Demographic Change and Work-force Planning: the All-Volunteer Force

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Labor-intensive employers are becoming aware that demographic changes are transforming the work force in important ways. Even before the stresses on military manpower occasioned by the invasion and occupation of Iraq, these changes were engaging planners in the nation's armed forces. As an employer of primarily young adults, the All-Volunteer Force (AVF) is confronting two important demographic changes: a population of young adults that has become relatively stable in terms of size, while changing rapidly in terms of racial and ethnic diversity. The stable youth population suggests more competition with other employers, as well as with such alternative life choices as educational attainment beyond the level the military seeks. The diverse population suggests more work group conflict/less work group cohesion without specific management attention. This paper focuses on the interaction between demographic changes and employer requirements in an "industry" whose traditional work force is becoming increasingly different, demographically, from the population as a whole.

I. Trends in the supply of potential recruits

A. The recruiting-age population

The bulk of the nation's military is made up of enlisted recruits, who generally volunteer after receiving a high school diploma. Thus, the military directs its advertising and

Note: Much of this paper derives from an earlier analysis (Riche and Quester 2004); thus I am considerably indebted to Aline Quester, PhD, the CNA Corporation, for data and other information about the armed forces.

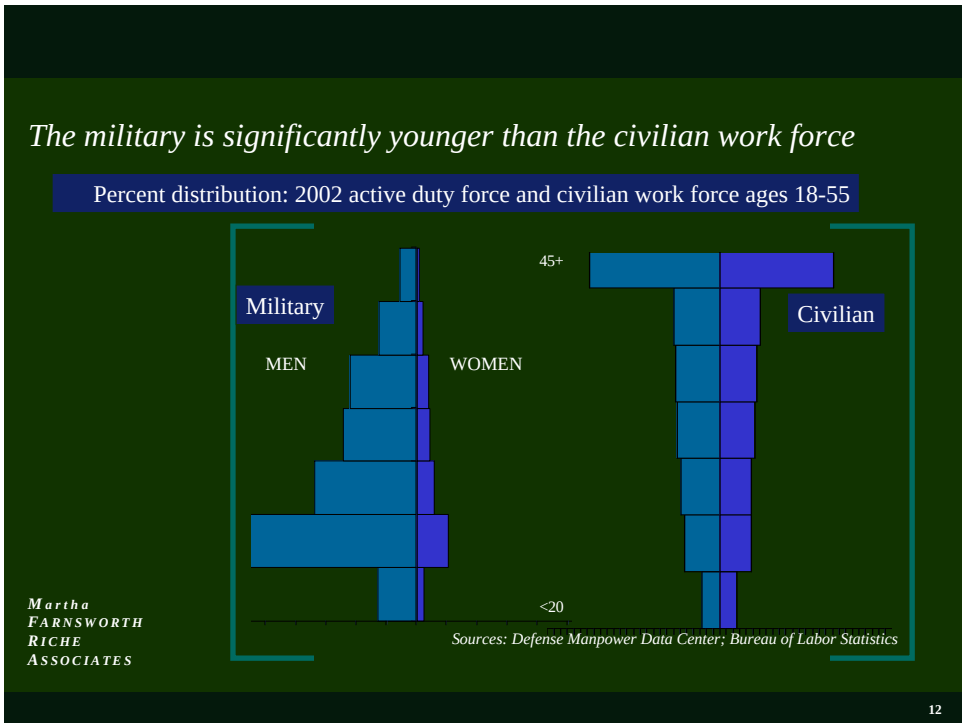
recruiting efforts toward the population ages15 to 19. [1] This age group is growing slowly in the United States in absolute numbers, while becoming proportionately smaller as a share of the total population. Between 2000 and 2025, the numbers of Americans aged 15 to 19 is projected to increase by 10.9 percent. (U.S. Census Bureau 2003) Compared with 1950 or 1960 (or 1970 in particular, with the Baby Boom swelling the numbers of young people), this is not the kind of population growth military recruiters were accustomed to when the All Volunteer Force (AVF) replaced the conscripted forces in 1973.

However, at that time the military was still focused on the male population, while the AVF has actively recruited females as well as males. With that shift in perspective, the male plus female youth population yields a significantly larger current and future potential recruit pool than the pre-AVF pool that was largely male. That said, very slow growth in the population of 15-to-19 year-olds is the new demographic reality for military recruiters.

The U.S. Census Bureau projects that the age group 15 to 19 will account for 6.4 percent of the population as a whole in 2025, down from 7.2 percent in 2000. (U.S. Census Bureau 2003) According to these projections, this age group will continue to decline relatively, but not absolutely, into the future. Thus, the age profile of the work force as a whole will continue to diverge considerably from the age profile of the nation's armed forces.

The figure below compares the recent age composition of the military and the civilian labor force up to age 55. The striking contrast underscores the unique nature of the military as an employer. Many other industries have a primarily youthful labor force—advertising, entertainment, and information come to mind. However, unlike other industries, the military needs to maintain the trust and understanding of the population as a whole. Thus, military leadership will need to monitor the potential effects of the increasing age gap between the forces and the public.

[1] The military cannot access recruits until age 18 (17 with parental permission).



At the same time as growth among young adults slows, other demographic trends are combining to constrict the supply of youth that the AVF can target for recruiting, with educational trends the most important.

B. Educational attainment

A recent National Academy of Sciences panel found that “the dramatic increase in college enrollment is arguably the single most significant factor affecting the environment in which military recruiting takes place.” (Sackett and Mavor 2002) Given the military’s preference for an enlisted corps with a high school diploma (reflected in military pay levels), other things equal this trend would act to reduce the potential pool of youth who are interested in military service.

The educational level of young Americans has increased over the three decades of the All-Volunteer Force. In 1974, 82 percent of the population ages 25 to 29—the ages when

Americans are expected to have completed their basic education— had completed four or more years of high school, compared to 86 percent in 2004. [2] (U.S. Census Bureau 2004)

Differential attainment levels for minority populations have been a challenge for military recruiters, given the AVF's strenuous efforts to achieve racial and ethnic population representation while at the same time recruiting a high quality force. In 1974, little more than half (52.5 percent) of Hispanics ages 25 to 29 had completed four or more years of high school, compared to 68.2 percent of blacks, and 83.4 percent of whites.[3] By 2004, 62.4 percent of Hispanics had attained this educational level, as had 88.7 percent of non-Hispanic blacks, and 93.3 percent of non-Hispanic whites. (U.S. Census Bureau 2004) Thus, given the educational requirements of the All-Volunteer Force, differential educational levels continue to constrain recruiting among some population sub-groups.

There is some concern that educational attainment levels have begun to stagnate, i.e. that today's young Americans are no better educated than the next older generation was at the same age, and may even fall behind. However, age changes in enrollment patterns obscure changes in attainment that are relevant to military recruiting.

Throughout the 20th century, each successive cohort of the American population attained higher levels of education than its predecessor. As a result, younger, better-educated cohorts have continually replaced older, less-educated cohorts. This pattern is changing, largely because the bulk of the population now has attained the basic, high school level of education required to find a place in today's economy, and today's armed forces.

However, the pattern is also changing because education is increasingly spread over the life cycle, and young Americans are taking longer to complete their education, often taking time out to explore alternative careers, and/or to earn money to pay for higher education. Meanwhile, immigration of large numbers of people who lack a high school

[2] Educational attainment data combine people who completed high school via a General Equivalency Diploma (GED) with people who earned a regular high school diploma.
[3] Until 1993, data for whites included Hispanics, most of whom report belonging to the white race; since 1993, data have been available for both whites, and white non-Hispanics.

diploma, particularly Hispanics, has suggested that immigration is working to lower the educational level of the U.S. population.

Taking all these factors into account, unofficial projections from the Census Bureau suggest that the educational attainment of the U.S. population aged 25 and older should in fact continue to improve over the next quarter century. (Day and Bauman 2000) Between 2003 and 2028, all population groups—men/women, native/foreign-born, and race/Hispanic origin— are projected to see an increase in the proportion that has a high-school education, even under conservative assumptions. The greatest improvement is for native-born black and Hispanic males (who start from a considerably lower base).

Overall, by 2028, the proportion of American adults with a high-school education should reach somewhere between 87 and 91 percent.[4] However, for younger cohorts there is projected to be little or no improvement, compared to the present, largely due to the impact of immigration.[5] Since these cohorts are the prime source of new recruits, the military should monitor this trend. It may need to consider taking a more pro-active stance on the importance of completing high school, especially with populations that are particularly interested in a lengthy military career.[6]

Similar improvement, albeit at lower levels, should take place for all population groups with regard to some post-secondary education. Over all age groups, between 56 and 63 percent of American adults are projected to have some post-secondary education by 2028, depending on the assumptions used. Looking specifically at younger cohorts, the significant change is that more will attain the level of "some college." Meanwhile, different demographic patterns creep in at the bachelor's degree level, where women are

[4] These projections assume a continuation of current patterns. (It should also be remembered that high school attainment numbers and projections include GEDs, who generally do not meet recruiting standards.) If fundamental changes should take place, such as expanded use of graduation standards and/or diminished use of social promotion, these levels may not be attained. (Day and Bauman 2000)

[5] The projected improvement is mainly driven by large expected increases in high school completion by foreign-born Hispanics, which the authors find "less plausible" than other predictions from their model. (Day and Bauman 2000)

[6] For instance, Southwestern states like Texas have large numbers of young Hispanics; if the new graduation standards are encouraging leaving high school before graduation, as some assert, these likely recruits may be lost to the military.

generally projected to attain higher levels than men, particularly among native-born minorities.

The implication for military recruiters is twofold. First, they can make a working assumption that current levels of high school completion are relatively stable. Second, they can assume that a greater share of high school graduates will be interested in furthering their education at some time. On the one hand, this trend could decrease the pool of high school graduates interested in military enlistment. On the other hand, given trends in the cost of higher education, the military can offer benefits to help enlistees fund more education once they leave the military, or further their educational qualifications while they are in the military.

The educational parameters of military accession thus call for careful thinking about the interaction of trends in educational attainment and recruiting and retention strategies. The enlisted force and officer corps both have distinct entry points, defined quite strictly by education and somewhat less strictly by age. Enlisted personnel are usually high-school graduates, entering around 18 years of age; officers are college graduates, entering at about age 22.[7]

The Department of Defense requires that at least 90 percent of each service's enlisted recruits possess a high school diploma (98 percent for the Air Force, 95 percent for the Marine Corps). (Riche and Quester 2004) Thus, individuals who obtained their high school credentials through examination (for example, General Equivalency Diplomas) are largely excluded, as experience has shown that they have significantly greater attrition rates. Since the military provides considerable up-front training and pays recruits during training, it is not cost-effective to access recruits with poor chances for successful completion of their contractual obligations.

[7] There is virtually no lateral entry, except for some specialties, such as doctors, dentists, lawyers, chaplains, and musicians.

The Department of Defense also requires that at least 60 percent of each service's recruits score in at least the 50th percentile on the nationally-normed Armed Forces Qualification Test. Thus, for both test scores and educational credentials upon entry, the services demand an unrepresentative (and higher quality slice) than is found in the overall population of 18- to 24-year-olds.

Meanwhile, the proportion of Americans who have completed four or more years of college by ages 25 to 29 has also increased over the thirty years of the All-Volunteer Force, from 21 percent in 1974 to 29 percent in 2004. The shift in the nation's racial and Hispanic origin composition masks the dramatic nature of this increase for each large population sub-group. In 2004, 17 percent of blacks ages 25 to 29 had completed four or more years of college, compared to 8 percent in 1974; for Hispanics, completions rose from 5 to 11 percent. For blacks, women are slightly more likely than men to have completed college by this age; for Hispanics, completion rates are higher for men.

Since the primary educational requirement for enlistment into the military's commissioned officer corps is a baccalaureate degree, current trends in educational attainment suggest a larger pool of potential officer candidates, especially within minority populations. However, minority populations, especially Hispanics, will still be under-represented in the baccalaureate population.

At the same time, with many young Americans postponing their investment in higher education while they accumulate experiences that will guide their future educational choices, the military's concentration on very young adults seems to fit current trends. Whether officer or enlisted, many service members do only one tour of duty, then go on to the civilian sector. To the extent that the military offers educational benefits and useful job-related learning, the military is part of the school-to-work transition.[8] For these and other reasons, the military should continue to monitor the educational patterns of

[8] Even if the learning is negative, i.e. guiding the recruit away from rather than toward an occupation, it is personally useful.

Americans in the context of force requirements, so that it can tailor pay and benefits to attract the people it wants and retain them for as long as it needs.

C. Other demographic interactions with the AVF

Ongoing demographic and social changes often interact with policy changes, such as the change to an all-volunteer force, in unexpected ways. For instance, an important although perhaps unintended effect of the AVF is that smaller proportions of adults—i.e. the parents, teachers, and other adults who influence a young person's choices—have military experience than in the days of the draft.

Census 2000 found that 12.6 percent of adult Americans were veterans, but the bulk of them are over age 65. Over a quarter of Americans (27.6%) over age 65 are veterans, compared with less than 10 (9.6) percent of Americans ages 18-64. According to Pentagon personnel chief David S.C. Chu, "Studies have shown that adults with military experience are more likely to recommend military service to high school students, but an ever growing number of Americans never have served in uniform." (*Marine Corps Times* 2003) This new situation calls for recruiters to educate the people who advise young people, as well as young people themselves, about the values and benefits of joining the military.[9]

The trend to fewer military parents suggests that a smaller share of recruits will come from military families. Still, children from such families may have a higher propensity to enlist, as it is common for young adults whose childhood was shaped by their parents' occupations to follow the same occupation themselves. This is true, for instance, of people who grow up in a family business, particularly a business that provides the family home, such as farm families. People who grow up on or near military bases, attend

[9] The Pentagon has a new advertising campaign to "reconnect Americans to the military". Unlike traditional recruiting commercials, the new spots bypass young people and take aim at more mature Americans who have some notion of what it takes to succeed in the world. Magazine and television ads feature veterans who discuss how military values such as commitment and teamwork helped them to forge successful lives. (*Marine Corps Times* 2003)

schools for military children, and socialize largely with other military families may be far more likely to choose a military career than those who are unfamiliar with a military life.[10] This suggests another potential divergence from the civilian population as a whole.

Life-stage changes. Over the decades of the AVF, a fundamental change has taken place among young Americans. Both legally and statistically, age 18 continues to mark the onset of maturity. However, the intersection of economic and demographic change has delayed the onset of adult activities for most young people to well beyond that threshold. In contrast to their parents, relatively few Americans currently ages 18 to 24 have taken on the major adult roles of financial independence, marriage, or parenthood. Instead, this life-stage has turned into one with a great many demographic activities (demographic density) undertaken in no particular order (demographic diversity.) (Riche 2000) In this context, "density" includes such demographic markers as leaving school; departing the parental home for independent living; moving from one county, state, or region to another; getting married, having children, and becoming employed. And "diversity" in this context refers to the increasingly varied sequence in which young people transition to adult work and family roles.

The Baby Boom marked a significant change that is very relevant to force planners: It reproduced its parents' lives to a great extent, but it did it at older ages. In essence, by delaying marriage, parenthood, and permanent attachment to the labor force, that generation created a new life-stage, a sort of post-adolescence devoted to exploring career and life options that takes place during the ages that are most salient to the AVF: 18 to 24.

Succeeding generations have solidified this trend. By and large, young adults are taking longer to finish their education, and longer to become attached to the work force. (Riche 2000). They are also delaying marriage and child-bearing, compared to previous generations. And many are delaying leaving their parents' home for independent living.

[10] Businesses know that the bulk of their customers tend to be repeat customers; i.e. it is more effective to market to people who have already bought than to cultivate a brand new customer.

In 2002, fully 50 percent of the civilian population ages 18 to 24 was living with parents or other relatives.[11] Thus, the ages 18 to 24 span an extended period in which young adults are at least partially dependent upon their parents and society. These years have become a post-adolescent life-stage in which young people prepare for adult life by engaging in a variety of activities, in a variety of places, simultaneously or consecutively, and in no particular order.

In assessing this transition, it is useful to monitor the age group 16 to 19, when high school graduation should normally take place. In 2000, 3.4 percent of Americans in these ages were high school graduates who were neither in school, in the military, or at work, as were 5.5 percent who had not earned diplomas. Thus, roughly 9 percent of these youth could be viewed as "spinning their wheels" before getting traction in an adult activity—almost as many as the 10 percent who were employed. (Nearly 80 percent were enrolled in school, many combining school with work.)

Given the postponement of what has been considered "normal" adult life, military service offers many attractive transitions to further education and eventual civilian work life. This is all the more so in that the military provides a variety of educational benefits to attract recruits—tuition assistance, the Montgomery GI Bill, and college enlistment bonuses are the most important. As an incentive to enlist, some recruits are offered loan repayments for college-related federal loans.

All services offer tuition assistance for college courses taken while on active duty, and service members can obtain college credits for some military training courses. Thus, in a direct parallel with the trend among young civilian adults to combine work and schooling, service members can combine post-secondary education with active duty. Moreover, all enlisted recruits have the opportunity to participate in the GI bill program. Although these benefits are usually utilized after leaving the military, members can use these benefits while on active duty.

[11] Current Population Survey, March 2002. This percentage may be mildly inflated by college students home for spring break during the survey week.

Thus, although the rise in educational aspirations could shrink the pool of future recruits, it could just as well expand it if military service helps recruits make career choices, acquire appropriate training, and earn benefits that ease the costs of further education once they return to civilian life. Cost-cutting pressures on institutions of higher education increase the value of such benefits, as tuition costs continue to rise and financial aid for poor students continues to contract. Getting a "second chance" to learn and earn after high school could also be relevant to those young people who find they are not fully prepared for college, or who "stop" out of college for personal or financial reasons.

Life course changes. The early years of the AVF coincided with a trend toward early retirement among Americans. In that context, a full military career continued to parallel the work-life expectations of other Americans, particularly men. Whether military or civilian, Americans' mental model of a "career" generally meant continuous service with a single employer or industry, learning a variety of skills on the job, rising through the ranks to higher and higher pay levels, and retiring at a fixed age with a pension.

Now, however, the trend toward early retirement has stopped, and increasing proportions of older Americans are in the work force. In 2004**,** over half the civilian population ages 60 to 64 was in the labor force, along with more than a quarter of those ages 65 to 69. (Over 80 percent of people ages 25 to 54, the prime working ages, are in the work force.) (U.S. Bureau of Labor Statistics 2005) Effectively, there is no standard retirement age anymore. "In 100 years, the Nation has gone from a society that needed few retirement benefits, through a period of closely structured retirement plans and ages, to a more flexible period characterized by varying plans and ages." (Wiatrowski 2001) The age at which people can receive full Social Security benefits is rising, while an increasing variety of retirement plans have severed the link between years with a specific employer and a specific retirement age.

Americans seem to be accustoming themselves to the idea of changing both employers and skill sets throughout their work lives. Many are also beginning to accept that a longer

life expectancy brings with it an expectation for a longer work life, with possible interruptions for retooling skills, concentrating on family, or simply experiencing life. These developments are based in part on a business climate that rewards responsiveness to change, and in part on changes in employees. Longer life expectancy (and healthy life expectancy) is an obvious demographic contributor to employee change. Less obvious is the effect of parallel though not necessarily identical work lives for men and women, and thus husbands and wives.

Since 1975, job separation rates have been relatively stable but have become more likely to be voluntary than involuntary, especially among more educated workers. They have also become more voluntary across all age groups, unlike the historical pattern in which job-shopping largely took place among young people. To be sure, the unusually good economic times of the 1990s made it relatively easy to risk unemployment by changing employers, but so did the increase in the proportion of couples in which the wife's earnings were a considerable share of the household's income. In 1975, men earned more than 60 percent of income in 77 percent of married couples; by 2000, only 58 percent of married couples fell into this category. Over the quarter century, women had become the primary earner in 12 percent of couples (up from 6 percent in 1975), while equal earner couples rose from 17 to 29 percent. (Stewart 2002)

In this new world of worker mobility, multiple careers, mid-life retooling, and flexible working ages, a military career may no longer parallel a civilian career but rather complement it. For all but the very senior officers, it precedes entrée into the civilian work force. It provides many short-service individuals with an enhanced educational background. And it positions the over 20,000 individuals a year who retire after a full military career to take full advantage of civilian career possibilities.

With a guaranteed annuity of half or more of their basic military pay, retired military have the funds to acquire more education and credentials if they like. At an average age of 43, they have enough work-life expectancy remaining to make undertaking a new career worthwhile. Their annuity may also give them the ability to choose a relatively

low-paying career, like teaching, that attracts them, or a light schedule that will allow them time to enjoy other pursuits. This ability may explain, at least in part, why the wages of recent military retirees have been lagging their civilian counterparts throughout their civilian careers. “Indeed, when pension income is added to retiree wages, the gap between retiree and civilian earnings disappears.” (U.S. Department of Defense 2002, p. 297)

Thus, military human resource planners need to keep a close tab on developments in civilian work lives, in order to situate military careers, compensation, and benefits in the most effective context. Like the other demographic developments described in this paper, this calls for more precise targeting for recruiting and compensation planning.

Immigration. Trends in immigration and citizenship produce another changing demographic intersection with military service. Although the proportion of international migrants is not increasing, the large increases in global population over the past half century have grown the numbers of migrants commensurately, and the United States continues to be a prime destination. Nearly 12 percent of the U.S. resident population was foreign-born in 2002, and over half (7 percent) of them were not citizens.

Military recruits do not need to be citizens, but they must have Legal Permanent Resident status. The active-duty military has about 35,000 non-citizens and the military recruits about 8,000 non-citizens yearly. (Riche and Quester 2004) Representing over 200 different countries, almost half come from Mexico, the Philippines, or Jamaica. Military service provides a unique opportunity for non-citizens to both serve the country and accelerate the citizenship process. Given that immigration is likely to remain an important factor in U.S. population growth, recruiting planners will want to pay careful attention to immigrant youth.

At least partly in response to the terrorist attack on September 11, 2001, President Bush signed Executive Order 329 in 2002, allowing non-citizen military members to apply for citizenship as soon as they enter the military. Previously, military personnel needed three

years of qualifying service (versus five years for civilian personnel) before they could apply. The military is also assisting service members with the Immigration and Naturalization process, as well as providing follow-up to shorten the period between application and the granting of citizenship

Family Composition. The increasing age gap between the military and the civilian work force enhances the role of the military as an employer in managing work/family conflicts. At the same time, these conflicts should become somewhat less problematic for civilian employers, as the shifting age pattern of the population is increasing the share of the civilian labor force that is beyond the major child-rearing years.

At present, the average American, male or female, spends just over a third of the ages between 20 and 70 raising children. (King 1999) Since the parenting years coincide roughly with the armed force's age profile, the military may well be the nation's largest employer called to address work/family issues. Its success in doing so will likely bear on its success in retention. Indeed, just as the AVF has put the military in the forefront of equal opportunity employment, its retention needs may put it in the forefront of successful management of work/family issues.

Military counts of dependents encompass a broad range of dependency. For example, a single parent with a child likely has a more demanding work-family situation than a service-member whose dependent is a non-working spouse. A recent report notes that "the enlisted force has moved from a predominantly single male establishment to one with a greater emphasis on family," although the report analyses marital status rather than the numbers of dependents who require care-giving. (U.S. Department of Defense 2003).

Marital status by age and sex, 2002
(percent married, spouse present or absent)

	MALE		FEMALE	
	military	civilian	military	civilian
18 to 19	5.6%	1.8%	9.7%	5.2%
20 to 24	26.5	13.2	32.5	22.9
25 to 29	59.8	40.5	51.6	50.4
30 to 34	78.3	57.6	60.4	63.7
35 to 39	85.6	66.2	62	67.3
40 to 44	88	68.7	61.8	68.6
45+	90	71.5*	58.5	66.9*

*45 to 54

Riche and Quester 2004

The military population is significantly more "married" than the civilian population across all age groups, but there are differences for men and women at different ages. Under age 30, both men and women service members are more likely than civilians to be married. This difference is so striking that it suggests that some form of bias is present—perhaps people who are likely to marry earlier than average select the military, or perhaps the military offers incentives for people to marry early (or disincentives to remain single).

There may be a simple explanation for some of these diverging patterns. As many demographers have shown (see, for example, various analyses of the Survey of Households and Families), the average age at first marriage has been rising in the civilian population in large part because marriage has been replaced among young adults by cohabitation. In other words, age-based trends in union formation have not changed significantly, but the nature of the union has shifted for young adults from marriage to cohabitation, particularly when no children are involved. However, the nature of the military and its living arrangements largely prevents service members from cohabiting. After age 30, the marital patterns of female service members lag civilian women slightly,

but male service members are overwhelmingly married, and considerably more so than civilian men.

The need for care giving, more than marriage, produces work-family conflicts, and in a predominantly young workforce, children are the family members most in need of care. Others have noted that enlisted service members have children somewhat earlier than civilians do. (See, for example, Morrison et al. 1989) Different data concepts make it difficult to neatly contrast the parenting demands on the AVF versus the civilian work force.[12] However, among married couples aged 20 to 24, nearly half the military couples had children in 2002, compared to a fifth of civilian couples. (Riche and Quester 2004)

In 2002, the 1.2 million enlisted service members had almost 1 million children, including 13 percent of the 607,000 single enlisted members. At the grade of E-4, the grade where most enlisted members complete their first term of service, 29 percent had dependent children. At the grade of E-5, 54 percent had dependent children. (Riche and Quester 2004) To the extent that retaining service members is important, family and parenting issues no doubt come into play. Thus, a thorough investigation of the work-family status of the active duty force, with a focus on care-giving responsibilities, may offer useful directions for retention strategies.

II. Racial and ethnic composition

Part of the rationale for creating the AVF was demographic. First, there was considerable public concern that minorities, particularly African Americans, represented a disproportionate share of fatalities during the Viet Nam War.[13] Second, there was a growing recognition that including women in the active duty force as a matter of course

[12] One problem in making these comparisons is that civilian data on families are based on co-residency, while military data are based on allowances for dependents. These differences obviously reflect the different goals of public policies that address families in each universe.
[13] According to researchers cited in Quester and Gilroy (2002), this concern was not factually based.

would significantly increase the potential pool of educationally qualified recruits. By all accounts, today's AVF is a success story along both racial and gender dimensions, from entry-level to top leadership positions. With the passage of 30 years, "both the current top enlisted and officer ranks have richer minority and female representation than the accession cohorts from which they were drawn." (Quester and Gilroy 2002)

Indeed, raw comparisons of demographic composition miss what may be the most meaningful measure of diversity: diverse leadership. Notably,

> "The military is the only large organization in which large units (comprised mostly of men) are led by women, and large units (comprised largely of whites) are led by minorities." (Quester and Gilroy 2002)

Still, the public's expectation that the military should, to the extent possible, mirror the composition of the population it defends, is likely to continue to challenge military recruiters.

Large waves of immigration in the latter decades of the 20th century have increased the racial and ethnic diversity of the U.S. population, making Americans very conscious of the racial and ethnic composition of groups like the police or the military that are both important and visible. People who assess such composition need to bear in mind that the nation's minority populations are much younger than the majority population. This is particularly important for groups like the military that have a very youthful age profile.

The median age is a good way to capture these age-based racial and ethnic differences. As of the 2000 census, the median age of the population was 35—the oldest ever. However, it was nearly 39 for white non-Hispanics, compared to 26 for Hispanics, 30 for African Americans, 33 for Asian Americans, and 28 for American Indians. These age differences are the product of differences in migration and fertility, as well as the interaction between them. Thus, to the extent that immigrants come from countries where people tend to have large families, like the Mexican immigrants of recent years, they make their population group relatively younger.

Consequently, the population as a whole is less diverse than the population aged 18 to 44, which includes most military personnel, and considerably less diverse than the age groups which include most new recruits. Moreover, projections of current trends suggest that minority populations will continue to be younger in the future. The result will be an increasingly diverse population, one even more diverse than projected before the results of Census 2000 became available.[14]

The 2000 census was the first to find more people than the annual population estimates had suggested; normally, the census finds fewer people than estimated (the census "undercount.") Aside from a larger than usual number of duplicates, the difference was largely among Hispanics, particularly young men. Thus, projections based on current patterns in the nation's racial and Hispanic origin populations suggest that the target age group for advertising and recruiting, ages 15 to 19, will contain an increasingly large number of Hispanics.

Race and Hispanic origin of the population ages 15 to 19, 2025 (projected)

White non-Hispanic	55.8%
Hispanic	23.8
Black non-Hispanic	15.3
Other, non-Hispanic	5.0

Riche and Quester 2004

[14] The current representation profile (Department of Defense 2003) incorporates the findings of the recent National Academy of Sciences panel on the youth population and military recruitment. That report (summarized in Chapter 9 of the profile) uses projections based on pre-2000 census population projections and estimates from the Census Bureau. Pending updated projections from the Bureau, this paper incorporates projections of race and ethnic composition using assumptions developed by the author and Thomas Exter, Ph.D. and applied to the Census Bureau's interim 2000-based projections of the population by age and sex, as presented in its International Data Base, www.census.gov.

To be sure, Hispanic is not a race but an ethnic origin; most official surveys have found that the great majority of Hispanics select “white” when they are asked to choose a race. Thus, it is quite possible that a smaller proportion of youth than projected will report that they are Hispanic. Certainly, patterns of intermarriage, impossible to project with confidence, could affect how the children and grandchildren of today’s Hispanic population choose to classify themselves. And with intermarriage more common among all racial groups, many wonder whether the population is becoming so diverse that racial and Hispanic origin designations may lose relevance.

Census 2000 took the first step in the direction of a more nuanced racial and ethnic profile, in that respondents were offered a greater array of categories, including listing more than one race. Fully 15 million census respondents were unable to identify with the five racial categories designated by the Office of Management and Budget. Instead, they checked “other” and wrote in an entry such as such as Moroccan, South African, Belizean, or a Hispanic origin. (Indeed, the majority of “Some Other Race” were Hispanics.) Another 6.8 million checked two or more races. (U.S. Census Bureau, 2001) Thus, nearly 8 percent of Americans found the traditional racial categories too constraining.

Annual monitoring of the racial and ethnic composition of the enlisted force shows that by and large, the racial and ethnic composition of new recruits largely mirrors the civilian population aged 18 to 24, with Hispanics being somewhat underrepresented and African Americans somewhat over represented. (U.S. Department of Defense 2003) However, the under-representation of Hispanics in the military because of lagging educational attainment may become an even greater challenge in the years ahead. It is hard to see how the military can compensate for basic differences in the alternative choices available to young adults in different population groups, particularly those based on education. The civilian sector bears the onus for rectifying/ameliorating these differences, although the military must continue to be responsive to them. For instance, given the importance the military attaches to high school graduation, military leaders could consider more actively

supporting the Department of Education's initiatives to encourage high school completion.

For the AVF as a whole, it may be time to acknowledge that it cannot be completely representative in terms of race and Hispanic origin, given its relative attractiveness to certain population groups within the parameters it has set for age composition and educational attainment. Doing so requires determining whether this lack of perfect representation is a comparative advantage/disadvantage of the military as a unique employer, industry, and set of occupations, within the overall American employment context. In particular, the lack of lateral entry in favor of promotion from within, including formally evaluating everyone for promotion, makes the military almost unique in providing a merit-based system for advancement, and thus particularly attractive to women and minorities, who have historically faced discrimination in the labor market.

Thus, the increasing proportion of racial and ethnic minorities in the U.S. population, combined with the relative attractiveness of the military as an equal opportunity employer makes dealing with a diverse work force an especial challenge for military executives. A review of the literature on diversity suggests that it can intensify the already difficult task of increasing retention and minimizing turnover.

For instance, O'Reilly, Caldwell, and Barnett (1989) found that employees most demographically distant from the group were the most likely to leave. Tsui et al. (1992) found that being most different according to race and gender led to the lowest psychological commitment to the organization, and the highest expressed intent to leave. Cox and Blake (1991) found that turnover and absenteeism tended to be higher for women and minorities than for white men (and job satisfaction lower), until efforts to manage diversity reduced these costs. Researchers have also found that increased diversity can lead to short-term, increased conflict. (See Ancona and Caldwell, 1992, for a summary of the relevant literature.)

More recent research has found that diversity can improve performance IF groups are managed to overcome diversity-based conflict. Put another way, “diversity may have either positive or negative effects on team effectiveness, depending upon how it is managed.” (Thompson and Gooler 1996, p. 402) As these authors point out, conflict is probably inevitable in any work situation where people are interdependent and where roles and responsibilities need to be defined, sometimes on an ongoing basis. Adding diversity can exacerbate the impact of differences in communications, leadership, and conflict resolution styles, as well as in such work-related attributes as the use of time and/or space. A long array of literature attests to cultural differences along these and other dimensions. (See Thompson and Gooler 1996, p. 405, for a list) However, it has also been demonstrated that conflict, constructively resolved, can generate new ideas, solve problems, and improve decisions.

Williams and O’Reilly (1998) look ahead to potential findings: “Much of the research from the field to date suggests that … racial diversity will have negative effects on group and individual outcomes, but laboratory studies hint that there may be substantial benefits to be captured from racial or ethnic diversity.” (p. 109) For instance, in a laboratory study of newly formed “work” groups over 17 weeks, Watson et al. (1993) found that diversity based on racial and national differences required more explicit management than other forms of diversity to avoid undue interference with group processes (such as achieving consensus) and outcomes (such as identifying problems and generating alternative solutions). However, after 17 weeks together, the overall problem-solving performance of heterogeneous groups equaled that of the homogeneous groups, and the heterogeneous groups produced superior decisions.

Untangling the effects of race/ethnic diversity, as well as gender diversity, is complicated because of the often associated status differentials. These differentials introduce asymmetries, and require careful parsing of relationship conflicts as well as task conflicts to determine the real source of the diversity impact.

Riordan and Shore (1997) studied 98 work groups in a life insurance company. The sample was large enough to contrast groups that were, respectively, predominantly African-American, Hispanic, non-Hispanic white, or without any race/ethnic group predominating. [15] They found that participants in work groups dominated by racial and ethnic minorities exhibited less commitment, no matter what their race/ethnicity, but not less group cohesiveness. White and Hispanic workers rated work group productivity lowest in groups where racial and ethnic minorities predominated. Overall, white employees had more positive perceptions of group productivity, group commitment, and advancement opportunities when they composed the majority of the group.

A number of field studies have explored the impact of racial/ethnic diversity on communication within groups. Results of this research have been mixed. In one of the earlier studies, Hoffman (1985) investigated the effect of increasing black representation among supervisors at a large sample of federal civilian installations of different sizes. He found that increased black representation was correlated with less face-to-face communication with immediate subordinates and supervisors, and more formal communication (e.g. meetings) among supervisory peers and their directors. This effect was weaker in larger and more complex installations. Indeed, organizational factors were more important than demographic composition for all the communication types studied except group-level communication.

Triandis, Kurowski, and Gelfand (1994) review earlier research and report that African-Americans and Hispanics define satisfactory communication differently than does the majority population. However, they caution that within group heterogeneity may make specific individuals more similar to the majority than the minority population. More recent studies support a broad homophily argument, that people express more satisfaction with and thus communicate more with those who are most similar to themselves. (Williams and O'Reilly 1998)

[15] There were 1,584 individuals in the sample. The majority were women and more than 35 percent were racial and ethnic minorities.

Tsui and Gutek (1999, p. 113) summarize the empirically supported organization-level findings about demographic diversity this way:

Diversity dimension	Effect by outcome
Gender	Increases absences
	Decreases psychological commitment
	Increases intent to leave
	Worsens social relations with senior-level and peer women
Race	Increases absences
	Decreases psychological commitment
	Increases intent to leave
	Decreases interpersonal communication

III. Conclusion

Suppliers of products and services started adapting to demographic change among consumers a quarter century ago. Car-makers acknowledged that women were involved in the majority of car purchases, insurance companies recognized that minority group members were potential clients with sometimes special needs, and the housing industry began to cater to "mature" customers. Employers, however, cushioned by the large supply of well-educated Baby Boomers and the influx of women of all ages into the work place, have been slower to respond.

Now that the flow of new young people is steadying, it is no surprise that the nation's largest employer of young adults is reassessing its requirements and its processes. This reassessment is taking place simultaneously with fundamental changes in the organization of military work, most of which result in an increased need for more educated workers with an ability to make decisions further down the command chain than in the past. Among other things, these simultaneous developments suggest rethinking the

military's rejection of lateral entry. In any case, the constrained supply of young adults with an array of alternatives to choose from has sharpened the thinking of Army and Reserve force planners in particular.

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