

A COMPARATIVE STUDY OF THE LIFE SATISFACTION OF EARLY RETIREMENT
MILITARY OFFICERS

A Dissertation

by

RUSS THOMAS GRAVES

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2005

Major Subject: Educational Psychology

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ABSTRACT

A Comparative Study of the Life Satisfaction of Early Retirement
Military Officers. (August 2005)

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This study compared the life satisfaction of early retirement military officers with several comparison groups on the basis of Retirement Descriptive Index (RDI) scale scores. The RDI is a self-report instrument that assesses life satisfaction across four scales: Activities, Finances, Health, and People (associations). "Early" retirement from the military, after as few as 15 years of service, was possible between 1993 and 1999 under the Temporary Early Retirement Authority Program (TERA), enacted by Section 4403 of the National Defense Authorization Act for Fiscal Year 1993 to reduce post-Cold War U.S. military personnel strength. This was a departure from the traditional 20 to 30 year military career length referred to in this study as "regular" military retirement. A total of 57,693 personnel from the five military service branches, including 12,790 officers, retired early under this legislation. Previous research has revealed that many military retirees experienced adjustment difficulties during their post-retirement midlife military-to-civilian transition. A long-existing problem has been the inability to predict or prevent these adjustment difficulties. To examine one aspect of the adjustment of military retirees, the RDI was electronically administered via the internet to 122 early retirement military officers and 824 regular

retirement military officers with retirement dates from the same period. RDI scale scores for the early retirement military officers were compared to those of the regular retirees. Additionally, comparisons were made with the RDI scale scores of other groups, including regular retirement military officers from previous studies, and early retirement civilians from a previous study. Analysis of RDI scale scores, using inferential statistical procedures including One-Way Analysis of Variance, chi-square tests of independence, and independent-samples t tests, revealed that early retirement military officers experienced slightly lower measures of life satisfaction in general than all comparison groups, and specifically experienced lower levels of satisfaction with their financial situations. Qualitative (anecdotal) data was included to complement the statistical analysis. Recommendations for research and practice were made regarding early retirement military officers.

DEDICATION

This study is dedicated to my wife, Sondra, who made many sacrifices in support of my military career, yet made even more upon my retirement from military service. Her encouragement and patience throughout my protracted efforts as an after-hours graduate student made completion of a challenging goal a reality.

ACKNOWLEDGMENTS

I owe a debt of gratitude to several individuals who assisted me throughout the course of my studies, and particularly with this dissertation. Dr. Gonzalo Garcia, Jr. was the first to encourage me toward a doctoral program, taught me in several courses, served as my committee chair, and provided helpful advice throughout this research project. Dr. Alvin Larke, Jr., Dr. Patricia Lynch, and Dr. Dan Brossart all served as teachers, mentors, and encouragers, for which I'm extremely grateful.

Dr. Lannes H. Hope, Professor Emeritus of Educational Psychology, Texas A&M University, served as a substitute committee member during my dissertation defense. I appreciate Dr. Hope's participation, knowledge, and military perspective (Colonel, United States Army Reserve, Retired).

This study would not have been possible without the beneficent acts of an individual whom I have never met. Retired Master Chief Petty Officer of the United States Coast Guard Vincent Patton III (who holds the additional titles of "Doctor" and "Reverend"), sought me out and single-handedly arranged the online promotion of my survey. His unsolicited assistance meant the difference between success and failure.

I'm indebted to Jean Forrest at the Defense Manpower Data Center. Over a two year period Jean patiently corresponded with me and graciously responded to numerous requests for information.

I thank the hundreds of military retirees who participated in or facilitated my research. Contact with numerous, anonymous comrades-in-arms reminded me of the "can-do" spirit I enjoyed in military service.

One retiree in Florida typified this attitude. Despite the fact that Florida was weathering its fourth hurricane within a two month period, he immediately forwarded my request for volunteers to the members of his Veterans Service Organization with the words "OK, let's see if we can assist this fellow."

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I INTRODUCTION

Since Colonial times, countless Americans have chosen the profession of arms as their career. Surprisingly, however, military retirees did not become a focus of researchers until long after World War II.

Working from original records, Glasson (1918) outlined the history of military pensions from Colonial times to World War I and noted that preparations were being made for a pension provision even before the Declaration of Independence was signed. Glasson also chronicled that Continental officers sought a grant of one-half of their military pay for life, equal to the pensions earned by British officers, if they remained in active service until the end of the Revolutionary War.

Deeply concerned about morale and escalating officer resignations, General George Washington became the leading promoter of the inflammatory pension issue to the Continental Congress. While a law granting pensions to disabled soldiers had been easily passed in 1776, establishment of Revolutionary War pensions for non-disabled veterans was considered an extravagant financial burden. The issue was debated, delayed, and defeated until 1783. Opposition and controversy over these early military pensions continued well into the next century.

Prior to the Civil War a military career was literally a "lifetime career" (University of Michigan, 1961, p. 2). Due to stringent retirement criteria, which at times required as many as 45

This dissertation follows the style and format of *The Career Development Quarterly*.

years of service to qualify, personnel often remained in active service until death. Promotions were based on seniority, which resulted in the problem of the ranking officers being over-age. To alleviate this problem, legislation was drafted--for example, A Bill For Retiring Superannuated And Disabled Officers From The United States Army (1860). Collings (1971) observed that out of the need to remove elderly personnel from active duty grew the concepts of age-based disability and length-of-service-based retirement pension. The length of service requirement to qualify for military retirement was 40 years in 1860 and was reduced to 30 years in 1870. According to McNeil, Lecca, and Wright (1983), reducing the pension criteria from its earlier high level helped clear the way for individuals of youth and vigor to be promoted into the senior leadership ranks.

At several points in the 20th Century retirement criteria were temporarily shortened to help meet personnel strength requirements. For example, Congress passed An Act to Promote the Efficiency of National Defense (1935) that allowed Regular Army and Philippine Scouts to retire with as few as 15 years of service. This was a temporary force reduction measure intended to alleviate the World War I senior officer surplus, and it ended with World War II. Following World War II, The Officer Personnel Act (1947) formalized the "up or out" promotion system (University of Michigan, p. 4). The Army and Air Force Vitalization and Retirement Equalization Act (1948) formalized the 20-year minimum, 30-year maximum retirement requirements (with age limit exceptions beyond 30 years of service for the most senior ranks). These standards currently remain in effect.

In the aftermath of the Cold War, several initiatives were undertaken by the Department of Defense to downsize the military in response to the perceived reduction in threat to national security. A Selective Early Retirement Board (SERB) was convened, which quickly and drastically reduced the number of senior officers. This was an extreme measure--Van de Vliet (1993) compared similar reductions happening concurrently within the British military to a hypothetical downsizing of the priesthood by the Church.

To reduce the junior ranks, the possibility of a Reduction in Force (RIF) existed, but voluntary measures were employed first. Separation incentives, known informally as exit bonuses, were offered to junior personnel in overstrength career specialties. These incentives took the forms of the Special Separation Benefit (SSB) and the Voluntary Separation Incentive (VSI) and involved lump-sum or annuity payments in addition to limited, short-term benefits (Beland, 1992).

However, few personnel nearing retirement eligibility (20 years of service) were attracted by the exit bonuses (Maze & Wolfe, 1992). Therefore, in 1992 Congress again adjusted retirement criteria by enacting the Temporary Early Retirement Authority Program (TERA) under Section 4403 of the National Defense Authorization Act for Fiscal Year 1993. This act provided the Secretary of Defense with a "temporary additional force management tool with which to affect the drawdown of military forces." TERA permitted voluntary early retirement for certain military members with as few as 15 years of service--a significant exception to the established 20 to 30 year career length that had been in effect for almost half a century. (Subsequently,

Section 561 of the National Defense Authorization Act for Fiscal Year 1994 extended TERA through Fiscal Year 1999.)

Section 4464 of the 1993 act provided an incentive for eligible personnel to volunteer for this early retirement program. It allowed participants to continue to accrue military service credit during the first five years following military retirement if they entered the civilian work force in jobs broadly classified as public or community service. This five-year opportunity was known as the enhanced retirement qualification period. Documentation of public or community service employment submitted to the Defense Manpower Data Center (DMDC) would qualify participants for a recalculation of military retirement credit at age 62, with a resulting substantial pay increase for life.

A query to the DMDC revealed that 57,693 military personnel retired under TERA. Of particular interest is the fact that only 2,499 (4.3%) of these individuals registered with DMDC as civilian public or community service employees for enhanced retirement qualification (J. Forrest, personal communication, September 23, 2002). The ratio of TERA officers who documented entry into civilian public service was slightly higher than the overall figure (1,229 of 12,790, or 9.6%), yet this was a low response considering the monetary incentive and the fact that an individual who served in the military for 15 years or longer had demonstrated willingness toward public service. Janowitz (as cited in Biderman, 1964) contended,

...public service orientation is an important basis of the choice of a military career... military professionals tend to be recruited from subcultures with strong traditions of public service motivation...the career itself reinforces such motivations (p. 311).

Under the "up or out" promotion process, promotion to the next rank extends the individual's length of service eligibility, or "Mandatory Separation Date" (MSD). For enlisted personnel, the maximum number of years of service allowed for each rank is referred to as the "High Year of Tenure" (HYT), and for officers the same concept is calculated from the "Total Federal Commissioned Service Date" (TFCSA). Failure to be selected for promotion forces an individual to separate from the military at or before the MSD that was established by the individual's latest promotion. Personnel who serve for 20 years or longer are eligible for a pension and retirement benefits. If 20 years of service are not reached, the individual is separated from the military with severance pay, but without a pension or long-term retirement benefits.

Despite having earned a military pension, the majority of military retirees are faced with a midlife military-to-civilian career transition. The first major study of military retirees, conducted by the University of Michigan (1961) for the United States Senate, acknowledged "The military profession does not offer a lifetime career...after 20 or 30 years [the military professional] is certain to be eliminated from his basic occupation" (p. 25-27).

Military retirees receive only a portion of their active duty pay, which is based on year of entry into service, length of service, rank, and other factors. Surprisingly, the traditional "half pay for life" concept dating from the British Army of the 1700s has survived. Stated simply, retired pay is calculated as 50 percent of one's basic pay (excluding other forms of compensation such as special pay and allowances for housing, subsistence, cost of living, etc.) for 20 years

of service. Those who serve longer than 20 years increase the amount of their pensions by 2.5 percent of their basic pay for each additional year of service. Retired pay is maximized at 30 years of service and 75 percent of one's basic pay. Biderman (1964) concluded that the monthly pension check received by most military retirees was seldom sufficient to serve as the recipient's sole source of income, and was probably even insufficient to serve as the major source of income.

McNeil et al. (1983) asserted that the term "retirement" was a misnomer when used to describe military retirees, and that a more accurate description was a change of careers. Draper, Strother, and Garrett (1963) estimated that if military retirees who retired at their maximum career length were in civilian jobs, they would have an average of nearly 15 working years still ahead of them. It is widely and conservatively estimated that two-thirds to three-fourths of military retirees work full time after leaving the uniformed services. Sharp and Biderman (1966, 1967a) found that 96% of retiring individuals planned to enter the civilian labor force.

In making the midlife military-to-civilian career transition, military retirees face some adjustments and accompanying anxieties that have been documented by previous studies. Central to these anxieties is the retiree's almost inalienable identification with the military. While some argue that the military is becoming civilianized through convergence with nonmilitary occupations (Janowitz, 1960; Biderman, 1964; Biderman and Sharp, 1968; Moskos, 1977), many consider the military to be an institution. Moskos (1988) noted that members of an institution "are commonly viewed and regard themselves as being different or apart from the broader society" (p.16). Watson (1963)

referred to the military as a "near total institution" (p. 12). Dunning & Biderman (1973) called the military "an approximation of a total institution" (p.37). Biderman and Sharp (1968) referred to characteristics that separate the military from the rest of society as compared with "other institutions" (p. 382). Biderman (1964) described the military as a "total, isolated institution," adding, "Work, play, eating, sleeping, worship, education, nursing, and burial all tend to take place within the institution and in the company of fellow members. Symbolic as well as physical and interactional arrangements foster isolation from the larger community" (p. 298).

Garber (1971) asserted that the completion of a defined career is evidence that an individual has been socialized into the orientations and value systems that characterize that career. Wolpert (2000) suggested,

Institutions...are meant to socialize--a positive impact--while jails and mental hospitals are intended to resocialize--a negative connotation. It could be argued that when people change jobs the process of being socialized into the new job might in fact be resocializing... (p.111).

Stanford (1971) also considered the midlife military-to-civilian transition a case of resocialization into the larger society, as the individual concludes one career and embarks upon another.

Kilpatrick and Kilpatrick (1979) considered the military to be the epitome of security. Leaving the security of the military institution in which one has become socialized, and facing resocialization into civilian life, is stressful at least and has even been characterized as a crisis (Giffen & McNeil, 1967; Ogburn, Bellino, Williams, & Gordon, 1969; Doherty, 1983). Giffen and McNeil explained that according to

crisis theory, for an experience to be considered a crisis, the individual must perceive it as being emotionally hazardous. Parnes and King (1977) noted that the loss of a job that has been held for a considerable period of time is likely to be a traumatic experience, but that when job loss occurs during middle age it can be catastrophic. McDonald (1977a) also referred to military retirement as a traumatic event, and likened it to cutting the umbilical cord. Drawing from the observations of Druss (1965), Ullmann (1971), and others, McDonald provided a composite, contextual, and concise description of why the preretirement period is often one of crisis or trauma:

Approaching separation from the military heralds a dramatic loss of prestige, power and authority. The service gives the professional military man the opportunity to perform tasks considered important, responsible, creative and demanding. The uniform adds self-respect and meaning to what he is doing. By the time the military professional contemplates retirement, he is accustomed to deference and a panoply of military symbols that command it. He has enjoyed the upward climb, the competition, and the rewards of satisfactory service that have carried him continually higher in his profession. He now faces starting at the bottom, bereft of the commonly accepted myths and symbols of power in the military society. He fears becoming at 45 as awkward as the young recruits he now commands. He feels he is turning from a whale into a minnow. Other intrapsychic problems stem from unfamiliarity with the new world he is about to enter (p. 33).

Commenting on the impact of the loss of the uniform, Frank (1993) offered an analogy: "The superficially trivial shift to civilian attire powerfully subjects [military retirees] to the type of role stripping that medical patients experience when discarding street clothes for hospital gowns" (pp. 230-231).

Ullmann (1971) maintained that military retirees may remain more like soldiers than civilians for several years after leaving military service. Some military retirees may never be able to separate from their identity with the military system (Doherty, 1983). Giffen and McNeil (1967) noted that individuals who responded maladaptively to the retirement crisis presented psychiatric symptoms that ranged from minimal to severe degrees of disability.

Statement of the Problem

The problem is the inability to predict or prevent adjustment problems experienced by retirees during the midlife military-to-civilian transition. It has been widely established that military retirees experience adjustment problems. Biderman and Sharp (1968), in summarizing some of the earliest studies of military retirees, reported that all previous studies indicated substantial problems during the military-to-civilian transition for at least a minority of individuals. McNeil (1976) noted that that efforts had been made to address the problems of the midlife military-to-civilian transition utilizing diverse theories, but that each approach was found lacking in predictive quality; there was still no means of determining who would be affected to a significant degree.

Researchers, among them McNeil (1964), Greenberg (1965), Ostertag (1976), and Doherty (1983), have sought to discover common denominator variables that could be measured and used to help predict or prevent problems experienced by military retirees, or at least minimize those problems through interventions. However, no definitive common denominator of adjustment problems has yet been identified. The recent military-to-civilian transition of the population of early retirees

presents the opportunity to further examine measurable relationships that might contribute to prediction, reduction, prevention, or intervention regarding adjustment problems associated with the midlife military-to-civilian transition. McNeil (1964) conceded that the measurement of adjustment was difficult, but suggested that one way of doing so was to compare an individual with others who were assumed to be similar in most respects. Through comparisons of individuals who have been socialized into the military institution for various lengths of service (i.e., early versus regular retirees), it may be possible to more accurately determine the relationship between certain measures and adjustment.

The problem may exist simply due to insufficient research. In the 1970s, Stanford (1971) referred to published literature on military retirees as "scarce" (p. 37), while Fuller & Redferring (1976) called it "practically nonexistent" (p. 479). In the 1980s, McNeil et al. (1983) referred to the literature as "sporadic, ill-conceived, and limited" (p. 128), and Houghton (1986) described it as "very sparse" and insufficient for generalizing or hypothesizing (p. 31). In the 1990s, McClure (1993) referred to the state of the literature as the "small body of literature on military retirement" (p. 15), and Brunson (1996) used the term "limited" to describe research on how the midlife military-to-civilian transition affects life satisfaction (p. 72). Little has been added to the literature since the turn of the Century. However, during recent years many changes have occurred within the military and civilian workforce that warrant additional research to update the understanding of the current retired military population and their midlife military-to-civilian transition.

More than 40 years ago Biderman (1964) correctly predicted "The retired military population of the future...will differ markedly from that of the present and recent past in such key respects as rank, age, educational attainment, military experience, and physical health" (p. 287). An example that illustrates this point, but one that even Biderman did not foresee, is the increased numbers and expanded roles of females pursuing military careers. Previous research occurred during times when military retirees were assumed to be males. Perreault (1981) described the military retiree population as a "fast-growing group of middle aged men" (p. 2). Garrett's (1961) sample yielded no female non-disability retirees, while Manning's (1979) sample yielded only two, and Backus' (1981) sample yielded only three. Collings (1969), Bruce (1975), Platte (1976), Ostertag (1976), and Knippa (1979) excluded females from their samples, at least partially due to their miniscule numbers. Snyder (1994) noted that female accessions greatly increased after 1970, and that significant numbers of women had only recently (1990s) become eligible for retirement. Today's military retiree population includes more career females who have served in roles such as fighter pilots and ground combatants. This reality was unimaginable to Biderman's generation, but highlights the changing military retiree population and the need for updated research.

Other examples of recent trends that highlight the outdated profile of the studied military retiree population include the proliferation of technology, the advent of the two-income household, the trend toward higher educational levels (officers have not always been required to hold college degrees, as is now the case), and the

reduction in the length of service required to achieve military retirement benefits (i.e., the TERA Program).

Purpose of the Study

The purpose of this study was to continue the research into the subsequent life of military retirees by comparing early retirees with regular retirees; to examine an aspect of adjustment (life satisfaction) that might ultimately contribute to prediction, reduction, prevention, or intervention of adjustment problems associated with the midlife military-to-civilian transition.

Research Questions

This study examined three research questions:

1. Is there a statistically significant difference in the life satisfaction of early retirement military officers compared with the life satisfaction of military officers who retired with regular 20 to 30 year military careers?
2. What can be learned about the military-to-civilian transition of early retirement military officers, given that 95.7% of eligible personnel (90.4% for officers) did not document a transition into civilian public or community service despite incentives?
3. Is there a statistically significant difference in the life satisfaction of early retirement military officers compared with the life satisfaction of early retirement civilian workers?

Definition of Terms

Numerous terms used in the present study and terms from the literature that are cited in the present study require definition. Two fundamental concepts in this study are "retirement" and "early

retirement." These concepts are discussed and defined below, followed by definitions of other important terms.

Differences in the definition of "retirement" exist between civilian and military contexts. Unlike civilian definitions of retirement, most military retirements represent the beginning of a second career rather than the end of the working life. Additionally, adjectives used to describe the timing of retirement differ in meaning, and require clarification. McNeil et al. (1983) noted that age 65 is considered normal retirement age in most occupations, and that retirement before that is considered early. Price, Walker, & Kimmel (1979) considered on-time retirement to be between ages 62 and 65, early retirement to be between ages 55 and 61, and very early retirement to be prior to age 55. These categories would classify almost all military retirements as very early. For example, an individual who retired from the military at age 54 with the maximum career length of 30 years would be classified as a very early retiree by civilian standards. The same individual would be considered an on-time or regular retiree by military standards.

A point of confusion within the literature on military retirement is based on the minimum 20-year service requirement. For example, some sources refer to 20-year military retirements as regular retirements. Other sources refer to 20-year retirements as early if the individual did not serve the maximum number of years allowed for his or her rank, or did not serve the maximum possible career length of 30 years. In the present study, early retirement in the military context refers only to retirements of fewer than 20 years, as allowed under the TERA

Program. Regular retirement refers to the traditional 20 to 30 year career length.

Adjustment. "The variations and changes in behavior that are necessary to satisfy needs and meet demands so that one can establish a harmonious relationship with the environment" (Wolman, 1973, p. 9).

Officer. A commissioned member of one of the five branches of the military services of the United States, in the pay grade of Officer-1 (O-1) and above. Warrant officer and Noncommissioned officer ranks are not included in the present study.

Life satisfaction. Feelings or affective responses to facets of one's life situation (Smith, Kendall, & Hulin, 1969).

Midlife military-to-civilian transition. The process of change experienced by a military retiree which spans the preretirement period (approximately 12 to 18 months prior to retirement) to a postretirement period (approximately five years after retirement) involving reemployment and/or adjustment to civilian life.

Military pension. "A regular payment made by a government to one who has served in its armed forces, or to his widow or dependent relatives. It is a gratuity given to former soldiers or their relatives for reasons satisfactory to the government, whether as compensation for physical injuries, or to relieve want, or purely as a reward" (Glasson, 1918, p. 1).

Military retirement. Post-career status earned through honorable military service over a specified period that affords a pension and benefits.

Military retiree. An individual who earned military retirement status.

Military services. The armed forces of the United States of America: The United States Navy (USN), the United States Army (USA), the United States Marine Corps (USMC), the United States Air Force (USAF), and the United States Coast Guard (USCG). In the present study the five branches of military service are differentiated from the seven branches of the uniformed services of the United States, which include the armed forces plus the United States Public Health Service (USPHS) and the National Oceanographic and Atmospheric Administration Corps (NOAA).

Socialization. "The process in and by which the individual learns the ways, ideas, beliefs, values, patterns and norms of his particular culture and adapts them as a part of his own personality" (Wolman, 1973, p. 350).

Veterans Service Organizations (VSO). A loosely defined category of independent organization comprised of supporters, veterans, active duty personnel, and retirees of the military services, for the purposes of providing various means of assistance and services to veterans and their dependents.

Significance of the Study

This study is potentially important for several reasons. One reason is that past visionaries recommended continuing future research into the midlife military-to-civilian transition. Dunning & Biderman (1973) urged,

For some, apparent success in making the transition undoubtedly masks agonizing doubts and uncertainties. And, for some, the transition is destructive...There appears to be a serious need for continuing research, including interdisciplinary research, into the processes

involved in military retirement and subsequent life career decisions and experiences (p. 37).

One way to conduct research on the midlife military-to-civilian transition is to quantify adjustment through measures of satisfaction (McNeil, 1964, 1975; McNeil & Giffen, 1965a). Manning (1979) recommended further research using different populations of military retirees to determine factors that influence satisfaction in retirement. Using the same measure of satisfaction as did Manning, Brunson (1996) drew comparisons between a sample of military retirees and a sample of short-term veterans who had left military service to pursue civilian careers. Brunson found no significant difference in the satisfaction of these groups. Early military retirees represent a new group with which to compare regular military retirees that is preferable to short-term veterans. TERA retirees are similar to 20 to 30 year retirees in that they demonstrated long-term commitment to military careers. As Gotz and McCall (1979) noted, having served for 10 years provides an inducement to remain in the military for at least 20 years. Therefore, TERA retirees may have been similarly socialized into the military institution, but were different from 20 to 30 year retirees primarily in that their length of military service was less (and their age younger) at the time of transition. Studying the population of early retirees seems to precisely respond to Manning's call for further research using other populations of retirees. By comparing TERA retirees with regular retirees on the basis of satisfaction, it may be possible to gain insight into causes of adjustment problems.

Second, this study might contribute to the knowledge of human development or career development. Milowe (1964) theorized that military service roles place a temporary "pseudomoratorium" on unresolved developmental issues and that a midlife return to "normal" society may trigger "conflicting unresolved developmental problems" within the retiree and family members (p. 106). Thomas (1975) stated that the study of individuals who have made career changes during midlife could add greatly to our knowledge of normal development.

Third, this study will add currency to research on military retirees. Most of the previous research was conducted on individuals who served during the World War II and Vietnam War eras. Therefore, the body of research does not represent the current retired military population.

Fourth, to date there has been no research on the population of TERA retirees. This study will establish baseline data on early military retirees that may aid future researchers.

Fifth, this study will allow comparison between early military retirees and early civilian retirees. Such comparisons are important for the purpose of promoting preventive mental hygiene. Bellino (1970) believed,

Seldom do we find such a large group of people with similar life histories and subculture to study social and personal conflict as we do with the military retirees. We may be able to clarify general trends in the civilian and military retirees by contrasting the attitudes and role changes in the two groups, thereby anticipating individual difficulties (p. 583).

Sixth, military retirees are valuable resources and this study may contribute to understanding about their transition into the

civilian labor force. Draper et al. (1963) recognized that military retirees constituted a substantial segment of the national labor force, and therefore considered military retirees to be a significant subject of study in their own right. Snyder (1994) stated that military retirees were valued citizens, and were of interest because they constituted a part of the attentive public on defense and foreign policy issues. Ullmann (1971) claimed that the development of methods to facilitate the midlife military-to-civilian transition would result in benefits to individual military retirees, to the military services, and to the civilian economy.

Finally, Smith et al. (1969) stated

The study of satisfaction should be able to contribute to the general psychology of motivation, preferences and attitudes...We should not forget that the improvement of satisfaction is of humanitarian value...satisfaction is a legitimate goal in itself. The topic, therefore, is of general importance (p.3).

II REVIEW OF THE LITERATURE

This section presents a post-World War II review of studies and publications pertaining to the midlife military-to-civilian transition. Among the resources used to search for related publications were the following electronic bibliographic databases: ERIC (Education Resources Information Center), PsycINFO (American Psychological Association), Social Sciences Citation Index (The Thomson Corporation), Social Services Abstracts (Cambridge Scientific Abstracts), and Digital Dissertations (ProQuest Information and Learning Company/University Microfilms). Among the keyword descriptors searched were "military," "retire," "officers," and all forms, tenses, combinations, and variations of these terms.

McNeil (1967) stated that military retirement may be studied from several important perspectives. Over the past five decades, military retirement has indeed been studied from different perspectives (i.e., sociology, psychology, gerontology, economics, career development, impact on the military, effect on the military family, etc.). Military retirement has also been studied at different levels (i.e., societal and individual), and in varying scopes (from comprehensive reports prepared by government agencies, to small dissertation studies conducted by single individuals).

The first author to focus attention on post-World War II military retirement from a social impact viewpoint was Biderman (1959), who anticipated that the approaching large-scale retirement of military personnel would present a serious problem if military retirees flooded the civilian labor market with the ability to work for low wages (made possible by their military pensions). The University of Michigan

(1961) was commissioned to conduct the first large-scale, government-sponsored study of military retirees for the United States Senate. The Michigan Study investigated numerous issues pertaining to retirement policies, such as the anticipated increase in the cost of the military retirement system, appropriate methods for making adjustments in retired pay, considerations of a 20 year versus a 30 year retirement policy, the possibility of adopting a contributory military retirement system, and comparisons of the military retirement system with other systems (i.e., the civil service retirement system).

Perhaps of more lasting importance, the Michigan Study included the first systematic survey of the economic position of non-disabled military retirees. It acknowledged to Congress the existence of "special problems of transition," and stated, "It is important both for the nation and for the personal welfare of these people that they are integrated into the civilian labor force as quickly and as effectively as possible" (p.49). The Michigan Study established baseline data on such factors as skills transferability; civilian attitudes toward military retirees; location after retirement; and factors related to employment and earnings such as disabilities, age, education, years of service, rank, dependents, military specialty, area of residence, and the effects of laws (i.e., the Dual Compensation Act).

Since the Michigan Study, the Secretary of Defense has conducted or sponsored periodic research into various aspects of military retirement. For example, a 1964 study, *Medical Care for Retired Military Personnel and Their Dependents*, examined retiree health needs. A 1967 study, *The First Quadrennial Review of Military Compensation* (also known as The Hubbell Report), included an appendix on second

career income of military retirees. A 1978 study, *Military Retiree Survey Report*, investigated retiree employment, income, residence, medical care, and the utilization of commissaries and exchanges.

The most publicized and insightful study into the lives of military retirees, *The Employment of Retired Military Personnel*, was conducted for the United States Department of Labor by Sharp and Biderman (1966) of the Bureau of Social Science Research (BSSR). Known as "the BSSR Study," this three-stage project targeted a sample of 3,350 military retirees and surveyed individuals before, during, and after the midlife military-to-civilian transition to investigate the problems they encountered. A specific objective of the study focused on the transferability of occupational skills from military to civilian employment.

In addition to examining the transfer of military skills and implications of military skill convertibility, the BSSR Study examined numerous other aspects of the midlife military-to-civilian transition. Among these factors were personal characteristics (i.e., branch of service and rank), educational background, social characteristics, family characteristics, ethnic characteristics, retirement pay, preparation for retirement, employment, employment type, civilian jobs, job turnover, income, residence after retirement, attachment to military life, employment plans and perceptions, preferred jobs and employers, employer and counselor evaluation of job seekers, timing of job seeking efforts, use of counseling and information services, placement channels, placement experience, personal and attitudinal characteristics, postretirement assessment, future job and training plans, and retraining needs.

The BSSR Study was significant due to the breadth of information it provided about the retired military population. Two of the most noteworthy findings of the BSSR Study were that 96% of respondents expressed intentions of entering the civilian workforce following military retirement (83% immediately and 13% eventually), and that only 45% of officers and 34% of enlisted personnel engaged in preretirement planning a year or more before military retirement.

Many researchers and observers focused on specific aspects of the midlife military-to-civilian metamorphosis. Much of the research has examined numerous variables, factors, and aspects of the transition, with a view toward understanding the effects of military retirement on the individual. For example, Brunson (1996) investigated 38 independent variables associated with military retirement and their effect on life satisfaction; Stanford (1968) investigated 19 independent variables associated with military retirement and their effect on retirement anticipation. The variables, factors, and aspects studied by individual researchers range from the most obvious (i.e., length of military service, educational level, or rank at retirement), to the most obscure (i.e., whether or not the individual consumed vitamins). Table 1 provides a summary of some of the variables considered within selected previous studies.

McNeil and Giffen (1965a, 1965b, 1967), respectively an Air Force psychiatric social worker and psychiatrist, identified three major stages in the midlife military-to-civilian transition: preretirement, transitional (or role confusion), and stabilization. Much of the literature on military retirees may be categorized within these stages. The present study organizes the literature into similar topical

TABLE 1

Variables Examined by Selected Previous Studies of Military Retirees

| Variable or Aspect Examined | Studies | | | | | | | | | | | | | | | |
|---------------------------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
| Adaptation | | | | | | | | | | | | | X | | | |
| Adjustment to retirement | | | X | | | | | | | | | | | | | |
| Age | X | | | | X | | X | | | | | | | | | X |
| Age at Retirement | | | | | | X | | | | X | | | | | | X |
| Alcohol | | | | | | | | | | | | | | | | X |
| Attitude | | | | X | | | | | | | | | | | | |
| Authority | | | | | | | | | | | | | | | | X |
| Body Age | | | | | | | | | | | | | | X | | |
| Branch of Service | | | | X | | | | | | | | | | | | X |
| Breaks in service | | | | | X | | | | | | | | | | | |
| Career Change (degree of) | | | | | | | | | | | X | | | | | |
| Careers (number of) | | | | | | | | | | | | | | | | X |
| Combat experience | | | | | | | | | | | | | | | | X |
| Community/civic participation | | | | | X | | | | | | | | | | | X |
| Contacts (for second career) | | | | | | | | | | | | | | | | X |
| Coping Styles | | | | | | | | | | | | | X | | | |
| Counseling (use of) | | | X | X | | | | | | | | | | | | |
| Current paid job status | | | | | | | | | | | | | | | | X |
| Dependents (number) | X | | X | | X | | X | | | | | | | | | |
| Difficulties in securing work | X | | | | | | | | | | | | | | | |
| Dogmatism | | | | | | | | X | | | | | | | | |
| Education | X | | X | X | X | X | | | | X | | | | X | X | X |
| Employer & Counselor evaluation | | | | X | | | | | | | | | | | | |
| Employment (degree of) | | | | | X | | | | | | | | | | | |
| Employment average per week | | | | | | | | | | | | | | | | X |
| Employment earnings | | X | | | | | | | | | | | | | | |
| Employment plans & perceptions | | | | X | | | | | | | | | | | | |
| Employment type | | | | X | | | | | | | | | | | | |
| Employment/work status | X | X | | X | | | X | | | | | | | | | X |
| Ethnicity | | | | X | | | | | | | | | | | | |
| Family Characteristics/roles | | | X | X | | | | | | | | | | | | |
| Feeling about complete ret. | | | | | | | | | | | | | | | | X |
| Financial status | | | | | X | | | | | | | | | | | |
| Friendship | | | | | | | | | | | | | | | | X |
| Future job & training plans | | | | X | | | | | | | | | | | | |
| Geographic origins | | | | | | | | | | | | | | | | X |
| Group orientation /identity | | X | | | | | | | | | | | | | | |
| Health | | | | | X | | | | | | | | | | | X |
| Health Service Utilization | | | | | | | | | | | | X | | | | |

Note. A=Garrett (1961), B=Watson (1963), C=McNeil (1964), D=Sharp & Biderman (1966), E=Stanford (1968), F=Garber (1971), G=Fuller & Redfering (1976), H=Ostertag (1976), I=Schiffler (1977), J=Knippa (1979), K=Perreault (1981), L=Larkin (1983), M=Doherty (1983), N=Houghton (1986), O=McClure (1992), P=Brunson (1996)

headings: preretirement, transition problems and adjustment, economic status, the effect on family dynamics, and satisfaction.

Preretirement

In the 1960s, as large numbers of personnel who had entered military service during World War II approached retirement, several military medical and mental clinicians documented observations about the physical and psychological well-being of their patients and clients. Druss (1965), an Army psychiatrist, observed that individuals approaching military retirement experienced anxiety, and that their failure to confront retirement in a direct and constructive manner led to inefficiency, symptom formation, and behavior problems. Milowe (1965), a neuropsychiatrist with the U.S. Public Health Service, witnessed "a significant incidence of onset of psychoneurotic, psychosomatic or psychotic symptomatology during the preretirement years" (p. 102).

Greenberg (1965), an Army psychiatrist, noticed similarities between certain problems experienced by personnel nearing retirement and problems previously described as the old soldier syndrome, which referred to aged, disabled veterans (Patten, 1959, 1960). Greenberg noted that some personnel developed complaints such as anxiety, tension, insomnia, and concentration difficulties; questioned their worth; mourned the approaching loss of their careers; and sometimes exhibited deviant, delinquent, or impulsive behavior. Greenberg also asserted that mid-life depression occurs in military individuals about 10 years before civilians. Greenberg (1966) later asserted, "Severe preretirement psychopathology can develop in patients for whom the Army has become a primary source of gratification for unsatisfied dependency

needs as well as an acceptable structure for the expression and control of aggressive impulses" (p. 488).

McNeil and Giffen (1967) coined the phrase "the retirement syndrome," documenting their observations that among military personnel, "pre-retirement symptoms appear often enough and at times are severe enough to be classified as a classic syndrome" (p.850). McNeil and Giffen observed that symptoms often centered on the cardiovascular system or gastrointestinal tract.

Berkey and Stoebner (1968), Army psychiatrists, documented somatic complaints and symptoms of anxiety and depression in individuals approaching retirement. These manifestations included tearfulness, anorexia, weight loss, insomnia, limited insight, and arrogance.

Several authors cautioned that observations based on clinical samples are not generalizable to all military retirees. Platte (1976) warned, "Data derived from clinical populations fall short of representing the general military retiree population because of sampling bias; the inferences made offer hypotheses to be tested rather than empirically supported theoretical assertions" (p. 260). McClure (1992) observed that early clinical explanations of retiree problems used mental illness models and were based on observations of the minority of military personnel who sought help. McClure felt that clinical explanations promoted the assumption that military retirement was not problematic to individuals who did not seek help, exhibit symptoms, or complain of difficulties. Additionally, McClure argued that clinical explanations of the problems affecting military retirees obscure possible social origins and solutions. Frank (1993) acknowledged the existence of a long-standing tradition within the

military of avoiding any form of outside assistance, and reminded professionals who deal with military retirees that those who seek help are in the minority.

Druss (1965) contended that the major psychological difficulty that confronts retiring military personnel is a sudden and dramatic loss of power and authority. Kilpatrick and Kilpatrick (1979) classified military retirement as a psychological loss, which produces grief or mourning. According to Kilpatrick and Kilpatrick, the resulting reaction-to-loss sequence, consisting of stages of protest, despair, detachment, and recovery, must be worked through in a process known as "grief work" so that the loss may be resolved and placed in its proper perspective (pp. 284-285).

The military itself recognized the importance of preretirement planning sooner than most outside observers. Biderman (1964) and Mailler (1968) traced the military's awareness of the need for preretirement counseling to 1956, when the Department of Defense began a cooperative relationship with the U.S. Employment Service within the Department of Labor. Mailler credited a memorandum of February 13, 1964 from the Assistant Secretary of Defense, Manpower, entitled "Civilian Employment Assistance for Retiring/Retired Military Personnel," as having paved the way for installation-level preretirement counseling programs. Mailler maintained that the memo affirmed the necessity of assistance 12 to 18 months before retirement to permit the individual to plan for his or her postmilitary career.

However, Biderman (1964) charged that despite the fact that the military had acknowledged the importance of preparation for a second career, the problem was approached indirectly and tentatively.

Biderman considered the military's treatment of the second career to be paradoxical in that since the retiree is no longer in military service, his or her subsequent civilian employment is considered to be a private matter outside the military mission. Similarly, McNeil (1976) observed that the military had never been fully committed to individualized preparatory assistance during preretirement.

Recommendations for improved or increased preretirement assistance from the military have been proposed by numerous researchers, including Collings (1969), Manning (1979), Doherty (1983), and Wolpert (1991). Wolpert studied Air Force personnel to determine the impact of a multi-function, preretirement planning program on the military-to-civilian transition. He found that, to a limited degree, preretirement planning leads to higher job satisfaction, which in turn directly affects life satisfaction.

Whether or not the military assists with preretirement planning, each career military person is certain of a future involuntary midlife military-to-civilian transition (Lenz, 1967). Wolpert (2000) observed that military personnel know precisely at which point they will become eligible to retire, and therefore have the opportunity to plan ahead for subsequent civilian employment. McNeil (1976) theorized that the best preretirement planning begins on the day the military career-minded person enters active duty. However, despite the certainty of a future military-to-civilian transition, and awareness of the precise timing of retirement eligibility, only a minority of individuals engage in long-term preretirement planning. Biderman (1964) described preretirement counseling as not being undertaken until the "terminal processing phase of the last assignment" (p. 325). A contributing reason for this

occurrence was highlighted by the BSSR Study, which revealed that 52% of the military retirees surveyed selected their retirement dates only six months or less in advance (Sharp & Biderman, 1966; Dunning & Biderman, 1973). Brunson (1996), whose study was conducted amid the TERA Program, made the point that early retirees miss the chance for preretirement planning due to the unforeseen opportunity of the early retirement option.

Sharp and Biderman (1966, 1967a) and Biderman and Sharp (1968) attributed low rates of preretirement planning to high rates of optimism about the expected ease of transition. Subsequent researchers have offered additional explanations. For example, McClure (1992) attributed low rates of preretirement planning to two factors-- competing needs and rationalization. McClure perceived conflict between the competing need of maintaining a positive image to the self and colleagues (achieved by continuing to put work first to the very end) versus the need to prepare for the future. McClure also perceived the rationalization that concentration on the familiar provides an acceptable excuse for postponing confrontation with the unfamiliar.

Several studies of military retirees have focused on the relationship between preretirement planning and postretirement adjustment and satisfaction. McNeil's qualitative study (1964) of 46 recently retired Air Force officers was the groundbreaking research into this aspect of military retirement. McNeil classified retirees as active planners, passive planners, procrastinators, or nonplanners, based on the amount and type of their preretirement planning in the areas of employment, finances, and residence. McNeil drew conclusions about postretirement adjustment by making observations in the areas of

job satisfaction, standard of living, residence, and family happiness, while taking into consideration age, rank, and type of retirement (voluntary vs. mandatory). Although findings were inconclusive, McNeil asserted that conscientious, specific planning activities that address what the retiree will do and where it will be done decrease anxiety.

Biderman and Sharp (1968) concluded,

Our data confirm that having definite second-career plans, having undertaken training while on active duty, having begun looking for a job before retirement, having undertaken training or educational courses after retirement, and success in the service as evidenced by grade attained and satisfaction with service life all seem to be associated with each other and, of course, with postretirement adjustment (p. 395).

Henry (1978) also concluded that planning and preparing for retirement tended to be supportive of a more favorable midlife military-to-civilian transition.

McClure (1992) discerned that the factor which differentiated the most meticulous planners among the officer retirees was that those who planned well had specific experience in their military careers that was transferable into civilian employment. McClure observed that when military retirees were aware that they lacked a marketable skill, or were unclear about how to translate their experience for civilian employers, planning for the second career was difficult.

Stanford (1971) investigated Army personnel nearing retirement who were experiencing a phase of anticipation or expectation that tends to occur between preretirement planning and adjustment. Stanford concluded that the ease of reintegration into civilian life was related to rank and that retirement was favorably anticipated by many high-ranking Army personnel. Similarly, Fuller and Redferring (1976) examined rank,

number of years retired, and preretirement planning as possible factors affecting retirement adjustment of military personnel. They found that preretirement planning was the only factor that had a significant effect on retirement adjustment and concluded that those who planned well adjusted well, regardless of rank or the length of time they had been retired.

Frank (1993) summarized a range of factors that potentially affected the long term retirement preparations of professional soldiers that did not affect civilians. These include geopolitical shock, high-tech warfare, DoD budget cutbacks, economic uncertainties, and social change. One example of social change that has accompanied the increase of career-minded females in the military, and in turn affects preretirement planning, is the two career family. Frank observed that when both spouses have military careers, and both are officers of the same rank, deciding which spouse's career is more likely to be successful is complicated because there are no clear cues as to the specific factors that result in promotion.

Transition Problems and Adjustment

While the preretirement period affords an opportunity to begin preparations, actual adjustment to the midlife military-to-civilian transition does not truly begin until separation occurs. Despite every military member's foreknowledge of certain eventual separation, military retirement is often experienced as an abrupt change. Drier (1995) described the return to civilian life as "no basic training, no drill sergeant, and no transition period. One day you're in, the next day, you're out--period" (p. 6). While some individuals may experience problems during preretirement, others experience problems after

separation. Bellino (1969), a psychiatrist with the Veterans Administration, observed that often the more severe adjustment problems occur only after the individual has left military service.

McNeil (1964) provided a specific description of what it means for a military retiree to have successfully transitioned and adjusted to civilian life:

To be considered adjusted to his new [civilian] role, the retired officer is expected to give up his military attitudes and all that this implies, secure employment, and in a relatively short time adapt to industrial procedures and norms. He is often considered maladjusted if he remains unemployed, fails to maintain the same standard of living, or insists upon being addressed by his military rank. Little consideration is given to the probability that the retired officer may be quite happy if he performs in a totally different manner from that which society haphazardly expects (pp. 182-183).

McNeil described the midlife military-to-civilian transition as a period of "role confusion," defined as a "bewildering perplexing experience" over the uncertainties of what is expected in civilian life (p. 29). He contended that role confusion is inescapable for all transitioning military retirees.

McNeil and Giffen (1965a, 1965b) elaborated on role confusion as experienced by military retirees and concluded that it implies a lack of motivation or capability to recognize and adjust to new demands, and is intensified because the military retiree must individually establish a pattern to follow. Wolpert (2000) also addressed the midlife military-to-civilian transition in terms of role theory:

It is helpful to discuss psychosocial aspects within the context of role. Role transition, especially the issue of 'role discontinuity,' explains the activity of moving from the military to the civilian world, in particular

the change in job roles... 'Role discontinuity' provides the longitudinal perspective that is crucial to this problem [continued identification with the military role after retirement] because it involves a lengthy transition process (pp. 108-109).

Bellino (1970) stated that retirement is not only a status, but is also a process for the individual. Bellino described the retirement process as "the transition from one period of life to another, leading to new interpersonal and social adjustment" (p. 580).

Several authors have identified problems, stresses, anxieties, and needs of military retirees during the transition and adjustment process. Bellino (1969) itemized seven anxiety-producing problems experienced by military retirees: employment, finances, changing social factors, residence, new household patterns, integration into civilian life, and changing interpersonal relations. Drier (1995) identified five common stresses experienced by military retirees during the job search phase of transition and adjustment: emotional, financial, ego, lack of confidence, and loss of identity. An additional source of stress identified by Strange (1984) was fear of declining masculinity, reinforced by separation from the male-oriented military society. In a study of Air Force officers, Backus (1981) concluded that officers have specific needs during their period of transition and adjustment, namely social and financial status, meaningful interchange with peers, an opportunity to achieve, and sufficient money to maintain their standard of living and finance their children's educations.

The transition and adjustment process often involves relocation. Although relocation is an accepted aspect of military duty, moves are usually based on operational needs; therefore, one's preretirement

location may not coincide with postretirement preference. Frank (1993) described relocation as a source of considerable stress at retirement for military families who are not living where they wish to remain. Frank pointed out that although retirees are allowed a cost-free move to the location of their choosing, no assistance is given for other relocation considerations, such as selling a home, conducting a long-distance job search, or issues presented by career progression in dual-career families. Garrett (1961) observed a tendency for military retirees to relocate based on a preferred change of climate. Biderman (1959) reasoned that military retiree concentrations in certain states or geographical areas appeared to be preferred destinations and referred to these locations as "military elephant graveyards" (p. 87). McDonald (1977b) attributed the clustering of military retirees in certain geographical areas as an attempt to preserve or reestablish their declining group cohesiveness. Biderman & Sharp (1968) reported that there has been speculation that a concentration of military retirees in areas near military installations tends to impact the job placement situation by putting retirees into competition with each other for civilian employment.

Watson (1963) conducted one of the first individual studies of military retirees to examine the occupational and social adjustments of recently retired Air Force officers during the midlife military-to-civilian transition. Retiree adjustments were observed through the reference group orientations (civilian or military) of the subjects. He noted that socialization problems, group identification, and civilian adjustment were counter to military identification. Watson

concluded that despite having made occupational adjustments, recently retired officers continued to identify strongly with the military.

Garber (1971) studied Army retirees to determine relationships between reference group salience (identification) and psychological well-being. For individuals who perceived a loss of prestige in retirement, he observed a positive relationship between civilian reference group salience and well-being. Additionally, he observed a negative relationship between military reference group salience and well-being in retirement. Garber concluded that there is little evidence that identification with the military lessens the impact of the midlife military-to-civilian transition.

Dunning and Biderman (1973) also commented on occupational adjustments and group identification. They asserted that adjustment to civilian life was not solely dependent upon occupational success, and that group identification (a sense of belonging to a group) was important whether it be military or civilian. Many retirees continue to identify with the military through continued use of military facilities. Little (1981) noted that midlife military-to-civilian transitions

...tend to foster reliance on--and attempts to maintain--career friendships. One pattern is largely vicarious, and that is the continued utilization of such military facilities as the exchange, commissary and hospital...they constitute a familiar environment in which the pre-retirement status is still relevant--the courtesies extended to active duty officers, for example, are extended equally to those in retirement...these activities maintain the military community and career friendships in fantasy and also mitigate the alienation of the retired status (pp. 233-234).

Biderman and Sharp (1968) observed, "It is the moderate military 'identifiers'--rather than 'dependents' who rely heavily on continued

military identification--who seem to have greater social adjustment as civilians (the indicator of 'moderate identification' being occasional rather than frequent use of base facilities)" (pp. 394-395).

Little's (1981) observation about group identity highlighted the problem of the military retiree in becoming accepted into new groups. Little contended that entry to existing friendships, associations, or informal organizations was difficult, and that the loneliness experienced in retirement was a cost of the intensity of friendships experienced during military service.

Perreault (1981) made comparisons of self-concept and psychological well-being between a group of retired military officers who had already made the midlife military-to-civilian transition and a group of active duty military officers who were nearing retirement. Perreault concluded that shifts in values and self-concept associated with the midlife military-to-civilian transition may have contributed to emotional distress, and that identification with coworkers appeared to be related to emotional satisfaction.

Berkey (1972) observed transition adjustments of retired military officers and noted that those who retired after failure to achieve promotion to the next rank often considered themselves to be failures. He noted that their previous military career successes do not provide sufficient ego support to counteract feelings of degradation when they retire after having been passed over for promotion. Symptoms were observed among officers of all ranks who did not achieve their promotion goals, but the disproportionately large number of retiring lieutenant colonels who exhibited symptoms led Berkey to define the lieutenant colonel syndrome as a separate rank category of McNeil and Giffen's

(1967) retirement syndrome. Berkey perceived a paradox, in that having failed at their military career goals, there seemed to be a "reverse correlation between rank and the severity of retirement symptoms on one hand, and civilian success and the regaining of personal happiness on the other" (p. 280). This finding was similar to an observation by Garber (1971), who noted that for those who had been relatively unsuccessful in the military, the post-retirement civilian career offered a second opportunity for advancement.

Doherty (1983) examined the psychological factors and coping processes of adaptation to the midlife military-to-civilian transition. Doherty concluded that adaptation was unrelated to socioeconomic status, but that factors such as personality, coping style, coping processes, and factors in place at the time of entry to the military system (such as unresolved adolescent identity struggles) did affect adaptation. Additionally, individuals with stable object relations and strong identities at the time of their entry to the military, who took action early to meet the challenges of military retirement, adapted much better than did those who displayed the opposite characteristics.

Ostertag (1976) examined military retirees to determine the relationship between dogmatism, length of military service, and adjustment. Ostertag found that while a positive relationship did exist between dogmatism and adjustment, it was rank rather than length of military service, that most affected the dogmatic variable. However, it was found that 20 and 30 year military retirees did not differ on measures of dogmatism or adjustment.

Biderman and Sharp (1968) stated "Men who appear to have been 'with it,' so to speak, in their adjustment to the military institution

also tend more frequently to be 'with it' in terms of adjustment in their civilian careers (p. 395). McNeil and Giffen (1965b) noted that most military retirees make relatively good adjustments. Drucker (1968), an acclaimed professor and management consultant, wrote

I have personally observed in the last decade maybe fifty to a hundred military officers, men who reached the rank of commander in the Navy or of colonel in the Army or Air Force and who were retired as not promotable any further, around age forty-eight to fifty. When they first left the service they were pitiful--scared of life, weighed down by the belief that theirs had been a narrow and circumscribed environment, and aware also of being tired and drained. There was not one 'great man' among them--and not many interesting ones either. They were not always easy to place. But the great majority made a successful transition to a different kind of life...Without exception each of these men became years younger, came to life and started to grow again and to contribute (p. 294).

Economic Status

Because most military retirees are not financially able to completely retire at the conclusion of their military careers and must face a midlife military-to-civilian transition, it is not surprising that much of the literature on the midlife military-to-civilian transition has focused on economic status. Biderman (1964) related that the most commonly asked question about military retirees addressed how financially well off retirees were compared with their situations in the military. Aspects of the answer to this question include retirement timing, reemployment, military retired pay, and post-retirement civilian earnings.

Retirement Timing

Having qualified for a retirement pension after serving 20 or more years in the military, each individual must next decide when to

retire. Frank (1993) pointed out that the timing of retirement may be influenced by factors beyond the individual's control (such as with a selective early retirement board). However, for those free to choose, numerous factors influence the retirement timing decision, such as the individual's mandatory separation date, age, promotion possibilities, job satisfaction, family considerations, current or future location, civilian employment possibilities, perceptions of the advantages or disadvantages of longer service versus shorter service, and assignment opportunities.

When to retire is a particularly complex decision due to such considerations as barriers to reemployment (i.e., age or discrimination against the military), the reality of limited life work expectancy, the possibility of starting toward a second pension, and the tradeoffs of pension versus civilian employment. Retirees with 20 years of service receive retirement pay at a rate of 50% of their basic pay. Those who serve longer increase the amount of their pensions by 2.5% of their basic pay for each additional year of service up to their mandatory separation date. Retirees who are able to serve 30 years maximize retired pay at 75% of their basic pay.

Lenz (1967) approached the "when to retire" decision purely from an economic perspective. He considered the issue one of income maximization, stating that the timing was a matter of deciding upon the earliest retirement point that would allow the individual to maximize expected future income. He considered the factors that must be combined to determine income maximization as military active duty pay, military retirement pay, civilian second career pay, and civilian second career retired pay. He observed a lack of significant incentive

for officers to maximize military career length and observed that the majority of military personnel seem to be convinced that short military careers are in their best interest. Lenz added

However, continued military service until retirement is mandatory increases 'risk' in the sense that it increases the odds that, when termination of military employment does finally occur, the retiree will be unable to find civilian second career employment that is both financially rewarding and personally satisfying. Thus, it is difficult to say which course of action, early or later termination of a military career, is the more risky. To a large extent, the solution is dependent on the economic aspiration level of the individual (p. 9).

Dunning and Biderman (1973) concisely summarized the retiree's dilemma in calculating the financial aspects of "when to retire:"

The military professional approaching retirement eligibility faces the issue of weighing the presumed economic advantages of entering the labor market at a relatively young age against the economic advantages of continued military service. As part of this calculus, he must weigh the probabilities of future advancement in the military against the probability of forced retirement a few years after reaching retirement eligibility, as well as the chances that future pay raises will increase his military pay (p. 24).

Many other authors have addressed these considerations. Cooper (1981) concluded that military retirees who served shorter careers generally fared better in terms of post-service earnings than did those who served longer careers. However, post-service earnings alone do not account for all of the factors contributing to economic status.

Collings (1969) concluded,

Stated very simply a 20-year man will make about the same total income for the next ten years in or out of the service. He will experience more difficulty in getting a job ten years hence but will eventually land a job at about the salary

or slightly less than he would get if he retired now plus raises. Ten years hence his increased retirement pay will far outweigh a civilian pension he might earn (p. 167).

Reemployment

Even though some military retirees are financially able to fully retire, cultural and personal stimuli to seek civilian reemployment exist. Dunning and Biderman (1973) acknowledged the existence of the individual's social and psychological need to be engaged in satisfying, status-providing employment. According to Sharp and Biderman (1966, 1967a), 85% of officers in the BSSR Study indicated that holding a job that was respected in the community was important to them. McNeil (1967) observed that American culture and society demand that able-bodied adult males be gainfully employed in productive work. Military retirees who remain unemployed instead of engaging in constructive civilian employment are often perceived to be maladjusted (McNeil, 1964; Ostertag, 1976).

Civilian reemployment is widely accepted to be the most serious issue facing military retirees (Mailler, 1968). However, a societal assumption exists that the many thousands of military retirees who enter the civilian workforce each year will be able to find civilian employment comparable to their military positions in economic and status level. Similarly, there is an expectation on the part of retirees that they will be qualified and able to embark upon second careers with similar work patterns in work considered important and with opportunities for recognition, advancement, regular hours, retirement benefits, and congenial environments (Biderman, 1964, 1969; Sharp & Biderman, 1966, 1967a; Biderman & Sharp, 1968). This optimistic

expectation was attributed by Sharp and Biderman (1966) to the belief that military personnel possess talents and valuable occupational skills that will be as applicable in the civilian workforce as they were in the military.

Dunning and Biderman (1973) stated, "The second-career phenomenon should be examined in the context of a lifetime process of occupational and career decisions in which the military career constitutes a first phase" (p. 29). However, from a career development perspective, not all military retirees possess the career maturity necessary for a smooth transition into the second phase of their working lives. Schlenoff (1977), a counseling psychologist, described the midlife military-to-civilian transition in terms of disrupted career development, and wrote

...the [retiring] officer's level of vocational maturity may be likened to that of an adolescent embarking on the job market. Much like the teenager who finds himself or herself suspended in a state between that of the mature adult with a crystallized vocational self and the dependent child whose needs are, for the most part, met by reliance on a nurturing institution (i.e., parents), the retiring military officer finds that he or she is surprisingly ill equipped to cope with the career-choice process (p. 131).

Biderman (1969) suggested, "The great majority of the men apparently do not visualize a second career which would involve a radical departure from their military work pattern. Most of them rather plan to replicate their service working life in a civilian setting" (p. 430). Biderman (1973) determined that the positions occupied in the civilian workforce by military retirees involved command of far less material and human capital than did their military jobs. Biderman and Sharp (1968) found that the majority of military retirees achieved

satisfactory civilian employment, although often at lower levels of pay and skill utilization than they expected.

McNeil (1976) identified four distinct phases in the reemployment search: A period of optimism (characterized by considerable job-hunting activity), a period of following leads (characterized by increased anxiety over rejections), a period of reduced job-seeking activity (characterized by doubt), and a period of realistic reappraisal (characterized by reduced expectations). Schiffler (1977) studied Air Force retirees to determine career search behavior and found serious transition planning is often delayed until just before retirement, retiring personnel tend to underutilize available employment resources, and military retirees tend to take a passive rather than systematic approach toward civilian employment.

Henry (1978) found that the reemployment situation for retired military officers could be improved before retirement by furthering their formal education; undertaking training oriented to the future civilian occupation; securing civilian employment before leaving the military; acquiring skills and experience that are transferable to civilian employment; selecting retirement location based on employment availability; considering avocational pursuits as potential areas of civilian employment; and emphasizing one's administrative, managerial, communications, and professional skills and qualifications.

A key factor in the reemployment of military retirees is the transferability of job skills. Garber (1971) found the most pronounced asset to the military retiree to be possession of a military skill which is directly transferable into the civilian labor market. Stanford (1971) generalized the transition to civilian employment

should be easy when the retiree continues to work in the same general area as his or her military job description. Draper, Strother, and Garrett (1963) looked at the relationship between the retirees' military and subsequent civilian jobs, and found there to be a clear, significant relationship between the transferability of military skills and equivalent civilian employment. Lenz (1967) said, "To the extent that civilian opportunities stem from specific skill training, it should be expected that those members with skills easily marketable in the civilian economy will tend to voluntarily retire earlier than those members possessing skills not in high demand in the civilian economy" (pp. 13-14). Cooper (1981) found military retirees employed in civilian occupations that were similar to their military occupations to be better off financially than those who were employed in dissimilar fields.

Many military occupational specialties, such as combat arms, have low levels of skill transferability into the civilian labor market (Dunning & Biderman, 1973). As Biderman (1964) observed,

...the institution which the retired military man must leave possesses that near-monopoly over its highly esoteric function...This may be contrasted, say, with the professor whose retirement from a given university does not necessarily preclude his teaching at some other school or engaging in some other academic pursuit (p. 303).

Some military occupational specialties that would seem to have high skill transferability do not cross over as well as expected. These specialties include aviation, engineering, medical, dental, electronic, and electrical and mechanical repair. The BSSR Study revealed that only one-third to one-half of the military retirees surveyed moved into

civilian jobs that were directly comparable to their military specialties (Sharp and Biderman, 1966, 1967b; Biderman & Sharp, 1968; Biderman, 1969).

Low transferability or utilization of military job skills in civilian employment is a source of frustration for many military retirees (Biderman, 1969; Biderman and Sharp, 1968; Ostertag, 1976). But more than a mere frustration, it may also be a source of stress and strain. In their study of Navy personnel, French, Doehrman, Davis-Sacks, and Vinokur (1983) found that two strains most relevant to the work situation, low self-esteem and job dissatisfaction, were related to the stress of low transferability of job skills. Low transferability of job skills was identified by Biderman and Sharp (1968) and Biderman (1969) as perhaps the outstanding area where the military-to-civilian transition was perceived to be unsatisfactory from the point of view of the individual military retirees.

Level of education has been found to be a major attribute in securing civilian reemployment (Biderman, 1969; Lenz, 1967; Collings, 1969). Collings stated that no factor had a larger affect on pay, and particularly starting salary, than education. Stanford (1971) claimed it was generally true that higher ranking individuals obtained better jobs than those of lower ranks. Dunning and Biderman (1973) acknowledged a positive correlation between military rank and level of education attained.

One particular second career field of military retirees that has been the subject of many a masters thesis, doctoral dissertation, or military staff college paper is that of education. For example, Robinson (1972) conducted a review of the literature that included 25

such studies, and others have been conducted in the intervening three decades. Robinson traced the focus of employing military retirees as educators to the 1950s. However, the literature is inconclusive as to the popularity, satisfaction, or effectiveness of military retirees in the field of education. The focus of a specific area of reemployment is outside the scope of the present study.

Barriers

Many military retirees have perceived or experienced barriers to civilian reemployment. Biderman (1973) surmised that individuals who devoted the majority of their adult lives to mastering war-fighting skills were substantially handicapped in assuming other remunerative skills upon retiring from the military. Some barriers are attributable to anti-military feelings, and are beyond the control of the individual. For example, there exists a perception that the entry of military retirees into civilian careers could lead to the militarization of civilian institutions (Biderman & Sharp, 1968; Collings, 1969, 1971; Biderman, 1973). Collings (1971) addressed the barriers of limited life work expectancy, discrimination against the military, and stereotyping.

Other barriers to civilian reemployment may be attributable to behavior and attitudes of individuals. Biderman and Sharp (1968) explained, "Accentuated military virtues can be perceived of as vices; for example, that set of attitudes referred to as 'authoritarianism' and 'jingoism' or those traits that are supposed to comprise the 'military mind'" (p.396). Collings (1971) agreed, noting that military retirees frequently contributed to their own unpleasant stereotype by telling war stories, retaining their military titles, and carrying "an

invisible riding crop" (p. 41). Schlenoff (1977) also noted that use of military titles in a nonmilitary setting can be interpreted by employers as pretentious behavior. Other barriers identified by Collings (1971) include holding an inflated idea of one's value, exhibiting adjustment problems, and bragging about travel.

Schlenoff (1977) noted that military retirees are disadvantaged because they lack affiliation with social groups within the civilian workforce, such as labor unions and professional affiliations, which influence career development and facilitate job changes. Biderman and Sharp (1968) acknowledged the existence of barriers to lateral entry, and noted that non-transferability of seniority status is probably a greater barrier to interpenetrability than non-transferability of skills.

McNeil (1967) suggested that military retirees face barriers in the form of several societal paradoxes. These include being expected to relinquish their earned rank titles (whereas retired physicians, ministers, and college professors retain theirs), accept substandard pay (because other employees do not receive pension income), avoid certain post-retirement government employment opportunities (as dictated by dual compensation laws and conflict of interest provisions), and seek full time reemployment. McNeil elaborated,

There is a decided cultural, familial, and individual push for the military retiree to seek full-time employment. Simultaneously, there is a counterpressure which makes it more difficult for the retiree to secure suitable employment and/or adjust adequately to his retired status. Society insists that the retiree be gainfully employed because he is too young to retire to leisure. Yet, often, he is seen as being too old even to be hired as a new employee.... (p. 246).

Dunning and Biderman (1973) observed, "a tendency to seek replication of the service experience, rooted in pragmatic occupational values, was implicit in the occupational choices of a great many military retirees" (p. 26). Sharp and Biderman (1966, 1967a) found that many military retirees exhibited a preference for affiliation with certain types of large bureaucratic organizations. Ullman (1971) observed, "State and local government are especially attractive to servicemen who have learned to be responsive to expectations without the stimulus of a profit motive" (p. 98). However, Biderman (1964) speculated that a possible barrier to second-careers in local government for military retirees is the difficulty older persons experience in attempting to enter established bureaucracies. He added that the lack of strong local ties and identifications restricted access to public offices and activities in political organizations.

Retired Pay

Examination of the military retirement system has been a visible public issue since the Revolutionary War, largely because of its actuarial valuation. However, Cooper (1981) identified two reasons not related to cost as to why studies are periodically conducted by or for the U.S. Government to examine the economic status of military retirees, with a view toward modifying the retirement system. First, because military careers necessitate a midlife military-to-civilian transition, the outlook for civilian employment and earnings is a potentially important factor affecting retention behavior. Second, the welfare of the nation's military retirees is a social concern due to perceptions that substantial retired pay is necessary to offset the lower earnings prospects of military retirees.

The idea that a purpose of the military retirement pension is to offset lost wages is an established concept. The University of Michigan (1961) acknowledged, "Retired pay today is, in a real sense, a system of deferred pay designed to assist officers and enlisted men make the transition to civilian life and to provide basic economic security in the event that such a transition cannot readily be made" (p. 8). Lenz (1967) noted,

A portion of the military retirement annuity, in effect, serves to compensate the retiree for the economic disadvantages typically encountered in a middle-aged transfer from a military to a civilian occupation. The military retirement annuity is thus an unusual form of income maintenance program, compensating recipients in part for the 'opportunity cost' of pursuing a military career which does not offer a working lifetime of employment (p.4-5).

Dunning and Biderman (1973) stated, "Retired pay gives retirees a level of assured income that distinguishes them from most civilians, providing a certain minimum level of financial security that...affects their labor force behavior" (p. 21).

Earnings

The University of Michigan (1961) study was conducted at a time when it was assumed that military retirees suffered lost income after the transition. Subsequent to the Michigan Study (1961), periodic governmental investigations into the post-service economic and civilian reemployment situations of military retirees have been conducted to monitor this situation. Early examples of these studies include *The Employment of Retired Military Personnel* (1966), *The First Quadrennial Review of Military Compensation* (1967), and the *Military Retiree Survey Report* (1978).

Goudreau and colleagues (1978) examined data from the Internal Revenue Service, Defense Manpower Data Center, and the National Longitudinal Survey to investigate the supposition that military retirees between 1970 and 1974 experienced money income differentials during their second careers compared to civilians with equivalent abilities. Concluding that substantial second career income loss did occur, the authors estimated the differential to be approximately 49% for officers and 40% for enlisted personnel. The researchers attributed approximately 60% of the observed average income differential to choices made by the retirees, such as rate of involvement in the labor force, occupational specialty, and geographical location. The remainder of the differential was attributed to factors linked to military service, such as non-transferability of skills and discrimination against military retirees. Goudreau et al. calculated that after adjusting for factors such as labor force involvement and pensions, military retirees have real incomes higher than their civilian counterparts (44% for officers and 17% for enlisted retirees). The fact that the subjects of this study had been retired for five years or less was noteworthy in light of the findings of Cooper (1981), as will be subsequently addressed.

Similarly, Danzon (1980) analyzed 1970 census data for evidence that military retirees experienced a loss of earning in their second career. Danzon defined this concept as "the difference between the potential civilian earnings of a military retiree, and a career in the military, and what his civilian earnings would have been had he not pursued a military career--his counterfactual earnings" (p. 1). Danzon found the wages of military retirees to be 10 to 20% lower than non-

retired veterans (civilians), but, like Goudreau et al. (1978), concluded that approximately half of the differential was attributable to voluntary choices. Making allowances for these, Danzon estimated the true earnings differential to be less than 10% at the upper extreme, assuming that civilian skills and experience increase over time.

Cooper (1981) compared military retirees to non-retired veterans (civilians) and reported that military retirees in the 1970s fared better in post-retirement civilian employment than originally thought. Cooper discerned that most early studies of earnings and employment included disproportionate numbers of recent retirees who were experiencing the "transition effect," an approximate five-year period during which military retiree earnings are significantly less than their non-retired civilian counterparts (p. vi). Cooper attributed the transition effect to voluntary behavior, such as returning to school, opting to reside in areas with lower cost of living (i.e., near military installations or in the South and West), or choosing employment based upon working conditions rather than pay. Cooper attributed the 25% earnings differential of non-retired veterans over comparably aged and educated military retirees to the fact that military retirees work less. Controlling for the above factors, Cooper concluded that fully employed military retirees earn somewhat more than comparably aged and educated non-retired veterans.

The 1996 Survey of Retired Military Personnel (SRMP) surveyed 24,857 military retirees. Loughran (2001) used the SRMP to compare the earnings of military retirees upon separation with civilians of comparable experience and education, to analyze wage growth of military

retirees during their civilian careers, and to evaluate the economic difficulty of the midlife military-to-civilian transition. Loughran found that relative earnings of military retirees compared to civilians decreased substantially from the 1970s to the 1990s; simultaneously the relative earnings upon retirement successively decreased. Considering these trends, Loughran suggested that a low level of relative wage growth existed for military retirees during the course of their civilian careers. Loughran also determined the wages of recent retirees to be 32% below the mean level for civilians, but suggested that military retirees probably do not consider the civilian mean wage as their point of reference. This judgment was based on the observation that only 30% of military retirees indicated that their civilian earnings were hindered by their military career, and that 91% of military retirees indicated satisfaction with civilian life. Finally, Loughran concluded that the decline in wages upon retirement is more than offset by the military pension.

Family Dynamics

Collings (1971) noted that 86% of retirees still have children at home when they retire. Many authors estimate that military retirees have two or three dependent children. These children may range from infants to young adults (McNeil, 1967).

Military families are exposed to a set of variables and stresses quite different from those of most civilian families (McNeil, 1967; Frances & Gale, 1973). Retirement can be a particularly stressful, hazardous period for the family. Giffen and McNeil (1967) observed that emotional turmoil can permeate the entire structure of a military family and precipitate reactions of various kinds and degrees among all

family members. They documented that family members are vulnerable to symptomatology and that intensity of anxiety may range from "expressions of concern" about the required adjustments, to "rather severe disabling symptoms" (p. 719). Greenberg (1966) observed that adolescent children are vulnerable to acting out their parents' difficulties. Strange (1984) stated that maladjustment within the retired military family is often expressed in depressive syndromes, marital conflict, impulsive and acting-out behavior, alcoholism in the retiree or spouse, and rebellion and drug abuse by the children.

Frances and Gale (1973) felt that the frequent moves associated with the military lifestyle may be very damaging to the utilization of extended family structures, and that when difficulties arise between parents and children it is often because problems with peer relationships have been exacerbated by frequent moves. One factor that could affect family dynamics is if the retiree shortened his or her career due to family pressures--i.e., if the family did not want to move to another assignment location (McNeil, 1967).

Jensen, Lewis, and Xenakis (1986) reviewed the research literature on the prevalence of military family psychosocial dysfunction. Though unable to establish the existence of a unitary "military family syndrome," they determined the potential risk factors to be absence of the father, war and combat stress, geographic mobility, cross-cultural family constellations, authoritarian military structure, and retirement. Wolpert (2000) warned that when the military retiree experiences problems associated with retirement, a natural ripple effect occurs within the family.

Milowe (1964) observed, "the sudden precipitation of psychosomatic, behavioral, psychoneurotic or psychotic reactions in [the retiree's] closest dependent" led to the "majority of referrals for psychotherapy" (p. 101). Frances and Gale (1973) noted that military patients rarely presented themselves for treatment complaining about family interaction, but rather with symptoms localized within one family member. This member was most often the wife, and next most likely were the children. Greenberg (1966) cautioned that when either a husband or wife solicits mental health assistance, "vigilance should be maintained for the possibilities of concomitant conditions in the spouse" (p. 489).

Larkin (1983) observed a positive, significant relationship between perception of life change and utilization of health care services among wives of men who were within four months of retirement from the Army. Though not generalizable, this observation suggested that the stress of impending changes associated with military retirement may have an effect on the health of a military spouse.

Frances and Gale (1973) noted that for some husbands and wives, a military career may legitimize a certain amount of separation from each other that both may unconsciously desire. Greenberg (1966) noted that in such marriages, where the periodic separations imposed by the military career have provided a buffer between the partners, retirement "disrupts the pathological equilibrium" and can produce problems (p. 489). In addition to physical separation, military fathers and husbands may have been more focused on military duties than on family matters (Wolpert, 2000; Frank, 1993; Pollock, 1987; McNeil, 1976). Bellino (1970) noted that civilian life often resulted in the military retiree spending more time at home than ever before, which often caused

adjustment problems for the family. Garber (1971) observed that unemployed retirees experienced a high incidence of family disruption, as well as a higher divorce rate than the general population.

McNeil and Giffen (1965b) reported that wives and children were also subject to a loss of prestige as a result of military retirement. Bellino (1970) also acknowledged that military families hold social position based upon the rank of the military member, and that retirement forces the family into a different subculture with few guidelines. Frank (1993) found that for some military wives, retirement caused grief over the loss of vicarious social status, automatic acceptance, and a natural social group. Frank identified future security, reduced income, and new responsibilities as additional sources of anxiety for wives and family members of military retirees. McNeil (1967) observed that the timing of military retirements often coincided with wives being menopausal or premenopausal. Greenberg (1966) added that when menopause coincided with retirement, further damage to the sense of identity sometimes occurred.

Greenberg (1966) reasoned that wives selected by military husbands who experienced traumatic developmental problems were themselves likely to have experienced trauma or frustration during adolescence. For such women, desire for meaningful identity was fulfilled by the social aspects of the military spouse role. Military retirement terminated this source of gratification, often resulting in extreme adverse reactions.

McNeil (1964) and Giffen and McNeil (1967) acknowledged a direct relationship in society between earnings and social status, and theorized that upward or downward mobility following the midlife

military-to-civilian transition may have precipitated stress for military retirees and their families. They noted that most retirees started at the bottom of the hierarchy in their second careers. This situation resulted in a loss of psychic income and actual earning power. Greenberg (1966) elaborated that in addition to losing psychic income from her husband's position, the wife of a retiree "must enter a strange new environment which at least initially may not be as carefully structured to meet her needs as an Army post, with its host of activities specifically organized to bring together and support families with diverse backgrounds but very common present interests" (p. 489).

Platte (1976) studied Army retirees and wives of Army retirees and hypothesized that the perceived direction of their social mobility (upward, downward, or horizontal) following the midlife military-to-civilian transition was of such importance to them that variation regarding their psychological well-being and marital adjustment would be observable. Platte concluded that the marital adjustment of both retired officers and wives of retired officers was unaffected by perceived direction of social mobility. However, Platte observed that while the psychological well-being of wives did not seem to be affected by social mobility, retired officers who perceived their mobility to be downward were affected psychologically.

French et al. (1983), in their study of Navy personnel, noted, "The greater the increase in social support from the wife, the greater the decrease in marital dissatisfaction and in depression. Other strains, i.e., irritation, somatic complaints, low self-esteem showed trends in the same direction" (p. 94).

Satisfaction

Measures of satisfaction, whether with job, retirement, or life, are useful in assessing how well the military retiree has adjusted to the midlife military-to-civilian transition. Beck (1982) stated that one way of observing how retirement affects psychological well-being is to investigate retirees' satisfaction with retirement. McNeil (1964, 1975) noted that satisfaction provided insight into the extent of adjustment the military retiree had made in the retirement situation. Biderman (1964) asserted that for many of the questions raised about military retirees, a subjective assessment of their satisfaction or dissatisfaction in retirement was more useful than an objective assessment of their financial situation.

Conditions under which a retiree concludes a career have been observed to affect subsequent satisfaction. McNeil (1964), Knippa (1979), Perreault (1981), and McClure (1992) examined the type of retirement from the military (voluntary as opposed to involuntary) as a factor associated with post-retirement life satisfaction. Knippa (1979) found that involuntarily retired military officers experienced significantly less life satisfaction than voluntarily retired officers. This finding was in agreement with Price et al. (1979), who investigated civilian early and on-time retirees and considered voluntary and involuntary retirements with regard to life satisfaction. Price found that their sample of early retirees tended to be less satisfied in retirement than on-time retirees, and that voluntary retirees--regardless of being either early or on-time--were more satisfied than involuntary retirees.

Stanford (1968) and McClure (1992) pointed out that voluntary military retirement may not actually be voluntary. Individuals may volunteer for retirement following incidents that signal career plateau or the effective end of a career, such as pass-overs (non-promotion), undesirable transfers, enforcement of weight and fitness standards, and dead end jobs. Another reason that voluntary retirements may actually be involuntary is because the great majority of officers (all those below general officer rank) face compulsory retirement at or before 30 years of service. Lenz (1967) pointed out that every career military person is certain of a future involuntary retirement from the military.

McClure (1993) observed that individuals go to lengths to construct presentations of their retirement as voluntary: "One focuses upon the voluntary aspects in order to construct the most positive definition of the situation for the self and others" (p. 230). Similarly, Larkin (1983) reported that although practically all individuals sampled indicated that they were retiring voluntarily, many "expressed reasons for retiring that represented a continuum between the choices voluntary and involuntary" (p. 93).

Sweet, Stoler, Kelter, and Thurrell (1989) studied veterans forced into early retirement for medical and other reasons, and observed that consequences of involuntary early retirement from the military include isolation, boredom, depression, and impaired social relationships. They summarized numerous studies that suggested involuntary early retirement might place individuals at higher risk for poor adjustment and life dissatisfaction.

Bruce (1975) surveyed retired officers from the Army, Navy, and Air Force to determine relationships between satisfaction derived from

military careers and from subsequent civilian careers or full retirement. Bruce concluded that a positive relationship existed between satisfaction with a military career and satisfaction with a subsequent civilian career and/or retirement, that retired military officers received greater satisfaction from their military careers than from their subsequent civilian careers (with the exception of pay), and that fully retired military officers and retired military officers working in second careers were equally satisfied with their situations. Henry (1978) reached a similar conclusion, finding that while retired officers tended to require several years to establish themselves in civilian careers, those who were satisfied in the military services tended to be satisfied in their civilian careers.

Knippa (1979) examined the relationship between antecedent and personality variables to life satisfaction of retired military officers. Like Henry, Knippa concluded that reestablishment took time. Knippa identified the first year following military retirement as the most critical for military retirees in reestablishing themselves in the civilian environment. Knippa found that age at retirement, rank, mode of retirement, education, income, perceived control over life events, and a capacity to assume female (in addition to male) roles were all significantly related to life satisfaction. Additionally, Knippa noted that younger, less educated officers were most likely to be affected negatively at retirement.

Perreault (1981) studied Air Force officers who had recently retired, or were eligible to retire, to examine the relationships among midlife transition concerns, degree of career change, measures of self-concept, and perceived psychological well-being. Perreault found that

individuals who experienced more transition changes reported more changes in their self-image, and more dissatisfaction than those who experienced less transition changes.

Houghton (1986) studied retired military officers to examine their life satisfaction; he noted a weak positive correlation between age and life satisfaction that suggested prior life satisfaction was a determinant of current life satisfaction. Houghton observed that fully retired individuals had a significantly higher level of prior life satisfaction than retirees who made a midlife military-to-civilian transition.

Manning (1979) examined the preretirement planning and preparations of military retirees, and investigated factors associated with second career job satisfaction and retirement satisfaction. Manning concluded that the family's satisfaction with retirement was a predictor of the retiree's retirement satisfaction in all areas measured (work, financial situation, health, and people [associations]). Manning found that current income and number of years retired were predictors of satisfaction with financial situation and retirement health, and that preretirement planning and rank attained were predictors of satisfaction with associates.

Brunson (1996) sampled retired alumni from the U.S. Naval Academy who had served as officers in the Navy, Marine Corps, and Air Force to determine the effects of the midlife military-to-career transition on life satisfaction. Brunson compared those who had earned military retirement with those who had pursued civilian careers. He found no significant differences between the levels of life satisfaction of these two groups. His regression analysis of 38 independent variables

revealed that factors related to health, finances, and activities contributed to the measurement of life satisfaction. This supported findings by Barfield and Morgan (1978) that health and income, two factors that are determinants of life satisfaction in general, are also the most powerful, explanatory determinants of retirement satisfaction.

Brunson's (1996) findings that suggested no significant differences existed between the satisfaction of officers who retired from military service and veterans who served as short-term military officers before pursuing civilian careers highlights the need for further comparisons between military and civilians. The importance of comparisons between military and civilian retirees for the promotion of preventive mental hygiene was recognized and urged by Bellino (1970).

Knesek (1992) found no significant difference in the life satisfaction of early and regular civilian retirees. Considering such findings, it is difficult to hypothesize about the relationship between the adjustment problems experienced by retired military officers (indicated by life satisfaction) and the extent of socialization to the military institution (quantified by length of military service).

One point to consider when comparing satisfaction of military and civilian retirees is how these groups compared prior to retirement. Blair and Phillips (1983) found young male and female military personnel to be less satisfied with their jobs than their civilian counterparts. Similarly, Porter and Mitchell (1967) found that officers at all ranks were much less satisfied than their civilian managerial counterparts. Bruce (1975) included in his study a comparison of the satisfactions of the retired military officers he sampled with a previously published sample of civilian industrial

workers. He found that fully-retired military officers received greater satisfaction from all facets of retirement than fully retired civilians.

In using satisfaction as a measure of well-being, there are several things to keep in mind. Beck (1982) stated, "One characteristic of life happiness and life satisfaction items is a negative skew [indication toward dissatisfaction]. National probability samples consistently show only about 10% of the population being dissatisfied or unhappy" (p. 618). Barfield and Morgan (1978) cautioned,

The absolute levels of reported satisfaction should not be taken to indicate lack of problems. It has long been known that expressed satisfaction with self and environment increases with age, independently of the factual situation. Presumably we learn to live with, and even appreciate more, what we have (p. 19).

Summary

The midlife military-to-civilian transition is a multifaceted metamorphosis that presents a variety of adjustment challenges to the military retiree. Aspects of this change process include the preretirement period, transition problems and adjustment, economic status, effect on family dynamics, and satisfaction. Military retirees have been studied from several disciplinary perspectives, at several different levels, and in various scopes. However, authors continue to describe the body of literature as small. Research about military retirees was practically nonexistent prior to 1960, but surged as World War II veterans retired, and later, as Vietnam veterans retired. There has been little research in the past decade. The literature does not reveal any definitive solutions to the inability to predict or prevent

adjustment problems experienced by retirees during the midlife
military-to-civilian transition.

III RESEARCH METHODOLOGY

This section presents the research methodology used in the present study. Descriptions are provided of the targeted population, strategies used in obtaining and refining the sample, characteristics of the research instrument, design, limitations, and data analysis.

Population and Sample of the Study

To define the population and sample of the present study, it is first necessary to identify the military services and briefly describe the rank structure. The branches of military service are the United States Army (USA), the United States Navy (USN), the United States Marine Corps (USMC), the United States Air Force (USAF), and the United States Coast Guard (USCG). The United States Public Health Service (USPHS) and the National Oceanographic and Atmospheric Administration Corps (NOAA) are considered uniformed services of the United States, but these organizations were not included in the present study because they are not armed forces. The rank structure of the military services consists of three tiers: commissioned officers, warrant officers, and enlisted personnel.

Similarities in rank nomenclature across military service lines can cause confusion to the uninformed. For example, the designation of "captain" in the USA, USMC, or USAF is a rank considerably junior to a USN or USCG captain. Similarly, USN and USCG lieutenants may outrank USA, USMC, or USAF lieutenants. Another confusing inconsistency is that majors outrank lieutenants, yet lieutenant generals outrank major generals.

In addition to similarities, differences in nomenclature across military service lines can cause confusion. For example, the USA,

USMC, and USAF have the rank of major, while the USN and USCG equivalent rank is lieutenant commander. The USAF no longer has warrant officer ranks, whereas the other military services do. The USMC designation of "first sergeant" is both a rank and a duty position, while the USAF designation by the same title refers only to a duty position which may be held by individuals in three different ranks. Yet another example of inter-service differences is that the USA, USMC, and USAF have enlisted "ranks," while the USN and USCG have enlisted "ratings."

These examples demonstrate some of the inconsistencies encountered when referring to personnel from more than one military service by rank or rating. Therefore, it is less confusing to refer to pay grades instead of ranks. Pay grades are administrative designations used to standardize pay levels across military service lines. Officer pay grades are designated by the letter "O" followed by a number. For example, O-1 is the pay grade for commissioned officers in the most junior commissioned ranks of second lieutenant and/or ensign, and O-10 is the pay grade for full ("four-star") general and/or admiral. Similarly, warrant officer pay grades are designated by "W" and a number, and enlisted pay grades are designated by "E" and a number.

Using pay grades instead of ranks does not solve all problems of nomenclature, as there are some grades that contain more than one rank. For example, an Army "corporal" and "specialist" are both pay grade E-4, but hold different ranks depending upon whether the individual has earned the leadership designation of "noncommissioned officer."

However, use of pay grades removes most of the confusion, particularly among the officer ranks.

Table 2 shows a comparison of ranks, ratings, and pay grades among the military services, and identifies those that are the focus of this study. The targeted population for this study was the 67,873 commissioned officers, in the pay grades of O-1 and above, who retired from the five branches of the military services of the United States between 1993 and 1999. A subpopulation addressed by this study was the group of 12,790 commissioned officers, in the pay grades of O-1 and above, who retired early under the TERA Program between 1993 and 1999. Table 3 presents demographic data for the subpopulation consisting of 55,083 military officers who retired between 1993 and 1999 with 20 years of service or longer. Table 4 presents demographic data for the subpopulation consisting of 12,790 military officers who retired between 1993 and 1999 with longer than 15 years, but less than 20 years of service, under TERA. Table 5 presents demographic data for the early retirement military officers who documented entry into civilian public service during the enhanced retirement qualification period.

Two methods of sampling, using five strategy initiatives, were undertaken to acquire survey respondents for the sample. Methods included the distribution of a paper form of the survey to potential respondents, and the directing of potential respondents to an electronic form of the survey. The five strategy initiatives consisted of attempts to reach potential respondents through governmental agencies, Veterans Service Organizations (VSOs), notices posted on military-related internet websites, articles published in military newsletters, and purchased advertising in periodicals likely to be seen by a large

TABLE 2

Comparison of Ranks, Ratings, and Pay Grades of the Military Services

| PAY GRADE | USAF | USA | USCG | USMC | USN |
|-----------|--------------------|--------------------|-------------------------|--------------------|-------------------------|
| O-10 | General | General | Admiral | General | Admiral |
| O-9 | Lieutenant General | Lieutenant General | Vice Admiral | Lieutenant General | Vice Admiral |
| O-8 | Major General | Major General | Rear Admiral Upper Half | Major General | Rear Admiral Upper Half |
| O-7 | Brigadier General | Brigadier General | Rear Admiral Lower Half | Brigadier General | Rear Admiral Lower Half |
| O-6 | Colonel | Colonel | Captain | Colonel | Captain |
| O-5 | Lieutenant Colonel | Lieutenant Colonel | Commander | Lieutenant Colonel | Commander |
| O-4 | Major | Major | Lieutenant Commander | Major | Lieutenant Commander |
| O-3 | Captain | Captain | Lieutenant | Captain | Lieutenant |
| O-2 | First Lieutenant | First Lieutenant | Lieutenant Junior Grade | First Lieutenant | Lieutenant Junior Grade |
| O-1 | Second Lieutenant | Second Lieutenant | Ensign | Second Lieutenant | Ensign |

Note. The present study is limited to the ranks shown above. Changes in ranks, ratings, and pay grades have occurred during the careers of participants in this study. This table shows the designations in use at the time of this writing. It is for general illustration and does not include all ranks (i.e., the First Sergeant rank/designation), special ranks or ratings held by a single individual (i.e., Chief Master Sergeant of the Air Force), or wartime only ranks (i.e., Fleet Admiral).

TABLE 2 (Continued)

| PAY GRADE | USAF | USA | USCG | USMC | USN |
|-----------|------------------------|------------------------------------|-----------------------------|---|-----------------------------|
| W-5 | N/A | Chief Warrant Officer Five | Chief Warrant Officer Five | Chief Warrant Officer Five | Chief Warrant Officer Five |
| W-4 | N/A | Chief Warrant Officer Four | Chief Warrant Officer Four | Chief Warrant Officer Four | Chief Warrant Officer Four |
| W-3 | N/A | Chief Warrant Officer Three | Chief Warrant Officer Three | Chief Warrant Officer Three | Chief Warrant Officer Three |
| W-2 | N/A | Chief Warrant Officer Two | Chief Warrant Officer Two | Chief Warrant Officer Two | Chief Warrant Officer Two |
| W-1 | N/A | Warrant Officer One | Warrant Officer | Warrant Officer | N/A |
| E-9 | Chief Master Sergeant | Command Sgt. Major, Sergeant Major | Master Chief Petty Officer | Master Gunnery Sergeant, Sergeant Major | Master Chief Petty Officer |
| E-8 | Senior Master Sergeant | Master Sergeant, First Sergeant | Senior Chief Petty Officer | Master Sergeant, First Sergeant | Senior Chief Petty Officer |
| E-7 | Master Sergeant | Sergeant First Class | Chief Petty Officer | Gunnery Sergeant | Chief Petty Officer |
| E-6 | Technical Sergeant | Staff Sergeant | Petty Officer First Class | Staff Sergeant | Petty Officer First Class |
| E-5 | Staff Sergeant | Sergeant | Petty Officer Second Class | Sergeant | Petty Officer Second Class |
| E-4 | Senior Airman | Corporal, Specialist | Petty Officer Third Class | Corporal | Petty Officer Third Class |
| E-3 | Airman First Class | Private First Class | Seaman | Lance Corporal | Seaman |
| E-2 | Airman | Private | Seaman Apprentice | Private First Class | Seaman Apprentice |

TABLE 3

Military Service Active Duty Commissioned Officer Regular (20+ Year)
Retirements, Fiscal Years 1993-1999, by Service Branch (SB) and Pay
Grade (PG) (N=55,083)

| SB | PG | Totals By Fiscal Year | | | | | | | TOTAL |
|------|-------|-----------------------|-------|-------|-------|-------|-------|-------|--------|
| | | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | |
| USAF | O-3 | 715 | 498 | 334 | 326 | 258 | 180 | 86 | 2,397 |
| | O-4 | 1,170 | 1,033 | 653 | 690 | 682 | 535 | 512 | 5,275 |
| | O-5 | 2,065 | 874 | 929 | 1,070 | 1,127 | 1,179 | 1,128 | 8,372 |
| | O-6 | 800 | 815 | 579 | 629 | 716 | 677 | 535 | 4,751 |
| | G O* | 55 | 47 | 49 | 40 | 56 | 36 | 30 | 313 |
| | TOTAL | 4,805 | 3,267 | 2,544 | 2,755 | 2,839 | 2,607 | 2,291 | 21,108 |
| USA | O-1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| | O-2 | 2 | 11 | 4 | 10 | 8 | 5 | 2 | 42 |
| | O-3 | 134 | 130 | 136 | 103 | 92 | 72 | 72 | 739 |
| | O-4 | 809 | 800 | 616 | 558 | 433 | 271 | 287 | 3,774 |
| | O-5 | 1,453 | 1,033 | 1,039 | 649 | 824 | 965 | 974 | 6,937 |
| | O-6 | 949 | 708 | 603 | 437 | 522 | 569 | 576 | 4,364 |
| | G O* | 42 | 54 | 56 | 37 | 44 | 37 | 48 | 318 |
| | TOTAL | 3,389 | 2,736 | 2,455 | 1,794 | 1,923 | 1,919 | 1,959 | 16,175 |
| USCG | O-2 | 0 | 1 | 2 | 3 | 2 | 0 | 0 | 8 |
| | O-3 | 12 | 15 | 18 | 30 | 27 | 19 | 21 | 142 |
| | O-4 | 22 | 20 | 30 | 53 | 42 | 41 | 42 | 250 |
| | O-5 | 37 | 55 | 31 | 66 | 47 | 60 | 60 | 356 |
| | O-6 | 31 | 64 | 66 | 76 | 74 | 69 | 33 | 413 |
| | G O* | 4 | 6 | 2 | 5 | 5 | 5 | 3 | 31 |
| | TOTAL | 106 | 161 | 149 | 233 | 197 | 194 | 160 | 1,200 |
| USMC | O-2 | 3 | 6 | 1 | 2 | 1 | 1 | 0 | 14 |
| | O-3 | 60 | 74 | 56 | 61 | 57 | 41 | 35 | 384 |
| | O-4 | 168 | 226 | 138 | 160 | 123 | 153 | 113 | 1,081 |
| | O-5 | 130 | 124 | 132 | 179 | 177 | 177 | 188 | 1,107 |
| | O-6 | 60 | 71 | 68 | 80 | 92 | 89 | 81 | 541 |
| | G O* | 6 | 16 | 6 | 6 | 9 | 11 | 9 | 63 |
| | TOTAL | 427 | 517 | 401 | 488 | 459 | 472 | 426 | 3,190 |
| USN | O-2 | 2 | 5 | 1 | 5 | 3 | 2 | 3 | 21 |
| | O-3 | 225 | 211 | 179 | 182 | 194 | 274 | 233 | 1,498 |
| | O-4 | 773 | 731 | 381 | 322 | 342 | 348 | 284 | 3,181 |
| | O-5 | 706 | 935 | 937 | 494 | 549 | 611 | 623 | 4,855 |
| | O-6 | 535 | 635 | 665 | 402 | 421 | 513 | 422 | 3,593 |
| | G O* | 33 | 25 | 44 | 39 | 39 | 37 | 17 | 262 |
| | TOTAL | 2,274 | 2,559 | 2,207 | 1,444 | 1,548 | 1,785 | 1,593 | 13,410 |
| | TOTAL | 11,001 | 9,240 | 7,756 | 6,714 | 6,966 | 6,977 | 6,429 | 55,083 |

Note. *G O=General Officer pay grades (O-7 - O-10)

Source: Defense Manpower Data Center (2005)

TABLE 4

Military Service Active Duty Commissioned Officer Temporary Early Retirement Authority Program Retirements, Fiscal Years 1993-1999, by Service Branch and Pay Grade (N = 12,790)

| PAY GRADE | Service Branch | | | | | TOTAL |
|-----------|----------------|-------|------|------|-------|--------|
| | USAF | USA | USCG | USMC | USN | |
| O-1 | 0 | 1 | 0 | 0 | 0 | 1 |
| O-2 | 5 | 10 | 3 | 2 | 2 | 22 |
| O-3 | 1,081 | 422 | 17 | 3 | 280 | 1,803 |
| O-4 | 3,429 | 3,015 | 32 | 92 | 2,862 | 9,430 |
| O-5 | 382 | 605 | 11 | 13 | 255 | 1,266 |
| O-6 | 13 | 199 | 0 | 0 | 55 | 267 |
| O-7 | 0 | 1 | 0 | 0 | 0 | 1 |
| TOTAL | 4,910 | 4,253 | 63 | 110 | 3,454 | 12,790 |

Note. Source: Defense Manpower Data Center (2005)

TABLE 5

Military Service Active Duty Commissioned Officer Temporary Early Retirement Authority Program Retirements Earning Enhanced Retirement Credit, by Service and Pay Grade (N = 1,229)

| PAY GRADE | Service Branch | | | | | TOTAL |
|-----------|----------------|-----|------|------|-----|-------|
| | USAF | USA | USCG | USMC | USN | |
| O-1 | 0 | 0 | 0 | 0 | 0 | 0 |
| O-2 | 1 | 0 | 0 | 0 | 0 | 1 |
| O-3 | 88 | 51 | 3 | 0 | 23 | 165 |
| O-4 | 360 | 290 | 4 | 14 | 265 | 933 |
| O-5 | 28 | 55 | 1 | 1 | 20 | 105 |
| O-6 | 0 | 25 | 0 | 0 | 0 | 25 |
| O-7 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 477 | 421 | 8 | 15 | 308 | 1,229 |

Note. Source: Defense Manpower Data Center (2005)

number of retired officers. These measures are described in more detail.

Computer based media such as electronic mail ("email") and the World Wide Web ("internet") were not widely used by the retired generations sampled by the most recent previous studies on military retirees. However, most individuals who retired from the military between 1993 and 1999 are technologically oriented to the extent that these media are now the most practical, efficient means of contacting potential respondents and administering surveys.

In preparing to collect the sample, the researcher formatted an electronic form of the survey and placed it on the internet via a commercial online survey service. This service enabled real-time monitoring of response counts and continuous tabulation of data. Concurrently, the researcher created an internet website to provide information about the present study to potential respondents. A link on the researcher's internet website to the uniform resource locator (URL) of the online survey facilitated the directing of potential respondents to the electronic survey for inspection and self-administering.

Selected previous studies (to which comparisons with the present study were planned) confined their samples to retired officers in pay grades O-1 and above. Bruce (1975) actually confined his sample to pay grades O-4 and above. Therefore, the sample for the present study was limited to officers in pay grades O-1 and above.

Because of the inability to restrict access to the online survey, explicit instructions were prominently displayed on the researcher's internet website to eliminate viewers who did not fit the pay grade and

retirement year criteria for the study. As a second screen, the survey itself was designed to include forced response items for the specific pay grades and retirement years of interest only. Therefore, any individuals who may have attempted to take the survey without reading the instructions were made aware that they did not fit the profile of the targeted population.

The success of some early previous studies that focused on military retirees was made possible through governmental sponsorship or support. However, governmental assistance for private research has evidently been difficult to obtain for quite some time. Garrett (1961) was denied support, even though no similar previous research had been conducted and public awareness of the imminent World War II retirement "hump" had been raised. The advent of the Privacy Act of 1974 further complicated the possibility of support, as this legislation prohibited governmental agencies from disclosing such information: "No agency shall disclose any record...by any means of communication to any person, or to another agency...." "Record" was defined as "any item...about an individual that is maintained by an agency...." With knowledge of this legislation, the researcher queried the Defense Manpower Data Center (DMDC) about the possibility of obtaining governmental assistance while complying within the law. The DMDC was asked to address and mail postage paid surveys provided by the researcher to TERA retirees, thereby maintaining strict confidentiality of personal information. Although the request was forwarded through DMDC channels for consideration, it was ultimately denied.

The TERA Program office at DMDC maintains an internet website to provide early retirement military officers with certain information

about the program. A request to DMDC for permission to publicize the present study on the TERA internet website was denied. A similar request to the Department of Veterans Affairs to publicize on their internet website was also denied. Collings (1969) noted that a researcher without government support may find securing names and addresses to be a difficult challenge. The present study confirmed Collings' observation that respondents are difficult to obtain; the absence of Department of Defense sponsorship or support increased the researcher's task of collecting a sample.

Veterans Service Organizations (VSOs) were viewed as networks through which potential respondents might be reached, as many retired military officers are members of these organizations. Several large VSOs affiliated with the different military services were targeted to help facilitate collection of a sample representative of all military services. Collings (1969), Bruce (1975), Henry (1978), Manning (1979), and Knippa (1979) all found The Retired Officers Association (TROA), later renamed the Military Officers Association of America (MOAA), to be the best unofficial organization through which to identify and contact military retirees. MOAA is the nation's largest military officer association, claiming 380,000 members from all of the uniformed services. MOAA is organized into state councils, and approximately 400 local chapters.

The researcher contacted MOAA about the possibility of acquiring assistance (at the national organizational level) that would enable distribution of surveys to members, as MOAA had provided for the aforementioned researchers. Unfortunately, current MOAA policies

prohibit such assistance. A subsequent request to publicize the present study on the MOAA internet website was also denied.

Alternatively, the researcher used the contact information provided on the MOAA internet website to submit an appeal for assistance, via email, to 393 local (regional) MOAA chapters (see APPENDIX C, F, and G). The appeal provided information about the present study, and asked each chapter to publicize the survey to its members by such methods as forwarding the researcher's email request to chapter members, announcing the survey at chapter meetings, posting a link to the researcher's internet website on the chapter's own internet website, publishing information about the present study (to include the URL of the researcher's internet website) in the chapter's newsletter, or allowing the researcher to send paper copies of the survey to the chapter for distribution to any members who fit the study criteria. For instances in which email transmission of the appeal to a chapter was unsuccessful, a letter version of the appeal was mailed to that chapter via United States Postal Service (see APPENDIX D).

Numerous MOAA chapter representatives responded to the researcher's request for assistance. Many chapters posted links to the researcher's internet website on their own internet websites, and many chapters published the URL of the researcher's internet website in their newsletters. Responses to the electronic survey began to accumulate almost immediately. However, many chapters reported that their membership included very few, if any, members who retired between 1993 and 1999. Additionally, there were many chapters that did not respond to the researcher's appeal. Only two chapters requested paper forms of the survey, and only nine paper survey responses were ever

returned to the researcher, despite the provision of pre-addressed, postage paid envelopes.

Having observed the strengths of the electronic survey method, namely speed, economy, and automated tabulation, the researcher abandoned efforts to further distribute the paper form of the survey. Because the survey was primarily conducted via the internet, it was not possible to report a traditional response rate for this survey.

Procedures similar to those previously described for MOAA chapters were repeated with other VSOs, minus the offer of providing paper forms of the survey. These organizations included both chapters of the American Military Retirees Association (AMRA), 123 chapters of the Association of the United States Army (AUSA), 215 chapters of the Navy League of the United States (NLUS), eight regional divisions of the Marine Corps League (MCL), 90 chapters of the Air Force Association (AFA), 15 area contacts of the Coast Guard Sea Veterans Association (CGSVA), and nine subordinate councils of the recently formed Commandant of the Coast Guard National Retiree Council (CCGNRC). The CCGNRC was the only national-level organization that agreed to publicize the present study on their internet website. In all, 855 VSO chapters, councils, or divisions were contacted and asked to publicize the survey to their members. Many of these organizations complied with these requests through the various methods suggested. Table 6 summarizes the VSOs contacted for obtaining the sample.

Retiree newsletters were considered to be a media through which military retirees could be recruited as respondents for the survey. The editors of the USCG *Evening Colors*, the USN *Shift Colors*, and the USAF *Afterburner* retiree newsletters were contacted with requests to

TABLE 6

Summary of Veterans Service Organizations Contacted for Obtaining the Sample

| Veterans Service Organization | Members | Units Contacted |
|---|---------|------------------|
| Military Officers Association of America (MOAA) | 380,000 | 393 chapters |
| American Military Retirees Association (AMRA) | 14,500 | 2 chapters |
| Association of the United States Army (AUSA) | 106,300 | 123 chapters |
| Navy League of the United States (NLUS) | 75,000 | 215 chapters |
| Air Force Association (AFA) | 142,000 | 90 chapters |
| Marine Corps League (MCL) | 56,000 | 8 divisions |
| Coast Guard Sea Veterans of America (CGSVA) | 250 | 15 area contacts |
| Commandant of the Coast Guard National Retiree Council (CCGNRC) | N/A* | 9 councils |
| | TOTAL | 855 units |

publicize the survey. The USCG posted a prominent notice about the survey in *Evening Colors*, while the other services denied the requests. Additionally, the *Randolph Air Force Base Retiree Newsletter* (San Antonio, Texas), which serves the highest concentration of military retirees in the country (Frank, 1993), also denied a request from the researcher to publicize the survey. No other installation-level newsletters were approached.

The researcher posted notices on several military-related internet discussion boards to direct potential respondents toward the online survey. There was no noticeable rise in survey responses attributable to these postings. However, one particular military-

related internet website emerged as the single most productive means of recruiting survey respondents for the present study. The Military Advantage (Military.com) internet website claims 4,000,000 subscribed members, and is described as "the largest online military destination, offering free resources to serve, connect, and inform the 30 million Americans with military affinity, including active duty, reservists, guard members, retirees, veterans, family members, defense workers and those considering military careers" (Military.com internet website). Correspondence with a director of Military Advantage led to advertisement of the survey as a news item in their October, 18, 2004 weekly electronic newsletter, *Military Report*. In the 24-hour period following electronic publication of the *Military Report* article, the count of online survey responses increased by more than 600. In the subsequent 24-hour period, another 100 responses had been received.

The researcher's final strategy to promote participation in the survey was through purchased advertising in a publication likely to be seen by a large number of military retirees. The researcher selected *Military Officer* magazine, published by MOAA, which has a circulation of 390,000. An ad was published in the December 2004 issue (see APPENDIX E). However, within the six week period following publication of the ad, less than 100 survey responses were received that could have possibly been attributed to it. Due to the expensive nature of published advertising, and the relatively small response attributable to it, purchased advertising was restricted to this single transaction.

Sampling via the online survey was conducted from September 23, 2004, until February 23, 2005. During this five month period the researcher's internet website was accessed by more than 2,500 unique

viewers. A total of 1,210 responses from individuals purporting to be military officers who retired between 1993 and 1999 were received. Of these, 139 respondents indicated that they were TERA retirees.

After data collection, several quality control measures were implemented to screen the 1,210 responses and produce a usable sample. The first measure was to eliminate responses from individuals who indicated that they had retired from the Reserves and National Guard. With some exceptions, individuals serving with the Reserves and National Guard usually hold full time civilian jobs, and therefore avoid the midlife military-to-civilian transitions experienced by retirees from active duty (who may have never worked in a civilian environment). As Biderman (1964) noted, "Reservists who did not remain on active duty are again a different type from the men retiring after twenty or more years of active duty..." (p. 297). Robinson (1972) excluded retired reservists, having concluded that their measures of satisfaction levels might be different from those retired from active duty.

In addition to eliminating responses from individuals who indicated that they had retired from the Reserves or National Guard, responses were eliminated if they *appeared* to indicate retirement from reserve duty rather than from active duty. For example, responses were eliminated from the sample if they indicated that individuals had worked in their current civilian jobs for a longer period of time than they had been retired from the military. Such situations would only have been possible with reserve duty. Additionally, responses were eliminated from the sample if the years of service at which individuals retired exceeded the maximum length of active duty service allowed for

the pay grade indicated. Such situations may have indicated retirement from reserve duty. Actions to remove reservists from the sample increased the probability that only those who retired from active duty remained.

Responses from individuals who were not regular retirees or TERA retirees were eliminated from the sample. These included cases in which the respondents retired with less than 15 years of service, or in which individuals indicated that retirement was for medical reasons. Most retirees with short lengths of service represent disability-related retirements. It was felt that individuals with disability-related retirements might have measures of satisfaction levels different than regular or TERA retirees.

Responses that did not indicate a pay grade were eliminated from the sample. Response options for pay grade on the survey were limited to commissioned officer grades (O-1 and above). Survey responses that did not indicate one of these options were assumed to be submitted by warrant officers or noncommissioned officers. It was felt that individuals who did not retire with officer rank might have measures of satisfaction levels different than retired commissioned officers. Another reason for eliminating these responses was that several previous studies with which comparisons might be drawn used samples limited to retired officers in pay grades O-1 and above. Similarly restricting the sample for the present study therefore made comparisons more appropriate.

Only one respondent did not indicate a branch of service. This response was eliminated from the sample, as it may have been from an individual retired from the USPHS or NOAA (which are uniformed

services, but not military services). Finally, responses were eliminated from the sample if the measurement instrument portion of the survey had not been completed. Several respondents completed only the demographic items, which rendered their responses unusable for purpose of the study.

After screening for the above situations, the total responses were trimmed to a usable sample of 946 (a 78 percent usable response rate), which included a subset of 122 TERA retirees. This sample size exceeded the traditional minimum sample size of 30 suggested by Gall, Borg and Gall (1996). Sudman (1976) stated "A general rule is that the sample should be large enough so that there are 100 or more units in each category of the major breakdowns and a minimum of 20 to 50 in the minor breakdowns" (p. 30). By these criteria, the usable sample size obtained was adequate. Table 7 provides a profile of the retired officer usable sample.

In addition to size, it is logical that a representative sample of the population of retired military officers should include early and regular retirees from all branches of the military services, retirees from the full range of commissioned officer pay grades, retirees residing in a wide range of geographic locations, retirees who documented entry into civilian public or community service, and retirees who entered other (private sector) civilian careers. The usable sample of 946, and the subset of 122 TERA retirees, included retired officers from all branches of the military services. All officer pay grades O-2 and above were represented in the sample, although obviously no general officers were among the early retirees. (Very few individuals retire at the grade of O-1 since most are

TABLE 7

Profile of Retired Officer Usable Sample (n = 946)

| | | Regular (20+ Year) Retirees | Early (15 to <20 Year) Retirees |
|------------------------------|--------|-----------------------------------|---------------------------------------|
| Branch of Service | USAF | 196 | 43 |
| | USA | 239 | 36 |
| | USCG | 120 | 7 |
| | USMC | 97 | 4 |
| | USN | 172 | 32 |
| Pay Grade | O-1 | 0 | 0 |
| | O-2 | 3 | 3 |
| | O-3 | 88 | 14 |
| | O-4 | 204 | 90 |
| | O-5 | 281 | 12 |
| | O-6 | 213 | 3 |
| | *G O | 35 | 0 |
| Gender | Male | 790 | 111 |
| | Female | 34 | 11 |
| Public Service Employment | No | 607 | 94 |
| | Yes | 217 | 28 |
| | **ERQP | N/A | 14 |

Note. *G O = General Officer Pay Grades (O-7 - O-10)

**ERQP = Enhanced Retirement Qualification Period participants

promoted to the grade of O-2 before they become eligible to retire as officers.) Inclusion of the zip codes in the demographic portion of the survey made it possible to determine that respondents resided in 47 of the 50 states, with only Montana, South Dakota, and Vermont not represented. Responses from 10 retirees living outside the United States were received. Lastly, responses were received from individuals who documented entry into civilian public or community service, and retirees who entered other civilian careers. Thus, the sample was

considered to be sufficiently large and sufficiently representative for use in the study.

Instrumentation

The *Publication Manual of the American Psychological Association* (APA, 1994) urged researchers to report similarities and differences with the work of others. Because previous studies of military retirees differed widely in perspective, level, scope, aspect, and methodology, an initial study of early military retirees should duplicate some previously examined details in order to establish basis for comparison. The literature review revealed that several researchers utilized the same measurement instrument to examine post-retirement adjustment of military retirees--the Retirement Descriptive Index (RDI).

Despite the fact that most military retirees do not immediately enter an actual state of retirement, use of the RDI has been deemed an appropriate measure of life satisfaction for this population. Previously, Robinson (1972), Bruce (1975), Manning (1979), and Brunson (1996) used the RDI to assess the life satisfaction of samples of retired military officers. Additionally, Knesek (1992) used the RDI to compare the life satisfaction of civilian early retirees with civilian regular retirees. Use of the RDI in the present study enabled comparisons with previous studies between early military retirees and regular retirees, as well as between early military retirees and early civilian retirees.

Smith (1992) stated, "The purpose of the RDI is to assess the retiree's satisfaction with his or her retirement situation" (p.423). Smith et al. (1969) developed the RDI as a parallel instrument to their Job Descriptive Index (JDI) through extension of the methods used to

develop the JDI. The RDI is a self-report instrument that assesses life satisfaction across four scales: Activities, Finances, Health, and People (associations).

The format of the RDI is a 63-item checklist consisting of adjectives and short phrases that describe an aspect of retirement. The Health scale contains nine items, while the other three scales contain 18 items each. Respondents indicate "Y" (yes) to indicate that an item describes the particular aspect of the respondent's retirement situation, "N" (no) to indicate that an item does not describe the particular aspect of the respondent's retirement situation, or "?" (could not decide) if the respondent was unable to decide if the item describes the particular aspect of his or her retirement situation.

Direct scoring of the RDI scales is accomplished through a system of revised weights. A weight of "3" is scored for a response of "Y" to a positively stated item, or for a response of "N" to a negatively stated item. A weight of "1" is scored for a response of "?". A weight of "0" is scored for a response of "Y" to a negatively stated item, or for a response of "N" to a positively stated item. Smith et al. (1969) provided detail as to why a "could not decide" response is scored as 1 and a negative response is scored as 0:

The traditional system...assumes that the ? response lies halfway between the positive and the negative responses to an item. To test the validity of this assumption, we divided the people in the five industrial samples...into satisfied and dissatisfied halves on the basis of their total scores...and then computed the average number of ? responses per person per item on each scale for each sample...the dissatisfied group gives more ? responses per person per item than the satisfied group ($p < .006$ by sign test). Thus we conclude that the ? response is more indicative of dissatisfaction

than of satisfaction. On this basis we have assigned the ? a weight of 1 instead of 2, and a dissatisfied response a weight of 0. (p.79).

The Activities, Finances, and People scales each have a maximum possible score of 54. The Health scale has a maximum possible raw score of 27, which is weighted (X 2) to convert to the same metric as the other three scales. Thus, all scales have a maximum possible score of 54.

This seemingly simple weighted scoring system might lead some to argue that the RDI is a nominally or ordinally scaled instrument rather than the continuously scaled instrument that its developers purport it to be (Smith et al., 1969). However, the RDI is widely accepted as a continuously scaled instrument. Smith explained, "We will treat each facet as a single continuum, capable of producing satisfaction and dissatisfaction" (p. 18). This researcher could not find any challenges in the literature to the developers' treatment of the scales as continuous. Previous researchers have performed statistical analyses on the JDI and RDI scales appropriate for continuously scaled instruments, i.e., Analysis of Variance (ANOVA).

Smith et al. (1969) devoted an entire book to the description of their development of the JDI and RDI scales. The following passages illustrate the developers' thoroughness, and give a summary of some of the considerations and statistical methods taken into account in creating the JDI and RDI:

A systematic consideration of the main influences on the worker's frames of reference, a consideration of adaptation levels and anchor points, of long- and short-term perspectives, absolute and relative evaluations, and descriptive and evaluative methods of gathering information, is necessary (p. 12).

We have presented scale characteristics of the JDI and RDI. The format, item development, internal consistency, order effects, response-set effects, scale intercorrelations, scoring, and score statistics have been examined for the JDI, and some of these characteristics are reported also for the RDI (p. 85).

While reliability and validity for the RDI remain unestablished, Smith et al. (1969) reported correlations among the subscales ranging from $r=.43$ to $r=.19$. The authors describe RDI scale validity as "sound" (p. 66). Additionally, they claimed, "We conclude that both the JDI and the RDI are very acceptable measures..." (p. 85). Subsequent to this claim, the RDI has received favorable acclaim from numerous researchers. Bruce (1975) referred to the RDI as an objective, easily administered, multidimensionally scaled, standardized, reliable, and valid instrument (p. 6). Smith (1992) reported, "The RDI has been shown to correlate strongly with measures of life satisfaction (p. 423)." After an extensive review of the literature, Brunson (1996) concluded that the RDI is a widely used instrument for measuring satisfaction, and stated that no published challenges to the instrument's validity were found. Sundberg (1995) was more guarded in his assessment, but stated that the RDI constituted a good research possibility for researchers wishing to study satisfaction with retirement.

Permission to use the RDI was sought by this researcher and obtained from the copyright holder, Bowling Green State University (BGSU), for both electronic (internet website) and paper (mailed) distribution. The researcher formatted the RDI for online use to closely resemble the RDI paper form provided by BGSU. As a condition of using the RDI, BGSU required a copy of the RDI sample data obtained,

along with particular demographic data for each respondent. Therefore, the final 82-item survey consisted of the 63 RDI items, six items included to ascertain the demographic data required by BGSU as a condition of RDI use, and 13 demographic items constructed by the researcher (see APPENDIX A). (The researcher added items sparingly in order to keep the length of the survey as inviting as possible to respondents.) Permission to publish the RDI scales as an appendix to this study was denied by BGSU, based on current policy, even though the scales have been published in numerous other studies, and by Smith et al. (1969). In keeping with this policy decision, only some of the items from each scale were specifically mentioned in this study.

Design

The design was selected to facilitate accomplishment of the purpose of the study--to conduct research into the subsequent life of military retirees by comparing early retirees with regular retirees; to examine an aspect of adjustment (life satisfaction) that might ultimately contribute to prediction, reduction, prevention, or intervention of adjustment problems associated with the midlife military-to-civilian transition. The RDI was chosen as the research instrument because it had been used in previous studies, and would allow comparisons of similarities and differences on a common measure (life satisfaction) with the work of others. Although the primary focus of the present study was on early retirement military officers, regular retirement military officers from the same retirement years were also sampled to enable comparisons. This was to help determine whether there was a statistically significant difference between the life satisfaction of early retirement military officers with the life

satisfaction of military officers who retired with regular 20 to 30 year military careers. The design used life satisfaction as the dependent variable and type of military retirement (early versus regular) as the independent variable.

A second aspect of the design was to form four comparison groups to analyze differences in measures of satisfaction levels between early and regular retirees on the basis of whether or not subjects entered public service employment after making the midlife military to civilian transition. The groups consisted of (1) early retirees who entered public service, (2) early retirees who did not enter public service, (3) regular retirees who entered public service, and (4) regular retirees who did not enter public service. Again, the four RDI scales were used to measure life satisfaction and enable comparisons between groups.

A third aspect of the design allowed comparisons of early retirement military officers with early retirement civilians. Bellino (1970) believed that the comparison and contrast of military and civilian retirees could help clarify trends and anticipate difficulties. Similarly, Wolpert (2000) stated,

There are increasing similarities between the military and the civilian world, and there may be parallels between the transition from the military to the civilian work place at age 42, with the transition at the same age for a management level worker who is 'outplaced' as a result of corporate changes" (p.111).

Knesek (1988, 1992) studied early retirement civilians, using the RDI to measure life satisfaction. Comparisons and contrasts with Knesek's sample were therefore possible.

Limitations

The most fundamental limitation of the present study was the impossibility of selecting a true random sample. The inaccessibility of the entire population to be studied, the lack of governmental sponsorship to facilitate collection of the sample, and the restrictions of privacy legislation and policies all necessitated reliance on volunteer participants.

Because the respondents were volunteers, the possibility exists that the sample contained responses that are not representative of the population. Additionally, despite the use of some strict internal methods that screened 22% of the responses to produce the usable sample, the survey was accessible to the public via the internet and could have received some erroneous responses. For example, while the survey was intended for active duty retirees, it is possible that some retired reservists may have responded to the survey without detection. Because reservists usually hold full time civilian employment, they avoid the midlife military-to-civilian transition experienced by active duty officers, and may therefore have different measures of satisfaction levels.

Use of the RDI as the measurement instrument imposed certain limitations on the study. The forced response format of the RDI restricted the gathering of qualitative data, as the RDI did not allow respondents to elaborate upon their situations.

A similar limitation existed with regard to the second research question of the present study, which involved the low percentage of early retirees who documented a military-to-civilian transition into civilian public or community service. This situation could have been

much more directly investigated had the researcher included additional, specific items on the survey. However, such items would have ideally been formatted for open-ended responses, which would have been more conducive to qualitative analysis. In assembling the survey for a quantitative study, the researcher followed the forced response format and added items sparingly in order to keep the length of the survey as inviting as possible to respondents.

While the researcher's personal experience as an early retirement military officer provided insight, it may also have introduced a limitation through some degree of bias. However, because the design of the study was not experimental, it is unlikely that any experimenter bias on the part of the researcher acted as a limitation to the findings derived quantitatively.

The study was limited by restrictions on participation (i.e., rank). Warrant officers and noncommissioned officers were excluded from the sample to enable more congruent comparisons with the samples of previous studies that were limited to retired officers. Numerous warrant officers and noncommissioned officers contacted the researcher to volunteer as participants, but were not used in the sample. While restricting the sample to commissioned officers kept the study more in line with previous studies for comparison purposes, a large amount of available data was excluded.

Another factor affecting the present study was maturation. More than five years have passed since the last early retirees left military service. The passage of time increased the likelihood that all had negotiated the approximate five-year transition effect described by Cooper (1981). However, respondents who retired in 1993 have had six

years longer to adjust to the midlife military-to-civilian transition than those respondents who retired in 1999. Thus, respondents were at different stages of adjustment. Additionally, the passage of time may restrict the generalizability of findings, as measures of life satisfaction levels might have been different had they been taken sooner, and might be different if taken at some point in the future.

The study involved certain assumptions that may have limited the findings. An underlying assumption was that active military duty experience, regardless of military service branch or military job specialty performed, had the same effect on subsequent satisfaction. Other assumptions were that responses were received only from individuals appropriate for the survey, that individuals did not respond more than once, and that the sample was representative of the targeted population.

Data Analysis

Computerized data analysis was accomplished using the Statistical Package for the Social Sciences (SPSS) microcomputer version 11. One of the first steps required prior to data analysis was to address missing values in the survey responses. George and Mallory (2001) stated,

Although replacing many missing values...can sometimes bias the results, a small number of replacements has little influence on the outcome of your analyses...An often-used rule of thumb suggests that it is acceptable to replace up to 15% of data by the mean of the distribution (or equivalent procedures) with little damage to the resulting outcomes. If a particular subject (or case) or a certain variable has more than 15% missing data, it is recommended that you drop that subject or variable from the analysis entirely. (p. 46).

The researcher contacted the JDI/RDI research office in the Department of Psychology at BGSU for guidance pertaining to missing values in the analysis of RDI scales. BGSU provided the researcher with SPSS syntax that replaced a missing value from an RDI scale item with a score value of 1, yet excluded a subject from calculations on that particular scale if there were more than three missing values on an 18-item scale, or if there were more than two missing values from the 9-item scale (Health). This procedure is approximately equivalent to that described above by George and Mallory (2001), in that a maximum of 16 percent of the responses on a given scale were allowed to be replaced before excluding that subject. An examination of the database revealed that missing values amounted to less than 1%.

Because all of the RDI scales are forced response format with three choices (yes, no, or could not decide), it is logical that missing values (non-responses) most often represent "could not decide," which are scored as 1. Therefore the procedure of replacing a missing value with a score of 1 has face validity.

One-way Analysis of Variance (ANOVA) was used to compare the mean scores on the four RDI scales for the groups of early retirement military officers with the mean scores on the four RDI scales for the regular retirement military officers. SPSS has a feature for choosing a random sample of cases based on equal probability of selection from a specified range. Comparison groups from the subsample of regular retirement military officers were selected using this feature, to acknowledge the assumption of randomness required for appropriate use of One-way ANOVA. One-way ANOVA comparisons of early and regular military

retirees on the aspect of life satisfaction, measured by the RDI, enabled reporting of differences between these groups.

Comparisons of early retirement military officers with samples of regular retirees from previous studies (Robinson, 1972; Bruce, 1975; Manning, 1979; and Brunson, 1996), and samples of early retirement civilians from a previous study (Knesek, 1988), were performed using independent-samples t tests to determine if statistically significant differences existed between groups on RDI scale score means.

IV RESEARCH FINDINGS

This section presents the findings of the present study. Each research question is stated, followed by a description of the statistical analysis that was performed to address the question. Results are reported in narrative and tabular form.

Research Question 1: Is there a difference in the life satisfaction of early retirement military officers compared with the life satisfaction of military officers who retired with regular 20 to 30 year military careers?

After collecting 1,210 responses to a survey that included the RDI to measure life satisfaction, a usable sample of 946 military officers who retired from active duty was obtained by discarding incomplete or questionable responses. Of the 946 subjects, 824 were regular retirees (with at least 20, but usually not more than 30 years of military service), and 122 were early retirees (with at least 15, but fewer than 20 years of military service). Table 8 shows descriptive statistics for the early retirees on the RDI scale scores, and Table 9 shows the intercorrelation matrix of RDI scale scores for the early retirees.

Three comparison groups were formed from the usable sample. The entire subsample of 122 early retirees was used as one group. Two groups from the subsample of regular retirees were selected using the SPSS random sample of cases feature. This was done to obtain samples of equal size and to attempt to incorporate a degree of randomness into the analysis (to address the assumptions for use of One-way ANOVA). One group contained 121 subjects, and the other contained 123 subjects. Figure 1 presents boxplots that depict the median scores and

TABLE 8

Descriptive Statistics of RDI Scale Scores of Early Retirement
Military Officers

| | | Activities | Finances | Health | People |
|-----------|---------|------------|----------|--------|--------|
| N | Valid | 122 | 122 | 122 | 121 |
| | Missing | 0 | 0 | 0 | 1 |
| Mean | | 38.76 | 39.49 | 38.93 | 41.42 |
| Std. Dev. | | 12.68 | 10.83 | 13.59 | 13.41 |

TABLE 9

Intercorrelation Matrix of RDI Scale Scores of Early Retirement
Military Officers

| RDI Scale | | Activities | Finances | Health | People |
|------------|---------------------|------------|----------|--------|--------|
| Activities | Pearson Correlation | | | | |
| | Sig. (2-tailed) | | | | |
| | N | 122 | | | |
| Finances | Pearson Correlation | .37 | | | |
| | Sig. (2-tailed) | .00 | | | |
| | N | 122 | 122 | | |
| Health | Pearson Correlation | .31 | .44 | | |
| | Sig. (2-tailed) | .00 | .00 | | |
| | N | 122 | 122 | 122 | |
| People | Pearson Correlation | .40 | .37 | .32 | |
| | Sig. (2-tailed) | .00 | .00 | .00 | |
| | N | 121 | 121 | 121 | 121 |

interquartile range for the three comparison groups on the four RDI scales, and Table 10 contains summary descriptive statistics for the three groups on each of the four RDI scales. Visual comparison of the median and mean scores on the RDI scales revealed that the early retirees had lower scores than both groups of regular retirees on the

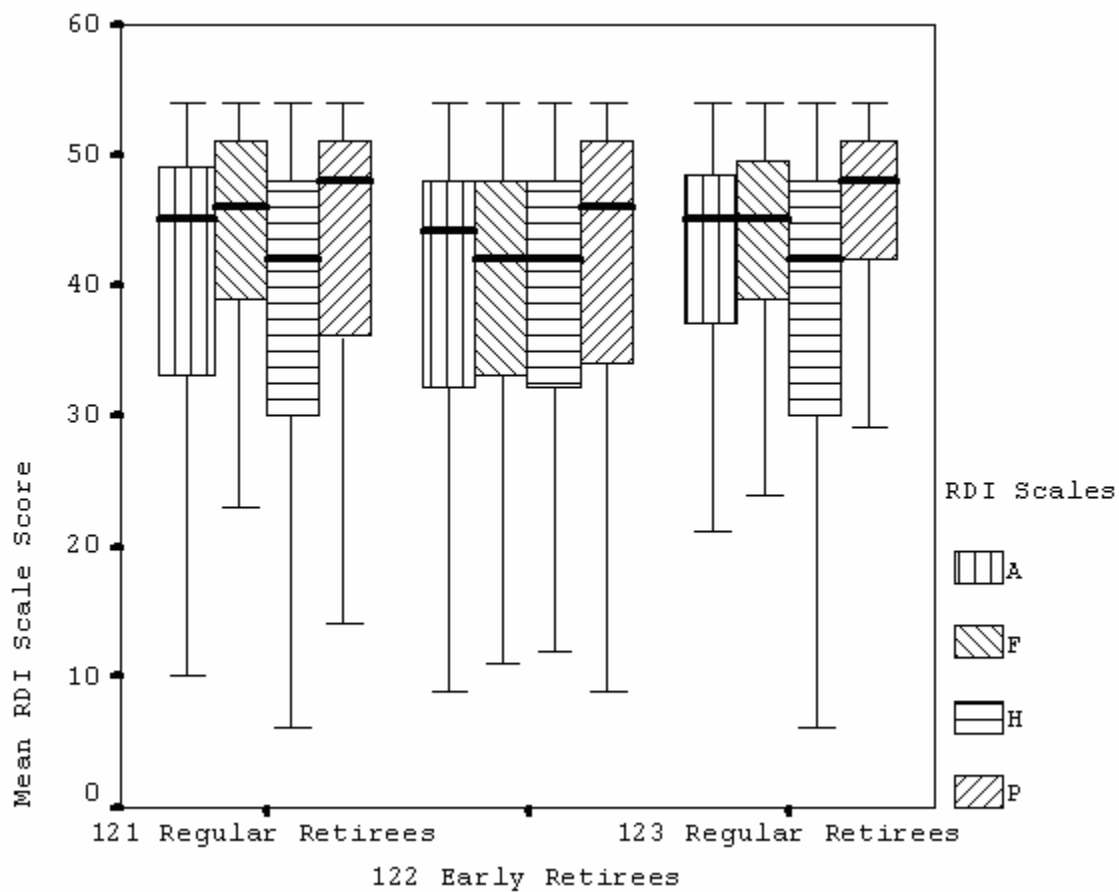


FIGURE 1

Boxplots of RDI Scale Scores for Early Retirement Military Officers and Two Comparison Groups of Regular Retirement Military Officers

Note. RDI Scales: A=Activities, F=Finances, H=Health, P=People

TABLE 10

Summary Descriptive Statistics on RDI Scale Scores of Early Retirement Military Officers and Regular Retirement Military Officers

| RDI Scale | Sample Group | n | Mean | Std. Deviation | Std. Error |
|------------|-------------------------|-----|-------|----------------|------------|
| Activities | Early Retired | 122 | 38.76 | 12.68 | 1.14 |
| | Regular Retired Group 1 | 123 | 40.39 | 12.49 | 1.12 |
| | Regular Retired Group 2 | 121 | 40.15 | 13.04 | 1.18 |
| | Total | 366 | 39.77 | 12.72 | 0.66 |
| Finances | Early Retired | 122 | 39.49 | 10.83 | 0.98 |
| | Regular Retired Group 1 | 123 | 42.79 | 9.93 | 0.89 |
| | Regular Retired Group 2 | 121 | 42.92 | 10.61 | 0.96 |
| | Total | 366 | 41.73 | 10.55 | 0.55 |
| Health | Early Retired | 122 | 38.93 | 13.59 | 1.23 |
| | Regular Retired Group 1 | 123 | 37.44 | 13.78 | 1.24 |
| | Regular Retired Group 2 | 121 | 37.63 | 13.88 | 1.26 |
| | Total | 366 | 38.00 | 13.73 | 0.71 |
| People | Early Retired | 121 | 41.42 | 13.41 | 1.21 |
| | Regular Retired Group 1 | 123 | 44.50 | 11.18 | 1.00 |
| | Regular Retired Group 2 | 121 | 43.36 | 11.73 | 1.06 |
| | Total | 365 | 43.10 | 12.17 | 0.63 |

Activities, Finances, and People scales. However, the early retirees had a higher mean score on the Health scale than both groups of regular retirees. The latter outcome was expected, in that early retirees are generally younger than regular retirees and might tend to enjoy better health. It was also noticed that the People scale is the only scale upon which the mean scores for both early and regular retirees fell below the 50th percentile (based on normative RDI scores established by Smith et al., 1969).

Before conducting any statistical analysis among the comparison groups, the sample data set was evaluated for compliance with the main assumptions relevant to appropriate use of One-way ANOVA, namely

independence, normality, randomness, and homogeneity of variance. The sample satisfied the assumption of independence because it was selected from separate and distinct populations (Hinkle, Wiersma, & Jurs, 1998). Population distinctions clearly differentiated officers from other ranks, and early retirees from regular retirees. A Kolmogorov-Smirnov Test was conducted on the sample data set to determine if the dependent variables (RDI scale scores) were normally distributed. The test result confirmed the normality of the distribution. As previously described, the sample for this study cannot be considered a true random sample due to the reliance on volunteer participants. However, the comparison groups of regular retirees were formed by using the SPSS random sample of cases feature to pick cases from the larger sample. Therefore, the researcher incorporated randomness into the analysis to the maximum extent possible. Finally, concurrent use of the Levene statistic with One-way ANOVA calculations was made so that homogeneity of variances could be confirmed prior to examination of ANOVA results.

Having addressed the basic assumptions necessary for use of One-Way ANOVA, comparisons of mean scores on each of the four RDI scales were appropriate to determine any differences in measures of satisfaction levels between early and regular retirees. The null hypothesis for these comparisons was that the mean scores for the group of early retirees and the two groups of regular retirees would not differ statistically on all four RDI scales. Table 11 contains the results of the Levene Test. Table 12 provides a summary of the One-way ANOVA results from the comparisons among groups.

On the Activities scale, mean scores for both groups of regular retirees were higher than the mean score for the early retirees. Mean

scores for both groups of regular retirees were greater than 40, placing them approximately at the 55th percentile (based on normative RDI scores established by Smith et al., 1969). Mean scores for the group of early retirees were approximately at the 48th percentile. The Levene statistic confirmed homogeneity of variance, so the One-way ANOVA results were examined. No statistically significant differences among groups on the Activities scale were obtained, $F(2, 363)=.58$, $p>.05$, so a fail-to-reject decision was reached regarding the null hypothesis. An effect size was calculated, which was considered small by Cohen's (1988) classifications (small=.2, medium=.5, large=.8).

On the Finances scale, mean scores for both groups of regular retirees were higher than the mean score for the early retirees. Mean scores for both groups of regular retirees were greater than 42, placing them approximately at the 85th percentile (based on normative RDI scores established by Smith et al., 1969). Mean scores for the group of early retirees were approximately at the 75th percentile. The Levene statistic confirmed homogeneity of variance, so the One-way ANOVA results were examined. A statistically significant difference among groups was obtained, $F(2, 363)=4.21$, $p<.05$, so the null hypothesis for this comparison was rejected. The value of the effect size was .02, which is considered small.

On the Health scale, the mean score for the early retirees was higher than the mean scores for both groups of regular retirees. The mean score for the early retirees approached 39, placing them approximately at the 62nd percentile (based on normative RDI scores established by Smith et al., 1969). Mean scores for both groups of regular retirees were below 38, placing them approximately at the 59th

TABLE 11

Test of Homogeneity of Variances for Early Retirement Military Officers and Regular Retirement Military Officers

| RDI Scale | Levene Statistic | df1 | df2 | Sig. |
|------------|------------------|-----|-----|------|
| Activities | .64 | 2 | 363 | .52 |
| Finances | .46 | 2 | 363 | .63 |
| Health | .23 | 2 | 363 | .78 |
| People | 3.55* | 2 | 363 | <.05 |

Note. *Statistically significant at $\alpha < .05$; the null hypothesis of homogeneity of variance for the three groups on this scale was rejected

TABLE 12

Analysis of Variance Summary Table of RDI Scale Scores for Early Retirement Military Officers and Regular Retirement Military Officers

| RDI Scale | Source | Sum of Squares | df | Mean Square | F | Sig. | eta Squared |
|-----------|----------------|----------------|-----|-------------|-------|------|-------------|
| A | Between Groups | 190.57 | 2 | 95.28 | 0.58 | .55 | <.01 |
| | Within Groups | 58957.60 | 363 | 162.41 | | | |
| | Total | 59148.17 | 365 | | | | |
| F | Between Groups | 924.07 | 2 | 462.03 | 4.21* | <.05 | .02 |
| | Within Groups | 39766.74 | 363 | 109.55 | | | |
| | Total | 40690.82 | 365 | | | | |
| H | Between Groups | 160.10 | 2 | 80.05 | 0.42 | .65 | <.01 |
| | Within Groups | 68699.88 | 363 | 189.25 | | | |
| | Total | 68859.98 | 365 | | | | |
| P | Between Groups | 588.43 | 2 | 294.21 | 1.99 | .13 | .01 |
| | Within Groups | 53370.40 | 362 | 147.43 | | | |
| | Total | 53958.83 | 364 | | | | |

Note. *Statistically significant at $\alpha < .05$

RDI Scales: A=Activities, F=Finances, H=Health, P=People

percentile. The Levene statistic confirmed homogeneity of variance, so the One-way ANOVA results were examined. No statistically significant differences among groups on the Health scale were obtained, $F(2, 363) = .42$, $p > .05$, so a fail-to-reject decision was reached regarding the null hypothesis. A small effect size was calculated.

The Levene statistic was checked before examining the One-way ANOVA results on the People scale. The test indicated that the homogeneity of variance assumption was not confirmed for this scale, so the One-way ANOVA results obtained on the People scale were not accepted as valid. Because homogeneity of variance was not confirmed, a nonparametric Kruskal-Wallis One-way Analysis of Variance for ranks (ordinal data) was performed on the People scale. No statistically significant differences in distribution of scores among groups on the People scale were obtained, $\chi^2(2, N=366) = 2.60$, $p > .05$, so a fail-to-reject decision was reached regarding the null hypothesis.

One of the reasons the RDI was selected as the measurement instrument was to enable comparisons among the present study and previous studies of military retirees on a shared measure. The RDI had been previously used in several studies, and thus provided a common basis for making comparisons. Therefore, RDI scale scores for regular military retirees reported by Robinson (1972), Bruce (1975), Manning (1979), and Brunson (1996) were used to compare with the RDI scale scores of the early retirees within the present study. These comparison groups differed with regard to year sampled, sample size, standard deviation of RDI scale scores, military rank of the subjects, and geographical location of the studies. Figure 2 enables visual

comparison of RDI scale score means among the samples used in these studies.

Unfortunately, the actual RDI scale score data for each of the subjects sampled by the previous studies were not available; only summary statistics were reported for the samples. This limited the type of statistical comparisons that could be conducted. A series of independent-samples *t* tests were calculated to compare the mean scores for the subsample of early retirees with mean scores for previous samples of regular retirees on each of the four RDI scales. The null hypothesis for each of these tests was that there would be no statistically significant differences in the four RDI scale score means among the early retirees and the comparison groups.

According to Hinkle et al. (1998), a problem associated with computing multiple independent *t* tests is the possibility of Type I error since alpha is not controlled. A Type I error is defined as rejection of the null hypothesis when the null hypothesis is actually true. With this in mind, interpretation of test results was approached conservatively.

The independent-samples *t* test calculations produced two-tailed *p* values. Tables 13-18 provide a summary of independent-samples *t* test results for the comparisons. The majority of *p* values obtained resulted in rejection of the null hypothesis based on findings of statistical significance among the early retirees and the regular retirees from previous studies. The effect sizes calculated ranged from $-.84$ to $.11$. However, the practical significance of these findings is limited to speculation as to why the groups may have

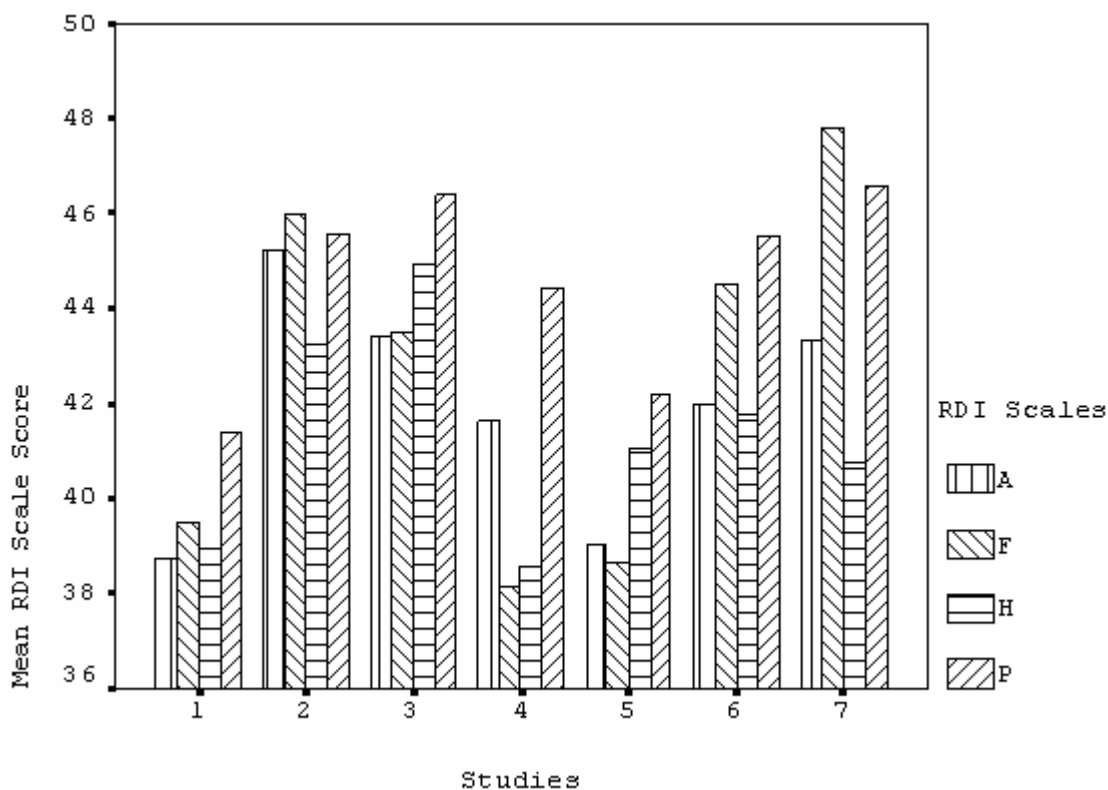


FIGURE 2

Comparison of RDI Scale Score Means Between Early Retirement Military Officers From the Present Study and Regular Retirement Military Officers From Previous Studies

Note. RDI Scales: A=Activities, F=Finances, H=Health, P=People
 Studies: 1=Present Study (122 early retirees); 2=Robinson, 1972 (98 retired officers in academic jobs); 3=Robinson, 1972 (120 retired officers in nonacademic education jobs); 4=Bruce, 1975 (449 fully retired officers); 5=Bruce, 1975 (534 retired officers in civilian jobs); 6=Manning, 1979 (185 retired officers and noncommissioned officers); 7=Brunson, 1996 (150 retired officers who graduated from the U.S. Naval Academy between 1945 and 1965)

TABLE 13

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Obtained by Graves (2005) and Regular Retirement Military Officers Working in Academic Jobs in the Field of Education Reported by Robinson (1972)

| RDI Scales | Graves (2005) | | | Robinson (1972) | | | t | Two-Tailed p | Cohen's d |
|------------|---------------|-----------|------|-----------------|-----------|------|-------|--------------|-----------|
| | n=122 | Std. Dev. | SEM | n=98 | Std. Dev. | SEM | | | |
| A | 38.76 | 12.68 | 1.14 | 45.25 | 6.80 | 0.68 | 4.56* | <.05 | -.63 |
| F | 39.49 | 10.83 | 0.98 | 45.96 | 7.30 | 0.73 | 5.06* | <.05 | -.70 |
| H | 38.93 | 13.59 | 1.23 | 43.23 | 11.22 | 1.13 | 2.51* | <.05 | -.34 |
| P | 41.42 | 13.41 | 1.21 | 45.58 | 9.74 | 0.98 | 2.57* | <.05 | -.35 |

Note. *p value indicates statistical significance at the .05 level

RDI Scales: A=Activities, F=Finances, H=Health, P=People

TABLE 14

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Obtained by Graves (2005) and Regular Retirement Military Officers Working in Non-academic Jobs in the Field of Education Reported by Robinson (1972)

| RDI Scales | Graves (2005) | | | Robinson (1972) | | | t | Two-Tailed P | Cohen's d |
|------------|---------------|-----------|------|-----------------|-----------|------|-------|--------------|-----------|
| | n=122 | Std. Dev. | SEM | n=120 | Std. Dev. | SEM | | | |
| A | 38.76 | 12.68 | 1.14 | 43.42 | 10.54 | 0.96 | 3.10* | <.05 | -.39 |
| F | 39.49 | 10.83 | 0.98 | 43.49 | 8.60 | 0.78 | 3.17* | <.05 | -.40 |
| H | 38.93 | 13.59 | 1.23 | 44.90 | 10.34 | 0.94 | 3.84* | <.05 | -.49 |
| P | 41.42 | 13.41 | 1.21 | 46.37 | 10.40 | 0.94 | 3.20* | <.05 | -.41 |

Note. *p value indicates statistical significance at the .05 level

RDI Scales: A=Activities, F=Finances, H=Health, P=People

TABLE 15

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Obtained by Graves (2005) and Regular Retirement Military Officers (Fully Retired) Reported by Bruce (1975)

| RDI Scales | Graves (2005) | | | Bruce (1975) | | | t | Two-Tailed P | Cohen's d |
|------------|---------------|-----------|------|--------------|-----------|------|-------|--------------|-----------|
| | n=122 | Std. Dev. | SEM | n=449 | Std. Dev. | SEM | | | |
| A | 38.76 | 12.68 | 1.14 | 41.63 | 12.23 | 0.57 | 2.28* | <.05 | -.23 |
| F | 39.49 | 10.83 | 0.98 | 38.14 | 12.19 | 0.57 | 1.10 | 0.26 | .11 |
| H | 38.93 | 13.59 | 1.23 | 38.57 | 13.97 | 0.65 | 0.25 | 0.79 | .02 |
| P | 41.42 | 13.41 | 1.21 | 44.44 | 11.27 | 0.53 | 2.51* | <.05 | -.24 |

Note. *p value indicates statistical significance at the .05 level
RDI Scales: A=Activities, F=Finances, H=Health, P=People

TABLE 16

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Obtained by Graves (2005) and Regular Retirement Military Officers Working in Civilian Jobs Reported by Bruce (1975)

| RDI Scales | Graves (2005) | | | Bruce (1975) | | | t | Two-Tailed P | Cohen's d |
|------------|---------------|-----------|------|--------------|-----------|------|------|--------------|-----------|
| | n=122 | Std. Dev. | SEM | N=534 | Std. Dev. | SEM | | | |
| A | 38.76 | 12.68 | 1.14 | 39.03 | 14.90 | 0.64 | 0.18 | .85 | -.01 |
| F | 39.49 | 10.83 | 0.98 | 38.66 | 13.96 | 0.60 | 0.61 | .53 | .06 |
| H | 38.93 | 13.59 | 1.23 | 41.02 | 14.68 | 0.63 | 1.43 | .15 | -.14 |
| P | 41.42 | 13.41 | 1.21 | 42.16 | 14.68 | 0.63 | 0.51 | .61 | -.05 |

Note. RDI Scales: A=Activities, F=Finances, H=Health, P=People

TABLE 17

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Obtained by Graves (2005) and Regular Retirement Military Officers and Noncommissioned Officers Reported by Manning (1979)

| RDI Scales | Graves (2005) | | | Manning (1979) | | | t | Two-Tailed P | Cohen's d |
|------------|---------------|-----------|------|----------------|-----------|------|-------|--------------|-----------|
| | n=122 | Std. Dev. | SEM | N=285 | Std. Dev. | SEM | | | |
| A | 38.76 | 12.68 | 1.14 | 41.99 | 11.08 | 0.65 | 2.57* | <.05 | -.27 |
| F | 39.49 | 10.83 | 0.98 | 44.50 | 9.28 | 0.54 | 4.74* | <.05 | -.49 |
| H | 38.93 | 13.59 | 1.23 | 41.75 | 13.20 | 0.78 | 1.95 | .05 | -.21 |
| P | 41.42 | 13.41 | 1.21 | 45.51 | 10.49 | 0.62 | 3.30* | <.05 | -.33 |

Note. *p value indicates statistical significance at the .05 level

RDI Scales: A=Activities, F=Finances, H=Health, P=People

TABLE 18

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Obtained by Graves (2005) and Regular Retirement Military Officers (U.S. Naval Academy Alumni) Reported by Brunson (1996)

| RDI Scales | Graves (2005) | | | Brunson (1996) | | | t | Two-Tailed P | Cohen's d |
|------------|---------------|-----------|------|----------------|-----------|------|-------|--------------|-----------|
| | n=122 | Std. Dev. | SEM | n=150 | Std. Dev. | SEM | | | |
| A | 38.76 | 12.68 | 1.14 | 43.30 | 6.09 | 0.49 | 3.87* | < .05 | -.45 |
| F | 39.49 | 10.83 | 0.98 | 47.82 | 8.80 | 0.71 | 6.99* | < .05 | -.84 |
| H | 38.93 | 13.59 | 1.23 | 40.76 | 12.10 | 0.98 | 1.17* | .24 | -.14 |
| P | 41.42 | 13.41 | 1.21 | 46.56 | 8.29 | 0.67 | 3.87* | < .05 | -.45 |

Note. *p value indicates statistical significance at the .05 level

RDI Scales: A=Activities, F=Finances, H=Health, P=People

differed in magnitude on the RDI scales. Perhaps the most interesting observation is that Bruce's (1975) subsample of 534 retired military officers working in second careers most closely approximated the RDI scale scores of the early retirees in the present study. In comparisons between these two groups, no statistically significant difference was found on any of the RDI scales. Therefore, fail-to-reject decisions regarding the null hypothesis were reached for all four RDI scale score mean comparisons.

Research Question 2: What can be learned about the military-to-civilian transition of early retirement military officers, given that 95.7% of eligible personnel (90.4% for officers) did not document a transition into civilian public or community service despite incentives? To address this question, analysis of the life satisfaction of military retirees on the basis of their public service employment was undertaken. A design similar to one used by Knesek (1988) in his study of the life satisfaction of early versus regular civilian retirees on the basis of either public or private sector careers was adapted for the comparison of early and regular military retirees.

Four comparison groups were formed to analyze differences in measures of satisfaction levels among early and regular retirees on the basis of whether or not subjects entered public service employment after making the midlife military to civilian transition. The groups consisted of (1) early retirees who entered public service, (2) early retirees who did not enter public service, (3) regular retirees who entered public service, and (4) regular retirees who did not enter public service. All 28 early retirees in the sample who entered public

service employment after leaving the military were used as one comparison group. The other groups were selected using the SPSS random sample of cases feature. This was done to utilize the larger numbers of cases available in each group, and to attempt to incorporate a degree of randomness into the analysis (to acknowledge the assumptions of One-way ANOVA). The group of early retirees who did not enter public service was formed by selection of 75 subjects from the total of 94 within the sample. The group of regular retirees who entered public service was formed by selection of 125 subjects from the total of 217 within the sample. Finally, the group of regular retirees who did not enter public service was formed by selection of 250 subjects from the total of 607 within the sample. Figure 3 presents boxplots that depict the median scores and interquartile range for the four comparison groups on the four RDI scales.

Concurrent use of the Levene statistic with One-way ANOVA calculations was made so that homogeneity of variances could be confirmed prior to examination of ANOVA results. Table 19 provides a summary of descriptive statistics on the RDI scale scores for early and regular retirees grouped according to public/community service employment. Table 20 shows the results of the Levene Test. Table 21 provides a summary of One-way ANOVA results from the comparisons of group mean scores for each RDI scale.

On the Activities scale, mean scores for both groups of regular retirees were higher than the mean score for both groups of early retirees, with the mean scores of those who entered public/community service being the lowest within each category of retirement. The

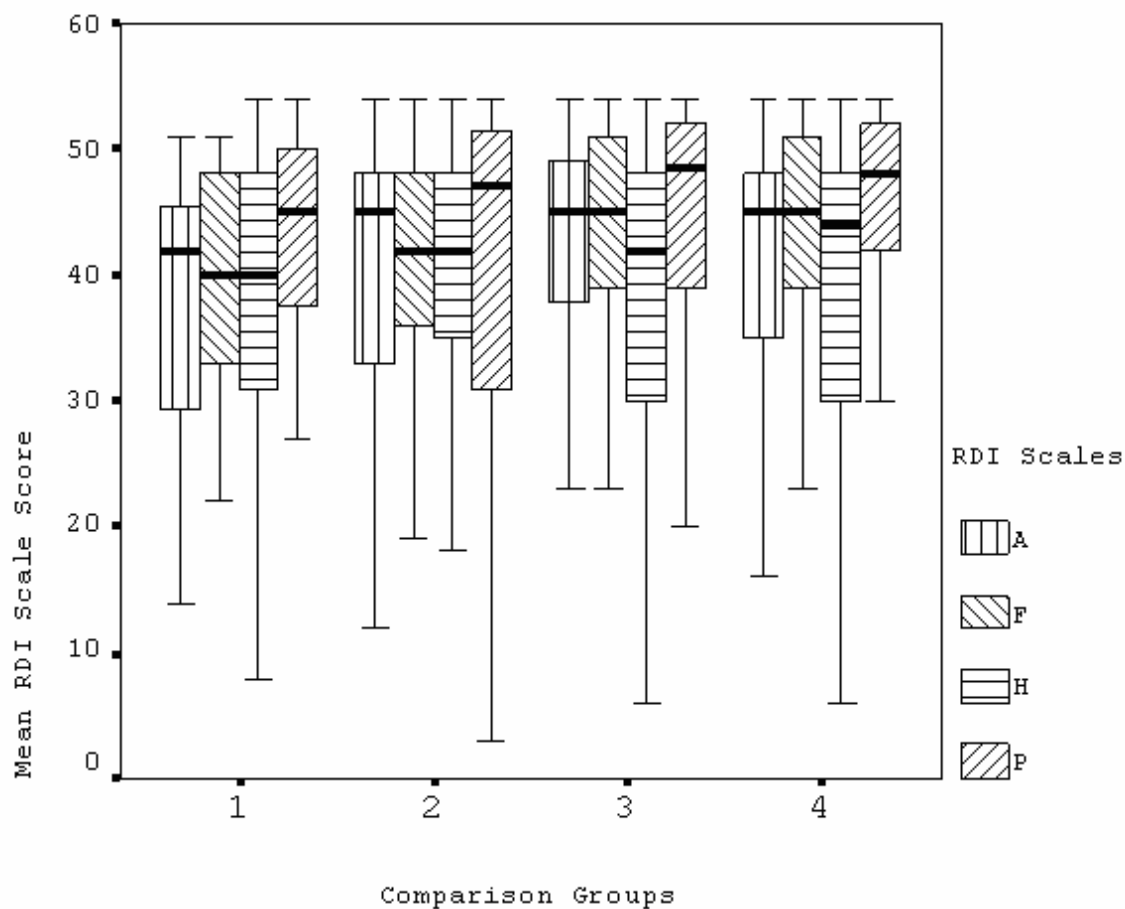


FIGURE 3

Boxplots of RDI Scale Scores for Comparison Groups of Early and Regular Retirement Military Officers Grouped According to Public Service Employment

Note. RDI Scales: A=Activities, F=Finances, H=Health, P=People
 Grp 1=28 Early Retirement Military Officers, Public Service
 Grp 2=75 Early Retirement Military Officers, No Public Service
 Grp 3=125 Regular Retirement Military Officers, Public Service
 Grp 4=250 Regular Retirement Military Officers, No Public Service

TABLE 19

Summary of Descriptive Statistics on RDI Scale Scores for Subsamples of Early and Regular Retirement Military Officers Grouped According to Public Service Employment Status

| RDI Scale | Sample Group | n | Mean | Std. Dev. | Std. Error |
|------------|-----------------------------------|-----|-------|-----------|------------|
| Activities | Early Retired/Public Service | 28 | 36.85 | 12.24 | 2.31 |
| | Early Retired/No public service | 75 | 39.24 | 13.09 | 1.51 |
| | Regular Retired/Public Service | 125 | 41.07 | 12.04 | 1.07 |
| | Regular Retired/No public service | 249 | 39.55 | 13.25 | .84 |
| | Total | 477 | 39.74 | 12.86 | .58 |
| Finances | Early Retired/Public Service | 28 | 38.75 | 10.90 | 2.06 |
| | Early Retired/No public service | 75 | 40.73 | 9.65 | 1.11 |
| | Regular Retired/Public Service | 125 | 43.40 | 9.30 | .83 |
| | Regular Retired/No public service | 248 | 43.04 | 10.18 | .64 |
| | Total | 476 | 42.52 | 9.97 | .45 |
| Health | Early Retired/Public Service | 28 | 37.14 | 13.36 | 2.52 |
| | Early Retired/No public service | 75 | 39.25 | 13.78 | 1.59 |
| | Regular Retired/Public Service | 125 | 37.90 | 13.70 | 1.22 |
| | Regular Retired/No public service | 247 | 38.88 | 13.67 | .87 |
| | Total | 475 | 38.58 | 13.65 | .62 |
| People | Early Retired/Public Service | 27 | 43.81 | 8.32 | 1.60 |
| | Early Retired/No public service | 75 | 40.01 | 15.25 | 1.76 |
| | Regular Retired/Public Service | 124 | 43.99 | 11.23 | 1.00 |
| | Regular Retired/No public service | 250 | 44.10 | 11.55 | .73 |
| | Total | 476 | 43.41 | 12.04 | .55 |

TABLE 20

Test of Homogeneity of Variances for Four Groups of Retired Military Officers on the Basis of Early Versus Regular Retirement Status and Public Service Employment Status

| RDI Scale | Levene Statistic | df1 | df2 | Sig. |
|------------|------------------|-----|-----|------|
| Activities | .79 | 3 | 473 | .49 |
| Finances | .47 | 3 | 472 | .70 |
| Health | .20 | 3 | 471 | .89 |
| People | 7.72* | 3 | 472 | <.05 |

Note. *Statistically significant at $\alpha < .05$; the null hypothesis of homogeneity of variance for the four groups on this scale was rejected

TABLE 21

Analysis of Variance Summary Table of RDI Scale Scores for Four Groups of Retired Military Officers on the Basis of Early Versus Regular Retirement Status and Public Service Employment Status

| RDI Scale | Source | Sum of Squares | df | Mean Square | F | Sig. | eta Squared |
|-----------|----------------|----------------|-----|-------------|-------|------|-------------|
| A | Between Groups | 482.20 | 3 | 160.73 | 0.97 | .40 | <.01 |
| | Within Groups | 78323.08 | 473 | 165.58 | | | |
| | Total | 78805.28 | 476 | | | | |
| F | Between Groups | 803.41 | 3 | 267.80 | 2.71* | <.05 | .01 |
| | Within Groups | 46483.33 | 472 | 98.48 | | | |
| | Total | 47286.74 | 475 | | | | |
| H | Between Groups | 171.57 | 3 | 57.19 | 0.30 | .82 | <.01 |
| | Within Groups | 88164.05 | 471 | 187.18 | | | |
| | Total | 88335.62 | 474 | | | | |
| P | Between Groups | 1033.50 | 3 | 344.50 | 2.39 | .06 | .01 |
| | Within Groups | 67844.13 | 472 | 143.73 | | | |
| | Total | 68877.63 | 475 | | | | |

Note. *Statistically significant at $\alpha < .05$

RDI Scales: A=Activities, F=Finances, H=Health, P=People

Levene statistic confirmed homogeneity of variance, so the One-way ANOVA results were examined. No statistically significant differences among groups were obtained, $F(3, 473) = .97, p > .05$, so a fail-to-reject decision was reached regarding the null hypothesis. A small effect size was calculated.

On the Finances scale, mean scores for both groups of regular retirees were higher than the mean score for both groups of early retirees, with the mean scores of those who entered public/community service being the lowest within each category of retirement. The Levene statistic confirmed homogeneity of variance, so the One-way ANOVA results were examined. A statistically significant difference among groups was obtained, $F(3, 472) = 2.71, p < .05$, so the null

hypothesis for this comparison was rejected. The value of the effect size was .01, which is considered small.

On the Health scale, mean scores for both groups of regular retirees were higher than the mean score for both groups of early retirees, with the mean scores of those who entered public/community service being the lowest within each category of retirement. The Levene statistic confirmed homogeneity of variance, so the One-way ANOVA results were examined. No statistically significant differences among groups was revealed, $F(3, 471)=.30, p>.05$, so a fail-to-reject decision was reached regarding the null hypothesis. A small effect size was calculated.

The Levene statistic was checked before examining the One-way ANOVA results on the People scale. The test indicated that homogeneity of variance was not confirmed for this scale, so the One-way ANOVA results obtained on the People scale were not accepted as valid. Because homogeneity of variance was not confirmed, a nonparametric Kruskal-Wallis One-way Analysis of Variance for ranks (ordinal data) was performed on the People scale. No statistically significant differences in distribution of scores among groups on the People scale were obtained, $\chi^2(3, N=473)=.01, p>.05$, so a fail-to-reject decision was reached regarding the null hypothesis.

To further examine the significant One-way ANOVA finding on the Finances scale, a cross tabulation and chi-square test of independence was conducted to determine if observed values deviated significantly from expected values on any item, by any group. The chi-square test involved the four comparison groups and 18 multi-category response variables (the 18 items on the Finances scale of the RDI). The null

hypothesis for the test was that the distribution of responses would be identical for all four groups on each of the 18 variables. The null hypothesis was rejected for six of the 18 items, since statistically significant differences were found between observed and expected values. Table 22 summarizes the items for which statistical significance was obtained ($p < .05$).

TABLE 22

Items of Statistical Significance (.05) for a Cross Tabulation and Chi-Square Test of Independence for Four Groups of Retired Military Officers (Grouped by Early or Regular Retirement Status and Public Service or Other Employment Status) on 18 Multi-category Response Variables (RDI Finances Scale)

| Item Number | RDI Finances Scale Item | Pearson Chi-Square | | |
|-------------|----------------------------|--------------------|----|------|
| | | Value | df | sig. |
| 4 | Well Off | 18.17 | 6 | <.05 |
| 7 | Need Outside Help | 17.57 | 6 | <.05 |
| 9 | High Income | 19.27 | 6 | <.05 |
| 10 | Good Pension Plan | 16.04 | 6 | <.05 |
| 12 | Serious Financial Problems | 18.28 | 6 | <.05 |
| 16 | Income provides luxuries | 13.62 | 6 | <.05 |

Inspection of Finance scale items 4 (well off), 9 (high income), 10 (good pension plan), and 16 (income provides luxuries), showed clearly that the residual differences between expected and actual responses were in opposite directions for early and regular retirees. That is to say, for each of these four items there were a lower than expected number of positive responses and higher than expected number

of negative responses for both groups of early retirees. Conversely, there were a higher than expected number of positive responses and a lower than expected number of negative responses for both groups of regular retirees. Several of the actual versus expected residual values were of surprising magnitude.

For example, the crosstabulation residual values for item 4 of the Finances scale (well off) reveal that the positive responses for early retirees fell below the expected levels, while the negative responses exceeded the expected levels. In other words, fewer early retirees than expected indicated that "well off" described an aspect of their financial situation, and more of them than expected indicated that "well off" did not describe an aspect of their financial situation. This was true regardless of the type of their civilian employment. In contrast, more regular retirees than expected indicated that "well off" described an aspect of their financial situation, and fewer of them than expected indicated that "well off" did not describe an aspect of their financial situation. Tables 23-26 illustrate this point for RDI Finances scale items 4, 9, 10, and 16 respectively.

Research Question 3: Is there a difference in the life satisfaction of early retirement military officers compared with the life satisfaction of early retirement civilian workers? Knesek (1988, 1992) studied civilian early retirees, using the RDI to measure life satisfaction. The sample obtained by Knesek contained both early and regular civilian retirees from public and private sector careers, and he compared them on this basis. The sample from the present study contained both early and regular military retirees who embarked upon second careers in public/community service or otherwise. Therefore,

TABLE 23

Crosstabulations for RDI Finances Scale Item 4 (Well Off) Between Early Retirement Military Officers and Regular Retirement Military Officers on the Basis of Public Service Employment

| Group | | 0 (No) | 1 (?) | 3 (Yes) | Total |
|-------|----------------|--------|-------|---------|-------|
| 1 | Count | 21 | 1 | 6 | 28 |
| | Expected Count | 13.8 | 0.8 | 13.4 | 28.0 |
| | Residual | 7.2 | 0.2 | -7.4 | |
| 2 | Count | 46 | 2 | 25 | 73 |
| | Expected Count | 35.9 | 2.2 | 35.0 | 73.0 |
| | Residual | 10.1 | -0.2 | -10.0 | |
| 3 | Count | 57 | 2 | 65 | 124 |
| | Expected Count | 61.0 | 3.7 | 59.4 | 124.0 |
| | Residual | -4.0 | -1.7 | 5.6 | |
| 4 | Count | 109 | 9 | 131 | 249 |
| | Expected Count | 122.4 | 7.4 | 119.2 | 249.0 |
| | Residual | -13.4 | 1.6 | 11.8 | |
| Total | Count | 233 | 14 | 227 | 474 |
| | Expected Count | 233.0 | 14.0 | 227.0 | 474.0 |

Note. Grp 1 = 28 Early Military Retirees, Public Service
 Grp 2 = 75 Early Military Retirees, No Public Service
 Grp 3 = 125 Regular Military Retirees, Public Service
 Grp 4 = 250 Regular Military Retirees, No Public Service

TABLE 24

Crosstabulations for RDI Finances Scale Item 9 (High Income) Between Early Retirement Military Officers and Regular Retirement Military Officers on the Basis of Public Service Employment

| Group | | 0 (No) | 1 (?) | 3 (Yes) | Total |
|-------|----------------|--------|-------|---------|-------|
| 1 | Count | 23 | 1 | 4 | 28 |
| | Expected Count | 16.3 | 1.3 | 10.4 | 28.0 |
| | Residual | 6.7 | -0.3 | -6.4 | |
| 2 | Count | 51 | 1 | 23 | 75 |
| | Expected Count | 43.7 | 3.5 | 27.8 | 75.0 |
| | Residual | 7.3 | -2.5 | -4.8 | |
| 3 | Count | 72 | 10 | 40 | 122 |
| | Expected Count | 71.0 | 5.7 | 45.3 | 122.0 |
| | Residual | 1.0 | 4.3 | -5.3 | |
| 4 | Count | 130 | 10 | 109 | 249 |
| | Expected Count | 145.0 | 11.6 | 92.5 | 249.0 |
| | Residual | -15.0 | -1.6 | 16.5 | |
| Total | Count | 276 | 22 | 176 | 474 |
| | Expected Count | 276.0 | 22.0 | 176.0 | 474.0 |

Note. Grp 1=28 Early Retirement Military Officers, Public Service
 Grp 2=75 Early Retirement Military Officers, No Public Service
 Grp 3=125 Regular Retirement Military Officers, Public Service
 Grp 4=250 Regular Retirement Military Officers, No Public Service

TABLE 25

Crosstabulations for RDI Finances Scale Item 10 (Good Pension Plan)
Between Early Retirement Military Officers and Regular Retirement
Military Officers on the Basis of Public Service Employment

| Group | | 0 (No) | 1 (?) | 3 (Yes) | Total |
|-------|----------------|--------|-------|---------|-------|
| 1 | Count | 8 | 3 | 17 | 28 |
| | Expected Count | 7.3 | 1.6 | 19.1 | 28.0 |
| | Residual | .7 | 1.4 | -2.1 | |
| 2 | Count | 31 | 2 | 42 | 75 |
| | Expected Count | 19.5 | 4.2 | 51.3 | 75.0 |
| | Residual | 11.5 | -2.2 | -9.3 | |
| 3 | Count | 22 | 9 | 93 | 124 |
| | Expected Count | 32.2 | 7.0 | 84.7 | 124.0 |
| | Residual | -10.2 | 2.0 | 8.3 | |
| 4 | Count | 63 | 13 | 174 | 250 |
| | Expected Count | 65.0 | 14.2 | 170.9 | 250.0 |
| | Residual | -2.0 | -1.2 | 3.1 | |
| Total | Count | 124 | 27 | 326 | 477 |
| | Expected Count | 124.0 | 27.0 | 326.0 | 477.0 |

Note. Grp 1=28 Early Retirement Military Officers, Public Service
Grp 2=75 Early Retirement Military Officers, No Public Service
Grp 3=125 Regular Retirement Military Officers, Public Service
Grp 4=250 Regular Retirement Military Officers, No Public Service

TABLE 26

Crosstabulations for RDI Finances Scale Item 16 (Income Provides Luxuries) Between Early Retirement Military Officers and Regular Retirement Military Officers on the Basis of Public Service Employment

| Group | | 0 (No) | 1 (?) | 3 (Yes) | Total |
|-------|----------------|--------|-------|---------|-------|
| 1 | Count | 15 | 3 | 10 | 28 |
| | Expected Count | 11.1 | 1.1 | 15.7 | 28.0 |
| | Residual | 3.9 | 1.9 | -5.7 | |
| 2 | Count | 39 | 2 | 34 | 75 |
| | Expected Count | 29.8 | 3.0 | 42.2 | 75.0 |
| | Residual | 9.2 | -1.0 | -8.2 | |
| 3 | Count | 45 | 4 | 75 | 124 |
| | Expected Count | 49.3 | 5.0 | 69.7 | 124.0 |
| | Residual | -4.3 | -1.0 | 5.3 | |
| 4 | Count | 89 | 10 | 147 | 246 |
| | Expected Count | 97.8 | 9.9 | 138.3 | 246.0 |
| | Residual | -8.8 | 0.1 | 8.7 | |
| Total | Count | 188 | 19 | 266 | 473 |
| | Expected Count | 188.0 | 19.0 | 266.0 | 473.0 |

Note. Grp 1=28 Early Retirement Military Officers, Public Service
 Grp 2=75 Early Retirement Military Officers, No Public Service
 Grp 3=125 Regular Retirement Military Officers, Public Service
 Grp 4=250 Regular Retirement Military Officers, No Public Service

Knesek's sample facilitated comparisons between military and civilian early retirees on the basis of public versus private sector employment orientation. Figure 4 enables visual comparison of RDI scale score means between military and civilian early retirees on the basis of the public versus private sector nature of their employment.

To make comparisons between these studies, two independent-samples t tests were calculated. The first t test compared the mean RDI scale scores for military early retirees who entered public/community service employment, with civilian early retirees who had public sector careers. The second t test compared the mean RDI

scale scores of military early retirees who did not enter public/community service employment, with civilian early retirees who had private sector careers. The null hypothesis for each of these tests was that there would be no significant difference in the four RDI scale score means between comparison groups.

The independent-samples *t* test calculations produced two-tailed *p* values. Tables 27 and 28 provide a summary of independent-samples *t* test results for these comparisons. For the comparisons of military and civilian early retirees based on public service employment, the null hypothesis was rejected only for the Finances scale; differences between groups on all other scales were not found to be statistically significant. The effect size calculated is considered to be small. However, this finding suggested that the financial situation was better for the civilian early retirees than for the military early retirees. For the comparisons of military and civilian early retirees based on private sector (non-public service) employment, a fail-to-reject decision was reached for the Health scale only. This finding could suggest that Health was the only area in which the civilian early retirees did not have an advantage over the military early retirees.

Summary of Findings

Analysis of early and regular retirement military officers using One-way ANOVA to compare mean scores on the four RDI scales was conducted. A statistically significant difference at the .05 level was obtained on the Finances scale. This finding suggested that the early retirees were less satisfied with their post-retirement financial situations than were the regular retirees. A small effect size of .02

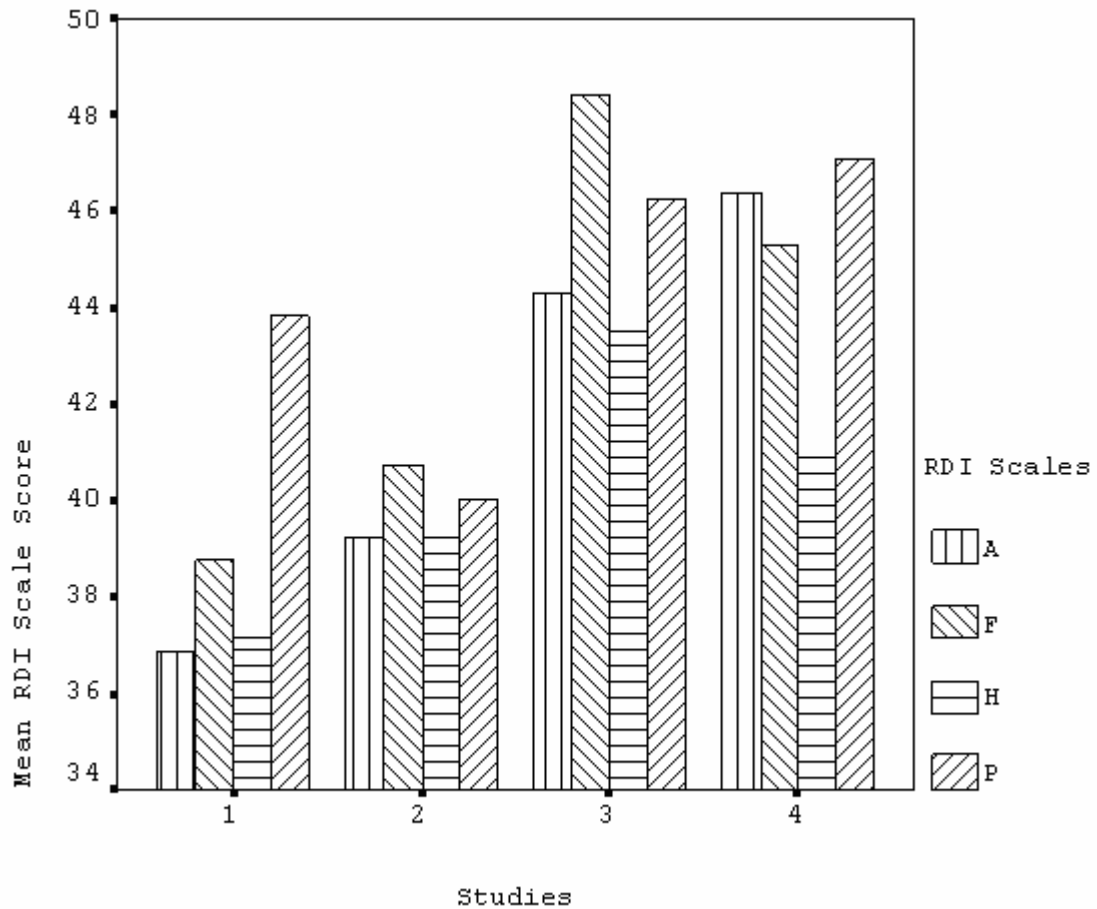


FIGURE 4

Comparison of RDI Scale Score Means Between Early Retirement Military Officers and Early Retirement Civilians on the Basis of Public or Private Sector Employment

Note. RDI Scales: A=Activities, F=Finances, H=Health, P=People
 Studies: 1=Present Study, Early Military Retirees, Public Service Employment; 2=Present Study, Early Military Retirees, No Public Service Employment; 3=Knesek (1988), Early Civilian Retirees, Public Sector Careers; 4=Knesek (1988), Early Civilian Retirees, Private Sector Careers

TABLE 27

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Who Entered Civilian Public Service Employment Obtained by Graves (2005) and Early Civilian Retirees From Public Sector Careers Reported by Knesek (1988)

| RDI Scales | Graves (2005) | | | Knesek (1988) | | | t | Two-Tailed P | Cohen's d |
|------------|---------------|-----------|------|---------------|-----------|------|-------|--------------|-----------|
| | n=28 | Std. Dev. | SEM | n=16 | Std. Dev. | SEM | | | |
| A | 36.85 | 12.24 | 2.31 | 44.31 | 11.97 | 2.99 | 1.96 | .05 | -.61 |
| F | 38.75 | 10.90 | 2.05 | 48.43 | 5.13 | 1.28 | 3.33* | <.05 | -1.13 |
| H | 37.14 | 13.36 | 2.52 | 43.50 | 9.50 | 2.37 | 1.67 | .10 | -.54 |
| P | 43.81 | 8.32 | 1.60 | 46.25 | 11.44 | 2.86 | 0.80 | .42 | -.24 |

Note. *p value indicates statistical significance at the .05 level

RDI Scales: A=Activities, F=Finances, H=Health, P=People

TABLE 28

A Comparison of Independent-Samples t Test Results Between Early Retirement Military Officers Who Did Not Enter Civilian Public Service Employment Obtained by Graves (2005) and Early Civilian Retirees From Private Sector Careers Reported by Knesek (1988)

| RDI Scales | Graves (2005) | | | Knesek (1988) | | | t | Two-Tailed P | Cohen's d |
|------------|---------------|-----------|------|---------------|-----------|------|-------|--------------|-----------|
| | n=75 | Std. Dev. | SEM | n=43 | Std. Dev. | SEM | | | |
| A | 39.24 | 13.09 | 1.51 | 46.39 | 7.79 | 1.18 | 3.26* | <.05 | -.66 |
| F | 40.73 | 9.65 | 1.11 | 45.30 | 6.11 | 0.93 | 2.79* | <.05 | -.56 |
| H | 39.25 | 13.78 | 1.59 | 40.88 | 11.08 | 1.68 | 0.66 | .50 | -.13 |
| P | 40.01 | 15.25 | 1.76 | 47.09 | 8.46 | 1.29 | 2.80* | <.05 | -.57 |

Note. *p value indicates statistical significance at the .05 level

RDI Scales: A=Activities, F=Finances, H=Health, P=People

was calculated, which indicated a small correlation between retirement category and scores on this scale.

Comparisons of the RDI scale score means of early retirement military officers from the present study with those of regular retirement military officers from several previous studies were conducted using independent-samples t tests. Statistically significant differences were obtained for five of the six tests, with early retirees consistently scoring lower on the majority of the RDI scales. However, it is difficult to draw specific conclusions due to the demographic inconsistencies among the comparison groups.

Analysis of early and regular retirement military officers on the basis of civilian public service employment was conducted using One-way ANOVA to compare mean scores on the four RDI scales. A statistically significant difference at the .05 level was obtained on the Finances scale. An small effect size (Cohen, 1988) of .01 was calculated, which indicated that the correlation between retirement category and scores on this scale was small. However, to further define the differences among the comparison groups, a chi-square test of independence was conducted on the 18 multi-category response variables of the Finances scale. Statistically significant findings were obtained on six items. These included items 4 (well off), 9 (high income), 10 (good pension plan) and 16 (income provides luxuries). For each of these items, residual values indicated that early retirees had a lower than expected number of positive responses and a higher than expected number of negative responses. Conversely, the regular retirees had a higher than expected number of positive responses and a lower than expected number of negative responses on these items.

Comparison of early retirement military officers to early retirement civilians was accomplished by using the RDI scale score means from the present study and those of early retirement civilians reported by Knesek (1988). Two independent-samples t tests were conducted to compare military early retirees and civilian early retirees on the basis of public sector nature of their employment. A statistically significant difference at the .05 level was obtained on the Finances scale for public sector civilian early retirees over the military early retirees employed in civilian public service. However, the very small sample size of the comparison groups makes interpretation of practical significance questionable. Statistically significant differences at the .05 level were obtained on the Activities, Finances, and People scales for private sector civilian early retirees over military early retirees who did not enter public service careers.

V. CONCLUSIONS AND RECOMMENDATIONS

This section reviews the purpose, strategy, methodology, sample, research questions, and major findings of the study. It presents conclusions based on the findings, provides discussion, and lists recommendations.

Purpose and Strategy

Three decades ago, Dunning & Biderman (1973) declared,

For some, apparent success in making the [midlife military-to-civilian] transition undoubtedly masks agonizing doubts and uncertainties. And, for some, the transition is destructive...There appears to be a serious need for continuing research...into the processes involved in military retirement and subsequent life career decisions and experiences (p. 37).

The purpose of this study was to conduct research into the subsequent life of military retirees by comparing early retirees with regular retirees; to examine an aspect of adjustment (life satisfaction) that might ultimately contribute to prediction, reduction, prevention, or intervention of adjustment problems associated with the midlife military-to-civilian transition.

Following the Cold War, the United States government reduced the size of its military. One of the force management tools used by the Secretary of Defense to accomplish this downsizing was the Temporary Early Retirement Authority Program (TERA), which permitted voluntary early retirement for many military members with as few as 15 years of service. This was a significant exception to the well established 20 to 30 year career length. Of the 67,823 officers who retired from the military services from 1993 to 1999, 12,790 were "early" retirees. Because the early retirees were previously unstudied, no baseline data

existed about their midlife military-to-civilian transition adjustment. More importantly, they represented a unique group with which the larger population of military retirees could be compared. Ostensibly, early retirees differed from regular retirees only on the variable of length of service, sharing many other factors such as commitment to military career and socialization into the military lifestyle.

The strategy for making the initial comparisons between early and regular retirees was to measure them on an aspect of adjustment. Additionally, it was preferred that the selected aspect of adjustment be one upon which other groups of military retirees had been measured in order to facilitate comparisons. Finally, it was important to measure postretirement adjustment with an instrument that had been used in previous studies so that the comparisons could be made on a common basis.

One way to quantify postretirement adjustment is through the measurement of satisfaction (McNeil, 1964, 1975; McNeil & Giffen, 1965a). A review of the literature revealed that Robinson (1972), Bruce (1975), Manning (1979), and Brunson (1996) measured the life satisfaction of groups of military retirees using the Retirement Descriptive Index (RDI). Manning (1979) recommended further research, "using other populations of military retirees, to determine factors influencing retirement satisfaction" (p. 117). Therefore, life satisfaction was selected as the aspect of adjustment to be measured, and the RDI was selected as the research instrument for this study.

Knesek (1988, 1992) used the RDI to measure the life satisfaction of civilian early retirees. Therefore, use of the RDI as the research instrument enabled some comparisons between military and civilian

retirees. Such comparisons had been recommended by Bellino (1970), who stated, "We may be able to clarify general trends in the civilian and military retirees by contrasting the attitudes and role changes in the two groups, thereby anticipating individual difficulties" (p. 583).

A sample of retired officers who left military service between 1993 and 1999 was obtained. These retirees were administered the RDI, and their scores were analyzed. The usable sample contained 946 retired officers, 122 of whom were early retirees.

Sample and Methodology

Respondents to the survey were reached most successfully in two ways. Correspondence by email was sent to 855 local or regional units of various Veterans Service Organizations. Units were informed of the study and asked to publicize the survey to their members, many of whom are military retirees. Additionally, the study was publicized by the Military Advantage (Military.com) internet website through their weekly electronic newsletter, *Military Report*. Military Advantage claims that its website has 4,000,000 subscribed members, many of whom are military retirees.

Respondents were directed to an internet website maintained by the researcher, which provided a link to an electronic version of the survey that could be completed online. Responses to the survey numbered 1,210, from which a 78% usable sample of 946 military officers who retired from active duty between 1993 and 1999 was obtained. Of the 946 subjects, 824 were "regular" retirees (with at least 20, but not more than 30 years of military service), and 122 were "early" retirees (with at least 15, but less than 20 years of military service).

Research Questions

This study examined three research questions:

1. Is there a statistically significant difference in the life satisfaction of early retirement military officers compared with the life satisfaction of military officers who retired with regular 20 to 30 year military careers?

2. What can be learned about the military-to-civilian transition of early retirement military officers, given that 95.7% of eligible personnel (90.4% for officers) did not document a transition into civilian public or community service despite incentives?

3. Is there a statistically significant difference in the life satisfaction of early retirement military officers compared with the life satisfaction of early retirement civilian workers?

Major Findings

Analysis of early and regular retirement military officers using One-way ANOVA to compare mean scores on the four RDI scales was conducted. A statistically significant difference at the .05 level was obtained on the Finances scale, indicating that early retirees were less satisfied with their post-retirement financial situations than were the regular retirees. A small effect size of .02 was calculated.

Comparisons of the RDI scale score means of early retirement military officers from the present study with those of regular retirement military officers from several previous studies were conducted using independent-samples t tests. Statistically significant differences were obtained for five of the six tests, with early retirees consistently scoring lower than regular retirees on the majority of the RDI scales.

An analysis of early and regular retirement military officers on the basis of civilian public service employment was conducted using One-way ANOVA to compare mean scores on the four RDI scales. A statistically significant difference at the .05 level was obtained on the Finances scale. A small effect size of .01 was calculated. To further define the differences among the comparison groups, a chi-square test of independence was conducted on the 18 multi-category response variables of the Finances scale. Statistically significant findings were obtained on six items. These included items 4 (well off), 9 (high income), 10 (good pension plan) and 16 (income provides luxuries). For each of these items the early retirees had a lower than expected number of positive responses and a higher than expected number of negative responses. Conversely, the regular retirees had a higher than expected number of positive responses and a lower than expected number of negative responses on these items.

Comparison of early retirement military officers with early retirement civilians was accomplished by using the RDI scale score means from the present study and those of early retirement civilians reported by Knesek (1988). Two independent-samples t tests were conducted to compare military early retirees and civilian early retirees on the basis of public sector nature of their employment. A statistically significant difference at the .05 level was obtained on the Finances scale for public sector civilian early retirees over the military early retirees employed in civilian public service. Statistically significant differences at the .05 level were obtained on the Activities, Finances, and People scales for private sector civilian

early retirees over military early retirees who did not enter public service careers.

Conclusions

The following conclusions were based on the findings of the study:

1. Generally, early retirement military officers experienced less satisfaction with their post-retirement lives than regular retirement military officers.

2. Specifically, early retirement military officers experienced less satisfaction with their financial situations than regular retirement military officers.

3. Early retirement military officers were less likely than regular retirement military officers to believe that they were well off, had high income, had a good pension plan, or could afford luxuries.

4. Among early retirement military officers, those who entered civilian public service employment considered themselves to be less well off than those who entered civilian non-public service employment.

5. Among early retirement military officers, those who entered civilian non-public service employment were less satisfied with their pension plans than those who entered civilian public service employment.

6. Early retirement military officers who entered civilian public service employment experienced less satisfaction with their financial situations than civilians who had retired early from public sector careers.

7. Early retirement military officers who did not enter civilian public service employment were less satisfied with their lives in the areas of activities, finances, and people than civilians who had retired early from private sector careers.

8. More early retirement military officers entered civilian public service and were eligible for the enhanced retirement qualification period than actually participated in the incentive program.

9. Anecdotal evidence suggests that negative feelings about the voluntary nature or fairness of TERA persist among some early retirement military officers.

Discussion

As evidenced by the conclusions listed above, statistical analysis of the RDI scales enabled some direct answers to the first and third research questions. The main point of the second research question was *not* why so few early retirees documented entry into civilian public service (although this is discussed). The question cited the low figure reported by the Defense Manpower Data Center as a possible abnormality that may have signaled adjustment problems or differences between the midlife military-to-civilian transitions of early and regular retirement military officers, and asked what could be learned about the transition.

No target numbers or predictions were found in the literature regarding the quantity of early retirees who would enter civilian public service. However, the number who eventually documented such a transition was low, considering that military personnel who had been performing public service for 15 years or longer might have been

motivated to continue their public service. Janowitz (as cited in Biderman, 1964) contended

...public service orientation is an important basis of the choice of a military career... military professionals tend to be recruited from subcultures with strong traditions of public service motivation...the career itself reinforces such motivations (p. 311).

Thus, the point of the second research question was the fact that public service motivations appeared to be low within the early retiree population.

The sample of the present study was similar to the population regarding the small percentage who reported entry into civilian public service. Within the sample, 26% of the regular retirement military officers reported that they had entered civilian public service employment. Of the 22% of early retirement military officers in the sample (28 individuals) who reported entry to public service employment, only one-half of them (14 individuals) submitted the necessary documentation to qualify for the enhanced retirement qualification incentive. Therefore, in answering the second research question, one of the things learned about the midlife military-to-civilian transition was that more early retirement military officers entered civilian public service than documented such entry.

Numerous authors have addressed the voluntary versus involuntary nature of military retirement as a factor related to satisfaction (Stanford, 1968; Larkin, 1983; Sweet, 1989; McClure, 1992). In his study of early versus regular retirement civilians, Knesek (1988) stated, "It would appear that retirees who make the decision to retire themselves feel that the retirement process is fair, and retirees who

feel forced to retire feel that the retirement process is unfair" (p. 77). This conclusion is in agreement with a similar observation by Price et al. (1979).

Lenz (1967) maintained that every career military officer ultimately faces involuntary retirement from military service. A key point about early retirement under TERA was that some may have felt pressured to volunteer. Some may have assumed that such pressure violated a perceived, unwritten contract that would allow them to serve at least to the traditional 20 year retirement point. Frank's (1993) general observation that the timing of military retirement may be a function of factors beyond the service member's control was accurate for any who felt pressured to accept early retirement.

An unanticipated aspect of the study was correspondence received by the researcher from respondents who felt compelled to provide more information than the survey allowed. Qualitative (anecdotal) data contained in this correspondence should be mentioned because it contributed to answering the second research question. Considering that TERA was officially a voluntary program, the following excerpts from the correspondence received from several respondents provided more insight into their subsequent life satisfaction:

Then along came TERA, or 'Terror' as it came to be called...A group of officers...formed a non-profit group called the O-4 Association with the stated purpose of bringing a class action lawsuit against the Navy for breach of contract...

I was going to have to [retire] sooner or later anyway, I just ended up doing it sooner than I had planned. The bitter part still lingers, though. It's softened and mellowed over the years, but it's still there.

I think the morale of the service was very low back then, and it might have nudged some field grade officers to opt for TERA, just as a way to control their own destiny, as best they could...this may have been the first time in Air Force personnel history when promising career officers gave long thought to their own self-interests and focused on what was best for them and their families. Something strange was going on in the early 1990s, culturally, in the Air Force that may have influenced the TERA people.

TERA was an unmitigated disaster for me, and I am still dealing with the fallout from it...I am a registered architect with graduate degrees in architecture and urban planning, yet I have been either unemployed or underemployed since I left the service...I am told that I interview very well. I am also told that I am 'overqualified' for many of the positions that I apply for, and I sense a certain amount of reluctance on the part of many organizations to hire someone with a military background. Although I am very proud of my military career, I often think that I could have avoided my current circumstances if I had (1) rejected military service altogether, or (2) spent significantly more time playing politics while in uniform.

However, not all of the correspondence about TERA was negative:

The last 8 years have been productive, personally and professionally rewarding, and astonishingly lucrative. I have no regrets, and am grateful to the US for the supplemental retirement income and health care my early retirement package provides...my feedback is simple. If you are confident, capable, aggressive, and especially if you have technical skills, leave now. Don't wait. Life outside the military cage is far, far better...I now find myself worth \$1.2 million after eight years of stock options, a six figure salary, and a wonderful benefits package with a Fortune 50 Corporation. While I enjoyed my USAF service, I now wish I'd jumped ship ten years earlier. I should reach my second retirement at 55, as a multi-millionaire--and I'm not a particularly brilliant individual....

So while some early retirement military officers have transitioned well, for others the adjustment is not yet complete. Thus, a second thing learned about the midlife military-to-civilian transition, as indicated by anecdotal data, is that negative feelings about the voluntary nature or fairness of TERA persist among some early retirees. This might help explain why satisfaction levels for early retirees, as indicated by RDI scale scores, are lower than regular retirement military officers and early retirement civilians.

Concern by the researcher over the length of the survey proved to be unfounded. For example, one respondent wrote,

There was no opportunity for participants to make any comments...about significant life changes other than retirement (i.e. death of a spouse/child/parent, major catastrophic event, etc.). Nor was there an opportunity for a participant to provide you with a statement of what the most significant effect of retirement was on him/her individually...Perhaps you were concerned about the length?

Correspondence provided insight as to why some early retirees did not enter civilian public service. One individual stated that the incentive was not sufficient because he would have to wait until age 62 to realize any benefit. Another wrote,

I actively considered this option, but the red tape simply didn't merit the effort. I especially considered Troops to Teachers, but you must be truly motivated to fight your way into a schoolroom in most states--the obstacles were considerable.

Still another stated,

I do vaguely recall the civilian public service ploy that was offered. As I recall, though, the list of qualifying jobs was very short, and they all involved several years work at substandard pay; things like police work or

teaching in an inner-city school. Noble professions both, but tough to raise a family on.

Some early retirees were not fully aware of the public service incentive offered during the enhanced retirement qualification period. Although the incentive was promoted in preretirement transition assistance programs during TERA, the stressful nature of preretirement, and the overwhelming volume of details associated with retirement, may have caused it to be missed. A January 2004 news article in *Afterburner* (the USAF retired personnel newsletter) entitled "Officials Say Some TERA Retirees Confused by Act's Provisions" announced that the Defense Manpower Data Center had established a TERA internet website to provide more information about the program because numerous retired personnel had failed to completely understand the provisions of the program at the time of their retirement.

Another possible explanation as to why few early retirees entered public service could have been that the primary objective was satisfactory reemployment, not continued public service. As cited by numerous authors, the transferability of job skills is extremely important to reemployment and satisfaction with reemployment (Draper et al. 1963; Biderman, 1969; Sharp & Biderman, 1966, 1967b; Lenz, 1967; Biderman & Sharp, 1968; Garber, 1971; Stanford, 1971; Dunning & Biderman, 1973; Ostertag, 1976; Henry, 1978; Cooper, 1981; and French et al., 1983). Military retirees seeking civilian reemployment would be expected to capitalize on their military job skills, with little or no regard as to whether the employment is classified as public service.

Recommendations for Research

1. Continued research about early military retirees should be

conducted. The problem of how to predict or prevent the adjustment problems associated with the midlife military-to-civilian transition remains. Early military retirees are an excellent comparison group for studying military retirees in general.

2. Future research should examine the adjustment of military retirees by subgroups, to include gender, ethnicity, and military service branch.

3. Qualitative studies of military retirees are needed. The researcher received a large quantity of correspondence from participants in the present study who wanted to provide specific information of a qualitative nature that was not able to be expressed due to the forced response format of a quantitative research instrument.

4. Use of online surveys is recommended. The advantages and effectiveness of electronic media for promoting and conducting research was made clear to this researcher during the present study.

Recommendations for Practice

1. Any future initiatives by the Department of Defense to encourage a midlife military-to-civilian transition into civilian public service should include inducements that serve as effective incentives. The enhanced retirement qualification period was not perceived by most early retirees to be a sufficient incentive.

2. Counselors and mental health practitioners who assist military retirees should be made aware that early retirees may be somewhat less satisfied with their lives than regular retirees, and that they may harbor negative feelings due to perceptions of unfair treatment.

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APPENDIX A

SURVEY INSTRUMENT

Note: The Retirement Descriptive Index (RDI) comprised the majority of the research instrument. Permission to publish the RDI in the present study was denied by the copyright holder, Bowling Green State University (BGSU). Items to obtain specific demographic data (items 8-9, and 13-15) were required to be included in the research instrument by BGSU as a condition of RDI use. Items 1-6, 10-12, and 16 were added by the researcher. This instrument was formatted in paper and electronic formats, but was primarily administered electronically via an internet web site established by the researcher.

LIFE SATISFACTION SURVEY

This is an anonymous survey; please do not indicate your name. Please mark one response to each of the following items:

PART 1: DEMOGRAPHIC INFORMATION

1. From which branch of military service did you retire?

- Army
- Air Force
- Coast Guard
- Marine Corps
- Navy

2. Did you initially enter military service either due to being drafted or to avoid being drafted?

- Yes
- No

3. During which year did you retire from military service?

- 1993
- 1994
- 1995
- 1996
- 1997
- 1998
- 1999

4. What was your pay grade at retirement?

- O-1
- O-2
- O-3
- O-4
- O-5
- O-6
- General Officer

5. Did you retire "early" (with less than 20 years of service) under the Temporary Early Retirement Authority (TERA) Program?

Yes
 No

6. How many complete years of military service did you have at retirement (including any enlisted service)? _____

7. What is your current age? _____

8. What is your gender?

Male
 Female

9. Did you enter civilian employment after retirement from military service?

Yes
 No

Note: The Defense Manpower Data Center (DMDC) defines public service organizations as federal, state, or local governmental entities. DMDC defines community service organizations as non-profit organizations or associations that provide or coordinate the delivery of services in the public interest. Areas of public/community service include: Elementary, secondary, or postsecondary school teaching, administration, or support of teachers or school administrators; law enforcement; public health care; social services; public safety; emergency relief; public housing; conservation; environment; job training, etc.

10. Did you initially enter civilian employment with a public or community service organization?

Yes
 No

11. If you retired under TERA, did you participate in the enhanced retirement qualification period by reporting your employment in public or community service to DMDC?

Yes
 No

12. What is your current job title or position? _____

13. How long have you worked in your current job? _____

14. What is the zip code where you are employed? _____

15. What is the zip code where you reside? _____

16. From which type of service did you retire?
 Active Duty
 Reserve
 National Guard

PART 2: RETIREMENT DESCRIPTIVE INDEX (RDI)

Note: The RDI comprised the remainder of the survey. The RDI is a 63-item checklist consisting of adjectives and short phrases that describe an aspect of retirement. It consists of four scales: Activities and Work (18 items), Financial Situation (18 items), Health (9 items), and People You Associate With (18 items). Respondents indicate "Y" (yes) to indicate that an item describes the particular aspect of the respondent's retirement situation; "N" (no) to indicate that an item does not describe the particular aspect of the respondent's retirement situation; or "?" (could not decide) if the respondent was unable to decide if the item describes the particular aspect of his or her retirement situation.

APPENDIX B

COVER LETTER FOR MAILED SURVEYS

Dear Retired Military Officer

As a fellow retiree and current graduate student, I'm asking for your help. If you retired between 1993 and 1999, your completion and return of the enclosed survey will be appreciated. This survey will enable a study at Texas A&M University into the life satisfaction of retired military officers, with a view toward assisting future retirees with the transition to civilian life.

The study will compare the life satisfaction of officers who retired "early" (with less than 20 years of service) under the Temporary Early Retirement Authority Program (TERA) with the life satisfaction of officers who retired with 20 or more years of service. The survey begins with 15 questions that address relevant demographic information, and concludes with the "Retirement Descriptive Index" (RDI) assessment instrument, which has been used in past studies of military retirees. Completion of the survey should take approximately 10 minutes.

This survey has been distributed to you indirectly via a veterans' organization to which you may belong. Respondents will be anonymous; I do not need to know your identity or contact information. Interested persons may read about my findings after the study concludes via my website (<http://retiredofficersurvey.tamu.edu>). Thank you for your contribution to my research.

Sincerely

RUSS T. GRAVES, Major, USAF (Ret)
Ph.D. Candidate
Department of Educational Psychology
Texas A&M University

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1. Life Satisfaction Survey
2. Information Sheet
3. Return Envelope
4. U.S. Flag decal (thank you for participating)

APPENDIX C

TEXT OF EMAIL TO VETERANS SERVICE ORGANIZATIONS

Dear Colonel _____

I'm writing to ask for assistance from the _____ Chapter of the _____ (VSO) in conducting a research project about retired military officers. The national organizational headquarters is unable to provide assistance from the highest level due to the large number of requests from individuals they receive. Therefore, I'm taking a grass roots approach by contacting individual chapters with my appeal for volunteers.

I'm retired from the Air Force and working on a graduate degree at Texas A&M University. I have a website with an online survey, to which I'm trying to direct officers from all service branches who retired between 1993 and 1999. I'm comparing the life satisfaction of officers who retired "early" under the Temporary Early Retirement Authority Program (TERA), to officers who retired with 20 or more years of service during these same years. The survey can be viewed at my website (<http://retiredofficersurvey.tamu.edu>). It is hoped that my research will ultimately be of interest or benefit to the retired military community.

The usefulness of this project is dependent upon surveying a large number of retired officers who retired 1993-99. Therefore, I'm asking your chapter to help me reach these retired officers by either allowing a notice about my survey to be posted on your chapter website/newsletter (if you have them), forwarding this email to your membership, mentioning my survey at your next meeting, or allowing me to mail paper copies of my survey to your chapter (just tell me how many to send). I'm not asking for any names, rosters, or contact information--the survey is completely anonymous. I'll be glad to provide a proposed text for a web/newsletter notice upon request.

Thank you for considering my request.

Russ Graves
Major, USAF (Ret)

APPENDIX D

FOLLOW-UP LETTER TO VETERANS SERVICE ORGANIZATIONS

Dear Colonel _____

I'm writing to follow-up my recent email request for assistance from your _____ (VSO) chapter in conducting a research project about retired military officers. I'm trying to reach officers who retired between 1993 and 1999 with an appeal for their participation in an on-line survey.

I'm retired from the Air Force and working on a graduate degree at Texas A&M University. My online survey will enable comparisons of the life satisfaction of officers who retired "early" under the Temporary Early Retirement Authority Program (TERA), to officers who retired with 20 or more years of service during these same years. The survey can be viewed at my website, accessible at: <http://retiredofficersurvey.tamu.edu>. It is hoped that this research will ultimately be of interest to the retired military community or of benefit to future retirees as they transition to civilian life.

I'm asking for your chapter's help in reaching officer members who retired between 1993 and 1999. This can be done by: mentioning the survey on your chapter website, in your newsletter, or emails; announcing the survey at your next meeting; or allowing me to mail paper copies of the survey for distribution at an upcoming meeting (I would need to know how many to send). I'm not asking for any names, rosters, or contact information--the survey is completely anonymous. Proposed text for a web/newsletter notice is enclosed.

My contact information follows:

Email: xxxxxxxxxxxx

Address: xxxxxxxxxxxx

Phone: xxxxxxxxxxxx

Thank you for any assistance that you may be able or willing to provide.

Sincerely

RUSS T. GRAVES
Major, USAF (Ret)

APPENDIX E

TEXT OF MAGAZINE ADVERTISEMENT

OFFICER RETIREES from 1993-1999:

Help a fellow officer conduct a graduate research study into the life satisfaction of "early" (TERA) retirees vs. 20+ year retirees. Please take an online survey at:

<http://retiredofficersurvey.tamu.edu>

Results will be posted online following the study.

APPENDIX F

TEXT PROVIDED TO VETERANS SERVICE ORGANIZATIONS FOR INCLUSION IN
CHAPTER INTERNET WEBSITES

ATTENTION OFFICERS WHO RETIRED BETWEEN 1993 & 1999:
Help a fellow officer conduct a research project into the life
satisfaction of military retirees. Take an online survey at:
<http://retiredofficersurvey.tamu.edu>. Results will be posted on the
website at the end of the study.

APPENDIX G

TEXT PROVIDED TO VETERANS SERVICE ORGANIZATIONS FOR INCLUSION IN
CHAPTER NEWSLETTERS

RETIRED OFFICER SURVEY

If you retired between 1993 and 1999 your participation in a survey is requested. Major Russ Graves (USAF, retired) is a graduate student at Texas A&M University investigating the life satisfaction of officers who retired during this period. He is soliciting volunteers to take an online survey, accessible at: <http://retiredofficersurvey.tamu.edu>. The study will compare officers who retired with less than 20 years of service with those who retired with more than 20 years. Survey results will be posted on his website at the conclusion of the study. It is hoped that findings will be of interest to present retirees and helpful to those who retire in the future as they transition from military life.

VITA

Russ Thomas Graves was born in Texas in 1957 and entered Texas A&M University in 1976. He received a B.S. degree in agricultural economics from Texas A&M University in 1980, and was commissioned as a United States Air Force second lieutenant through the Reserve Officer Training Corps. He earned a M.A. degree in human relations from Webster University in 1983.

During his military career, primary duties included Missile Combat Crew Commander in the Titan II and Ground-Launched Cruise Missile weapon systems, Wing Executive Officer, Aide-de-Camp, and Assistant Professor of Aerospace Studies. Assignment locations included Little Rock Air Force Base, Arkansas; Royal Air Force Greenham Common, England; Wiesbaden Air Station, Federal Republic of Germany; Royal Air Force Mildenhall, England; and Texas A&M University, College Station, Texas.

Russ retired from the Air Force in 1996 following an assignment at Texas A&M University, then joined the university staff and continued to work with college students in various capacities. Russ and his wife, Sondra, reside in Bryan, Texas. Russ may be reached through the Department of Educational Psychology, Texas A&M University, College Station, Texas, 77843-4225.