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**Social and Cultural Dynamics
of American Military Organization**

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EXECUTIVE SUMMARY

This report reviews a program on military organization conducted during the last five years of the twentieth century. The collapse of the Soviet Union and the Warsaw Treaty alliance and the involvement of the American Military in operations other than war in coalition with other nations, defined the international context of this period. A full-employment economy and increasing levels of college attendance among American Youth characterized the domestic environment. The research program focuses on six areas. 1) Attitudes and behavior of youth, including patterns, trends, and correlates of enlistment propensity and the relationship between propensity and enlistment. 2) Adaptation of soldiers to the military and to participation in peacekeeping operations. 3) Military families, including family adaptation to separation during deployment, communication, between forward deployed soldiers and the home front, and family adaptation to disaster. 4) Gender diversity, including gender integration, sexual harassment, and the effect of gender on enlistment propensity. 5) Comparative research, including national differences in organizational adaptation to the end of the Cold War in Europe. 6) The intersection of the military and American society, including the impact of service on the civilian adaptation of veterans, and the economic impact of military bases on their host civilian communities.

SOCIAL AND CULTURAL DYNAMICS OF AMERICAN MILITARY ORGANIZATION

Introduction

The last decade of the twentieth century saw major changes in the nature of American military organization and in the relationship between the military and American society. The collapse of the Soviet Union and the Warsaw Treaty alliance at the end of the decade of the 1980s raised questions about the post-Cold War role of the military. The Gulf War at the start of the 1990s, and an increasing number of operations other than war in the mid-1990s, suggested that the tasks of the American military, and the regions of the world in which they were to be performed, were changing. These missions were increasingly becoming joint operations, involving coordination of the several services. They were also increasingly coalition operations, involving coordination with the armed forces of other nations. By the end of the decade, in the light of youth employment levels that had not been seen during the days of the post-1973 volunteer force, increasing numbers of young Americans attending college, and a lack of national consensus on the appropriate role of the military, all services had problems in recruiting entry-level personnel.

Other changes that had implications for the military were going on as well. Women were continuing to enter the labor force and seek equal treatment regardless of gender. Young men were increasingly seeing their familial roles as having equal importance to their work roles. Communications technology was affecting the ways in

which people and groups related to each other—including the relations between forward deployed or forward stationed military personnel, and those on the home front.

In this context, the Center for Research on Military Organization at the University of Maryland, with support from the U.S. Army Research Institute for the Behavioral and Social Sciences, undertook a multi-faceted five-year research program to help understand the nature of these changes. A major focus of the program dealt with the attitudes and behaviors of American youth, particularly those who aspired to serve in the military and those who actually served.

A second focus was the adjustment of young adults to the military, the adaptation of American soldiers to participation in peacekeeping missions specifically, and adjustment to a higher intensity of operational tempo in general.

A third and related focus was on the implications of this intensity for military families, as part of our analysis of how military families intersect with military organization. One particular theme of this research was the use of modern communications technologies to maintain virtual family solidarity in the face of geographical separation. Another theme was a reminder that military service remains a dangerous calling. We studied organizational responses to dealing with the families of military personnel who died in aircraft disasters.

A fourth focus of our research program was gender diversity in the military, reflecting the fact that today, fifteen percent of our personnel are women, serving in a wider range of military jobs than ever before. Fifth, part of our research program focuses on comparative military sociology, and considers the nature of military organization in other nations. Part of this work was an extension of our gender diversity research. Here

we studied not only the contemporary U.S. Army experience, but also the range of experiences of different services and different nations at different historical periods, to discern emerging patterns.

Sixth, a portion of our research program focused on ways in which the American military directly intersects with and affects host civilian communities and institutions. The published research reports on these themes are reviewed below.

Attitudes and Behavior of American Youth

Much of our research program in this area was undertaken in collaboration with colleagues at the University of Michigan, using the data base afforded by the Monitoring the Future (MtF) research program. MtF has surveyed about 16,000 high school seniors every Spring since 1975, collecting data on the primary military recruiting market: people who will soon be high school graduates. Subsamples of each year's graduating class sample are then followed up for several years after graduation. The high school senior data include expectations for post-high school activities. The follow-up studies collect data on what people have actually done after graduation. In addition, in the 1990s, surveys were conducted of 8th and 10th grade students as well.

One of the early analyses of MtF concerned the relationship between propensity to join the military expressed by high school seniors, and their subsequent enlistment behavior (Bachman, Segal, Freedman-Doan, and O'Malley, 1998). For men, there was a very good fit. Of male high school seniors who said that they definitely would serve in the military, 70 percent actually joined the service within six years of high school graduation. The percentages were smaller for African-American and Hispanic men than

they were for White men. They were also lower for women than for men. Only about 40% of the high school senior women who said they would definitely join the military actually did so. The relationship between propensity to serve in the military and actual service was about the same for men as the relationship between propensity to go to college and actual college attendance. This latter relationship was higher for women than was the military service relationship.

A complementary analysis looked at trends in enlistment propensity over time among high school seniors, as they varied by race, ethnicity, and gender (Segal, Bachman, Freedman-Doan & O'Malley, 1999). This study also looked at changes from the 8th to the 12th grade. Among high school students, during every year from 1991 to 1997, enlistment propensity declined from the 8th to the 10th and 12th grades, and at each grade level, propensity declined from year to year during this period. Among high school seniors (12th graders) propensity varied as a function of such factors in the recruiting environment as entry-level military pay, recruiting resources, and availability of educational benefits, producing variation from year to year. The general pattern, however, was a long-term decline in propensity from 1976 to 1997, reflected dramatically in a 20% increase in the percentage of students who said that they definitely would not serve during this period. African-Americans had higher enlistment propensity than Whites, and men had higher enlistment propensity than women. Hispanics tended to have higher propensity than Whites, but lower propensity than African-Americans. There was a dramatic decline in enlistment propensity among African-Americans (both male and female) in 1990 to 1991. There was no obvious explanation for this decline, and there was no subsequent increase in their propensity.

Beyond looking at the relationship between military propensity and actual service, an additional concern of this research program was with what other factors in addition to propensity predicted actual military service. We started this inquiry with the National Longitudinal Survey of the high school class of 1972: a survey of about 6,000 seniors who were followed up in 1973, 1974, 1976, and 1979. This was the first graduating class from which the post-1973 volunteer force was recruited (Segal, Burns, Falk, Silver, and Sharda, 1998). Intent to serve was of course a strong predictor of actual service. In terms of social position, young men who served came from somewhat lower socioeconomic backgrounds and had somewhat lower levels of high school academic performance than those who did not serve. African-Americans were over-represented among those who served, but we did not find evidence of the military "creaming" the best of the young Black males. Rather, we found some evidence of the military "dredging" White males, who did less well academically than did their peers who did not serve. Those who served as officers had higher academic performance in high school and came from higher socioeconomic backgrounds than did those who served as enlisted personnel. In the early years of the volunteer force, as has been the case more recently, African-Americans were underrepresented in the officer corps.

This analysis was replicated and extended with MtF data (Bachman, Segal, Freedman-Doan, and O'Malley, 2000). Surveys of more than 100,000 seniors in the classes of 1984-1991, with more than 15,000 graduates followed up after graduation, showed enlistment rates to be lower among people with college-educated parents, high grades, and college plans. Rates were higher among men than women, Among African-Americans and Hispanics than among Whites, and among those who view military work

roles as attractive. These factors affect enlistment primarily through their effect on propensity. When propensity is included in predictive models, the significance of other factors declines.

The relationship between attitudes specifically regarding military issues and actual enlistment was also explored using MtF data. In the late 1990s, there had been considerable journalistic investigation, theoretical reflection, and empirical research on whether there were differences between military personnel and other Americans on issues such as patriotism, nationalism, conservatism, and traditionalism. Also at issue was whether the military was socializing a segment of the population to be significantly different from their civilian peers on these matters. We analyzed MtF data from the high school classes of 1976-1995, and follow-up studies conducted through 1997. We assumed that we would find differences between military personnel and others, as we would with regard to any occupation. We sought to determine how large the attitude differences were between military personnel and their civilian counterparts, whether these differences have changed over time, and to what degree they reflected self-selection into the military versus socialization resulting from joining the armed forces (Bachman, Freedman-Doan, Segal, and O'Malley, 2000).

We compared young men who went into the military after graduating from high school with those who went into full-time entry-level civilian jobs and those who went to college full-time, with regard to their views on military spending and military influence. We found that those who went into military service had the greatest preferences for more military spending and more military influence in the affairs of the nation. These differences existed in high school, and did not change much over time.

Regarding views about U.S. military supremacy, young men in general favored such supremacy, with those going into the military being the strongest in this regard. The differences increased after high school graduation.

Regarding U.S. military intervention, young men in general felt that the U.S. should be willing to go to war to protect its economic interests. There was somewhat less support for going to war to protect the rights of other countries. Generally, young men headed for the military were more "interventionist" than were those going into the civilian work force (but not those going to college). The level of interventionism did not increase once in the military. There was a general increase in interventionism in the youth population during the two decades we studied.

We found little change in patterns of military attitudes across two decades. Most differences between military personnel and others after graduation were reflections of self-selection. There were instances where organizational socialization seemed to take place as well. Where this was the case, it tended to enhance differences already observable in high school. Young men going into the military do seem to be slightly more "hawkish" on average than their civilian labor force peers, but not those entering college, from which group our future civilian leaders will be drawn. The differences that exist may reflect a military organizational culture, but do not pose a problem for civil-military relations.

In our research on youth attitudes, we also analyzed the values of West Point cadets. Our concern here was also the issue of self-selection for military service versus organizational socialization. Using data that combined a survey conducted by the American Council on Education with a value inventory developed at West Point, we

sought to describe the values of plebes, and analyze the degree to which these values might reflect either the social status of the cadets' parents, or the fact of growing up in a military family (Hammill, Segal, and Segal, 1995). We were particularly interested in independence and self-control, which we felt would result from the generally middle-class upbringings of the cadets, and which we felt would be important for Army officers of the future, but which might run counter to traditional West Point culture.

We found high levels of cadet support for six of eight values studied: intellectualism, kindness, social skills, honesty, academic achievement, and status. The two values for which we did not find cadet support were the two with which we were concerned. For all values we found a high degree of consensus among cadets, and their value profile resembled what other research has found among career-oriented military personnel. We did not find important effects of either parental socioeconomic status or military family background on cadet values. While we feel that the military professional of the twenty-first century is likely to need a relatively high level of independence and self-determination, and to eschew conformity, this is opposite the profile we found, which may, however, be adaptive to the structured hierarchical setting in which new cadets find themselves.

Adjustment to the Military and to Military Missions

Like our work on youth attitudes, one of our analyses on behavior in the military drew on the MtF database. These data are rich in information on the use of psychoactive substances. We used them to address the questions of whether the armed forces adoption of a zero-tolerance policy with regard to drugs in 1980, and more recent policies to

discourage drug and alcohol abuse (such as no smoking during entry-level training), affected substance use by recruits. We focused on the two decades from 1976 to 1995 and compared recruits before and after entering service. We also compared recruits before and after implementation of new policies, and we compared recruits with their high school peers who went into the civilian labor force or to college (Bachman, Freedman-Doan, O'Malley, Johnston, and Segal, 1999).

We found that illicit drug use declined more among military recruits than among their civilian counterparts. In particular, there were declines in the prevalence of both marijuana and cocaine use by military recruits after the initiation of routine military drug testing. We also found that lower proportions of smokers of half a pack or more of cigarettes a day entered service after the initiation of tobacco bans during entry-level training. This latter finding seems to reflect self-selection rather than behavior change during training. Smokers seem to have removed themselves from the recruit pool.

Our research on organizational adjustment focused largely on peacekeeping operations—broadly defined. The range of types of these missions, and the fact that they were not a major part of the American military *repertoire* during the Cold War, led to their having a high degree of ambiguity to soldiers. One of our early efforts used the “social constructionist” theoretical perspective to understand how American soldiers make sense of the peacekeeper role (Segal, 1996a). One of our major findings was the tendency of American soldiers to make participation in early peacekeeping missions more martial than did soldiers from nations that had longer-standing traditions of peacekeeping participation.

Much of our research on peacekeeping has focused on the American infantry battalion assigned to the Multinational Force and Observers (MFO) in the Sinai Desert in support of the Camp David Accords between Egypt and Israel. In the mid-1990s, the US experimented with manning this unit with volunteers drawn primarily from the Army National Guard and assigned to the Fourth Battalion, 505th Parachute Infantry Regiment (4-505 PIR). While other nations have made considerable use of reservists in peacekeeping, this was an initial effort for the United States. Scientists at the University of Maryland collaborated with scientists from the Army Research Institute for the Behavioral and Social Sciences (ARI) to study this experimental unit. The major report on this project is a book published by ARI, for which Segal (1996b) wrote the preface.

One particular set of analyses of this experimental unit concerned soldiers attitudes at three points in time (prior to deployment, early in the six-month deployment, and late in the deployment) regarding the likelihood of different kinds of future deployments, adjustment to multinational environments, and the peacekeeping role (Segal & Tiggle, 1997). We found that the soldiers thought it very likely (80-100%) that the United States would be involved in low-intensity operations (peacekeeping and humanitarian missions, restoration of order) during the next decade. These expectations declined somewhat during the course of the deployment. They had low expectations regarding the likelihood of tactical or strategic nuclear war (ca. 20%), but these increased somewhat during the deployment. They had moderate expectations of high intensity non-nuclear war (ca. 40%), including conventional, biological, and chemical warfare, and these expectations increased during the deployment.

We did not find a positive orientation toward transnational operations in these data. These soldiers did not look forward to working with foreign nationals, and seem to have been motivated to volunteer by a desire for travel and new experiences. A majority subscribed to the peacekeeping norm of impartiality, but the majority was not large. Overall, these reservists looked very much like active army soldiers who had been surveyed during prior peacekeeping deployments, although some differences existed as well.

This issue was addressed more directly in a comparison of the attitudes of soldiers in 4-505 PIR with a sample of soldiers from the 10th Mountain Division (Light Infantry), an active army unit that in a three year period had been deployed to Florida for hurricane relief, to Somalia, and to Haiti (Segal, Reed, & Rohall, 1998). We found the soldiers in 4-505 PIR to feel more strongly that they could be effective in peacekeeping without the use of force, that they could be impartial in a conflict situation, that peacekeeping missions were good for a soldier's career, and that such missions were appropriate for their units. However, they were less likely to feel that peacekeeping should be done by civilians or by military police. In general, soldiers in 4-505 PIR had attitudes more compatible with constabulary missions than did soldiers in 10th Mountain Division.

Another set of analyses conducted in the course of this research focused on two PATRIOT air defense units: the 2nd Battalion, 7th Air Defense Artillery Regiment (2-7 ADA) and the 1st Battalion, 43rd Air Defense Artillery Regiment (1-43 ADA). The first of these units was deployed unexpectedly to South Korea in 1994, in response to North Korea's refusal to comply with nuclear site inspections. They had previously been told that they would be stabilized at Fort Bliss for two years following two rotations to South

West Asia. After six months, they were replaced by 1-43 ADA, through which soldiers rotated for one-year tours. We conducted surveys and interviews with soldiers from both units in Korea (Segal, Rohall, Jones & Manos, 1999).

In general, attitudes among soldiers in 2-7 ADA were significantly more negative than in 1-43 ADA with regard to morale, job satisfaction, and attractiveness of careers in the Army, in air defense artillery, and in PATRIOT units. In the former units, higher-ranking soldiers were more positive than lower ranking soldiers. No rank differences emerged in the latter. Soldiers in 2-7 ADA were more likely to say that they would leave the army.

Family issues had significant impacts on morale. Soldiers who felt that their families adjusted well to the military, who felt that their leaders supported them, and who were satisfied with resources to communicate home, were more likely to report higher morale.

Military Families

American Army culture has traditionally been both masculine and bachelor. However, the Army over time has become increasingly gender-integrated and increasingly married. A multitude of other changes has taken place in the American military as well. We have sought to document the implications that many of these changes have for military families (Segal & Segal, 1999).

In particular, we have suggested above that family support had positive consequences for the Army. One of the tasks of our research program has been to document the changes that have taken place in the family demography of the military, the

ways in which the military has adapted to these changes, and ways in which it has resisted adaptation as well (Segal, 1999a). Potential policy changes have been identified to make the military more family-friendly, without detracting from readiness.

One research project focused on the two PATRIOT battalions described earlier (Rohall, Segal, & Segal, 1999). In both units, younger and lower-ranking soldiers reported lower family adjustment during deployment than did older and more senior soldiers. However, certain personal and organizational resources were found to somewhat alleviate the negative effects of deployment. Particularly important in this regard were morale, satisfaction with resources to communicate home, and perceptions of leader support.

The positive effects of family supportive policies are not restricted to forward deployed or forward stationed personnel. Bourg and Segal (1999) studied the impact of family-supportive policies on the organizational commitment of soldiers using the 1989 Army Soldier and Family Surveys collected as part of the Army Research Institute's Army Family Research Program. This was a survey of over 11,000 soldiers and over 3,000 spouses stationed in 35 stateside and overseas locations. The analysis demonstrated that the army's response to families affects the commitment of male soldiers and their wives to the army both directly and indirectly. It also demonstrated the powerful effect that wife's commitment to the army has on husband's commitment.

The Sinai MFO, to which we have referred above, was the birthplace of the Family Support Groups that now routinely are associated with Army unit deployments. A major thrust of our research program was collaboration with ARI on documenting methods for supporting Army families during the deployment of their military members

(Bell, Stevens, & Segal, 1996). Recent collaborative research focused on the families of soldiers in the 4-505 PIR, the experimental units sent to the Sinai in 1995, discussed earlier.

Bell et al, (1996) researched the unique problems of providing family support to this unit, drawn largely from the reserve components, whose soldiers came from 33 states and who had spouses in 31 states. The support system that evolved was better suited to an active unit that had a home garrison than it was to a group of reserve component personnel drawn from across the country. Schumm et al. (1996) studied marital quality in this unit. Based upon earlier findings, generally low morale in the unit, and an imperfect family support system, they expected to see decreases in marital satisfaction, marital stability, and marital quality. In fact what they found over the course of the deployment was a small decrease in marital stability, no significant change in marital satisfaction, and an increase in marital quality.

One of the recurrent findings of our research program has been the importance of vehicles of communication to keep forward deployed soldiers in touch with the home front. Ender and Segal (1995) review the evolution of these communications, from the advent of the post card during the Franco-Prussian War in 1870. For American soldiers during the World War II and early Cold War eras, isolation from home was high, and communication was one-way (e.g., letter mail, Victory-mail, radio, still and motion pictures, and tapes). During the late Cold War era, and since the end of the Cold War in Europe, the revolution in two-way communications media (telephone, voice-mail, e-mail) resulted in a continued decrease in isolation. New communications media do not replace older media: they supplement them.

The use of modern communications media by army personnel and their families was explored using surveys of soldiers who participated in Operation Restore Hope and Operation Uphold Democracy (Ender & Segal, 1998). The former was a humanitarian relief effort in Somalia in 1992. The latter was a nation-building mission in Haiti in 1994. The results were interpreted in the context of other recent military operations, reflecting dramatic changes in the availability of communications technology. For example, soldiers in Vietnam spent a great deal on electronic equipment such as tape recorders, but the technology did not support rapid two-way communication. By contrast, more recent nation-building operations in the former Yugoslavia could be monitored on the Internet.

The final deployment-oriented study in our military family area concerned the support that the military provides to the families of soldiers who are killed or seriously injured, in either wartime or peacetime, while deployed. The research involved both content analysis of the role requirements in the handbooks written for Casualty Assistance Officers (CAOs), and questionnaire responses of 118 officers who served as CAOs in three unrelated air disasters in which military personnel were killed (Ender, Segal, and Stanley, 1999). The study covered the period between 1985 and 1990 and dealt with disasters in Gander, Newfoundland, Lockerbie, Scotland, and in Arizona. The research showed that the activities of CAOs transcend officially specified duties.

Gender Diversity

In an overview of the research that has been done on gender and the military, Segal (1999b) identifies the characteristics of society that are related to the utilization of women in the military. She describes the history and contemporary use of women in the

U.S. armed forces, and reviews the research that has been done on gender integration and on gender harassment and sexual harassment, and on the military family issues that impact women. In a more empirical project, Segal et al. (1998) use the MtF data to analyze sex differences in propensity to enlist and in actual patterns of enlistment. They find that young women's propensity to serve is lower than men's, but that more women desire to serve than expect to serve. The relationship between propensity and enlistment is weaker for women than for men, and has not increased over time. Background characteristics and educational achievement and plans are less predictive of women's propensity and enlistment than of men's, with the exception of higher race and ethnicity effects among women. Having children has a small negative effect on high propensity women's enlistment, but an even stronger positive effect on low propensity men's enlistment. More women desire and expect to serve than the military is enlisting.

Comparative Research

Our concern with gender diversity was reflected in our research program on comparative military organization. Segal (1995) developed a theory of what affects the degree and nature of women's participation in armed forces throughout history and across nations. Examining national security situations, military technology, military accession policies, demographic patterns, cultural values, and structural gender role patterns, she proposes a systematic theory of the conditions under which women's military roles expand and contract.

In another project, Segal, Segal, and Booth (1999) used a multiple-case study approach to analyze the relationship between gender integration and sexual orientation

integration in the armed forces of eighteen nations. Most of the nations were in Western Europe or in North America, but Australia, New Zealand, Israel, Russia, and South Africa were included as well. There was a strong relationship between gender integration and sexual orientation integration, with a group of nations from relatively cold climates (the Netherlands, Canada, Denmark, and Norway) being the most integrated on both dimensions, and a group of Mediterranean nations (Turkey, Greece, Italy) among the least integrated on both. The United States and Great Britain were slight outliers from the general trend, being more exclusionary with regard to homosexuals than would be anticipated from their integration of women. (Great Britain has since lifted its exclusion of homosexuals from military service, under requirements from the European Court for Human Rights. This leaves the U.S. as the major outlier.)

A major project in our comparative research program was a cross-national study of the ways in which military organization has changed in the years since the Cold War ended in Europe. A conference was convened involving military sociologists from twelve nations who were asked to analyze military organization in their respective nations in terms of eleven dimensions. These ranged from threat perception, force structure, and mission definition, through issues like the nature of military professionalism and public attitudes toward the military, to policies on military families, women's roles in the military, policies regarding homosexuals, and conscientious objection. These analyses were reviewed, revised, edited, and published as a collection reflecting the cross-national range of organizational responses by armed forces to the contemporary global system (Moskos, Williams, and Segal, 2000).

The Military and American Society

The effects of military service on the social relocation of veterans in civilian society have been among the longstanding concerns of our research program. A particular interest has been the effect of service on educational attainment, particularly in light of the fact that the World War II G.I. Bill of Rights drastically altered the educational level of the U.S. population and the institutional structure of higher education in America. While male veterans through the Korean War obtained higher levels of education than did their peers who did not serve, this relationship reversed in the Vietnam War era. One of our research projects focused on veterans of the post-1973 volunteer force, and asked whether the pattern had again been reversed (Cohen, Warner, & Segal, 1995). This project also was the first to look at the educational attainment of women veterans.

Using data from the National Longitudinal Survey Youth Cohort, we found that veterans of the volunteer force of the late 1970s and early 1980s lagged more than two-thirds of a year of education behind their non-veteran peers. The longer they served, the less education they received. This pattern held for both whites and non-whites, and for both men and women. The general increase in education level of the population, and the relative reduction in military educational benefits over time seem to have contributed to a veterans' educational deficit.

A more recent concern of our program has been the location of military bases on the labor market dynamics of their host communities. This has particular consequences for the civilian spouses of military personnel, who frequently seek employment in these communities. Booth et al. (2000) used a Public Use Microsample (PUMS) of the 1990 decennial U.S. Census to explore the relationship between military presence and

women's employment and earnings across local labor market areas. They found that women who live in a labor market area with a substantial military presence have, on average, lower annual earnings and higher rates of unemployment than do women who live in areas with less of a military presence.

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