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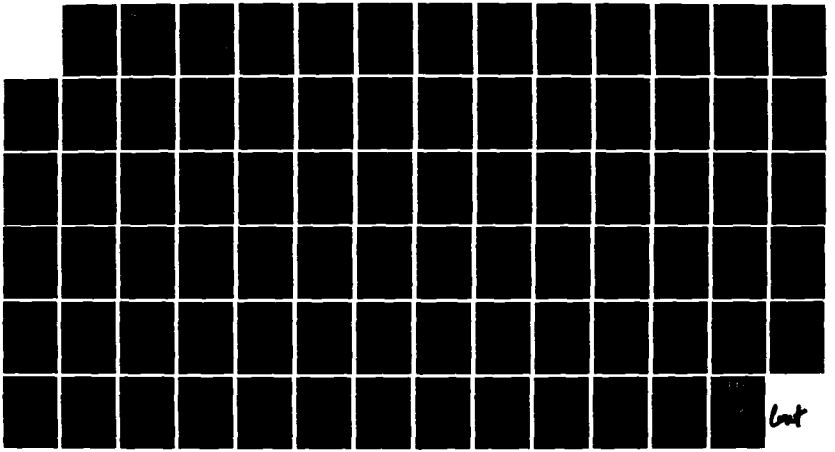

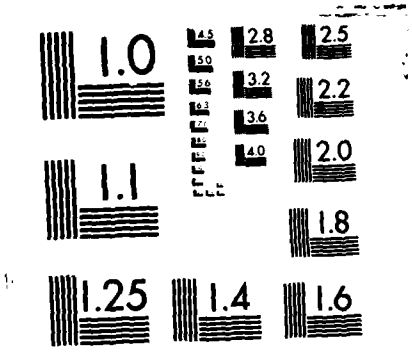

DEFENSE

MANPOWER DATA CENTER

PROPENSITY OF YOUNG WOMEN TO ENLIST IN THE MILITARY

A REPORT TO CONGRESS

MARCH 1985

1600 WILSON BOULEVARD ARLINGTON, VIRGINIA 22209

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Vonda L. Kiplinger
David P. Boesel
Kyle T. Johnson

Defense Manpower Data Center

PREFACE

This study was requested by the House Committee on Armed Services in the Department of Defense Authorization Act, 1985. The Survey and Market Analysis Division, Defense Manpower Data Center (DMDC) conducted the research at the request of the Directorate for Accession Policy, Office of the Assistant Secretary of Defense (Manpower, Installations, and Logistics). Like most studies based on large-scale research, this work reflects the effort, guidance, and support of many people in a number of organizations.

In the Directorate for Accession Policy, Dr. W.S. Sellman, Director, provided overall guidance and review. Captain Louise Wilmot (USN), Deputy Director, served as principal point of contact, reviewed each draft, and provided invaluable background information and guidance.

At DMDC, the study was undertaken by Vonda Kiplinger, who analyzed Youth Attitude Tracking Study (YATS) data and wrote Chapters 1 and 2. Kyle Johnson analyzed data from the National Longitudinal Study, as well as from High School and Beyond, and wrote Chapter 3. David Boesel, Chief, Personnel Survey Branch, coordinated the research effort, wrote Chapter 4 and the Executive Summary, and edited the report. Zahava Doering, Chief, Survey and Market Analysis Division, reviewed drafts of the report and provided valuable support and guidance in the course of the study. Barbara Saunders was responsible for most of the data processing, and Virginia Broadus was responsible for all phases of producing the report.

The study benefited from the analysis of enlistment intentions and behaviors conducted by Bruce Orvis, the Rand Corporation, and incorporated in Chapter 2. The study also benefited from his review of drafts and his astute analytic observations based on several years' work with the YATS data.

Finally, officers of the Army, Navy, Air Force, and Marine Corps reviewed the draft report and offered useful comments and insights. Their cooperation in this research effort is greatly appreciated. Special thanks are due to Colonel Douglas Patterson (USAF) for his knowledgable and careful consideration of the issue of women's enlistment behavior.

EXECUTIVE SUMMARY

This report presents the results of a review and analysis of current data on the propensity of young women to enlist in the Armed Forces. The study was requested by the Congress in the Department of Defense Authorization Act, 1985 and was occasioned in part by Congressional concern over the potential strain on the recruiting market that may result from a decline in the numbers of military-age youth and an improving economy.

After briefly reviewing the history of women's participation in the Armed Forces and public attitudes toward their participation, the study turns to an analysis of recent data from three major, ongoing surveys of American youth -- the Youth Attitude Tracking Study, the National Longitudinal Survey of Youth Labor Market Experience, and High School and Beyond. Together the studies provide a coherent picture of the propensity of women to enlist.

There are essentially two kinds of propensity measures in these surveys. The broad measures, which combine responses to the effect that the respondent will "definitely" or "probably" enlist, do not generally reflect a strong commitment to enlist. The narrow measures, which include the "definitely" responses and statements of intent to join the military, do reflect such a commitment.

The broad measures typically show 25 to 35 percent of the males and 10 to 15 percent of the females having a positive propensity to enlist. The narrow measures typically show 5 to 8 percent of the males and 1 to 2 percent of the females having a strong positive propensity. Thus, the broad measures indicate that men are about 2.5 times as likely as women to express positive propensity, while the narrow measures indicate that they are about 5 times as likely to do so.

There was not much year-to-year change in women's propensity between 1980 and 1984, although there was a modest two-year decline from 1981 to 1983. Men's propensity remained unchanged from 1980 to 1983, but dropped markedly in 1984.

Regarding Service preference, women are most likely to prefer the Air Force, followed by the Army or Navy, and least likely to prefer the Marine Corps. Among men, the traditional order of preference appears to have changed over the last several years. Instead of preferring the Air Force, the Navy, the Army, and the Marine Corps, in that order, men now express roughly equal preferences for the Air Force and the Army, while stated preferences for the Navy and Marine Corps appear to be converging at a lower level.

Men are more likely than women to choose, or be chosen by, the military at each stage of the enlistment decision process examined in this study. Larger percentages of men than women express a positive propensity to enlist. Of those expressing a positive propensity, larger percentages of men than women take the written test; and of those testing, larger proportions of men enlist.

About one third of the women and somewhat less than half of the men who take the written test subsequently enlist. Earlier research indicates that at least some of this difference in enlistment probabilities is due to the greater tendency of qualified women to drop out of the enlistment process between sucessfully completing the written aptitude test and taking the physical examination.

Positive-propensity responses are statistically related to the probability of future enlistment; the relation is stronger for men than for women.

While positive-propensity women are more likely than negative-propensity women to enlist, about two-thirds of all female enlistees come from the negative-propensity categories. This occurs because the number of women expressing little or no interest in the military is so large that even the tiny percentage who enlist (between one-half and one percent) make up the majority of female enlistees.

For both women and men, propensity to enlist is inversely related to age, level of education, year in school, measures of ability (such as enlistment test scores and reported high school grades), social class, employment, and marital status (being married). Positive-propensity youth tend to have lower-than-average education and ability levels. However, enlistees closely resemble the eligible youth population in education and ability levels. Apparently the process of selection and self-selection that occurs between initial propensity and enlistment screens out people with lower education and ability levels, leaving a population of enlistees who are substantially representative of American youth in these respects.

Blacks are much more likely to be interested in serving than whites, with Hispanics occupying a middle position. Compared to their white counterparts, black women show an especially strong propensity to enlist. The military may be seen as a channel of social mobility for many of those who face discrimination in civilian life on the basis of race and sex. Recent evidence, however, suggests that this pattern of double discrimination in civilian life may be fading rapidly.

Among survey respondents not interested in the military, both men and women tend to cite plans for further education, not wanting to be separated from family and friends, civilian job plans, and a desire for more personal freedom as reasons for their lack of interest. Service constraints on enlistment, such as eligibility criteria, do not appear to be a major reason for lack of interest, either among women or men.

While respondent characteristics associated with propensity tend to be similar for both men and women, there are some areas of difference. Women are more likely than men to be interested in the Guard/Reserve, as opposed to the Active Military, paralleling their greater preference for part-time work in the civilian economy. They are more likely to regard higher education as complementary to military service, while men are more likely to regard it as an alternative. Women are also more likely to cite parental disapproval, family responsibilities and pregnancy, and an anticipated dislike of the military as reasons for not being interested in enlisting, while men are more likely to cite the level of military pay as a reason. The latter may be related to differences in the levels of pay which men and women receive in the civilian labor market.

Taken together, the research findings suggest that women's attitudes toward the military reflect an outlook which is rather different from men's. Not only are women in the aggregate less interested in military service than men, but those who are interested tend to view the service in a broader context. Their interest in the military is more likely to be limited and qualified by interests in other areas. This outlook, and the social context of which it is a part, may be major determinants of the future potential for women's participation in the Armed Forces.

After the analysis of the propensity of women to enlist in the military, the report concludes with recommendations for future research.

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CHAPTER 1

INTRODUCTION

This report presents the results of a review and analysis of current data on the propensity[1] of young women to serve on active duty in the U.S. Armed Services. The study was requested by the Congress in the Report of the Committee on Armed Services, the Department of Defense Authorization Act, 1985.[2] Recognizing the potential strain on recruiting resources in the wake of a decline in the size of the 17-to-21 year-old male youth population, the military's primary recruiting market, and increases in employment opportunities provided by an improving economy, the Committee on Armed Services has stated that "...more women must be provided the opportunity to serve in the military if the All-Volunteer Force is to be sustained".[3]

Accordingly, Department of Defense Authorization Act, 1985 specified that:

> The Secretary of Defense shall study the propensity of young women to serve in the military and shall submit a report to Congress with the Secretary's review and analysis of that propensity not later than six months after the date of the enactment of this Act.[4]

Purpose and Scope

The purpose of this report is to comply with the Congressional tasking and provide a review and analysis of the most current data on the likelihood or propensity of women to enlist in any of the U.S. Military Services. As used here, "propensity" refers to the level of interest expressed by American youth in joining the active-duty military. The various measures used to assess this interest do not reflect young people's actual enlistment behavior, but rather, their self-reported attitudes and general expectations or intentions concerning military service as a future occupational option.

Propensity to enlist in the military has been the primary focus of the Youth Attitude Tracking Study (YATS), an ongoing annual survey-series conducted for the Department of Defense (DoD). It has also been a topic of interest in two other large, national surveys, the National Longitudinal Survey of Youth Labor Market Experience (NLS)[5] and High School and Beyond (HSB).[6] Analyses of these data have generally focused on the traditional

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[1]The term "propensity" is used in a general sense to denote interest, disposition, or likelihood.

[2]H.R. Rep. No. 691, 98th Cong., 2d Sess. (1984).

[3]Ibid, pp. 246-247.

[4]DoD Authorization Act, 1985, Pub. L. No. 98-525, 98 Stat. 2539 (1984).

[5]Conducted for the U.S. Department of Labor.

[6]Conducted for the U.S. Department of Education.

recruiting market for enlisted military service--i.e., the young male population, ages 16 through 21. However, the YATS, NLS, and HSB also contain unique information on the expressed attitudes, motivations, and intentions of young women to enlist in the active-duty military. Until now, these data sources have not been extensively analyzed. Therefore, in order to provide more information on this segment of the potential recruit population, the analyses reported here focus on current survey data on female enlistment propensity and, insofar as the data will allow, on the relationship of expressed intentions to the enlistment behavior of young American women.

Before discussing the survey data, however, it will be useful to examine the context of female military service which frames current expectations and, to some extent, behavior. Such a review will facilitate a better understanding of the complex nature of the propensity of women to enter an institution which has historically been a male domain. Thus, Chapter 1 of this report provides a brief overview of female participation in the U.S. military, including levels of participation, types of military occupations historically held by women, attitudes toward women serving in the military, and changes in legislation and defense policy on women. This chapter also notes some of the societal and political factors which may influence expressed enlistment intentions and enlistment behavior. Chapter 2 presents the results of the review and analysis of YATS data on the propensity of women to enlist and conclusions based on those results, while Chapter 3 provides the results of the analyses of the NLS and HSB data sets. Conclusions and recommendations for future research are presented in Chapter 4.

Historical Overview

Prior to the mid-1970s, women's participation in the U.S. Armed Forces was limited. Although the auxiliary Army Nurse Corps was established in 1901 to care for soldiers wounded in the Spanish American War and the Navy Nurse Corps was formed in 1908, their members did not have the rank, benefits, or compensation of the regular (male) military. These ancillary corps were small, with strengths of 400 Army nurses and 460 Navy nurses at the beginning of World War I. The war, however, brought with it an increased demand for women in the Services. The numbers of Army and Navy nurses grew to 20,000 and 1,400, respectively. In addition, nearly 13,000 women served with the Navy, Marines, and Coast Guard. Most of these female personnel filled clerical and administrative positions at U.S. headquarters, although some female Navy yeomen served as draftsmen, translators, and recruiters. Others served with hospital or intelligence units overseas[1]. After demobilization, the numbers of women in the military were reduced to much lower levels.

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[1]See, for example, Hancock, J.B. (1972). Lady in the Navy: A Personal Reminiscence. Annapolis, MD: U.S. Naval Institute Press;
Holm, J. (1983). 2nd edition. Women in the Military: An Unfinished Revolution. Novato, CA: Presidio Press;
Treadwell, M. (1954). U.S. Army in World War II: Special Studies--the Women's Army Corps. Washington, D.C.: Department of the Army.

World War II presented the first opportunity for contributions by substantial numbers of military women. As in World War I, the threat to national security and the need for rapid mobilization of a large military force resulted in increased utilization of women in the U.S. Armed Forces. As U.S. involvement in the war became imminent (and particularly after the passage of the first peacetime Selective Service Act in 1940), there was increased pressure to allow women to participate in the mobilization effort. After nearly a year of legislative debate, the Women's Auxiliary Army Corps (WAAC) as established in May 1942 to serve with, but not as an integral part of, the U.S. Army.[1] In mid-1943, the auxiliary status of the WAAC was removed and the Women's Army Corps (WAC) was established as a separate component of the U.S. Army.[2] In July 1942, the Navy established the WAVES (Women Accepted for Voluntary Emergency Service) as part of the Naval Reserve with full military status. The same law authorized the organization of a Marine Corps Women's Reserve.[3] The women's reserve component of the Coast Guard (the SPARS) was also established in 1942.[4]

By the end of World War II, approximately 280,000 women (just over two percent of the U.S. forces) were on active-duty, and a total of about 350,000 women had served during the course of the war.[5] Although the majority of these women served in administrative, clerical, and medical billets, many worked in technical specialities such as radio communications and repair, cryptography, aerophotograpy and aerophotography interpretation, control tower operations, antiaircraft identification and gunnery, engine repair, and parachute rigging. In addition, women also served as noncombat pilots and as instructors in celestial navigation, in other aviation specialities, and in all of the technical specialties noted above.[6] Indeed, it has been pointed out that after WAVES were assigned to aviation instructor billets, no naval aviator flew into combat without receiving some of his training from WAVE instructors.[7]

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[1]Women's Army Auxiliary Corps, ch. 312, 56 Stat. 278 (1942).

[2]Women's Army Corps, ch. 187, 57 Stat. 371 (1943).

[3]The Naval Reserve Act of 1938, amendment, ch. 538, 56 Stat. 730 (1942).

[4]Coast Guard Auxiliary and Reserve Act of 1941, amendments, ch. 639, 56 Stat. 1020 (1942).

[5]Holm. (1983).

[6]See, for example, Hancock. (1972);
Holm. (1983);
Treadwell. (1954).

[7]See for example, Hancock. (1972);
Keil, S.V. (1979). Those Wonderful Women in Their Flying Machines: The Unknown Heroines of World War II. New York: Rawson, Wade.

After the end of World War II and the passage of the Women's Armed Services Integration Act of 1948,[1] the sizes of the women's corps were not permitted, by law, to exceed two percent of their respective authorized Service strengths. In addition, the highest permanent rank achievable for females was lieutenant colonel/Navy commander, although each Service had one colonel/Navy captain billet which was filled by the director of the women's corps on a temporary tour of duty in that position. The two-percent ceiling was not reached until the late 1960s and the Vietnam build-up.[2]

The legal ceiling on female enlisted strength and ceilings on grades were removed on November 8, 1967.[3] With the subsequent drawdown of troops from Southeast Asia, which disproportionately affected junior people and consequently women, substantial increases in female end-strength did not begin until 1972. From this point and throughout the 1970s, women's participation in the U.S. Military increased greatly. By the end of 1972, five female officers had been promoted to general/flag rank, and the number of women serving on active duty increased over 300 percent from 1971 to 1980. This represents a change in force composition from 1.6 percent to 8.4 percent female. In addition, women gained admission to the three Service academies in 1976, and the classes of 1980 graduated 214 women, 60 percent of the initial female entrants. This percentage is only slightly lower than the 65 percent of male entrants who were graduated.[4]

Unquestionably, a major impetus for increased utilization of women in the military was the creation of a volunteer force. Although the Gates Commission, whose task was to "develop a comprehensive plan for eliminating conscription and moving toward an all-volunteer force,"[5] did not make any recommendations concerning the use of women as a military resource, the Department of Defense became concerned that the age-eligible male population would not supply the quantity and quality of personnel needed to maintain a standing peacetime force of over two million trained volunteers. Thus, the Central All-Volunteer Task Force was designated in early 1972 to explore options for maintaining required strength-levels. Among various options, the task force was to study the utilization of women and to provide a contingency plan for increasing the number of women in the military in order to offset any shortage of male recruits. The Task Force was directed to concentrate on the transition years FY 1973-1977, when it was feared that male accessions might not meet quality and quantity requirements, and that male recruiting costs would increase.[6]

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[1]Women's Armed Services Integration Act of 1948, ch. 449, 62 Stat. 356 (1948).

[2]It is interesting to note that although combat restrictions for females were in effect during the Vietnam War, an estimated 7,500 women served in Southeast Asia, and many more volunteered.

[3]Armed Forces Women Officers, Pub. L. No. 90-130, 81 Stat. 374 (1967).

[4]Sources: The United States Army, Air Force, and Naval Academies.

[5]Holm. (1983, p. 247)

[6]U.S. Department of Defense. (1972 December). Central All-Volunteer Task Force Report: Utilization of Military Women (A Report of Increased Utilization of Women, FY 1973-1977). Washington, D.C.: Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs).

Throughout the 1970s, it was apparent that the role of women in the labor force was changing, with concomitant implications for the American occupational structure and the military establishment. Women were entering the labor force in unprecedented numbers. In 1960, 40 percent of women ages 18 through 34 were in the civilian labor force. By 1970, this percentage had increased to 51 percent, and by 1983, over 68 percent of women in the 18-34 age group were in the civilian labor force. In addition, many women were also entering traditionally male occupations, partially as a result of affirmative action programs.

Despite civilian equal opportunity legislation[1] and expanded employment opportunities for women, traditional attitudes and practices continued to hamper full and effective participation in many areas. In 1972 Congress debated the proposed Equal Rights Amendment and the role of women in the military. Debate focused on the exclusion of women from combat, their exemption from the draft, and charges of sex discrimination within the Armed Forces. At the same time, the constitutionality of several military policies was being challenged in Federal courts. Results of the litigation were mixed but focused national attention on some traditionally male-oriented policies.[2] In addition, a 1972 special Subcommittee on the Utilization of Manpower in the Military of the House Committee on Armed Services, chaired by Representative Otis Pike (D, New York), issued a report which stated:

> We are concerned that the Department of Defense and each of the military services are guilty of "tokenism" in the recruitment and utilization of women in the Armed Forces....We strongly urge the Secretary of Defense and the Service Secretaries to develop a program which will permit women to take their rightful place in serving in our Armed Forces.[3]

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[1]For example, the Civil Rights Act of 1964 was passed by Congress to "insure equal employment opportunities for employees without discrimination because of race, color, religion, sex, or national origin..."

[2]The policy areas receiving the most legal attention during the 1970s were classification and assignment policies and policies regarding military families. In 1971, a Supreme Court ruling on sex-based classification policies provided for a more stringent interpretation of laws on equal protection. However, most of the litigation concerned family policy and denial of benefits to women, contending that such policies violated the equal protection provisions of the U.S. Constitution. The Supreme Court case of Frontiero v. Richardson (1973) successfully challenged the constitutionality of the military policy requiring that a female military member prove her spouse (civilian) and/or dependent children to be dependent on her for more than one-half of their support in order to receive the dependency benefits normally accorded male military personnel. For a discussion of other relevant legal actions, see Holm (1983, Ch. 20, "Family Policy").

[3]H.R. Rep. No. 51, 92d Cong., 1st Sess. (1971).

In response to these social and political pressures, the Services adopted the contingency plans of the Central All-Volunteer Task Force for greater utilization of women as action plans, with the goal of increasing the number of active-duty military women by 150 percent from an FY 1972 end-strength of 34,705 to 86,858 at the end of FY 1977.[1]

The results of this intensification of efforts to enlist and retain greater numbers of females in the Armed Services are illustrated in Tables 1 and 2. Table 1 presents the numbers of non-prior service females recruited into the four active-duty Services for the two decades FY 1964 through FY 1984. Table 2 shows the numbers of female personnel serving on active duty (end-strengths) and female personnel as the percent of total personnel for each Service for FY 1971 through FY 1984. As indicated in Table 1, the number of non-prior service female recruits increased from a total of 13,000 in FY 1972 to 31,300 in FY 1974. During the period 1976 through 1980, the number of women recruited annually increased steadily, peaking at 49,400 in FY 1980.

After rapid and steady expansion in the recruiting of women throughout the 1970s, the number of female enlisted accessions began declining. The number of women enlisting annually decreased from the peak of 49,400 (about 14 percent of all enlisted accessions) in 1980 to 36,100 in 1984 (about 12 percent of enlisted accessions). Male accessions also decreased in this period, but at a much slower rate.

Summary data on end-strengths of female military personnel from FY 1971 through 1984 are presented in Table 2. The number of female officer and enlisted personnel on active duty increased from 42,300 in 1971 to almost 201,000 in 1984. At the end of the most intensive phase of the buildup, from 1972 to 1976, the increase in the number of women serving on active duty averaged an approximate 25 percent annually. After this initial four-year buildup, the average annual growth rate slowed to approximately ten percent (from 1976 to the present). Although the number of women serving in the Armed Forces has increased dramatically since 1970, the year-to-year increase in the proportion of women serving, while historically significant, has been more gradual.

Not only has there been an increased representation of women in the U.S. Armed Forces during the decade since the termination of the draft, but revisions in assignment policies resulted in the expanded utilization of women in several occupational areas previously closed to them. The effect of this change in assignment policies is illustrated by comparison of the 1971 and 1984 occupational distributions of female officer and enlisted personnel (Table 3).

The current decline in the size of the youth population may have an even greater impact on the military's use of women than some of the social and policy factors discussed above. The decline in U.S. birthrates, which brought a halt to the babyboom in the mid-1960s, has resulted in a reduction in the size of the male youth population (ages 17 to 21). The decline is projected to continue into the early 1990s; the U.S. Bureau of the

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[1]U.S. Department of Defense. (1972 December, p. 46). The end-strength figures do not include women officers in the healing arts.

TABLE 1

Number and Percent of Female Non-Prior Service Enlisted Accessions by Service[1]

FY 1964 - 1984

(Number in thousands)

	ARMY		NAVY		MARINE CORPS		AIR FORCE		DOD	
Year	N	%	N	%	N	%	N	%	N	%
1964	3.7	1.4	2.0	2.2	0.7	1.8	2.0	2.3	8.4	1.7
1965	4.4	2.1	2.4	2.7	0.9	2.6	2.0	2.4	9.7	2.3
1966	3.4	0.7	2.3	1.7	1.0	1.0	2.1	1.3	8.7	1.0
1967	3.6	0.7	2.4	2.5	1.6	2.1	2.0	1.8	9.6	1.2
1968	4.2	0.8	2.4	2.0	1.5	1.6	2.9	3.2	11.0	1.3
1969	5.1	1.1	2.4	1.7	1.3	1.3	3.9	3.3	12.6	1.6
1970	5.7	1.5	2.3	2.3	1.1	1.4	4.4	6.0	13.5	2.2
1971	5.2	1.7	2.5	3.1	1.1	2.0	4.3	4.5	13.0	2.4
1972	5.7	3.2	1.6	1.8	1.2	2.1	4.6	5.3	13.0	3.1
1973	8.7	4.0	5.0	5.3	1.1	2.0	6.2	6.6	21.0	4.6
1974	15.4	8.5	6.6	7.2	1.2	2.5	8.0	10.9	31.3	7.9
1975	19.1	10.3	7.1	7.0	1.4	2.4	10.0	13.3	37.6	9.0
1976[2]	15.9	8.8	5.2	5.6	1.3	2.5	8.9	12.2	31.2	7.9
1976[3]	20.2	8.7	6.3	5.1	1.6	2.5	11.7	12.4	39.8	7.7
1977	15.0	8.9	4.8	4.7	1.6	3.4	9.9	13.6	31.2	8.0
1978	17.5	14.1	5.8	7.2	2.3	5.8	12.8	18.7	38.3	12.3
1979	17.2	13.3	9.1	11.4	2.3	5.6	13.4	20.2	42.0	13.3
1980	22.2	14.0	10.9	12.4	2.3	5.5	13.9	19.4	49.4	13.7
1981	18.3	15.5	10.1	11.0	2.3	5.6	11.0	14.3	41.7	12.7
1982	15.2	12.6	8.4	10.5	2.3	6.1	8.7	12.9	34.6	11.3
1983	16.5	12.4	8.5	10.2	2.0	5.1	8.9	12.8	35.9	10.5
1984	17.2	13.1	7.9	10.1	2.2	5.5	8.9	14.8	36.1	11.7

[1]Service totals may not sum to DoD totals due to rounding.

[2]Estimates as of 30 June 1976. In FY 1976 the designation of 30 June as the end of the fourth quarter of the fiscal year was changed to 30 September. Therefore, two estimates are given for 1976.

[3]Estimates as of 30 September 1976.

Sources: AVF History Summary Sheets. (1980 November; 1980 December), OASD(Manpower, Installations, and Logistics).
News Release. (1980 October; 1982 December; 1983 November; 1984 October), OASD(Public Affairs).

TABLE 2

Number and Percent of Female Officer and Enlisted Personnel by Service[1]

FY 1971 - 1984

(Number in thousands)

	Army		Navy		Marine Corps		Air Force		DOD	
Fiscal Year	N	%	N	%	N	%	N	%	N	%
1971	16.9	1.5	8.3	1.4	2.3	1.1	14.9	2.0	42.3	1.6
1972	16.8	2.1	8.9	1.5	2.3	1.2	16.5	2.3	44.5	1.9
1973	20.7	2.6	12.3	2.2	2.3	1.2	19.8	2.9	55.1	2.5
1974	30.7	3.9	16.9	3.1	2.7	1.5	24.2	3.8	74.5	3.5
1975	42.3	5.4	21.0	4.0	3.2	1.6	30.2	5.0	96.7	4.6
1976[2]	48.6	6.3	22.7	4.4	3.5	1.8	34.2	5.9	109.0	5.3
1976[3]	49.6	6.4	23.0	4.4	3.5	1.8	35.7	6.2	111.6	5.4
1977	51.8	6.7	23.0	4.4	3.9	2.1	40.0	7.1	118.7	5.8
1978	56.6	7.4	24.9	4.7	5.1	2.7	46.7	8.3	133.3	6.5
1979	61.7	8.2	29.1	5.6	6.0	3.2	53.2	9.6	150.0	7.4
1980	69.0	8.9	34.7	6.6	6.7	3.6	59.9	10.8	170.3	8.4
1981	73.3	9.4	39.7	7.4	7.6	4.0	63.0	11.1	183.6	8.9
1982	73.3	9.4	42.8	7.8	8.4	4.3	64.0	11.1	188.5	9.0
1983	75.5	9.7	46.8	8.3	8.9	4.6	65.4	11.1	196.7	9.3
1984	76.9	9.9	48.1	8.6	9.2	4.7	66.6	11.2	200.8	9.5

[1]Service totals may not sum to DoD totals due to rounding.

[2]Estimates as of 30 June 1976. In FY 1976 the designation of 30 June as the end of the fourth quarter of the fiscal year was changed to 30 September. Therefore, two estimates are given for 1976.

[3]Estimates as of 30 September 1976.

Source: Data are extracted from the Department of Defense Personnel Master Files. The estimates represent end-strengths for the fiscal years listed.

TABLE 3

Occupational Distribution[1] of Female Officer and Enlisted Personnel[2] by Service

FY 1971 - 1984

(Percent)

	ARMY		NAVY		MARINE CORPS		AIR FORCE		DOD	
OCCUPATIONAL AREAS	1971	1984	1971	1984	1971	1984	1971	1984	1971	1984
A. OFFICER										
General/Flag, Executives, N.E.C	*	*	*	3	2	1	0	*	*	*
Tactical	*	2	*	3	7	6	*	8	*	5
Intelligence	*	8	1	4	3	6	3	5	2	6
Engineering & Maintenance	*	16	2	7	5	7	1	13	*	13
Scientific & Professional	*	3	1	11	1	5	*	5	*	6
Medical	82	52	74	43	0	0	75	40	76	44
Administrative	16	13	20	25	69	58	14	22	17	20
Supply, Procurement	*	5	*	3	13	17	5	7	2	6
B. ENLISTED										
Direct Combat	*	1	0	1	0	0	0	*	*	*
Electronic Equipment Repair	*	3	4	7	5	5	*	7	1	5
Communications and Intelligence	2	16	6	18	3	12	5	11	4	14
Medical & Dental	33	15	28	17	0	0	18	11	24	13
Other Technical	1	3	5	3	2	3	3	3	3	3
Support & Administrative	61	42	56	35	84	52	71	44	66	42
Electrical/Mechanical Equipment Repair	*	7	*	9	*	9	0	10	*	9
Crafts	*	*	0	2	*	2	*	3	*	2
Service & Supply	1	13	*	7	5	17	3	11	2	11

[1]Percentages may not sum to 100 due to rounding and the fact that percentages less than 1 percent are not shown.

[2]Personnel who were not in an assigned occupational area and those whose occupational areas were unknown are omitted. The majority of "unassigns" and "unknowns" represent personnel in speciality training.

*Percentage in occupational area less than 1 percent.

Source: Data are extracted from the Department of Defense Personnel Master Files. The estimates represent end-strengths for the fiscal years listed.

Census[1] projects that the number of 17 to 21 year-old males will decline from the peak of 10.8 million in 1978 to 8.4 million in 1994, a decrease of 23 percent. According to a report by Representative Les Aspin (D, Wisconsin), the Services may face a "recruiting crunch" by the end of this decade, however.[2] The report notes that according to estimates from the Congressional Budget Office, the Military Services would have to recruit one out of every seven young men ages 18 and 19 in 1989 to maintain the current size and structure of the enlisted military force (providing that retention rates also remained at current levels). When estimates of those who would be ineligible for service or who would be attending college are considered, the ratio increases to one out of every 3.5 males in that age range.

In addition, the report notes that an improving economy would increase educational and employment alternatives, so that the Services would be in even greater competition with the civilian sector for a reduced labor pool. The problem may be particularly acute in the higher quality market, since the Services must attract sufficient numbers of high-aptitude high school graduates to operate the sophisticated technological weaponry of the future.

In Representative Aspin's view, DoD personnel planners may be faced with the alternative of a return to conscription or expansion of the available military manpower pool by greater utilization of women. He concurs with Major General Holm who, in her review of the progress and status of women in the U.S. Armed Forces, concludes:

> ...Whether the United States will be able to meet its future quantitative and qualitative military manpower requirements without resorting to some form of conscription may very well turn on the question of womanpower. So integrated are they into the services and on such a scale, that the United States could not go to war without them....The nation is faced in the 1980s with crucial choices as defense requirements rise to meet the growing military threat in a period when manpower resources are declining and the defense dollar is limited.[3]

Other experts, however, argue that the Services may not face a manpower crisis in the late 1980s and the 1990s.[4] A recent Rand analysis, for example, projects a reduction in the demand for new recruits. The report notes that "the high accession levels of the mid and late 1970s have combine

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[1]U.S. Bureau of the Census. (1984). Projections of the Population of the United States: 1983 to 2080, Table 6. Current Population Reports (Series P-25, No. 952). Washington, D.C.: Government Printing Office.

[2]Aspin, Les. (1984 March 5). Armed Forces Recruitment Outlook. In the Congressional Record, (Part E, pp. 781-785).

[3]Holm. (1983, pp. xiv-xv).

[4]See, for example, Hosek, J.R., Fernandez, R.L., & Grissmer, D.W. (1984). Active Enlisted Supply: Prospects and Policy Options. (Rand Paper No. P-6967). Santa Monica, CA: The Rand Corporation;
Lockman, R.F. & Quester, A.O. (1985). The AVF: Outlook for the Eighties and Nineties. In Armed Forces and Society, Vol. 11 No. 2, pp. 169-182.

with the recent high retention rates to create a relatively large stock of personnel in their second and third terms of service."[1] If the current retention rates persist into the 1990s and if military pay keeps pace with civilian pay,[2] the continuation of this large group of mid-level personnel should compensate for the decline in the youth labor pool and any likely improvements in the economy. At the same time a more senior force should evolve. According to this line of analysis, then, the accession of larger numbers of women may not be the only viable alternative to conscription.

In either case, force planners can benefit from knowing whether sufficient numbers of qualified women will want to join the military and whether they can be recruited. An individual's plans and behavior are fundamentally tied to attitudes; and attitudes, while often elusive, can nevertheless be assessed, as in this report, to gain insight into future plans and behavior. A young woman's decision to enter the military may be influenced not only by her own attitudes, perceptions, and goals, but also by those of others; and, in the normative sense, by the values, beliefs, and definitions of role-appropriate behavior prevailing in American society. As one researcher observes,

> ...the resolution of the issue of women in the military is likely to be driven not by decisions to introduce conscription or to raise military pay, but by social changes in American society external to the military. As a nation, we are undergoing a large-scale redefinition of appropriate gender-role behaviors....It is important to note that the major changes have taken place outside the military, and changing gender roles within the military merely brings our armed forces into synchronization with civilian patterns.[3]

Results of recent research on the attitudes of the general public on the issue of women serving in the military are germane to this discussion. Data from a nationally representative survey[4] of American adults conducted by the National Opinion Research Center (NORC) of the University of Chicago in 1982 indicate a fair amount of support for women in the military and a "national consensus on extensive participation by women in military roles well beyond the traditional ones of nursing and clerical work..."[5] Among other things, the survey found that:

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[1]Hosek, Fernandez, & Grissmer. (1984, p. 22).

[2]The model assumes a military/civilian pay ratio of 100% in the years 1987-1990. If a low pay scenario is used, with a ratio of a little over 90% for those years, the authors anticipate retention rates so low as to raise serious concern about maintaining force strength.

[3]Segal, D.R. (1983). Military Organization and Personnel Accession: What Changed with the AVF...and What Didn't, pp. 13-14. In R.K. Fullinwider (ed.) Conscripts and Volunteers: Military Requirements, Social Justice, and the All-Volunteer Force (pp. 7-22). Totowa, NJ: Rowman & Allanheld.

[4]General Social Survey. (1982). James A. Davis, principal investigator.

[5]Davis, J.A., Lauby, J., & Sheatsley, P.B. (1982). Americans View the Military: Public Opinion in 1982 (NORC Tech. Rep. No. 131). Chicago, IL: University of Chicago, National Opinion Research Center.

- Thirty-one percent of Americans questioned felt that there should be more women in the Armed Forces, and 53 percent thought that the number was "about right".

- In terms of occupational assignments, the majority of respondents said that, assuming proper training, military women should be assigned to nontraditional as well as traditional military duties; for example, it was found that 84 percent approved of assignment of women as military truck mechanics, 73 percent as jet transport pilots, 62 percent as jet fighter pilots, 59 percent as missile gunners in the U.S., 59 percent as commanders of large bases, 57 percent as crew members on combat ships, and 35 percent as soldiers in hand-to-hand combat.

- Twenty percent believed that the increase in the number of women had raised the effectiveness of the military, 61 percent felt that it had maintained effectiveness, and less than 8 percent believed that it had decreased the effectiveness.

- Of those who favored a return to the draft at the time of the survey, the majority (53 percent) believed that women as well as men should be drafted; of those who did not favor an immediate return to conscription but would support a draft for a national emergency, 54 percent would draft both females and males.

The survey results concerning occupational assignments merit special emphasis, since they indicate that over one-third of the contemporary U.S. adult population endorses assignment of women to hand-to-hand combat.[1] Although the last two decades have seen major social and political transformations which have contributed to reevaluations of the role of women in the workplace (both civilian and military) and in society, this finding on public opinion of women in combat is, nonetheless, suprising.

Conclusion

The interplay of societal forces, institutional policy, and individual choices will determine future directions of the status of women in the military. The effects of the interaction of societal forces and military policy should not be underestimated. For example, Segal attributes the failure of President Carter to gain Congressional approval for his plan to register both young men and women for Selective Service to lack of national consensus on the issue of women's role in our national defense.[2] Within the framework of national values, institutional policy-makers may have a great deal of latitude. Recent research has shown strong public support for the participation of women in the military, and military women have come a long way since 1942. They now comprise 9.5 percent of the total active-duty force and over 90 percent of all military skills are open to them. The expansion of the integration of women into the military in the

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[1]Although 35 percent of the American adults surveyed endorsed the assignment of qualified women to hand-to-hand combat, one cannot assume that, given the opportunity, one-third of all women enlistees would volunteer for combat arms.

[2]Segal. (1983).

1970s has leveled off in the 1980s, although some change in assignment policies is still occurring. Whether past growth will continue is dependent, at least in part, on future military policy and women's perceptions of that policy. In examining the situation of women and minorities in the voluntary-service environment, Binkin and Eitelberg observe: "The principal issue involving women and the military is the extent to which remaining laws and policies that constrain further expansion are justified by valid national security concerns or instead are anchored to sexual stereotypes of an earlier era..."[1] The extent to which women perceive the military as negative toward women and still a male domain could indeed affect their desire to enlist in military service.

Content and Organization of the Report

The analyses which follow have been conducted using current data from three major, ongoing surveys of American youth: the Youth Attitude Tracking Study (YATS), the National Longitudinal Survey of Youth Labor Market Experience (NLS), and High School and Beyond (HSB). The Youth Attitude Tracking Study, initiated by the Department of Defense (DoD) in 1975, is an annual cross-sectional survey of young men and women ages 16-21, conducted each autumn to monitor attitudes toward the military and interest in enlisting. In recent years the samples have included some 6,000 to 7,000 youths.

The National Longitudinal Survey was initiated in 1979 by the Department of Labor, with participation by DoD and other agencies, to collect data on the educational and work experiences of a cohort of American youth. A nationally representative sample of 12,000 young men and women, ages 14-21, was interviewed in the spring of 1979 and reinterviewed each spring thereafter.

Finally, High School and Beyond is a longitudinal survey of 1980 high school seniors and sophomores, conducted by the National Center for Education Statistics, with the participation of DoD and other agencies. Random subsamples of two high school cohorts, initially encompassing approximately 30,000 seniors and 28,000 sophomores, are reinterviewed every two years in the spring to ascertain their educational and career experiences over time.

Whenever analyses are based on data from somewhat different samples, and when different questionnaires, data collection methods, and field periods are used, we can expect that the results will be different, too. In the course of this study, an effort has been made to control major differences in the three data sets in order to increase comparability of the data. At the same time, care has been taken to avoid focusing only on data that are strictly comparable, for doing so would restrict the analysis to just a few items. A common denominator approach such as this would omit much that is interesting and relevant, but unique to a particular data set. The report, then, seeks a balance between comparability and breadth. As will be evident in the following pages, there are strong similarities in the data from the three surveys on the propensity of women to enlist in the military.

[1] Binkin, M. & Eitelberg, M.J. (1983). Women and Minorities in the All-Volunteer Force. In The All-Volunteer Force After a Decade: Retrospect and Prospect. Conference sponsored by the Office of the Secretary of Defense, November 2-4, 1983. Annapolis, MD: U.S. Naval Academy.

CHAPTER 2

YOUTH ATTITUDE TRACKING STUDY DATA ON THE PROPENSITY OF WOMEN TO ENLIST

Since 1975, the Youth Attitude Tracking Study (YATS) has collected information on backgrounds, attitudes, motivations and intentions to serve in the military from national samples of American youth. Initially (until 1980), only young males were surveyed; beginning in 1980, and continuing through the present, the surveys have also included samples of young females.[1] YATS was not designed to collect information from samples of the total youth population; rather, data are collected annually from cross-sections of a recruiting target population defined as young people between the ages of 16 and 21 (inclusive), who have not completed more than two years of college education, and who do not have any prior or current military service, ROTC, or Service academy attendance. Since the interviews are conducted by telephone, the survey population is further restricted to those residing in the coterminous United States in households or noninstitutional group quarters with telephones.

Additional information on sample definition, together with age and sex distributions of the 1980-1984 samples, is found in Appendix A.

Measures of Propensity[2]

Composite and Service-Specific Propensity. The most widely used measure of propensity toward service in the active-duty military is derived from four questions in YATS which ask the respondent about his or her likelihood of serving in the active-duty Army, Navy, Marine Corps, or Air Force. A 'composite' propensity measure is constructed from the four Service-specific items and represents the reported likelihood of joining one or more of the four active Services. The Service-specific questions are asked with the following format:

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[1]All YATS data are weighted to assure representativeness. The data from the 1980, 1981, and 1982 YATS have been reweighted recently to make the sample data comparable across years by statistically adjusting for changes in the sampling methodologies. For a discussion of the reweighting, which applies to all YATS surveys prior to 1983, see Laurence, M.T. & Bridges, S.T. (1985 January). Youth Attitude Tracking Study: Historical Evolution and Characteristics. Washington, D.C.: The Department of Defense Manpower Data Center.

[2]The definitions of the alternative measures of propensity and question format derived from the YATS survey are obtained from the 1984 Youth Attitude Tracking Study II Codebook (Research Triangle Institute: 1984).

Now, I'm going to read you a list of several things which young _____ (men/women) your age might do in the next few years. For each one I read, please tell me how likely it is that you will be doing that.

How likely is it that you will be serving on active duty in the _____ (Service branch)? Would you say...

definitely,
probably,
probably not, or
definitely not?

This question is asked separately for each of the active Services, with Service-order randomized among respondents. Positive propensity for a specific Service is defined by a response of "definitely" or "probably" to that Service question; negative propensity for a Service is defined by a response of "probably not," "definitely not," or "don't know." Since composite propensity is constructed as the most positive response given to the four Service questions, respondents who answer "definitely" or "probably" to at least one of the four Service-specific items are classified as 'positive propensity'; 'negative propensity' respondents are those who answer "probably not," "definitely not," or "don't know" to each of the four individual Service items.

In addition to the Service-specific and composite measures, YATS also assesses interest in the military with several other indices. Two of these will be described briefly.

General Intentions to Join the Military. Prior to the series of questions used to assess propensity toward the active-duty Services discussed above, respondents are asked a very general question concerning the likelihood of serving in the military in the next few years. The question is one in a series which asks how likely respondents are to engage in certain employment fields. The military service question is simply:

How likely is it that you will be serving in the military? Would you say...

definitely,
probably,
probably not, or
definitely not?

Note that while "serving in the military" is asked and response-categories are pre-specified, type of service (i.e., active, reserve or National Guard) and branch of service are not. Therefore, the 'general intentions' item may provide a more inclusive measure of interest in military service than the composite measure. Although this item may be tapping a broader-based interest than the active-duty composite measure, 'interest levels' as measured by this item are generally lower than those obtained from the composite measure. This is most likely due to the fact that the general intentions item is asked once, while the composite propensity is

constructed from a series of propensity questions in which the individual is asked specifically about each of the four active Services and, therefore, has four chances of responding positively.

Unaided Mentions of Plans to Join the Military. 'Unaided propensity' for any Military Service is determined by a response having the meaning of "joining the military" to the open-ended question:

> Now, let's talk about your plans for the next few years. What do you think you might be doing? PROBE: Anything else?

Respondents who say they are planning to join the military are then asked which Service they intend to join and whether their interest is in the active-duty military, the Reserves, or the National Guard.

An unaided mention may be considered the strongest indicator of interest in the military, since it is an unprompted response reflecting an individual's current expectations or intentions regarding future plans. Propensity, as measured by unaided mention, is generally lower than that measured by either composite propensity or general intentions because it is unprompted, and no reference to the military has been made to the respondent at that point in the interview.

Although unaided mentions may be an indicator of a stronger intention to enlist, the composite measure has been the traditional measure of active-duty propensity reported from the survey; therefore, this analysis of YATS data focuses primarily on propensity as defined by the composite measure, unless otherwise stated.

The various measures of propensity obtained from YATS will be examined in this chapter and in Appendix A. This chapter may be logically divided into three major sections: trends, comparative analyses, and the relationship of reported intentions to actual enlistment behavior.

Trends in Composite Propensity

Examination of trends in positive propensity presented in Figure 1 indicates that there has been little year-to-year change in female propensity levels over the five years examined, although there was a significant two-year decline from 1981 to 1983. However, the most striking result of the trend analysis is the marked decline in the propensity reported by young males. As shown, male propensity declined from 35.4 in 1983 to 29.9 in 1984. Prior to that time, fluctuations in male positive propensity were not statistically significant. Comparisons of positive propensity for males and females indicate that, on the average, young men are about 2.5 times more likely than females to express an interest in joining an active-duty Military Service.

Service-Specific Propensity

Table 4 presents Service-specific propensity estimates for both males and females for the years 1980 through 1984. As shown in this table, female preferences for specific Services follow a consistent pattern: the Air Force is generally the preferred Service, followed by the Navy and Army at about the same level, while the Marine Corps is the Service least often selected. In 1984, Service-specific propensities for females ranged from

FIGURE 1

TRENDS IN POSITIVE COMPOSITE PROPENSITY FOR MALES AND FEMALES

YATS 1980 - 1984

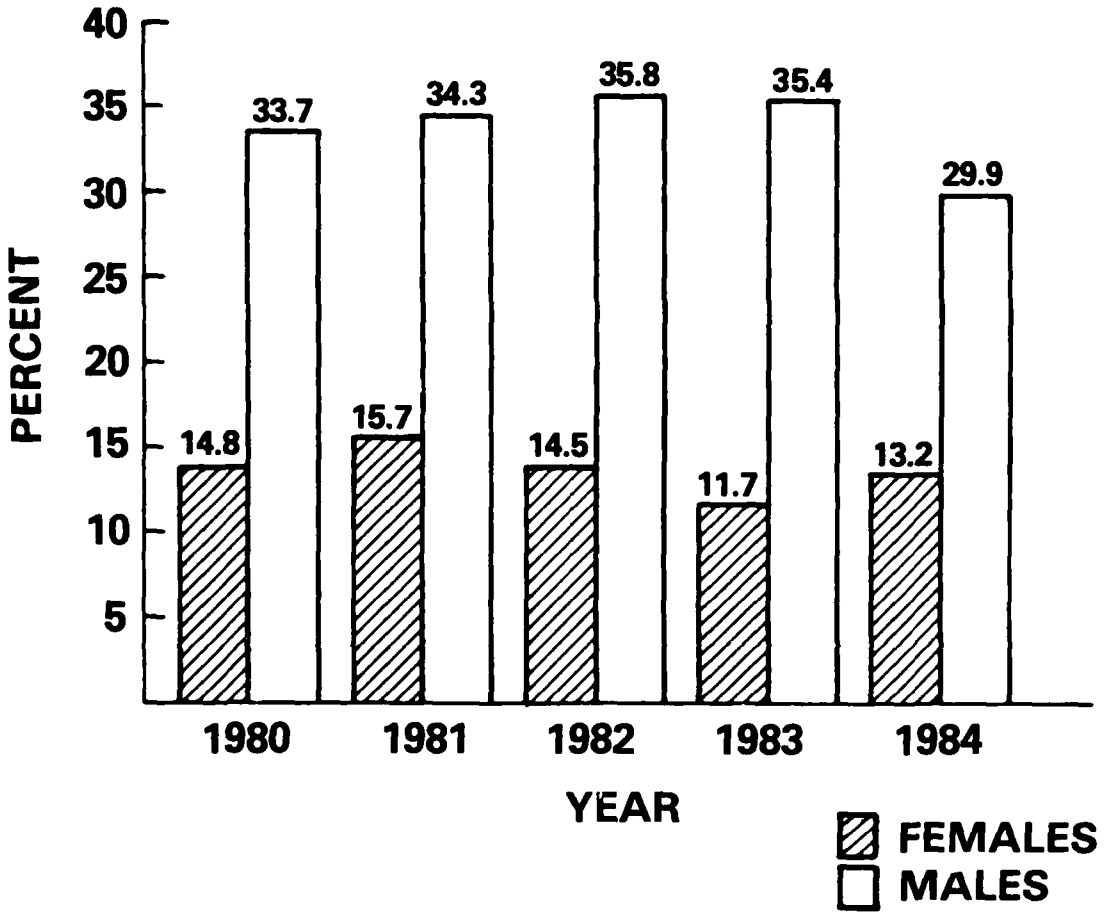

TABLE 4

Trends in Service-Specific Propensity for Males and Females

YATS 1980 - 1984

(Percent positive propensity for specific Services)

	Females					Males				
Service	1980	1981	1982	1983	1984	1980	1981	1982	1983	1984
Sample size (N)	(5,003)	(5,209)	(1,248)	(876)	(1,503)	(5,260)	(5,192)	(5,986)	(4,416)	(5,057)
Army	6.3	7.0	6.1	4.4	5.6	14.6	15.0	16.0	17.5	14.3
Navy	6.6	7.1	5.6	4.7	4.3	14.4	15.4	14.4	13.0	10.9
Marine Corps	5.2	5.0	3.8	2.6	3.3	12.3	12.4	11.7	12.1	9.6
Air Force	9.5	9.4	8.8	6.8	9.0	20.6	20.9	18.7	18.8	15.3

3.3 percent for the Marine Corps to 9.0 percent for the Air Force. The proportion of females stating that they would definitely or probably join the Air Force was significantly larger than that for any other Service.

While female Service-specific propensities have followed a consistent pattern, historical data suggest an apparent structural change in the Service-specific propensities of young men. Prior to 1980 (data not shown), the ordering of Service propensities of young males, from highest to lowest, was: Air Force, Navy, Army, Marine Corps. During 1980-1981, preferences for the Army appear to have increased and tied with those for the Navy, so that the Service-specific propensity ranking became: Air Force, Navy/Army, and the Marine Corps. This trend has continued, concurrent with a decrease in Navy propensity, so that by 1984 a dichotomy in male Service-specific propensity had appeared: the Air Force and the Army are tied as the Services most frequently preferred, while the Navy and the Marine Corps are tied at a lower preference level. (The minor percentage difference within each pair is not statistically significant.)

Alternative Measures of Interest in the Military

Table 5 presents two alternative measures of interest in the Services: general intentions to join the military and unaided mentions for active military service. The definitions of these measures were discussed in the introduction to this chapter.

General Intentions to Join the Military. As noted above, general intentions are measured by a series of questions which ask how likely respondents are to engage in certain employment fields, including military service. General intentions are gauged by the single question in the series, "How likely is it that you will be serving in the military? Would you say... definitely, probably, probably not, or definitely not?". Since propensity, or interest in the military as defined here, is measured by a single question, the percentage reporting general intentions is lower than the percentage measured by composite propensity. This is true for both males and females. However, Table 5 shows that, as with composite propensity, males are about 2.5 to three times as likely as females to indicate an intention to enlist in the military. In 1984 9.8 percent of the women and 24.6 percent of the men said they intended to do so.

Unaided Mentions of Interest in the Military. Unaided mentions of plans to join the active military are generally considered the strongest measure of propensity for active-duty service. Table 5 indicates that males are four to eight times as likely as females to mention joining the active military. In 1984, 5.6 percent of males and one percent of females expressed an intent to do so.

Data on a related measure, unaided mentions of plans to join any Military Service, including the National Guard and the Reserve, are presented in Appendix Table A-2. A comparison of data in Tables 5 and A-2 indicates that approximately three quarters of the men and half of the women who mentioned an intent to join any Military Service were referring to the active military, while the remainder were referring to the Guard or Reserve. The finding that a smaller percentage of women than men were considering active service is consistent with civilian employment patterns, in which women are more likely than men to hold part-time jobs.

TABLE 5

Alternative Measures of Interest in Joining the Military by Sex

YATS 1980-1984

(Percent positive interest)

	Females					Males				
Measure	1980	1981	1982	1983	1984	1980	1981	1982	1983	1984
Sample size (N)	(5,044)	(5,213)	(1,249)	(876)	(1,503)	(5,320)	(5,192)	(5,992)	(4,416)	(5,058)
General intention	10.8	12.2	11.7	8.9	9.8	27.7	29.6	30.7	29.0	24.6
Unaided mention, active service	1.0	1.3	1.4	0.9	1.0	5.3	5.0	6.5	7.6	5.6

Composite Propensity: Subgroup Differences, Characteristics of Positive and Negative Propensity Groups

Data from previous YATS surveys and from other studies have shown that propensity to enlist in the military is related to sociodemographic characteristics such as age, educational attainment and desire for higher education, race and ethnicity, high school grades, and employment status. In general, younger persons, minorities, those with lower levels of education, and those who are unemployed and looking for work are more favorable toward military service. Data on the relationship of propensity to selected demographic and socioeconomic characteristics are discussed with two different emphases. The first focuses on differences in positive propensity for subgroups within the 'YATS eligible' population in 1984, while the second contrasts positive and negative propensity groups with respect to selected 1984 characteristics for both females and males.

Subgroup Differences

While male propensity is higher than female propensity, the patterns of differences among subgroups are very similar for the two genders (Table 6). For both females and males, for example, the percentages reporting that they will definitely or probably join the active-duty military decrease with increasing age. In 1984, 17.7 percent of 16 year-old females expressed a positive propensity, as compared to 11.5 percent of 21 year-old females. For males, the decline with age was even sharper than for females; in 1984, 40.0 percent of 16 year-old males and 21.4 percent of 21 year-old males expressed a positive propensity to enlist. (The sharper decline in propensity among males may be due, in part, to the fact that a higher portion of the high-propensity young men in the 18-to-21 year age range have already enlisted and therefore are not eligible for the study).

Minorities, both males and females, are more likely than are (non-Hispanic) whites to express an interest in the military. In 1984, black females reported positive propensity at a rate of about three times that of white females, and black males were almost two times as likely as white males to express positive propensity. (Approximately 29 percent of black females and 46 percent of black males were in the positive propensity category.) The propensity of Hispanic females, while significantly higher than that of white, non-Hispanic females, was significantly lower than that of black females. Hispanic males, on the other hand, were no different from black males in their reported propensity levels.

It is widely recognized that minorities enlist in the Services out of proportion to their numbers in the population, and research has shown that the military has traditionally been viewed by minority males as providing a preferable alternative to civilian employment, as fairer and less discriminatory than institutions in the civilian sector, and as a channel for social mobility.[1] It seems reasonable to extend this line of thinking to

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[1]See, for example, Fullinwider, R.K. (1983). The All-Volunteer Force and Racial Balance. In R.K. Fullinwider (ed.) Conscripts and Volunteers: Military Requirements, Social Justics, and the All-Volunteer Force (pp. 178-188). Totowa, NJ: Rowman & Allanheld;
Martindale, M. & Poston, D.L. (1979). Variations in Veteran/Nonveteran Earnings Patterns Among World War II, Korea, and Vietnam War Cohorts. Armed Forces and Society, 5 (2), pp. 219-243;
Segal. (1983).

TABLE 6

Positive Propensity for Military Service by Selected Characteristics for Females and Males

YATS 1984

(Percent positive propensity)

Characteristic	Females	Males
Total sample	13.2	29.9
Age		
16	17.7	40.0
17	11.3	34.2
18	15.4	27.3
19	11.4	24.8
20	8.8	19.9
21	11.5	21.4
Race		
White, non-Hispanic	9.6	25.4
Black, non-Hispanic	29.2	46.2
Hispanic	17.3	46.1
Other	27.0	39.1
Completed education		
10 years or less	16.8	42.5
11 years	14.3	34.9
12	11.9	21.7
13	7.9	11.3
14	3.4	18.9
Current grade in school		
10th grade or less	16.5	52.5
11th grade	19.1	41.1
12th	14.0	34.3
13th	11.5	18.1
14th	9.4	11.3

black women, who have experienced the double discrimination associated with being both black and female, although current evidence suggests that this pattern may be changing rapidly.[1]

Given the high positive correlation between age and education in this age range and the inverse relationship of propensity to age, it is not surprising that propensity appears to be inversely related to educational attainment. The data show that persons who had completed less than 12 years of education reported the highest propensity for military service. However, among those currently in school, only males show the characteristic decline in propensity with increase in grade level; despite the apparently inverse relationship for female students during the current 1984-85 school year, their propensity levels did not differ significantly by grade.

Selected Characteristics

The previously discussed results suggest an inverse relationship between positive propensity and educational attainment. Data on educational desires and plans give somewhat different results, however. (Data for this section are found in Appendix Table A-3). Among those expressing a desire for further training or education, positive-propensity females were as likely as negative-propensity females to say that they wanted to complete four or more years of college. In contrast, positive-propensity males were less likely than negative-propensity males to say they wanted to finish college: 45 percent as opposed to 52 percent. Thus, women's propensity does not seem to be related to plans for completing college, while men's plans to graduate from college are negatively related to propensity. The data also show that positive-propensity females were significantly more likely than their positive male counterparts to say that they wanted to complete four years of college (55 percent vs. 45 percent). These data suggest that females may view military service as complementary with, if not a means to, higher education. Males, on the other hand, seem more likely to view military service and higher education as alternatives. Further analyses are needed, however, to determine whether factors such as current enrollment in school affect the relation between educational expectations and propensity.

Self-reported high school grades appear to be inversely related to propensity. For both males and females, larger proportions of positive- than negative-propensity respondents reported grades of "C" or lower. Positive-propensity women are more likely than their male counterparts to report grades of "B" or better, but women in the sample generally report higher grades than men. Taking this into account, grades do not seem to be associated with propensity differences between men and women.

Employment status also appears to be related to propensity. For both men and women, those who expressed positive propensity to enlist were significantly more likely to be unemployed and looking for work than were negative-propensity respondents. Conversely, negative-propensity respondents (both females and male) were significantly more likely to hold full-time jobs than were their positive-propensity counterparts.

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[1]See, for example, Smith, J.P. & Ward, M.P. (1984). Women's Wages and Work in the Twentieth Century. (Rand Tech. Rep. No. R-3119-NICHD). Santa Monica, CA: The Rand Corporation. Smith and Ward find that in 1983 the median earnings of year-round full-time black female workers were 90% of their white counterparts' earnings. In 1956 black women had earned only about half as much as white women.

Enlistment-Related Behaviors Reported by Positive- and Negative-Propensity Groups

Enlistment in one of the Military Services can be viewed as the end-result of a progression of steps along a passive-to-active continuum. Seeing or hearing military advertisements and having a family member who has served in the military are relatively passive forms of exposure and potential influence. More active behaviors include discussing serving in the military, contacting a military recruiter, and taking the military's aptitude and physical qualifying examinations. The final steps in the process are, of course, enlistment and accession. YATS does not contain enlistment data, but it does contain data on whether respondents had previously thought of joining the military, discussed enlistment, requested information on the military, contacted a military recruiter, or taken the military's qualifying exams. (Data on enlistment-related behaviors are found in Appendix Table A-4.)

The data show, as expected, that individuals with positive propensity are more likely to report having previously thought about enlisting in military service and to have given it serious consideration. They are also more likely to report having engaged in enlistment-related behaviors, such as discussing serving in the military, making toll-free calls for information, talking with military recruiters, or taking the written (aptitude) or physical examination for military entrance.

Regardless of propensity group, males are more likely than females to report having considered enlisting or taken actions indicative of an interest in the military. In general, the more commitment an action implies, the greater the disparity between percentages of males and females reporting such behavior. Thus, men are one to two times as likely as women to report having talked to a recruiter, but six times as likely to have taken a written test at a Military Entrance Processing Station (MEPS).

In addition to the enlistment-related behaviors discussed above, data are provided on the type of advice 16-21 year-olds would give to "a good friend" about seeing a military recruiter. Positive-propensity respondents, both male and female, were much more likely to think that the decision to see a military recruiter was a "good idea" than were those with negative propensity. It is interesting to note that males were no more likely than females to give that response.

Perceived Attitudes of Others and Potential Forms of Influence

In addition to the self-reported enlistment-related behaviors discussed above, data on potential influencers in the enlistment decision-making process were also examined. The most passive forms of exposure and potential influence are having friends or relatives with military service and seeing or hearing military advertisements. Of more consequence is the potential influence of those closest to the individual and the interaction of personal perceptions and attitudes toward military service. Data on the more passive forms of potential influence are not discussed, since there were few significant differences between the positive- and negative-propensity subgroups or between females and males.

Significant differences were found, however, in the perceived attitude of others toward the respondent's serving in the active-duty military and in respondent attitude toward personally serving in the military. Not surprisingly, the majority of positive-propensity respondents, both female and male, reported that those "who mattered the most" to them held favorable attitudes toward their joining the military, while negative-propensity respondents were more likely to report unfavorable attitudes. Furthermore, these 'significant others' were perceived as more favorable toward military service for males than for females. The male/female differences, while significant, were not large. For example, almost six percent of the females and slightly more than eight percent of the males reported that those closest to them were "very favorable" toward their enlisting in the military.

The results discussed above are presented in Appendix A-5. Also presented in that appendix is a table which cross-classifies respondent attitudes by attitudes of others.

Reasons for Not Joining the Military

The discussion thus far has focused on women's interest in joining the military and on characteristics which distinguish between those who are and those who are not interested in the military. At this point it would also be useful to examine the reasons many women give for not wanting to serve in the military and to determine if males and females differ with respect to the reasons they cite. Until the 1984 survey, negative-propensity respondents were asked how important various possible reasons for not joining the military were. (Appendix Table A-6 shows the percentages of females and males who said various reasons for not joining the military were important; the table also ranks the reasons given.)

The four reasons most frequently cited as important by both females and males with negative propensity fall into two main categories--future career/educational plans and familial/personal concerns:

- plans to continue school;
- separation from family and friends;
- plans for a civilian job; and
- lack of personal freedom.

For females in 1983, the two most important reasons for not joining were to continue in school (cited by over 82 percent) and separation from family and friends (cited by almost 79 percent); for males, the two most important reasons were to continue in school and plans for a civilian job (both cited by about 78 percent of the negative-propensity males). Disapproval from parents was a relatively more important reason for females (cited by 43 percent and the fifth most frequently cited reason) than for males (cited by 33 percent and seventh in ranking). Also, the level of military pay was more important to males as a reason for not enlisting than for females, with a rank of five for males and nine for females.

In addition to considering respondents' reasons for not joining the military, it is also useful to consider attributes of employment in the military that respondents regard as positive. Appendix A-7 presents an analysis of the importance of selected job characteristics to respondents and their assessment of whether these characteristics are more likely to occur in a civilian or military environment.

Enlistment Intentions and Enlistment Behavior

Since its inception in 1975, data collected by YATS, particularly propensity estimates, have had two primary uses within DoD: in the broadest context, to provide summary indicators of the characteristics, future plans and attitudes toward the military of American youth; and more specifically, to provide inputs to program decision-making. Within the latter context, the results of the YATS surveys have been useful in making decisions about the distribution and allocation of recruiting resources and assignment of recruiting goals; in assessing effectiveness of Service advertising campaigns and developing advertising programs; in Defense appropriations testimony before the Congress; and in assessing many other issues, programs, and policies in manpower supply areas.

All these uses assume a direct relationship between the strength of stated enlistment intentions and enlistment behavior. Recently the validity of this assumption has been tested systematically. Continuing work at the Rand Corporation based on YATS data has demonstrated that stated enlistment intention results do a fairly good job of predicting eventual enlistment actions for young males and that the relationship is strongest within the first 12 to 18 months following the survey period, although intention levels continue to distinguish differences in enlistment rates for over three years.[1]

The prior analyses were performed only for males; this research extends the analysis of intentions and behavior to the samples of females that are contained in the 1980 and 1981 YATS surveys. The data from these two YATS surveys were combined and repondents matched to records contained in Defense Manpower Data Center extracts of Military Entrance Processing Command (MEPCOM) files in order to determine respondents' actual enlistment decisions and actions after the surveys. Since prior analyses of the male data have shown that a long follow-up period is necessary to observe the full relationship between intentions and enlistments, the results presented here are obtained from a follow-up analysis (through March 1984) of the combined 1980 and 1981 YATS surveys, the first two years that females were included in the YATS samples. Analyzing only these two years provides a minimum follow-up of about two and one-half years and a combined sample size of approximately 6,350 females and 6,530 males with Social Security Numbers (SSNs).[2] The data are weighted to ensure representativeness.

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[1]Orvis, Bruce. (1982). Forecasting Enlistment Actions from Intention Information: Validity and Improvement. (Rand Note No. 1954-MRAL). Santa Monica, CA: The Rand Corporation.

[2]The analyses must be limited to persons who provided Social Security Numbers (approximately 2/3 of the combined sample), since SSNs provide the only efficient means of identifying and following respondents. The data suggest that the followup results should be representative of the entire sample, however.

This analysis, like others, indicates that the propensity distribution of women is substantially less positive than that of men. Table 7 shows the percentage of females and of males at each intention level as indicated by: (a) the general intentions measure and (b) the active unaided mention measure. Table 7 indicates that 13.2 percent of the women expressed a positive propensity to serve ("definitely" plus "probably"), compared to 31.7 percent of the men, while 1.4 percent had an unaided mention of plans to enter the active-duty military, as compared to about 5.7 percent of the men.

TABLE 7

Percentage of Females and of Males at
Each Intention Level for Two YATS Propensity Measures[1]

Enlistment Intention	Percent of Sample	
	Females	Males
General intention (N)	(6341)	(6525)
Definitely	1.5	5.0
Probably	11.7	26.7
Negative propensity[2]	86.8	68.3
Unaided mention (N)	(6359)	(6534)
Yes	1.4	5.7
No	98.6	94.3

[1]Data sources are the combined samples of 1980 and 1981 YATS, together with Military Entrance Processing Command (MEPCOM) files.

[2]Negative propensity is the proportion of respondents who answer "probably not", "definitely not", or "don't know" to the general intentions measure.

The relationship of stated enlistment intentions to behavior is illustrated in Table 8, which shows the enlistment and testing rates at each intention level for females and males. The rates are calculated through the follow-up period, extending through March 1984. The results indicate a strong relationship between stated propensity, on the one hand, and testing and enlistment on the other. For both males and females, the proportions who test and enlist decline as the propensity level decreases. However, there are marked differences between men and women of both propensity groups in their probability of testing and enlisting. Positive-propensity males are more likely than comparable females to test and enlist; negative-propensity males are also more likely than comparable females to test and enlist. Thus, positive propensity is a better predictor of accession to the military for males, but negative propensity is a better predictor of non-military outcomes for females.

TABLE 8

Percentage of Females and of Males at Each Intention Level (1980, 1981) Who Had Tested by March 1984 and Percentage Who Had Enlisted by March 1984[1]

	Females		Males	
Enlistment Intention	Percent Testing	Percent Enlisting	Percent Testing	Percent Enlisting
Sample size (N)	(6341)	(6356)	(6525)	(6534)
General intention				
Definitely	29.8	9.2	42.2	25.0
Probably	10.7	3.7	26.2	12.2
Negative propensity[2]	3.7	1.3	12.4	5.4
Unaided mention				
Yes	39.5	16.7	46.6	29.0
No	4.9	1.5	15.8	6.9

[1]Data sources are the combined samples of 1980 and 1981 YATS, together with Military Entrance Processing Command (MEPCOM) files.

[2]Negative propensity is the proportion of respondents who answered "probably not," "definitely not," or "don't know" to the general intentions measure.

The data also indicate greater male/female differences in enlistment rates than in testing rates. For example, males who stated that they would definitely enlist in the military did so at a rate 2.7 times that of women with the same reported intention, while males in the definite category tested at a rate 1.4 times that of women. The same pattern holds for the "probably" and "negative" categories, as well as for the unaided mention measure. This growing difference between proportions of males and females remaining in the enlistment process reflects the cumulative effects of individual decisions and institutional practices as men and women move from interest in the military to enlistment. (A more detailed examination of persistence and attrition in the enlistment process is found in Appendix A-8.)

Prior analyses of male respondents in the YATS survey have shown that over a period of more than three years after the survey, sizeable numbers of respondents continued to take the written examination and to enlist[1]. Moreover, throughout this period, positive-propensity males were more likely to take the test and to enlist than negative-propensity males. In the current analysis, comparing the 30-month results for men and women (Fall 1981 through March 1984), there is less evidence of this effect for women. In contrast to men, women are more likely to test quickly or not at all (Appendix Figure A-9).

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[1]Orvis. (1982)

Table 9 illustrates that the positive-propensity categories generate enlistees out of proportion to their numbers. For example, 1.5 percent of the most positive female respondents ("definitely") account for 8.2 percent of the female enlistments; for males, 5.0 percent of the sample supplies 15.3 percent of the enlistments. When unaided mentions are examined, the results are even more striking: 1.4 percent of the females sampled provide 13.8 percent of the female enlistees, and 5.7 percent of the males supply 20.2 percent of their enlistees.

TABLE 9

Percentages of Sample Respondents and of Enlistees at Each Intention Level, by Sex[1]

	Females		Males	
Enlistment Intention	% of Sample	% of Enlistees	% of Sample	% of Enlistees
General intention (N)	(6341)	(104)	(6525)	(523)
Definitely	1.5	8.2	5.0	15.3
Probably	11.7	25.4	26.7	39.7
Negative propensity[2]	86.8	66.4	68.3	45.0
Unaided mention (N)	(6359)	(104)	(6525)	(523)
Yes	1.4	13.8	5.7	20.2
No	98.6	86.2	94.3	79.8

[1]Data sources are the combined sample of 1980 and 1981 YATS, together with Military Entrance Processing Command (MEPCOM) files.

[2]Negative propensity is the proportion of respondents who answered "probably not," "definitely not," or "don't know" to the general intentions measure.

Given the results presented earlier, it may seem that most women enlistees are drawn from the positive-propensity groups and relatively few from the negative-propensity group. This is not the case, however. In fact, two-thirds (66.4 percent) of female enlistees come from the negative-propensity group, and 86.2 percent from women without unaided mentions. These figures compare to 45.0 percent and 79.8 percent for men, respectively. The results are due to the very large size of the negative-propensity and no-unaided-mentions groups of women, which contain, respectively, 86.8 percent and 98.6 percent of female respondents. Because these groups are so large, they account for a majority of the enlistees, despite the low enlistment rates observed among the persons in the groups. Since a larger proportion of female respondents are concentrated in the negative-propensity categories than are males and, moreover, since the enlistment rates among females with positive propensity or unaided mention are lower than for males, the effect is even more pronounced for women than for men.

A major implication of these results is that future analyses should focus on the identification of factors which distinguish women who enlist from those who do not within propensity levels, as well as on the identification of factors that distinguish women with positive propensity from those with negative propensity. Similar analyses would be useful for men as well, although only about half of them come from the negative-propensity group.

The analysis of intentions and behaviors also compared the stated Service preferences of YATS respondents with actual enlistment outcomes. The rank order of preferences from highest to lowest was similar for men and women in these 1980 and 1981 data: namely, Air Force first, Army and Navy close for second and third, and the Marine Corps fourth. However, despite the greater stated propensity for the Air Force, men and women were both more likely to test for the Army, which has the highest accession goals and the largest recruiting force, than for any other Service. If anything, the effect appears more pronounced for women. Among female respondents who eventually took the written test, about as many tested for the Army as for all the other active Services combined. However, the proportion of female test-takers who enlisted was lowest for the Army (27 percent), and highest (63 percent) for the Marine Corps. Among males who took the written test, the enlistment rates were roughly similar for the Army, Navy, and Air Force, ranging from 42 to 50 percent, while those for the Marine Corps were again the highest (62 percent). (See Appendix Tables A-9.1, A-9.2, and A-9.3.)

It is not immediately clear why the enlistment rate for women testing for the Army is relatively low, while the rate for the Marine Corps is so high. The Army rate may be due to institutional factors such as the large proportion of combat positions for which women are not eligible, or to recruiting and admission policies in that Service. The high enlistment rate for those testing for the Marines may be attributable to a greater commitment among Marine applicants. Women who do test for the Marines, in spite of the strongly male image of the Corps, may be so determined that most of them go on to enlist.

Conclusions

YATS survey enlistment intention data demonstrate that there is a positive relation between stated propensity and the likelihood of taking the military's aptitude test or enlisting in the active-duty military, even though many respondents make their enlistment decisions long after the survey. Men express more positive intentions to serve than women, and are more likely to enlist at every intention level. These results no doubt reflect some screening out of women (i.e., demand constraints) and individual decisions which result in smaller proportions of women than men moving from one stage of the enlistment decision process to the next. The greater concentration of women in the negative propensity category, together with their lower overall enlistment rates for all categories, results in the majority of female enlistees being drawn from the negative-propensity group; about two-thirds of the female enlistees were drawn from that group, compared to less than half of the male enlistees. These results have an important implication for future research: marketing research should identify factors that distinguish female enlistees from nonenlistees within propensity levels, in addition to factors that distinguish women with different enlistment intentions.

CHAPTER 3

ENLISTMENT PROPENSITY OF WOMEN IN TWO LONGITUDINAL STUDIES

In the previous chapter, data on the enlistment propensities of women and men in the Youth Attitude Tracking Study were analyzed. These data are based on different random samples drawn each year. In contrast, the data in this chapter from the National Longitudinal Survey of Youth Labor Market Experience (NLS) and the High School and Beyond Survey (HSB) are longitudinal. For each of these surveys, a single sample was chosen and followed over time: respondents are reinterviewed at periodic intervals to provide continuing data on their experiences. The chapter begins with an examination of the NLS data.

The National Longitudinal Survey

The National Longitudinal Survey of Youth Labor Market Experience was begun in 1979 and is still ongoing. The sample was selected to be representative of the national population of youth, ages 14 to 21 as of 31 December 1978, living in the United States or on active duty in the Armed Forces outside the U.S.

The first interviews of the sample were conducted between January and August 1979. This and subsequent annual reinterviews were administered face-to-face by trained interviewers. The initial survey administration covered a sample of 12,686 individuals, including 1,280 on active military duty. By 1982 over 95 percent of the original members remained in the sample. The consistently high response rates achieved year after year provide considerable confidence that the data collected in a given year are representative of youth in the age range included in the survey. Of course the sample members age from one year to the next, so the sample is representive of successively older youth populations.[1]

The question used to measure interest in military enlistment is comparable, but not identical, to the "general intentions" question used in YATS:

Do you think in the future, that you will:

definitely try to enlist,
probably try to enlist,
probably not try to enlist,
definitely not try to enlist in the military?

Those who responded either "definitely" or "probably" were then asked in which Service they were most likely to enlist--Army, Navy, Air Force, Marine Corps, Reserves, National Guard, or Coast Guard. Most of the analysis of NLS data will focus on these questions, which were asked each year of respondents who had never been in military service. For purposes of

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[1]All NLS data are weighted to assure representativeness.

analysis, the sample is restricted to be roughly comparable to the YATS sample: youth ages 16 to 21, with no previous military service, and with no more than two years of college education.

Table 10 tracks the experience of the restricted NLS youth sample over the years 1980-1982. The proportion of females interested in enlisting declined from 10.8 to 7.8 percent, while male rates dropped from 26.7 to 22.7. The aging of the sample may play some role in this decline, because propensity is inversely related to age. As individuals grow older, there is a tendency for those with positive propensity to shift their attitudes in the direction of negative propensity. In addition, many of those who retain a positive propensity will enlist in the Services as they age, removing themselves from the civilian positive propensity sample. Both tendencies cause us to observe lower average propensities in higher age groups, and both have an effect on observed differences in total propensity between 1981 and 1982. Young, relatively high propensity 16-year-olds are unrepresented in the NLS sample after 1981; the youngest respondents were 14 in 1979 and 17 in 1982. Thus, the decline in total propensity from 1981 to 1982 is partly a function of the changing age structure of the sample.

The relation between age and propensity is evident in Table 10. For both males and females, there is a big difference in a given year between the interest of 17- and 18-year-olds. The experience of an approximate age group (e.g., those who were 16 in 1980, 17 in 1981, and 18 in 1982) is similar. Seventeen year-olds' interest declines dramatically as they reach age 18. This is true for females as well as males. For many youths, this is the natural result of either acting on their earlier interest by enlisting and leaving the sample, or by entering college or full-time employment and losing interest in enlisting.

TABLE 10

Trends in Positive Propensity
by Age for Males and Females

NLS 1980-1982

(Percent positive propensity)

	Females			Males		
Characteristic	1980	1981	1982	1980	1981	1982
Total sample	10.8	8.8	7.8	26.7	25.3	22.7
Age						
16	14.3	12.6	-	40.5	39.1	-
17	16.2	11.8	9.6	35.9	34.3	33.1
18	9.5	8.7	8.7	23.8	25.5	27.6
19	8.6	7.1	8.2	21.9	18.6	21.2
20	8.0	7.2	6.6	18.5	14.9	16.2
21	6.6	4.9	5.4	11.2	15.4	13.0

Table 11 shows that larger percentages of blacks and Hispanics than of non-Hispanic whites express a positive propensity to enlist. As in the YATS data, black women, especially, are more likely than white women to report positive propensity.

Table 11 also indicates that for both women and men, propensity to enlist is inversely related to ability, as measured by the Armed Forces Qualifying Test (AFQT). Among women, the proportion expressing positive interest increases steadily from 4.8 percent in AFQT Category II to 19.0 percent in Category V; for men it increases from 5.2 percent (Category I) to 48.2 percent. Interest in the military increases more rapidly among males than females as we move to successively lower AFQT scores. Other NLS data (not presented here) indicate that positive-propensity women are somewhat more evenly distributed across AFQT categories than are positive-propensity men, who tend to fall in the lower AFQT categories. These data suggest that aptitude may be more of a factor in men's propensity to enlist than in women's, although HSB data, to be discussed shortly, suggest the opposite.

Among both men and women, propensity to enlist decreases with years of school completed. Some 10.4 percent of the females with 10 years or less of schooling expressed a positive interest in the military, but less than half as many (only 4.8 percent) of those with 14 years of schooling did. Among males, the comparable figures are 38.0 percent and 6.7 percent: more highly educated males were less than one-fifth as likely to have a positive propensity as their less educated counterparts. Education seems to have a relatively greater negative relationship with propensity for males than for females. As noted in Chapter 2, schooling and age are closely related, and apparent effects of schooling may be partially due to age.

Reported years of mother's education is a commonly used measure of social class. There is a fairly consistent negative relation between social class and propensity to enlist among both males and females. The higher the respondent's socioeconomic status, as measured by this indicator, the less likely he or she is to express an interest in the military.

Table 12 shows the Service preference for those NLS youth who indicated a positive interest in enlisting in the military in 1980-1982.[1] Among positive-propensity males, around 30 percent were interested in serving in the Air Force and in the Army; smaller percentages were interested in the Navy and the Marine Corps. Among females, there was a more distinct preference for the Air Force. In 1980, 38.5 percent preferred the Air Force to other Services; in 1982, 46.5 percent did so. Women's interest in the Marine Corps declined substantially between 1980 and 1982, while men's interest in the Army increased somewhat during the same period.

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[1]Note that these numbers are different from those in Table 4, Chapter 2, which describes YATS propensity for various Services. The YATS data present proportions of sample youth who intend to join a given Service, while the NLS data present proportions of positive-interest youth who intend to join each Service.

TABLE 11

Positive Propensity for Military Service by Selected Characteristics for Females and Males

NLS 1982

(Percent positive propensity)

Characteristics	Females	Males
Total sample	7.8	22.7
Race/ethnicity		
White non-Hispanic	5.0	16.9
Black non-Hispanic	21.2	45.1
Hispanic	10.1	37.8
Other	15.8	17.5
AFQT category		
I (High)	- -*	5.2
II	4.8	6.1
III	5.5	19.4
IV	15.8	36.5
V (Low)	19.0	48.2
Years of school completed		
10 or fewer	10.4	38.0
11	13.7	41.1
12	7.5	20.4
13	6.0	12.0
14	4.8	6.7
Mother's years of school completed		
10 or fewer	11.6	33.4
11	8.2	36.2
12	6.0	18.4
13-16	6.1	12.0
17-18	4.7	12.0

*Cell contains fewer than 30 cases.

TABLE 12

Probable Branch of Service for Positive Propensity Youth

NLS 1980-1982

(Percent positive propensity)

	Females			Males		
Service	1980	1981	1982	1980	1981	1982
Sample size (N)	(535)	(448)	(287)	(1110)	(1063)	(784)
Army	28.8	29.7	32.5	29.1	32.7	36.6
Navy	21.3	25.4	16.9	22.8	18.3	18.0
Marine Corps	11.5	8.1	4.2	15.0	17.2	14.4
Air Force	38.5	36.7	46.5	33.2	31.7	31.0

Interest and Behavior Among NLS Youth

In order to follow up on enlistment interest as expressed by NLS youth in 1980, their self-reported recruiter contacts and enlistments through Spring of 1982 were analyzed. Table 13 shows that of those youth who in 1980 expressed a positive propensity to enlist, over a third of the females and nearly half of the males contacted a military recruiter during the next two years. During the same period, however, only 2.5 percent of these positive-propensity women actually enlisted, compared to 14.2 percent of the positive-propensity men.

TABLE 13

Percentage of Each 1980 Propensity Group
Who Contacted Recruiters by 1982
and Percentage Who Enlisted
by 1982

NLS 1980, 1982

	Females		Males	
	Positive Propensity	Negative Propensity	Positive Propensity	Negative Propensity
Sample size (N)	(371)	(2,763)	(629)	(1,650)
Contacted Recruiter 1980-82	33.6	7.7	46.8	18.9
Enlisted 1980-82	2.5	0.6	14.2	3.6

There were also recruiter contacts and enlistments among those who had indicated negative enlistment propensities in 1980. Proportionately, negative-propensity people were only about one-fourth as likely to enlist as people with positive propensity (for both men and women), but because the negative-propensity groups were so much larger, they supplied many of the recruits. About two-thirds of female enlistments and 40 percent of the male enlistments that occurred within two years of the 1980 propensity statement came from the negative-propensity group. The NLS results also show that negative-propensity men are more likely than comparable women to report recruiter contacts and to enlist.

In 1981 and 1982, NLS respondents who had contacted a recruiter but had not subsequently enlisted were asked why they had not enlisted. (Their responses are tabulated in Appendix Table B-1.) The largest number of respondents said they had not yet decided on a future course or had decided to seek additional schooling. Relatively few respondents, male or female, cited enlistment constraints imposed by the Services as reasons for not enlisting: three to four percent of positive-propensity respondents reported failing the ASVAB, while eight to nine percent said they were not eligible for the Service they wanted. Positive-propensity females were much more likely than their male counterparts to cite the opposition of parents and friends as a reason for not enlisting (7.1 percent as compared to 1.3 percent). Negative-propensity females were almost nine times as likely as positive females to say they "didn't think [they'd] like the military." "Family responsibilities or pregnancy" were also cited by negative-propensity females, but not by positive females, as reasons for not enlisting.

The High School and Beyond Survey

High School and Beyond (HSB) is a longitudinal survey begun in 1980. In that year, a sample of high school seniors was selected in such a way as to be representative of the national population of their classmates. (A sample of sophomores was also included, but the results of that survey are less relevant for this study than those of the senior survey.) The first or base-year survey of this sample was administered in the Spring of 1980, and the first follow-up survey was conducted in the Spring of 1982. The base-year survey included approximately 28,000 seniors enrolled in 1,015 high schools. In the 1982 follow-up, a random subsample of about 12,000 of the 1980 seniors were reinterviewed.[1]

The survey questionnaire includes items that can be used to analyze the propensity of males and females to enlist. Seniors were asked: "In the past year, have you tried to enlist into any branch of the Armed Services?" Response options were "Yes," "No, but I plan to try to enlist soon," and "No, and I don't plan to enlist." For analysis of 1980 enlistment interest of the seniors, the first two responses were considered to be indicators of positive propensity, after excluding from the sample those respondents who had actually served in the military.

Table 14 presents, for various subgroups of HSB seniors, the proportions showing interest in joining the military, according to these questionnaire items. In 1982, females were somewhat less than half as interested in the military as males. For both genders, socioeconomic status (defined by an index based on parent's income, education, and occupation) was inversely related to degree of interest in the military; there was also an inverse relation between aptitude test scores and degree of interest.

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[1]All HSB data are weighted to assure representativeness.

TABLE 14

Expressed Interest[1] in Military Service by
Selected Characteristics for Females and Males

HSB Seniors, 1982[2]

(Percent positive propensity)

Characteristics	Females	Males
Total sample	4.6	10.8
Socio-economic status quartile		
1 (Low)	8.8	18.2
2	4.1	12.0
3	3.8	7.6
4 (High)	1.8	7.6
Test quartile		
1 (Low)	8.5	19.1
2	4.1	10.9
3	3.5	8.4
4 (High)	2.0	7.1
Race/Ethnicity		
White non-Hispanic	3.0	8.4
Black non-Hispanic	13.4	27.8
Hispanic	9.0	16.5
Other	6.8	13.8
Educational expectation:		
High School Graduate	4.5	14.8
2 yrs. Voc. Ed.	9.5	20.8
2 yrs. College	5.7	11.3
4 yrs. College	2.7	8.4
M.A. Equivalent	4.1	7.0

[1]"Interest" is defined as "have tried" or "will try" to enlist.
[2]The sample is made up of 1980 seniors who were reinterviewed in 1982.

For both the socioeconomic status (SES) index and the aptitude test, a scale was used which indicates whether the respondent was in the lowest, second, third, or fourth (highest) 25 percent (quartile) of the population. The HSB aptitude scale and the socioeconomic status scale indicate that positive propensity among men was more evenly distributed across quartiles than it was among women: positive-propensity women were somewhat less likely than men to come from high-aptitude or high-SES groups. However, these findings are inconsistent with NLS and YATS results, and it is difficult to reach any firm conclusion about whether aptitude and socioeconomic status are related to differences between female and male propensity.

The usual relationship holds between race/ethnicity and interest. In 1982 whites showed the least interest and blacks the most, with Hispanics at an intermediate level. As in the YATS and NLS data, black women were much more likely than white women to be interested in enlisting. Turning to educational expectation, we see for both sexes a tendency for propensity to decline with increased expectation, although there are some interesting irregularities in the pattern. First, among both men and women, those expecting to complete two years of vocational education were the most likely to express a positive propensity. Second, women who expected an M.A. graduate degree were almost as likely to be interested in the military as those who expected a high school diploma, while men who expected an M.A. were much less likely to be interested than those expecting a high school diploma. Evidently M.A.-level expectations were less of a hindrance to positive propensity for females than for males.

Intentions and Behavior

Like the other propensity measures, the HSB measure predicts enlistment outcomes. Table 15 shows that of those women who said in 1980 that they had tried to enter the service, 15.8 percent had served in the Active Force by 1982, and 4.1 percent of those who said they would try to enlist had done so. Of those women who had earlier said they would not try to enlist, only 0.8 percent had served on active duty by 1982. Similarly for men, the proportions who enlisted decline as we move from positive to negative intention categories.

TABLE 15

Percentage of Each 1980 Intention Group Who Had Served in the Active Military by 1982 and Percent Still on Active Duty in 1982

HSB Seniors 1980, 1982

	Females			Males		
Active Duty Status	Have Tried	Will Try	Will Not Try	Have Tried	Will Try	Will Not Try
Sample size (N)	(291)	(295)	(5,098)	(441)	(518)	(3,834)
Have Ever Served on Active Duty by 1982	15.8	4.1	0.8	45.1	15.9	3.6
Still on Active Duty Feb. 1982	13.8	2.4	0.5	38.2	14.5	3.6

High School and Beyond does not provide a good measure of length of service; at two years out of high school, very few of the enlistees would have successfully completed a full term in any event. Nevertheless, the proportions of HSB men and women on active duty in February 1982 tell something about their early attrition rates. Nearly all of the HSB men who had ever served on active duty were still on active duty in 1982. Of those males who reported trying to enlist, 45.1 percent had actually enlisted between 1980 and 1982, and 38.2 percent were still serving on active duty in February 1982. Of those males who said that they would not try to enlist, 3.6 percent actually enlisted, and all of those enlistees were still on active duty in February 1982.

Positive-propensity females show a similar commitment: 15.8 percent of those who said they had previously tried to enlist actually did enlist between 1980 and 1982, and 13.8 percent were still serving in February 1982. Of the negative propensity women, however, 0.8 percent enlisted and only 0.5 percent were on duty at the time of the survey in February 1982. Though these latter percentages are very small, the difference is statistically significant because the sample number (5098) is so large. These results suggest that among positive propensity women who enlist, the rate of attrition is no higher than for men, but that for negative-propensity women attrition is greater. Because of the small numbers of females in the sample who served, and the brief time covered between the 1980 and 1982 surveys, the results are not conclusive, but they seem to corroborate overall male/female differences in retention behavior found in other research.[1]

Conclusion

The analysis of the National Longitudinal Survey of Youth Labor Market Experience and the High School and Beyond Survey supports the conclusion that women are less interested in military service than are men. Because of this, positive propensity is a less valuable indicator of actual enlistment behavior for women; most women who enlist are those who at an earlier date would have expressed negative enlistment propensity. The factors associated with positive propensity for men are, by and large, also associated with positive propensity for women - lower age, test scores, social class, etc. However, women with higher educational accomplishments or expectations are less likely than their male counterparts to decide against military service on that basis alone. Evidently, women perceive greater compatibility between high educational expections and positive propensity than do men.

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[1]See, for example, Kim, C. (1982). Youth and the Military Service: 1980 National Longitudinal Survey Studies of Enlistment, Intentions to Serve, Reenlistment, and Labor Market Experience of Veterans and Attriters. Columbus, OH: The Ohio State University, Center for Human Resource Research, Chapter IV.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Conclusions

This study has examined recent data on the propensity of women to enlist from three major surveys - the Youth Attitude Tracking Study (YATS), the National Longitudinal Survey of Youth Labor Market Experience (NLS), and High School and Beyond (HSB). Despite the differences in these data sets, there is a good deal of consistency in the results. The most obvious point is that data from all three studies show higher proportions of males than of females expressing positive propensity to enlist in the military. However, the ratios of male-to-female propensity rates vary with the measures of propensity employed.

There are essentially two kinds of propensity measures in these surveys. The first are the more broadly inclusive measures, which do not require a strong commitment on the part of the respondent to register as positive - the YATS composite propensity measure, the YATS general intentions measure, and the NLS intentions measure. All the broad measures combine responses that indicate a "definite" or "probable" intent to enlist. (The HSB propensity measures are different from the others, but tend to be broadly inclusive.) Second, there are the narrow measures, which do require a strong commitment to register a positive response. They include the YATS unaided mentions measure and the "definitely" response categories of the general intentions measures.

The broad measures typically show 25 to 35 percent of the males and 10 to 15 percent of the females having a positive propensity to enlist. The narrow measures typically show five to eight percent of the males and one to two percent of the females having a strong positive propensity.

Thus, the broad measures generally indicate that men are about 2.5 times as likely as women to express positive propensity, while the narrow measures indicate that they are about 5 times as likely to do so. Evidently interest in the military is both more widespread and stronger among men than among women.

Overall, women's and men's propensity to enlist did not change much from year to year between 1980 and 1983, but in 1984 men's propensity dropped significantly, while that of women continued unchanged from the previous year, according to YATS data.

Regarding Service preference, the YATS and NLS data indicate that women are most likely to prefer the Air Force, followed by the Army or Navy (depending on the survey and the year), and least likely to prefer the Marine Corps. Among men, the order of preference has changed since the late 1970s. Then the order was Air Force, Navy, Army, and Marine Corps. Now the Army and the Air Force are tied for first, while the Navy and Marine Corps have converged at a lower preference level. Whatever their stated preference, more women and men test for, and enlist in, the Army than any other Service. This is not surprising, because the Army has the highest accession goals and the largest recruiting force of the four Services.

Data from the three surveys enable us to examine the relations between propensity and a variety of other respondent characteristics. For both women and men, propensity to enlist is inversely related to age, level of

education, year in school, measures of aptitude (such as reported high school grades and enlistment test scores), social class, employment, and marital status (being married).

While these data indicate that propensity to enlist is associated with lower-than-average levels of education and ability, other research has shown that those who actually enlist more closely resemble the general population of age-eligible youth.[1] Apparently the process of selection and self-selection that occurs between initial propensity and enlistment tends to screen out people with lower education and aptitude levels, leaving a population of enlistees who are substantially representative of American youth in these respects.

Racial/ethnic data in the surveys indicate that blacks are much more likely to be interested in serving than whites, with Hispanics occupying a middle position. Compared to their white counterparts, black women show an especially strong propensity to enlist.

For many respondents, both male and female, lack of interest in the military seems to stem from the fact that they simply have other plans or goals which they see as incompatible with military life. The main reasons for not enlisting cited by male and female YATS respondents were having plans for further education, not wanting to be separated from family and friends, having civilian job plans, and wanting more personal freedom than they thought the military would provide. Service constraints on enlistment, such as eligibility criteria, were not mentioned often by either women or men as reasons for not wanting to enlist.

However, some factors associated with propensity are also gender-related. Among YATS respondents wanting higher education, desire for a college degree is more likely to be associated with negative propensity among men than among women. HSB data show that expecting a graduate degree (M.A. equivalent) is less a hindrance to positive propensity for females than for males. These data suggest that women are somewhat more likely to regard higher education as complementary to enlistment in the Services, while men are more likely to regard higher education as an alternative to military service. Other YATS data indicate that women show a distinct preference for the Reserve or Guard over the Active Forces, and hence for part-time service which is complementary with other pursuits. Taken together, these findings suggest that women are more likely than men to regard military service as part of a broader pattern of activities and life choices, rather than as a career in itself. Further research on this point would be useful.

Stated reasons for not enlisting are another area in which females differ from males. Women are more likely than men to cite disapproval of parents (YATS, NLS), family responsibilities and pregnancy (NLS), and an

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[1]See, for example, U.S. Department of Defense. (1982, March). Profile of American Youth: 1980 Nationwide Administration of the Armed Services Vocational Aptitude Battery. Washington, D.C.: Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics);
Kim, C., Nestel, G., Phillips, R.L., & Borus, M.E. (1980). The All-Volunteer Force: An Analysis of Youth Participation, Attrition, and Reenlistment. Columbus, OH: The Ohio State University, Center for Human Resource Research.

anticipated dislike of military life (NLS) as reasons for not enlisting. Men, on the other hand, are more likely to cite the level of military pay as a reason (YATS). (The latter may be related to differences in the levels of pay which men and women receive in the civilian labor market.)

The YATS data indicate that males are somewhat more likely than females to take a range of enlistment-related actions, such as discussing military service with friends and relatives or making toll-free calls for information, and both YATS and NLS data indicate that men are also more likely to contact recruiters. As expected, positive-propensity respondents, regardless of sex, are also more likely to take such actions.

The report analyzes the relation between stated intentions and enlistment behavior in each of the three data sets. Table 16 summarizes these findings, showing the percentages of females and of males who fall in each propensity category and the percentages who enlist. Again the data are reasonably consistent. The proportions of females who express a negative propensity to enlist range from 86.8 to 89.7 percent, the proportions of males, from 68.3 to 80.0 percent. Adding the "definitely" and "probably" categories in YATS and NLS and the "have tried" and "will try" to enlist categories in HSB to create broad measures of propensity, we see that from 10.3 to 13.2 percent of the females express a positive propensity to enlist, as do 20.0 to 31.7 percent of the males.[1] Survey-measured enlistment rates (in the "Total" columns) range from 0.8 percent to 1.6 percent for females, and from 6.5 to 8.2 percent for males.

For YATS and NLS females, the negative-propensity group produces about two-thirds of all enlistees (compare negative propensity enlistees to total enlistees), though the HSB data indicate a different result. The male negative-propensity group produces less than half of the male enlistees in each of the three surveys.

The predictive power of the propensity measures can be assessed by comparing the intention and enlistment rows in Table 16. Across all data sets, the stronger and more positive the respondent's statement of intention, the greater the likelihood of enlistment. For example, about one fourth of the YATS males who said they definitely would enlist did so (1.2 percent out of 5.0 percent), while about 1 out of 8 in the "probably" category (3.3 percent out of 26.7 percent) and 1 out of 18 in the negative category (3.7 percent out of 68.3 percent) actually enlisted.[2]

Table 17 summarizes the YATS data on individuals' persistence through several stages of the enlistment decision process - initial interest, taking the enlistment test, and enlisting. The table presents the percentage of people at each stage who continue to the next stage - the percentage of the sample in each propensity group, the percentage of each propensity group who test, and the percentage of each testing group who enlist.

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[1]The 20 percent positive propensity rate for males in HSB is lower than that found in the YATS and NLS broad measures over the years and is a function of the questions that are used to measure propensity.

[2]All percentages noted in the paragraph are based on the total sample of YATS males.

TABLE 16

Percentage of Females and of Males
in Each Propensity Category
and Percentage Who Enlist

YATS General Intention	Females				Males			
	Definitely	Probably	Negative	Total	Definitely	Probably	Negative	Total
Propensity	1.5	11.7	86.8	100.0	5.0	26.7	68.3	100.0
Enlistment	.1	.4	1.1	1.6	1.2	3.3	3.7	8.2
NLS General Intention	**Positive (Def. + Prob.)**		**Negative**	**Total**	**Positive (Def + Prob)**		**Negative**	**Total**
Propensity	11.8		88.2	100.0	27.6		72.4	100.0
Enlistment	.3		.5	.8	3.9		2.6	6.5
HSB Intention	**Have Tried**	**Will Try**	**Will Not**	**Total**	**Have Tried**	**Will Try**	**Will Not**	**Total**
Propensity	5.1	5.2	89.7	100.0	9.2	10.8	80.0	100.0
Enlistment	.5	.2	.4	1.1	3.3	1.9	3.0	8.2

Sources: Youth Attitude Tracking Study
National Longitudinal Survey
High School and Beyond

Reading down the positive-propensity columns in Table 17, we see that the percentages tend to increase from one stage to the next. This occurs because the enlistment decision process screens out those who do not want to join or are not qualified to do so, leaving more interested/qualified candidates who are more likely to continue. Thus, while the number of candidates dwindles at each stage, the probability that a candidate will persist to the next increases.

Table 17 also demonstrates that at every stage of the enlistment decision process, and by every measure of propensity, men are more likely than women to choose, or be chosen by, the military. Larger percentages of men than women express a positive propensity to enlist. Of those expressing positive propensity, larger proportions of men than women take the enlistment test, and of those testing, larger proportions of men enlist. On the negative propensity side, the outcomes are similar. Positive propensity measures are better predictors of testing and enlistment for men than for women, while negative propensity measures are better predictors of non-military outcomes for women.

About one-third of the women and somewhat less than half of the men who take the written test subsequently enlist. Earlier research[1] indicates that at least some of this difference is due to a greater tendency among qualified women to drop out of the enlistment process between successfully completing the written test and taking the physical examination. Among men and women who have passed the written test and are still interested in continuing, the proportions enlisting are probably more nearly equal.

Table 17 also shows a marked difference between the percentage of positive- and negative-propensity people at the testing stage, but the difference becomes smaller or negligible at the enlistment stage. For example, 29.8 percent of the YATS females who said they definitely would enlist took the aptitude test, but only 3.7 percent of those who said they were not interested in the military subsequently tested. At the next stage, however, the proportions of test-takers who enlisted are more similar across propensity categories, in this case about 33 percent.

Why is it that positive-propensity people are much more likely than negative-propensity people to take the written enlistment test, but among those testing, the proportions from the different intention categories who go on to enlist are more similar, regardless of their earlier statements of propensity? Clearly some people change their minds after participating in these surveys; some of those who say they will try to enlist do not, and some of those who say they are not interested subsequently come to the testing centers. In effect, taking the test is itself a measure of propensity, and one that is closer in time to actual enlistment than is the survey. However, to the extent that recruiters encourage men to test at a higher rate than they do women, testing may overestimate the interest of men relative to that of women.

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[1]Berryman, S.E., Bell, R.M., & Lisowski, W. (1983). The Military Enlistment Process: What Happens and Can It Be Improved? (Rand Report No. R-2986-MRAL.) Santa Monica, CA: The Rand Corporation.

TABLE 17

Persistence in the Enlistment Decision Process - Percentage of Individuals at Each Stage Who Continue to the Next Stage

	Females				Males			
YATS General Interest	Definitely	Probably	Negative	Total	Definitely	Probably	Negative	Total
% of total in each propensity group	1.5	11.7	86.8	100.0	5.0	26.7	68.3	100.0
% of each propensity group who test	29.8	10.7	3.7	4.7	42.2	26.2	12.4	17.3
% of each testing group who enlist	32.1	32.9	33.8	33.4	58.0	45.6	42.5	45.6
YATS Unaided Mention	Unaided Mention		No Unaided Mention	Total	Unaided Mention		No Unaided Mention	Total
% of total in each propensity group	1.4		98.6	100.0	5.7		94.3	100.0
% of each propensity group who test	39.5		4.9	5.3	46.6		15.8	17.7
% of each testing group who enlist	42.3		30.6	31.7	62.2		43.7	46.7

A number of findings in this report suggest a coherent pattern of gender-related differences in the enlistment decision process. First, across a range of attitudes and activities measured in our surveys - propensity to enlist, exploratory discussions and recruiter contacts, and taking the written and physical examinations - women are less likely than men to be interested in the military. Second, Service selection constraints do not seem to be a major factor in the decisions of those women who talk to recruiters but do not subsequently enlist. Third, women who take the written test are more likely than men to leave the enlistment process after successfully completing the test. And finally, among women interested in the military, there is apparently a greater tendency than among men to regard military service as a complement to other activities, such as further education, rather than as a career. Taken together, these findings suggest that women's attitudes toward the military reflect an outlook which is rather different from men's. Not only are women in the aggregate less interested in military service than men, but those who are interested tend to view the service in a broader context. Their interest in the military is more likely to be limited and qualified by interests in other areas. This outlook, and the social context of which it is a part, may be major determinants of the future potential for women's participation in the Armed Forces.

To what extent the propensity of women in general can be increased by policy measures is an open question. It seems plausible that efforts by the military to increase women's participation, coupled with aggressive advertising and recruiting campaigns, could expand the market by generating more interest among women, but scientific research on this subject is lacking, and controlled studies to address the question would be difficult to design.

Recommendations for Future Research

There are four research directions which would assist the Department of Defense in assessing women's interest and participation in the military. First, there is a need to estimate the population of women who are qualified to join the Armed Services. Second, there is a need for continued and expanded research to assess the interest of young women in joining the Services. Third, there is a need for further research on motivating factors in women's enlistment decisions and on persistence and attrition in the enlistment process. Finally, there is a need to understand better the experience of women in the military.

Estimating the qualified population. Eligibility for military service is primarily a function of age and of educational, aptitude, and physical standards[1]. Estimating the number of women qualified to enlist requires estimating the number in the population who meet those standards. Data on the age and education of women in the population are readily available from Census and other sources. The Profile of American Youth[2] provides infor-

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[1]There are also moral character standards, not relevant to the proposed research, which cause a small percentage of applicants to be rejected by the military.

[2]U.S. Department of Defense. (1982, March). Profile of American Youth: 1980 Nationwide Administration of the Armed Services Vocational Aptitude Battery. Washington, D.C.: Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logist[illegible])

mation on the aptitudes and education of American young men and women, based on the administration of the Armed Services Vocational Aptitude Battery (ASVAB) to a large sample of youth. Physical standards, however, and the rate at which young women and men of military age would be disqualified from serving, have not been subjected to detailed analysis. Such standards are of particular relevance to the participation of women in the military. Preliminary research on physical standards, currently sponsored by DoD, will be extended, with a view to permitting estimates of the qualified population to be made.

Assessing the propensity of women to enlist. The Youth Attitude Tracking Study will be continued and the YATS sample of women increased. The present female sample, which is about one-third the size of the male sample, is too small to permit regional and other types of subgroup analyses to be conducted. In addition, because the negative-propensity group produces so large a proportion of all female enlistees, DoD will attempt to identify the social and demographic characteristics associated with enlistment for those in the negative-propensity group.

Examining the enlistment decision process. Further research is needed to assess (1) the factors that influence young women's decisions to apply for enlistment in the Armed Forces and (2) the factors that affect women's persistence/attrition in the enlistment process. Data from the YATS and NLS, together with data from the 1979 Armed Forces Examining and Entrance Station (AFEES) Survey, are currently being analyzed to assess the determinants of enlistment for men. This research will be extended to women as well. Information on men's reasons for enlisting was also collected in the 1981 and 1983 DoD Survey of Applicants to Military Service, but these surveys did not include women. Another Applicant Survey should be conducted in 1986 which would include women as well as men. Applicant data, linked with administrative records, can be used to examine patterns of persistence and attrition in the enlistment process for both women and men.

Assessing the experience of women in the military. Factors that affect the retention and attrition of enlisted women and men in the Armed Forces should also be examined. Some currently available data, such as those in the NLS, will be analyzed in the near future, but the number of enlisted females in the survey is too small to permit extensive analysis. Some of the Services conduct ongoing surveys of members separating from service or periodic surveys to assess members' reasons for leaving or staying in the military, but the survey questions and methods differ greatly across the Services, and some have serious methodological problems. DoD will continue to review separation-related surveys, with a view to determining whether a uniform data collection is desirable and feasible.

With regard to other experiences of women in the military, such as occupational assignments and promotions, the 1985 DoD Survey of Officers and Enlisted Personnel being conducted in the Spring of 1985 will provide a wealth of data for analysis.

APPENDIX A

THE YOUTH ATTITUDE TRACKING STUDY

SUPPLEMENTAL DATA

ON

THE PROPENSITY OF WOMEN TO ENLIST

IN THE U.S. ARMED SERVICES

Appendix A-1

Sample Distribution and Definition

The sample design does not specifically include persons who reside in noninstitutional group quarters in which telephone service is supplied only for the group (i.e., where residents do not have private telephone numbers), such as college dormatories not having individual telephones. The sample does include, however, eligible persons identified in association with sample households, who are resident in noninstitutional group quarters in which telephone service is supplied only for the group. These individuals are included in order to adequately represent eligible persons in college dormatories not having individual telephones.

The sample also excludes persons institutionalized in hospitals, prisons, detention centers, military barracks, etc.

The unweighted age and sex distributions of the samples obtained in the 1980 through 1984 YATS surveys are presented in Table A-1.

TABLE A-1

Unweighted Sample

Distribution by Age and Sex

YATS 1980-1984

	1980		1981		1982		1983		1984	
Age	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
16	1282	1386	1292	1283	296	1296	285	1083	359	823
17	1181	1246	1203	1282	252	1390	291	1115	333	1236
18	836	927	868	885	219	1056	228	890	264	1096
19	681	764	729	742	182	919	222	804	232	814
20	591	560	623	551	170	736	142	631	168	596
21	473	436	498	458	132	595	145	425	147	493
TOTAL	5044	5319	5213	5201	1251	5992	1313	4948	1503	5058

APPENDIX A-2

Unaided Mentions Of Plans To Join Any Military Service

The Service-specific and active/reserve propensities of respondents giving unaided mentions of joining the military in response to the open-ended question on their plans for the next few years were determined by a two-question series:

> You said you might be joining the _____(military/Service). Which branch of Service would that be?
>
> Which type of service would that be? Would it be...
>
> Active duty,
> the Reserves, or
> the National Guard?

A comparison of trends in unaided mentions of any Military Service, including the National Guard and the Reserves[1], for females and males is presented in Figure A-2. Using the unaided mention measure, men appear to be three to five times as likely as women to report "joining the military" as part of their future plans. In 1984, 1.9 percent of young females and 7.5 percent of young males gave unaided mentions of joining the military, including the Guard and Reserve Components. As with other YATS propensity measures, this one shows the marked decline in male propensity from 1983 to 1984.

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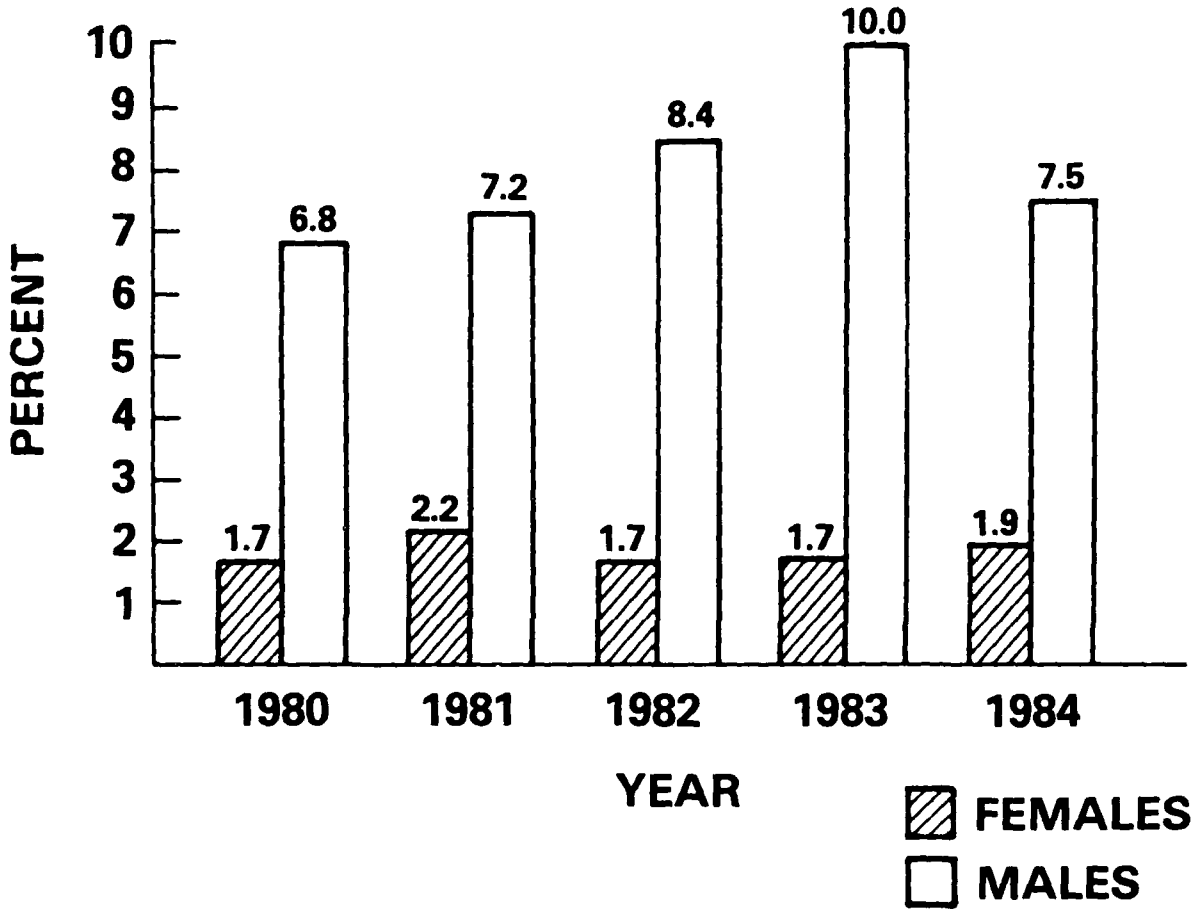
[1]The estimates of unaided mentions of any Military Service presented in Table Figure A-2 are obtained from responses to the initial question above. Estimates of unaided mentions of service in the active-duty military, which were discussed in Chapter 2, are obtained from the second question in the series.

FIGURE A-2

TRENDS IN UNAIDED MENTIONS OF JOINING ANY MILITARY SERVICE

YATS 1980 - 1984



APPENDIX A-3

TABLE A-3

Selected Characteristics of Positive and Negative Propensity Groups by Sex

YATS 1984

(Percent distributions)

	Females		Males	
Characteristics	Positive	Negative	Postive	Negative
Desires more education or training beyond high school	(N=197) 83.4	(N=1306) 79.4	(N=1423) 77.6	(N=3634) 74.7
Highest grade wish to complete	(N=174)	(N=1123)	(N=1309)	(N=3142)
Less than 12th	0.0	0.5	0.8	1.0
12th (high school grad.)	14.1	14.5	23.3	16.6
1-2 yrs. college/ vocational/technical/ trade school	23.9	26.2	26.4	24.7
3 yrs. college	4.1	3.7	1.7	2.2
4 yrs. college (grad.)	55.3	50.1	44.7	51.8
Post-college or graduate/ professional school	2.6	5.0	3.1	3.8
High school grades	(N=196)	(N=1287)	(N=1387)	(N=3567)
Bs or higher	53.7	62.8	37.0	47.4
Cs or lower	46.3	37.2	63.0	52.6
Employment status	(N=196)	(N=1300)	(N=1420)	(N=3625)
Employed full-time	11.5	16.7	22.6	33.9
Employed part-time	30.0	34.1	31.2	30.7
Unemployed, looking for work	38.3	25.0	32.2	17.0
Unemployed, not looking for work	20.3	24.2	14.0	18.4

APPENDIX A-4

TABLE A-4

Enlistment-Related Behaviors Reported by Positive and Negative Propensity Groups and Total Sample by Sex

YATS 1984

(Percent distributions)

	Females			Males		
Reported "Behavior"	Positive	Negative	Total Females	Positive	Negative	Total Males
Thought about joining military before interview	(N=197) 89.3	(N=1036) 31.5	(N=1503) 39.1	(N=1423) 87.9	(N=3633) 52.9	(N=5056) 63.4
How seriously joining military considered	(N=174)	(N=422)	(N=596)	(N=1259)	(N=1930)	(N=3189)
Very seriously	37.9	14.4	21.5	38.7	18.8	27.1
Discussed serving in military with anyone	(N=197) 62.8	(N=1306) 13.9	(N=1503) 20.4	(N=1422) 59.2	(N=3633) 27.7	(N=5055) 37.1
Sent postcard or coupon for information about military	(N=197) 23.8	(N=1306) 7.6	(N=1503) 9.7	(N=1423) 24.4	(N=3633) 12.3	(N=5056) 15.9
Made toll-free call for information about military	(N=197) 4.9	(N=1306) 2.2	(N=1503) 2.6	(N=1423) 6.6	(N=3632) 3.4	(N=5055) 4.4
Talked with military recruiter	(N=197) 42.2	(N=1306) 20.9	(N=1503) 23.7	(N=1423) 50.6	(N=3632) 34.0	(N=5055) 39.0
Ever took written test for military	(N=197)	(N=1306)	(N=1503)	(N=1423)	(N=3633)	(N=5056)
At school or at place other than a Military Entrance Processing Station (MEPS)	15.3	9.5	10.2	13.3	13.5	13.4
At a Military Entrance Processing Station (MEPS)	2.1	0.8	1.0	8.9	4.6	5.9
Ever took physical examination for military	(N=36) 7.0	(N=136) 1.0	(N=172) 2.3	(N=329) 8.5	(N=665) 12.0	(N=994) 10.8
Advice would give about seeing a military recruiter	(N=197)	(N=1305)	(N=1502)	(N=1422)	(N=3631)	(N=5053)
Waste of time	3.1	6.1	5.7	2.9	9.6	7.6
Up to him or her	35.4	69.8	65.3	44.8	69.0	61.8
Good idea	60.9	23.0	28.0	51.8	20.6	29.9
Don't know	0.5	1.1	1.0	0.5	0.8	0.8

APPENDIX A-5

TABLE A-5.1

Perceived Attitude of Others[1] Toward Respondent's Serving in the Active-Duty Military by Propensity Group and Sex

YATS 1984

(Percent distributions)

	Females			Males		
Attitude	Positive	Negative	Total Females	Positive	Negative	Total Males
Sample size (N)	(195)	(1297)	(1489)	(1422)	(3629)	(5051)
Very favorable	19.1	3.6	5.7	17.6	4.5	8.4
Somewhat favorable	36.8	18.3	20.7	42.3	23.6	29.2
Neutral	22.8	39.8	37.5	22.3	39.8	34.5
Unfavorable or don't know	21.3	38.3	36.1	17.8	32.1	27.8

[1]"Others" refer to those who "matter the most" to the respondent.

TABLE A-5.2

Respondent Attitude Toward Personally Serving in the Active-Duty Military by Propensity Group and Sex

YATS 1984

(Percent distributions)

	Females			Males		
Attitude	Positive	Negative	Total Females	Positive	Negative	Total Males
Sample size (N)	(197)	(1306)	(1503)	(1422)	(3628)	(5050)
Very favorable	30.9	3.5	7.1	29.0	3.0	10.8
Somewhat favorable	48.7	14.7	19.2	43.4	20.0	27.1
Neutral	11.2	20.1	18.9	16.2	28.7	24.9
Unfavorable or don't know	9.2	61.6	54.8	11.4	48.3	37.2

TABLE A-5.3

Respondents' Attitudes Toward Personally Serving in the Active-Duty Military by Perceived Attitudes of Others[1] for Females and Males

YATS 1984

(Percent distributions)

Respondent Attitude and Sex	Very Favorable	Somewhat Favorable	Neutral	Unfavorable or Don't know
Sample size (N)	(81)	(309)	(555)	(558)
Females				
Very favorable	45.2	9.8	4.3	2.6
Somewhat favorable	27.2	47.0	12.4	9.3
Neutral	6.7	12.7	34.3	8.8
Unfavorable or don't know	20.4	30.5	49.0	79.4
	(100.0)	(100.0)	(100.0)	(100.0)
Sample size (N)	(402)	(1456)	(1766)	(1425)
Males				
Very favorable	50.6	14.5	3.2	4.3
Somewhat favorable	25.0	52.5	15.6	15.2
Neutral	8.5	14.2	46.2	14.6
Unfavorable or don't know	15.9	18.8	35.0	65.9
	(100.0)	(100.0)	(100.0)	(100.0)

[1]"Others" refer to "those who matter the most" to the respondent.

APPENDIX A-6

TABLE A-6

Importance of Reasons for Not Serving in the Active-Duty Military: Negative Propensity Respondents[1] by Sex

YATS 1983

	Females		Males	
Reasons	Percent	Rank	Percent	Rank
Continue school	82.4	1	78.4	1
Separation from family and friends	78.5	2	62.9	4
Plans for a civilian job	71.6	3	77.4	2
Lack of personal freedom	68.5	4	65.1	3
Disapproval of parents	43.1	5	33.4	7
Disagree with U.S. defense	39.3	6	33.3	8
Disagree with mission and purpose of Armed Forces	37.0	7	33.5	6
Lack of value in military training	34.2	8	31.1	9
Military pay	30.1	9	37.3	5
Little in common with people in military	26.7	10	24.1	10
Difficulty in getting into military	13.5	11	10.8	11

[1]These estimates are based on responses from the active-duty subsample only. Respondents in the active-duty subsample were asked about reasons for not serving in an active branch of the military, whereas respondents in the Reserve/National Guard subsample were asked reasons for not joining the military.

APPENDIX A-7

Importance of Selected Job Characteristics and Respondent Perception of Whether They Are More Likely to Occur in a Civilian or Military Environment

For over a decade, the Military Services have had to compete with the civilian sector for available personnel resources. It is well-established that this competition becomes more acute during times of economic expansion, which provides greater employment and educational alternatives to military service, further reducing the available labor pool. Since the Military Services and the private/industrial complex may be seen as competing employment sectors, it is necessary for the Services to offer valued job attributes and benefits in order to attract the required levels, both quantitative and qualitative, of "manpower". In order to understand better job-related values of the military's target markets, YATS respondents were asked to rate the importance of fifteen selected job characteristics in choosing a job. Respondents were also asked whether each job characteristic was more likely to occur in a military or civilian job, or whether it could occur in either one.

This appendix presents the selected characteristics rated as "very important,"[1] "somewhat important," or "not at all important." Table A-7.1 indicates that in 1984 the two characteristics most frequently rated as "very important" by both females and males, irrespective of propensity, were:

- o enjoying your work and
- o job security.

For males and positive propensity females, the job attributes ranked third and fourth were:

- o being able to learn a valuable trade or skill and
- o a good income.

Negative propensity females, however, differed slightly from the other three subgroups in that these latter two characteristics were ranked sixth and third, respectively.

Relatively unimportant to all of the respondents were:

- o being able to stay near family and friends,
- o parents' approval, and
- o high status and prestige.

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[1]The questionnaire categories "extremely important" and "very important" have been collapsed into the single category, "very important."

In order to assess respondent perception of the relative achievability of the selected job attributes, the analysis now turns to the achievability responses of those who rated the selected characteristics as extremely important or very important. The data, which are presented in Table A-7.2, indicate that for both females and males, positive-propensity respondents were significantly more likely than negative-propensity respondents to view each of the job characteristics (with a few exceptions) as more achievable in the military.

Among both female and male positive-propensity respondents, the following job characteristics were rated as significantly more likely to occur in the military than in a civilian job (with the exceptions noted):

- job security,
- being able to learn a valuable trade or skill,
- a good income (positive-propensity males rate this as significantly more likely in a civilian job),
- being able to get money for education,
- equal pay and opportunity for men and women (the difference between ratings for military or civilian job was not statistically significant for positive-propensity females),
- adequate retirement benefits,
- promotion opportunities,
- being able to do something for your country,
- getting trained for leadership, and
- high status and prestige.

Among negative-propensity respondents, the following job attributes were perceived as significantly more achievable in the <u>civilian</u> sector than in the military:

- enjoy your work,
- a good income,
- promotion opportunities,
- personal freedom,
- high status and prestige,
- parents' approval,
- having a lot in common with co-workers, and
- being able to stay near family and friends.

The purpose of this analysis was to attempt to identify those job characteristics and perceptions which might differentiate between positive- and negative-propensity individuals, and further, to determine if females differ from males in their work-related perceptions and values. If such differences were found, they could be utilized in shaping military advertising campaigns to emphasize those job characteristics which appear most attractive to specific markets. The results indicate few differences between males and females or between positive- and negative-propensity individuals in the job-related characteristics or perceptions examined. Further, positive- and negative-propensity individuals appear to hold similar attitudes. However, the data also indicate that it would be particularly important to stress the ability of the military to provide job enjoyment, a good income, and job security since these traits are valued by both positive and negative respondents. In attempting to attract members of the negative-propensity group, who are generally of higher quality than those with positive propensity, it would also be advantageous to stress promotion opportunities provided in the Military Services, since this was perceived as more likely to occur in a civilian job. It would also be important to stress the job attributes which were rated as extremely or very important by negative-propensity respondents, but were perceived by these same respondents as more achievable in a military job than in a civilian one. These are:

- job security,
- being able to learn a valuable trade or skill (not significantly different for negative-propensity males),
- being able to get money for education,
- equal pay and opportunity for men and women,
- adequate retirement benefits,
- being able to do something for your country, and
- getting trained for leadership.

TABLE A-7.1

Importance Ratings of Selected Job Characteristics for Females and Males by Propensity Group

[illegible]

[illegible]

	Females		Males	
Job Characteristics & Rating	Positive	Negative	Positive	Negative
Enjoying your work	[illegible]	(N=1303)	(N=1414)	(N=3611)
Very important	[illegible]	90.7	87.3	88.8
Somewhat important	[illegible]	8.6	11.4	10.1
Not at all important	[illegible]	0.7	1.3	1.1
Job security	(N=104)	(N=711)	(N=769)	(N=1954)
Very important	87.9	88.8	85.7	86.5
Somewhat important	10.6	9.7	12.1	11.2
Not at all important	1.5	1.4	2.2	2.3
Being able to learn valuable trade or skill	(N=195)	(N=1299)	(N=1417)	(N=3625)
Very important	84.7	77.0	81.9	77.7
Somewhat important	13.4	21.1	15.7	19.9
Not at all important	1.9	1.9	2.4	2.4
Good income	(N=197)	(N=1304)	(N=1420)	(N=3621)
Very important	83.6	84.5	83.4	81.9
Somewhat important	14.8	14.4	14.5	16.7
Not at all important	1.6	1.1	2.1	1.4
Being able to get money for education	(N=197)	(N=1305)	(N=1415)	(N=3623)
Very important	82.2	67.1	72.1	58.7
Somewhat important	14.1	27.1	22.6	31.2
Not at all important	3.7	5.8	5.3	10.1
Equal pay and opportunity for men and women	(N=103)	(N=709)	(N=830)	(N=2165)
Very important	79.8	83.7	63.9	56.3
Somewhat important	13.1	14.0	25.5	31.7
Not at all important	7.1	2.4	10.6	12.0
Adequate retirement benefits	(N=197)	(N=1301)	(N=1418)	(N=3624)
Very important	79.7	72.3	78.3	73.5
Somewhat important	18.2	24.1	18.1	21.3
Not at all important	2.2	3.6	3.6	5.2

TABLE A-7.1 (CON'T)

	Females		Males	
Job Characteristics & Ratings	Positive	Negative	Positive	Negative
Promotion opportunities	(N=197)	(N=1303)	(N=1415)	(N=3619)
Very important	79.1	68.3	70.1	69.1
Somewhat important	17.9	28.6	26.5	25.3
Not at all important	3.0	3.1	3.4	5.6
Personal freedom	(N=195)	(N=1302)	(N=1417)	(N=3621)
Very important	78.9	82.7	75.2	81.9
Somewhat important	18.1	15.6	21.0	16.3
Not at all important	3.0	1.7	3.9	1.8
Being able to do something for the country	(N=197)	(N=1298)	(N=1309)	(N=3295)
Very important	71.2	49.8	69.8	48.9
Somewhat important	26.7	44.7	27.3	43.8
Not at all important	2.1	5.4	2.9	7.3
Getting trained for leadership	(N=196)	(N=1302)	(N=1419)	(N=3616)
Very important	67.2	46.7	61.8	47.2
Somewhat important	26.0	41.4	31.4	42.1
Not at all important	6.8	11.9	6.8	10.7
High status and prestige	(N=197)	(N=1303)	(N=1415)	(N=3622)
Very important	62.2	46.2	49.2	45.9
Somewhat important	31.6	43.9	41.2	41.2
Not at all important	6.2	9.9	9.6	12.9
Parents' approval	(N=196)	(N=1304)	(N=1415)	(N=3617)
Very important	50.9	47.9	45.2	38.7
Somewhat important	34.3	37.2	37.9	40.4
Not at all important	14.8	14.9	16.9	20.9
Having a lot in common with co-workers	(N=197)	(N=1301)	(N=1420)	(N=3614)
Very important	49.9	52.5	57.7	50.6
Somewhat important	38.3	39.7	34.0	40.8
Not at all important	11.8	7.8	8.4	8.5
Being able to stay near family and friends	(N=196)	(N=1305)	(N=1416)	(N=3622)
Very important	33.8	51.5	39.2	48.1
Somewhat important	48.5	38.5	43.2	38.7
Not at all important	17.7	10.0	17.7	13.2

TABLE A-7.2

Important Job Characteristics: Perceptions of Whether They Are More Likely to Occur in the Military or Civilian Sectors by Propensity and Sex

YATS 1984

(Percent distributions)

Job Characteristics and Occurence	Females		Males	
	Positive	Negative	Positive	Negative
Enjoying your work	(N=186)	(N=1194)	(N=1242)	(N=3210)
Military	8.9	1.7	7.2	1.4
Civilian	10.8	30.7	17.4	37.6
Either	79.4	67.5	75.5	60.8
Don't know	0.9	0.2	0.0	0.1
Job security	(N=92)	(N=634)	(N=662)	(N=1689)
Military	27.2	26.5	34.3	29.0
Civilian	3.5	7.4	9.2	11.5
Either	69.3	65.6	56.2	59.5
Don't know	0.0	0.5	0.3	0.1
Being able to learn valuable trade or skill	(N=166)	(N=1002)	(N=1164)	(N=2773)
Military	25.1	12.5	24.1	12.5
Civilian	2.1	8.4	7.5	14.3
Either	72.8	79.0	68.3	73.2
Don't know	0.0	0.2	0.0	0.0
Good income	(N=163)	(N=1101)	(N=1184)	(N=2969)
Military	14.1	7.2	10.5	2.7
Civilian	5.7	23.4	22.9	39.8
Either	80.2	69.4	66.6	57.5
Don't know	0.0	0.0	0.0	0.0
Being able to get money for education	(N=162)	(N=877)	(N=1016)	(N=2106)
Military	32.4	23.5	32.1	23.4
Civilian	7.0	11.3	10.3	16.7
Either	60.2	64.7	57.5	59.8
Don't know	0.4	0.5	0.2	0.1

[1]Results on perceptions of where the job characteristics are more likely to occur are presented only for those respondents who rated the characteristics as extremely important or very important.

Table A-7.2 (Con't)

Job Characteristics and Occurrence	Females		Males	
	Positive	Negative	Positive	Negative
Equal pay and opportunity for men and women	(N=84)	(N=593)	(N=528)	(N=1211)
Military	17.1	23.5	28.0	25.8
Civilian	12.2	6.7	7.8	8.9
Either	70.7	69.3	63.9	65.0
Don't know	0.0	0.5	0.3	0.2
Adequate retirement benefits	(N=157)	(N=943)	(N=1113)	(N=2688)
Military	23.9	17.5	26.6	15.9
Civilian	1.8	10.7	7.9	13.6
Either	74.3	71.1	65.4	70.3
Don't know	0.0	0.7	0.1	0.3
Promotion opportunities	(N=152)	(N=895)	(N=1008)	(N=2490)
Military	15.4	8.5	17.6	7.6
Civilian	5.0	12.6	8.6	19.2
Either	79.7	78.3	73.5	73.0
Don't know	0.0	0.6	0.3	0.2
Personal freedom	(N=150)	(N=1084)	(N=1083)	(N=2969)
Military	7.6	2.6	6.1	2.1
Civilian	38.0	51.3	46.2	62.4
Either	54.4	45.5	47.6	35.4
Don't know	0.0	0.6	0.1	0.1
Being able to do something for the country	(N=138)	(N=652)	(N=922)	(N=1597)
Military	48.1	37.1	50.5	35.2
Civilian	2.0	7.8	4.1	11.1
Either	49.1	55.1	45.4	53.6
Don't know	0.7	0.0	0.0	0.1
Getting trained for leadership	(N=130)	(N=628)	(N=875)	(N=1726)
Military	40.3	27.4	45.1	29.3
Civilian	2.6	7.6	3.9	12.3
Either	57.1	65.0	51.0	58.3
Don't know	0.0	0.1	0.0	0.1
High status and prestige	(N=120)	(N=596)	(N=713)	(N=1641)
Military	16.7	7.0	20.4	9.6
Civilian	3.9	14.5	10.1	22.8
Either	79.3	78.0	69.1	67.5
Don't know	0.0	0.5	0.4	0.1

Table A-7.2 (Con't)

Job Characteristics and Occurrence	Females		Males	
	Positive	Negative	Positive	Negative
Parents' approval	(N=103)	(N=628)	(N=645)	(N=1388)
Military	10.2	3.9	14.2	3.7
Civilian	15.5	33.7	15.8	34.3
Either	74.2	62.2	70.0	61.9
Don't know	0.0	0.2	0.0	0.1
Having a lot in common with co-workers	(N=99)	(N=693)	(N=819)	(N=1853)
Military	18.7	6.6	10.0	8.3
Civilian	7.6	15.6	12.7	22.2
Either	73.7	77.8	77.3	69.4
Don't know	0.0	0.0	0.0	0.1
Being able to stay near family and friends	(N=68)	(N=675)	(N=570)	(N=1739)
Military	2.7	2.0	5.5	2.3
Civilian	40.8	59.8	52.5	61.7
Either	56.5	38.2	41.6	35.8
Don't know	0.0	0.0	0.4	0.3

APPENDIX A-8

Persistence and Attrition in the Enlistment Process

Tracking respondents through successive stages of the enlistment decision process will give a more complete picture of gender differences. Each stage implies a stronger commitment - expression of an interest in joining the military, taking the military's written qualifying exam, and actual enlistment. These stages, and the percentages of respondents completing each one, are graphically illustrated in Figure A-8.

This analysis focuses on the percentages of respondents from each stage who progress to the next stage. In other words, the percentages shown at each stage are based on the number of respondents at the preceding stage. For example, Figure A-8 shows that of the 1.5 percent of female respondents who expressed a definite interest in joining the military, 29.5 percent took the written qualifying exam; of those female respondents who took the exam, 32.1 percent actually enlisted. Of males with a "definite" interest, 42.3 percent took the qualifying exam, and 58 percent of the test-takers enlisted within the followup period.

While males and females show similar decreases in the percentages testing as interest levels decline (from "definitely," to "probably," to "negative"), it appears that among those who test for the military, intention level may predict male enlistment rates but not those of females. Among males who tested, 58 percent of those with a definite intention subsequently enlisted, as did almost 46 percent of those with probable intention, and over 42 percent of those with negative propensity. In contrast, about one-third of females who tested did enlist in a Military Service, regardless of their earlier stated intention level.

The generally lower rates of enlistment among female test-takers no doubt reflects individual decisions and demand constraints on total enlistments, on types of jobs, and on quality requirements for women, which operate to restrict enlistments among women taking the written test more so than enlistments among their male counterparts.

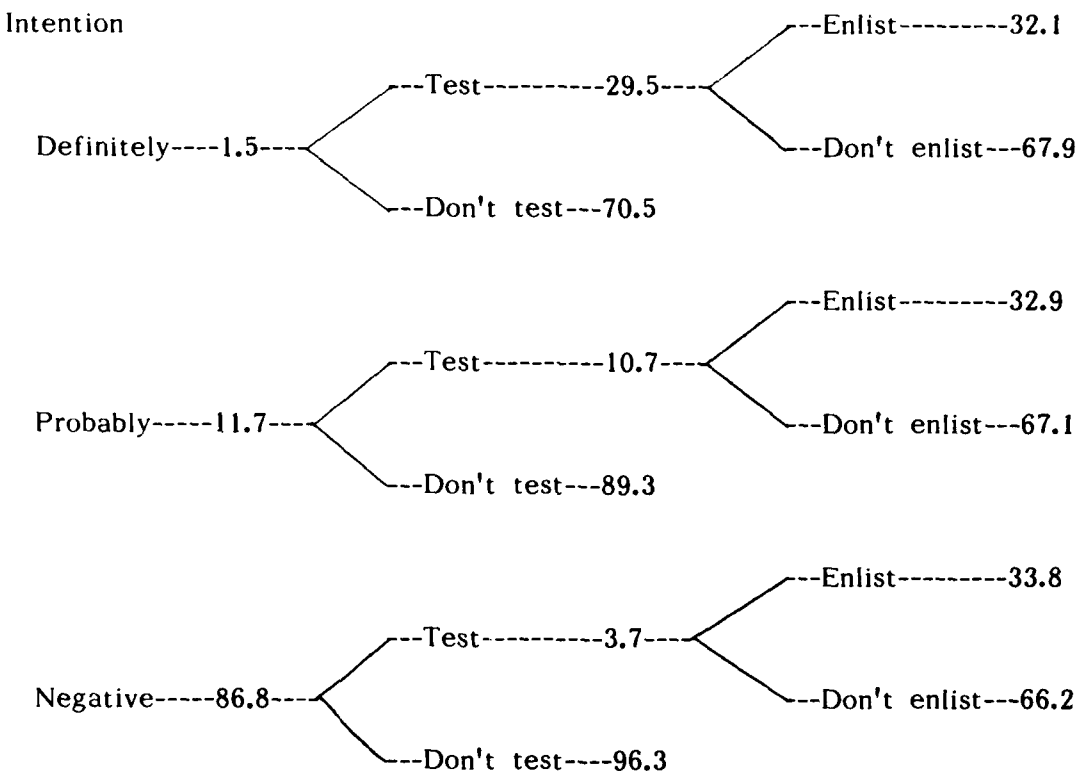
FIGURE A-8

Tracking Respondents through Three Stages of the Enlistment-Decision Process: Intention[1] Determination, Decision to Test for the Military, and Decision to Enlist[2]

Combined YATS 1980-1981

(Numbers in percents)

Females



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[1]General intentions measure.

[2]Results are expressed as percentages of the preceding stage rather than as percentages of the total at each intention level.

FIGURE A-8
(Continued)

Males

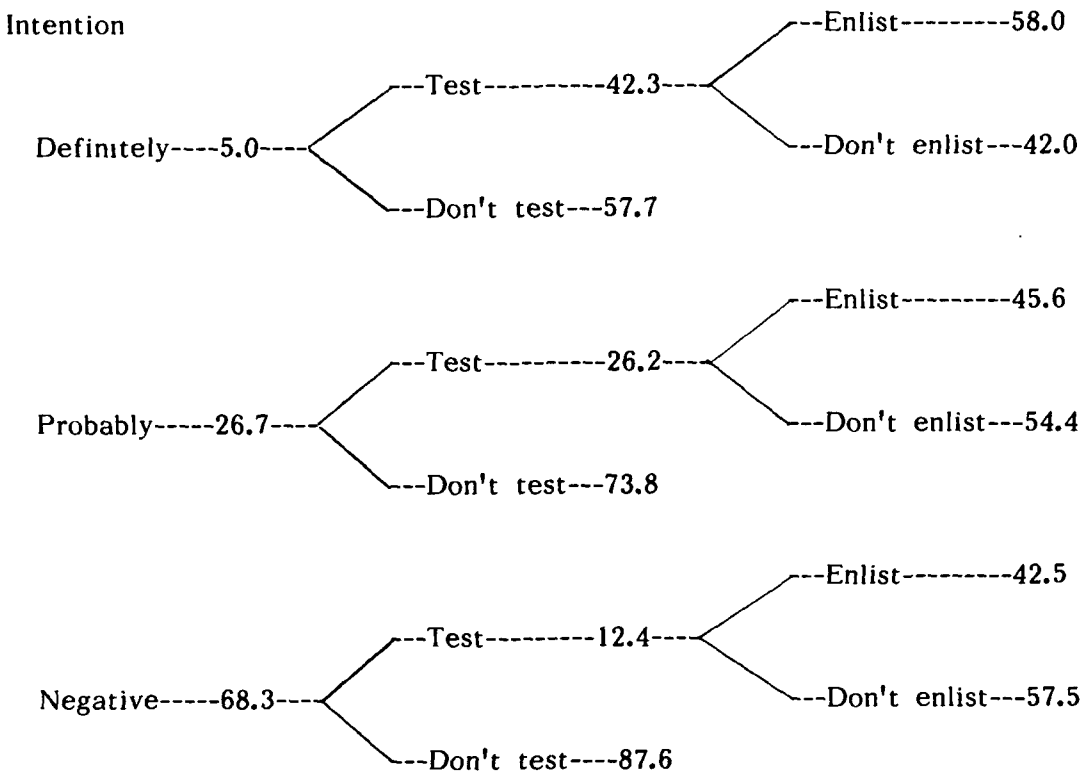
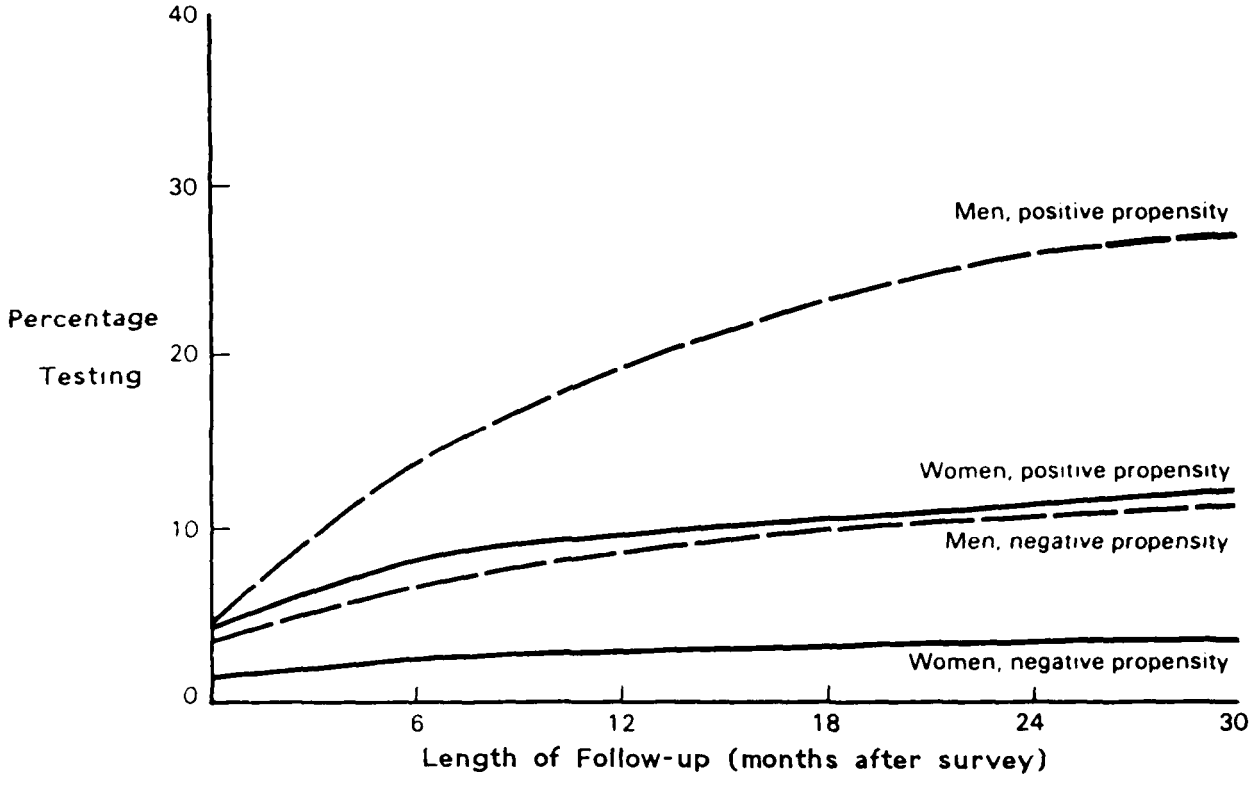


Figure A-9

Written Examination Rates for Intention Levels Over Time[1]
(Combined YATS Surveys for Fall 1980-Fall 1981)



[1] Results are weighted to ensure representativeness and are limited to persons providing SSNs. The numbers of cases are 831 and 5395 for women and 2016 and 4441 for men, for the positive and negative propensity groups, respectively.

TABLE A-9.1

Enlistment Propensity for Specific Services[1]

Enlistment Intentions	Percentage of Sample			
	Army	Navy	Marine Corps	Air Force
Females (N)	(6224)	(6231)	(6226)	(6227)
Definitely	0.8	0.7	0.5	1.3
Probably	6.8	7.1	5.2	9.7
Negative propensity	92.4	92.2	94.1	89.0
Males (N)	(6429)	(6431)	(6433)	(6429)
Definitely	2.1	1.8	1.7	3.2
Probably	14.8	14.6	11.8	19.7
Negative propensity	82.8	83.5	86.5	77.1

[1]Data source is combined YATS sample for 1980 and 1981.

TABLE A-9.2

Examination and Enlistment Rates by Service for Females and Males[1]

Service	Females		Males	
	% of Examinees	% of Enlistees	% of Examinees	% of Enlistees
Sample Size	(309)	(104)	(1115)	(523)
Army	49.5	38.6	41.6	38.5
Navy	19.8	24.3	27.3	24.9
Marine Corps	4.0	7.1	12.7	17.0
Air Force	26.7	30.0	18.4	19.6

[1]Data sources are combined YATS samples for 1980 and 1981, together with Military Entrance Processing Station (MEPCOM) files.

TABLE A-9.3

Enlistment Conversion Rates of Respondents Taking the Military Written Exam by Service for Males and Females[1]

Service	Females	Males
Army	27.0	43.2
Navy	42.5	42.5
Marine Corps	62.5	62.1
Air Force	38.9	49.7

[1]Data sources are combined YATS samples for 1980 and 1981, together with Military Entrance Processing Station (MEPCOM) files.

APPENDIX B

NATIONAL LONGITUDINAL STUDY

SUPPLEMENTAL DATA

ON

THE PROPENSITY OF WOMEN TO ENLIST

IN THE U.S. ARMED SERVICES

APPENDIX B-1

TABLE B-1

Percentage of NLS Respondents in Each Propensity Category Who Stated a Reason for Not Enlisting, by Sex of Respondent[1]

NLS 1982

	Females		Males	
	Positive Propensity	Negative Propensity	Positive Propensity	Negative Propensity
Sample size (N)	(57)	(126)	(145)	(157)
Job I wanted wasn't available	1.1	0.3	3.0	3.8
Didn't qualify for job I wanted	0.0	2.5	0.4	0.9
Wasn't eligible for service I wanted	8.6	1.3	7.6	1.0
Bonus program filled	-	-	-	-
Not yet decided	30.0	18.7	24.3	18.5
Didn't think I'd like military	2.9	25.3	21.3	22.9
Went to school	15.3	22.6	21.3	22.9
Got better job	1.7	1.7	0.6	4.0
Failed ASVAB	3.3	0.3	4.4	0.9
Family responsibilities or pregnancy	0.0	7.8	0.2	0.0
Length of obligation	0.0	0.3	2.7	1.9
Didn't want to leave home	2.0	3.2	2.5	1.9
Parents or friends opposed it	7.1	5.7	1.3	0.0
Insufficient pay benefits	-	-	0.4	0.9
Other	10.6	7.8	19.11	8.8
Still may join	17.5	2.5	5.1	9.0

[1]Youth contacted by a recruiter in 1981 and had not enlisted by 1982.

END

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AD-A156 550 PROPENSITY OF YOUNG WOMEN TO ENLIST IN THE MILITARY A 1/2
REPORT TO THE CONGRESS(U) DEFENSE MANPOWER DATA CENTER
ALEXANDRIA VA V L KIPLINGER ET AL. MAR 85

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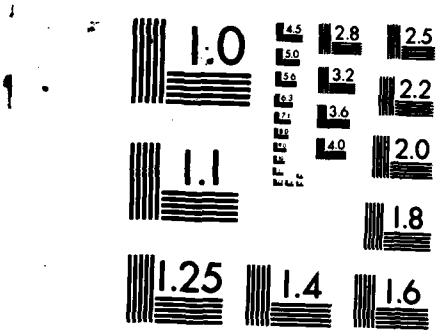

SUPPLEMENTARY

INFORMATION

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19 ABSTRACT (Continue on reverse if necessary and identify by block number)

This report presents the results of a review and analysis of current data on propensity of young women to enlist in the Armed Forces. The study was requested by Congress because of a concern about potential strain on the recruiting market that may result from a decline in numbers of military-age youth and an improving economy.

The study briefly reviews the history of women's participation in the Armed Forces and public attitudes toward their participation. Also included is an analysis of recent data from three major surveys of American youth: Youth Attitude Tracking Study; National Longitudinal Survey of Youth Labor Market Experience; and High School and Beyond. All three surveys have strong similiarities in their data.

The broad propensity measures "probably will enlist" and narrow measures statements of definite intent to join the Service.

The report consists of four sections which include an introduction, a historical overview, scope of study, three major surveys and their contents, and conclusions. Appendices

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A and B contain supplemental data from the three surveys on women's propensity.

The following is a summary of some conclusions that were reached.

Women are most likely to prefer Air Force, followed by Army or Navy and lastly, Marine Corps.

Smaller percentages of women (than men) express a positive propensity to enlist.

Propensity to enlist is inversely related to age, level of education, year in school, measures of ability, social class, employment and marital status.

Blacks are more likely to be interested in serving than whites.

Hispanics occupy a middle position in their interest to enlist.

Reasons for not enlisting were: further education, not wanting separation from family, civilian job plans and desire for personal freedom. Women are more likely to be interested in Guard/Reserve duty rather than active duty. Women also cite parental disapproval and family responsibilities as reasons not to enlist.

The report concludes with recommendations for future research.

END

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