# Self-Selection, Socialization, And Distinctive Military Values: Attitudes of High School Seniors

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he notion of a distinctive set of values among military personnel The notion of a distinctive set of values unlong has long been accepted by both critics of the military and agreement supporters.2 Based on much literature, there is widespread agreement that military personnel tend to be above average in nationalism, conservatism, and traditionalism.3 They have also been characterized both in positive terms such as professional, patriotic, and altruistic (willing to risk death for their country), and in more controversial terms such as authoritarian, militaristic, and aggressive (striving to make the enemy die for his country). To be sure, the literature includes some exceptions to the general findings: Kirkpatrick and Regens, for example, reported that the foreign policy attitudes of those who have served in the military are not very distinctive from those of nonveterans.4 And Bachman, Blair, and Segal found that distinctive values and beliefs are not equally evident among all servicemen; promilitary attitudes are much

AUTHOR'S NOTE: The authors wish to thank Patrick O'Malley and David R. Segal for their helpful comments on an earlier draft. We also thank Dan Zahs and Ginger Maggio for their contributions in data analysis and manuscript preparation.

ARMED FORCES & SOCIETY, Vol. 13 No. 2, Winter 1987 169-187 ©1987 by the Inter-University Seminar on Armed Forces and Society

more pronounced among the career oriented than among those who do not expect to reenlist.<sup>5</sup> Still, the overall connection between service and promilitary values has been firmly enough documented so that interest now centers on *why* rather than *whether* such a connection exists.

One explanation focuses on socialization processes; the idea is that the military teaches—explicitly and through a "hidden curriculum" as well—certain types of attitudes and orientations. However, there has been little empirical evidence of dramatic attitude or value changes attributable to military socialization. A number of studies have concluded that length of military service is not associated with the development of "authoritarian" attitudes, and such findings are incompatible with the view that socialization processes operate over the years to foster distinctive outlooks among military personnel.

An alternative explanation for promilitary values among service personnel focuses on self-selection, the tendency for certain types of persons to enter military service while others avoid it. As Cockerham put it, "While military socialization provides the cadet or trainee with knowledge of military values and traditions, the determining factor in the potential for promilitary attitudes and beliefs... appears to be the personal set of attitudes brought to the training situation by the trainee."

Self-selection and socialization are not, of course, mutually exclusive. Some ideological distinctiveness may be present at the time of induction, but it may also be enhanced by years of service. Thus, our task is really one of estimating just how strong each process may be. A further distinction could be made between self-selection and selection by other processes (in this case, by one or more aspects of the military system). Although no formal "ideological screening" for military service exists to ensure that only those with "certain" attitudes are admitted, informal screening during the enlistment process and/or during training might possibly serve to help "weed out" those whose attitudes are considered inappropriate.

This study deals most directly with the self-selection explanation, but it bears inferentially on the others as well. Unlike prior research, which measured the attitudes of those already in the military in some capacity, our approach compares those who have not yet served, but expect to do so, with those who do not intend to serve. Among those who expect to serve, we further distinguish between those who do and do not anticipate military careers. Specifically, the plans and attitudes of large samples of high school seniors in the classes of 1976–85 are examined. We consider their perceptions of service opportunities,

preferences for military spending and influence, views on the need for U.S. military supremacy, support for military intervention, and views about unquestioning military obedience. To the extent that such attitudes are closely linked to plans for military service, the self-selection hypothesis will be supported. Evidence that differences among high school seniors are similar in magnitude to those already documented between servicemen and civilians would suggest that any preponderance of promilitary values among U.S. military personnel today derives primarily from those who choose to join the armed forces rather than from events (screening and/or socialization) that occur thereafter.<sup>10</sup>

# **Samples**

The data were obtained from the Monitoring the Future project, an ongoing study of high school seniors conducted by the Institute for Social Research (ISR). The study design, described extensively elsewhere," involves nationally representative surveys of each high school senior class, beginning in 1975, plus follow-up surveys mailed each year to a subset of each class sample.

This report combines data from surveys of seniors in the 10 graduating classes of 1976 through 1985. (Although many survey items reported here were included in the 1975 survey, changes in questionnaire format and response rates reduce comparability—thus, the decision was made to begin with 1976.) The data over a 10-year period were combined both to increase numbers of cases in rare categories and to permit analyses confirming that the relationships reported here are generalizable across time (i.e., do not interact with year of survey).

A three-stage probability sampling approach was used each year to select approximately 130 public and private high schools representative of those in the 48 coterminous states. The questionnaires were administered by professional interviewers from the ISR during school hours in the spring, usually in a regularly scheduled class period. Special procedures that ensured confidentiality were carefully explained in the questionnaire instructions and reviewed orally by the interviewers.

Student response rates ranged from 77 percent to 84 percent across the 10 surveys, and the obtained sample sizes ranged from 16,499 to 18,924. However, each annual survey includes five different questionnaires, with most items appearing in one form only. Accordingly, the numbers available for each of our analyses are about one-fifth of the total sample sizes.

#### Measures

Military Service Plans

All questionnaire forms included a set of questions asking, "How likely is it that you will do each of the following things after high school?" "Serve in the armed forces" was one of the activities listed, and all respondents were asked to choose among the following alternatives: "Definitely won't," "Probably won't," "Probably will," "Definitely will." Any respondent who expected to serve was also asked to indicate his or her preferred branch of service and expectations of being an officer, as well as the following item about career plans: "Do you expect to have a career in the armed forces?" The response alternatives to this last were "No," "Uncertain," "Yes." (Any respondent with missing data on the career question was coded as "career not expected.")

A composite measure of military plans (or expectations) was formed from these two questions, distinguishing the following eight categories:

- (1) Definitely won't serve
- (2) Probably won't serve
- (3) Probably will serve, career not expected
- (4) Probably will serve, uncertain about career
- (5) Probably will serve, expect career in armed forces
- (6) Definitely will serve, career not expected
- (7) Definitely will serve, uncertain about career
- (8) Definitely will serve, expect career in armed forces

Our eight-category measure is thus ordered primarily by likelihood of service and, within likelihood categories, according to probability of military career. (The latter distinction was pertinent only for those expecting to serve; the questionnaire instructions led most others to skip over the item about military careers.) We viewed extreme categories as representing the lowest (category 1) and highest (category 8) interest in military service; we assumed that attitudes toward the military would vary the most between these two categories. However, it should be noted that we were not entirely clear about how all the middle categories would be ordered (e.g., we could not predict whether category 6 would score lower or higher than category 5), although, specifically, we expected a clear ordering of categories 1 through 5, and of categories 6 through 8. We also expected 8 to be higher than 5, 7 to be higher than 4, and 6 to be higher than 3, in terms of promilitary attitudes.

Military Attitudes

The measures of military attitudes presented here were all adapted directly from earlier research examining the attitudes of civilians, sailors, and soldiers. To facilitate comparisons with that earlier research, we clustered the same sets of items into indexes, to the extent possible. Findings are presented for eight measures, based on a total of 15 items spread across three different questionnaire forms. Each item used a fivepoint response scale, reversed when necessary so that the high scores were always more promilitary.12

Perceived military job opportunities (an index of five items):

"To what extent do you think the following opportunities are available to people who work in the military services?"

A chance to get ahead

A chance to get more education

A chance to advance to a more responsible position

A chance to have a personally more fulfilling job

A chance to get their ideas heard"

(1=to a very little extent; 3=to some extent; 5=to a very great extent)

Perceived fair treatment in service (an index of two items):

"To what extent is it likely that a person in the military can get things changed and set right if he is being treated unjustly by a superior?" (1=very little extent; 3=some extent; 5=very great extent)

"Do you personally feel that you would receive more just and fair treatment as a civilian or as a member of the military service?" (1=much more fair as a civilian; 5=much more fair in the military service)

Preference for higher military spending (a single item):

Do you think the U.S. spends too much or too little on the armed services?" (1=far too much; 3=about right; 5=far too little)

Adequacy of military influence (a single item):

"All things considered, do you think the armed services presently have too much or too little influence on the way this country is run?" (1=far too much; 3=about right; 5=far too little)

Preference for greater military influence (a single item):

"Some people think there ought to be changes in the amount of influence and power that certain organizations have in our society. Do you think...the U.S. military...should have more influence, less influence, or about the same amount of influence as they have now?" (1=much less; 3=same as now; 5=much more)<sup>13</sup>

Support for military intervention (an index of two items):

"There may be times when the U.S. should go to war to protect the rights of other countries." (1=disagree; 3=neither; 5=agree)

"The only good reason for the U.S. to go to war is to defend against an attack on our own country." (1=agree: 3=neither: 5=disagree)

Preference for U.S. military supremacy (an index of two items):

"The U.S. does not need to have greater military power than the Soviet Union." (1=agree; 3=neither; 5=disagree)

"The U.S. ought to have much more military power than any other nation in the world." (1=disagree; 3=neither; 5=agree)

Servicemen should obey without question (a single item):

"Servicemen should obey orders without question." (1 = disagree; 3 = neither; 5 = agree)

### Other Measures

Four other variables were included as controls: race was coded to distinguish blacks, whites, and all others; and college plans were coded to distinguish those who probably or definitely expected to complete four years versus those who did not. In addition, we carried out analyses separately for males and females, and our analyses took account of year of survey.

# **Analysis Strategy**

Our analysis focuses on the link between military service plans and various attitudes about the military. To examine these relationships while taking account of the possible effects of race, college plans, and year of survey, we used Multiple Classification Analysis, which is, in effect, dummy variable regression analysis. A most important feature is that it treats predictors as nominal scales, thus accounting for curvilinear as well as linear relationships. 14 Such flexibility is necessary in controlling for effects of year of survey, since several of the attitudes (especially views about military spending and influence) showed substantial curvilinear trends during the decade spanned by this research. Like other forms of multiple regression, MCA assumes that the effects of predictor variables combine additively; that is, it assumes no interaction among predictors. We conducted several preliminary analyses to check for such interactions and were satisfied that none of any importance were present.

Analyses were carried out and are reported separately for males and females, primarily because of the large difference in proportions planning military service, and also because there are some male-female differences in patterns of relationship between plans and attitudes. Rather than conduct analyses separately for each of the 10 graduating classes of seniors, however, we combined all 10 and included year of administration as one of the predictors in the statistical analyses. (We did so, of course, only after the checks for interactions assured us that the patterns of relationship were not appreciably different from year to year.) This approach of combining the classes of 1976 through 1985 streamlined analysis and reporting, yielded adequate numbers of cases even in relatively rare categories (e.g., fewer than 1 percent of all female seniors definitely expected to enlist and have military careers), and provided large enough total numbers of cases (in excess of 10,000 for each

Table 1 Military Attitudes Linked to Plans for Military Service: Male High School Seniors, 1976-85

		Military Attitude Dimensions <sup>a</sup>									
		Α	В	С	Ď	E	F	G	Н	Pro-mil.	
	Number										
Military Plans	of Cases	MCA Adjusted Mean Scores <sup>b</sup>									
Definitely won't serve	4,714-5,889	2.53								2.65	
2. Probably won't serve	3,730-5,161	2.80		3.20							
3. Probably serve, no career	608 937	2.96	2.49	3.32	3.26	3.72	2.43	3.37	3.33	3.00	
4. Probably serve, career uncertain	621-853	3.19	2.67	3.53	3.40	3.84	2.45	3.56	3.44	3.17	
5. Probably serve, career expected	184- 258	3.36	2.82	3.57	3.36	3.91	2.48	3.52	3.39	3.24	
6. Definitely serve, no career	164- 239	3.34	2.74	3.55	3.39	3.93	2.71	3.43	3.28	3.24	
7. Definitely serve, career uncertain	449- 591	3.50	2.90	3.72	3.46	4.03	2.60	3.60	3.62	3.37	
8. Definitely serve, career expected	408- 486	3.94	3.18	3.76	3.62	4.25	2.78	3.75	3.84	3.64	
Coefficientsc											
Beta		0.36		0.24						N/A	
Eta		0.38	0.33	0.21	0.21	0.29	0.12	0.14	0.14	N/A	
Total Sample Statistics											
Mean		2.80		3.16						2.87	
S.D.		0.95	0.89	1.09	0.83	1.09	1.14	1.23	1.31	N/A	

<sup>&</sup>lt;sup>a</sup>The military attitude dimensions are as follows (see also Measures section):

- A. Perceived military job opportunities
- B. Perceived fair treatment in service
- C. Preference for higher military spending
- D. Adequacy of military influence
- E. Preference for greater military influence
- F. Support for military intervention
- G. Preference for U.S. military supremacy
- H. Serviceman should obey without question

Pro-mil. Pro-military attitudes index (weighted mean of A-H, see text)

<sup>c</sup>Beta (adjusted) and eta (unadjusted) regression coefficients are based on MCA (see text).

<sup>&</sup>lt;sup>b</sup>Entries are adjusted means, based on Multiple Classification Analyses (MCA) controlling race, college plans, and year of survey (see text).

Table 2 Military Attitudes Linked to Plans for Military Service: Female High School Seniors, 1976-85

			Military Attitude Dimensions <sup>a</sup>								
		Α	В	С	Ď	E	F	G	Н	Pro-m	
	Number										
Military Plans	of Cases	MCA Adjusted Mean Scores <sup>b</sup>									
Definitely won't serve	8,196-11,024	2.99	2.43	2.87	3.07	3.29	2.08	3.18	2.89	2.83	
2. Probably won't serve	1,950-3,002	3.16	2.56	3.06	3.19	3.56	2.27	3.15	2.94	2.97	
<ol><li>Probably serve, no career</li></ol>	167-240	3.43	2.73	3.14	3.25	3.64	2.23	3.19	2.88	3.09	
4. Probably serve, career uncertain	215-307	3.55	2.82	3.22	3.27	3.83	2.20	3.23	2.86	3.16	
5. Probably serve, career expected	131-178	3.66	2.93	3.27	3.35	3.89	2.27	3.32	3.15	3.27	
<ol><li>Definitely serve, no career</li></ol>	33-45	3.59	2.78	3.05	3.19	4.01	2.51	3.14	2.81	3.19	
7. Definitely serve, career uncertain	81-92	3.52	2.77	3.43	3.25	3.80	2.22	3.30	3.00	3.18	
8. Definitely serve, career expected	99-127	3.94	3.14	3.31	3.38	4.29	2.33	3.25	3.26	3.43	
Coefficientsc											
Beta		0.18	0.15	0.12	0.10	0.18	0.08	0.02	0.04	N/A	
Eta		0.21	0.18	0.12	0.10	0.19	0.08	0.04	0.04	N/A	
Total Sample Statistics											
Mean		3.05	2.48	2.93	3.11	3.37	2.13	3.18	2.90	2.88	
S.D.		0.87	0.79	0.92	0.72	0.97	1.02	1.15	1.27	N/A	
a,b,cSee notes to Table 1.											

analysis) so that the overall patterns of findings can be considered highly trustworthy.

Tables 1 and 2 display the relationships between military plans and each of the eight dimensions of military attitudes. The entries are adjusted means, to be thought of as the mean scores that would have been obtained if the different categories of military plans were all independent of racial differences and college plans and if there were no variations from year to year in proportions planning to serve. In fact, careful inspection of the complete MCA results (not shown) reveals that adjustments for race, college plans, and year were not very large. Although we still consider it appropriate to offer findings that are adjusted to remove possible confounding effects of other variables, it is reassuring to know that our basic findings and conclusions would be much the same if we focused on the unadjusted means. (The extent of the adjustments can be inferred from a comparison of the eta and beta coefficients at the bottom of each table. These coefficients are directly analogous to product-moment correlations and betas in ordinary multiple regression, except that MCA captures nonlinear as well as linear correlation. The betas reflect the impact of including race, college plans, and year in the regression analysis; the etas are unadjusted for such effects.)

## Promilitary Attitudes Index

In addition to the eight attitude dimensions, tables 1 and 2 include a final column showing overall "promilitary attitudes" mean scores. These are weighted means across the eight attitude dimensions, with each dimension given a weight equal to the number of items it contains. This provides the same sort of comparison across groups as might be provided by a single summary index based on the 15 military attitude items. (Such an index could not be computed directly at the individual level because the military attitude items are spread across three different questionnaires.)

## **Results and Discussion**

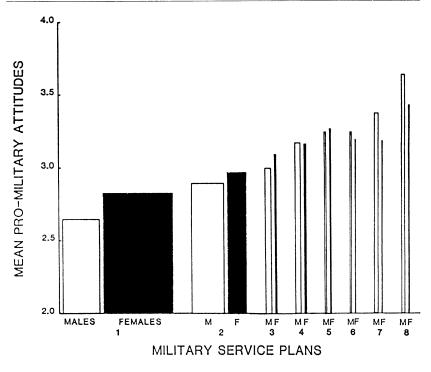
Military Attitudes Linked to Plans for Service

Are those who plan military careers more promilitary than those who do not expect to serve at all? Clearly they are, as detailed in tables 1 and 2 and summarized in Figure 1. With each higher level of commitment to service, there are correspondingly more positive views of military job opportunities and fair treatment, greater desires for increased military spending and influence, more support for military intervention and supremacy, and greater endorsement of unquestioning military obedience. Despite some important differences from one attitudinal dimension to another, the expected relationship with military plans does appear for each of these dimensions as well as for the overall index of promilitary attitudes.

A closer inspection of the eight categories of military plans, shown in Figure 1, reveals that differences in military attitudes are linked to *both* aspects of military plans, rather than just to career expectations. In other words, while career distinctions are important, they are not the whole story: those who expect to enlist but do not anticipate military careers are still distinctly more promilitary than those who do not expect to serve at all.

Figure 1 prompts a few additional observations. First, we note that bar widths have been set proportionate to subgroup size in order to illustrate the very large differences in the numbers of high school seniors at the two extremes of personal commitment to military service. Three-quarters of males say they "probably" or "definitely" will not serve, while more than nine out of ten females expect not to serve. At the other extreme, fewer than 4 percent of males and 1 percent of females expect "definitely" to serve and have a military career. (Given the

Figure 1
Promilitary Attitudes Index Related to Military Service Plans
Of Males and Females



Note: Military service plans 1–8 are as described in tables 1 and 2. The index of promilitary attitudes is described in the text. Widths of bars are proportional to the numbers of cases in each category of military plans.

limited overall variance in military plans, especially among females, it is not surprising that some regression coefficients in tables 1 and 2 are rather low.)

There is another interesting distinction between males and females, in addition to the substantial difference in proportions planning to serve. As Figure 1 illustrates, the link between these plans and military attitudes is not nearly as strong among females as among males. Among those who do not expect to serve, females are, on average, a bit more promilitary than their male counterparts; however, among those who definitely expect to serve and have military careers, the males tend to be more promilitary than the females. The overall pattern of stronger

links between plans and attitudes for males than for females holds across all eight attitude dimensions.

More generally, the mean scores given in tables 1 and 2 suggest that high school students as a whole are neither strongly pro- nor strongly antimilitary; rather, their scores during the past decade average very close to the midpoint of the scale. Those who definitely do not expect to serve are slightly below the midpoint. More importantly, even those who definitely expect military careers are much less promilitary than might have been anticipated: the "careerists" average only about 3.4 (females) to 3.6 (males) on the 1-5 promilitary attitudes scale. Of course, these means across all eight dimensions obscure some important differences from one set of attitudes to another.

## Differences Among Military Attitude Dimensions

While attitudes on all eight dimensions are linked to plans for military service, some linkages are much closer than others, and some reveal much more positive sentiment toward the military. The eight attitude dimensions also differ somewhat in patterns of male-female differences as well as in trends upward or downward during the past 10 years; such patterns are noted briefly.

Perhaps least surprising—documented in tables 1 and 2—is that perceptions of job opportunities and of fair treatment in the military are strongly related to plans for service. If there were no such relationships, it would be very difficult to understand why young people intended to serve in or devote their careers to the military. But against the backdrop of this positive relationship there is a striking sex difference: females perceive military job opportunities more favorably than males do, but females are much less likely to plan to enlist. The discrepancy is particularly strong between males and females who do not expect to serve, whereas males and females with the strongest career expectations are equally positive in their perceptions. In an earlier study that noted the same pattern, it was suggested that many young women may rate military work abstractly and impersonally rather than considering it as a field they themselves might enter.15 Perception of opportunities and fair treatment in the services changed very little throughout the decade under study; ratings were slightly lower during the late seventies and early eighties than in the mid-seventies or mid-eighties.

Preferences for military spending and influence showed substantial shifts across time. The largest shift involved opinions about whether the United States spends too much or too little on the armed services: in 1976 opinion split just about evenly on this issue; in 1980 and 1981

the majority felt that increased spending was necessary (means of 3.4 on the 1-5 scale); by 1982 the split was nearly even again; and in 1985 larger proportions advocated decreased military spending (a mean of 2.6). Changes in views about military influence ran reasonably parallel with those involving spending. More importantly for our purposes, attitudes concerning military spending and influence throughout the decade under study are almost as closely tied to plans for service as are perceptions of military job opportunities and fairness. That is, those who consider themselves more likely to enlist and/or to spend a career in the military show more support for increased spending and greater military influence. On these key dimensions, then, discernible attitudinal differences predate entry into the military.

On the remaining dimensions—support for American military intervention abroad, preference for American military supremacy, and endorsement of unquestioning obedience to military authority—tables 1 and 2 display the expected linkages, but these are considerably weaker (especially among females) than those considered above. Thus, along the dimensions that translate most readily into "hawk-dove" or "authoritarianism" distinctions, males who definitely expect military careers average about one-half of a standard deviation higher than those who definitely do not expect to serve. The corresponding differences among females average only about one-quarter of a standard deviation. Among those definitely expecting not to serve, males and females have very similar views about intervention (they tend not to support it) and preferences for U.S. military supremacy (they are split nearly evenly); but among those expecting military careers, males are distinctly more "hawkish" than females. When it comes to supporting unquestioning military obedience, males at each level of future military plansespecially those expecting military careers—score substantially higher than their female counterparts.

Finally, we should note that support for military intervention did not change very much during the 10 years studied; belief in unquestioning obedience rose slightly from 1976 (mean of 2.9) to 1981 (mean of 3.2), with little change thereafter; and preference for U.S. military supremacy increased from the mid-1970s to 1981 but declined thereafter—a pattern that closely parallels the rise and fall in support for greater military spending and influence. None of these trends was very strong, however, and none affected the basic relationships between military plans and attitudes.

These findings tend to support a self-selection interpretation. The linkage between military plans and promilitary attitudes is strongest,

however, along dimensions dealing with military job opportunities, whereas those dimensions having most to do with hawk-dove distinctions show less dramatic links with military plans. Thus, while we find some clear evidence of self-selection among high school seniors, it is not vet clear whether self- selection accounts for most of the ideological differences that may exist between civilians and those actually serving in the armed forces.

# Earlier Findings from Military and Civilian Samples

How large is the "ideology gap" between military personnel and civilians? More precisely, if we compared military personnel with their civilian counterparts (matched on such potentially important dimensions as age and education), to what extent would they differ in preferences about military spending, influence, and policy? Data collected from nationally representative samples of sailors and civilians in 1972 and soldiers in 1974 were examined from just this perspective, using each of the measures employed in our present analysis. Only a brief summary is provided here since a detailed reporting is available elsewhere.16

Military personnel were, indeed, more promilitary than their civilian counterparts on virtually every dimension examined, and military careerists showed larger contrasts with civilian counterparts than did noncareerists. In perceptions of military job opportunities and fair treatment, noncareerists and career enlisted men averaged about a half standard deviation higher than their civilian counterparts, whereas career officers were a full standard deviation higher than counterparts. These distinctions are generally quite similar to those uncovered here for high school seniors. In preferences for higher military spending and influence, noncareer enlisted men were again about a half standard deviation higher than civilian counterparts, with larger gaps (generally a full standard deviation) evident for careerists and officers. Here again, the patterns are similar to those we now find for high school males. Finally, views about military intervention, supremacy, and obedience all showed smaller military-civilian discrepancies; noncareer enlisted men scarcely differed from civilian counterparts, and even career officers' attitudes were only about a half standard deviation more hawkish than their civilian counterparts. Thus, when we come to the dimensions most closely tied to weapons and warfare, we see that the ideology gap was somewhat smaller—just as we now find among high school seniors.

There are always difficulties and complications when linking research results across different samples and time periods. But the pres-

ent comparisons avoid several key problems: the data collection procedures were similar (e.g., all the surveys involved self-completed, optically scanned questionnaires); most items being compared are identical; the time intervals (1972-74 and 1976-85) are closely adjacent; and our exploratory analyses reveal essentially the same relationship patterns for each senior class from 1976 through 1985, which suggests that things probably were not very different in 1972 and 1974. There remain, of course, any number of other possible confounding factors, but most would tend to produce differences in results rather than similarities. Thus, the striking similarities between the present results and those obtained a decade earlier—i.e., the findings that attitudinal differences linked to military plans are of the same order of magnitude as those linked to actual service—provide strong support for the self-selection interpretation. In other words, the attitude differences between military personnel and civilians are no wider than the preservice differences between those who plan to serve (especially those who plan military careers) and those who do not. The inference to be drawn is that promilitary values among service personnel are not, for the most part, the product of events and experiences that occur during military service.

# **Conclusions and Policy Implications**

A decade ago, analyses of survey data from soldiers, sailors, and civilians led to the conclusion that "career military men are, on the average, ideologically different from their civilian counterparts and also from noncareer military men." While the data for those analyses did not permit a thorough test of self-selection versus socialization explanations for these differences, the analyses did suggest that "the dominant role is played by self-selection, that is, individuals on the promilitary side of the ideological spectrum are the ones most likely to pursue careers in the military." The analyses reported here provide further evidence of self-selection: high school seniors who expect to serve in the military are more promilitary than those who do not, and those who anticipate military careers are the most promilitary.

Studying high school seniors' plans or expectations about military service offers an important advantage compared with earlier research. Because these surveys predate entrance into the armed forces, the respondents must be free of socializing effects of actual military service. We do, however, acknowledge two significant limitations to the present research. First, although earlier studies have shown that seniors'

plans are strongly predictive of actual service, the relationship is far from perfect; many of those who expect to enter fail to do so. <sup>19</sup> Thus, post-high school follow-up data would quite possibly reveal that ideology is linked even more strongly to actual enlistment than to plans. If this were true, even larger selection effects, perhaps including screening as well as self- selection, would prevail.

A second limitation to the present analysis is that it does not tell us whether the preexisting differences in military attitudes are to any degree enlarged by actual service (which would indicate some degree of socialization, in addition to self- selection). Here again, follow-up information on actual service, coupled with repeated measurement of military attitudes, could provide a more complete answer to the selectionsocialization question. In fact, such follow-up data are collected from subsets of each Monitoring the Future high school sample. As increasing numbers of follow-up cases become available, we hope to exploit these data in future analyses. In the meantime, the present findings that plans for military service are linked to differences in promilitary attitudes, coupled with the observation that these differences are roughly equivalent to previously documented differences between servicemen and civilians, all strongly suggest that self-selection is dominant.

This evidence of self-selection may be of considerable theoretical interest to social scientists in general, since it represents an instance in which individual differences predate rather than result from exposure to different social environments or "formative" experiences. 20

The self-selection findings may also have policy implications in this era of the all-volunteer force. When the possibility of such a force was debated two decades ago in the 1966 Chicago Conference on the Draft, and again in the Gates Commission report, there was considerable discussion of whether there should be such a shift toward careerists and whether that would encourage "a separate military ethos." Seventeen years later, a 1983 conference on "the all-volunteer force after a decade" paid scant attention to such issues.<sup>22</sup>

Careerists now constitute a considerably larger proportion of the total force than they did when the AVF began; some have suggested that an even larger proportion would be desirable "from a cost-benefit perspective." For those who remain concerned about careerism and a separate military ethos, the present findings provide relevant data but not necessarily straightforward answers. Suppose, for example, that reenlistment bonuses "convert" some noncareerists into careerists. If self-selection rather than socialization is dominant, one might conclude that such converts would bring more "civilianlike" attitudes into the

ranks of careerists. On the other hand, one could argue that those most likely to shift toward military careers might also have been more promilitary all along. Here again, longitudinal data—in this case, tracking young men and women beyond their first enlistment—would be most informative.

It is also worth reemphasizing that the overall differences in promilitary attitudes do not apply equally to all dimensions. Whether we speak of high school students' military plans or of actual distinctions between military personnel and civilians, the greatest differences involve perceptions of military opportunities and fair treatment. For those concerned about the "military mind," it may be reassuring that those in or headed for military service, and even careers, are not a great deal more hawkish than their nonservice counterparts—at least not when "hawkish" is defined as desiring U.S. military supremacy, being relatively supportive of military intervention, and supporting unquestioning military obedience. Thus, it may be fundamentally more important to be concerned about any emergence of a military mind on the part of elected officials or the electorate as a whole, rather than to focus narrowly on military personnel who are called upon to carry out the nation's policies.

#### **Notes**

- 1. C. Wright Mills, *The Power Elite* (New York: Oxford University Press, 1956); and Robert Perrucci and Mark Pilisuk, "The Warfare State," in The Triple Revolution Emerging, ed. Robert Perrucci and Mark Pilisuk (Boston: Little, Brown and Company, 1971).
- 2. Samuel P. Huntington, The Soldier and the State (Cambridge: Harvard University Press, 1957, reprint, New York: Vintage Press, 1964); Morris Janowitz, The Professional Soldier (New York: Free Press, 1960); and Charles C. Moskos, Jr., The American Enlisted Man (New York: Russell Sage Foundation, 1970).
- 3. James E. Dorman, "ROTC Cadet Attitudes: A Product of Socialization or Self-Selection?" Journal of Political and Military Sociology 4 (Fall 1976): p. 204.
- 4. Samuel Kirkpatrick and James L. Regens, "Military Experience and Foreign Policy Belief Systems," Journal of Political and Military Sociology 6 (Spring 1978): pp. 29-47.

- 5. Jerald G. Bachman, John D. Blair, and David R. Segal, The All-Volunteer Force (Ann Arbor: University of Michigan Press, 1977); and Jerald G. Bachman, High School Seniors' Plans, Preferences and Attitudes About Military Service: Differences Linked to Sex and Race (Unpublished, 1978).
- 6. Sanford M. Dornbusch, "The Military Academy as an Assimilating Institution," Social Forces 33 (May 1955): pp. 316-321; and Gary L. Wamsley, "Contrasting Institutions of Air Force Socialization: Happenstance or Bellwether?" American Journal of Sociology 78 (September 1972): pp. 399-417.
- 7. Donald T. Campbell and Thelma H. McCormack, "Military Experience and Attitudes Toward Authority," American Journal of Sociology 62 (March 1957): pp. 482-490; Elizabeth G. French and Raymond R. Ernest, "The Relationship Between Authoritarianism and Acceptance of Military Ideology," Journal of Personality 24 (December 1955): pp. 181-191; and Klaus Roghmann and Wolfgang Sodeur, "The Impact of Military Service on Authoritarian Attitudes," American Journal of Sociology 78 (September 1972): pp. 418-433.
- 8. William C. Cockerham, "Self-Selection and Career Orientations Among Enlisted U.S. Army Paratroopers: A Research Note," Journal of Political and Military Sociology 6 (Fall 1978): pp. 249-259; Dorman, "ROTC Cadet Attitudes"; and E. M. Schreiber, "Authoritarian Attitudes in the United States Army," Armed Forces & Society 6 (Fall 1979): pp. 122-131.
- 9. Cockerham, "Self-Selection and Career Orientations," p. 250.
- 10. The present study is not the only one that examines attitudes of young people before they enlist. The Youth Attitudes Tracking Survey, conducted for the Department of Defense, examines enlistment propensities of young men and women. Attitudes related to enlistment propensity in the YATS surveys include valuation of equal pay and opportunity for men and women, retirement benefits, educational opportunities, and the opportunity to do something for the country; interestingly, enlistment propensity was negatively related to concerns with personal freedom as a job attribute. (See Robert M. Bray et al., Youth Attitude Tracking Study II (Arlington, Va.: Defense Manpower Data Center, April 1985); also summarized in David R. Segal, "Military Personnel," in American Defense Annual 1986-1987, ed. Joseph Kruzel (Lexington, Mass.: D.C. Heath, 1986): pp. 139-152.

The key difference between the YATS data and those reported herein is that the YATS surveys tend to treat the military as simply another actor in the labor market, asking questions that would be appropriate about any potential employer; the present study, on the other hand, expands the knowledge base by assuming the military is a unique institution and thus asks a broader range of questions. Nonetheless, in areas where content overlaps, the findings from the two studies seem generally consistent.

- 11. Jerald G. Bachman and Lloyd D. Johnston, The Monitoring the Future Project: Design and Procedures, Monitoring the Future Occasional Paper 1 (Ann Arbor: Institute for Social Research, 1978); Lloyd D. Johnston, Jerald G. Bachman, and Patrick M. O'Malley, Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors, annual volumes 1976-85 (Ann Arbor: Institute for Social Research); and Lloyd D. Johnston, Jerald G. Bachman, and Patrick M. O'Malley, Drug Use Among American High School Students, College Students, and Other Young Adults, National Trends Through 1985, National Institute on Drug Abuse (Washington, D.C.: GPO, 1986).
- 12. See Bachman, Blair, and Segal, The All-Volunteer Force, especially appendixes

- B and C. Appendix B summarizes factor analyses showing that each measure used here loads on a general factor of promilitary sentiment (loadings for civilian males ranged from .41 to .72).
- 13. The two items on military influence were asked in different questionnaire forms. Item D appeared in the form 3 questionnaire after a series of questions about how good a job a number of institutions were doing for the country (the U.S. military was the last on the list and received relatively positive ratings). Item E appeared in the form 4, where it was the last in a similar list of institutions rated in terms of whether they should have more or less influence. We would not include two such similar questions in the same form, but placing them in different forms provides at least some opportunity to observe possible questionnaire context effects. Interestingly, some such effects are evident in tables 1 and 2. Item D, which appeared after respondents already had the opportunity to indicate whether they felt the military was doing a good job "for the country as a whole," yielded a lower (less promilitary) mean score than item E, which provided the first opportunity to contrast the military with the other institutions. Item E also showed stronger correlations with military enlistment intentions than did item D. Such findings provide a valuable caution against overinterpretation of single questionnaire items and indicate the value of replicating overall findings across a number of indicators.
- 14. Frank M. Andrews, James N. Morgan, and John A. Sonquist, Multiple Classification Analysis: A Computer Program for Multiple Regression Using Categorical Predictors, rev. ed. (Ann Arbor: University of Michigan, 1973).
- 15. Jerald G. Bachman, "American High School Seniors View the Military: 1976-1982," Armed Forces & Society 10 (Fall 1983): pp. 86-104.
- 16. Bachman, Blair, and Segal, The All-Volunteer Force, especially pp. 112-113, 183-185.
- 17. Ibid., p. 141.
- 18. Ibid., pp. 141-142.
- 19. Jerome Johnston and Jerald G. Bachman, Young Men and Military Service, vol. 5 of Youth in Transition (Ann Arbor: Institute for Social Research, 1972); and David R. Segal and Jerald G. Bachman, "The Military as an Educational and Training Institution: A Comparison Among Post-High School Alternatives," Youth & Society 10 (1978): pp. 47-64.
- 20. Several other examples of this general phenomenon are provided in Jerald G. Bachman, Patrick M. O'Malley, and Jerome Johnston, Adolescence to Adulthood— Change and Stability in the Lives of Young Men, vol. 6 of Youth in Transition (Ann Arbor: Institute for Social Research, 1978).
- 21. Sol Tax, The Draft: A Handbook of Facts and Alternatives (Chicago: University of Chicago Press, 1967); and The Report of the President's Commission on an All-Volunteer Armed Force (Washington, D.C.: GPO, 1970).
- 22. William Bowman, Roger Little, and G. Thomas Sicilia, eds., The All-Volunteer Force After a Decade, Retrospect and Prospect (Washington, D.C.: Pergamon-Brassey's International Defense Publishers, 1986).
- 23. C. Robert Roll, Jr., and John T. Warner, "The Enlisted Career Manpower in the All-Volunteer Force," in The All-Volunteer Force After a Decade, ed. Bowman, Little, and Sicilia, pp. 70-71.

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# History of Military and Naval Technology

A small group of historians has been meeting in Washington, D.C; their aim is to enhance understanding of the relationship of military and naval technology to the broader sweep of historical investigations.

In addition to holding periodic meetings, the group has initiated a series of three annual lectures at the National Museum of American History; the third lecture of this current series is scheduled for the end of March 1987. The group also plans to publish a newsletter, the Ingeniator, in February, May, and September; the newsletter will provide information on conferences and meetings, work in progress, major publications, job vacancies, and appointments.

For information regarding the group's activities at the National Museum of American History, contact Dr. Edward C. Ezell, curator/supervisor of the Division of Armed Forces History. Notes and bulletins for the newsletter should be addressed to Dr. Donald R. Baucom, 2418 Childs Lane, Alexandria. VA 22308, who can also provide further information.