailed)
High values:
   White
   Dual income households
   Civilian sample member
   Higher Saving Habits scores indicate spending less than income.
   Higher education scores indicate more education.

There are significant positive relationships between level of income and all of the independent variables and dependent variables. This finding indicates that in the combined sample, those who have higher levels of income tend to have more savings, to have more debt, to be older, to have more children, to be part of a dual income household, to be Whites, and to have more education. Those who have more beneficial saving habits are also those who have higher levels of income. In the combined sample, level of savings is negatively associated with saving habits, debt, and dual income, which indicate that those with more savings tend to have worse saving habits, to have less debt, and to be from a single income household. There are positive correlations between savings and age, number of children, race/ethnicity, and education.

The relationships for saving habits are not altogether similar to the correlations for level of savings. The direction and significance of the relationships between saving habits and debt, race/ethnicity, and education are the same as the relationships between these variables and level of savings. However, number of children is negatively correlated with saving habits, whereas it had been positively correlated to savings. In addition, age and dual income status are not significantly related to saving habits, although they are significantly correlated with level of savings.

The relationships between debt and the other variables are all significant, with the exception of age of the respondent. Being a member of the civilian sample is positively correlated with debt, but the magnitude of this correlation is slight. Debt is positively associated with number of children, indicating that having more children is associated with more debt. Dual income, being White, and education are also positively associated with debt.

Regression Analyses

To understand the relationships between the factors influencing financial distress in military and civilian households, ordinary least squares (OLS) regression models are estimated for the four primary financial well-being indicators—income, debt, savings, and saving habits. In regression models, income is included as an independent variable in the models where it is not the dependent variable. For the model for saving habits regression model, the categorical version of income (in which the values range from 1-11) is included to facilitate interpretation of results. For the remaining model, the income variable in the model is recoded to the midpoint of the income ranges originally presented to respondents.

Income Regression Models

Military Sample

The regression analysis regarding income shows that 17% of the variance of income for the military sample is accounted for by the model ($r^2 = .17$) (Table 18). All of the variables in the model are significant, although number of children is not as powerful as the other variables ($p < .05$ level as compared to $p < .001$ level). Respondents who are older have slightly higher incomes, as do those with more education. Those who are part of a dual income household are more likely to have higher levels of total household income—with dual income households having, on average, incomes nearly a thousand dollars more than single income households.

Whites have slightly but significantly higher incomes than minority members, which may reflect that there is higher representation of minorities in the enlisted paygrades in the military, who have lower pay than officers. Although paygrade may be a powerful explanatory variable in the military model, it is not included because there is

no parallel variable in the civilian model. Although the race/ethnic difference in income

is significant, the regression coefficient is small and it is the least powerful variable in the

model (standardized coefficient of 0.06). The more children respondents have in their

household, the lower their income.

Table 18.
OLS Regression Income Models

	Military		Civilian		Combined	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Civilian [†]	--------	--------	--------	--------	0.13***	745.30 (56.74)
Age	0.28***	117.59 (6.23)	0.34***	175.86 (7.30)	0.31***	145.10 (4.85)
# of Kids	-0.03*	-61.30 (31.32)	0.09***	238.84 (36.32)	0.04***	93.91 (24.25)
Dual Income	0.17***	899.44 (75.30)	0.03*	186.33 (88.28)	0.09***	548.53 (58.66)
Race/Ethnic	0.06***	403.01 (91.37)	0.14***	1108.99 (107.56)	0.10***	742.98 (71.32)
Education	0.18***	532.87 (42.81)	0.35***	1236.00 (48.90)	0.27***	87.94 (32.92)
Income	--------	--------	--------	--------	--------	--------
Intercept	--------	-1263.08 (226.38)	--------	-4733.09 (266.80)	--------	-4018.74 (191.61)
	$r^2 = 0.17$		$r^2 = 0.34$		$r^2 = 0.26$	

Note: Unweighted sample size for the military data presented in this table is 4366, 3706 for the civilian data, and 8072 for the combined data. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.
*** – Significant at the $p < .0001$ level.
** – Significant at the $p < .001$ level
* – Significant at the $p < .05$ level.
† The variable Civilian indicates whether the respondent is from the civilian sample.

Civilian Sample

In comparison to the military sample regression models, the OLS regression

models for the civilian sample tend to be better predictors of the variance in the

dependent variables (Table 18). For the civilian sample, the income model explains 34%

of the variance ($r^2 = .34$). All of the variables in the income regression model are

significant, although dual employment status is not as powerful as the other variables (p <
.05 level as compared to p < .001 level).

The results indicate that civilian respondents who are older, who have more
children, who are part of a dual income household, who are White, and who have more
education have higher income. This finding is very similar to what is found in the
military regression model for income, with the exception of the number of children,
which is positively associated with income in the civilian model. It may be that civilians
who have more children acquire second jobs or work overtime (which is largely not
possible for active duty service members). Whereas Whites in the military have only
slightly higher incomes, the impact of race/ethnicity is larger for civilians with Whites
having more than $1,000 in income. In addition, based on the standardized coefficients,
race/ethnicity explains more of the variance in the civilian income model than in the
military income model (0.14 vs. 0.06). The impact of education and number of children
on level of income is stronger in the civilian sample, and having dual incomes results in
almost $200 greater income. Having dual incomes has less of an impact on income for
civilian households than it does for military households, which is consistent with findings
of other research that military wives contribute a larger percentage of household income
than civilian wives (Department of Defense 2006).

Combined Military and Civilian Sample

In the combined military and civilian dataset, the regression model explains 26%
of the variance in income (Table 18). All of the variables in the income model are
significant at the p < .001 level. Civilian families are more likely to have higher incomes
than military families by more than $700. In regard to the other variables in the model,
the results indicate that those respondents who are older, who have more children, who

are part of a dual income household, who are White, and who have more education are more likely to have higher levels of income. The direction of these relationships is largely consistent with the separate military and civilian models (although the model for the separate military sample had a negative relationship between income and number of children). There is a positive relationship between income and number of children.

When the income regression model was run for race/ethnic minorities only (not shown), the results indicated there was no significant difference between minority civilians and their military peers. Even when controlling for being military or civilian, race/ethnicity and dual employment are significant predictors of income.

Savings Regression Models

Military Sample

The savings regression model explains the most variance ($r^2 = .25$) for the military with all the variables significant at the $p < .001$ level (Table 19). As in the income model, respondents who are older, who are White, and who have more education are more likely to have higher levels of savings. For example, Whites, on average, have $5,000 more in savings than members of racial/ethnic minorities. Unlike the income model, the relationship in the savings model between dual employment households indicates that single income households are not worse off financially than dual income households. Respondents in dual income households tend to have less in savings than those in single income households—with dual income households having about $6,500 less in savings. Number of children negatively affects financial well-being as respondents with more children have less savings. For every child in a military family, the household tends to have a decrease in their savings of more than $2,000. Income is

included in the savings model as an independent variable, which proves to be significant

(p < .001 level).

Table 19.
OLS Regression Savings Models

	Military		Civilian		Combined	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Civilian [†]	--------	--------	--------	--------	0.12***	9257.48 (656.71)
Age	0.19***	962.17 (77.57)	0.13***	836.87 (85.41)	0.15***	912.10 (58.61)
# of Kids	-0.10***	-2613.71 (376.23)	-0.01	-384.45 (397.20)	-0.04***	-1207.18 (278.46)
Dual Income	-0.10***	-6572.09 (919.32)	-0.08***	-6926.15 (960.43)	-0.10***	-7867.82 (676.51)
Race/Ethnic	0.06***	5119.34 (1102.12)	0.03*	2556.61 (1186.31)	0.05***	4470.38 (824.92)
Education	0.26***	9418.87 (523.99)	0.15***	7039.59 (576.12)	0.21***	8843.30 (394.83)
Income	0.25***	3.20 (0.19)	0.59***	7.62 (0.18)	0.44***	5.66 (0.13)
Intercept	--------	-42958.00 (2702.68)	--------	-48454.00 (3022.71)	--------	-62013 (2248.74)
	$r^2 = 0.25$		$r^2 = 0.53$		$r^2 = 0.42$	

Note: Unweighted sample size for the military data presented in this table is 4366, 3706 for the civilian data, and 8072 for the combined data. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.
*** – Significant at the p < .0001 level.
** – Significant at the p < .001 level
* – Significant at the p < .05 level.
† The variable Civilian indicates whether the respondent is from the civilian sample.

Civilian Sample

As with the military regression models, the strongest model in the civilian

regression analyses is the savings model. Overall, the model is able to explain 53% of

the variance in the dependent variable (Table 19). Unlike the military model for savings,

number of children is not a significant predictor of level of savings. Otherwise, the

relationships in the civilian model for savings are the same as the relationships in the

military model for savings. Being White is positively related to having more savings—

respondents who are White had, on average, about $2,500 dollars more in savings than

members of racial/ethnic minorities. The results suggest that respondents who have

higher income, who are older and who have more education are more likely to have

higher savings, whereas respondents who are in a dual income household tend to have

less savings.

Combined Military and Civilian Sample

The regression analysis for level of savings explains 42% of the variance (Table

19). All of the variables in the model are significant (p < .001 level). The "civilian"

sample indicator suggests that civilian families have higher savings. On average, the

civilian families have $9,000 more in savings than military families. As in the separate

military and civilian savings regression models, there are positive relationships between

savings and age, race/ethnicity, education, and income and there are negative

relationships with number of children and dual income. Hence, the results indicate that

those respondents who are older, who have fewer children, who are part of single income

households, who are White, and who have more education are more likely to have higher

savings. When the savings regression model was run for race/ethnic minorities only (not

shown), the results indicated that civilians have more savings than their military peers

(difference of $7,520).

Debt Regression Models

Military Sample

The models for income and savings are more successful in explaining the variance

in the dependent variable than the model regarding level of debt. Overall, the model only

explains 2% of the variance in debt (Table 20). In the debt model, only two variables are

significant (p < .001 level). The number of children in the household is a significant

predictor of debt: having more children is associated with having more debt. For every

child in a military household, the household tends to have an increase in level of personal

debt of $500. In addition, being from a dual income household is positively associated

with having more debt—with these households having about $1,500 more debt.

Table 20.
OLS Regression Debt Models

	Military		Civilian		Combined	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Civilian [†]	--------	--------	--------	--------	0.08***	2154.31 (176.64)
Age	0.02	24.66 (19.92)	-0.1***	-129.42 (24.91)	-0.04*	-49.17 (15.79)
# of Kids	0.09***	500.65 (96.40)	0.04*	300.62 (115.85)	0.07***	429.90 (74.95)
Dual Income	0.10***	1438.79 (235.53)	0.09***	1475.86 (280.12)	0.09***	1411.48 (182.10)
Race/Ethnic	0.00	-38.28 (281.98)	0.11***	2203.99 (346.00)	0.05***	1008.58 (221.84)
Education	-0.02	-171.27 (134.25)	0.08***	788.74 (168.03)	0.03*	293.48 (106.23)
Income	-0.02	-0.06 (0.05)	0.03	0.09 (0.05)	0.01	0.03 (0.03)
Intercept	--------	5260.65 (693.42)	--------	7664.10 (881.60)	--------	4436.56 (6060.09)
	$r^2 = 0.02$		$r^2 = 0.03$		$r^2 = 0.02$	

Note: Unweighted sample size for the military data presented in this table is 4366, 3706 for the civilian data, and 8072 for the combined data. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.
*** – Significant at the $p < .0001$ level.
** – Significant at the $p < .001$ level
* – Significant at the $p < .05$ level.
† The variable Civilian indicates whether the respondent is from the civilian sample.

Civilian Sample

As was found in the military regression analyses for level of debt, the regression

model is not a powerful predictor of debt in the civilian sample, with only 3% of the

variance being explained by the model (Table 20). However, unlike the military debt

model, all of the variables in the model are significant predictors of debt, with the

exception of income. Age is negatively associated with debt ($p < .001$ level), indicating

that those who are younger have more debt, but the decrease in debt is only by slightly

more than $100. The remaining variables are positively related to debt. Those with more children are more likely to have higher levels of debt—by $300. In addition, dual income families and respondents with more education are more likely to have higher debt. Whites have, on average, $2,000 more debt than members of racial/ethnic minorities. These results indicate that race/ethnicity have a greater impact on debt for civilian families than military families.

Combined Military and Civilian Sample

As with the analyses of debt in the separate military and civilian samples, the regression model for debt is not very successful in predicting debt, as only 2% of the variance is explained by the model (Table 20). With the exception of income, all of the variables in the model are significant predictors of debt, as is found in the civilian only model. Being a member of the civilian sample is a significant predictor of debt, with civilian families having, on average, $21,000 more in debt than military families. When the debt regression model was run for race/ethnic minorities only (not shown), the results indicated that civilians have less debt than their military peers (difference of $801). The results suggest that respondents who are younger, who have more children, who are part of dual income households, who are White, and who have more education are more likely to have higher debt.

Saving Habits Regression Models

Military Sample

Like the regression model for level of debt, the regression analysis regarding saving habits is not very effective in explaining the variance in the dependent variable. Overall the model only explains 7% of the variance saving habits (Table 21). However, unlike the debt regression model, several of the independent variables are significantly

Table 21.
OLS Regression Saving Habits Models

	Military		Civilian		Combined	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Civilian †	--------	--------	--------	--------	-0.33***	-0.43 (0.01)**
Age	0.14***	0.01 (0.0)	-0.05*	-0.01 (0.00)	0.04*	0.00 (0.00)*
# of Kids	-0.13***	-0.06 (0.01)	-0.07***	-0.04 (0.01)	-0.08***	-0.04 (0.00)**
Dual Income	-0.00	-0.00 (0.02)	-0.07***	-0.11 (0.01)	-0.05***	-0.07 (0.01)**
Race/Ethnic	-0.02	-0.02 (0.02)	-0.00	-0.00 (0.02)	-0.00	-0.00 (0.01)
Education	0.11***	0.06 (0.01)	0.01	0.01 (0.01)	0.07***	0.05 (0.01)**
Income	0.10***	0.02 (0.0)	0.42***	0.09 (0.00)	0.28***	0.06 (0.00)**
Intercept	--------	2.21 (0.05)	--------	2.10 (0.07)	--------	2.73 (0.05)**
	$r^2 = 0.07$		$r^2 = 0.16$		$r^2 = 0.17$	

Note: Unweighted sample size for the military data presented in this table is 4366, 3706 for the civilian data, and 8072 for the combined data. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.
*** – Significant at the $p < .0001$ level.
** – Significant at the $p < .001$ level
* – Significant at the $p < .05$ level.
† The variable Civilian indicates whether the respondent is from the civilian sample.

related to saving habits ($p < .001$ level). There is a positive relationship between having

more financially beneficial saving habits and age, education, and income. However,

there is a negative relationship between saving habits and number of children. Dual

employment status and race/ethnicity are not significantly related to saving habits.

Civilian Sample

Although the regression model for saving habits is stronger in the civilian sample

than for the military sample, the model still only successfully explains 16% of the

variance in the dependent variable (Table 21). Only three variables in the model are

significantly related to the dependent variable ($p < .001$ level). It appears that more

financially beneficial saving habits are related to age, having fewer children, and having higher income.

Combined Military and Civilian Sample

The regression model successfully explains 17% of the variance in saving habits (Table 21). All of the variables in the savings model are significant, with the exception of race/ethnicity. The results show that civilian families are less likely to have financially beneficial saving habits. Those who are older, who are in single income households, who have more education, and higher income are more likely to have better saving habits. Respondents who have more children have more beneficial saving habits. When the income regression model was run for race/ethnic minorities only (not shown), the results indicated that civilians have less beneficial saving habits than their military peers.

CHAPTER V. RESULTS OF MILITARY-ONLY ANALYSIS

Description of Demographic Characteristics of Military Households

The previous chapters described the demographic and financial characteristics of military and civilian households based on samples matched on age, race/ethnicity, and education. Comparisons of financial well-being characteristics from datasets designed to mirror one another on key demographic characteristics facilitate the identification of differences between military and civilian families; however, they do not represent the "true" characteristics of either sample. This chapter provides descriptive statistics for the dependent and independent measures in the full military sample, with weights applied to reflect more accurately the characteristics of the military spouse population to the extent possible using a stratified random sample. Military families are not homogenous; the differences in the characteristics of households and of non-military spouses may significantly influence their experiences with military life and their financial well-being.

Characteristics of the Matched Military Sample and the Weighted Full Military Sample

The full military dataset represents a stratified random sample of spouses of active-duty personnel; in this chapter, the data have been weighted to represent the population. The most striking difference between the matched sample and the full military sample is the age distribution. The matched sample was artificially constrained to be older than the normal age distribution in the military because the matched sample reflected the age distribution of the civilian sample. The demographic characteristics of the weighted full military sample are different from those from the unweighted matched sample in important ways (Table 22). In the full weighted sample, more military spouses have at least some college than the matched sample shows; however, they are less likely to have completed college. The full military sample also includes more race/ethnic

minorities than the matched sample. These basic demographic differences between the

matched military sample and the full military sample also affect other variables in the

analysis because many of the variables, such as income and spouse employment status,

are closely tied to age (particularly in a military population).

Table 22.
Demographics for the Final Military Sample Allocation and the Weighted Full Military Sample

	Military Matched Sample		Weighted Full Military Sample	
Age Categories	*Frequency*	*Unweighted %*	*Frequency*	*Weighted %*
18-25	341	7.8	3,421	20.3
26-30	707	16.2	3,203	23.5
31-35	1,019	23.3	3,195	23.4
36-40	1,312	30.1	2,554	18.4
41-44	987	22.6	1,108	7.6
45 and older	-------	-------	1,063	6.9
Total	*4,366*	*100*	*14,544*	*100*
Education Level	*Frequency*	*%*	*Frequency*	*%*
HS diploma/GED or less	1,439	33.0	3,388	23.7
Some college	910	20.8	5,278	39.1
College degree/higher	2,017	46.2	5,443	37.3
Total	*4,366*	*100*	*14,109*	*100*
Racial Categories	*Frequency*	*%*	*Frequency*	*%*
Minority	927	21.2	4,640	34.6
(Non-Hispanic) White	3,439	78.8	10,012	65.4
Total	*4366*	*100*	*14,652*	*100*

Demographic Characteristics of the Full Military Sample by Age Groups

On average, military spouses in the full sample are 32.4 years old (Table 23). The

majority of families (76%) have children in their household; this finding is true of all age

groups, with the largest percent among spouses who are 36-40 years old, and the smallest

percent among the youngest and oldest members of the sample. For the youngest

members, this may be because they have not yet started having children, but for the

oldest members of the sample, this finding is likely a reflection that their children are

grown and no longer living in their households. Similarly, the spouses who are 18-25,

26-30, and 45 or older have the fewest children, although again this likely reflects "empty

nests" among the oldest age group.

Table 23.
Demographic Characteristics of the Full Military Sample by Age Groups (Means and Percentages)

	Total	18-25	26-30	31-35	36-40	41-44	45 or older
Percent with Children	75.9	60.8	73.4	84.2	88.3	81.9	61.8
Average Number of Children	1.5	1.0	1.4	1.8	2.0	1.8	1.1
Average Age	32.4	22.7	28.1	33.0	37.8	42.4	48.8
Percent Women	91.1	93.4	92.0	92.3	90.5	88.9	81.6
Percent of Dual Income Families	59.0	55.1	58.1	57.5	63.6	63.2	63.2
Percent Underemployed	55.2	63.9	56.7	53.1	52.7	50.6	48.6
Voluntarily Not Employed	33.7	34.4	35.7	36.0	30.2	30.0	30.0
Percent Minority Members	34.6	32.3	33.4	36.5	37.0	34.1	28.8

Note: Unweighted sample size for the military data presented in this table is 14,652.

The vast majority of spouses (91%) are women; however, this is most common

among the youngest age group and least common for the oldest age group. About 60% of

spouses are employed, with spouses in the youngest age group the least likely to be

working. Spouses in all age groups 36 and older are more likely to be working.

Although spouses ages 18 to 25 are the least likely to be working, they are also the most

likely to identify themselves as being underemployed (i.e., having employment that is

inadequate with respect to their training or skills). Slightly more than half of all military

spouses in the sample believe that they are underemployed in their current job. About a

third of military spouses indicate that they are voluntarily not employed. Spouses in the

three youngest age groups are the most likely to be voluntarily out of the workforce. This

may be a reflection of their stage in the life course, because at their ages, they may be

more likely to be pursuing a post-secondary degree or to be out of the labor force while

their children are young (Schwartz, Wood, and Griffith 1990). About a third of spouses

are from race/ethnic minorities, but this is least common among spouses in the oldest age group (28.8% vs. 32.3-37.0%), which may be due to the greater representation of officers' spouses among older respondents where minorities are less represented.

The majority of military spouses have more than a high school diploma, regardless of their age (Table 24). In comparison to spouses in the other age groups, the youngest military spouses are more likely to have attained a high school diploma but no additional education. Spouses ages 41 or older are the most likely to have a college degree or higher.

Table 24.
Educational Characteristics of the Full Military Sample by Age Group (Percentages)

	High School Diploma/GED	Some College	College Degree
Total	23.7	39.1	37.3
18-25	35.2	47.6	17.2
26-30	18.9	41.5	39.5
31-35	21.6	37.6	40.8
36-40	21.1	35.0	43.9
41-44	21.5	30.1	48.4
45 or older	20.6	30.9	48.4

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

Demographic Characteristics of the Full Military Sample by Paygrade and Organizational Seniority

Previous research on the military has found that there are significant differences between spouses of enlisted personnel and officers (Segal 1986). For example, spouses of enlisted personnel are younger than spouses of officers (Table 25). Although spouses of enlisted personnel are slightly more likely to have children than spouses of officers, they have the about the same number of children. Spouses of enlisted personnel have their first child on average four years younger than spouses of officers. This is not

unexpected as most spouses of officers are college educated, which is related to higher

ages at birth of first child. The vast majority of spouses in the sample are women,

regardless of the paygrade group of the active-duty member.

Table 25.
Demographic Characteristics of the Full Military Sample by Paygrade Groups and Organizational Seniority (Means and Percentages)

	Paygrade Group				Organizational Seniority			
	Enlisted	Junior Enlisted	Senior Enlisted	Officers	Junior Officers	Senior Officers	Junior	Senior
Mean Age	31.5	23.2	32.1	36.0	31.0	40.1	28.3	33.1
Percent with Children	76.7	55.0	78.1	72.4	61.7	81.4	59.4	78.5
Mean # of Children	1.5	0.8	1.6	1.6	1.2	1.8	1.1	1.6
Percent Women	91.4	88.6	91.5	90.2	87.9	92.1	88.1	91.6
Percent of Dual Income Families	60.8	55.3	61.2	51.6	53.3	50.1	54.0	59.8
Percent Underemployed	57.2	67.8	56.7	46.4	48.8	44.3	55.0	55.3
Voluntarily Not Employed	31.3	30.6	31.3	43.5	41.2	45.4	37.6	33.1
Percent Minority Members	38.7	37.2	38.8	18.2	19.5	17.2	25.5	36.1

Note: Unweighted sample size for the military data presented in this table is 14,652.

The characteristics of military families are expected to differ based on

organizational seniority of the active-duty spouse (i.e., junior enlisted and junior officers

vs. senior enlisted and senior officers), reflecting both their maturity and position in their

life course. For example, spouses of junior personnel are younger (by about 5 years) than

spouses of senior personnel. This is primarily because spouses of junior enlisted are

much younger on average than spouses of members in the other paygrade groups.

Spouses of senior members (both officers and enlisted) are more likely to have children,

and both groups tend to have more children as well. This may reflect their position in

their life course, as spouses of senior members are older and their active-duty spouse

have higher military income (within officers and within enlisted paygrade groups).

Although the majority of spouses in the sample are women, more spouses of junior personnel (both officers and enlisted) are men.

Military spouses have their employment disrupted by geographic relocations, which has been known to lead to their unemployment, underemployment, and voluntary exit from the workforce (Booth 2000; Payne, Warner, and Little 1992; Segal 1986). Spouses of enlisted personnel and spouses of senior personnel are more likely to be working than spouses of officers or junior personnel, respectively; reflecting the higher percentage of spouses of senior enlisted members who are employed. Although there is no difference in the underemployment rate of spouses based on the organizational seniority of the active-duty spouse, spouses of enlisted personnel (both junior and senior) are more likely to think they are underemployed than spouses of officers. Cooney (2003) also found that enlisted spouses were more dissatisfied with employment opportunities than spouse of more senior officers. However, officers' spouses (both junior and senior) are more likely than spouses of enlisted members to be voluntarily out of the workforce (12% higher). This may reflect Cooney's (2003) finding that enlisted spouses have more trouble finding work. These are interesting findings as previous research has found that spouses of officers pay a higher penalty for their linked lives to the military than enlisted spouses (Wardynski et al. 1996). They tend to be better educated than enlisted spouses and, as a result, their occupations may be more difficult to pursue as their family relocates. Cooney (2003) found that officers' spouses who had at least a graduate degree experienced the highest interference in their employment as result of PCS moves, whereas this level of education did not have a significant impact on enlisted spouses.

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More enlisted spouses than officers' spouses are race/ethnic minority members (38.7% vs. 18.2%), and this pattern remains in the more detailed paygrade/organizational grouping. This finding is consistent with the race/ethnic distribution of active-duty members; 36% of enlisted men, 51% of enlisted women, and 17% of officers (both sexes) are race/ethnic minority members (Segal and Segal 2004). Spouses of senior members of the military are more likely to be minority members than the spouses of junior members; this may be due to higher retention of minority members into the senior enlisted ranks.

There are marked differences in education by paygrade but more parity by organizational seniority (Table 26). This pattern remains in the more detailed paygrade/organizational grouping. Spouses of officers (both junior and senior) tend to be much better educated than the spouses of enlisted personnel. For example, three-fourths of officers' spouses have a college degree or higher, whereas only about a third of enlisted members' spouses have achieved this level of education. In contrast, officers' spouses, like their active duty marital partners, are more likely to have married when they were older, particularly after they graduated from college. This finding is consistent with research on civilian society that has found that people tend to marry others with similar characteristics, such as age and education (Fields and Casper 2001). Among enlisted spouses, having some college credits but not having attained a degree is the most common status. Spouses of both junior and senior officers have higher educational attainment than spouses of junior and senior enlisted personnel. This may reflect that being an enlisted member of the military is like being the "blue collar" workers, whereas officers are "white collar" professionals. Spouses of junior personnel are somewhat better educated than spouses of senior personnel. Over half of spouses of junior

personnel have achieved a college degree but only a third of senior spouses have done so. This reflects the larger proportion of senior enlisted members in the senior category.

Table 26.
Educational Characteristics of the Full Military Sample by Paygrade Group (Percentages)

	High School Diploma or GED	Some College	College Degree
Total	23.7	39.1	37.3
Paygrade Group			
Enlisted	28.2%	44.1%	27.7%
Junior Enlisted	39.8	48.9	11.3
Senior Enlisted	27.5	43.8	28.7
Officers	5.7%	19.0%	75.3%
Junior Officers	5.2	20.5	74.4
Senior Officers	6.2	17.8	76.0
Organizational Seniority			
Junior	16.6%	29.8%	53.6%
Senior	24.8%	40.5%	34.7%

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

Relocation and Separation by Age Groups, Paygrade and Organizational Seniority

Military families experience two major types of disruptions in their lives as a result of being part of the military: relocations and separations. Nearly all members of the military move their families on a regular basis as they are assigned a "permanent change of station" (PCS). These PCS moves often have a negative impact on the financial well-being of military families (Booth 2000; Payne, Warner, and Little 1992; Scarville and Bell 1993; Segal 1986). Cooney (2003) notes that for civilian families the annual earnings of employed women decreased by about $700 immediately after moving, although the negative impact decreases within 2 years. As military families tend to move every 2 to 3 years, civilian spouses of military personnel only have minimal time to recover from a PCS move before the next move occurs. However, the frequency and

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regularity of military relocations may enable spouses to develop expectations regarding moves. For example, spouses know that their pursuit of education/training and employment will be disrupted on a reoccurring basis, and they may gear their occupational and educational choices accordingly. As spouses experience more moves, they may also become aware of the hidden and overt costs of moving, which may enable them to mitigate these costs.

In contrast to the experience of PCS moves, separations for military families are often unexpected and for varying durations. The frequency and duration of these separations could inhibit a spouse's ability to maintain a commitment to work, particularly if there are family responsibilities that are also vying for their time. Longer separations are likely to have a more negative impact on financial well-being because they may result in changes in a spouse's ability to work, increased long distance phone bills, greater child care costs, and other such expenditures. This section summarizes the relocation and separation experiences of military spouses by age and their active-duty spouse's paygrade and organizational level.

On a scale that measures the extent to which respondents experienced varying costs as a result their most recent move and that ranges from 0 (no costs related to relocation) to 60 (maximum costs related to relocation), the average relocation cost score for military families is 25.8 (Table 27). There are no differences in the degree to which military families experience financial costs during PCS moves based on the age of the spouse. This may indicate that moving does not get less costly as spouses become more experienced at moving. The percent who have moved declines as age category increases. As expected, older spouses have experienced more moves during their marriage than

younger spouses, reflecting that older spouses are likely to have been married longer and, therefore, to have had more opportunities to undergo PCS moves. Spouses in the oldest age groups have had their active-duty spouse away from home more often in the previous 12 months than younger spouses. However, spouses 18-25 and 26-30 have had their active-duty spouse away from home for a slightly higher cumulative duration over the previous twelve months than older spouses.

Table 27.
Relocations and Separations of the Full Military Sample by Age Groups (Means and Percentages)

	Total	18-25	26-30	31-35	36-40	41-44	45 or older
Mean Relocation Cost Score	25.8	25.7	26.0	25.7	26.0	25.6	25.5
At Residence Less Than 6 Months	23.5	31.1	25.5	22.2	19.1	18.9	16.3
Mean Number of Moves	2.8	1.1	2.2	3.0	3.8	4.3	4.2
Mean Number of Times Away	4.9	4.4	4.8	4.9	5.0	5.4	5.5
Mean Number of Months Away	2.9	3.1	3.3	2.8	2.6	2.5	2.3

Note: Unweighted sample size for the military data presented in this table is 14,652.

The data indicate that there are some differences in the degree to which families of officers and enlisted personnel experience relocations and separations (Table 28). Spouses report having the about the same costs related to their PCS moves across paygrade/organizational grouping. However, officers' spouses tend to have moved more recently than enlisted members' spouses, even though junior enlisted members' spouses are least likely have lived at their current residence for 6 months or more. Senior officers' spouses have experienced more moves during their marriage than any other paygrade/organizational grouping and junior enlisted members' spouses have moved the least often. This is consistent with Cooney's (2003) finding that senior officers move more often than other members of the military (i.e., shorter periods between PCS moves). Although officers are away more often than enlisted members, there is no substantive

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difference in the number of months they have been away in the previous year. As

paygrade/organizational group increases from junior enlisted to senior officers, the

number of times the active duty member has been away from home increases. Junior

officers have been away from home for the highest cumulative time, although senior

enlisted are away almost as long.

Table 28.
**Greedy Institution Characteristics of the Full Military Sample by Paygrade Groups
and Organizational Seniority (Means and Percentages)**

	Paygrade Group						Organizational Seniority	
	Enlisted	Junior Enlisted	Senior Enlisted	Officers	Junior Officers	Senior Officers	Junior	Senior
Mean Relocation Cost Score	26.1	27.2	26.1	25.0	25.2	24.8	25.6	25.9
At Residence < 6 Mon.	22.8	36.0	22.0	26.6	28.5	25.0	31.0	22.3
Mean # of Moves	2.4	0.7	2.5	4.3	2.9	5.5	2.1	2.9
Mean # of Times Away	4.5	3.3	4.6	6.2	5.7	6.7	4.9	4.9
Mean # of Mon. Away	2.9	2.4	2.9	2.8	3.2	2.5	2.9	2.9

Note: Unweighted sample size for the military data presented in this table is 14,652.

Description of Financial Well-Being Characteristics

As with the military/civilian comparisons in this study, multiple financial status

measures are analyzed to attain a more complete picture of financial well-being in the

military. Comparisons between the income of military and civilian families may

overstate the differences between the two groups because the military provides "in-kind"

benefits and services to military personnel and their families, including housing,

subsidized child care, medical and dental care, and lower cost groceries and other goods.

However, analyses comparing the military personnel to their civilian peers provide a

baseline for understanding the military experience. In contrast, comparisons within the

military community enable us to understand better how, even within the military context,

there is great variation in the effect of military service on financial well-being. To this

end, this study compares different groups within the military on the same income, savings, debt, and saving habits addressed in previous chapters. In addition to these measures, this portion of the analysis also includes a measure of the respondents' perception of their families' financial well-being. This finding provides an interesting standpoint from which to compare financial well-being because, unlike absolute measures like income, this enables spouses to take into account what is normative within their community and their feelings about their situation. People make social comparisons with others in their community, which forms the basis of their own happiness with their financial status (Hagerty 2000). Although absolute measures of financial well-being provide insight into specific aspects of financial well-being, the perceptions of overall status may provide a more complete picture. These five measures of financial well-being are addressed in this section of the study.

Description of Financial Well-Being Characteristics By Age Group

In the military/civilian comparison portion of this study and in civilian research more broadly, age is a powerful explanatory measure, and as a result, all financial well-being measures are analyzed within the context of age. The financial well-being characteristics of the full weighted military sample (Table 29) differ from those for the matched military sample (Table 8) because there were a disproportional number of older respondents in the matched sample to better reflect the civilian age distribution. Total household income is positively related to spouse age, such that the older the spouse, the higher the mean total household income (Table 29). The mean level of savings overall for military families is about twice the mean level of debt. Spouses in the youngest age group have the lowest level of savings and the highest level of debt. Indeed, spouses age 18-25 represent the only age group for which the level of debt is higher than the level of

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savings. This finding is consistent with research that shows that families headed by

young adults tend to be in the worst financial position (Iceland 2000). Because it is

stable, well-paying work with full medical benefits, military service enables young

people to assume adult roles and responsibilities, including marriage, more quickly than

their civilian peers, while at the same time isolating them from the social and financial

support of their families, and the absence of these two positive forms of support can have

negative effects on the development of financially responsible behaviors (Buddin and Do

2002).

Table 29.
Financial Well-Being Measures for the Full Military Sample by Age Group

	Mean Monthly Income ($)	Median Monthly Income ($)	Mean Savings ($)	Mean Debt ($)	Households w/Savings (%)	Households w/Debt (%)
Total	$4,164	$3,500	$14,844	$7,007	82.4	83.8
18-25	$2,910	$2,500	$2,760	$5,632	69.5	87.3
26-30	$3,704	$3,500	$8,875	$7,458	79.0	87.6
31-35	$4,294	$3,500	$15,349	$7,404	86.9	84.3
36-40	$4,815	$4,500	$21,869	$7,435	89.1	81.5
41-44	$5,467	$4,500	$29,348	$7,429	90.5	76.4
45 or older	$6,004	$5,500	$38,212	$6,611	93.0	72.1

Note: Unweighted sample size for the military data presented in this table is 14,652.

Overall, the percentage of military families with at least some savings (82%) is

about the same as the percentage with at least some debt (84%). There is a trend for the

percentage of households with at least some savings to increase as the age of the spouse

increases, such that spouses 18-25 are the least likely to have savings and spouses ages 45

or older are the most likely to have savings. There is a similar, although less prominent,

reverse pattern in regard to having at least some personnel debt.

Almost 40% of spouses indicate that their families save money by regularly

putting some aside each month (Table 30). This is least common among spouses in the

youngest age group (22%) and most common for spouse's ages 41 or older (55%). Between 5 and 6% of spouses under 30 years old indicate that their families are spending more than their income each month, and more than a quarter say their families spend their entire income each month. Very few families save one income while saving the other income, this likely reflects the fact that 40% of military families are single income households and also that families may pool their income without distinguishing the source of the income.

Table 30.
Saving Habits of the Full Military Sample by Age Group (Percentages)

	Don't save - spend more than income	Don't save - spend about as much as income	Save what is left over at the end of the month	Save one income, spend the other	Spend regular income, save other income	Put money aside each month
Total	4.2	22.4	29.6	3.0	1.7	39.1
18-25	6.1	31.7	36.0	3.1	1.0	22.1
26-30	5.1	26.2	29.8	2.8	1.6	34.5
31-35	3.3	19.9	29.2	2.7	2.3	42.6
36-40	3.9	18.1	26.2	3.5	1.5	46.7
41-44	2.0	12.6	25.1	3.0	2.0	55.3
45 or older	1.7	12.8	25.2	2.8	2.5	55.0

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

About half of military spouses indicate that they are either very comfortable financially or are able to make ends meet (Table 31). The percentage who believes they are very comfortable/secure financially tends to increase as the age of the spouse increased. Although few spouses indicate that their families are in over their heads financially, nearly 5% of spouse's ages 18-25 say this is the case for their family. A third of spouses in this age group indicate that their families are occasionally having difficulty making ends meet, and a quarter say it is tough for them to make ends meet on a regular basis. As expected, older spouses have the most positive perspective on their financial

well-being, with about 70% indicating that they are fairly secure financially (e.g., very comfortable/secure or able to make ends meet without much difficulty). Spouses ages 41 and older are the least likely to indicate that their families are in over their heads financially, but 9% find it tough to make ends meet, although they are keeping their heads above water.

Table 31.
Perceived Financial Well-Being of the Full Military Sample by Age Group (Percentages)

	Very Comfortable & Secure	Able to Make Ends Meet Without Much Difficulty	Occasionally Have Some Difficulty Making Ends Meet	Tough to Make Ends Meet But Keeping Your Head Above Water	In Over Your Head
Total	12.7	38.7	28.4	17.1	3.1
18-25	6.7	30.5	33.9	24.2	4.7
26-30	10.1	37.6	30.9	17.8	3.5
31-35	11.8	41.9	28.0	15.7	2.5
36-40	17.5	39.9	25.2	14.8	2.7
41-44	19.1	41.7	24.1	13.4	1.7
45 or older	22.4	48.3	19.0	8.9	1.4

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

Description of Financial Well-Being Characteristics By Race/Ethic Status

The two largest race/ethnic minority groups within the military are African Americans and Hispanics (Segal and Segal 2004). Civilian research on poverty and the working poor has found that minority members are at most risk of poor financial well-being (Iceland 2000; Kasarda 1995). In particular, Kasarda (1995) found that Americans of Hispanic descent and African Americans have the highest rates of being the working poor and poverty-wage workers. However, the military strives to be an equal opportunity employer and differences in income by race/ethnic status should be less drastic in the military context. When mean and median household incomes are examined by

race/ethnic status, there is a slight, but significant, difference ($400 per month) between

spouses who are minority members and those who are not (Table 32). This may be a

reflection of the pay equity within the military, whereby all at the same rank receive the

same pay (with some exceptions for special pay). When income is examined for minority

and non-minority members by paygrade/organizational grouping (not shown), there are

no difference by race, although enlisted spouses (both junior and senior) are more likely

to be employed if they are White than minority members. Spouses who are White have a

higher level of savings than race/ethnic minority spouses, although minority and non-

minority households are equally likely to have at least some savings. Minority spouses

are more likely to have at least some debt, but there is no substantive difference the mean

debt levels by race/ethnic status.

Table 32.
Financial Well-Being Measures for the Full Military Sample by Minority Status

	Median Monthly Income ($)	**Mean Monthly Income ($)**	**Mean Savings ($)**	**Mean Debt ($)**	**Households w/Savings (%)**	**Households w/Debt (%)**
Minority	$3,500	$3,884	$10,178	$6,977	81.6%	87.7%
Non-Minority	$3,500	$4,311	$17,237	$7,022	82.8%	81.7%

Note: Unweighted sample size for the military data presented in this table is 14,652.

The saving habits of military families do not differ much by race/ethnic status

(Table 33). More than one-third of military families, regardless of race/ethnicity, indicate

that they regularly put money aside each month for savings and few indicate that they

spend more than their incomes. Spouses who are White are slightly more likely to

indicate that they spend in amounts equal to their household income, whereas spouses

who are minority members are slightly more likely to say that they just save whatever is

left over at the end of the month.

Table 33.
Saving Habits of the Full Military Sample by Minority Status (Percentage)

	Don't save - spend more than income	Don't save - spend about as much as income	Save what is left over at the end of the month	Save one income, spend the other	Spend regular income, save other income	Put money aside each month
Minority	4.2	20.7	32.1	3.3	2.1	37.7
Non-Minority	4.2	23.3	28.3	2.9	1.5	39.7

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

When asked to describe how they perceive their financial well-being, the majority of military spouses, regardless of race/ethnic status, indicate that they are very comfortable or are able to make ends meet without difficulty. When these two response categories are examined individually by race/ethnic status, White spouses are slightly more likely to say they are very comfortable financially; whereas spouses who are race/ethnic minority members are slightly more likely to say they are able to make ends meet without difficulty (Table 34). This may indicate that White families are slightly better off financially.

Table 34.
Perceived Financial Well-Being of the Full Military Sample by Minority Status (Percentages)

	Very Comfortable & Secure	Able to Make Ends Meet Without Much Difficulty	Occasionally Have Some Difficulty Making Ends Meet	Tough to Make Ends Meet But Keeping Your Head Above Water	In Over Your Head
Minority	10.7	41.5	28.0	16.8	3.0
Non-Minority	13.7	37.2	28.6	17.3	3.2

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

Description of Financial Well-Being Characteristics By Paygrade and Organizational
Seniority

On average, officers' spouses have about twice the total household income of

enlisted families (Table 35). As paygrade increases from junior enlisted to senior

officers, total household income increases. There is no substantive difference between

the total household income of junior and senior personnel. Spouses of senior officers are

least likely to indicate that they carry personal debt (24% lower) and spouses of officers

(both junior and senior) are more likely than spouses of enlisted members to have at least

some savings. Officers' families have about 6 times as much in savings as enlisted

families, and as paygrade increases from junior enlisted to senior officers, level of

savings increases. The difference between officers and enlisted in debt is minimal, with

enlisted families having about $800 more debt on average than the families of officers.

When debt is examined by paygrade/organizational group, junior enlisted and senior

officers have less debt than senior enlisted and junior officers. Junior personnel have

slightly more savings than senior personnel, although there is little difference in the

Table 35.
Financial Well-Being Measures for the Full Military Sample by Paygrade Groups
and Organizational Seniority

	Median Monthly Income ($)	Mean Monthly Income ($)	Mean Savings ($)	Mean Debt ($)	Households w/Savings (%)	Households w/Debt (%)
Paygrade Group						
Enlisted	$2,500	$3,697	$7,363	$7,162	78.8	88.4
Jr Enlisted	$1,500	$2,653	$2,517	$4,678	62.5	86.2
Sr Enlisted	$2,500	$3,763	$7,734	$7,319	79.8	88.6
Officers	$5,500	$6,060	$46,061	$6,374	97.5	64.9
Jr Officers	$4,500	$5,138	$28,708	$7,504	96.0	73.1
Sr Officers	$6,500	$6,850	$61,180	$5,420	98.8	58.0
Organizational Seniority						
Junior	$3,500	$4,290	$19,228	$6,528	84.3	77.6
Senior	$3,500	$4,144	$14,141	$7,083	82.1	84.8

Note: Unweighted sample size for the military data presented in this table is 14,652.

percentage of junior and senior households with at least some savings. In contrast, senior

personnel are more likely to have at least some personal debt (84.8% vs. 77.6%), but

there is little difference in the mean level of debt by organizational seniority.

Officers' spouses are twice as likely as enlisted members' spouses to be saving

money regularly by putting money away each month (Table 36). Enlisted members'

spouses (both junior and senior) are much more likely than officers' spouses to indicate

that their family either spends as much as their total household income each month or that

they save whatever is left over each month. Analyzing savings habit by organizational

seniority shows that junior members' spouses are more likely to say they save regularly

each month, whereas the saving habits of senior members' spouses are more similar to

enlisted members—saving either nothing or only what is left over each month. This is

not surprising because most of the senior members are enlisted. Junior enlisted members

have the least beneficial saving habits. They are the most likely to spend more than or as

much as their income, whereas senior officers have the most beneficial saving habits.

Table 36.
Saving Habits of the Full Military Sample by Paygrade Groups and Organizational Seniority (Percentages)

	Don't save - spend more than income	Don't save - spend about as much as income	Save what is left over at the end of the month	Save one income, spend the other	Spend regular income, save other income	Put money aside each month
Paygrade Group						
Enlisted	4.9	26.0	33.0	2.8	1.6	31.7
Jr Enlisted	6.7	34.5	39.1	2.2	1.0	16.5
Sr Enlisted	4.8	25.4	32.6	2.8	1.7	32.6
Officers	1.3	8.1	15.9	3.9	2.1	68.7
Jr Officers	2.0	10.5	18.8	4.9	1.9	61.9
Sr Officers	0.8	6.1	13.4	3.1	2.3	74.4
Organizational Seniority						
Junior	3.6	18.6	25.7	4.0	1.6	46.5
Senior	4.3	23.0	30.2	2.8	1.7	37.9

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

As expected, junior enlisted spouses are the least positive about their family's financial condition, whereas spouses of senior officers are the most positive about their family's financial condition (Table 37). Spouses of officers are nearly four times as likely as spouses of enlisted personnel to indicate that their financial status is very comfortable and secure. Fewer officers' spouses (both junior and senior) indicate that their families are in over their head financially. About half of enlisted spouses said that their families are occasionally having difficulty making ends meet or having a tough time making ends meet.

Table 37.
Perceived Financial Well-being of the Full Military Sample by Paygrade Groups and Organizational Seniority (Percentages)

	Very Comfortable & Secure	Able to Make Ends Meet Without Much Difficulty	Occasionally Have Some Difficulty Making Ends Meet	Tough to Make Ends Meet But Keeping Your Head Above Water	In Over Your Head
Paygrade Group					
Enlisted	8.0	36.6	31.6	20.1	3.7
Jr Enlisted	3.8	24.1	34.2	29.8	8.0
Sr Enlisted	8.3	37.4	31.4	19.5	3.4
Officers	31.6	47.0	15.7	5.0	0.7
Jr Officers	23.9	50.1	18.4	6.6	1.0
Sr Officers	38.0	44.3	13.5	3.6	0.6
Organizational Seniority					
Junior	17.1	41.3	23.8	14.5	3.4
Senior	12.0	38.3	29.2	17.5	3.1

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

Description of Financial Distress Characteristics By Employment Characteristics

The mean and median monthly income of dual income households is $1,000 higher than single income households (Table 38). The relationship between spouse employment status and financial well-being is not clear cut. Although dual income households are more likely to have at least some savings, their mean savings is only $500

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more than single income households. In contrast, dual income households are more

likely to have at least some debt and their mean debt level is roughly a $1,000 more than

single income households. Among dual income households, spouses who say they are

underemployed have lower financial well-being. Underemployed spouses have lower

mean and median monthly income (about $1,000 less per month). Underemployed

spouses are more likely to have at least some personal debt and are less likely to have

savings (more than $6,000 less on average).

Table 38.
**Financial Well-being Measures for the Full Military Sample by Spouse Employment
Status**

	Median Monthly Income ($)	Mean Monthly Income ($)	Mean Savings ($)	Mean Debt ($)	Households w/Savings (%)	Households w/Debt (%)
Employed	$3,500	$4,580	$15,053	$7,529	86.1	85.2
Underemployed	$3,500	$4,272	$12,758	$7,629	84.5	87.5
Not Underemployed	$4,500	$5,174	$19,246	$7,631	88.8	82.8
Not employed	$2,500	$3,561	$14,541	$6,249	77.0	81.7
Voluntarily Not Employed	$2,500	$3,667	$15,601	$6,127	78.6	80.6
Looking for Work	$2,500	$3,072	$9,637	$6,812	69.6	86.7

Note: Unweighted sample size for the military data presented in this table is 14,652.

Among spouses who are not employed, those voluntarily not employed have

higher financial well-being measures. Although there are no differences between the

median incomes of these two types of spouses, those voluntarily not working tend to have

slightly higher total household income. Voluntarily not employed spouses also have, on

average, $6,000 more in savings than spouses who are unemployed and looking for work.

Voluntarily not employed spouses are more likely to have at least some savings and are

less likely to have personal debt. However, the level of personal debt does not differ

much between those voluntarily and involuntarily unemployed.

The saving habits of dual income and single income households may reflect the differing level of financial resources available to families in each status (Table 39). For example, single income households are more likely to spend all of their income each month (25.8%) than dual income households (20.1%) and are somewhat more likely to spend more than their income each month.

Table 39.
Saving Habits of the Full Military Sample by Spouse Employment Status (Percentages)

	Don't save - spend more than income	Don't save - spend about as much as income	Save what is left over at the end of the month	Save one income, spend the other	Spend regular income, save other income	Put money aside each month
Employed	3.5	20.1	30.0	4.0	2.0	40.5
Underemployed	4.5	21.6	30.9	4.0	2.0	36.9
Not underemployed	2.7	18.1	28.3	4.4	1.7	44.8
Not Employed	5.2	25.8	29.0	1.6	1.3	37.0
Voluntarily Not Employed	4.8	24.7	28.4	1.6	1.3	39.3
Looking for Work	7.0	31.2	32.2	1.5	1.5	26.6

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

Households may differ in their financial well-being based on whether periods of being without employment are preplanned. For example, households in which the non-military spouse is voluntarily out of the workforce may have adjusted their spending habits to accommodate a lower, but stable, total household income; in contrast, households in which the non-military spouse is unemployed and looking for work may be at a greater disadvantage because they were not prepared for the change in income. Also, these spouses may be looking for work because of their financial problems. The savings habit data show that voluntarily not employed spouses are more likely to indicate their families are living within their means each month and to indicate that they are able to

regularly save money each month. Among dual income households, families in which non-military spouses believe they are underemployed are more likely to be spending either more than their income or as much as their income each month.

Respondents from dual income households are more likely to perceive their financial status as very comfortable (14.0% vs. 10.7%) or successfully making ends meet (41.2% vs. 35.0%) than respondents from single income households (Table 40). This is as would be expected because dual income households also tend to have higher total household income and more savings (Table 38). With more resources at their disposal, dual income households are more likely to be financially secure. Not all dual income households are equally secure financially. Dual income households in which non-military spouses believe they are underemployed are more likely to have negative perceptions of their family's financial well-being.

Table 40.
Perceived Financial Well-being of the Full Military Sample by Spouse Employment Status (Percentages)

	Very Comfortable & Secure	Able to Make Ends Meet Without Much Difficulty	Occasionally Have Some Difficulty Making Ends Meet	Tough to Make Ends Meet But Keeping Your Head Above Water	In Over Your Head
Employed	14.0	41.2	28.4	13.8	2.6
Underemployed	10.1	39.9	30.6	16.1	3.3
Not underemployed	18.4	44.7	24.9	10.3	1.8
Not Employed	10.7	35.0	28.4	21.9	3.9
Voluntarily Not Employed	12.0	36.4	28.1	20.4	3.1
Looking for Work	5.0	28.7	29.7	29.2	7.3

Note: For each row, the cells sum to 100%.
Unweighted sample size for the military data presented in this table is 14,652.

Spouses in households that rely on a single income by choice perceive their financial status as being more secure than spouses in households in which the non-

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military spouse is seeking employment. Spouses who are voluntarily out of the workforce are almost identical in their perceptions of their financial well-being to spouses in dual income households, although they are slightly more likely to indicate that it is tough to make ends meet (Table 40). Spouses who are involuntarily unemployed are the most likely to characterize their financial status as being in over their heads and are the least likely to indicate they are very comfortable financially.

Description of Financial Distress Characteristics By Relocation and Separation

Relocation and separation can cause financial problems by creating additional costs for families (Wolpert et al. 2000). For separations, these costs can include additional outlays for childcare and opportunity costs, such as lost income by the spouse or the second job of the active-duty member. Relocations typically include out-of-pocket moving expenses that are not reimbursed by the military and loss of spouse employment (Wolpert et al. 2000). These costs can be caused by a variety of reasons; for example, transitions out of and into new homes, food while traveling, and moving/kenneling pets. The costs of setting up a household can start a downward spiral, particularly for junior enlisted families, but even for spouses of officers, relocations are expensive—furniture never fits correctly in two different houses and kitchen staples have to be restocked with each move (Office of the Assistant Secretary of Defense [Personnel and Readiness] 1993). With the military career cycle, families have to re-establish households every 2 to 3 years throughout the military career—more frequent moves than if they were civilians (Segal 1986).

In this section, I provide a summary of the relationships between financial well-being and separation and relocation experiences. The tables supporting this analysis are not shown because this section is only a prelude to the regression analysis, as I expect

that the differences that are evident are likely due to paygrade differences. The regression analysis tests if the relationship between financial well-being and separation and relocation experiences remains, even after controlling paygrade and seniority.

There may be both direct and indirect links between the length of residence and financial well-being. PCS moves often negatively impact the employment of non-military spouses; for example, employment may be difficult to find at their new location and they lose seniority, which may be tied to their pay level. However, the majority of employed military spouses found their current job in less than 3 months, although this does not measure whether they were underemployed in their current job (Williams, Lipari, and Wetzel 2002). The monthly income of those military families who had been at their current location for more than 6 months is higher than the income of those who have moved recently (the median by $1,000 and the mean by $500) (data not shown). Similarly, those who have not moved recently have more money put aside in saving and are slightly more likely to have at least some savings.

Military families who have been at their current location for more than 6 months are more likely to save money on a regular basis each month than those who have moved within the previous 6 months. However, the analysis of relocation rates by paygrade/organization groups show that junior enlisted members have moved more recently than any other group, which may explain these differences. Contrary to expectations, there is no substantive difference in the amount of debt carried by military families based on the recentness of PSC moves. Also, although those who have been at their current location fore more than 6 months are more likely to think that they are very comfortable and secure financially, on the whole there are no substantive differences

between military families based on whether they have lived at their current location for more than 6 months. It may be that military families, regardless of paygrade or organizational seniority, have recovered from PCS moves within 6 months of arriving at their new location.

Measures of experience with the demands of relocation and separation include costs of relocation, number of PCS moves, frequency of separations, and length of separations. Analyses of these measures by the financial well-being characteristics (not shown) indicate that there are no substantive bivariate relationships between financial well-being and the demands of relocation and separation. Mean relocation cost score, which measures the degree to which families experienced financial costs as a result of their most recent PCS move, is not related to the total monthly household income for military families, but those with the least in savings, the highest levels of debt, and less beneficial saving habits have experienced higher relocation costs. In regards to military spouses' perception of their financial well-being, relocation costs increase as the perception of well-being decreases. For example, those who have had more costs during their most recent PCS move have more negative perceptions of their financial well-being.

Overall, the number of PCS moves a spouse has experienced is not substantively related to financial well-being, and when there is a relationship, it is not in the expected direction. For example, the number of PCS moves that spouses have experienced is related to the total household income, savings, saving habits and perceived well-being, such that those with fewer moves have lower incomes, less savings, less beneficial saving habits, and less positive perspectives on financial well-being. There is no relationship between number of PCS moves and debt. As previously stated, it is likely that this

relationship can be accounted for by differences in total household income between officers and enlisted members. Junior enlisted members tend to have lower levels of total household income and savings and to have experienced the least number of PCS moves (Tables 28 and 35). These relationships are re-examined in the regression analysis to assess whether they will remain when paygrade and seniority are controlled.

There are few substantive relationships between financial well-being and number of times away or cumulative duration of separations. Those with the highest levels of savings are those who have been away from home the most often during the previous 12 months, which is not supportive of Hypothesis 7c, which states military families who undergo more frequent separations/deployments have lower financial well-being than other military members. However, officers, who typically have higher levels of savings, are away more often than enlisted personnel (Tables 28 and 35). Consistent with Hypothesis 7c, those with less savings have been away from home for slightly longer in the previous 12 months, and those families who are able to save money each month are those in which the active-duty spouse had been away fewer months, in comparison to those who are spending more than their income. There is a slight trend for those who have experienced more separations to have higher incomes, but there is no consistent relationship between income and duration of separation. Separation is not related to level of debt. The number of times that the active-duty spouse has been away from home and the average number of months they have been away are not substantively related to perceived financial well-being.

Correlations

At the bivariate level, there are significant correlations between the financial well-being variables and the independent variables though many of the correlations are low

(Table 41). As with the correlations from the military/civilian comparisons, there is a significant positive relationship between income and savings, such that as income increases, savings increase. There is also a positive correlation between income and saving habits, such that those with higher income tend to have more fiscally beneficial saving habits. The only variable in the analysis that is not significantly correlated to level of income is number of children.

The correlations between perceived financial well-being and the other financial well-being measures are in the expected direction, with more positive perceptions of financial condition being positively correlated with having higher levels of income, savings, and more fiscally beneficial saving habits and being negatively correlated to having higher levels of debt. Being married to an officer is positively related to having more positive perceptions of financial well-being, which is as expected because officers' families have higher income, savings, and better saving habits. As with the correlations for level of income, savings and saving habits, there is a positive relationship between having a positive perception of financial well-being and being older, age at first birth, and education. Positive perceptions of financial well-being are also related to more positive employment status, such that those employed, not underemployed, and voluntarily out of the workforce are more positive about their financial well-being than their counterparts.

Military families' experiences of PCS moves are correlated with their perceptions of their financial condition. The longer military spouses have lived at their current location, the more positive they are about their financial condition, although the magnitude of this correlation is not large. The more moves a military family has experienced is positively related to higher perceived well-being, but this finding is likely

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Table 41.
Correlation Table for the Full Military Sample

	Income	Saving	Saving habits	Debt	Financial condition	Officer/ Enlisted	Senior paygrades	Age	Number of children
Income	1								
Saving	0.386**	1							
Saving habits	0.178**	0.277**	1						
Debt	0.054***	-0.206***	-0.184***	1					
Financial condition	0.300**	0.434**	0.459**	-0.271**	1				
Officer/Enlisted	0.369**	0.556**	0.194**	-0.046**	0.309**	1			
Senior paygrades	-0.020**	-0.064**	-0.040***	0.028***	-0.053**	-0.461**	1		
Age	0.354***	0.367**	0.172***	0.063***	0.200**	0.233**	0.214**	1	
Number of children	-0.005	-0.031**	-0.106***	0.062***	-0.138***	0.003	0.156**	0.174**	1
Education	0.242**	0.317**	0.185***	0.024***	0.221**	0.365***	-0.121**	0.170**	-0.070**
Race/Ethnic	0.080***	0.122***	-0.029***	0.003	0.005	0.172***	-0.076***	-0.002	-0.010
Not underemployed	0.174***	0.117***	0.062***	0.000	0.154***	0.084***	-0.002	0.091**	0.001
Employed	0.196***	0.009	0.083***	0.091***	0.114***	-0.075***	0.041***	0.053***	-0.119**
Voluntarily not employed	0.094***	0.081***	0.072***	-0.040***	0.143***	0.109***	0.006	0.044***	0.097**
Length of residence	0.114***	0.046***	0.035***	0.011	0.059*	-0.017*	0.100***	0.162***	0.059**
Number of moves	0.205***	0.289***	0.095***	0.020	0.123***	0.317***	0.108***	0.440***	0.229**
Times away	0.058***	0.112***	0.018*	0.003*	0.002	0.146***	-0.003	0.065***	0.003
Length of time away	-0.027**	-0.012	-0.017*	0.001	-0.041***	0.025***	0.003	-0.051**	-0.016
Relocation cost score	-0.074***	-0.097***	-0.110***	0.112***	-0.300***	-0.058***	0.009	-0.011	0.004

Note: Unweighted sample size for the military data presented in this table is 14,652.
** Correlation is significant at the 0.01 level (2 tailed) * Correlation is significant at the 0.05 level (2 tailed)
High values: White, Dual income households, Officers, Senior paygrades, Not underemployed, Voluntarily not employed.
Higher saving habits scores indicate spending less than income. Higher education scores indicate more education. Higher relocation cost score indicate higher costs during last PCS move.

Table 41. **(Continued)**

	Education	Race/Ethnic	Not underemployed	Employ	Voluntarily not employed	Length of residence	Number of moves	Times away	Length of time away
Education	1								
Race/Ethnic	0.066**	1							
Not underemployed	0.093***	0.060**	1						
Employ	0.109***	0.021*	-0.008	1					
Voluntarily not employed	0.032*	0.100***	-0.061	------	1				
Length of residence	0.014	-0.004	-0.063**	0.143**	0.194**	1			
Number of moves	0.102***	0.052**	0.004	-0.057**	-0.031*	-0.042**	1		
Times away	0.061**	0.057***	-0.008	-0.016	-0.003	0.021*	0.115***	1	
Length of time away	0.015	0.029***	0.021	-0.023**	-0.006	0.010	0.030**	0.628**	1
Relocation cost score	0.026***	-0.016	0.108***	0.036***	-0.208***	-0.056***	0.107***	0.103**	0.105**

Note: Unweighted sample size for the military data presented in this table is 14,652.
** Correlation is significant at the 0.01 level (2 tailed) * Correlation is significant at the 0.05 level (2 tailed)
High values:
White, Dual income households, Officers, Senior paygrades, Not underemployed, Voluntarily not employed. Higher education scores indicate more education. Higher relocation cost score indicate higher costs during last PCS move.
Higher saving habits scores indicate spending less than income.

a reflection of the positive relationship between being an officer (both junior and senior) and having both higher numbers of PCS moves and perceived financial well-being. As expected, experiencing higher relocation costs is negatively correlated to perceived financial well-being. Although the number of times away is not significantly related to perceived well-being, the total duration of these separations is negatively correlated to perceived well-being; however, the magnitude of this correlation is small.

Income is positively correlated with the three employment measures. Families with higher incomes are those where spouses are employed and not underemployed. In addition, spouses who are not employed by choice have higher total household incomes than those who are looking for work. These positive relationships also apply to the correlations between level of savings and saving habits, although being employed is not significantly related to level of savings. There are slight but significant correlations between level of debt and being employed or voluntarily not employed, such that those who are employed have slightly more debt than those not employed, but those who are voluntarily not employed have less debt than those who are looking for work. This may indicate that those in debt may have more need to work (e.g., working to pay off debts).

There are also significant correlations between employment status and the demographic characteristics of the military spouse. Being a spouse of an enlisted member is associated with being unemployed, and being a spouse of an officer is correlated with being underemployed and voluntarily out of the workforce. Although there is no relationship between being underemployed and number of children, having higher numbers of children is negatively associated with being employed and positively

associated with being voluntarily not employed. White spouses are more likely to be employed or to be voluntarily out of the workforce but less likely to be underemployed.

There are slight, but significant, negative relationships between income and both the number of times and the length of time away from home. There are also positive relationships between these variables and level of savings, saving habits, and financial condition, and a negative relationship between the separation variables and level of debt. Length of time away is negatively correlated with spouse employment status, such that families who experience longer separations are more likely to be single income households.

As anticipated in the discussion of the cross-tabulations, there are significant relationships between the number of moves a military family experiences and their income and savings; however, there are also strong significant relationships between paygrade group and number of moves, income and savings. This finding provides support for the interpretation that the direction of the relationship between PCS moves and income and savings is a result of the strong correlations between these variables and paygrade. Relocation costs are negatively correlated with income, level of savings, savings habit, and financial condition and positively related to level of debt. Higher relocation costs are associated with being employed and not being underemployed, but they are negatively correlated with voluntary non-employment, indicating those who are voluntarily not employed have lower relocation costs. There is a small, but significant, negative correlation between number of moves and being part of a dual income household. However, number of moves is not related to underemployment.

Regression Analysis

    Analysis of Full Military Sample

The regression analysis regarding income for the full military model indicates that 28% of the variance in income is accounted for by the model (Table 42), and the majority of variables in the model are significant. The results show that those respondents who are older and who are married to senior personnel have higher incomes. Officers' families have higher income than enlisted families, as expected based on the pay scale within the military. Consistent with the regression results in the military/civilian comparisons, those who are part of a dual income household have higher total household income. Those with more education have higher incomes. Race/ethnicity is not significant in the model; this shows that the lower mean incomes of minority families are due to factors other than race/ethnicity, such as officer/enlisted status. In addition, the more children respondents have in their household, the lower their family income.

The model indicates that respondents who have lived at their current location for longer periods of time have higher income; however, spouses who have moved more often during their active-duty spouse's career have higher income, although number of PCS moves is only significant at the p < .05 level. Relocation costs are negatively associated with income, indicating that those who experience more costly PCS moves have fewer resources for dealing with these costs. Although the number of times the active-duty spouse has been away from home does not have a significant impact on household income, total length of time away is negatively associated with income, such that those service members who have been away more in the past year have lower household incomes. This may be due to spouses being less able to work if the service members are away more.

Table 42.
OLS Regression Models for the Full Military Sample

	Income		Savings		Debt	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Age	0.22***	76.56 (3.60)	0.14***	584.54 (37.70)	0.05**	44.04 (11.84)
Officer/Enlisted	0.36***	2187.47 (72.25)	0.53***	36896.00 (776.84)	-0.12***	-1911.15 (242.46)
Senior paygrades	0.10***	740.09 (80.61)	0.19***	16539.00 (829.50)	-0.06***	-1157.68 (259.36)
Number of children	-0.05***	-99.31 (18.58)	-0.08***	-1931.30 (190.07)	0.07***	433.40 (59.78)
Education	0.06***	204.02 (30.69)	0.10***	3787.23 (314.87)	0.01	130.18 (98.99)
Race/Ethnic	0.00	23.80 (46.24)	0.03***	1977.61 (474.11)	0.00	5.19 (148.59)
Dual Income	0.19***	970.81 (44.36)	-0.02*	-1176.62 (464.65)	0.09***	1303.19 (145.69)
Length of residence	0.04***	66.40 (14.25)	0.01	129.23 (145.86)	-0.02*	-98.69 (45.75)
Number of moves	0.02*	26.21 (11.93)	0.02*	302.48 (122.63)	-0.01	-24.57 (38.37)
Times away	0.02	18.69 (11.39)	0.05***	556.35 (116.77)	-0.01	-28.61 (36.64)
Length of time away	-0.04**	-62.44 (17.73)	-0.04***	-777.82 (181.60)	0.01	23.30 (56.87)
Relocation cost score	-0.06***	-17.37 (2.63)	-0.06***	-220.60 (26.87)	0.11***	91.10 (8.44)
Income	--------	-------	0.11***	1.26 (0.10)	0.05***	0.14 (0.03)
Intercept	--------	-165.54 (154.78)	--------	-32183.00 (1583.11)		2983.24 (496.70)
	$r^2 = 0.28$		$r^2 = 0.44$		$r^2 = 0.04$	

Note: Unweighted sample size for the military data presented in this table is 14,652.
*** – Significant at the $p < .0001$ level.
** – Significant at the $p < .001$ level
* – Significant at the $p < .05$ level.
Note. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.

Table 42. (*Continued*)
OLS Regression Models for the Full Military Sample

	Saving Habit		Financial Condition	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Age	0.11***	0.03 (0.00)	0.05***	0.01 (0.00)
Officer/Enlisted	0.24***	0.10 (0.06)	0.25***	0.60 (0.03)
Senior paygrades	0.03**	0.17 (0.06)	0.07***	0.20 (0.03)
Number of children	-0.11***	-0.16 (0.01)	-0.14***	-0.12 (0.01)
Education	0.14***	0.32 (0.02)	0.1***	0.14 (0.01)
Race/Ethnic	-0.04***	-0.16 (0.03)	-0.05***	-0.11 (0.02)
Dual Income	0.02*	0.08 (0.03)	0.08***	0.16 (0.02)
Length of residence	0.02*	0.03 (0.01)	0.02*	0.01 (0.01)
Number of moves	0.05***	0.04 (0.01)	0.06***	0.03 (0.00)
Times away	0.01	0.01 (0.01)	-0.02*	-0.01 (0.00)
Length of time away	-0.03*	-0.03 (0.01)	0	0.00 (0.01)
Relocation cost score	-0.13***	-0.03 (0.00)	-0.28***	-0.03 (0.00)
Income	0.07***	0.05 (0.01)	0.13***	0.05 (0.00)
Intercept		2.62 (0.12)		3.29 (0.06)
	$r^2 = 0.19$		$r^2 = 0.27$	

Note: Unweighted sample size for the military data presented in this table is 14,652.
*** – Significant at the $p < .0001$ level.
** – Significant at the $p < .001$ level
* – Significant at the $p < .05$ level.
Note. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.

The savings regression model is the most successful model as it explains 44% of the variance in the dependent variable (Table 42). With the exception of length of residence, all of the variables in the savings model are significant. As is found in the income regression model, the results show higher levels of savings among respondents who are older, who are married to senior personnel, and who have more education. In addition, officers' families have, on average, $37,000 more in savings than enlisted families. As was found in the savings model in the military/civilian comparisons, unlike the income model, the relationship between savings and dual employment is negative. Those respondents who are in a dual income household tend to have less in savings than those in a single income household. However, as this is cross-sectional data, the causality of relationships is not certain, and it may be that the causality is reversed for these variables (e.g., having less in savings and more debt may lead spouses to seek employment). Respondents with more children have less in saving by about $2,000 for every additional child. As expected, higher income is associated with higher levels of savings.

In the savings model, length of time at current location is not related to level of savings; however, having experienced more PCS moves is positively associated with more savings at the $p < .05$ level. The regression analysis for savings does indicate that relocation has a negative impact on military family financial well-being. Relocation costs are negatively associated with savings. Although number of times away is positively associated with savings, the length of time the active-duty spouse has been away from home in the previous 12 months is negatively associated with savings.

As in the military/civilian comparison regression models, the debt model for the full military sample is successful in explaining only 4% of the variance. Although those who are older and who have more income have higher levels of debt, spouses of officers and of senior personnel have lower levels of debt than spouses of enlisted members and of junior personnel. The number of children in the household is a significant predictor of debt: for every child, the household tends to have an increase in their level of personal debt of about $400. There is a slightly less significant relationship between length of residence and debt, which indicates that those who have been at their current location longer have lower levels of debt. The analysis does indicate that those who have higher relocation costs related to their most recent PCS move have higher levels of debt.

Nearly all of the variables in the savings habit model are significant; overall the model explains 19% of the variance. The only non-significant variable in the model is number of times away from home. Frequency of separations does not appear to be related to saving habits. The direction of the relationships in the saving habits model mirror those of the savings model with two exceptions. In the savings model, Whites have higher levels of savings, but in the savings habit model, the relationship is negative, indicating that Whites have worse saving habits than their peers who are race/ethnic minority members. In addition, being part of dual income household is associated with lower savings levels, but it is associated with more beneficial saving habits. Although it is not explicit in the analysis, it may be that in some of these families the spouse works to enable the family to increase savings and lower debt.

The regression analysis for perceived financial well-being is moderately successful in that it explains 27% of the variance (Table 42). Although length of time

away is not significantly related to perceptions of well-being, all of the other variables in the model are significant. As with the income, savings, and savings habit models, perceived financial well-being is positively associated with age, being married to an officer, being married to senior military personnel, education, and dual employment. Having larger numbers of children is negatively related to having positive perceptions of financial well-being, as is being White. Families who have more costs related to their most recent PCS move have more negative perceptions of their financial well-being, and those who have lived at their current location longer are more positive than those who have moved more recently. However, having moved more times during your spouse's active duty career is positively related to perceived financial well-being. Employed spouses are more positive about their family's well-being than other spouses, as hypothesized.

Analysis of Dual Income Households

The regression models for dual income households are not quite as strong as the regression models for the full military sample, although they are largely similar in regards to the directions of the relationships (Tables 42-43). The regression model explains 24% of the variance in total household income (as compared to the 28% of variance in income explained by the model for the full sample). The results indicate that respondents in dual income households who are older, who are married to officers, who are married to senior military personnel, who have fewer children, and who have more education are more likely to have higher income. Number of relocations and times away are not significant predictors of level of income. The longer military spouses in dual income households

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Table 43.
OLS Regression Models for the Full Military Sample: Dual Income Households Only

	Income		Savings		Debt	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Age	0.22***	79.28 (5.84)**	0.18***	729.59 (58.34)	0.03	33.14 (18.85)
Officer/Enlisted	0.32***	1985.55 (114.65)**	0.51***	35444.00 (1161.07)	-0.11***	-1951.88 (371.96)
Senior paygrades	0.08***	617.42 (130.23)**	0.17***	14858.00 (1276.26)	-0.04	-743.27 (408.66)
Number of children	-0.05***	-115.67 (29.89)**	-0.10***	-2418.55 (292.48)	0.10***	588.24 (94.29)
Education	0.09***	296.24 (48.30)**	0.09***	3577.38 (473.27)	0.02	162.55 (152.45)
Race/Ethnic	0.01	28.40(73.74)	0.03*	1873.32 (723.86)	0.00	19.53 (232.29)
Not underemployed	0.11***	580.85 (67.50)**	0.01	852.89 (664.74)	0.01	193.65 (213.80)
Length of residence	0.03*	56.61 (24.31)*	0.01	158.19 (237.04)	-0.03*	-151.09 (76.14)
Number of moves	0.02	26.57 (18.46)	0.01	115.52 (180.84)	-0.02	-75.80 (58.06)
Times away	0.02	22.97 (18.32)	0.04*	494.15 (179.44)	0.02	51.59 (57.62)
Length of time away	-0.04*	-71.74 (28.77)*	-0.03*	-558.57 (280.93)	-0.02	-96.49 (90.29)
Relocation cost score	-0.06***	-18.59 (4.04)**	-0.07***	-254.08 (39.52)	0.11***	94.99 (12.71)
Income	-------	-------	0.12***	1.31 (0.14)	0.05**	0.14 (0.05)
Intercept	-------	1704.01 (278.13)	-------	-33081.00 (2732.24)	-------	4685.48 (878.01)
		r² = 0.24		r² = 0.43		r² = 0.03

Note: Unweighted sample size for the military data presented in this table is 8,409.
*** – Significant at the p < .0001 level.
** – Significant at the p < .001 level
* – Significant at the p < .05 level.
Note. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.

Table 43.(Continued)
OLS Regression Models for the Full Military Sample: Dual Income Households Only

	Saving Habit		Financial Condition	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Age	0.13***	0.03 (0.00)	0.03	0.00 (0.00)
Officer/Enlisted	0.21***	0.89 (0.08)	0.19***	0.45 (0.045)
Senior paygrades	0.02	0.11 (0.09_	0.05**	0.13 (0.05)
Number of children	-0.14***	-0.21 (0.02)	-0.16***	-0.13 (0.01)
Education	0.14***	0.33 (0.03)	0.11***	0.15 (0.01)
Race/Ethnic	-0.04*	-0.14 (0.05)	-0.03*	-0.07 (0.03)
Not underemployed	0.04*	0.13 (0.05)	0.07***	0.14 (0.03)
Length of residence	0.06***	0.08 (0.02)	0.04*	0.03 (0.01)
Number of moves	0.04*	0.03 (0.01)	0.06***	0.03 (0.01)
Times away	0.01	0.01 (0.01)	-0.01	-0.00 (0.01)
Length of time away	-0.02	-0.02 (0.02)	-0.00	-0.00 (0.01)
Relocation cost score	-0.12***	-0.02 (0.00)	-0.28***	-0.03 (0.00)
Income	0.04*	0.03 (0.01)	0.14***	0.05 (0.01)
Intercept	-------	2.56 (0.20)	-------	3.26 (0.10)
	$r^2 = 0.18$		$r^2 = 0.25$	

Note: Unweighted sample size for the military data presented in this table is 8,409.
*** – Significant at the $p < .0001$ level.
** – Significant at the $p < .001$ level
* – Significant at the $p < .05$ level..
Note. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.

have lived at their current location, the higher their total household income, and high

costs resulting from their most recent PCS move are negatively associated with income.

The total length of time the active-duty spouse has spent away from home is negatively

associated with higher levels of income. Military spouses who believe that they are

underemployed have lower levels of total household income.

The model explains 43% of the variance in level of savings for dual income

households. The direction and degree of significance of the relationships regarding age,

paygrade, organizational seniority, number of children, and education are the same in the

savings model as they are for the income model. Consistent with the findings from the

regression model for income, total length of time away from home is negatively

associated with higher levels of savings. The savings model, like the income model, also

shows that high relocation costs are negatively associated with savings. Unlike the

income model, race/ethnicity is significantly related to savings, such that those who are

White have more savings—about $1,800 more. Even though underemployment status is

significantly related to total household income, it is not significant in the savings model,

although the direction of the relationship is the same in both models. Number of times

away from home by the active-duty spouse is positively related to more savings, but the

relationship is only significant at the $p < .05$ level. Income is significantly related to

savings, as it was for the full military model.

The model for debt in dual military households is even less robust than the debt

model for the full military sample ($r^2 = 0.03$). Only five variables in the model are

significant. As expected spouses of officers have less debt than spouses of enlisted

personnel. Those with more children have more debt. Length of residence is negatively

associated with debt, such that those who have moved less recently have less debt and those with more costly relocations have more debt. As in other the debt models, having more income is also associated with having more personal debt. Underemployment is not significantly related to the amount of personal debt a military household had acquired.

The savings habit model explains 18% of the variance, which is only slightly less than was explained in the savings model for the full military sample. The relationships in the savings habit model for dual income households are nearly identical to those for the full military sample; however, organizational seniority and length of time away do not have significant explanatory power in the model for dual income households. Underemployment is not significantly related to saving habits.

The model explains a quarter of the variance in the perceptions of financial well-being held by spouses in dual income households. Spouse age is not significant in the model nor are the two measures of separation (number of times away and length of time away). The direction and significance of the relationships in the model for dual income households is otherwise the same as for the full military model. Underemployment is positively related to perceived financial condition, indicating that spouses who believe they are underemployed are less positive in their assessment of their family's financial well-being.

Analysis of Single Income Households

The models for single income households are the most robust of all the models tested in the military-only analysis. The regression analysis regarding total household income for single income households indicates that 29% of the variance of income is accounted for by the model (Table 44). Few of the other variables in the model are significant. For example, voluntary non-employment is not significantly related to total household

income. Not surprisingly, the status of the military member—officers/enlisted and seniority are powerful predictors since the active-duty member is the sole source of employment income for the family. Spouses who are older also have higher incomes. Having more children in their household is related to lower income. Although only significant at the $p < .05$ level, higher total household income is positively associated with the length of time at current location. This relationship is surprising because for these households there is no disruption of spouse employment, which is the primary reason incomes increase the longer a family has lived in their current location. The more times they have moved during their active-duty spouse's career is also positively associated with income. This may reflect that junior enlisted families have moved the least often and have the lowest income. Additional support for Hypothesis 7 is the negative relationship between income and higher relocation costs. Contrary to Hypothesis 7c, there is no significant relationship between total household income for single income families and their experiences of separations in the previous year. This is not surprising because there is no spouse work to be disrupted by separations for these families.

The results for the savings and saving habits models for single income households are similar to the models for the full military sample. The savings model for single income households is nearly identical to the regression for the full military model in the direction and degree of significance of the relationships. Race/ethnicity, though still indicating that Whites have more savings, is not as significant in the model for single income households. Voluntary non-employment is not significantly related to the level of savings in households. The savings habit model for single income households

Table 44.
OLS Regression Models for the Full Military Sample: Single Income Households Only

	Income		Savings		Debt	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Age	0.24***	77.15 (5.04)	0.11***	457.75 (57.77)**	0.05*	44.99 (17.05)
Officer/Enlisted	0.42***	2236.68 (98.81)	0.56***	37944.00 (1175.58)**	-0.12***	-1785.92 (345.17)
Senior paygrades	0.12***	834.11 (106.40)	0.21***	17635.00 (1199.85)**	-0.08***	-1566.33 (354.34)
Number of children	-0.05***	-102.30 (25.84)	-0.07***	-1729.55 (288.46)**	0.07***	406.08 (85.53)
Education	0.01	28.87 (42.53)	0.11***	4020.57 (476.26)**	-0.00	-3.60 (141.15)
Race/Ethnic	-0.01	-43.07 (65.47)	0.02*	1587.81 (731.65)*	0.00	7.80 (216.33)
Voluntarily not employed	0.02	137.40 (82.69)	0.00	69.82 (924.20)	-0.04	-625.84 (272.75)
Length of residence	0.04*	60.67 (18.73)	0.01	255.33 (209.18)	-0.00	-2.88 (61.93)
Number of moves	0.04*	45.79 (16.92)	0.04*	496.82 (190.66)*	-0.02	-69.29 (56.26)
Times away	-0.00	-1.20 (15.60)	0.05**	626.01 (174.19)**	-0.04	-99.51 (51.63)
Length of time away	-0.02	-34.31 (24.33)	-0.05**	-909.77 (271.72)**	0.02	78.17 (80.26)
Relocation cost score	-0.02*	-6.75 (3.83)	-0.05***	-200.72 (42.68)**	0.09***	73.29 (12.65)
Income	-------	-------	0.08***	1.06 (0.17)**	0.04*	0.10 (0.05)
Intercept	-------	-291.17 (221.59)	-------	-30893.00 (2476.64)	-------	4514.06 (732.33)
	$r^2 = 0.29$		$r^2 = 0.46$		$r^2 = 0.02$	

Note: Unweighted sample size for the military data presented in this table is 6,243.
*** – Significant at the $p < .0001$ level.
** – Significant at the $p < .001$ level
* – Significant at the $p < .05$ level.
Note. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.

Table 44 (Continued).
OLS Regression Models for the Full Military Sample: Single Income Households Only

	Saving Habit		Financial Condition	
	Std. Coeff.	Unstd. Coeff. (std err)	Std. Coeff.	Unstd. Coeff. (std err)
Age	0.1***	0.02 (0.00)	0.09****	0.01 (0.00)
Officer/Enlisted	0.28****	1.15 (0.08)	0.30****	0.70 (0.05)
Senior paygrades	0.03*	0.17 (0.08)	0.08****	0.23 (0.05)
Number of children	-0.10****	-0.15 (0.02)	-0.13****	-0.12 (0.01)
Education	0.13****	0.31 (0.03)	0.09****	0.11 (0.02)
Race/Ethnic	-0.05****	-0.21 (0.05)	-0.07****	-0.15 (0.03)
Voluntarily not employed	0.05**	0.25 (0.07)	0.06****	0.16 (0.04)
Length of residence	-0.01	-0.02 (0.01)	-0.02	-0.01 (0.01)
Number of moves	0.06**	0.05 (0.01)	0.05*	0.02 (0.01)
Times away	0.02	0.02 (0.01)	-0.01	-0.00 (0.01)
Length of time away	-0.06**	-0.07 (0.02)	0.01	0.01 (0.01)
Relocation cost score	-0.11****	-0.03 (0.00)	-0.26****	-0.03 (0.00)
Income	0.07****	0.05 (0.01)	0.10****	0.04 (0.01)
Intercept	-------	2.64 (0.18)	-------	2.90 (0.11)
	$r^2 = 0.24$		$r^2 = 0.29$	

Note: Unweighted sample size for the military data presented in this table is 6,243.
*** – Significant at the p < .0001 level.
** – Significant at the p < .001 level
* – Significant at the p < .05 level.
Note. "Std. Coeff." is the standardized coefficient and "Usd. Coeff." is the unstandardized coefficient.

accounted for 24% of the variance—more than was accounted for in the regression analysis for the full sample. However, the findings for the model for savings habit are largely the same for single income households as they are for the full military sample. Being married to a senior military personnel, which is significant at the $p < .001$ level for the full model, is not significantly related to savings habit in the model for single income households. In addition, length of residence, which is positively and significantly related to saving habits for the full sample, is neither positively related nor significant in the model for single income households. It may be that length of residence is not important for single income families because their saving habits are not contingent on the spouse's income. Unlike the model for level of savings among single income households, being voluntarily not employed is significantly related to the saving habits of military families, such that those who are voluntarily out of the labor force have more beneficial saving habits.

Debt is a reflection of past financial behavior, not current, and as a result, current financial behaviors, such as being part of a dual employment household, may not have a visible impact on level of debt. The regression models for the single income households tend to be slightly more robust than the models for the full military sample. However, the model for debt is the exception, as it only explains 2% of the variance in the dependent variable. The directions of the relationships are largely the same, although fewer variables are significant in the model run for single income households. The regression analysis for debt in single income households does not provide much support for the hypotheses because so few variables are significant in the model. Notably, voluntary

non-employment is not significantly related to the level of debt a single income household carries. There is a positive relationship between relocation costs and debt.

The model for perceived financial condition indicates that spouses who are choosing not to work are more positive in their personal assessments of their family's financial well-being. The models for single income households are slightly more robust than the model is for the full military sample; however, the direction and degree of significance of the relationships are largely the same. Two variables are no longer significant when analysis is limited to single income households—length of residence and number of times the active-duty spouse has been away. These two variables are only significant at the $p < .05$ level for the full model, and this degree of significance is lost in the single income household models.

CHAPTER VI: CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This chapter begins with a discussion of the purpose of the study and the results of analyses presented in Chapter IV, which tested for the differences between military and civilian samples, and summarizes whether the analyses support the specific hypotheses addressed in Chapter V, which tested the impact of military-specific characteristics on the financial well-being of military families. This presentation is followed by a discussion of the relationship between the major findings in this study and what is known from the literature about the factors related to financial well-being in civilian and military contexts. Limitations to the research and suggestions for future research related to this study conclude this chapter.

Summary of Study Purpose

The purpose of this study was two-fold, as evidenced by the two distinct components of the analysis. The first purpose was to apply what is known about financial well-being in the civilian context to a military population to see if the same financial well-being models are relevant to married military personnel. In testing the applicability of civilian financial well-being models to the military context, this study also sought to determine if a military life course has a negative impact on the financial well-being of military families relative to their civilian peers.

This study expands the knowledge about financial well-being within a military context and supports the hypothesis that joining the military has negative life course implications on financial well-being because through their linked lives with active-duty personnel, military spouses are worse off than their civilian peers.

The second purpose of this study was to assess how certain greedy characteristics of military life affect the financial well-being of military families; these characteristics include deterrents to spouse employment, separations, and relocations. Although the second purpose is specific to the military in this study, the importance of the analyses may apply beyond the military context. These particular "greedy" characteristics of military life are not unique to the military; rather, only the frequency and severity of these characteristics are unique to the military. Thus, the impact of spouse employment status, underemployment status (e.g., employment that does not utilize or match skills and training), relocation, and separation may generalize to the civilian sector. Instead of focusing solely on the differences between military and civilian families, this study included an analysis of the differences among military families due to their varying life experiences within a military context.

The data analyzed in this study were collected in 1999, which provides a unique historical context, particularly in regard to the military. The 1990s were a period of transition for the military—the Cold War had ended and the military was drawing down its force size and engaging increasingly in constabulary/peacekeeping missions. The U.S. economy was quite strong and the military was struggling to keep itself an attractive employment option, which resulted in a large across-the-board pay increase for members of the military at the end of 1999. This change in military incomes is not reflected in the data collected for this study, and, hence, the comparisons of military and civilian income conducted in this study may overestimate the differences between the two populations.

Since the data were collected in 1999, the military has undergone many changes that have life course implications for military families, including financial attainment.

During this time frame, the demographic composition of entry-level recruits also has

changed as fewer minority members, particularly African Americans, are entering the

military (Segal and Segal 2004; Segal and Segal 2005). The 1999 pay increase has been

followed by additional increases each fiscal year, which would make the military a more

attractive employment option except that during this time frame the military's operational

tempo has increased. Since the events of September 11, 2001, the military has been

deployed to Iraq and Afghanistan to conduct the war on terrorism—this has increased

greatly the greediness of the military and put additional emotional and financial strain on

military families (DMDC 2005a). The young adult considering entry into the military in

2006 is presented a very different life course trajectory from the person entering the

military in 1999.

Summary of Results

The results presented in the preceding chapters tested the following basic

concepts related to the life course effects of military service on financial well-being.

First, I expected that when controlling for the factors known to have negative effects on

financial well-being in a civilian context, military service would be negatively associated

with financial well-being such that civilian families would be better off than military

families. Second, I expected that race/ethnic status would operate differently in its

effects on financial well-being in a military context. The military provides an

environment in which race/ethnicity should not matter to organizational achievement or

compensation. This should enable race/ethnic minority members to have higher

economic well-being than their civilian peers, or, at a minimum, attain economic parity

with their non-minority peers within the military. Third, as single income households are

more normative among married couples in the military context, I expected that having a

dual income would not be as much of a determinant of financial well-being in the military as it is for civilians. Fourth, I predicted that having large numbers of children would have a negative impact on financial well-being, regardless of the organizational affiliation of the household; however, I expected that military service, which provides young adults a "good job" that allows them adopt adult roles more quickly than other life course choices. Fifth, I expected spouse employment status to be a key determinant in the establishment and maintenance of the financial well-being of military families. Sixth, within the military context, families may experience organizational interference in their pursuit of financial stability, which should negatively affect their financial well-being.

The central issue underlying each of the hypotheses in this study is the extent to which military families represent a bounded subset of the U.S. population: other than the occupation of one member of the household, are military families largely similar to their non-military peers? Although all entry-level military personnel undergo some form of training that is designed to promote sound financial practices, military service does not provide the basic resources and context needed to maintain economic parity with civilian peers and, even within the military, some families will be more negatively affected by their association with the military than others.

The tests of differences in the financial well-being of military families and their civilian peers demonstrate the negative relationship between affiliation with the military and financial well-being. The literature on the economic attainment of members of the military indicates that the military is a good place to start (Gade, Lakhani, and Kimmel 1991). My initial analysis in the cross-tabulations supports this perspective, although this is only the preliminary step in the analysis which does not include control variables other

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than the variables on which the samples were matched. For the youngest age group (between 18 and 25 years old), military families have, on average, higher incomes, less debt, and about the same amount of savings as their civilian peers. For this age group, military service does not have the negative impact on spouse employment. The benefits of military service that are evident in their income and savings levels at ages 18-25 begin to taper as respondents enter their mid- to late-20's and by the time they are 30 years old, spouses in military families have been decidedly left behind economically by their civilian peers in terms of their total household income and savings. Hence, from a life course perspective, military service appears to be a financially sound option, but the benefits of military service diminish over time. Overall, military families have less income than civilian families (about $1,000 less per month), about $15,000 less in savings. However, military families are more likely to have a savings plan, although this measure is based on a three level self-assessment of the family's typical monthly saving habits which may differ greatly from month to month. The analysis of income and savings is a more robust and reliable assessment of the differences in financial well-being.

Military families carry less debt than civilian families (difference of about $1,300). Although military families have less debt overall, more military families than civilian families have at least some debt. The percentage of military and civilian families with debt is very similar until about age 30, at which the percentage of civilian families with debt declines. It is also at this age that incomes for civilian families rise much higher than military families. This finding is somewhat contrary to what was expected because previous research comparing junior enlisted members of the military to their

civilian peers found that members of the military experienced more problems with paying

bills (Buddin and Do 2002). However, the differences in debt by age between civilian

and military families may reflect the type of debt being measured. In this analysis, only

personal, unsecured debt is analyzed, which excludes two major forms of debt—car loans

and mortgage debt. Car loans are particularly common for young adults (both military

and civilian) and older civilian adults often carry a mortgage. Members of the military

often defer purchasing a home until they are close to exiting the military because the

frequent geographic relocations required for military service make it less financially

feasible to purchase a home. As a result of the limitations related to the debt measure, the

analysis of income and savings differences is a more direct and accurate assessment of

financial well-being.

The regression analysis of the combined military and civilian samples shows that

military families have lower income and savings after controlling for dual income status,

age, number of children, race/ethnicity, and education. The regression models for debt

show that, as indicated by the correlation analysis, those civilian families with debt have

higher levels than the military families with debt (difference of $2,154) and they are less

likely to have a savings plan than military families. However, as previously stated, the

measures of income and savings provide for a more robust analysis of financial well-

being.

Although income is considered to be one of the more robust measures of financial

well-being in this dissertation, there is an inherent limitation in comparing military and

civilian income data. As previously noted, the historical context for this study may

overemphasize the disparity between military and civilian because the income data do not

reflect the large 1999 military pay increase which was designed to address the difference

between military and civilian pay. In addition, when assessing military family income

based on gross pre-tax earnings, the many in-kind benefits provided by the military are

not accounted for in the income estimation. Military families have access to low cost

child care, recreational services, retail, and groceries that enable their incomes to go

farther, and members of the military are paid less because the Department of Defense

provides these in-kind benefits instead. Another problem with the comparisons of

military and civilian income in this study is that there is an artificial upper bound set

because income is measured as a categorical variable, which may lead to an under

estimation of income for the more wealthy respondents, who were hypothesized to be

civilian more often than military.

The lower level of total military household income may reflect the life course

implications of active duty service for military spouse employment (and thus total

household income), which only become apparent as military spouses age and they

become much less likely than their peers to be employed. Civilian couples are more

likely than military households to be in dual income households (63.0% vs. 59.4%). At

the youngest age, being a part of a military household does not make military spouses

less likely than their civilian peers to be employed. However, as they age, the life course

implications of military service for both active-duty members and their spouses become

more apparent because military spouses become much less likely than their peers to be

employed. Dual income households tend to have less in savings than single income

households, for both military and civilian families. When the full sample of military

families is examined, these relationships between dual employment and income and

savings hold true. Dual employment in military families is associated with higher total household income, less savings, more debt, and more positive perceptions of their family's financial well-being. The amount that a family has in savings or debt is a reflection of their past economic choices, whereas whether the spouse is employed is a current economic action. Cooney (2003) found that when military spouses are deciding whether to work, financial need is an important facet in their decision-making process, particularly for non-minority members. Dual employment may not be the cause of lower savings levels and higher debt; rather having less in savings and more debt may lead spouses to seek employment. In addition, dual income households may have higher expenses as a result of having two working persons in the house, such as childcare, greater costs of car maintenance and gas, etc. Similarly, the lower level of savings among dual income households, particularly when they have more beneficial saving habits, may reflect that these households are actively trying to build their savings level. Previous research on enlisted spouses found that over 80% wanted or needed to work because they wanted to save money for the future, although nearly as many said they worked because they needed money for basic family expenses (Bureika et al.1999).

Exiting the workforce, particularly in concert with childbearing, is a turning point in the lives of married couples which has implications for their family's financial well-being. This study finds that, consistent with the literature, unemployment is more common among military spouses than their civilian peers (Hosek et al. 2002; Segal 1986; Wardynski et al. 1996), but the results of this analysis indicate that choosing to leave the workforce does not translate to being better prepared financially to do so. Although the military is an occupation where the two-person, one-income career, as described by

Papanek (1973), is still common, especially among officers, unemployment among spouses remains a key driver in having lower financial well-being. Among military families in the full sample, dual income households have the best financial well-being, according to their level of income, level of savings, and level of debt. In addition, spouses in dual income households are the most likely to have beneficial saving habits under which they are able to regularly put money aside each month and are also the most positive in their perception of their family's financial well-being. However, choosing not to be employed, as opposed to not being able to find work, is positively related to two of the most robust measure of financial well-being in this dissertation: level of income and perceived financial well-being. However, involuntarily unemployed spouses indicate that their families are spending more than or as much as their income, which supports the notion that unless planned for, loss of spouse income is very detrimental to the financial well-being of military families.

In addition to making military spouses more likely to exit the workforce, military service is also historically tied to the higher underemployment of military spouses (Scarville and Bell 1993; Williams, Lipari, and Wetzel 2002). Previous research has found that a third of military spouses view finding a job with an acceptable salary as a major problem for them and a quarter indicate that finding a job relevant to their career aspirations is a major problem (Williams, Lipari, and Wetzel 2002). Spouses have varying reasons for choosing whether to work and for accepting work even if it does not meet their skill level. Through their linked lives with an active duty husband/wife, military spouses are tied to their spouse's job and typically must relocate whenever and to wherever directed. Relocations can have positive or negative effects on the spouse's

employment status. Costs of living vary from location to location, as do the availability

of jobs and the job markets; however, as Booth (2000) found, the labor markets around

military bases are often characterized by depressed wages and higher unemployment,

especially for women. Similar to the analysis of military spouses being out of the labor

force voluntarily, being underemployed has a negative effect on the total household

income and military spouses' perceived financial well-being. It may be that a spouse's

perceptions of being underemployed stem, in part, from dissatisfaction with pay or the

number of hours of work per week offered. Scarville and Bell (1993) found that many

spouses were not working as much as they wanted. Underemployment has no significant

relationship to military family savings or debt and only a slight negative relationship to

saving habits. Previous research has found that feeling that their skills are not used in

their current job is more common among spouses of enlisted personnel than among

officers (Scarville and Bell 1993; Williams, Lipari, and Wetzel 2002). Although a

hypothesis was not explicitly made concerning financial well-being and paygrade, it is

noteworthy that being an officers' spouse has a positive effect on income, savings,

savings habit, and financial condition, regardless of the spouse's employment status.

These results suggest that military spouses' sense of efficacy may play a large

role in their evaluation of their family's financial well-being. Spouses who have chosen

not to work may feel a greater sense of control that translates into being more positive

about the ramifications of their choice on their family's financial well-being. Similarly,

spouses who are working in jobs that they view as inappropriate for their skill level and

qualifications may feel that, although they are contributing to their family's financial

well-being, they are not accomplishing their goals and are not able to have the financial

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security/life style they would prefer, which leads them to more negative perceptions of their financial well-being. Although underemployed spouses have more income than those who are voluntarily not employed, their households have less savings and more debt. In addition, fewer underemployed spouses than those voluntarily not employed indicate that their families are putting money away each month for savings.

Military service may not have a wholly negative effect on the financial well-being of military families. As previously stated, the military provides many in-kind benefits to augment the income it provides, and the military also provides formal and informal programs to provide financial management training to prevent financial problems from arising and to address financial problems after they have developed (Buddin and Do 2002). In addition, although many people enter into the military with student loans, it is also common for people to join the military as a means for attaining college funding without accruing debt. Hence, the military may provide a context that encourages military families to be more proactive in their approach to financial management. This could explain why military families are more likely to have a savings plan and they carry more than $2,000 less debt than civilian families (controlling for income, dual income status, age, number of children, race/ethnicity, and education). In addition, although military service has a negative effect on spouse employment (Hosek et al. 2002; Segal 1986; Wardynski et al. 1996), the regression results in this analysis indicate that dual income households have more debt than single income households.

Prior research on the life course effects of military service on the financial well-being of members of the military has found that the military provides a good employment opportunity, particularly for race/ethnic minority members (Gade, Lakhani, and Kimmel

1991; Moskos and Butler 1996). However, in a civilian context, racial/ethnic minority status is a common characteristic of households that experience financial distress (Iceland 2000; Kasarda 1995). One component of this study has been to examine whether what is known about financial distress from research on the civilian population applies in a military context. Contrary to expectations, the regression analysis indicates military spouses who are race/ethnic minority members do not, on average, have more positive scores on financial well-being measures than their civilian peers; rather, minority couples in the military context look either the same as or worse off than their civilian peers. When the regression analyses are restricted to only race/ethnic minorities, there is no difference in income for race/ethnic minorities by their civilian status, and civilians have more savings, less debt, but less beneficial saving habits.

The lack of support for Hypothesis 2, that minorities in the military fare better financially than their civilian peers, is surprising because the military has been an organization in which minority members can advance more easily than in civilian organizations where there may be more racial barriers (Armor 1996; Moskos and Butler 1996; Segal 1989). However, most analyses of minorities in the military are not limited to married couples, which may factor into this study. Civilian research on marital patterns by race finds that African Americans are less likely to be married than others (McKinnon and Bennet 2005). As an Americans comprise the largest percentage of minorities in the military, comparisons of minority and non-minority martial patterns in the military will largely reflect the behaviors of African Americans. Research on the median family income of minorities compared to the total U.S. population finds that married African Americans earn only $7,000 less than other married couples; whereas

African American households, regardless of marital status earn about $17,000 less than other U.S. households (McKinnon and Bennet 2005). Hence, it may be that marital status is a large factor in understanding racial differences in income between military and civilians and the life course benefits associated with military service for minority members applies more to those who are unmarried than those who are married.

In both the military and civilian samples, race/ethnicity is a significant predictor of two key indicators of financial well-being, income and savings, with Whites having higher levels of both. The analysis in this study indicates that, although race/ethnicity does have the same relationship to poorer financial well-being in the military, the effect is not as strong as among civilians (i.e., the impact of race/ethnicity in the military context is reduced relative to their civilian context). In comparison to their non-minority military peers, race/ethnic minority members tend to fare either the same or to be worse off. The mean monthly household income does not vary by minority status between civilian and military families. The greater parity in income between minorities and non-minorities in the military may indicate that the military has a negative effect on the life course of non-minorities because this parity may be because Whites in the military have lower incomes than their civilian peers. Although the hypothesis does not address non-minority spouses, it is interesting to note that White military spouses may experience a penalty relative to their civilian peers in regard to income. The mean monthly income of White households is about $1,000 higher for civilian families than for military families. This analysis does not control for paygrade or seniority in the military population because there is no equivalent distinction available in the civilian data.

Through the provision of training and self-help resources, the military strives to provide a climate in which all military personnel undertake prudent financial actions. Minority members in the military have higher levels of debt and lower levels of savings than their civilian peers. When unexpected expenses arise, it is this type of financial balance that can easily tip households over the edge to become working poor (i.e., employed full-time but with incomes below the official poverty threshold). However, when the savings plans are examined, members of the military, regardless of their minority status, are more likely than their civilian peers to have a savings plan (e.g., spend less than their income). These contrary descriptive statistics indicated that perhaps the military is successfully transmitting information regarding the need to develop financial plans, but this planning does not automatically result in financial well-being superior to civilians.

The regression analyses indicate that race/ethnicity affects the financial well-being of both civilian and military families, as would be expected based on the civilian literature (Iceland 2000). However, as hypothesized, race/ethnicity not is as effective a predictor of financial well-being for military families. Regardless of race/ethnicity, military service has a negative effect on the financial well-being of military families as the results indicate that all members of the military are similarly disadvantaged relative to their race/ethnic peers, but race/ethnic members of the military who compare themselves to their White military peers will be more satisfied with their lot in life than race/ethnic civilians who compare themselves to their White peers in the civilian context. The analysis also indicates that White families in the military have more of a disadvantage relative to their civilian peers than do minority families.

Another strong influence on financial well-being in the civilian context is having a large family. The more children within a family, the worse the ratio between the number of earners bringing in income to the number of household members claiming part of that income (Casper, McLanahan, and Garfinkel 1994). In addition, civilian research has found that households headed by younger persons are more likely to experience financial distress (Iceland 2000). Military service provides young people stable, gainful employment, which enables them to assume adult roles and responsibilities more quickly than their civilian peers (Buddin and Do 2002), and previous research on military families has found that the military career cycle might encourage early or large family formation (Office of the Assistant Secretary of Defense [Personnel and Readiness] 1993; Segal et al. 1976). The results of this analysis indicate that married military personnel are no more likely to have children in their households than civilian families, and on average, the number of children in military and civilian households do not differ. In both samples the average number of children is 1.8 and about 80% of both military and civilian respondents indicate that they have children. The distributions by age group are not consistent with the idea that members of the military are more likely to have children; the percentage of military families by age group that have children is typically slightly lower than the percentages for their civilian peers.

In the military, the effect of higher numbers of children is very clear—more children means less income, less savings, more debt, and worse saving habits. This is directly in line with what would be expected. For civilian families, the relationships are the same, with one exception—in this analysis, the more children in a civilian household, the more income the household has. This may be because civilian couples wait until they

have reached a "reserve wage" before expanding their family size, but such waiting does not appear to occur in the military households. Another explanation is that civilian families who have larger numbers of children seek a second job to cover the costs related to greater numbers of children. For active duty military members, it is often difficult to have a second job, particularly among officers, because of the demands of military service. However, on the whole, the results of this study indicate that what is known about the relationship between large families and financial well-being are true in both the military and civilian context. Although the analysis in this dissertation does not support the idea that military members have larger families than their civilian peers, it does support the hypothesis that number of children will operate the same way in models of financial well-being for military and civilian households. This may be an indication that military households do not differ as much from civilian households as is often believed.

Being in the military does appear to have a negative effect on the total household income and savings levels and a positive effect on saving habits and level of personal debt of military families relative to their civilian peers. This study also sought to assess the differential effects of military service on the financial well-being of military families. Relocations are a fact of life for military families, as every 2 to 3 years they are asked to leave everything and move to a new location. Segal and Segal (2004) noted that between 2000 and 2001, 37% of military personnel relocated, which is much higher than the 15% relocation rate for civilians during that period. Relocations negatively affect spouse employment, as new jobs must be sought on a recurring basis and seniority is typically lost with each move. Bureika et al. (1999) found that nearly half of spouses of enlisted members in paygrade E1-E5 believed that moving to a new location interferes with their

advancement at work, and this perception is more common among spouses of members in higher paygrades. Separations also take their toll financially. Segal and Harris (1993) found that military families who underwent separations experienced increased expenses, loss of income, and problems arising from inexperience with budgeting. The costs experienced by military families when they move are anticipated by DoD, but even with the compensation provided by DoD to defray these costs, most military families have to pay out of pocket to cover their moving expenses.

The analysis in this study indicates that these PCS moves have an immediate negative impact on the financial well-being of military families but that they do recover from these events. The longer military families have lived at their current location, the better off they are financially—the higher their income, the lower their debt, the more positive their saving habits, and the more positive their perception of their financial well-being. Military families vary in the frequency of their relocations. For example, in this study older spouses have moved more times than younger spouses (as would be expected because they have had more time to move more times). In addition, officers' spouses are more likely than spouses of enlisted members to have moved within the previous 6 months, even though spouses of junior enlisted members are least likely to have lived at their current residence for 6 months or longer, and typically have experienced more PCS moves during their career. This is consistent with Cooney's (2003) finding that senior officers not only have experienced more moves (as would be expected because they had been in the service longer), but they also move more often than other members of the military (i.e., shorter periods between PCS moves). Although PCS moves can have an immediate negative impact on financial health, military families are able to "bounce

back" from these relocations in the long run. It is noteworthy that these relationships

hold true regardless of paygrade, although paygrade is also significant in the model.

Length of residence appears to matter most to military families who are dual

income, although it does have a positive impact on total household income of all military

families. In addition, length of time since relocation matters most when military spouses

are seeking employment or have attained employment at their new location. This

conclusion is in line with Cooney's (2003) findings that every additional year between

moves increases the likelihood that a military spouse would be employed. Although the

military relocates its members partly to develop their human capital, these recurring

forced changes in location are typically detrimental to military spouses' ability to develop

their human capital (Dowd 2001), and, as this analysis shows, the longer employed

military spouses live in a particular location, the more beneficial it is to their family's

total household income, which may reflect their growing seniority and increased pay

from duration of employment at a particular job.

Similarly, the costs that military families incur as a result of moving appear to

have an immediate negative impact. Higher relocation costs for the most recent PCS

move are associated with lower income, less in savings, more debt, negative perceptions

of financial well-being, and less beneficial saving habits. The direction and significance

of the relationships between relocation costs and the financial well-being measures

remains in the analysis of dual income households, even when underemployment status is

included in the model. Similarly, relocation cost score also remains significant with the

same direction for its relationships to the financial well-being measures when the analysis

is limited to single income households and voluntary non-employment is controlled in the

model. This finding suggests that the costs of relocating do have an immediate negative effect on the financial well-being of military families, regardless of the spouse's employment status or underemployment status.

Contrary to expectations, the number of times a military family has moved appears to have a positive effect on their financial well-being measures. The cross tabulation analysis indicates this is due to differences by paygrade and seniority (e.g., the low number of PCS moves and poor financial well-being of junior enlisted and the higher number of PCS moves and high financial well-being of senior officers). However, even when controlling for officer/enlisted status and seniority in the regression analysis, the unexpected relationship remained. This relationship is contrary to what is intuitive and to what has been found in the past (Cooney 2003). Further investigation of this relationship is needed and would be an excellent expansion of this study for later work. The military dataset used in this analysis is one of the most robust sources of data on the financial well-being of military families where the respondent is a military spouse; however, testing this model on a second dataset to see if this relationship holds would provide more insight into the veracity of the findings in this study.

To assess the relationship between number of moves and financial well-being, I also ran a regression analysis on an active-duty member dataset collected in 1999. In this analysis, the relationship between PCS moves and income, savings, and perspective on financial well-being was in the direction predicted in the hypotheses for this study when officer/enlisted and organizational seniority were separately included in the model. PCS moves were not a significant predictor of financial well-being. This finding is in line with the life course perspective which notes that experiences differ greatly across gender,

class, and race/ethnicity (Hogan and Astone 1986) because spouses, who are almost all women, appear to have a different experience/perspective regarding the impact of PCS moves on their family's financial well-being than active duty members, who are almost all male. The analysis of the relationship between PCS moves and financial well-being indicates that the predicted direction of the relationship holds true when tested on active duty married members (though not significant), even though it did not hold true in this analysis of spouses of active duty members.

It may be that experience does play a role in mitigating the negative impact of PCS moves on financial well-being; at a minimum, military spouses who move more often know what to expect and this may enable them to be more savvy in their expenditures and enable them to minimize the negative impact of moving on their financial well-being. These findings are contrary to previous research on military spouses which found that each move a military spouse undergoes is associated with a loss of income, although this was only significant for spouses who do not work year round (Cooney 2003). If this is occurring in this analysis, the income of the active-duty member may be increasing to compensate for the loss of spousal earnings. There is also a chance that this may be a reflection of the positive labor market and economic conditions at the time the data were collected in 1999. For example, spouses may have found it easier to locate high paying employment or the families may have been enjoying greater economic prosperity as a result of investments. Life course research notes that historical timing can be an important factor in how an individual's life turns out (Elder 1998). Additional research on the relationship between PCS moves and financial well-being is needed.

Other than PCS moves, military families also undergo frequent and often extended geographic separations which have a negative impact on their financial well-being. Controlling for the other factors considered in the multivariate analysis, the frequency of separations has little impact on the financial well-being measures. Number of times away is positively associated with greater savings, which is contrary to what was hypothesized, but, again, junior and senior officers' families, who tend to have more savings, also experience slightly higher frequency of separations. There is a slight negative relationship between number of times away and perceived financial condition. When examined for dual income households and for single income households separately, number of times away is only significant in the level of savings model and, again, the direction of the relationship indicates that more separations are related to more savings. These results may reflect that active-duty spouses are often called away from home for a single evening (Segal and Harris 1993), which would have little impact on the financial well-being of the household.

The longer the active-duty spouse is away from home during the previous 12 months, the lower the total household income and the less savings the household had. In addition, as length of separation increased, fewer military families indicated they save money on a regular basis. The regression results support the notion that when active-duty spouses are away from home for an extended duration, the financial well-being of the household begins to fail. As Segal and Harris (1993) noted, this fall in financial well-being may be because the nonmilitary spouse is not used to managing the household finances, and the household may encounter higher expenses due to phone bills to keep connected with the military spouse as well as additional child care expenses, and loss of

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income.   This is a very important finding, especially because more military families today are experiencing long separations due to deployments. This bodes ill for their financial well-being.

This study focuses on the current financial status of military families, but this may overstate the negative impact of military service on the financial well-being of military families because, for active-duty members who have a full career in the military, the military retirement system is generous. The military retirement system can be seen as deferred compensation for military households (Wardynski et al. 1996), which would not show up in the analysis of their current financial well-being. However, to realize the retirement benefits, active-duty members have to serve for 20 years. In addition, the long-term benefits of military retirement do not alleviate the current financial needs of families.

Summary of Tests of Hypotheses

The results of the hypotheses in this study are summarized in Table 45. Overall, the analyses provide very mixed support for the hypotheses. Financial well-being is a very difficult concept to measure. For example, people may experience financial difficulty because they lack the income needed to cover their basic expenses or the savings to take care of emergencies, but it may also arise as a result of poor planning rather than not having adequate funds. Sociologists tend to simplify the concept of financial well-being by income data alone as an indicator. However, to assess the financial status of a family adequately, it is essential to incorporate measures of savings (Keister and Moller 2000). Ideally, this information would be combined to create a measure of the net worth of a household, but the data in this analysis do not allow for the combination of income, debt, and savings data. To compensate for the complexity of

assessing financial well-being, this study relied on multiple measures to build a more

complete picture of the financial status of military families. This approach works well to

capture the dynamics of financial well-being, but, the very reason for its necessity is the

cause of confusion when interpreting results. That is to say, some of the hypotheses work

better for one measure of financial well-being than others. Hence, support for the

hypotheses varies by the measure of financial well-being that is used.

Table 45.
Summary of Analytic Support for the Hypotheses by Each Dependent Variable

	Income	Saving	Debt	Saving Habits	Perceived Well-being
H1 - Military families have lower financial well-being than their civilian peers	S	S	N	N	NA
H2 - In comparison to their civilian peers, military spouses who are from racial or ethnic minorities have higher financial well-being	N	N	N	S	NA
H3 - There will be more financial parity between the races for military peers than for civilian peers.	P	N	P	P	NA
H4 - Unlike their civilian peers, single income households in the military do not have lower financial well-being	N	P	P	P	NA
H 5 - Consistent with their civilian peers, military families with more children have lower financial well-being	P	S	S	S	NA
H6 - Involuntary spouse unemployment or underemployment negatively affects financial well-being	S	N	N	P	S
H6a - Employed spouses have higher financial well-being than other spouses.	S	N	N	S	S
H6b - Involuntarily unemployed spouses have lower financial well-being than other spouses who are not employed	N	N	N	S	S
H6c - Underemployed spouses have lower financial well-being than other working spouses	S	N	N	S	S
H7 - Military families who more frequently experience "greedy" characteristics of military service have lower financial well-being than other military families	P	P	P	P	P
H7a - Relocation decreases financial well-being—sharply in the short run, less so over time	S	S	S	S	S
H7b - There is a cumulative negative effect of moves on the financial well-being	N	N	N	N	N
H7c - Military families who have had more/longer separations have lower financial well-being than other military families	P	P	N	P	N

P = Partial support for hypothesis ; S = Hypothesis supported; N = Hypothesis not supported; NA = Not applicable.

The first question addressed in this study deals with the life course effects of military service on the financial well-being of military families. **Hypothesis 1** states that because of their connection to the military, *military families have lower financial well-being than their civilian peers.* **Hypothesis 1 is supported on half of the measures, but not on the other half**. Military families do have lower financial well-being in regard to income and savings (the more important measures), but they fare better in regard to their level of debt and saving habits.

The second question addressed in this study is whether the life course effects of military service on the financial well-being of military families differs based on race/ethnicity. **Hypothesis 2** states that because of their connection to the military, *in comparison to their civilian peers, military spouses who are from racial or ethnic minorities have higher financial well-being*. **Hypothesis 2 is supported on one measure, but not on the other measures**. The analysis indicates that race/ethnic minority military spouses have lower financial well-being in regard to level of savings (one of the two more important measures), and level of debt, but they have more beneficial savings/spending habits than their civilian peers. There is no difference in income by race/ethnicity.

Hypothesis 3 assesses whether the financial well-being of race/ethnicity minority military families is more similar to their military peers than the financial well-being of race/ethnic minority civilian families compared to their civilian peers. **Hypothesis 3** states that because of their connection to the military, *there will be more financial parity between the races for military peers than for civilian peers*. **Hypothesis 3 is partially supported on three measures and not supported on one**. The analysis indicates that,

although race/ethnicity is a significant explanatory variable in the military and civilian analyses, the effect of minority status appears to be greater in the civilian context, and there is more parity among military members in terms of their income (one of the two more important measures), level of debt, and saving habits. The difference between minorities and non-minorities in the military in regard to level of savings, the other more important measure, appears to be greater than for civilians.

The fourth question addressed in this study is whether single income households experience the same negative financial well-being characteristics that are found in the civilian context. **Hypothesis 4** states that because of their connection to the military, *unlike their civilian peers, single income households in the military do not have lower financial well-being*. **Hypothesis 4 is partially supported on three measures, but not on one measure**. Single income households, regardless of the population, have less income than dual income households. The analyses do provide some support for the contention that single income households are not worse off than dual income households. Overall, dual income households have less savings (one of the more important measures) and more debt; however, these relationships hold true in both the military and civilian samples. Although dual income civilian families have worse saving habits than single income households, there is no difference

The fifth question concerns the impact of number of children on the financial well-being of military families. **Hypothesis 5** states that, *consistent with their civilian peers, military families with more children have lower financial well-being*. **Hypothesis 5 is supported**. Having larger numbers of children has a negative impact on the financial well-being of military families in regard to income, level of savings, level of debt, and

beneficial savings/spending habits. These results are in line with what would be expected based on the literature; however, the analysis of the civilian data in this study finds that having more children is related to higher incomes, which is contrary to what is expected.

Question six assesses the impact of spouse employment status on the financial well-being of military families; its subcomponents test specific aspects of spouse employment. Unlike the other hypotheses, it is easiest to understand the validity of this hypothesis by examining the subcomponents rather than addressing the overall question. **Hypothesis 6a** states *employed spouses have higher financial well-being than other spouses.* **Hypothesis 6a is supported on three measures, but not on the other two measures**. The analysis indicates that employed spouses do have higher income, more beneficial saving habits, and more positive perceived financial well-being, but employed spouses have lower savings and more debt. **Hypothesis 6b** states *involuntarily unemployed spouses have lower financial well-being than other spouses who are not employed.* **Hypothesis 6b is supported on two measures, but not on the other three measures**. Overall, voluntary non-employment of military spouses is not significant in regard to their family's financial well-being; however, it is positively related to more beneficial saving habits and a more positive perspective on financial well-being. **Hypothesis 6c** states *underemployed spouses have lower financial well-being than other working spouses.* **Hypothesis 6c is supported on three measures, but not on the other two measures**. Like the models examining spouse's being voluntarily not employed, the models examining underemployment prove largely to be non-significant; however, underemployment does have a negative impact on total household income, saving habits, and spouses' perspective on their family's financial well-being.

The last question addressed in this study assesses the impact of certain greedy characteristics of military life on the financial well-being of military families. As with Hypothesis 6, it is easiest to understand this Hypothesis 7 by examining the results of the subcomponents. **Hypothesis 7a** states *relocation decreases financial well-being— sharply in the short run, less so over time.* **Hypothesis 7a is supported**. The analysis indicates that military families do recover from their PCS move experiences in regard to all the measures of financial well-being. The length of residence is a positive predictor of financial well-being (except for level of savings), which indicates that families are better off the longer it has been since their last move. The financial costs of relocation of their most recent PCS move do have a negative effect on the financial well-being of military families. **Hypothesis 7b** states *there is a cumulative negative effect of moves on the financial well-being.* **Hypothesis 7b is not supported**. Contrary to what was hypothesized, the number of relocations a military family experiences has either no significant effect on their financial well-being and/or the direction of the relationship is in the opposite direction than anticipated, even when controlling for paygrade and seniority **Hypothesis 7c** states *military families who have had more/longer separations have lower financial well-being than other military families.* **Hypothesis 7c is partially supported on three of the five measures**. Although the number of separations that a military family experiences has little or no bearing on their financial well-being, the cumulative duration of these separations do have a negative impact on the financial well-being of military families. Duration of separations negatively affected income, savings, and saving habits; however, there is no relationship between the duration of separations and debt and perceived financial well-being.

Limitations of the Current Study

This study sought to understand the life course implications of military service on financial well-being. The first limitation of this study is that it relies on cross-sectional data. This type of data inherently limits a researcher's ability to test for life course implications of major decisions and events because data are not available that precedes and follows the turning point that is the focus of the study. In comparing the financial well-being of military families to civilian families, this study has to assume that differences between the two populations are a result of military service, rather than a pre-existing characteristic of the respondents. Ideally, this study would have relied on data collected prior to choosing to enter the military for all respondents and then would track these respondents over their life course to see how their financial well-being differed. Hence, the negative effects of military service, race/ethnicity, family formation practices, and greedy characteristics of military life predicted in the models do not reflect causality because they were assessed concurrently.

A second limitation of this study was that the data for the military and civilian samples were collected separately by different organizations with different purposes for their research. Whenever secondary data are used in research, there are variables important to analyze that are not included in the dataset or were collected in a way that is not meaningful for the study. In this analysis, the problems associated with using secondary data sources are compounded because the two datasets did not both include all of the measures needed to conduct the most complete analysis. Keister and Moller (2000) suggest that the sociological study of financial well-being has been limited to the study of household income and recommend that a more complex measure of household wealth be analyzed instead. This study sought to enhance the knowledge of the financial

well-being of military families by incorporating multiple measures of financial well-being, as Keister and Moller (2000) recommend; however, unlike the authors' recommendations, this study had to analyze each measure of financial well-being separately rather than as a combined wealth measure because the data were not collected in a manner that allowed for the creation of a single wealth measure.

In addition, the variables were not always measured the same way in both datasets. For example, age of respondent at birth of first child was of interest, but only the civilian dataset had a precise measure of this variable. As a result, this variable could not be included in the models. The most detrimental example of this problem is in regard to the measurement of debt. Due to the structure of the questions in the military survey instrument, this study lacked continuous data for the absolute measures of financial well-being (level of income, savings, and debt). This limited my ability to combine the various types of debt assessed in the survey and the focus on debt in this analysis was therefore on a very specific type of debt—personal debt (credit cards, loans, student loans). This may be somewhat misleading because it does not include two kinds of debt that are common—mortgage debt and car loans. However, it was not feasible to collect new data for this analysis.

Another limitation of this study comes from the type of comparison undertaken. When assessing the financial well-being of military families relative to their civilian peers, it is difficult to account for the many in-kind benefits offered by the military (e.g., subsidized child care, housing, and discount groceries). This study attempted to work around the problems associated with in-kind benefits by utilizing multiple measures of financial well-being. However, the provision of these goods and services enables the

military to pay military members slightly less than they would otherwise need to maintain their standard of living. Although these in-kind benefits are offered, not all military families take advantage of them, which makes accounting for these provisions even more difficult.

Policy Implications

From a policy standpoint, these results provide military leaders with a better understanding of who may be experiencing financial distress in the military. In addition, it shows how military families differ in regard to the varying measures of financial well-being. Finally, it provides insight into the effects of the unique characteristics of military life on the financial well-being of military families. This knowledge will enable military leaders to develop more effective policies for helping families avoid poor financial health over the course of their association with the military.

This research supports the notion that military spouses are less likely to be employed than their civilian peers. The data indicate that unemployment and underemployment both have negative financial consequences for military families. Hence, military spouse employment programs need to focus not only on helping spouses get jobs, but also in matching spouses' skills and qualifications to their employment because the results indicate that being underemployed is more closely associated with poor financial well-being than being voluntarily out of the labor force. Previous research on the underemployment of military spouses (including measures similar to this study) also noted that this is a common problem in military households (Scarville and Bell 1993). This previous research has shown that spouse employment is important to military families' well-being and to the active duty member's decision to remain in the military. However, the federal government seems to need continued reminders of these

relationships, as is evidenced by the recent removal of funds from a successful national military spouse employment program (Zuckerbrod 2006).

The analysis of the impact of the unique characteristics of military life on the financial well-being of military families indicates that some military families are able to deal with relocations without it negatively impacting their financial well-being. This suggests that the military may be able to teach military families how to move more efficiently to avoid the detrimental costs of moving. The military often provides families with a sponsor at their new location to help them adjust upon arrival at their new home; however, it may be that military families also need help preparing them for their departure and transition period. High relocation costs (such as losing/paying security deposits, temporary lodging expenses, cost of moving pets/cars, and settling damage claims) have negative effects on financial well-being; military families seem to recover from these costs, but perhaps there are costs that military families can either prepare for or avoid incurring with better training.

Another lesson that can be drawn from this research is that the focus on financial management that is mandatory for active duty members in basic training and is available to members of the military community may not result in tangible improvements in the financial well-being of military families. Although military families appear to have more positive saving habits than their civilian counterparts, this does not translate to more positive financial well-being. This suggests that the Department of Defense should investigate the effectiveness of their financial management programs and evaluate whether they are achieving the goals that were intended. It may be that at the beginning of their military career, young adults need to be informed as to how to avoid financial

distress but, as they progress along their life course (age, get married, have kids), financial management training should focus on how to create positive financial well-being and growth, including discussing the benefits and pitfalls of dual income households.

This study suggests that cumulative duration of separations has a negative impact on the financial well-being of military families. Given the increased operational tempo, likelihood of deployments, and length of deployments that have come to characterize the U.S. military, it is important for the Department of Defense to understand the financial impact of these separations on military families. Active-duty members who are deployed to combat zones, such as Iraq, are additional specialty pays and are eligible to have their income while deployed deemed tax exempt. These policies provide some compensation, but the effectiveness of these policies in mitigating the negative impact of separations on military families needs to be empirically validated. Most of these policies are geared towards longer deployments; however, this study indicates that cumulative length of time away from home has negative ramifications for military families. If the military is not compensating families for the increased financial burdens associated with both extended separations and short but frequent separations, then policies should be reevaluated.

Suggestions for Future Research

While this study provides some answers to how military service affects the financial well-being of military families, there are many other questions that need to be considered. First, the scope of this research should be expanded to create a more complete picture of the relationship between military service and financial well-being. This study focuses on military families; to address the life course implications of military service better; this study should be expanded to include non-married active-duty

personnel. In the current study, a primary driver in explaining variance in financial well-being is spouse employment. However, the other characteristics included in the models would be applicable to single service members. In particular, an expansion of the population in this manner would enable the study of single parents, a group at particularly high risk for experiencing financial distress. Further, including single people would help answer the question about the negative financial consequences of family formation and would enable a comparison of the financial well-being of unmarried and married minority members to their civilian peers to determine if military service is more beneficial depending on marital status.

Second, to address the direct causality between military service and financial well-being, longitudinal research needs to be conducted. More specifically, what is needed is a longitudinal study of both military and civilians that contains measures of financial well-being prior to, during, and following military service. Ideally, the measures of financial well-being would be collected in a manner that facilitates the creation of a single wealth variable, which is Keister and Moller's (2000) suggested manner of analyzing financial well-being. This study makes assumptions regarding causality that can only be minimized by having longitudinal data. In addition, this study is only able to compare the current financial well-being of families of active-duty service members to civilian families. As there is some evidence that the military retirement system works as a type of deferred compensation for military households, particularly to compensate for forgone spousal earnings due to military service (Wardynski et al. 1996: 29), the post-service economic attainment of military families is key to understanding the life course implications of military service. Included in a longitudinal study would also

be the long-term financial effects of lower rates of spouse employment and greater underemployment.

A third expansion of this research that is needed would reexamine the relationship between the frequency of relocation and financial well-being. The results of this study are an anomaly because they indicate that, even after controlling for paygrade and seniority, more experiences of relocation are tied to having better measures of financial well-being. However, this may be a result of examining the relationship between PCS moves and financial well-being as perceived by military spouses because when a regression analysis was run on an active duty member dataset collected in 1999, the relationship between PCS moves and income, savings, and perspective on financial well-being was in the direction predicted in the hypotheses even when officer/enlisted and organizational seniority were included in the model. Further analysis is needed to understand why this relationship is occurring in this dataset and to determine if it holds true in repeated samples of military spouses, across time.

A fourth way in which this research could be enhanced is by having more specific data on the type of separations that military families endure. This research focused on the number of times separated and the total length of these separations in the past year. The military data were collected in 1999; since then the frequency and level of hostility of military deployments has greatly changed as the United States engages in the war on terrorism. When active duty members are deployed to hostile areas, such as Iraq, they are given additional pay (e.g., hostile fire pay) and are often offered the opportunity to count their earnings while deployed as non-taxable income, which would have a large effect on their net income for a year. Parsing out the type of deployment to determine if these

"benefits" to dangerous duty impact the financial well-being of military families would be an interesting and timely expansion of the research conducted in this study.

A fifth expansion of this research would include a broader measure of debt owed by military and civilian families. In this research, the analysis was limited to personal debt, which excludes major categories of debt held by many families—car loans and mortgage debt. Although military families typically do not purchase a home during their period of service, this is a large drain on the resources of many civilian families. The measure of personal debt included in this study many not have had sufficient variance, which may reflect that personal debt is a category of debt that many Americans deal with differently. For example, many Americans have personal debt but do not revolve their credit (i.e., pay their debt in full each month), which means that having personal debt is not an indicator of poor financial health for them. In addition, those with the worst financial health may be limited in their ability to attain and carry personal debt because they have limited access to credit. A more in depth look at debt in military families is required to understand better how service affects the acquisition and maintenance of debt.

Concluding Thoughts

When young adults choose to enter into the military or marry someone who is serving in the military, they make a decision that has lasting implications for their life course. This study indicates that being on a military-related life path is tied to having lower measures of financial well-being. While poverty studies in sociology routinely strive to identify characteristics associated with financial distress in American society, researchers have not considered how the same factors would operate within the military context. This analysis was intended to expand our knowledge of the financial well-being of military members and their families by applying pre-existing models to the military

context. Although members of the military are typically excluded from analyses of poverty and financial distress, the results presented above indicate that this differentiation is unnecessary. This study suggests that the financial well-being of military families are a function of three major factors; the unique demographic characteristics of military service (such as, youth and frequent separations), the employment status of military spouses, and the financial management values and practices that are present within the military community. The analysis indicates that the demographic characteristics (age, race/ethnicity, and education) do operate in the military context in a manner similar to how they operate in civilian society. In addition, in both military and civilian households, spouse employment status is vital to understanding a household's financial well-being and appears to operate in the same manner in both populations. Finally, this study does find that military and civilian families differ in their saving habits, but that these more positive habits do not translate into more positive tangible financial well-being measures (income, savings, and debt).

As sociologists continue the study of financial well-being, this study has shown that the tendency to analyze income as the sole measure of financial well-being is a limiting and perhaps misleading. As attempted in this study, more complex measures of financial well-being that incorporate debt, savings, and, ideally, wealth, are needed in future analysis. In addition, the segregation of military households from sociological research is not needed. Including military households in future research will enhance our understanding of American society as a whole. When sociologists include military households in their analysis and address the greedy aspects of military service, they stop marginalizing a vital segment of society.

APPENDIX A:
DETAILED DESCRIPTION OF SAMPLES

Military Sample

The 1999 Survey of Spouses of Active Duty Personnel (1999 ADS) is a large-scale survey of the spouses of military personnel. The 1999 ADS is a mail survey conducted by Defense Manpower Data Center (Wright et al. 2000). The population of inferential interest for the 1999 ADS included spouses of all active-duty Army, Navy, Marine Corps, Air Force, and Coast Guard members (including Reservists on active duty), below the rank of admiral or general, with at least nine months of active-duty service at the time of survey mailings. An additional criterion for eligibility was that the spouse was married to a member of the military who was serving on active duty in May 1999, when the sample was drawn, and in November 1999, when the questionnaire was mailed out. A service member married to another service member would be eligible for the spouse survey based on their spouse's military status, not their own; however there are very few dual military couples in the sample. Data collection efforts resulted in a weighted response rate (corrected for non-proportional sampling) of 51%. The 1999 ADS spouse sample consisted of 38,901 spouses with 16,103 eligible spouses returning usable surveys. The adjusted eligible sample was 31,130 (Wright et al. 2000). Data were weighted to reflect the populations of interest. Sample strata were based on: service branch, gender, paygrade, and location (in the U.S. vs. outside the U.S.), (Wright et al. 2000). The key reporting domains were: service branch, gender, paygrade, location (in the U.S. vs. outside the U.S. and regions outside of the U.S.), occupation group, race/ethnic group, housing (on-base vs. off-base), and component (active duty vs. Reserve) (Wright et al. 2000).

Civilian Sample

The 1998 Survey of Consumer Finances (1998 SCF) is sponsored by the Board of Governors of the Federal Reserve System in cooperation with the Statistics of Income Division (SOI) of the Internal Revenue Service, and data are collected by the National Opinion Research Center at the University of Chicago (Kennickell and Woodburn 1997). The 1998 SCF was collected using computer-assisted personal interviewing (CAPI), and thus, there is no questionnaire in the usual sense. Most of the data in the survey are intended to represent the financial characteristics of a subset of the household unit referred to as the "primary economic unit" (PEU). In brief, the PEU consists of an economically dominant single individual or couple (married or living as partners) in a household and all other individuals in the household who are financially dependent on that individual or couple.

The 1998 SCF is based on a dual frame sample, which is designed to yield a higher response rate on sensitive financial issues across a large sample. Of the 4,309 completed interviews, 2,813 are from the first sampling frame and 1,496 are from the second. The first set of survey cases was selected from a standard multi-stage area-probability design, and these cases are intended to provide good coverage of demographic and financial characteristics, such as home ownership, that are broadly distributed in the population. The response rate for this sample was 70%. The other set of survey cases was selected as a list sample from statistical records derived from tax data collected by the Statistics of Income Division of the Internal Revenue Service (SOI). These records were made available to the Federal Reserve Board conducting the Survey of Consumer Finances surveys under strict rules governing confidentiality, the rights of potential respondents to refuse participation in the survey, and the types of information

that can be made available. To obtain a sufficient representation of wealthy households, the second sample was designed to disproportionately select families that were likely to be relatively wealthy, although only a 35% response rate was achieved.[7]

Two versions of the 1998 SCF data are available for public use. The first is the main dataset which contains the variables as originally coded from the CAPI responses, and the second is a subset of this dataset which contains summary variables used for reporting financial well-being by the Federal Reserve Board in their comprehensive review of the Survey of Consumer Finances research program (Kennickell, Starr-McCluer, and Surette 2000).

Multiple methodologies are possible for constructing summary variables from the 1998 SCF dataset. To facilitate the appropriate analysis of the 1998 SCF data, the Federal Reserve Board created a dataset that contains summary variables corresponding to those used in the comprehensive analysis article. The dataset includes summary variables that are constructed according to Federal Reserve Board guidelines for reporting income, debt, and savings. For example, the 1998 SCF includes multiple items that assess the various types of income an individual and members of his or her household may have, and these various types of income are combined into a summary variable that measures total household income. This type of summary variable is most comparable to the military data available, which only asked for summary household data; rather than the components of income, debt, and savings. For this research, the summary variables typically fulfill the analysis requirements.

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[7] The wealthy were over-sampled because previous iterations of the Survey of Consumer Finances revealed this population tends to refuse participation. In the part of the second sample containing the wealthiest respondents, the response rate was only 10%.

The data are also modified to make the military and civilian samples more demographically comparable. In the military-civilian comparison analyses, the matched samples include only married people from 18-44 years of age. The civilian sample is limited to those couples where there is at least one person employed full-time. It would have been difficult to find individuals in both military and civilian datasets with the same combination of characteristics, even though the sample sizes for the datasets are large. For this analysis, the demographic characteristics to be matched are age, education, and race. Gender was initially considered as a matching variable but was discarded because this analysis focuses on households, rather than individuals.

To create even more comparable datasets, it is determined necessary to have matched samples. For this analysis, samples are drawn that are proportionally matched at the cell level for the three relevant variables (age, education, and race). This type of matched samples was selected as the most appropriate for facilitating comparisons while retaining the maximum number of cases in both datasets. An alternative to the sampling methodology employed in this analysis is matching on the margins. Matching on the margins creates distributions in the samples that could have caused comparisons to be misleading. Unless the sampling procedure employed to create matched datasets takes into account the degree to which the samples match at the cell level, the cross-tabulations of the key demographic matching variables would be vastly different in the civilian and military samples. Another alternative, pair by pair matching, which entails matching records in each dataset, was also rejected because it is difficult to match on multiple variables and it unduly restricted the number of observations available for use from each dataset (Nachmias and Nachmias 1987: 115).

Proportional matching at the cell level relies on frequency distributions, which minimizes data loss while still providing comparable samples. The sampling procedure used to create the matched samples is one in which there are equivalent percentage distributions in the cells when a three-way cross of the matching variables is conducted (e.g., age by education by and race). This creates a proportional number of cases for all cells in both samples. To retain as many observations as possible, given that proportional matching at the cell level requires matching on more dimensions than matching on the margins, the threshold for matches was established such that the one-way frequencies differed by no more than 4 percentage-points.

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