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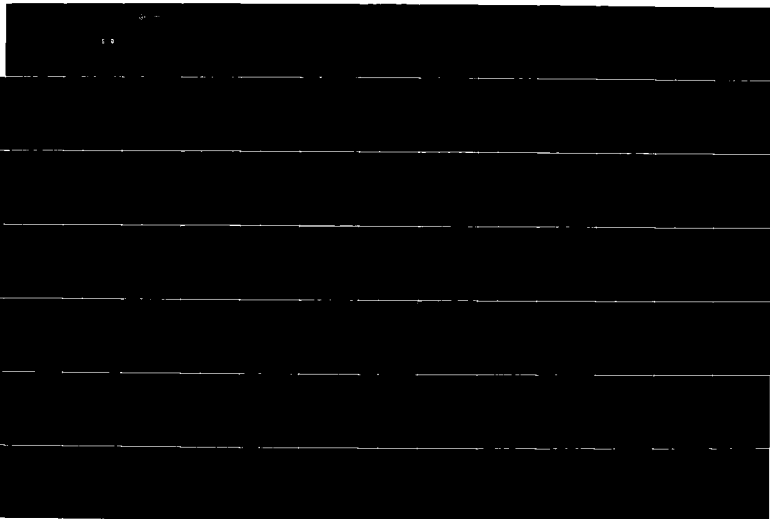
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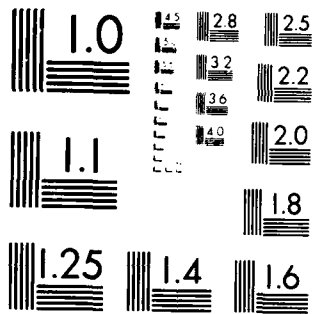
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Youth Attitude Tracking Study II
Wave 17 -- Fall 1986

Report

Research Triangle Institute

1600 WILSON BOULEVARD ARLINGTON, VIRGINIA 22209

YOUTH ATTITUDE TRACKING STUDY
Fall 1986

by

Nancy M. Ostrove
Robert M. Bray
Henrick J. Harwood
Sara C. Wheelless
Elizabeth R. Cavanaugh

RTI/3624/06-02FR
June 1987

This report has been prepared for the Directorate for Accession Policy, Office of the Deputy Assistant Secretary of Defense (Military Manpower and Personnel Policy [(ODASD)(MM&PP)(AP)] under Contract Number MDA903-86-C-0066. The Research Triangle Institute (RTI) has been the contractor for this study with Jay R. Levinsohn, Ph.D. and Robert M. Bray, Ph.D., serving as project directors.

The views, opinions, and findings contained in this report are those of the authors and should not be construed as an official Department of Defense position, policy, or decision, unless so designated by other official documentation.

TABLE OF CONTENTS

	<u>Page</u>
PREFACE	xi
EXECUTIVE SUMMARY	X-1
 1. RECRUITING THE FORCE: THE 1983 PERSPECTIVE REVISITED.....	 1-1
A. Introduction.....	1-1
B. Statistical Results.....	1-2
C. Counting the Youth Population.....	1-6
D. Recruiting and Youth Unemployment.....	1-16
E. Conclusion.....	1-19
 2. INTRODUCTION TO THE 1986 YOUTH ATTITUDE TRACKING STUDY II.....	 2-1
A. 1986 YATS II Objectives.....	2-1
B. 1986 YATS II Features.....	2-2
1. Distinctive Features.....	2-2
2. Propensity as an Organizing Theme.....	2-3
3. Market Groups.....	2-4
C. Report Organization.....	2-4
1. Background and Methodology.....	2-5
2. Market Group Analyses.....	2-5
3. Market Segmentation Analyses	2-7
 3. METHODOLOGY OF YATS II.....	 3-1
A. Sampling Design Overview.....	3-1
B. Data Collection Overview.....	3-2
C. Survey Performance Rates.....	3-3
D. Survey Questionnaire.....	3-4
1. Content of the Interview.....	3-4
2. Configuration of Question Sets.....	3-4
E. Characteristics of Survey Population.....	3-5
 4. ENLISTMENT PROPENSITY AND MILITARY ORIENTATIONS.....	 4-1
A. Measurement of Propensity.....	4-1
B. Propensity Toward Active Service and Reserve Components.....	4-3
1. Composite Active and Service-Specific Propensity.....	4-3
2. Propensity to Enlist in the National Guard and Reserves.....	4-4
3. Unaided Mentions of Interest in Serving in the Military.....	4-5
4. 1985-1986 Changes in Propensity.....	4-7
C. Trends in Positive Active Propensity.....	4-7
1. Young Male Propensity Trends.....	4-9
2. Young Female Propensity Trends.....	4-11
3. Older Male Propensity Trends.....	4-13
4. Unaided Mention Trends.....	4-14

TABLE OF CONTENTS (continued)

	<u>Page</u>
D. Demographic Profiles of Active Propensity Groups.....	4-15
E. Summary	4-20
5. ENLISTMENT PROPENSITY AND ECONOMIC FACTORS.....	5-1
A. National Time Trend Analyses.....	5-1
B. Propensity and Local Economic Conditions.....	5-4
C. Propensity and Individual Labor Market Status.....	5-8
1. Propensity by Employment Status.....	5-9
2. Propensity by Student Status.....	5-11
3. Propensity by Employment Status and Student Status.....	5-11
D. Summary	5-13
6. INTENTIONS, ATTITUDES AND ACTIVE PROPENSITY.....	6-1
A. Military Service and Alternative Activities.....	6-1
1. Alternative Plans for the Next Few Years.....	6-2
2. Most Likely Plan for Next Year.....	6-4
3. Time Period in Which Enlistment Is Likely to Occur.....	6-8
4. Specificity of Propensity: Active and Reserve/Guard...	6-9
B. Interpersonal Influences and Attitudes.....	6-12
1. Previous Consideration of Military Service.....	6-12
2. Attitudes and Interpersonal Influences.....	6-14
3. Enlistment of a Close Friend or Relative.....	6-16
C. Summary	6-18
7. ENLISTMENT INCENTIVES AND PROPENSITY.....	7-1
A. Active Services.....	7-1
1. General Intention to Enlist Given Knowledge of Monthly Starting Pay.....	7-1
2. Propensity and Knowledge of Educational Benefits.....	7-3
3. 1984-1986 Trends in Knowledge About Educational Benefits.....	7-6
4. When Educational Benefits Can be Used.....	7-8
B. Reserve Component.....	7-10
1. Knowledge of Pay and Time Required for Guard/Reserve Participation.....	7-10
2. Effects of Potential Cash Bonus on Propensity to Enlist	7-12
3. Beliefs About Ease and Consequences of Guard/Reserve Participation.....	7-15
C. Summary	7-19
8. ADVERTISING EXPOSURE AND SERVICE IMAGES.....	8-1
A. Exposure to Advertising.....	8-1
1. Advertising Awareness.....	8-1
2. Recognition of Military Advertising Slogans.....	8-6
3. Awareness of Print and Broadcast Advertising.....	8-10
4. Receipt of Recruiting Literature.....	8-12
B. Service Images.....	8-14
C. Summary	8-18

TABLE OF CONTENTS (continued)

	<u>Page</u>
9. INFORMATION-SEEKING ACTIVITIES AND RECRUITER CONTACT.....	9-1
A. Information-Seeking.....	9-1
1. Information-Seeking by Mail and Telephone.....	9-1
2. Use of Computerized Career Information Systems.....	9-3
3. Informal Sources of Information.....	9-5
B. Armed Services Vocational Aptitude Battery (ASVAB).....	9-9
C. Recruiter Contact.....	9-11
1. Extent of Recruiter Contact.....	9-11
2. Comparisons of Recruiter Contact: 1983 to 1986.....	9-14
3. Visits to a Recruiting Station in the Past 12 Months...	9-14
D. Differences Between Respondents With and Without Recruiter Contact	9-14
1. Differences in Sociodemographic Characteristics.....	9-17
2. Differences in Educational Background.....	9-19
3. Differences in Attitudes.....	9-21
E. Summary	9-23
10. PREDICTING ACTIVE PROPENSITY FOR YOUNG MALES AND YOUNG FEMALES..	10-1
A. Specification of Variables and Analytical Approach.....	10-1
B. Overview of Findings.....	10-4
C. Summary	10-7
11. AFQT-BASED ANALYSIS OF SELECTED ISSUES FOR YOUNG MALES AND YOUNG FEMALES	11-1
A. Predicted AFQT Market Segmentation Approach.....	11-1
B. Positive Propensity.....	11-3
C. Actions Taken Toward Enlistment.....	11-5
1. Young Males.....	11-5
2. Young Females.....	11-10
D. Recruiter Contacts by Service.....	11-14
E. Plans for the Next Year (or After High School).....	11-16
1. Young Males.....	11-16
2. Young Females.....	11-21
F. Expectations for Further Education.....	11-25
G. Summary	11-28
REFERENCES	R-1
Appendix A: Sampling Design, Estimation Procedures and Estimated Sampling Errors.....	A-1
Appendix B: Data Collection Procedures, Survey Response Data and Performance Rates.....	B-1
Appendix C: Supplementary Tables.....	C-1

TABLE OF CONTENTS (continued)

	<u>Page</u>
Appendix D: Multiple Regression Variables, Analytical Approach and Detail of Results.....	D-1
Appendix E: Cross Reference - 1986, 1985, 1984, and 1983 YATS Questionnaires.....	E-1
Appendix F: 1986 Screener and Questionnaire.....	F-1

LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1.1	FY 1983-FY 1986 Active-Duty End-strengths and Accessions....	1-2
1.2	FY 1983-FY 1986 Selected Reserve End-strengths and Accessions	1-3
1.3	YATS 16-to 21-Year-Old Males Expressing Positive Propensity and Population Counts in Thousands.....	1-8
1.4	YATS 16- to 21-Year-Old Male Population, Non-prior Service Accessions, and Ratio of Accessions to the YATS Population..	1-9
1.5	YATS 16- to 21-Year-Old Males Expressing Positive Propensity, Population Counts by Propensity, Non-Prior Service Accessions by Propensity, and Ratio of Accessions to Populations by Propensity.....	1-11
1.6	Armed Forces Qualification Test (AFQT) Categories by Corresponding Percentile Score Range and Distribution of 18- to 23-Year-Old Males in 1980.....	1-13
1.7	1986 YATS 16- to 21-Year-Old Male Population (excluding High School Juniors and Sophomores), FY 1987 Accessions, and Ratios of Accessions to YATS Population by Propensity and AFQT Category.....	1-14
3.1	Survey Performance Rates.....	3-3
3.2	Question Sets and Sample Respondents.....	3-5
3.3	Estimates of Sociodemographic Characteristics of Survey Population.....	3-6
4.1	Positive Propensity to Serve in the Active Military.....	4-4
4.2	Positive Propensity to Serve in the Reserve Components.....	4-5
4.3	Unaided Mentions of Interest in Serving in the Military.....	4-6
4.4	Positive Propensity to Serve in the Active Military and Reserve Components Among Young Males, Older Males, and Young Females, 1985-1986.....	4-8
4.5	Positive Propensity as a Function of Selected Sociodemographic Characteristics and Educational Plans.....	4-17
4.6	Positive Composite Active Propensity by Race/Ethnicity and Age	4-20
5.1	Positive Propensity by Local Unemployment Rate.....	5-5
5.2	Positive Propensity by Census Region and Local Unemployment Rate	5-7
5.3	Positive Propensity by Employment Status.....	5-10
5.4	Positive Propensity by Student and Employment Status.....	5-12
6.1	Alternative Plans for the Next Few Years by Composite Active Propensity.....	6-3
6.2	Most Likely Plan for Next Year (or After High School) by Composite Active Propensity.....	6-5
6.3	Perceptions of Difficulty in Finding a Full-Time Job in the Community.....	6-7
6.4	Time Period in Which Respondent Would Join Military.....	6-8
6.5	Previous Consideration of Military Service.....	6-13

LIST OF TABLES (continued)

	<u>Page</u>
6.6 Most Likely Plan for Next Year (or After High School) by Previous Consideration of Military Service.....	6-15
6.7 Attitudes and Interpersonal Influences Concerning Military Service and Advice to Friend About Seeing a Recruiter.....	6-17
7.1 Change in General Intention to Serve in the Military in the Next Few Years Given Knowledge of Actual Monthly Starting Pay	7-2
7.2 Overall Beliefs that at Least One Service Helps Pay for College or Vocational Training.....	7-4
7.3 When Educational Benefits Can be Used.....	7-9
7.4 Incremental Effects of Cash Bonus on Propensity to Enlist in Guard/Reserve.....	7-14
7.5 Males' Beliefs About Guard/Reserve Participation.....	7-17
7.6 Females' Beliefs About Guard/Reserve Participation.....	7-18
8.1 Levels of Awareness of Military Advertising.....	8-2
8.2 Order of Mention for Recall of Military Advertising.....	8-7
8.3 Correct and Incorrect Sponsor Attributions for Military Advertising Slogans	8-8
8.4 Awareness of Print Media Advertising.....	8-11
8.5 Awareness of Broadcast Media Advertising.....	8-13
8.6 Reported Receipt of Recruiting Literature.....	8-14
8.7 First Service Mentioned in Response to Service Image Statements for Young Males and Females.....	8-15
8.8 First Service Mentioned in Response to Service Image Statements for Older Males and Females.....	8-16
9.1 Information-Seeking by Mail and Telephone.....	9-2
9.2 Presence and Use of Computerized Career Information System at High Schools.....	9-4
9.3 With Whom Military Service Was Discussed.....	9-8
9.4 Location Where Armed Services Vocational Aptitude Battery Was Taken	9-10
9.5 Any Contact with Recruiters by Service Represented.....	9-12
9.6 Method of First Contact with Recruiters.....	9-13
9.7 Sociodemographic Characteristics as a Function of Recruiter Contact for Young Males and Young Females.....	9-18
9.8 Education-Related Variables as a Function of Recruiter Contact for Young Males and Young Females.....	9-20
9.9 Attitudinal/Normative Variables as a Function of Recruiter Contact for Young Males and Young Females.....	9-22
10.1 Sociodemographic/Economic Variable Definitions.....	10-2
10.2 Psychological/Behavioral Variable Definitions.....	10-3
10.3 Variables in Overall Regression Model Significantly Associated with Increased Levels of Composite Active Propensity.....	10-6
11.1 Young Males' Positive Propensity for Military Service.....	11-4
11.2 Young Females' Positive Propensity for Military Service.....	11-6
11.3 Young Males' Actions Taken Toward Enlistment.....	11-7
11.4 Young Females' Actions Taken Toward Enlistment.....	11-11

LIST OF TABLES (continued)

		<u>Page</u>
11.5	Young Males' Recruiter Contacts by Service.....	11-15
11.6	Young Females' Recruiter Contacts by Service.....	11-17
11.7	Young Males' Most Likely Plans for Next Year (or After High School).....	11-18
11.8	Young Males' Positive Propensity Level by Most Likely Plans	11-20
11.9	Young Females' Most Likely Plans for Next Year (or After High School).....	11-22
11.10	Young Females' Positive Propensity Level by Most Likely Plans	11-24
11.11	Expectations for Further Education for High School Seniors and Graduates.....	11-26
11.12	Positive Composite Active Propensity for High School Seniors and Graduates as a Function of Predicted AFQT and Expectation of Further Education.....	11-27

LIST OF FIGURES

<u>Figure No.</u>	<u>Page</u>
1.1 Non-prior Service Accessions Holding High School Diplomas, FYs 1974-1986.....	1-4
1.2 Non-prior Service Accessions Scoring in AFQT Categories I-III, FYs 1974-1986.....	1-5
1.3 YATS Annual Unemployment Rate and Positive Propensity for Any Active-Duty Service, 1976-1986.....	1-16
4.1 Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Young Males.....	4-10
4.2 Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Young Females.....	4-12
4.3 Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Older Males.....	4-13
4.4 Trends in Unaided Mentions of Interest in Serving in the Military for Young Males, Older Males, and Young Females....	4-15
5.1 Young Males' Annual Unemployment Rate and Positive Propensity for Any Active Duty Service, 1976-1986.....	5-2
5.2 Young Females' Annual Unemployment Rate and Positive Propensity for Any Active Duty Service, 1980-1986.....	5-3
6.1 Specificity of Propensity for Serving in Active Military and Reserve Component.....	6-10
6.2 Specificity of Propensity for Serving in Guard and Reserves	6-12
6.3 Close Friend or Relative Enlisted in the Past Six Months....	6-18
7.1 Overall Beliefs That Specific Individual Services Help Pay for College or Vocational Training.....	7-5
7.2 1984-1986 Changes in Belief That at Least One Service Helps Pay for College or Vocational Training.....	7-7
7.3 Respondents with Correct Knowledge of Reserve Component Enlistment Factors.....	7-11

LIST OF FIGURES (continued)

<u>Figure No.</u>		<u>Page</u>
8.1	Young Males' Aided and Unaided Awareness of Advertising, 1984-1986	8-5
8.2	Young Females' Aided and Unaided Awareness of Advertising, 1984-1986	8-5
9.1	Increased Interest in the Military by Users of Computerized Information System, 1984-1986.....	9-5
9.2	Discussed Military Service with Anyone During the Past Year	9-6
9.3	Discussed Military Service with Anyone During the Past Year, 1983-1986.....	9-7
9.4	Any Contact with Recruiters by Propensity by Service for Young Males, 1983-1986.....	9-15
9.5	Any Contact with Recruiters by Propensity by Service for Young Females, 1983-1986.....	9-16
9.6	Visited a Recruiting Station Within the Past 12 Months.....	9-17

PREFACE

The report documents a study performed by Research Triangle Institute under Contract MDA 903-86-0066 as part of the Joint Market Research Program sponsored by the Office of the Deputy Assistant Secretary of Defense (Military Manpower and Personnel Policy) [ODASD(MM&PP)].

The Youth Attitude Tracking Study II (YATS II) is a key component of the Joint Market Research Program which contributes to policy formulation and the development of recruiting marketing strategies. The Military Services provide comments and guidance through the Joint Market Analysis and Research Committee (JMARC). YATS II provides annual data about the propensity of young men and women to enlist in the active military and in the Reserve components. It also measures awareness of military advertising, contact with recruiters, and knowledge of the financial incentives for enlisting.

The Project Directors for the 1986 YATS II were Dr. Jay R. Levinsohn and Dr. Robert M. Bray of Research Triangle Institute. L. Lynn Guess was responsible for instrument development, Frederick W. Immerman for the sampling design, and Dale S. DeWitt for data collection. Ronald Smith coordinated data collection at Amrigon, RTI's subcontractor for some of the data collection. Dr. George H. Duntelman provided valuable consultation regarding the multivariate analyses. Lillian Clark completed the typing and clerical requirements. Special thanks are due to the tireless efforts of the telephone survey staff in completing the interviews, both at RTI and Amrigon; to Dr. Jay R. Levinsohn for Computer Assisted Telephone Interviewing (CATI) design and implementation; to Cheryl Whitacre for CATI programming; and to Dr. Daniel G. Horvitz for his interest and support. Of course, we are indebted to the respondents who provided the data for the study.

Research Triangle Institute acknowledges the efforts of individuals from the Department of Defense in the successful completion of this study. At the Defense Manpower Data Center, Zahava D. Doering, Chief, Survey and Market Analysis Division provided overall guidance during the effort. Dr. Michael T. Laurence and Vonda L. Kiplinger, Market Research Branch, were the principal DoD contacts who provided specific direction during all stages of the effort. In addition, Dr. Laurence is the author of

Chapter 1. Dr. Bruce R. Orvis and Martin T. Gahart of The RAND Corporation developed the algorithm for classifying respondents into predicted Armed Forces Qualification Test (AFQT) categories discussed in Chapters 1 and 11.

In ODASD(MM&PP), Dr. W. S. Sellman, Director, Accession Policy, and LTC John A. Ford, U.S. Army, provided critical policy guidance and extensive editorial review. Finally, we would like to thank the executive committee and members of JMARC, who provided continuing support for the study and made valuable suggestions regarding questionnaire modification.

YOUTH ATTITUDE TRACKING STUDY
Fall 1986

EXECUTIVE SUMMARY

Effective recruiting for manpower requires that the Department of Defense and the Individual Services have reliable and timely recruit market data describing the background, attitudes and career intentions of young adults. This report describes the results of the 1986 YATS II study conducted by the Research Triangle Institute with the assistance of Amrigon Enterprises, Inc. Data for the study consist of responses to a 30-minute, computer-assisted telephone interview administered to a nationally representative sample of four recruit market groups: 5,328 young males (aged 16-21); 1,068 males (aged 22-24); 3,191 young females (aged 16-21); and 1,102 older females (aged 22-24).

This report examines enlistment propensity (i.e., the likelihood of young adults to enlist in the military), economic factors affecting propensity, intentions and attitudes toward the military, enlistment incentives, advertising exposure and Service images, and information-seeking and recruiter contact. The report also provides selected findings as a function of respondents' educational status and predicted AFQT category. In addition to the descriptive tabulations which comprise the bulk of the report, other, more sophisticated analyses that simultaneously examine a set of variables for young males and young females are presented.

A. Enlistment Propensity

Table X.1 presents the 1986 and 1985 estimates of positive propensity to serve in the active military and the Reserve components. In 1986, young males expressed the highest propensity (32.0 percent) for active military service, followed by older males (14.2 percent), young females (12.8 percent), and older females (5.0 percent). Propensity estimates for 1986 closely paralleled those for 1985. Respondents expressing positive propensity toward the active Services were more likely than those expressing negative propensity to be younger, nonwhite, unmarried, attending school and less educated.

Table X.1. Positive Propensity to Serve in the Active Military
and Reserve Component, 1985-1986

Propensity Measure	Market Group							
	Young Males		Older Males		Young Females		Older Females ^a	
	1985	1986	1985	1986	1985	1986	1985	1986
Composite Active Propensity ^b	29.8	32.0	12.6	14.2	11.9	12.8	-	5.0
Army	14.7	15.8	5.2	7.9	5.9	5.8	-	2.4
Navy	10.6	11.1	3.7	5.6	4.4	4.1	-	2.0
Marine Corps	10.2	11.2	3.6	5.4	3.0	3.3	-	1.8
Air Force	14.9	16.0	6.9	6.9	6.5	8.0 ^a	-	3.5
Composite Reserve Propensity ^c	20.8	20.0	12.1	11.5	7.7	7.6	-	5.5
Army National Guard	7.1	7.3	5.8	5.5	2.0	2.2	-	2.3
Air National Guard	4.2	4.7	1.1	3.2	1.7	1.8	-	1.3
Army Reserve	6.4	5.8	3.7	3.1	2.2	2.1	-	1.0
Navy Reserve	1.6	2.0	0.7	1.3	0.9	0.8	-	0.9
Marine Corps Reserve	2.1	2.1	1.8	1.6	0.3	0.3	-	0.6
Air Force Reserve	5.0	4.5	2.4	2.2	2.6	2.7	-	1.3
Coast Guard Reserve	1.0	0.9	1.1	0.4	0.4	0.2	-	0.2
Unaided Mentions								
Any Service	7.4	8.8 ^a	0.6	1.2	1.6	2.5 ^a	-	0.3
Active Service	5.2	6.2	0.0	0.6	0.9	1.5	-	0.3

Note: Tabled values are column percentages. Estimates for 1985 are based on interviews with 5,478 young males, 465 older males and 3,301 young females. Estimates for 1986 are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females, and 1,102 older females.

^aData from older females are only available for 1986.

^bPropensity to serve in at least one active Service.

^cPropensity to serve in at least one Reserve component (National Guard or Reserves).

Source: Questions 438-441, 505-513.

*1985-1986 comparisons were statistically significant at the 95 percent confidence level.

Only three statistically significant changes in propensity levels between 1985 and 1986 were found. Young females showed an increase in propensity toward serving in the Air Force (1.5 percentage points) and in unaided mentions of interest in serving in any branch of the military (.9 percentage point). Young males were more likely to express an unaided interest in 1986 compared to 1985 (1.4 percentage points).

Young males and females were significantly less likely to express positive propensity toward service in the Reserve components than toward active military service. In contrast, older males and females showed equal levels of propensity toward Reserve or active military service.

About 50 percent of those respondents who expressed positive propensity toward serving in the military were positive toward both the active military and the Reserve component. Among those respondents who expressed a specific preference for either the active military or the Reserve components, more were positive toward the active military than toward Reserve service. Between 33 and 50 percent of the respondents expressing positive propensity toward the Reserve component were positive toward both the Reserves and the National Guard. The Reserves were more likely to be preferred over the Guard among those younger respondents expressing a preference for a specific service.

B. Propensity and Economic Factors

For young males the direction of year-to-year changes in the level of positive propensity over the 1976-1986 period tended to be the same as the direction of changes in unemployment rates. 1986 levels of positive propensity were also related to aggregate unemployment rates at the county level among young males but were somewhat less related among young females. Youths living in areas with high average unemployment rates were more likely to express both active and Reserve positive propensity than those living in areas with relatively low average unemployment rates.

Those respondents who reported being currently unemployed and looking for a job expressed the highest levels of positive active and Reserve propensity. Respondents' perceptions about the difficulty of finding a full-time job in the community were also related to propensity. Among the younger groups, positive propensity was higher among those believing that finding a job is very difficult or almost impossible.

C. Intentions and Attitudes Towards the Military

When asked what they would most likely be doing in the next few years, seven percent or fewer of any group expected to be serving in the military. Between 50 and 80 percent of all respondents replied "attending college." The younger males and females were especially likely to express an interest in attending college. When asked to specify their most likely plan for the coming year, or following high school graduation, about 50 percent of the younger groups, but only ten percent or less of the older groups, expected to be attending school full time. Seventy-five percent of the older males, about 45 percent of the older females, and between 28 and 32 percent of the younger groups, expected to be working full-time.

Favorable attitudes about serving in the military were expressed by 40 percent of the young males, 29 percent of the older males, 24 percent of the young females, and 18 percent of the older females. Similar percentages of each market group also reported that "important others" were favorable toward their serving in the military. About 33 percent of each market group reported that they would tell an interested friend that seeing a military recruiter was a good idea. Positive propensity was also related to increased reports of a close friend or relative having enlisted in the past six months.

D. Enlistment Incentives

Between 44 and 59 percent of the respondents reported an awareness of military programs designed to provide financial assistance for college or vocational training. Positive propensity was generally related to relatively higher levels of awareness. Among the younger groups, the

overall level of knowledge of educational benefits was lower than in 1985, but it was still higher than in 1984.

Offering hypothetical increments in cash bonuses for enlisting for eight years in the Reserve components resulted in significant increases in positive propensity toward serving in the Reserve components.

Between 38 and 54 percent of the employed respondents believed there are laws protecting their employment rights and that their employer would hold their job open during Reserve basic training. However, similar percentages felt they would lose job seniority during the basic training period.

E. Advertising Exposure and Service Images

Sixty-six percent or more of the male market groups and 57 percent or more of the female market groups reported awareness of military advertising for the four active Services. The highest percentages of advertising awareness (83-86 percent) were reported for Army advertising and the lowest (31-44 percent) for Coast Guard advertising. Overall levels of advertising awareness among young respondents for all the military components showed year-to-year decreases from 1984 to 1986.

Sixty-five percent or more of the young males and young females reported having seen print advertising, and 80 percent or more reported having seen broadcast advertising for the military in the past 12 months. Slightly less than 50 percent of the young males and less than 25 percent of the young females reported receiving unsolicited recruiting literature by mail in the past 12 months. The most frequently mentioned sponsor for each of these advertising media was the Army.

The Army was the most common response to a number of statements designed to assess respondents' images of the four active Services. The Army was mentioned most often for six of the ten images assessed: provides money for education; teaches valuable skills and trades; opportunities for promotion and advancement; equal pay and advancement for men and women;

defending your country; and work in or near a combat zone. The Air Force was the most frequent response to providing a high technology environment to work in. The Marine Corps was mentioned most often with regard to lack of personal freedom. The Navy was mentioned most often regarding extended duty away from immediate family. No one Service received a clear majority of attributions to the statement concerning assignment to work which does not prepare one for a civilian career.

F. Information-Seeking and Recruiter Contact

About 40 percent of the males and 20 percent of the females reported having ever spoken with a military recruiter, with positive propensity respondents being more likely to have done so. Young males and young females who reported recruiter contact in the past 12 months were more likely than those not reporting contact to be: 18 or 19 years old; Black; never married; seniors in high school or beyond high school; and desirous of additional education in the future. Those having had contact were also more likely to report favorable attitudes toward serving in the military, perceived favorable attitudes toward their serving among those who matter the most to them, and to report having a close friend or relative who enlisted in the military in the past 6 months.

More than 50 percent of the younger respondents and between 40 and 50 percent of the older groups had discussed serving in the military with someone within the past year. Positive propensity was related to increased likelihood of reporting this behavior.

G. AFQT-Based Analysis of Selected Results

Young males and young females were classified as a function of their educational status and predicted AFQT categories to assess selected findings in terms of respondent "quality."

In general, positive propensity was found to decrease as a function of both increasing educational status and classification in AFQT Categories I-IIIA. Younger High School Students expressed the highest, and High

School Graduates the lowest, levels of both active and Reserve propensity. In addition, positive propensity was considerably lower for Category I-IIIA than for Category IIIB-V youths.

The relatively greater frequency among young male High School Seniors of having engaged in information-seeking activities in the past year appears consistent with the view that Seniors are at a natural enlistment decision point. Discussion of military service with a recruiter or having taken the ASVAB were, in contrast, more prevalent among High School Graduates.

Both young male and female High School students were more likely than Graduates to expect to be attending school full time in October of 1987 or following high school graduation. Category I-IIIA youths within each educational status group were more likely than those in Category IIIB-V to expect to be in school and less likely to be working. The military thus appears to be competing more with full-time schooling than the full-time labor market for quality youth.

Over sixty percent of male and female High School Seniors and Graduates reported that they desired more education. This finding was strongest among Seniors and among Category I-IIIA youths. High School Graduates expecting more education expressed higher propensity levels than those who do not. In addition, Category I-IIIA youths within each educational group who desired additional schooling expressed lower propensity levels than their Category IIIB-V counterparts.

1. RECRUITING THE FORCE: THE 1983 PERSPECTIVE REVISITED*

A. Introduction

In recent years, this first chapter of the Youth Attitude Tracking Study (YATS) final report has been devoted to a discussion of broad manpower issues, our understanding of which is enhanced by the data collected in the YATS. In 1983, the first of this series dealt with manning the force from a recruiting perspective. The principal conclusions of the 1983 discussion were that the Military Services were enjoying unprecedented success in recruiting sufficient numbers of quality youth and that the success would be difficult to sustain. To the surprise of some, but the satisfaction of all, the Military Services have not only sustained their level of success but improved upon it.

In the face of a declining youth population, lower levels of youth unemployment, lower levels of positive propensity towards serving in the military as measured by YATS, and relatively stable recruiting budget levels, the Services have continued to meet their recruiting goals. They have also maintained the percentage of high school graduate recruits at more than 90 percent and increased the percentage of high-quality recruits, as measured by the Armed Forces Qualification Test (AFQT), by seven percentage points.

In this chapter we revisit several of the issues discussed in 1983, with the advantage of three years of additional experience. First, we will provide an update on recruiting goals and successes. Next, we will discuss the size of the 16- to 21-year-old male manpower pool and its relationship to propensity levels and enlistment probabilities. To present the scope of the recruiting task in a meaningful way, this discussion will emphasize population counts instead of percentages. Finally, recruiting success as a function of youth unemployment will be discussed. This discussion presents an interpretation for the recruiting success of recent years in the face of reduced unemployment rates, a result which defies conventional recruiting wisdom.

*This chapter was written by Michael T. Laurence of the Defense Manpower Data Center.

B. Statistical Results

The magnitude of the recruiting task confronting the Department of Defense in manning the active-duty force is summarized in Table 1.1, which presents the end-strengths and recruiting results for Fiscal Years (FY) 1983 through 1986. The total DoD active-duty military end-strength at the end of FY 1986 was 2,169,100 men and women of whom 1,844,300 were enlisted personnel. During FY 1986, 315,300 men and women entered the active Military Services for the first time, representing 17.1 percent of the enlisted end-strength. For FY 1987, the Department of Defense has established a recruiting objective of 300,800 non-prior service accessions to meet a fiscal-year end-strength of 1,852,700 enlisted personnel. Thus, at fiscal year-end 1987, 16.2 percent of the enlisted military end-strength will be composed of new recruits.

Table 1.1. FY 1983-FY 1986 Active-Duty End-strengths and Accessions
(strength and accessions in thousands)

	Fiscal Year			
	1983	1984	1985	1986
End Strength:				
Enlisted	1,811.1	1,821.3	1,828.5	1,844.3
Officer	313.3	318.3	322.5	324.8
Total	<u>2,124.4</u>	<u>2,139.6</u>	<u>2,151.0</u>	<u>2,169.1</u>
Non-prior Service Enlisted Accessions	305.1	309.8	301.4	315.3
Non-prior Service Enlisted Accessions Objective	303.4	306.8	301.9	314.5
Non-prior Service Enlisted Accessions Objective Attained	101%	101%	100%	100%

Source: End-strength data from OSD-Washington Headquarters Services. Accession data from the Directorate for Accession Policy, OASD(FM&P).

At the end of FY 1983, when the previous chapter was written, we reported on four successive years in which the Department of Defense met its active-duty recruiting objectives. That record of success has been extended to seven years at the end of FY 1986. The 315,300 men and women who entered the Services for the first time in FY 1986 represented 100.3 percent of the recruiting objective of 314,500. These results contrast with the chronic manpower shortfalls experienced by the Services in the late 1970s following the end of conscription in FY 1973.

In addition to the active-duty forces, the Selected Reserve, including the National Guard and the individual Service reserve components, play a vital role in meeting the Nation's defense requirements. Upon mobilization, these forces will assume major combat and support roles. The end-strengths and recruiting results for the past four fiscal years are presented in Table 1.2. In FY 1986, 238,900 men and women enlisted into the Selected Reserve contributing to a FY 1986 total end-strength of 1,130,100, of whom 972,200 were enlisted personnel. This year-end end-strength is the highest since 1961 and continues an upward trend that began in FY 1979 following the lowest end-strength in 25 years at year-end FY 1978.

Table 1.2. FY 1983 - FY 1986 Selected Reserve End-strengths and Accessions
(strength and accessions in thousands)

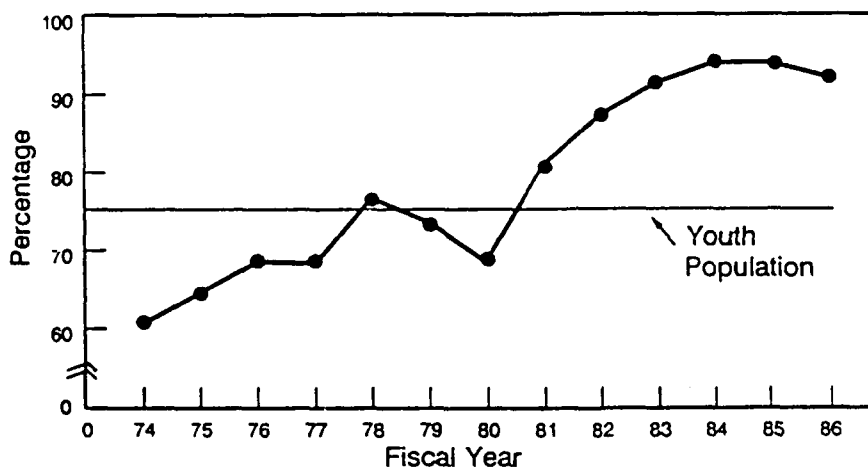
	Fiscal Year			
	1983	1984	1985	1986
End Strength:				
Enlisted	862.0	897.7	936.5	972.2
Officer	142.5	148.1	151.5	157.9
Total	<u>1,004.5</u>	<u>1,045.8</u>	<u>1,088.1</u>	<u>1,130.1</u>
Enlisted Accessions	232.5	221.7	232.4	238.9
Enlisted Accessions Objective	220.2	247.1	234.4	245.9
Enlisted Accessions Objective Attained	106%	90%	99%	97%

Source: End-strength data from Defense Manpower Data Center--Office of Reserve Affairs. Enlisted accessions data from the Directorate for Accession Policy, OASD(FM&P).

The Selected Reserve, however, has not completely matched the success of the active-duty forces in meeting their recruiting objectives. As shown at the bottom of Table 1.2, Selected Reserve enlisted accessions have fallen slightly short of the objective in each of the past three years, although only by small amounts in the past two years. In part, this shortfall was a result of end-strength constraints and improved retention rates among current members, rather than recruiting problems.

A significant feature of the recruiting success of the past seven years is reflected in the increasingly high quality of the men and women entering the active-duty Services. In FY 1983, we reported that a record-breaking 91 percent of non-prior service accessions were high school graduates. As shown in Figure 1.1, in each of the three years since FY 1983, the percentage of non-prior service accessions who were high school graduates exceeded that level. These results are a continuation of a trend that began in FY 1981. In contrast, in FY 1980 only 68 percent of new accessions held a high school diploma. Also noteworthy is the fact that while only 75 percent of all young Americans hold a high school diploma, as indicated by the horizontal line in Figure 1.1, the Services have recruited a disproportionately large share of them in every year since FY 1980. Only once in the previous six years, in FY 1978, did the percentage of accessions who were high school graduates exceed this 75 percent level.

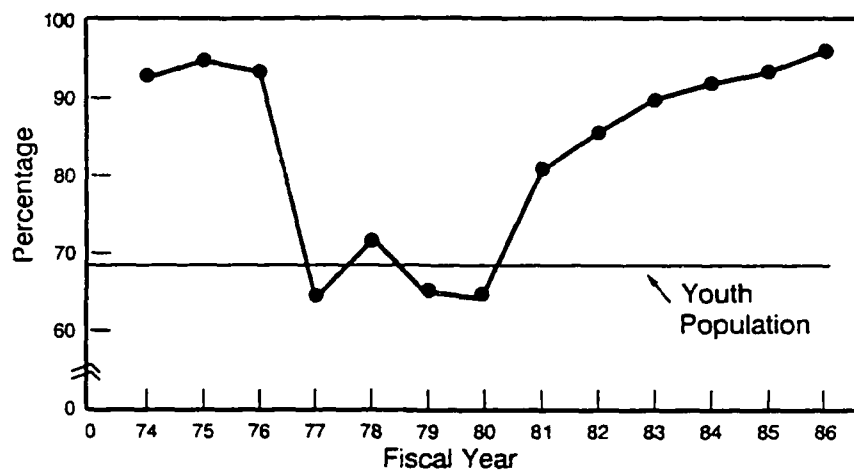
Figure 1.1. Percentage of Non-prior Service Accessions Holding High School Diplomas, FYs 1974-1986



SOURCE: Statement of the Principal Deputy Assistant Secretary of Defense for Force Management and Personnel before the Subcommittee on Defense, House Committee on Appropriations, February 25, 1987.

As measured by Armed Forces Qualification Test (AFQT) scores, the Services have sustained an upward trend that began in FY 1981 in recruiting the brightest of American youth. As shown in Figure 1.2, in FY 1986 a record-breaking 96 percent of all non-prior service accessions had scores in AFQT Categories I-III, which represents average or above trainability. As indicated by the horizontal line in Figure 1.2, 69 percent of all American youth fall into AFQT Categories I-III. As was the case with high school graduates, the Services have recruited a disproportionately large share of these bright young men and women in every year since FY 1980.

Figure 1.2. Percentage of Non-prior Service Accessions Scoring in AFQT Categories I-III, FYs 1974-1986



SOURCE: Statement of the Principal Deputy Assistant Secretary of Defense for Force Management and Personnel before the Subcommittee on Defense, House Committee on Appropriations, February 25, 1987.

Without question the Services have, in recent years, succeeded in their efforts to recruit sufficient numbers of quality youth in the face of the challenges that were described in 1983. Historically, the Services have often found it necessary to trade off manpower quality and quantity. When quantity was in demand, quality was sacrificed and standards lowered; when the demand for quantity was low and recruiting goals easily met, quality standards were made more stringent. In contrast to these cycles of trade-offs between quality and quantity, the Military Services have, since FY 1980, enjoyed both quantity and quality.

C. Counting the Youth Population

Typically, the YATS results are presented in the form of percentages of the particular market segment being discussed. For example, we say that in 1986, 32.0 percent of young males, aged 16 to 21, expressed a positive propensity towards serving in the military compared to 35.4 percent in 1983, a statistically significant decrease. This form of presentation tells us that interest in the military is substantially lower in 1986 than it was in 1983. Although this is a meaningful piece of information in its own right, it has limited utility for recruiting planners who must allocate goals and resources. For these planners, the statistic has more utility when it is related to the size of the youth population. In this section of this chapter we will present YATS propensity data and address the issue of recruiting from the young male market in terms of population counts instead of percentages.

Presented in Table 1.3 are data from the 1983-1986 YATS showing the reported levels of positive propensity and the estimated total sizes of the 16- to 21-year-old male population, broken down by the estimated subpopulations expressing positive and negative propensity. These population estimates are those represented by the YATS sample which excluded those individuals who had completed more than two years of college and were currently enrolled in a four-year college or university; those individuals who were currently serving in the military, including those in the Delayed Entry Program, as well as those who had previously served in the military; and those individuals who were serving or had served in college ROTC. In addition, those individuals who were living in group quarters of ten or more people, such as college dormitories, as well as those without telephones, were excluded from the sample. Thus, the sample and the population estimates include only those young men who are potential enlistees, rather than those more likely, by virtue of their education or previous military service, to enter the officer ranks or not serve at all. In other words, the YATS surveys only the military-available population.

Accordingly, in the 1986 YATS, for example, only 6,775,000, or 59 percent, of the entire 16- to 21-year-old male population of 11,457,000 were covered by the survey.¹

Table 1.3 shows that the size of the YATS 16- to 21-year-old male population was highest in 1984, totaling 8,065,000. In the succeeding years this population decreased by 172,000 to 7,893,000 in 1985, and by 1,118,000 to 6,775,000 in 1986. Compared to the 1983 population total of 6,891,000, the 1986 population decreased by 116,000. The estimated size of the 16- to 21-year-old male population expressing a positive propensity toward serving in the military shows a steady decline from 1983, when 2,441,000 expressed positive propensity, to the 1986 total of 2,169,000, a decrease of 272,000. Clearly, the potential recruiting difficulty resulting from the decrease in the size of the total population is compounded by the decrease in the estimated portion of that population expressing positive propensity.

Given the downward trend in the size of the total population, even if the percentage expressing positive propensity remains unchanged, the size of the interested population will decrease. Even if positive propensity in 1986 had reached 34.7 percent (2.7 percentage points higher than the reported level of 32.0 percent), the number of positive propensity youths would have remained unchanged at the 1985 level of 2,349,000, when the positive propensity level was 29.8 percent.

¹/ Care should be taken in evaluating the results of the analyses that follow. The YATS data are based on a sample of the population meeting the various screening criteria and are thus subject to sampling error. For example, the level of positive propensity in 1986 is reported to be 32.0 percent (representing 2,169,000 young males) with a sampling error of 0.8 percent (106,000 young males). This means that, at a confidence level of .05, the true percentage of young males expressing positive propensity in 1986 falls within the range of 30.4 to 33.6 percent (2,063,000 to 2,275,000). The analyses employ the reported point estimates and thus, to the extent of sampling error, the results could be different.

Table 1.3. YATS 16- to 21-Year-Old Males Expressing Positive Propensity and Population Counts in Thousands

	Survey Year			
	1983	1984	1985	1986
Expressing Positive Propensity	35.4%	29.9%	29.8%	32.0%
Population Expressing:				
Positive Propensity	2,441	2,414	2,349	2,169
Negative Propensity	<u>4,450</u>	<u>5,561</u>	<u>5,544</u>	<u>4,606</u>
Total	<u>6,891</u>	<u>8,065</u>	<u>7,893</u>	<u>6,775</u>

In a similar vein, the effect of the 5.5 percentage point decrease in the level of positive propensity that occurred between 1983 and 1984 was cushioned by the increase in the size of the total population of 1,174,000 between these two years. Had the size of the 1984 total population remained unchanged from 1983, the size of the 1984 positive propensity subpopulation would have been 2,060,000. Instead of the actual estimated decrease of 27,000 young males expressing positive propensity, the decrease would have been larger by 354,000, or 381,000.

Given that the size of the total 16- to 21-year-old male population is expected to decline during the next few years, any future decreases in the positive propensity percentage will not be cushioned as in 1984. More importantly, even if the positive propensity percentage remains unchanged, the number of positive propensity young males will decrease. Accordingly, the positive propensity percentage must increase for the total positive propensity population just to remain the same. For example, if we apply the Census Bureau's estimate of a 1.8 percent decrease in the size of the

total 16- to 21-year-old male population from 1986 to 1987, yielding a 1987 YATS population of 6,655,000, positive propensity must increase by six-tenths of a percentage point, to 32.6 percent, to yield the same 2,169,000 young males expressing positive propensity in 1986.

Table 1.4 illustrates the relationship of the size of the total young male population, as represented by the YATS sample, to the actual requirements of the Services, as represented by actual numbers of 16- to 21-year-old male, non-prior service accessions. The number of accessions ranged from a low of 214,000 in FY 1985 to a high of 227,700 in FY 1984 and represented 82 to 84 percent of all male, non-prior service accessions. As shown, the ratio of accessions to the total population ranges from a high of 1:30 in FY 1986 to a low of 1:37 in FY 1985. The year-to-year fluctuations in the ratios are not systematic and reflect the year-to-year changes in both the number of accessions and size of the total population.

Table 1.4. YATS 16- to 21-Year-Old Male Population, Non-prior Service Accessions, and Ratio of Accessions to the YATS Population

(population counts in thousands)

	1983	1984	1985	1986	1987 Estimate
YATS Population	6,891	8,065	7,893	6,775	6,655
Non-prior Service Accessions	217.1	227.7	214.0	224.1	218.4
Ratio of Accessions to YATS Population	1:32	1:35	1:37	1:30	1:30

For FY 1987, where the number of 16- to 21-year-old male, non-prior service accessions is estimated to be 218,400 and the total population is estimated to decline by 1.8 percent to 6,655,000, the ratio of accessions to population will be 1:30. A comparison of FY 1983 actual results with FY 1987 estimates clearly shows that recruiting has become more difficult. Compared to FY 1983, the YATS population is smaller by 236,000 while the

number of accessions is nearly the same, resulting in an increase in the ratio of accessions to population from 1:32 to 1:30. The difficulty will be further increased should the need for larger numbers of new accessions occur.

Thus far, this analysis has not considered the relationship of propensity to actual enlistment behavior. Orvis and Gahart (1985) found a strong relationship between enlistment propensity, as measured by YATS, and actual enlistment behavior. Of the total number of YATS respondents interviewed between 1976 and 1980 who actually enlisted into the active-duty military, 54 percent had earlier expressed a positive propensity toward serving. The remaining 46 percent of YATS enlistees had expressed a negative propensity toward serving. Taking these findings into consideration by applying these enlistment rates to the actual number of young male, non-prior service accessions, we can further refine the analysis of recruiting requirements on the total young male population. The results are presented in Table 1.5.

As can be seen at the bottom of this table, the ratio of accessions from the subpopulation expressing positive propensity is substantially higher than from the subpopulation expressing negative propensity. Further, the ratio of accessions to the negative propensity population has fluctuated over a much wider range than has the ratio of accessions to the positive propensity subpopulation. These results reinforce the value of propensity, when expressed in terms of population counts, as a measure of recruiting difficulty.

Even though the 32.0 percent level of positive propensity for 1986 appears to be "good news" when compared to the 1985 level of 29.8 percent (even though the change is not a statistically significant increase), it is

Table 1.5. YATS 16- to 21-Year-Old Males Expressing Positive Propensity, Population Counts by Propensity, Non-prior Service Accessions by Propensity, and Ratio of Accessions to Population by Propensity

(population counts in thousands)

	1983	1984	1985	1986
Expressing Positive Propensity	35.4%	29.9%	29.8%	32.0%
Population Expressing:				
Positive Propensity	2,441	2,414	2,349	2,169
Negative Propensity	4,450	5,561	5,544	4,606
Total	<u>6,891</u>	<u>8,065</u>	<u>7,893</u>	<u>6,775</u>
Non-prior Service Accessions Assumed to Express:				
Positive Propensity	117.4	123.0	115.6	121.0
Negative Propensity	99.7	104.7	98.4	103.1
Total	<u>217.1</u>	<u>227.7</u>	<u>214.0</u>	<u>224.1</u>
Ratio of Accessions to YATS Population Assumed to Express:				
Positive Propensity	1:21	1:20	1:20	1:18
Negative Propensity	1:45	1:53	1:56	1:45
Total	<u>1:32</u>	<u>1:35</u>	<u>1:37</u>	<u>1:30</u>

not "good enough news." Though these results are suggestive of increased interest in the military, when one looks beyond the simple percentages and looks at population numbers, he finds that recruiting may actually become more difficult. Just to stay even, in terms of relative recruiting requirements on the positive and negative propensity segments of the youth population, propensity would have had to increase to 34.7 percent. Only a level of positive propensity higher than this could be considered truly "good news."

To this point the analysis has considered all members of the young male population as if they were all fully qualified for entry into the Services. But, as has been noted, the military is most interested in, and has successfully obtained, high quality accessions, those young men who have earned a high school diploma and who score in AFQT Categories I-III (at or above the 31st percentile on the AFQT).

As shown in Table 1.6, percentile scores on the AFQT are grouped into five categories that summarize trainability. Persons scoring in Categories I and II tend to be above average in trainability; those in Category III, average; those in Category IV, below average; and those in Category V, markedly below average and are, under current law, not eligible to enlist. Overall, 69 percent of the 1980 youth population, aged 18-23 years, scored at or above the 31st percentile on the AFQT and fell in the Category I-III range. The Services prefer these youth, in contrast to those who fall into Category IV, because training time and costs are lower and they are more likely to qualify for training in a wider range of military occupations.

Orvis and Gahart (forthcoming) have developed a methodology for predicting the AFQT categories (CAT I-IIIA versus CAT IIIB-V) of the YATS respondents which we will now apply to the requirements analysis.²

²/ This dichotomy results in a more strict definition of high quality than the one described earlier. The Orvis and Gahart (1987) prediction algorithms do not permit a split between AFQT subcategories. Accordingly, the AFQT category split used here produces a more conservative result than would a CAT I-III versus CAT IV-V split. In addition, an undetermined number of youth are included in the CAT IIIB-V group who would, in fact, fall in the CAT V AFQT category and thus, under current law, would be excluded from military service. Accordingly, the number of recruitable young males in the CAT IIIB-V group is actually smaller than that estimated in Table 1.7.

Table 1.6. Armed Forces Qualification Test (AFQT) Categories by Corresponding Percentile Score Range and Distribution of 18- to 23-Year-Olds in 1980

AFQT Category	Percentile Score Range	Population Distribution
I	93 - 100	8%
II	65 - 92	28
III	31 - 64	34
IV	10 - 30	21
V	1 - 9	<u>9</u>
		<u>100%</u>

Source: Department of Defense (March 1982), 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).

Presented in the upper third of Table 1.7 is the distribution of the 1986 YATS 16- to 21-year-old male population, excluding high school juniors and sophomores, by propensity and predicted AFQT category. This subpopulation totals 5,016,000 and represents 74.0 percent of the total YATS 16- to 21-year-old male population. Of this subpopulation, 1,352,000 (27.0 percent) expressed a positive propensity toward serving in the military and 3,663,000 expressed a negative propensity. Compared to the positive propensity percentage of 32.0 percent for the entire YATS population, positive propensity for this subpopulation is clearly lower. As to AFQT, 2,801,000 (55.9 percent) were predicted to fall in CAT I-IIIA and 2,214,000 (44.1 percent) were predicted to fall in CAT IIIB-V. In the total YATS population of 16- to 21-year-old males, the comparable AFQT split was 54.7 percent versus 45.3 percent, respectively. Thus, the quality of the YATS subpopulation that excludes high school juniors and sophomores is about the same as that of the total population.

Table 1.7. 1986 YATS 16- to 21-Year-Old Male Population
(excluding High School Juniors and Sophomores),
FY 1987 Accessions, and Ratios of Accessions to
YATS Population by Propensity and AFQT Category

(population counts in thousands)

1986 YATS Population (excluding High School Juniors and Sophomores)						
Propensity	Predicted AFQT Category				Total	
	I-III A		IIIB-V			
	Number	Percent	Number	Percent	Number	Percent
Positive	561	11.2	791	15.8	1,352	27.0
Negative	2,240	44.7	1,423	28.3	3,663	73.0
Total	2,801	55.9	2,214	44.1	5,016	100.0

Estimated FY 1987 Accessions Assuming
63 Percent in CAT I-III A and 54 Percent with Positive Propensity

Propensity	Predicted AFQT Category				Total	
	I-III A		IIIB-V			
	Number	Percent	Number	Percent	Number	Percent
Positive	74.4	34.0	43.6	20.0	118.0	54.0
Negative	63.3	29.0	37.2	17.0	100.5	46.0
Total	137.7	63.0	80.8	37.0	218.5	100.0

Ratio of Accessions to Population Assuming
63 Percent in CAT I-III A and 54 Percent with Positive Propensity

Propensity	Predicted AFQT Category		Total
	I-III A	IIIB-V	
Positive	1:8	1:18	1:11
Negative	1:35	1:38	1:36
Total	1:20	1:27	1:23

In Table 1.5 the analysis was refined to take into consideration the finding that 54 percent of all accessions historically came from the positive propensity subpopulation. In the middle third of Table 1.7 we expand on this consideration and further classify the FY 1987 16- to 21-year-old male, non-prior service accession goal of 218,500 by AFQT category. It is assumed that the actual FY 1986 percentage of all CAT I-III A, non-prior service accessions of 63 percent will apply to the FY 1987 accessions. In addition, it is assumed that 63 percent of the accessions from both the positive and negative propensity subpopulations will fall in CAT I-III A. Accordingly, 137,700 young male accessions would be expected to fall in CAT I-III A and 80,800 would fall in CAT IIIB-V. Taking both propensity and AFQT category simultaneously, the largest number of accessions, 74,400, or 34 percent, would come from the positive propensity, CAT I-III A subpopulation while the fewest number, 37,200, or 17.0 percent, would come from the negative propensity, CAT IIIB-V subpopulation.

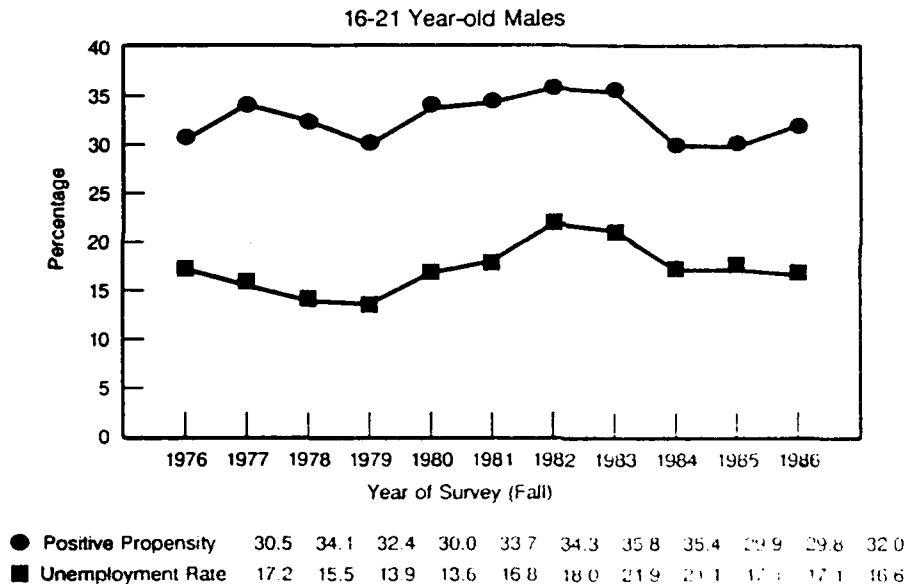
The bottom third of Table 1.7 presents the ratios of recruits to the YATS subpopulation. Overall, 1 of every 23 members, or 4.4 percent, of the total subpopulation must be recruited. In terms of AFQT category, 1 of every 20 accessions would come from the CAT I-III A subpopulation compared to 1 of every 27 from the CAT IIIB-V subpopulation. In terms of propensity, 1 of every 11 accessions would come from the positive propensity subpopulation compared to 1 of every 36 from the negative propensity subpopulation. The group with the lowest ratio of accessions to population is the negative propensity, CAT IIIB-V group, 1 of every 38, and the group with the highest ratio of accessions to population is the positive propensity, CAT I-III A group, 1 of every 8.

Clearly, the challenge facing military recruiters is a difficult one. Granted that the analysis that has been presented contains a number of assumptions and applies experience rates which may differ from what might be expected in the future; however, the general direction of the results is not likely to change. Despite these findings, there is at least one counterbalancing factor which we shall now discuss.

D. Recruiting and Youth Unemployment

Conventional recruiting wisdom holds that when economic conditions are good, as represented by low unemployment, interest in the military and the ability of the Services to successfully recruit deteriorates, and vice versa. Indeed, the data from the YATS for young males generally supports this view. As shown in Figure 1.3 (this figure is also presented in Chapter 5 of this report and is discussed in more detail there), in eight of the past ten years the direction of year-to-year changes in the rate of youth unemployment has been matched by similar directional changes in the level of positive propensity.

Figure 1.3. Youth Attitude Tracking Study Annual Unemployment Rate and Positive Propensity for Any Active Duty Service, 1976-1986



In 1983, when commenting on the relationship of unemployment rates and recruiting success in terms of the conventional wisdom, it was concluded that greater competition between the Services and the civilian employment sector in attracting qualified recruits could be expected. The implication was that, all else remaining equal, the Services were likely to experience significant recruiting difficulties.

Since November 1982, when the aggregate national civilian unemployment rate reached a post-World War II high of 10.7 percent, the unemployment rate has been steadily declining. For young males, aged 16-21, the 1982 unemployment rate stood at 21.9 percent. Since then it too has declined, standing at 16.6 percent in November 1986. The continued decline in unemployment and the continued recruiting successes of the Services, a result contrary to conventional wisdom, suggest that the 1983 conclusion was incorrect. Indeed, it appears to some that the link between the economy and recruiting success may have been broken, even if the relationship between unemployment and positive propensity has not.

A major contribution to this result may be what has been called the "deindustrialization of America."³ Prior to 1980, an arbitrarily chosen point in time, in good economic times and low unemployment, a young high school graduate who did not go on to college had a reasonable chance of getting an entry-level job in heavy manufacturing (e.g., steel-making or automobile assembly). These types of jobs were heavily unionized and offered highly competitive wages and benefits, real job security, and opportunities for training in apprenticeship programs. In other words, this young person had a reasonable economic future.

In contrast, the situation is different in 1987. Today, the kinds of jobs with good economic futures that were available to a young high school graduate before 1980 have become fewer. The size of the unionized work force has declined, and the system of apprenticeship training for young, untrained union members has all but disappeared. Heavy manufacturing is both declining and undergoing a technical revolution (e.g., automobile assemblers being replaced by robots which do a better job, faster). The post-Depression industrial economy is being replaced by a new service and information economy.

^{3/} This term summarizes the fundamental structural changes in the composition of the American economy. These changes and their effects are described in more detail in the December 1986 study, The Great American Job Machine: The Proliferation of Low Wage Employment in the U.S. Economy, conducted for the Congressional Joint Economic Committee.

The young, untrained high school graduate must now look for a job in the service sector. However, he is also faced with a new problem where the kinds of employment opportunities available to him take a dichotomous form. On the one hand, many of the service-sector jobs, those offering good wages and an economic future, such as data processing, require education and training beyond high school. On the other hand, those jobs not requiring additional education, such as food-service workers, offer only the minimum wage and little opportunity for advancement. In addition, the young high school graduate is facing increased competition for jobs from an expanding female work force, immigrants and older, displaced workers. The young high school graduate without technical training is faced with the prospect of being, at worst, unemployed or, at best, underemployed (employed in an occupation with little potential for advancement). In either case there is reduced opportunity for him to match his own parents' standard of living, much less to do better.

To look at only aggregate unemployment rates as one attempts to look into the future of military recruiting may be misleading. While unemployment is indeed down substantially since 1982, it is being replaced by underemployment. In March 1987, the aggregate national civilian unemployment rate reached its lowest point in seven years. Compared to February 1987, however, the total number of jobs in manufacturing had declined, the number of service jobs had increased, and fewer people were looking for work.

What is a young high school graduate to do? He can aspire to a high-level service job and return to school to prepare himself. However, the cost of higher education continues to increase and the availability of educational assistance has decreased, making this course a financially difficult one. For this young person and his less educationally inclined peers, the military offers an answer. Although military compensation has in recent years lagged behind overall civilian earning levels, it still pays higher than the minimum wage. For many young people, the military offers opportunities to learn a skill, the equivalent of the apprenticeship programs, that may be applied to a civilian job after they leave the

military. Finally, the military offers benefits to those who wish to pursue higher education. From this perspective, the Joint Recruiting Advertising Program slogan, "It's a great place to start," describes reality.

Thus, the real link between the economy and recruiting success may not be unemployment but underemployment among young people. The former may have been replaced by the latter. The link may not have been broken but simply changed. While the young high school graduate may suffer economically because of reduced employment opportunities, he can improve his chances for an economic future by joining the military. He benefits from the increased opportunities for personal economic success, and his Nation benefits by his contribution to the common defense.

E. Conclusion

Even as the size of the youth population declines, making recruiting more difficult, it seems reasonable to suggest that this impediment may be partially offset by underemployment among military-age youth. The replacement of well-paying manufacturing jobs by lower-paying services may make military service a more attractive option, enabling the Services to recruit sufficient numbers of high quality youth.

The two factors affecting recruiting discussed in this chapter are beyond the control of the Services. Clearly, there is nothing they can do to directly counter the absolute decline in the size of the youth population. The Services can, however, use the results of deindustrialization to their advantage. By targeting their effort resources toward those youth most affected, the Services can mitigate the effects of the population decline.

Maintaining the levels of recruiting success is not an insurmountable task. By recruiting quality youth today for longer enlistment terms with the likelihood of improved retention, the resultant smaller requirements for new recruits will make the Services' task less difficult.

In recent years, the Services have made efficient use of available recruiting resources, and offered recruits improved pay and educational benefits, and a good quality of life. These factors have certainly contributed to the success of the Armed Forces and can continue to do so in the future.

2. INTRODUCTION TO THE 1986 YOUTH ATTITUDE TRACKING STUDY II

Effective targeting of recruiting efforts requires that the Department of Defense understand the backgrounds, attitudes and motivations of young men and women, and their intentions to serve in the military. In the past, two survey series provided data on these issues: the Youth Attitude Tracking Study (YATS) and the Reserve Component Attitude Study (RCAS). The Youth Attitude Tracking Study II (YATS II) is a reconfigured survey begun in 1983 that merged the former YATS and the non-prior service portion of RCAS into a single study. This chapter provides an overview of the 1986 YATS II survey.

A. 1986 YATS II Objectives

The conduct of YATS II in 1986 was guided by a number of broad objectives:

- Assess current levels of propensity to enlist in the active military service and in the Reserve Component
- Assess trends in propensity to enlist in the active military
- Measure attitudes and motivations of potential recruits, especially as these relate to enlistment propensity
- Determine the variables that predict propensity for the young market groups
- Provide an AFQT-based market segmentation analysis for young males and young females

The 1986 YATS II analyses build upon the 1983, 1984 and 1985 YATS II surveys, as well as upon the previous YATS and RCAS studies to provide an integrated understanding of the factors affecting enlistment propensity of men and women.

B. 1986 YATS II Features

The 1986 YATS II questionnaire has remained substantively similar to the 1985 instrument. The only major changes consisted of deletion of items concerning job characteristics and their likelihood of achievement in military versus civilian job settings, and the addition of a number of items dealing with respondents' perceptions of the active Services. Overall, the format for the current report is patterned after the 1985 YATS II final report. For example, data are presented on the active Services and Reserve Component as a function of topic area. Also, propensity to join the military is used as an organizing theme in presentation of the data. However, there are a number of distinctive features which characterize the 1986 report and serve to distinguish it overall from earlier reports. These features are discussed below.

1. Distinctive Features

The reconfiguration of YATS into YATS II included changes in the data collection methods and analytical approaches. The underlying goal was to use state-of-the-art technology and sophisticated analyses to make the data more useful. Some of the distinctive features incorporated into the YATS II since 1983 are:

- An advanced Computer Assisted Telephone Interviewing (CAII) system for conducting interviews. This system handled screening and interviewing activities, issuing of phone numbers, and control of call-back appointments. It also controlled skip patterns in the questionnaire, permitted resolution of inconsistent responses for various key items, and created a data set of high quality information.
- A sophisticated sampling design based on the Waksberg (1978) random digit dialing procedure. The design allocated the sample across 66 Military Entrance Processing Stations (MEPS) to meet DoD-specified precision requirements.

Some of the distinctive features incorporated into the 1986 YATS II are:

- The redefinition of the older male market group to include only 22-24 year olds. This contrasts with the 22-29 year olds used in 1983 through 1985. In addition to increasing the relative power of the analyses performed on this restricted group, the redefinition necessitates a similar restructuring of prior years' older male market segments for cross-year comparisons with the current group of older males.
- The addition of a market group of 22-24 year old females (older females).
- The use of multivariate (regression) analyses to increase understanding of the contribution made by combinations of variables in predicting propensity for the younger market groups.
- An expanded treatment of the effect of economic conditions on propensity for young males and young females utilizing average local unemployment rates and self-reported employment status.
- A new market segmentation approach (based on high school status and predicted Armed Forces Qualification Test (AFQT) scores) which replaces the Recruiting Priority Groups used in the 1984 and 1985 YATS II analyses. This new approach is considered for young males and young females.

C. Propensity as an Organizing Theme

Assessing respondents' positive propensity (i.e., responses that individuals "definitely" or "probably" will join at least one of the Services) is the primary focus of the 1986 YATS II survey, as it has been for the entire Youth Attitude Tracking Study series. Propensity is the organizing theme for the analyses and presentation of descriptive results of the various market groups. Analyses examine levels of propensity among

the four market groups and the relationship of propensity to other variables.

3. Market Groups

YATS II respondents were drawn from four groups corresponding to distinct recruiting markets:

- Males aged 16-21 (young males)
- Males aged 22-24 (older males)
- Females aged 16-21 (young females)
- Females aged 22-24 (older females).

The young male market was sampled most heavily. Consistent with past YATS surveys, age-eligible individuals with current or prior military service (except high school ROTC) and education beyond the second year of college were not eligible.

Comparisons of current YATS II data with prior YATS results for young males, young females, and older males (for 1983-1985) require that YATS data collected before 1983 be reweighted to be comparable to the 1983-1986 surveys. Older male data for 1983-1985 also need to be reanalyzed for the restricted age subset of 22-24 years. The procedures for reweighting are described in the 1984 YATS II report (Appendix E).¹

C. Report Organization

This report describes the methodology employed and the results obtained for the 1986 YATS II survey. The report consists of three main parts:

¹/ Appendix E from the 1984 YATS II report is also available from the Defense Manpower Data Center (address on inside front cover).

- Background and Methodology (Chapters 1-3)
- Market Group Analyses (Chapters 4-10)
- Market Segmentation Analyses (Chapter 11).

Some changes in table presentation have been made in the current report. More specifically, a number of tables in the text were simplified, and graphs were used to clarify data presentation. Additional detail is often provided in tables included in Appendix C. Where discussion in the text necessitates reference to Appendix C tables, more detail is given regarding referenced percentages than is the case when referencing chapter tables.

Supplementary tabulations by Active Service Propensity and Reserve Component Propensity are published in a companion volume (Bray, Ostrove and Whitacre, 1987). It provides the distributions of responses to individual questionnaire items as a function of market group and propensity.

1. Background and Methodology

Chapters 1-3 provide information on the general background and methodology of YATS II. Chapter 1 revisited a number of topics discussed in the 1983 YATS II report, including a review of the recruiting successes of the most recent years and the likely effects of the declining size of the youth population and changing structure of the U.S. economy on future recruiting efforts. Chapter 2 provides a general introduction and overview of the 1986 YATS II survey. Chapter 3 provides a brief overview of the methodology for the current study, including the data collection procedures, performance rates and characteristics of the survey population.

2. Market Group Analyses

Chapters 4 through 10 present results for analyses of the four market groups of young and older males and young and older females.

Chapter 4 analyzes propensity to join the military. We discuss results for traditional measures of Service-specific and composite propensity for active Services and for the Reserve components. This chapter also presents trends in Composite Active Propensity for young males, older males and young females and presents positive propensity results as a function of various sociodemographic variables.

Chapter 5 examines enlistment propensity as a function of local economic conditions. Trend analyses of the relationship of national unemployment rates and positive propensity are performed as in past years. In addition, we present analyses which examine the relationship of aggregate local area average unemployment rates with associated local propensity levels among young men and women, and examine the effects of reported employment status on propensity.

Chapter 6 examines propensity to enlist in the military in the context of competing military and civilian alternatives. The likelihood of military plans relative to other future occupational plans is examined as is the specificity of intentions regarding active Service and the Reserve component. Attitudinal and normative influences on propensity are also presented and discussed.

Chapter 7 examines the relationships between enlistment factors and Active and Reserve propensity to enlist for the four market groups. Data concerning the active Services primarily examine the effect on propensity of knowledge of monthly starting pay and educational benefits. Data concerning the Guard/Reserve focus on such issues as the effects of hypothetical enlistment bonuses and the perceived effects of Guard/Reserve participation on one's civilian job.

Chapter 8 presents data regarding the degree of respondents' exposure to military information sources. This includes general awareness of advertising, recognition of advertising slogans, awareness of advertising in specific media and (for young respondents) receipt of direct mail recruiting literature. In addition, perceived images of the Services are discussed.

Chapter 9 examines behaviors which can be conceived of as active information-seeking efforts. Initially, we present data for information seeking via mail and telephone, availability and use of school computerized career information systems, and informal discussions with others about military service. Respondents' current and anticipated experience with taking the Armed Services Vocational Aptitude Battery (ASVAB) is then presented. Chapter 9 concludes with an examination of recruiter contact, both with regard to how and when it was initiated. Also provided is a comparison of the characteristics of respondents who have and have not spoken with a recruiter.

Chapter 10 reports the results of an examination of positive active propensity utilizing multiple regression analyses. Sociodemographic, economic and psychological/behavioral variables are examined to determine how effectively they predict positive propensity (the criterion variable) when looked at in combination, and how each variable contributes independently to the prediction of the criterion.

3. Market Segmentation Analyses

Chapter 11 presents the results of a market segmentation analysis for young males and young females. Four major educational status groups were defined: High School Graduates; High School Seniors; Younger High School Students; and Non-completers. Based on a procedure developed by Orvis and Gahart (1987), the graduate and student groups were each dichotomized to reflect predicted standing on the Armed Forces Qualification Test (Categories I-IIIA, Categories IIIB-V). This yielded a total of seven groups. These breakdowns are examined with regard to propensity and selected propensity-related issues, including actions taken toward enlistment, recruiter contact, and future intentions regarding education and occupations.

3. METHODOLOGY OF YATS II

The 1986 YATS II survey utilized a Computer Assisted Telephone Interviewing (CATI) system to gather information of the propensity of a national sample of youth and young adults to join the military. This chapter provides an overview of the sample design, data collection procedures, survey performance rates, and organization and content of the survey questionnaire for YATS II. The chapter concludes with a brief description of the 1986 YATS II survey respondents.

A. Sampling Design Overview

The YATS II survey was designed to obtain information from four market groups of interest to the military:

- Young Males aged 16-21
- Older Males aged 22-24
- Young Females aged 16-21
- Older Females aged 22-24.

To be eligible for inclusion in this study, individuals had to reside in the continental United States in households or noninstitutional group quarters with telephones. Consistent with past YATS surveys, eligible individuals could have no prior military service (other than high school ROTC) and could have completed no more than two years of college.

The sample size and allocation for each of the four markets were determined from DoD specifications of precision requirements for estimates of propensity (see Appendix A). Young males were the market of primary interest for YATS II and, accordingly, the sample size was determined by the number of households needed to meet the precision requirements specified for this market group. The number of households required for young males produced more eligible individuals than were needed to satisfy the precision requirements for the other three market groups, so subsamples of these groups were selected for interview.

The YATS II sampling design is based on the Mitofsky/Waksberg random digit dialing procedure (Waksberg, 1978). Under this procedure, telephone numbers are called in two stages to identify households. First-stage calls are made to randomly selected telephone exchanges. Exchanges yielding a household on the first number called are designated as clusters. In the second stage, numbers within these clusters are generated to find additional households. This approach is efficient because residential telephone numbers are frequently assigned to the same exchange. Thus, once an exchange containing a household (i.e., a cluster) is identified, numbers subsequently called in the same exchange are more likely to be assigned to households than numbers in other exchanges. A detailed discussion of these procedures is provided in Appendix A.

B. Data Collection Overview

The 1986 YATS II used a Computer Assisted Telephone Interviewing (CATI) system for all phases of the data collection. With this system, questionnaires for screening (eligibility determination), interviewing and verification are programmed, entered and stored within the computer. Instructions and questionnaire items appear on the screen in the proper sequence, greatly simplifying the interviewer's task and allowing for the resolution of inconsistent, invalid and incomplete responses as an ongoing part of the interview.

A two-phased approach to data collection was taken during the 16-week period from July 28 to November 12, 1986. Phase 1 consisted of dialing to identify households and Phase 2 consisted of screening households to identify members eligible for the study and then interviewing these individuals. Overall, 188,471 telephone numbers were called to identify 81,446 households. From these households, 12,816 eligibles for the study were identified and selected for interviews. Analyses for the study were based on 10,743 interviews. Further details about the data collection appear in Appendix B.

C. Survey Performance Rates

Performance rate information is important to assess the quality of survey field operations and the potential for nonresponse bias in the data. Table 3.1 presents two performance rates of interest: interview completion rates and overall response rates for each of the four market groups.

Table 3.1. Survey Performance Rates

Performance Rate	Young Males	Older Males	Young Females	Older Females
Interview Completion Rate ^a	80.4	71.2	81.2	72.9
Overall Response Rate ^b	77.1	68.2	78.0	69.9

Note: Tabled values are percentages.

^aPercentage of completed interviews out of total eligibles identified/selected.

^bHousehold screening rate (percentage of second stage units screened out of those identified) multiplied by Interview Completion Rate.

Interview completion rates were highest among young females (81.2 percent) followed by young males (80.4 percent), older females (72.9 percent), and older males (71.2 percent). Final response rates, which were computed by multiplying the interview completion rates by the household screening rates, were 77.1 percent for young males, 68.2 percent for older males, 78.0 percent for young females, and 69.9 percent for older females.

Numerous calls and attempts to overcome initial refusals were conducted to complete household screening for all sample numbers and to administer a questionnaire to all selected eligibles. A thorough effort was made to obtain the highest possible response rates within the given schedule constraints. Additional details about the computation of response rates appear in Appendix B.

D. Survey Questionnaire

Data for the YATS II survey consist of responses to a questionnaire administered in a 30-minute computer assisted telephone interview. The 1986 questionnaire is similar to the 1985 instrument. Appendix E provides a cross-reference of items on the 1983, 1984, 1985 and 1986 questionnaires. The 1986 questionnaire was revised based on pretest results and on recommendations from the staffs within the Department of Defense and RTI. Two aspects of the interview instrument are briefly considered: its basic content and the general configuration of the question sets.

1. Content of the Interview

The survey questionnaire for YATS II appears in Appendix F and consists of four sections. Section A consists primarily of education and employment items. Sections B and C contain items about propensity toward the active Services and the Reserve Component, and general awareness about military pay, bonuses, educational benefits, requirements of the Reserve Component, and other selected issues. Section D contains items on advertising, recruiter contact, and respondent demographics.

2. Configuration of Question Sets

In the 1986 YATS II questionnaire, responses to some questions routed the interviewers to other questions or led them to skip over one or more questions that did not pertain to a particular respondent. These skip patterns helped minimize respondent burden while obtaining the necessary information. For example, respondents who said they did not plan to attend school or a training program in the fall (Q407) were not asked about the kind of school in which they would be enrolled (Questions 408A-408C). The latter questions (called "filtered" questions) were asked only of the subset of individuals who were planning to attend school. Accordingly, fewer responded to filtered questionnaire items than to the questionnaire as a whole. Routing (skip) pattern instructions appear in the questionnaire (Appendix F).

Questions 551-563 apply only to active duty service and were asked of all respondents. Questions 571-582 apply only to service in the Reserve Components and were asked of all older males and all females but only half of the young males. The numbers of analysis interviews for these subsets of items and for the total study appear in Table 3.2.

Table 3.2. Question Sets and Sample Respondents

Tabulation Part	Question Sets	Young Males	Older Males	Young Females	Older Females
All respondents	403-525 601-717	5,382	1,068	3,191	1,102
Active only (Part 1)	554-563	5,382	1,068	3,191	1,102
Reserve only (Part 2)	571-582	2,613	1,068	3,191	1,102

Note: Item numbers 526-553, 564-570, and 583-600 were not used in the questionnaire. Table entries indicate the total number of analysis interviews for the question sets. Numbers responding to specific items vary due to missing data questionnaire routing (skip) patterns.

E. Characteristics of Survey Population

Estimates of the sociodemographic characteristics of the 1986 survey population are presented in Table 3.3. This table and those in the following chapters often present two numbers in each cell. The first number is an estimate of the percentage of the population with the characteristics that define the cell. The second number, in parentheses, is the standard error of the estimate. Standard errors represent the degree of variation associated with taking observations on a sample rather than on every member of the population. A detailed discussion of standard errors and the construction of confidence intervals is presented in Appendix A.

Table 3.3. Estimates of Sociodemographic Characteristics of Survey Population

Characteristic	Young Males (n=5,382)	Older Males (n=1,068)	Young Females (n=3,191)	Older Females (n=1,102)
<u>Age^a</u>				
16 (22)	26.5 (0.7)	36.7 (1.7)	23.9 (0.8)	36.5 (1.7)
17 (23)	22.7 (0.7)	32.2 (1.7)	22.8 (0.8)	34.3 (1.6)
18 (24)	17.1 (0.7)	31.0 (1.6)	17.1 (0.7)	29.2 (1.6)
19	14.1 (0.6)	-	14.9 (0.7)	-
20	10.7 (0.6)	-	10.8 (0.6)	-
21	8.9 (0.5)	-	10.7 (0.6)	-
<u>Race/Ethnicity</u>				
White	76.1 (0.8)	79.7 (1.4)	76.9 (0.9)	78.1 (1.5)
Black	12.0 (0.6)	10.4 (1.1)	12.1 (0.7)	10.0 (1.0)
Hispanic	8.5 (0.5)	8.5 (1.0)	8.3 (0.6)	9.2 (1.0)
Other	3.3 (0.3)	1.3 (0.4)	2.7 (0.3)	2.6 (0.6)
<u>Marital Status</u>				
Never married	96.3 (0.3)	62.3 (1.7)	87.7 (0.7)	35.2 (1.7)
Currently married	3.2 (0.3)	33.9 (1.7)	10.8 (0.6)	56.7 (1.7)
Other ^b	0.4 (0.1)	3.7 (0.1)	1.5 (0.2)	8.1 (0.9)
<u>Educational Status^c</u>				
Attend school	69.3 (0.8)	13.2 (1.1)	66.9 (0.9)	13.5 (1.2)
Not attend school	30.0 (0.8)	85.7 (1.2)	32.7 (0.9)	86.4 (1.2)
Don't know	0.6 (1.3)	1.2 (0.4)	0.5 (0.1)	0.2 (0.1)
<u>Years of Education Completed</u>				
Less than 10	9.2 (0.5)	5.7 (0.9)	5.5 (0.4)	5.6 (0.8)
10	23.7 (0.7)	4.9 (0.7)	21.5 (0.8)	4.1 (0.7)
11	26.5 (0.7)	9.0 (1.1)	25.8 (0.9)	7.3 (1.0)
12	31.1 (0.8)	60.9 (1.8)	35.2 (1.0)	63.3 (1.7)
Some vocational school	0.7 (1.5)	2.6 (0.6)	1.3 (0.3)	2.7 (0.5)
Some college	8.8 (0.5)	16.9 (1.4)	10.6 (0.6)	17.0 (1.3)
<u>Employment Status</u>				
Employed full-time	29.7 (0.8)	82.2 (1.3)	22.8 (0.8)	48.1 (1.8)
Employed part-time	29.6 (0.8)	8.6 (1.0)	32.9 (0.9)	16.9 (1.3)
Not employed, looking	21.4 (0.7)	6.7 (0.9)	20.9 (0.8)	10.7 (1.0)
Not employed, not looking	19.3 (0.7)	2.5 (0.5)	23.4 (0.8)	24.3 (1.6)

Note: Tabled values are column percentages with standard errors in parentheses. Percentage distributions may not sum to 100.0 due to rounding.

^aAges 22-24 apply to older males and older females.

^b"Other" includes widowed, divorced, and separated.

^cData were collected during August, September, October, and November 1986. The question before October 1 asked about planned status for October; the question after October 1 asked about actual status.

Source: Questions 403, 404, 407, 416, 417, 713C, 714, 715.

Unweighted sample sizes are presented for each of the tables, indicating the number of interviews on which the estimates are based. Estimates in the tables, however, are based on weighted data.

As shown in Table 3.3, about one-fourth of the young males and young females are age 16, while another one-fifth of both groups are 17. Decreasing percentages of eligible respondents appear as age increases from 18 to 21. Older males and older females show a more even distribution across years. Reflecting the general population, the majority of respondents interviewed are white, followed by Blacks and Hispanics. Other differences between the groups are primarily a function of age differences between the younger respondent groups on the one hand and the older respondent groups on the other. For example, most young males (96 percent) and young females (88 percent) have never been married, compared with about two-thirds of older males (62 percent) and one-third of the older females (35 percent). More than 65 percent of young males and females are currently in school compared with only 13-14 percent of older males and females. Fewer than half of the young males (41 percent) and young females (47 percent) had completed 12 or more years of school compared with 80 percent of older males and 83 percent of older females. Over half of the young males (59 percent) and young females (56 percent), compared with 91 percent of the older males and only 65 percent of the older females are employed.

4. ENLISTMENT PROPENSITY AND MILITARY ORIENTATIONS

The primary focus of the Youth Attitude Tracking Study is the propensity of young people to enlist in the active military or Reserve Component. In this chapter, we first briefly discuss the definition and measurement of propensity (i.e., the self-reported likelihood of enlisting). Then we examine the basic results relating to the issue of likelihood of enlistment for the 1986 YATS II data for both the active military and the reserves. The major emphasis is on active military service.

A. Measurement of Propensity

The term "propensity" refers to the self-reported likelihood of a respondent enlisting in the military. Propensity toward active military service has traditionally been measured by four questions assessing the likelihood of serving in each of the active Services: the Army (Q510 in the questionnaire), the Navy (Q513), the Marine Corps (Q512) and the Air Force (Q511).

These questions were asked with the following format:

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 _____ (Army, Navy, Marine Corps, Air Force)? Would you say

Definitely,
Probably,
Probably not, or
Definitely not?

For each of the Services, positive propensity is defined as having answered "definitely" or "probably"; negative propensity is defined as having answered "probably not," "definitely not," "don't know," or "refuse" to the question.

The four Service-specific propensity items also form the measure used most widely throughout the report, the Composite Active Propensity measure. Composite Active Propensity is defined as the most positive response given to any of the four questions assessing propensity to join the individual active duty Services. For example, an individual who indicates that he would "probably enlist" in the Army, but "probably not enlist" in the Navy, the Air Force, or the Marine Corps is assigned a value of "probably enlist" on the Composite Active Propensity measure. Respondents with values of "definitely enlist" or "probably enlist" on the composite measure are considered to have "positive propensity." Respondents whose values on the composite measure are "probably not," "definitely not," "don't know," or "refuse" are considered to have "negative propensity."

The 1986 YATS II survey similarly assessed Reserve propensity by answers to two questions--one about joining the National Guard (Q505) and the other about joining the Reserves (Q507). They were asked as follows:

How likely is it that you will be serving in the _____ (National Guard, Reserves)? Would you say

Definitely,
Probably,
Probably not, or
Definitely not?

The answers to these two questions became the individual measures of propensity to join the National Guard and propensity to join the Reserves. In addition, a Composite Reserve Propensity measure was constructed from the answers to these two items in the same manner as the Composite Active Propensity measure.

In summary, propensity is examined most commonly using five measures for active duty--one for each of the individual Services and one composite measure--and three measures for the Reserve Component--one each for the Reserve and the National Guard and one composite measure. There is extensive discussion of these eight measures throughout the report. Additional measures of propensity are used occasionally. Two of these are unaided mentions of enlisting in the military (in response to Q438 about what the respondent might be doing for the next few years) and general

expectation of serving in the military (any Service or component) in the next few years (Q503).

B. Propensity Toward Active Service and the Reserve Components

In this section we examine the 1986 propensity results. The initial discussion concerns composite propensity for the active Services, followed by propensity for each of the four Services. This format is repeated for the Reserve Component, and is followed by an examination of unaided mentions of interest in joining the military where a distinction is made between mentions of any military service and active military service. Finally, propensity for the active Services and propensity for the Reserve Component for 1985 are compared to the same type of data for 1986.

1. Composite Active and Service-Specific Propensity

Table 4.1 presents the percentage of each market group showing positive propensity to serve in any of the four active Services (Composite Active Propensity) as well as positive propensity toward enlisting in each of the Services. Data showing the distribution of item responses appear in Appendix C (Table C.1). Clearly, young (16-21 year old) males show the highest Composite Active Propensity (32.0 percent). None of the other market groups achieve even half this level (14.2 percent for older males, 12.8 percent for young females and 5.0 percent for older females). In other words, young men are much more likely than either older men or young or older women to say that they may serve in at least one branch of the active military.

Table 4.1 also shows that the young males are twice as likely to say that they will be serving in any of the individual active Services in the next few years (between 11.1 percent and 16.0 percent) as are older males (between 5.4 percent and 7.9 percent), young females (between 3.3 percent and 8.0 percent), or older females (between 1.8 percent and 3.5 percent). The older females show the lowest Service-specific propensity levels.

Table 4.1. Positive Propensity to Serve in the Active Military

Propensity Measures	Market			
	Young Males (n=5,382)	Older Males (n=1,068)	Young Females (n=3,191)	Older Females (n=1,102)
Composite Active Propensity ^a	32.0 (0.8)	14.2 (1.3)	12.8 (0.7)	5.0 (0.7)
Army	15.8 (0.6)	7.9 (1.0)	5.8 (0.5)	2.4 (0.5)
Navy	11.1 (0.5)	5.6 (0.8)	4.1 (0.4)	2.0 (0.5)
Marine Corps	11.2 (0.5)	5.4 (0.8)	3.3 (0.4)	1.8 (0.5)
Air Force	16.0 (0.6)	6.9 (0.9)	8.0 (0.5)	3.5 (0.7)

Note: Tabled values are cell percentages with standard errors in parentheses.

^aPropensity to serve in at least one active Service.

Source: Questions 510-513.

The young males' propensity levels for the Air Force (16.0 percent) and Army (15.8 percent) were significantly higher than for the Marine Corps (11.2 percent) or the Navy (11.1 percent). Young females showed a similar though attenuated pattern of stronger propensity for the Air Force (8.0 percent) and the Army (5.8 percent) than for the Navy (4.1 percent) or Marine Corps (3.3 percent). In contrast, older males' and older females' propensity levels did not differ statistically among the individual Services.

2. Propensity to Enlist in the National Guard and Reserves

Table 4.2 presents the percentage of each market group showing positive propensity to serve in any of the Reserve Components (Composite Reserve Propensity), as well as the individual branches of the Guard or Reserve to which they had ascribed a likelihood of enlistment. Data showing the distribution of item responses for these three propensity measures are provided in Appendix C (Table C.2). Inspection of Table 4.2 reveals a decreasing pattern of Composite Reserve propensity moving across the table from young males to older females. Young males have significantly higher Composite Reserve Propensity (20.0 percent) than older males (11.5 percent), and both of these groups are significantly higher than young females (7.6 percent) and older females (5.5 percent).

Table 4.2. Positive Propensity to Serve in the Reserve Components

Propensity Measures	Market			
	Young Males (n=5,382)	Older Males (n=1,068)	Young Females (n=3,191)	Older Females (n=1,102)
Composite Reserve Propensity	20.0 (0.7)	11.5 (1.1)	7.6 (0.6)	5.5 (0.8)
<u>National Guard</u>	12.2 (0.5)	8.6 (1.0)	4.1 (0.4)	3.7 (0.7)
Army National Guard	7.3	5.5	2.2	2.3
Air National Guard	4.7	3.2	1.8	1.3
<u>Reserves</u>	15.6 (0.6)	8.8 (1.0)	6.1 (0.5)	4.0 (0.7)
Army Reserve	5.8	3.1	2.1	1.0
Navy Reserve	2.0	1.3	0.8	0.9
Marine Corps Reserve	2.1	1.6	0.3	0.6
Air Force Reserve	4.5	2.2	2.7	1.3
Coast Guard Reserve	0.9	0.4	0.2	0.2

Note: Tabled values are cell percentages with standard errors in parentheses.

Source: Questions 505-508.

Both young males and young females were more likely to say that they would be serving in the Reserves than in the National Guard: 15.6 percent versus 12.2 percent, respectively, for the young males; 6.1 percent versus 4.1 percent, respectively, for the young females. The older males and females did not differ with respect to propensity to serve in the Reserves or the Guard.

Finally, respondents who indicated positive propensity toward service in the National Guard or Reserves were asked to indicate the branch of the (appropriate) Reserve Component to which they referred. Among the Guard, the Army was mentioned more often than the Air National Guard. Among the various Reserves, the Army and the Air Force Reserve were most likely, and the Coast Guard Reserve least likely, to be mentioned.

3. Unaided Mentions of Interest in Serving in the Military

Another measure used to assess propensity to join the military is termed "unaided mentions" and refers to an answer volunteered without an

interviewer prompt. The unaided mention measure was obtained by the question:

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

An unaided mention was recorded when the respondent indicated his or her intention to join the military in general or one of the Services. After stating such an intention, the respondent was asked what Service he or she planned to join (where not already indicated) and whether the type of service would be active duty, the Reserves or the National Guard.

Table 4.3 presents the percentage of each market group expressing unaided mentions of interest in serving in the military, both for mentions of joining any branch and for joining one of the active Services. Young males and young females show a small but significantly greater tendency to join the military in general than to join the active Services. Among young males, 8.8 percent said "any" military compared with 6.2 percent who specified the active military; among young females the parallel comparison was 2.5 percent versus 1.5 percent. The older market groups show very low interest in the military as indicated by unaided mention and no difference between serving in any military and the active military.

Table 4.3. Unaided Mentions of Interest in Serving in the Military

Market	Type of Service			
	Any Military Service		Active Duty Service	
Young Males	8.8	(0.5)	6.2	(0.4)
Older Males	1.2	(0.4)	0.8	(0.4)
Young Females	2.5	(0.3)	1.5	(0.2)
Older Females	0.3	(0.2)	0.3	(0.2)

Note: Tabled values are cell percentages with standard errors in parentheses. Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,102 older females.

Source: Questions 438-441.

Older males were shown previously to have aided composite and Service-specific propensity levels lower than those of young males and higher than those of young females. The responses to the item assessing unaided interest in the military were different. Older males had a significantly lower level of unaided mentions of interest in serving in any military and essentially the same level of unaided mentions regarding the active military as young females. Older females, as has been the case throughout, showed significantly lower levels than any other market group of unaided mentions of interest in serving in the active military or any military.

4. 1985-1986 Changes in Propensity

Table 4.4 presents the 1985-1986 comparisons for active and Reserve propensity and unaided mentions for young and older males and young females. Few changes are evident between 1985 and 1986. Only three significant differences emerged. More specifically, young females showed a higher percentage in 1986 than in 1985 indicating positive propensity toward joining the Air Force (8.0 percent versus 6.5 percent, respectively). Young females were also more likely in 1986 than they had been in 1985 to express unaided interest in serving in any branch of the military (2.5 percent versus 1.6 percent, respectively). Finally, young males also show a higher percentage in 1986 expressing unaided interest in serving in any branch of the military than was the case in 1985 (8.8 percent versus 7.4 percent, respectively). It should be noted that despite the statistical significance of the differences, however, the actual size of the changes were quite small, ranging from .9 to 1.5 percentage points.

C. Trends in Positive Active Propensity

One of the advantages of YATS data is the ability to track trends across key items over time. Research methodology and questionnaire items must be comparable, however, for trend data to be interpreted correctly. For the YATS surveys, key items such as propensity remained constant across years, but there were differences in the sampling methods, sampling strata, and weighting schemes. In 1984, the effects of these changes on estimates made from the data obtained before the 1983 redesign were analyzed, and the

Table 4.4. Positive Propensity to Serve in the Active Military and Reserve Components
Among Young Males, Older Males, and Young Females, 1985-1986

Propensity Measure	Young Males			Market			Young Females		
	Young Males			Older Males			Young Females		
	1985	1986	Change	1985	1986	Change	1985	1986	Change
Composite Active Propensity	29.8	32.8	2.2	12.6	14.2	1.6	11.9	12.8	0.9
Army	14.7	15.8	1.1	5.2	7.9	2.7	5.9	5.8	-0.1
Navy	10.6	11.1	0.5	3.7	5.6	1.9	4.4	4.1	-0.3
Marine Corps	10.2	11.2	1.0	3.6	5.4	1.8	3.0	3.3	0.3
Air Force	14.9	16.0	1.1	6.9	6.9	0.0	6.5	8.0	1.5*
Composite Reserve Propensity	20.8	20.0	-0.8	12.1	11.5	-0.6	7.7	7.6	-0.1
Army National Guard	7.1	7.3	0.2	5.8	5.5	-0.3	2.0	2.2	0.2
Air National Guard	4.2	4.7	0.5	1.1	3.2	2.1	1.7	1.8	0.1
Army Reserve	6.4	5.8	-0.6	3.7	3.1	-0.6	2.2	2.1	-0.1
Navy Reserve	1.6	2.0	0.4	0.7	1.3	0.6	0.9	0.8	-0.1
Marine Corps Reserve	2.1	2.1	0.0	1.8	1.6	-0.2	0.3	0.3	0.0
Air Force Reserve	5.0	4.5	-0.5	2.4	2.2	-0.2	2.6	2.7	0.1
Coast Guard Reserve	1.0	0.9	-0.1	1.1	0.4	-0.7	0.4	0.2	-0.2
Unaided Mentions									
Any Service	7.4	8.8	1.4*	0.6	1.2	0.6	1.6	2.5	0.9*
Active Service	5.2	6.2	1.0	0.0	0.8	0.8	0.9	1.5	0.6

Note: Tabled values are column percentages. Estimates for 1985 are based on interviews with 5,478 young males, 465 older males and 3,301 young females. Estimates for 1986 are based on interviews with 5,382 young males, 1,668 older males and 3,191 young females.

Source: Questions 438-441, 505-513.

*1985-1986 comparisons were statistically significant at the 95 percent confidence level.

propensity data for the earlier years were adjusted for differences in sampling and weighting. The reweighted estimates for positive propensity to join each Service and Composite Active Propensity across the series of YATS surveys are shown for young males in Figure 4.1 (p. 4-12) and for young females in Figure 4.2 (p. 4-14). In addition, Figure 4.3 (p. 4-16) shows these propensity estimates for the older male group after redefinition to only those between 22 and 24 years old.

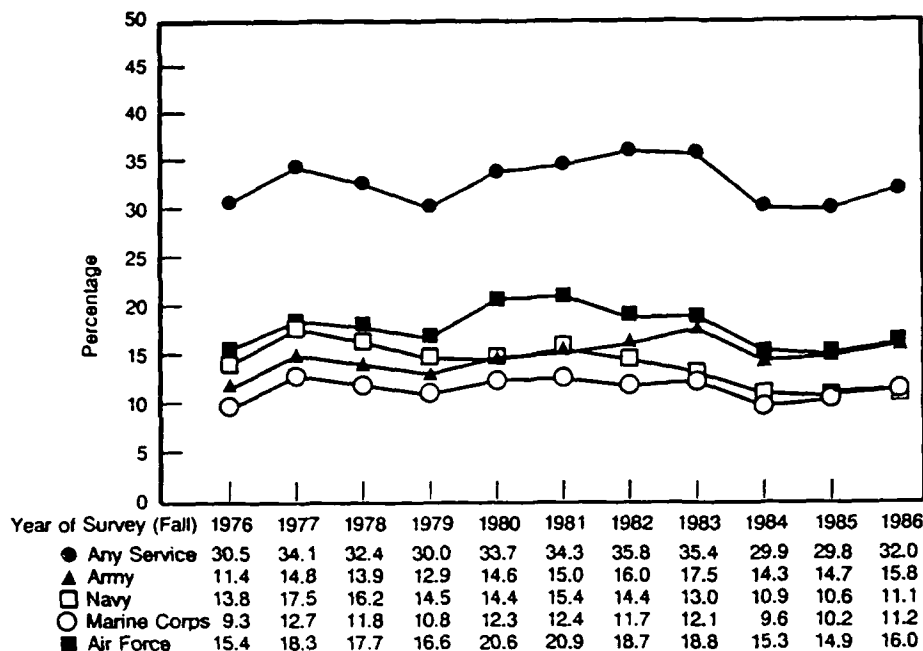
1. Young Male Propensity Trends

Data for young males (Figure 4.1) show highly similar patterns for Composite Active Propensity and Service-specific propensities from 1976 through 1979, with an initial increase followed by a general downward trend. Composite Active Propensity increased from 1979 to 1982, leveled off in 1983, and significantly declined in 1984. In 1985, Composite Active Propensity remained at the 1984 level, and in 1986 shows a slight but nonsignificant increase since 1985.

Service-specific propensities generally increased from 1979 through 1981. From 1981 through 1986, however, the Services show distinct patterns. The Air Force shows an initial decline (1981-1982), another leveling off (1982-1983), and another decline (1983-1984) followed by another leveling off (1984-1986). The Army shows an increase between 1981 and 1983, followed by a decline (1984), and a leveling off (1985-1986). The Navy shows a steadily declining pattern since 1981 which also levels off in 1985. The Marine Corps was fairly level until a 1984 decline, which has been followed most recently by a leveling off. Overall propensity, as well as propensity within each Service, has risen consistently in recent years, with the curves all turning up in 1986.

A shift in Service preference patterns is also evident in Figure 4.1. Since 1976, propensity for the Services shows a shift from four distinct preferences to two distinct preferences. During the '70s, preferences for all Services were clearly differentiated, but since 1980 there has been a convergence between the Air Force and the Army and between the Navy and the Marine Corps. Thus, current preferences are equally strong (or weak) for the two sets of Services rather than for the four Services.

Figure 4.1. Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Young Males



NOTE: Estimates prior to 1983 have been reweighted to be comparable to those from 1983 through 1986.

SOURCE: Questions 510-513.

Another approach to evaluating the propensity level for a single year is to estimate the average over the series of surveys and contrast the particular year with the average. The 1976-1986 average for Composite Active Propensity is 32.5 percent. The range of deviation around this mean is rather narrow. The highest value is 35.8 percent (1982) and the lowest is 29.8 percent (1985). From 1980 to 1983, young males' Composite Active Propensity has been above average and from 1984-1986 it was below average.

The 11-year averages for Service-specific propensity are 14.6 percent for the Army, 13.8 percent for the Navy, 11.3 percent for the Marine Corps and 17.6 percent for the Air Force. Propensity levels for both the Air

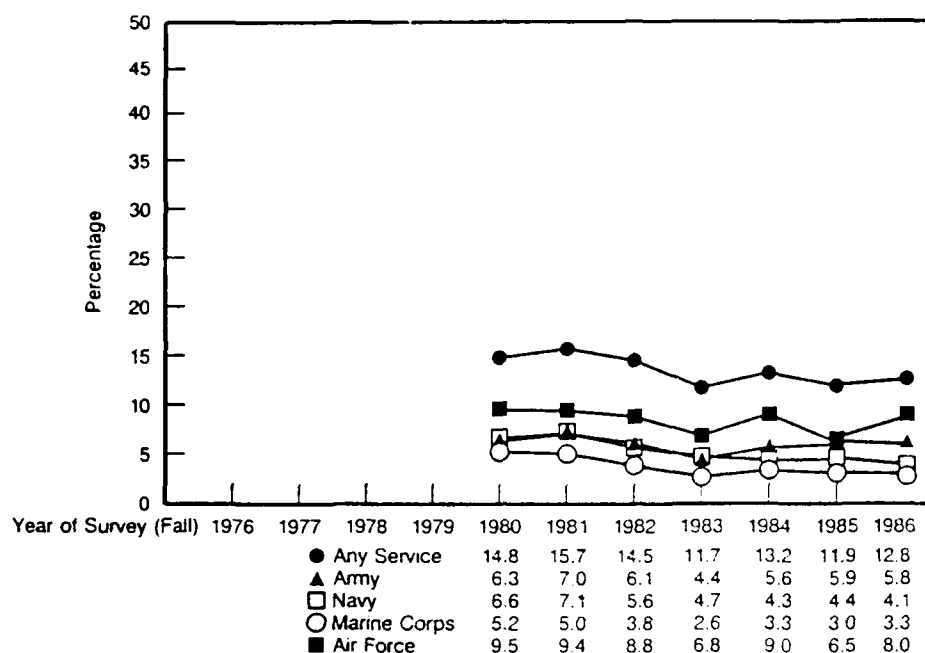
Force and the Marine Corps were above average from 1980 through 1983 (Figure 4.1), dropped to below average in 1984, and have stayed below average since then. The Navy shows a similar pattern, with a slight drop to below average levels in 1983, a year before the abrupt 1984 drop. The Army propensity levels were at or above average from 1980 through 1983 and returned to above average levels fairly quickly following the 1984 decrease; in fact, even this decrease had reduced Army propensity levels to only minimally below the 11-year average.

2. Young Female Propensity Trends

Figure 4.2 presents trend data for young females comparable to the data in Figure 4.1 for young males. Females were first included in the YATS series in 1980, so data for only six years are available for them. Comparison of Figures 4.1 and 4.2 shows that young females' positive propensities for each active Service and Composite Active Propensity are all lower than parallel propensities for young males. The propensity patterns in Figure 4.2 show that young female Composite Active Propensity rose between 1980 and 1981, dropped in 1982 and 1983, rose again in 1984, remained essentially unchanged in 1985, and rose slightly again in 1986.

Service-specific propensities for young females showed no overall consistent pattern between 1980 and 1986. The Army propensity level and the composite measure rose between 1980 and 1981, and fell in 1982 and 1983. Army propensity increased in 1984 and has remained virtually unchanged since then. In contrast, Navy propensity level rose in 1981 and has fallen every year since then. Propensity to join the Marine Corps steadily decreased from 1980 to 1983, showed a slight increase in 1984, and has since remained unchanged at well below the 1980 level. Finally, propensity for the Air Force is the most inconsistent pattern of all; propensity decreased between 1980 and 1984, recovered in 1984 almost to the 1980 level, dipped considerably in 1985, and significantly increased again in 1986, though still to lower than the 1980 level. Clearly, however, young females are most interested in the Air Force and least interested in the Marine Corps.

Figure 4.2. Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Young Females



NOTE: Data for young females are available since 1980. Estimates prior to 1983 have been reweighed to be comparable to those from 1983 through 1986

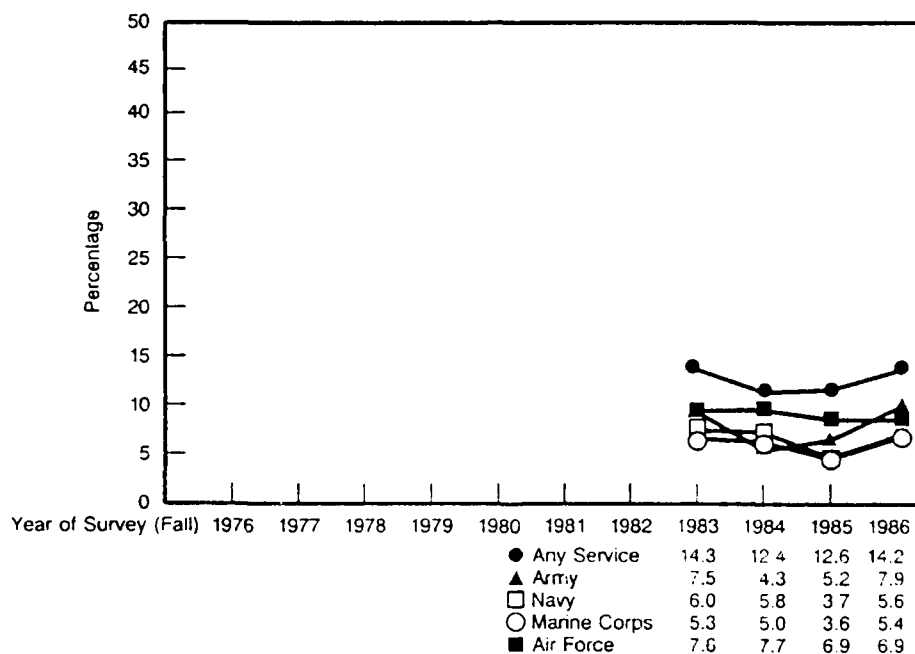
SOURCE: Questions 510-513

Following the approach used for young males, the variations in young females' propensity from the average propensity for the seven-year period were examined. The seven-year averages are: 13.5 percent for Composite Active Propensity, 5.9 percent for the Army, 5.3 percent for the Navy, 3.7 percent for the Marine Corps and 8.3 percent for the Air Force. Analyses of the deviation from the averages show a similar pattern for Composite Active Propensity and three of the four individual Services. Specifically, the composite measure and propensity for all four Services show above average levels between 1980 and 1982, followed by below average levels in 1983. Since 1983, composite propensity as well as Service-level propensity for the Army, the Navy and the Marine Corps have remained at or below average. The Air Force shows a down-up-down-up pattern between 1983 and 1986, ending at just below its average propensity level in 1986.

3. Older Male Propensity Trends

Figure 4.3 presents only four years of composite and Service-specific propensity values for older males because they were first included in the YATS series in 1983. Because the definition of the older male sample was changed in 1986 to include only 22-24 year olds (rather than 22-29 year olds), the data presented for 1983 through 1985 were calculated for the corresponding 22-24 year old subset of respondents.

Figure 4.3. Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Older Males



NOTE: Data are for older males between the ages of 22 and 24 only, and are available only since 1983. Estimates for 1983 through 1985 have been reanalyzed for the restricted age group to be comparable to the 1986 data.

SOURCE: Questions 510-513.

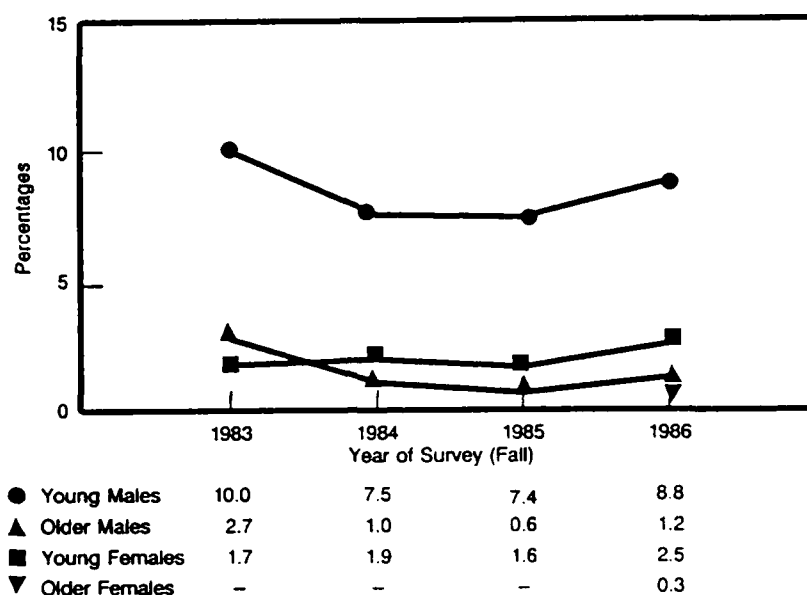
As shown in Figure 4.3, older male Composite Active Propensity dropped from 1983 to 1984, remained unchanged in 1985, and increased in 1986 to the 1983 level. Propensity for the Army followed the same pattern observed for composite propensity. Propensity levels for the Navy and Marine Corps remained about the same in 1983 and 1984, decreased in 1985, and increased again in 1986. The Air Force propensity has remained relatively constant across the four years. Except for 1984, older males have consistently shown higher propensity levels for the Army and the Air Force than for the Navy and the Marine Corps.

Calculation of the four-year propensity averages for older males yields 13.4 percent for Composite Active Propensity, 6.2 percent for Army propensity, 5.3 percent for Navy propensity, 4.8 percent for Marine Corps propensity, and 7.3 percent for Air Force propensity. Examination of the variation of the propensity measures about their averages shows decrements in propensity in 1985 on all measures to below average levels. These decreases were also evident in 1984 for composite and Army propensity. Propensity levels for the Army, Navy, and Marine Corps returned to above average levels in 1986.

4. Unaided Mention Trends

Figure 4.4 presents trend data since 1983 for unaided mentions of interest in serving in any branch of the military for young males, older males and young females. Young males are clearly more likely than the other two market groups to spontaneously mention joining the military when asked about their plans for the next few years. The percentage of young males asserting this was highest in 1983, decreasing in 1984, leveling-off in 1985, and slightly increasing in 1986--although still to below the 1983 level. The percentage of unaided mentions among older males also decreased in 1984 and remained at approximately that level through 1986. Young females show slightly higher percentages of unaided mentions than older males from 1984 through 1986; young female levels have remained very similar since 1983.

Figure 4.4. Trends in Unaided Mentions of Interest in Serving in the Military for Young Males, Older Males and Young Females



NOTE: Data from 1983-1985 from older males have been reanalyzed for the restricted group of ages 22-24 years for comparability with 1986 data. Data for older females are not available before 1986.

SOURCE: Question 438.

D. Demographic Profiles of Active Propensity Groups

Determining whether propensity to join the military is related to specific sociodemographic characteristics could be extremely useful in understanding how best to tailor recruiting strategy and communications to potential enlistees. Tables 4.5, 4.6, and 4.7 present summary data for the 1986 YATS II market groups on the relationship of sociodemographic characteristics to expressed positive propensity. These tables show positive propensity for each level of the variable under examination (i.e., age, race/ethnicity, educational status) the percentage of respondents--within each market group. In addition, in Appendix C, Tables C.3a, C.3b, C.4a and C.4b present the distribution of each of the sociodemographic variables as a function of positive and negative propensity; Tables C.3a and C.3b provide data about Composite Active Propensity while Tables C.4a and C.4b present parallel data for Composite Reserve Propensity.

Inspection of Table 4.5 reveals that positive propensity increases as a function of being:

- young;
- black and, secondarily, nonwhite in general;
- unmarried;
- attending school (for younger groups only); and
- of lower educational status (especially 11 grades or fewer completed).

These results are essentially the same as those found in previous years. Of course, these findings partially result from the fact that analyses examined each variable independently of all others and age, educational status and marital status are highly interrelated. That is, for any market groups as age increases there are increases in educational level and the proportion who become married.

There are very similar patterns of propensity between the two younger groups and between the two older groups. Among young males, age is an important variable; 16 year olds are significantly more likely than 17 year olds (41.9 percent versus 35.2 percent) to demonstrate positive propensity. Positive propensity declines across the remainder of the age range, with another significant decrement between the 19 and 20 year olds (27.2 percent versus 20.4 percent). Overall, 16-year-old males are more than twice as likely to express positive propensity than are 21-year-old males. Positive propensity declines across age for young females as well, but the only significant decrement between adjacent age categories is between 16 and 17 year olds (21.0 percent versus 12.7 percent). Overall, 16-year-old females are more than three times as likely to express positive propensity as their 21-year-old counterparts.

Table 4.5. Positive Propensity as a Function of Selected Sociodemographic Characteristics and Educational Plans

Variable/Response	Market			
	Young Males (n=5,382)	Older Males (n=1,068)	Young Females (n=3,191)	Older Females (n=1,102)
<u>Age^a</u>				
16 (22)	41.9 (1.6)	15.0 (2.1)	21.0 (1.7)	6.3 (1.5)
17 (23)	35.2 (1.7)	17.2 (2.5)	12.7 (1.4)	4.8 (1.1)
18 (24)	30.4 (1.8)	10.1 (1.9)	11.2 (1.5)	3.7 (1.1)
19	27.2 (2.1)	-	10.3 (1.5)	-
20	20.4 (2.1)	-	6.9 (1.5)	-
21	19.1 (2.2)	-	6.8 (1.4)	-
<u>Race/Ethnicity</u>				
White	26.5 (0.9)	9.4 (1.3)	9.4 (0.7)	2.8 (0.6)
Black	55.2 (2.3)	39.1 (5.4)	29.6 (2.7)	22.2 (4.7)
Hispanic	46.0 (2.8)	25.9 (5.2)	17.5 (2.7)	6.0 (2.4)
Other	38.1 (4.3)	29.1 (10.9)	18.4 (4.8)	2.0 (2.0)
<u>Marital Status</u>				
Never married	32.4 (0.8)	15.8 (1.7)	13.7 (0.8)	8.8 (1.6)
Currently married	18.9 (3.6)	9.5 (1.7)	6.1 (1.5)	1.8 (0.7)
Other ^b	51.0 (13.5)	29.1 (9.4)	4.6 (3.2)	10.8 (3.3)
<u>Educational Plans/Status^c</u>				
Attend school	33.9 (1.0)	13.9 (3.0)	14.5 (0.9)	10.6 (3.2)
Not attend school	27.3 (1.4)	14.0 (1.4)	9.2 (1.0)	4.1 (0.7)
Don't know	43.6 (10.2)	27.2 (14.0)	15.8 (8.8)	0.0 (**)
<u>Years of Education Completed</u>				
Less than 10	55.0 (2.8)	23.6 (6.9)	26.7 (3.7)	6.8 (3.3)
10	42.5 (1.7)	22.6 (5.5)	20.1 (1.8)	4.7 (3.3)
11	34.3 (1.5)	21.4 (5.6)	12.4 (1.3)	12.1 (5.1)
12	20.8 (1.3)	13.2 (1.6)	8.8 (0.9)	3.9 (0.9)
Some vocational school	17.7 (7.4)	4.4 (3.1)	2.7 (2.0)	11.8 (5.1)
Some college	14.8 (1.9)	12.1 (2.8)	6.6 (1.4)	4.6 (1.6)

Note: Tabled values represent the percentages within each group showing positive active propensity with standard errors in parentheses.

^aAges 22-24 apply to older males and older females.

^bOther* Includes widowed, divorced, and separated.

^cData were collected during August, September, October and November, 1986. Questions prior to October 1 asked about planned status for October. Questions after October 1 asked about actual status.

**Informative standard error not available.

Source: Questions 403, 404, 407, 510-513, 713C, 714, 715.

The differences in positive propensity across the age range in the older groups are smaller. Twenty-four year old males are significantly less likely to express positive propensity than 23 year olds (10.1 percent versus 17.2 percent). Positive propensity declines with age for older females, but the differences between the youngest and oldest age groups (6.3 percent versus 3.7 percent, respectively) were not significant. The overall strong effects of age on propensity are shown across the entire age distribution by noting that when the data for older males and older females are placed below the column of data for young males and young females, respectively, the data show a very strong declining pattern of propensity from age 16 through age 24.

Race/ethnicity appears to be another important variable. Nonwhites are, overall, more likely than whites to have positive propensity. Black young males are more than twice as likely as white young males (55.2 percent versus 26.5 percent) to have positive propensity. Similarly, positive propensity among Hispanic young males (46.0 percent) is almost twice that of whites. Black older males are more than four times as likely to express positive propensity as white older males (39.1 percent versus 9.4 percent). Among young females, the ratio is three to one (29.6 percent for Blacks versus 9.4 percent for whites), and among older females, it is eight to one (22.2 percent versus 2.8 percent for whites). Hispanic young females, older males and older females have lower propensity levels than their Black counterparts, but higher levels than whites.

For all market groups, never having been married or (for all except young females) being divorced, separated, or widowed is associated with much higher levels of propensity than being currently married. The relationship of propensity and marriage, however, may merely reflect the positive correlation of greater age and marriage. Those considering joining the military may defer marrying, and those who marry may no longer favorably consider joining the military.

Finally, propensity as a function of educational plans and status further illustrates the importance of age-related variables. Young males and young females who reported that they plan to be in school in the fall of 1986 have higher propensity (33.9 percent for males; 14.5 percent for females) than their counterparts who are not expecting to be in school (27.3 percent for males; 9.2 percent for females).

Similarly, increasing years of education is related to decreasing levels of positive propensity for all groups except older females. Among young males, propensity declines an average of 11 percentage points for each additional year of education between completed between "less than 10" years up to 12 years. The addition of some vocational schooling does not change propensity beyond that shown by respondents with 12 years of schooling. The same overall pattern occurs among young females, although the individual decrements are smaller (the average equalling 6 percentage points) and not significant between "less than 10 years" and 10 years of education. This pattern of declining propensity as a function of increasing education is also evident for older males, although the only significant difference between adjacent levels occurs between 12 years of education and some vocational school.

In view of the clear effects of age and race/ethnicity on propensity, additional analyses (Table 4.6) examined the joint relationship between these two factors. As with the earlier data, overall positive effects on propensity of being young and being nonwhite are evident. In addition, young males and young and older females demonstrate a pattern showing that age and race/ethnicity appear also to have an interactive effect. Specifically, among the 16-17 year olds, the only significant differences are seen between whites and nonwhites; among the 18 to 21 year olds, however, positive propensity among Blacks is significantly higher than that among either whites or Hispanics.

Table 4.6. Positive Composite Active Propensity by Race/Ethnicity and Age

Market/Age	Race/Ethnicity									
	White		Black		Hispanic		Other		Total	
<u>Young Males</u>										
16-17	33.5	(1.3)	58.9	(3.3)	54.7	(4.2)	51.5	(6.4)	38.8	(1.2)
18-21	19.5	(1.1)	51.3	(3.4)	39.5	(3.7)	28.5	(5.3)	25.4	(1.0)
Total	26.5	(0.9)	55.2	(2.3)	46.0	(2.8)	38.1	(4.3)	32.0	(0.8)
<u>Young Females</u>										
16-17	12.9	(1.2)	34.2	(3.8)	26.2	(5.0)	21.9	(6.9)	16.9	(1.1)
18-21	6.3	(0.7)	24.9	(3.5)	11.7	(2.6)	15.1	(6.6)	9.1	(0.8)
Total	9.4	(0.7)	29.6	(2.7)	17.5	(2.7)	18.4	(4.8)	12.8	(0.7)

Note: Tabled values are cell percentages indicating positive active propensity with standard errors in parentheses. Estimates are based on interviews with 5,371 young males (4,021 white, 685 Black, 474 Hispanic, and 191 "other"); and 3,189 young females (2,454 white, 399 Black, 260 Hispanic, and 76 "other").

Source: Questions 403, 510-513, 714, 715.

E. Summary

This chapter presented findings which describe propensity to serve in the military for the four market groups--young and older males, and young and older females. Propensity was discussed as a function of individual Service of the active military as well as of a composite measure. In a parallel fashion, results were presented for the Reserve Component of the military. Also discussed were trends in propensity toward the active military and the association of propensity with basic sociodemographic variables.

The 1986 Composite Active Propensity continued, as it has in the past, to be highest among young males (32 percent). Propensity for each of the other market groups is less than half this level: older males--14 percent;

young females--13 percent; older females--5 percent. This same pattern is obtained within each of the individual active Services; young males show the highest levels of positive propensity (between 11 and 16 percent), followed by older males (between 5 and 8 percent), young females (between 3 and 8 percent), and older females (between 2 and 4 percent). In general, Air Force and Army have the highest, and very similar, propensity levels.

The pattern of propensity to serve in the Reserve Components is parallel, at a lower level, to the propensity to serve in the active military. Composite Reserve Propensity is highest among young males (20 percent), followed by older males (12 percent), young females (8 percent), and older females (6 percent). Both young males and young females show higher propensity to join the Reserves than the National Guard (16 percent versus 12 percent among young males; 6 percent versus 4 percent among young females); older males (about 8 percent for both) and older females (4 percent for both) do not demonstrate this preference.

"Unaided mentions" show lower percentages of respondents indicating interest in joining the military--any branch or the active military. Young males again show the highest interest levels (6-9 percent), followed by young females (2-3 percent), older males (1 percent) and older females (less than 1 percent).

Most of the changes in active propensity and unaided mentions are positive, although only three are statistically significant. The significant changes were the increases in the young females' propensity toward joining the Air Force and in their unaided mentions of interest in serving in any branch of the military. Young males also showed a significant increase in unaided mentions of interest in serving in any branch of the military.

The only other important trend in active propensity for young males and females is the general, although not statistically significant, increase which occurred in the last year. Current levels are now very close to average propensity levels within each of the market groups.

Positive Composite Active Propensity is also seen to be related to being: young; Black and nonwhite; unmarried; attending school (among younger groups only); and of lower educational status (especially the completion of 11 grades or fewer). The close relationship of virtually all these variables with age, however, precludes drawing firm conclusions about the primary source of the effect.

The results discussed in this chapter have at least two major policy implications for meeting recruitment goals. First, as the pool of potential enlistees declines in future years, and assuming no change in recruiting efforts or targets' propensity levels, recruiting goals may not be met. Second, younger individuals should continue to be the major target for recruiters because they have consistently been more interested in joining the military than older individuals. Sustaining the interest of these younger individuals until they graduate from high school, however, is a major challenge. Concurrently, policymakers might also consider determining what incentives would persuade older, less interested groups to join the military.

5. ENLISTMENT PROPENSITY AND ECONOMIC FACTORS

This chapter examines the relationship of economic conditions and enlistment propensities for young males and young females.¹ As young people weigh career options and educational plans, some consideration is generally given to economic factors associated with the choices. Expected earnings, job security, and growth potential are all important economic considerations that can be assessed for a variety of career paths (military and civilian) and balanced against individuals' interests and lifestyle preferences.

Initially, our analysis examines time trends in national enlistment propensities and unemployment rates. Next, local (county of residence) unemployment rates are used to study the relationship between individual enlistment propensities and strength of the local economy. Following this, the relationship between enlistment propensity and employment/student status is assessed.

A. National Time Trend Analyses

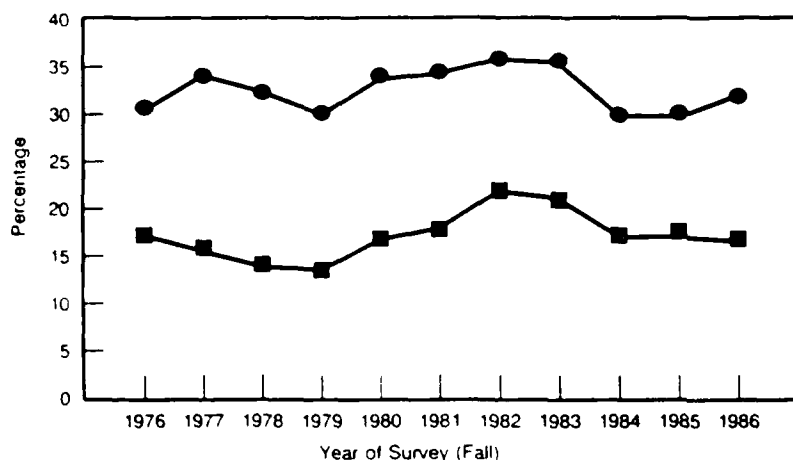
In the context of social, political and cultural considerations, a military career may appear more attractive when civilian career options are limited because of a weak national or local economy. If this is correct, then when the economy is strong or strengthening (unemployment rates are low or falling), propensity will be low or declining. When the economy is weak or weakening (unemployment rates are high or rising), propensity will be high or rising.

To examine the link between positive active propensity and national unemployment rates for young males and young females, the estimates of Positive Composite Active Propensity were plotted along with the comparable annual unemployment rates for young males and young females aged 16-21 years.¹ Unemployment rates are from the U.S. Bureau of Labor Statistics for the calendar year of the corresponding YATS survey.

¹/ Analyses are not performed for older males and females because of the limited trend data available for them.

Figure 5.1 shows a positive relationship between the unemployment rate for young males aged 16 to 21 and their level of positive propensity to enlist in the military. Years of low or declining unemployment rates correspond with low or declining positive propensity, and years of high or increasing unemployment rates correspond with high or increasing positive propensity. The correlation between the two rates is .61.

Figure 5.1. Young Males' Annual Unemployment Rate and Positive Propensity for Any Active Duty Service, 1976-1986



● Positive Propensity	30.5	34.1	32.4	30.0	33.7	34.3	35.8	35.4	29.9	29.8	32.0
■ Unemployment Rate	17.2	15.5	13.9	13.6	16.8	18.0	21.9	21.1	17.1	17.1	16.6

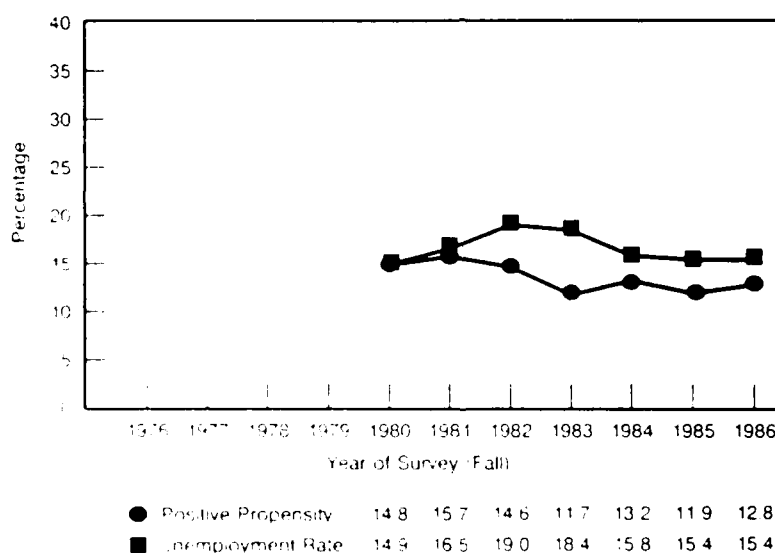
NOTE: Propensity estimates are based on surveys in the fall of each year. Those prior to 1983 have been reweighted to be comparable to those from 1983 through 1986. Unemployment figures are annual estimates provided by the Bureau of Labor Statistics for 16-21 year old males. Correlation of the two curves is .61.

The pattern of changes in the respective rates are particularly striking. Since 1976, the unemployment rate for young males increased in three years (1980, 1981, and 1982) and decreased in seven years (1977 through 1979, and 1983 through 1986). Each of the three years that the unemployment rate for young males increased, their positive propensity also increased. In the seven years that unemployment rates fell, however, positive propensity fell in five years (as expected) and increased in two

years (contrary to prediction). These results suggest that while there is a positive relationship between employment rates and positive propensity, important factors other than economic conditions are also at work.

Figure 5.2 compares annual unemployment rates and positive propensity for young females over the seven-year period from 1980 through 1986. Unlike the data for young males, no clear relationship emerged (correlation = 0.0). No evidence exists that young females' interest in careers in the military is significantly affected by the strength of the economy, at least as measured by annual aggregate unemployment rates.

Figure 5.2. Young Females' Annual Unemployment Rate and Positive Propensity for Any Active Duty Service, 1980-1986



NOTE: Propensity estimates are based on surveys in the fall of each year. Those prior to 1983 have been reweighted to be comparable to those from 1983 through 1986. Unemployment figures are annual estimates provided by the Bureau of Labor Statistics for 16-21 year old males. Correlation of the two curves is 0.0

B. Propensity and Local Economic Conditions

Just as trends in the national unemployment rate can affect the national positive propensity, local economic conditions may affect local positive propensity. When the local economy is weak and few civilian job opportunities exist, young people may be more likely to consider enlisting in the military than when the local economy is strong. In this section, local unemployment rates are used as a measure of a local economy's strength. For each individual in the young male and young female samples, the unemployment rate from the individual's county of residence was attached to the data record and used in the analyses discussed below.

In this analysis, respondents are classified into four groups based on the average unemployment rate in the county in which they reside. Economically "very strong" areas were defined as those in which the county average unemployment rate for October 1985 through September 1986 was 4.9 percent or less. "Stronger than average" areas were those with unemployment rates of 5.0 to 6.9 percent; "weaker than average" were those with unemployment rates of 7.0 to 8.9 percent; and "very weak" areas were those with unemployment rates of 9.0 percent or greater. These intervals were selected on the basis of the national unemployment rate for this period (slightly below seven percent) and analytical considerations related to the distribution of the data. Local area unemployment data were obtained from the U.S. Bureau of Labor Statistics. Positive propensity was then computed for the four groups of respondents classified by the local unemployment rates. Results appear in Table 5.1.

Across the Nation, a solid relationship is apparent between local area unemployment rates and the positive enlistment propensity of young males and young females. For young males, 1986 Composite Positive Active Propensity is 32.0 percent. Young males living in economically "very strong" areas show a positive propensity of 27.0 percent (significantly less than the national average), while those living in economically "very weak" areas show a positive propensity of 37.9 percent (significantly greater than the national average). Young males living in areas "stronger than average" and "weaker than average" demonstrated propensities of 30.8

percent and 33.1 percent, respectively. This result is not different from the national average. Clearly, then, positive active propensity is very different in economically very strong areas than in very weak areas (40 percent higher in very weak areas than in very strong areas). Areas only somewhat stronger or weaker than average are not noticeably different in propensity from the national average. A similar pattern is seen for the relationship between Composite Positive Reserve Propensity and local area unemployment rates for young males.

Table 5.1. Positive Propensity by Local Unemployment Rate

Local Unemployment Rate	Young Males		Young Females	
	Active Military ^a	Reserve Component ^b	Active Military ^a	Reserve Component ^b
0-4.9 Percent (Very strong)	27.0 (1.4)	17.0 (1.2)	10.5 (1.3)	5.1 (0.9)
5.0-6.9 Percent (Stronger than average)	30.8 (1.4)	17.4 (1.1)	11.5 (1.2)	7.3 (1.0)
7.0-8.9 Percent (Weaker than average)	33.1 (1.8)	21.9 (1.5)	14.6 (1.6)	9.5 (1.4)
9.0 Percent (Very weak)	37.9 (1.9)	25.3 (1.8)	14.9 (1.5)	8.6 (1.2)
Total	32.0 (0.8)	20.1 (0.7)	12.8 (0.7)	7.6 (0.6)

Note: Tabled values are cell percentages indicating positive propensity with standard errors in parentheses. Estimates are based on interviews with 5,382 young males and 3,191 young females.

^aRefers to Positive Composite Active Propensity.

^bRefers to Positive Composite Reserve Propensity.

Source: Questions 505, 507, 510-513 and aggregate local area unemployment rates from the U.S. Bureau of Labor Statistics.

As seen in Table 5.1 as well, the pattern of propensity and local unemployment for young females is similar, though somewhat attenuated. Composite Positive Active Propensity was 12.8 percent. Positive propensity is lowest in areas with the lowest unemployment rates, greater in areas with higher unemployment rates, and highest in areas with the highest unemployment rates. The differences between the average propensity rate and propensity in the four sub-areas, however, do not reach statistical significance. As for young males, the positive propensity in "very weak" areas is about 40 percent higher than in economically "very strong" areas; this difference is significant. The relationship of local unemployment rate with Composite Positive Reserve Propensity for young females generally corresponds to expectations. Positive propensity in "very strong," areas is significantly lower than overall positive propensity, and also differs significantly from the higher propensity levels in "weaker than average" and "very weak" areas.

Levels of propensity and unemployment rates were also examined for the four major (Census) regions of the Nation. Table 5.2 presents the data using the same classification of unemployment groupings as in Table 5.1. The general pattern of the regional findings strongly suggests that local unemployment is related to positive propensity within each region, across sex and branch of military service. More specifically, it is clear that both active and Reserve propensity increase with increasing average local unemployment rates. This pattern is strongest among young males but is also evident even among young females. The relationship is especially striking in comparisons of propensity among those in economically "very strong" and "very weak" areas.

In viewing this overall pattern, it is important to recognize the limitations of the current analysis of economic factors. A number of cells have small sample sizes and large standard errors. Thus, despite the patterns, most differences fall below accepted levels of statistical significance. However, it is likely that, given the consistency and strength of the patterns observed, increases in cell sample sizes would, in fact, result in statistically significant differences.

Table 5.2. Positive Propensity by Census Region and Local Unemployment Rate

Census Region/ Unemployment Rate	Young Males		Young Females	
	Active Military ^a	Reserve Component ^b	Active Military ^a	Reserve Component ^b
<u>Northeast</u>				
0-4.9 percent	25.3 (2.1)	16.4 (1.9)	7.2 (1.7)	4.2 (1.3)
5.0-6.9 percent	25.4 (4.0)	11.4 (2.8)	12.3 (3.6)	9.1 (2.9)
7.0-8.9 percent	34.1 (3.3)	21.8 (2.9)	17.0 (3.3)	13.9 (2.8)
9.0 percent or more	36.6 (9.7)	31.7 (9.5)	19.6 (6.9)	10.3 (4.8)
Total	28.3 (1.7)	17.6 (1.4)	11.9 (1.6)	8.4 (1.3)
<u>North Central</u>				
0-4.9 percent	16.5 (4.4)	11.2 (3.2)	7.8 (3.3)	6.2 (3.1)
5.0-6.9 percent	27.0 (3.2)	17.9 (2.7)	9.0 (2.1)	4.6 (1.6)
7.0-8.9 percent	25.9 (3.1)	17.4 (2.4)	13.8 (2.5)	7.8 (2.2)
9.0 percent or more	39.2 (4.0)	20.2 (3.4)	13.0 (2.9)	8.9 (2.2)
Total	28.4 (1.8)	17.5 (1.5)	11.7 (1.4)	7.1 (1.1)
<u>South</u>				
0-4.9 percent	33.2 (2.5)	21.6 (2.2)	13.5 (2.2)	6.4 (1.6)
5.0-6.9 percent	37.0 (2.3)	23.3 (2.2)	12.9 (2.1)	7.8 (1.6)
7.0-8.9 percent	40.3 (3.5)	30.4 (3.1)	14.5 (3.0)	9.5 (2.7)
9.0 percent or more	37.3 (2.5)	28.3 (2.6)	16.9 (2.2)	9.7 (1.9)
Total	36.7 (1.3)	25.5 (1.3)	14.5 (1.2)	8.3 (1.0)
<u>West</u>				
0-4.9 percent	25.6 (3.9)	12.1 (2.7)	14.5 (5.2)	2.5 (1.8)
5.0-6.9 percent	29.3 (2.3)	13.6 (1.6)	11.7 (2.1)	7.7 (1.7)
7.0-8.9 percent	40.0 (4.6)	20.3 (3.9)	12.9 (4.2)	6.7 (3.0)
9.0 percent or more	37.7 (4.6)	22.7 (4.1)	10.2 (2.9)	3.8 (1.8)
Total	31.9 (1.7)	16.0 (1.3)	11.9 (1.5)	6.2 (1.1)

Note: Tabled values are cell percentages indicating positive propensity with standard errors in parentheses. Estimates are based on interviews with 5,382 young males and 3,191 young females.

^aRefers to Positive Composite Active Propensity.

^bRefers to Positive Composite Reserve Propensity.

Source: Questions 505, 507, 510-513 and local area unemployment rates from the U.S. Bureau of Labor Statistics.

This initial, tentative examination of economic conditions and positive propensity supports the findings from time trend patterns that changes in the unemployment rate are related to changes in positive propensities, most notably among young males. Local unemployment rates are also related to individual positive propensity. Areas with high unemployment rates have relatively high average positive propensity, and areas with low unemployment rates have relatively low average positive propensity.

C. Propensity and Individual Labor Market Status

This section examines the relationship of propensity to respondents' reported employment and student status. An economic perspective suggests that a person's current employment and student status are the most important determinants of his or her propensity although other noneconomic factors may be equally or more important. The local area unemployment rate only reflects average conditions in the labor market, not the individual's specific situation. Those employed in secure, well-paying jobs may be unlikely to consider a military career even if they live in a high unemployment area.

Individuals who are employed full time are expected to have relatively low positive propensity. Those who are unemployed and looking for a job are expected to have relatively high positive propensity because they are actively examining and pursuing career opportunities. Individuals who are currently out of the labor market (unemployed, but not looking for a job) and those who are employed part time should fall between those employed full time and those who are unemployed but looking for work in their propensity to enlist.

Student status is an important adjunct to labor force status. In the United States, 75 percent of young males and young females complete at least 12 years of primary and secondary education before entering the labor force on a full-time basis. Even at that point, significant proportions of young people pursue full-time education instead of a full-time job. To a great extent, school enrollment is an alternative to full-time labor force participation. Therefore, in the following analyses, respondents are

classified first by employment status and, second, by both employment status and student status.

1. Propensity by Employment Status

Table 5.3 examines the effects of employment status on propensity. The results show that the positive propensity of young males is strongly related to their employment status. Individuals employed full time have positive active propensity of 23.4 percent, while those unemployed but looking for jobs have positive active propensity of 44.1 percent. Both of these figures also differ from the overall average for young males of 32.0 percent. Part-time workers and those who were unemployed but not looking for jobs have positive active propensities of 33.5 percent and 29.6 percent, respectively.

Positive Reserve propensity for young males is similarly related to employment status. Those who are employed full time and those unemployed but not looking for jobs have lower positive Reserve propensity (17.5 and 17.4 percent, respectively) than those unemployed and looking for jobs (25.5 percent). The average positive Reserve propensity of 20.1 percent does not differ significantly for any of the groups except the unemployed but looking group.

Self-reported employment status is also an important determinant of young females' positive active and Reserve propensities. The positive active propensity of young females who are unemployed (and looking for jobs) is twice that of any of the other female groups (21.8 percent versus 10 to 11 percent). Positive Reserve propensity for unemployed (and looking) young females is 15.3 percent compared to 5 to 6 percent for employed and unemployed but not looking young females.

Table 5.3. Positive Propensity by Employment Status

Employment Status	Young Males		Young Females	
	Active Military ^a	Reserve Component ^b	Active Military ^a	Reserve Component ^b
Employed Full time	23.4 (1.3)	17.5 (1.2)	9.8 (1.2)	5.2 (0.9)
Employed Part time	33.5 (1.4)	20.5 (1.2)	10.7 (1.0)	6.1 (0.8)
Unemployed, looking	44.1 (1.9)	25.5 (1.6)	21.8 (1.9)	15.3 (1.7)
Unemployed, not looking	29.6 (1.8)	17.4 (1.6)	10.7 (1.3)	5.4 (0.9)
Total	32.0 (0.8)	20.1 (0.7)	12.8 (0.7)	7.7 (0.6)

Employment Status	Older Males		Older Females	
	Active Military ^a	Reserve Component ^b	Active Military ^a	Reserve Component ^b
Employed Full time	13.4 (1.4)	11.1 (1.2)	4.1 (0.9)	5.2 (1.1)
Employed Part time	5.5 (2.2)	3.9 (1.8)	8.1 (2.7)	9.1 (2.9)
Unemployed, looking	34.7 (6.7)	29.6 (6.5)	7.6 (2.5)	8.5 (2.7)
Unemployed, not looking	16.5 (7.1)	3.9 (3.9)	3.6 (1.3)	2.4 (1.0)
Total	14.2 (1.3)	11.5 (1.1)	5.0 (0.7)	5.5 (0.8)

Note: Tabled values are cell percentages indicating positive propensity with standard errors in parentheses. Estimates are based on interviews with 5,369 young males, 1,065 older males and 3,187 young females and 1,100 older females.

^aRefers to Positive Composite Active Propensity.

^bRefers to Positive Composite Reserve Propensity.

**Informative standard error not available.

Source: Questions 407, 409A, 416, 417, 424A, 505, 507, 510-513.

Older males' propensity is similarly affected by employment status. Unemployed but looking older males have the highest positive active propensity (34.7 percent) compared with 13.4 percent among those employed full time and 5.5 percent among those employed part time. Despite the large percentage point spread, the 34.7 percent does not differ from the 16.5 percent among those who are unemployed, but not looking; this is probably a result of the relatively small cell sizes for these two groups. The same pattern was evident for positive Reserve propensity and significant for all comparisons with the unemployed but looking group.

The active and Reserve propensity data for older females show no significant differences by employment status.

2. Propensity by Student Status

There is only a modest relationship between student status and positive active propensity for young males and young females as shown in Table 5.4. Specifically, full-time students have higher positive propensity than non-students. The propensity of full-time students does not differ from that of part-time students, nor does the propensity of part-time students differ from that of non-students. Thus, the magnitude of the effect is fairly small.

No relationship exists between positive Reserve propensity and student status for young males. The relationship between student status and positive Reserve propensity for young females is similar to that demonstrated for positive active propensity.

3. Propensity by Employment Status and Student Status

No new patterns appear when young males and young females are classified by both employment status and student status. In general, those who are unemployed but looking for jobs have the highest positive active and Reserve propensities, and those who are employed full time have the lowest positive active and Reserve propensities regardless of student status.

Table 5.4. Positive Propensity by Student and Employment Status

Employment Status	Young Males		Young Females	
	Active Military ^a	Reserve Component ^b	Active Military ^a	Reserve Component ^b
<u>Full-Time Student</u> - Total	34.4 (1.0)	20.0 (0.9)	14.9 (1.0)	8.7 (0.8)
Employed Full time	28.4 (3.1)	18.0 (2.7)	13.3 (3.6)	7.3 (2.8)
Employed Part time	32.2 (1.6)	18.5 (1.3)	11.3 (1.2)	5.7 (0.9)
Unemployed, looking	45.1 (2.2)	26.0 (1.9)	24.7 (2.4)	17.7 (2.3)
Unemployed, not looking	29.3 (1.9)	16.9 (1.7)	12.1 (1.5)	5.8 (1.1)
<u>Part-Time Student</u> - Total	31.8 (3.0)	21.0 (2.5)	12.0 (2.5)	7.3 (2.2)
Employed Full time	25.2 (3.9)	18.8 (3.4)	15.7 (4.5)	7.7 (3.4)
Employed Part time	39.1 (5.7)	20.8 (4.4)	6.6 (3.7)	4.7 (3.5)
Unemployed, looking	40.4 (7.8)	26.5 (6.7)	13.0 (5.6)	8.6 (4.8)
Unemployed, not looking	28.3 (12.1)	27.8 (12.0)	16.7 (9.1)	13.7 (8.8)
<u>Non-Student</u> - Total	27.4 (1.4)	19.8 (1.3)	9.2 (1.0)	5.8 (0.8)
Employed Full time	21.0 (1.5)	16.2 (1.4)	8.0 (1.3)	4.4 (0.9)
Employed Part time	37.1 (3.8)	29.7 (3.9)	10.2 (2.3)	8.4 (2.2)
Unemployed, looking	45.7 (4.2)	26.2 (3.7)	16.0 (3.3)	10.4 (2.8)
Unemployed, not looking	34.1 (6.3)	20.7 (5.2)	4.8 (1.8)	2.8 (1.4)

Note: Tabled values are cell percentages indicating positive propensity with standard errors in parentheses. Estimates are based on interviews with 5,274 young males and 3,145 young females.

^aRefers to Positive Composite Active Propensity.

^bRefers to Positive Composite Reserve Propensity.

Source: Questions 407, 409A, 416, 417, 424A, 505, 507, 510-513.

Among young males, the pattern is for part-time workers and unemployed and not looking individuals to have active propensities between those of full-time workers and those who are unemployed but looking, regardless of their student status. The pattern for Reserve propensities is not as consistent.

The pattern among young females is for part-time workers and unemployed and not looking individuals to have positive propensities similar to or lower than those of full-time workers, regardless of their student status. Unemployed and not looking non-student young females had very low positive active and Reserve propensities. This may be attributed to their high probability of being married and/or having dependent young children.

D. Summary

This chapter examined the relationship between economic factors and enlistment propensities. Economic indicators included aggregate unemployment data, as well as self-reported employment and student status.

Trends of national unemployment rates and average Positive Composite Active Propensity revealed a positive correlation between these two variables ($r=.61$) for young males (16-21 years old) for 1976 through 1986. Overall, as the unemployment rate rises, propensity increases. There was no association between unemployment rate and propensity for young females.

Examination of propensity as a function of the average unemployment rate in the respondent's county of residence revealed a strong relationship for young males and a somewhat attenuated association for young females. Youths living in economically "very strong" areas (lowest unemployment rates) were significantly less likely to show both active and Reserve positive propensity than those in economically "very weak" areas (highest unemployment rates). Those in economically "weaker" or "stronger than average" areas did not differ from the national average. This association of propensity and unemployment rate follows the same general pattern of results within Census regions.

Self-reported employment status is strongly related to the expression of positive propensity for both young males and young females. In general, individuals employed full time and those who are unemployed but not looking for a job show the lowest levels of active and Reserve propensity. Those employed part time have either similar or slightly higher propensity levels. The highest levels of positive propensity are found among individuals who are currently unemployed but looking for a job.

Examination of propensity as a function of student status alone and in conjunction with employment status did not contribute additional information to the results as already described.

6. INTENTIONS, ATTITUDES AND ACTIVE PROPENSITY

Military service is only one of the many activities or routes to occupational opportunity open to young people. The variety of activities in which individuals may engage ranges from managing a home to attending school or working, all of which may be performed on a full-time or part-time basis. Obviously then, young people must judge the relative advantages and disadvantages of serving in the military as a function of all the alternatives available to them. What are some of the variables that enter into this judgment?

The relevant sociodemographic variables related to positive propensity toward joining the active military have already been discussed. The contribution of economic factors has also been considered. This chapter examines the attitudinal concomitants of propensity. First, respondents' intentions to engage in a number of alternative occupations during the next few years are examined. Their most likely plan for the next year (or, for the younger respondents, following high school) is then discussed. Attitudes regarding how difficult it is to find a job in one's community and how seriously one has considered joining the military, as well as one's own feelings about military service are presented. Finally, perceived norms (the perceived attitudes of significant others) and related behavioral intentions are examined. All of these variables are discussed with regard to their relationship to active propensity.

A. Military Service and Alternative Activities

This section consists of an examination of individuals' plans to engage in military and/or alternative civilian activities during the next few years. Choosing one activity does not preclude choosing another at another point in time. Thus, plans for further schooling do not necessarily rule out military service. In fact, the GI bill benefits package is aimed at individuals who expect to continue their education, either while serving or subsequent to serving.

1. Alternative Plans for the Next Few Years

Respondents were asked to state the likelihood that they would be doing each of a number of future potential activities in the next few years. In Table 6.1 some general observations are immediately apparent from inspection of the percentages of each market group answering "definitely" or "probably" to each activity. First, the largest percentage of all the market groups plan to be going to college. Percentages stating this range from 51 percent of the older males to 81 percent of the young females. Of secondary importance to the male groups is going to vocational or technical school (49 percent of the young males; 50 percent of the older males). For the females, working at a desk in a business office is second in importance (59 percent of young females; 57 percent of older females). Males did not differ significantly in preferences for working as a laborer in construction, at a desk in a business office or as a salesman, with about one-third or less of each male group planning to engage in any of these activities in the next few years. One fourth or fewer of the young females said that they were likely to be working as a waitress or to be a full-time homemaker, while about two-fifths said they would probably be a saleswoman or go to vocational or technical school. Older females were similarly unlikely to plan to be waitresses and similarly likely to plan to be in sales or vocational/ technical school but were much more likely than young females to expect to be a full-time homemaker (44 percent).

Finally, there were a number of significant differences between respondents with positive and those with negative propensity. Among the male groups, positive propensity individuals were more likely than their negative propensity counterparts to say they would probably or definitely be a construction laborer or go to vocational or technical school. This result may indicate that positive propensity males feel they have less potential for middle or high level occupations, or it may merely reflect an inclination by these individuals to respond in a positive fashion concerning all potential future activities. Positive propensity females were more likely than negative propensity females to say that they would be going to college or vocational/technical school in the next few years.

Table 6.1. Alternative Plans for the Next Few Years by
Composite Active Propensity

Likelihood of Alternative Plans ^a	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Working as a laborer in construction	37.8	26.7	30.3 (0.8)
Working at a desk in a business office	35.0	34.2	34.5 (0.8)
Working as a salesman	25.2	29.1	27.8 (0.8)
Going to college	74.8	76.4	75.9 (0.7)
Going to vocational or technical school	59.0	44.0	48.8 (0.9)
<u>Older Males</u>			
Working as a laborer in construction	50.7	29.7	32.7 (1.7)
Working at a desk in a business office	25.7	33.5	32.4 (1.7)
Working as a salesman	42.6	29.4	31.3 (1.7)
Going to college	59.5	49.8	51.2 (1.8)
Going to vocational or technical school	65.2	47.0	49.6 (1.8)
<u>Young Females</u>			
Working as a waitress in a restaurant	26.7	21.2	21.9 (0.9)
Working at a desk in a business office	60.0	58.9	59.1 (1.0)
Working as a saleswoman	41.1	43.5	43.2 (1.0)
Going to college	86.3	79.8	80.6 (0.8)
Going to vocational or technical school	53.9	40.9	42.5 (1.0)
Being a full-time homemaker	23.7	25.4	25.2 (0.9)
<u>Older Females</u>			
Working as a waitress in a restaurant	27.8	13.5	14.2 (1.2)
Working at a desk in a business office	64.7	56.6	57.0 (1.7)
Working as a saleswoman	39.4	35.4	35.6 (1.7)
Going to college	75.5	60.2	61.0 (1.7)
Going to vocational or technical school	60.4	44.1	44.9 (1.7)
Being a full-time homemaker	37.0	44.6	44.2 (1.8)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,376 young males (1,721 with positive propensity and 3,655 with negative propensity); 1,068 older males (153 with positive propensity and 915 with negative propensity); 3,190 young females (405 with positive propensity and 2,785 with negative propensity) and 1,102 older females (58 with positive propensity and 1,044 with negative propensity).

^aPercentages of respondents who said "definitely" or "probably" to the item.

Source: Questions 501-502, 504, 510-514, 515, 516.

Older females' responses to the question about working as a waitress were parallel to the males' responses to the question about working as a laborer.

2. Most Likely Plan for Next Year

In addition to asking respondents to judge how likely they were to be engaging in each of a number of activities over the next few years, they were asked to specify what they were most likely to be doing in the next year (October, 1987) or after graduating from high school (for the respondents who would still be in high school in October of 1987). These results are presented in Table 6.2. The pattern of results was highly similar for young males and young females. Almost half of the younger respondents--both male and female--expected to go to school full time. From 28 to 32 percent planned to work full time, and about 10 percent planned to attend school part time. Seven percent of young males and only 2 percent of young females planned to be serving in the military.

The older respondent groups were less consistent in their responses than the younger respondents. Both older males and older females were most likely to say that they would be working full time in October 1987. However, the males were much more likely to say this (76 percent) than the females (45 percent). The older males' second and third choices were mentioned by fairly small percentages: 10 percent said they would be in school part time and 3 percent in school full time. A relatively larger percentage of older females (19 percent) expected to be full-time homemakers, with another 14 percent planning to be in school part time and 11 percent in school full time. Only one percent of both the older males and older females said that they would be serving in the military.

As was the case for alternative plans for the next few years, there are significant differences are evident between respondents with positive and those with negative propensity. The most striking difference is that the positive propensity respondents in both groups are more likely than the negative propensity respondents to expect to be serving in the military.

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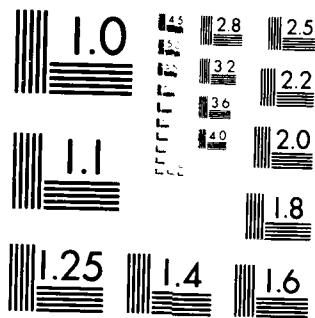
YOUTH ATTITUDE TRACKING STUDY II WAVE (17) -- FALL
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Table 6.2. Most Likely Plan for Next Year (or After High School) by Composite Active Propensity

Most Likely Plan	Young Males			Older Males		
	Positive Propensity (n=1722)	Negative Propensity (n=3659)	Total (n=5381)	Positive Propensity (n=153)	Negative Propensity (n=914)	Total (n=1067)
Going to school full time	37.4	50.3	46.2 (0.9)	14.3	7.1	8.2 (0.9)
Going to school part time	10.6	8.9	9.5 (0.5)	8.4	10.5	10.2 (1.0)
Working full time	25.5	34.5	31.7 (0.8)	65.8	77.6	76.0 (1.5)
Working part time	3.2	2.9	3.0 (0.3)	1.1	1.9	1.8 (0.4)
Serving in the military	20.4	0.4	6.8 (0.4)	7.6	0.1	1.2 (0.4)
Being a full-time homemaker	0.1	0.1	0.1 (0.1)	0.0	0.2	0.2 (0.1)
Other	1.7	1.9	1.9 (0.2)	0.9	1.7	1.6 (0.5)

Most Likely Plan	Young Females			Older Females		
	Positive Propensity (n=404)	Negative Propensity (n=2786)	Total (n=3190)	Positive Propensity (n=58)	Negative Propensity (n=1042)	Total (n=1100)
Going to school full time	43.7	48.9	48.3 (1.0)	12.7	10.6	10.7 (1.1)
Going to school part time	11.4	10.5	10.6 (0.6)	17.9	13.3	13.5 (1.2)
Working full time	22.6	29.2	28.3 (0.9)	50.4	44.5	44.8 (1.7)
Working part time	4.4	5.3	5.1 (0.4)	6.1	7.4	7.3 (0.8)
Serving in the military	13.7	0.0	1.8 (0.3)	9.9	0.4	0.9 (0.4)
Being a full-time homemaker	2.0	4.2	3.9 (0.4)	1.8	19.5	18.6 (1.4)
Other	0.7	1.4	1.3 (0.2)	1.3	2.6	2.6 (0.5)

Note: Tabled values are column percentages with standard errors in parentheses. Respondents who had completed 11 years or less of school and were less than 19 years old were asked what they most likely would be doing after high school. All others were asked what they most likely would be doing in the fall a year after the interview, i.e., October 1987.

Source: Questions 510-513, 517.

consist of 20 percentage points for young males, 14 points for young females, 8 points for older males, and 10 points for older females.

Respondents with positive propensity were significantly different from those with negative propensity in that:

- both young and older positive propensity males and young females were less likely to anticipate working full time--by about 10 percentage points;
- young positive propensity males were less likely to anticipate going to school full time, whereas older positive propensity males were more likely to anticipate going to school full time (supporting older males' greater relative interest than young males in Reserve/Guard service see--Table 4.4); and
- both young and older positive propensity females were less likely to expect to be full-time homemakers--this is especially true for the older females (20 percent with negative propensity versus 2 percent with positive propensity).

As the previous chapter's discussion of economic factors would suggest, respondents' perceptions of the difficulty of finding a full-time job in the community are also related to alternative plans. To explore the relationship of the perceived probability of locating alternative civilian work and relative attractiveness of military service, data about the difficulty of finding a full-time job in one's community as a function of propensity are presented in Table 6.3.

Overall, the largest percentage of respondents (41-44 percent) feel that finding a full-time job in their community is somewhat difficult. Almost a third of the respondents assert that finding a full-time job is either very difficult or almost impossible. These latter individuals may be more open to options other than employment in the civilian labor market. The older respondents do not differ in their perceptions about the ease of finding a job as a function of propensity; but both young males and young

females with positive propensity are more likely than those with negative propensity to say that finding a job is almost impossible and less likely to say that finding a job is not at all difficult. Thus, perceptions of difficulty in locating a full-time job are related to the expression of interest in joining the military, at least for the younger respondents who, generally, have less experience with the real labor supply picture in their community.

Table 6.3. Perceptions of Difficulty in Finding a Full-Time Job in the Community

Most Likely Plan	Young Males			Older Males		
	Positive Propensity (n=1699)	Negative Propensity (n=3630)	Total (n=5329)	Positive Propensity (n=153)	Negative Propensity (n=911)	Total (n=1064)
Almost impossible	12.8	9.8	10.8 (0.6)	8.0	8.2	8.1 (1.0)
Very difficult	24.3	21.7	22.5 (0.7)	25.5	20.1	20.9 (1.5)
Somewhat difficult	43.6	43.8	43.7 (0.8)	41.1	41.2	41.2 (1.7)
Not at all difficult	19.3	24.6	23.0 (0.7)	25.4	30.6	29.9 (1.6)

Most Likely Plan	Young Females			Older Females		
	Positive Propensity (n=402)	Negative Propensity (n=2755)	Total (n=3157)	Positive Propensity (n=57)	Negative Propensity (n=1035)	Total (n=1092)
Almost impossible	16.2	9.0	10.0 (0.6)	5.7	8.1	7.9 (1.0)
Very difficult	29.1	22.8	23.6 (0.9)	31.7	23.5	23.9 (1.5)
Somewhat difficult	36.6	45.4	44.3 (1.0)	41.4	43.1	43.0 (1.7)
Not at all difficult	18.1	22.8	22.2 (0.8)	21.2	25.4	25.2 (1.5)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Question 436.

3. Time Period in Which Enlistment Is Likely to Occur

Those respondents indicating positive propensity toward any of the active Services were asked when they might join. Their responses, by market group, are presented in Table 6.4. The most striking finding is that approximately half of the queried individuals replied that if they were to join, they would not do so for more than two years. The actual percentages saying this ranged from 44 percent of the older males to 53 percent of the young females. With the caveat that many of the young males and young females are likely to be in high school for another one to two years, it is nonetheless encouraging to note that one-fifth to one-fourth of the young positive propensity respondents, and about one-third of the older positive propensity respondents said that they would join in a year or less. However, these data apply to relatively few respondents.

Table 6.4. Time Period in Which Respondent Would Join Military

Response	Market			
	Young Males (n=1721)	Older Males (n=152)	Young Females (n=404)	Older Females (n=57)
Within 6 months	8.7 (0.8)	16.0 (4.0)	5.6 (1.2)	5.9 (3.2)
Between 6 months and 1 year	16.4 (1.1)	19.6 (4.2)	14.7 (1.9)	26.8 (7.2)
More than 1 year but less than 2 years	27.4 (1.3)	20.8 (3.7)	26.7 (2.6)	18.9 (5.6)
More than 2 years	47.6 (1.5)	43.6 (4.9)	53.1 (2.8)	48.4 (7.1)

Note: Tabled values are column percentages with standard errors in parentheses. Data apply only to individuals who indicated that they probably or definitely planned to join at least one of the active Services.

Source: Questions 510-513, 521.

4. Specificity of Propensity: Active and Reserve/Guard

This section presents data concerning relationships between the expression of interest in joining each of the active Services and the two Reserve Components. It examines whether the expression of interest in joining the military applies to either active or reserve duty, or whether it applies primarily to one or the other.

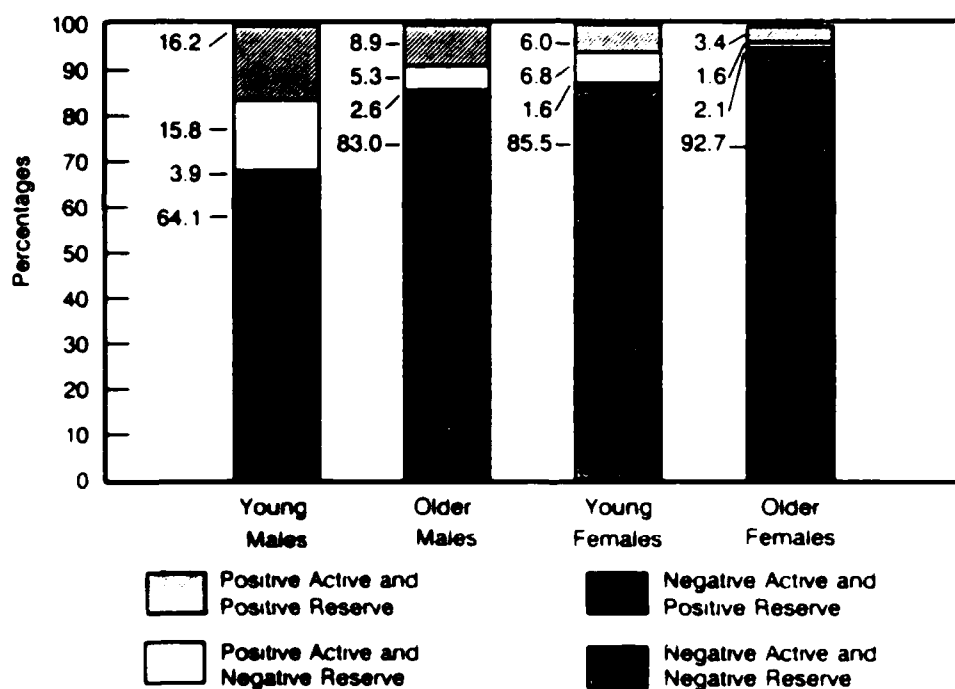
The percentages of young males and young females expressing positive propensity toward the active branches are significantly different than comparable percentages for the Reserve branches of the military. Specifically, 32 percent of young males have positive propensity for active duty, and only 20 percent have positive propensity for the Reserve Component. Although young females are much less likely than young males to have positive propensity, they too are more likely to choose active duty (13 percent) than the Reserve Component (8 percent).

The differences among older groups are small and nonsignificant. Only slightly more older males had positive propensity for active duty (14 percent) than for the Reserve component (12 percent). Reversing the pattern for the older groups, older females were more interested in the Reserve Component (6 percent) than in active duty (5 percent).

Figures 6.1 and 6.2 present data relevant to the question of whether the 5 to 32 percent of respondents who expressed positive propensity are exclusively interested in the active military or in the Reserve Component. Figure 6.1 presents the percentages of each market group showing different combinations of positive and negative Composite Active Propensity and Composite Reserve Propensity. Figure 6.2 presents the percentages of respondents showing different combinations of interest in joining the Reserves and the National Guard.

Figure 6.1 shows that less than one-fifth of the young males (16 percent) and less than one-tenth of the other three market groups (9 percent of older males, 6 percent of young females and 3 percent of older females) expressed positive Composite Active Propensity and positive Composite Reserve Propensity. There is a similar pattern of results across the four market groups for those expressing positive active propensity and negative Reserve propensity. Much smaller percentages of all groups except the older females (who are low on all combinations which include any positive propensity response) expressed positive Reserve propensity and negative active propensity.

Figure 6.1. Specificity of Propensity for Serving in Active Military and Reserve Component



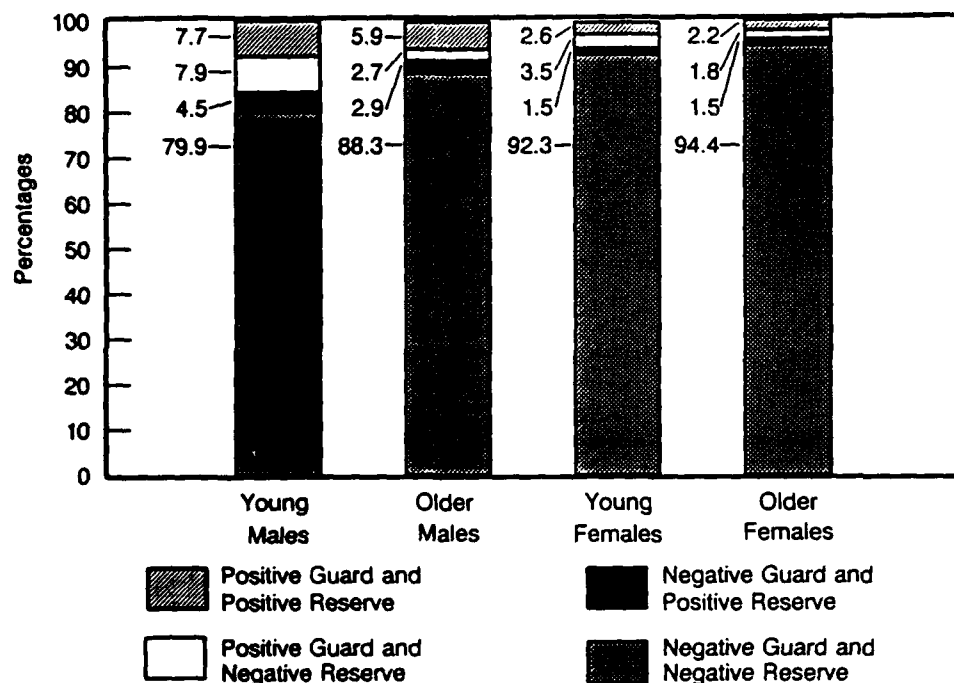
NOTE: Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,102 older females

SOURCE: Questions 505, 507, 510-513.

We can also look at these data in a slightly different fashion by describing the percentage of respondents who show any positive propensity (i.e., positive active, positive Reserve, positive active/negative Reserve, or positive Reserve/negative active) are specific in expressing propensity for either the active Services or the Reserve Component. Drawing on data from Figure 6.1 we see that, of all respondents expressing any positive propensity, only about half (between 42 percent and 53 percent) indicated both positive active and positive Reserve propensity. Thus, there appears to be a fair degree of specificity, with virtually half of each group showing positive propensity toward either the active Services or the Reserve Component.

Figure 6.2 presents data similar to Figure 6.1 regarding specificity of propensity to serve in the National Guard and the Reserves. Here again, we see that, overall, by far the largest percentage of each market group (between 80 percent and 94 percent) shows negative propensity toward both the Guard and the Reserves. Between only 2 percent and 8 percent of the market groups indicated positive propensity toward both components. Almost identical percentages (2-8 percent) of individuals in the market groups expressed positive Reserve/negative Guard propensity, and positive Guard/negative Reserve propensity (2-5 percent). Looking at specificity of component preference among those expressing any positive propensity (i.e., among those who are positive Guard/positive Reserve, positive Reserve/negative Guard, and positive Guard/negative Reserve), 38 percent of the young males and 34 percent of the young females expressed positive propensity for both Reserve components. Among the almost two-thirds showing specificity, more respondents expressed positive Reserve propensity alone than expressed positive Guard propensity alone. The older males were the least specific of the four market groups. Just over half of the older males showed positive propensity toward both Reserve components. Preference for the Guard and the Reserves was approximately equal among the older males showing positive propensity for only one of these components. Older females were closest to the younger males in their nonpreference for either component (40 percent) but, like the older males, when they had a preference, the percentages citing either the Guard or the Reserves were approximately equal.

Figure 6.2. Specificity of Propensity for Serving in Guard and Reserves



NOTE: Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,102 older females.

SOURCE: Questions 505, 507.

B. Interpersonal Influences and Attitudes

This section provides an examination of the respondents' own attitudes, attitudinal indicators and interpersonal influences which are related to a positive attitude toward military service.

1. Previous Consideration of Military Service

The first attitudinal indicator examined is the extent to which respondents gave prior consideration to the possibility of joining the military. As shown in Table 6.5, males are more likely to have considered joining the military than females; 76 percent of young males and 72 percent of older males have given it either serious or some consideration, compared

Table 6.5. Previous Consideration of Military Service

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Serious consideration	50.3	14.6	26.0 (0.7)
Some consideration	43.5	52.5	49.6 (0.8)
Never thought about it	6.2	32.9	24.4 (0.8)
<u>Older Males</u>			
Serious consideration	47.9	21.0	24.8 (1.6)
Some consideration	47.3	47.1	47.2 (1.8)
Never thought about it	4.8	31.9	28.1 (1.5)
<u>Young Females</u>			
Serious consideration	44.3	7.2	11.9 (0.7)
Some consideration	44.1	35.8	36.9 (1.0)
Never thought about it	11.7	57.0	51.2 (1.0)
<u>Older Females</u>			
Serious consideration	39.9	10.2	11.7 (1.1)
Some consideration	52.2	32.3	33.3 (1.7)
Never thought about it	7.9	57.5	55.0 (1.8)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,379 young males, 1,067 older males, 3,191 young females and 1,102 older females.

Source: Questions 510-513, 525.

with only 49 percent of young females and 45 percent of older females. Both female market groups (about half) were much more likely than both male market groups (about a quarter) to say that they had never thought about military service. As expected, previous consideration of military service is related to propensity. Positive propensity respondents in all four groups were more likely than their negative propensity counterparts to say that they had given military service serious consideration and were less likely to say that they had never thought about it. Females show the most striking contrast. There

was more than a 45 percentage point difference between the positive propensity female respondents who had never considered joining the military and the negative propensity female respondents who had never considered joining. This difference for males was 27 percentage points.

The relationship between prior consideration of military service and propensity, suggests that previous consideration of military service would also be related to respondents' most likely plans for next year (or after high school). The association between giving military service previous serious consideration and planning to serve in the military is shown in Table 6.6. It is high, as expected, especially for males and young females.

2. Attitudes and Interpersonal Influences

Beliefs about what others think one should do (norms) as well as one's own likes and dislikes (attitudes) should be important influences on propensity to join the military and, one would expect, on the ultimate decision of whether to enlist. These variables have been shown to be strongly associated with propensity in the past. Table 6.7 presents the percentages of individuals in each of the market groups, cross tabulated by propensity, who indicated positive attitudes, behavioral intentions, and perceived norms toward joining the military. Tables C.5a and C.5b (in Appendix C) present the complete distributions, by propensity, for these three questions.

The total percentage of respondents who had a positive attitude toward military service ("Own feelings are favorable") varies considerably as a function of market group. Older females were least likely to be positive (18 percent), followed by young females (24 percent) and older males (29 percent); young males were by far the most likely to be positive overall (40 percent). This general pattern of positive attitude parallels propensity levels for the market groups. In addition, the expression of positive propensity is highly related to having a positive attitude toward serving in the active military. In all markets, individuals with positive propensity are far more likely to report positive personal feelings about the military than are respondents with negative propensity (15-22 percent versus 74-79 percent).

Table 6.8. Most Likely Plan for Next Year (or After High School) by Previous Consideration of Military Service

Market/Item Response	School		School		Work		Work		Serve in Military (n=370)
	Full Time (n=2536)	Part Time (n=496)	Full Time (n=1860)	Part Time (n=183)	Full Time (n=1860)	Part Time (n=183)			
<u>Young Males</u>									
Serious consideration	21.5 (1.0)	21.5 (2.3)	22.0 (1.2)	19.5 (3.5)	83.7 (2.3)				
Some consideration	53.4 (1.2)	54.0 (2.9)	50.6 (1.6)	53.8 (4.7)	15.3 (2.2)				
Never thought about it	25.2 (1.1)	24.5 (2.5)	27.4 (1.5)	26.7 (4.2)	1.0 (0.6)				
<u>Older Males</u>									
Serious consideration	34.5 (5.6)	28.4 (4.7)	21.9 (1.7)	35.4 (10.6)	100.0 (**)				
Some consideration	41.3 (5.9)	47.9 (5.3)	49.1 (2.0)	30.9 (10.5)	0.0 (**)				
Never thought about it	24.2 (5.0)	23.7 (4.4)	29.0 (1.8)	33.7 (11.0)	0.0 (**)				
<u>Young Females</u>									
Serious consideration	10.8 (1.0)	12.3 (1.9)	10.0 (1.2)	7.9 (2.2)	83.1 (5.7)				
Some consideration	37.5 (1.4)	40.1 (2.9)	36.3 (1.8)	37.6 (4.4)	15.3 (5.6)				
Never thought about it	51.7 (1.5)	47.6 (3.0)	53.7 (1.9)	54.5 (4.4)	1.6 (1.6)				
<u>Older Females</u>									
Serious consideration	15.3 (3.6)	15.1 (3.2)	11.9 (1.6)	14.6 (4.3)	38.9 (19.3)				
Some consideration	41.9 (5.3)	38.5 (4.6)	33.8 (2.4)	30.1 (5.4)	23.0 (16.1)				
Never thought about it	42.8 (5.1)	46.5 (4.7)	54.3 (2.6)	55.3 (5.9)	38.1 (25.3)				

Note: Tabled values are column percentages with standard errors in parentheses.

**Informative standard error not available.

Source: Questions 517, 525.

The market groups have the same general order as before with regard to the perceived favorability toward military service among those who matter most to the respondent. Older females overall are the least likely (23 percent) to report favorable perceived norms; young females (30 percent) and older males (32 percent) are more likely, and young males most likely (42 percent) to report that those who matter most are favorable. Within each market group, those with positive propensity are much more likely to report favorable norms than are those with negative propensity.

Overall, the market groups look somewhat more similar on the final item in Table 6.7 than on the previous two. Similar percentages of older males, older females, and young females (about 32 percent) report that they would encourage a friend to see a recruiter. Only the percentage for young males is significantly higher (36 percent). Propensity is highly related to favorable behavioral intentions. Respondents with positive propensity were more than twice as likely to report positive behavioral intent than their negative propensity counterparts.

The importance of attention to factors that influence positive attitudes toward the military cannot be overemphasized. The data examined in this section show clearly that propensity becomes more positive as attitudes and perceived norms become more positive. This reinforces long-standing marketing assumptions and suggests that recruiters and advertisers can increase positive propensity by creating positive images about military service.

3. Enlistment of a Close Friend or Relative

The recent enlistment of a close friend or relative is also a strong personal influence regarding military service. The percentages of each market group reporting the occurrence of this event in the past six months are presented in Figure 6.3. About two-fifths of the young males and young females and just under half of the older market groups did, indeed, report this occurrence. In addition, positive propensity respondents were more likely than those with negative propensity to report

Table 6.7. Attitudes and Interpersonal Influences Concerning Military Service and Advice to Friend About Seeing a Recruiter

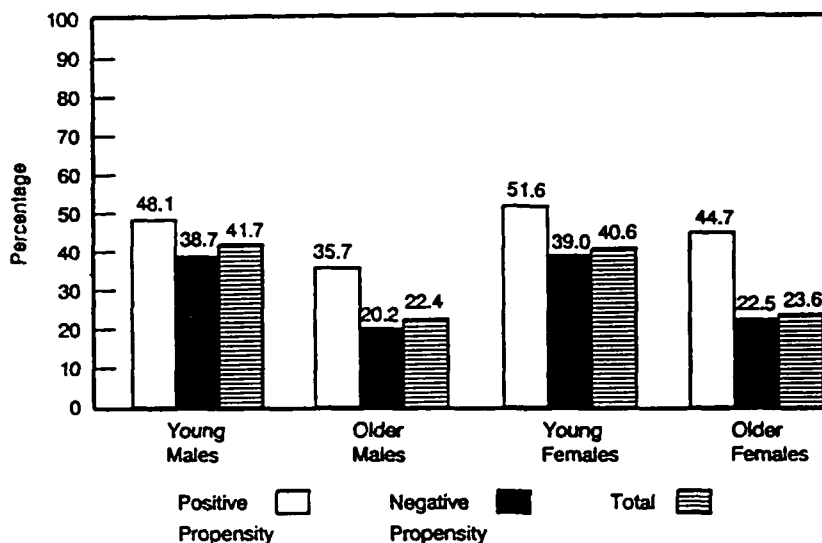
Response	Young Males			Older Males		
	Positive Propensity (n=1715)	Negative Propensity (n=3847)	Total (n=5362)	Positive Propensity (n=151)	Negative Propensity (n=911)	Total (n=1062)
Own feelings are favorable ^a	78.8 (1.2)	21.9 (0.8)	40.1 (0.8)	78.0 (4.1)	20.6 (1.5)	28.7 (1.6)
Those who matter most are favorable ^a	65.3 (1.4)	30.3 (1.0)	41.5 (0.9)	61.1 (4.6)	27.4 (1.7)	32.2 (1.7)
I would tell friend that seeing a recruiter is a good idea	60.8 (1.5)	24.7 (0.9)	36.2 (0.8)	59.2 (4.9)	27.7 (1.7)	32.2 (1.7)
Response	Young Females			Older Females		
	Positive Propensity (n=403)	Negative Propensity (n=2780)	Total (n=3183)	Positive Propensity (n=58)	Negative Propensity (n=1041)	Total (n=1099)
Own feelings are favorable ^a	79.0 (2.2)	16.0 (0.8)	24.0 (0.9)	74.1 (7.4)	15.0 (1.3)	17.9 (1.3)
Those who matter most are favorable ^a	64.2 (2.7)	24.6 (1.0)	29.7 (1.0)	45.3 (7.6)	21.4 (1.5)	22.6 (1.5)
I would tell friend that seeing a recruiter is a good idea	63.6 (2.6)	20.6 (1.0)	31.3 (1.0)	65.7 (7.1)	30.3 (1.7)	32.1 (1.7)

Note: Tabled values are percentages with standard errors in parentheses.

^aIncludes those responding either "somewhat favorable" or "very favorable."

Source: Questions 510-513, 690-692.

Figure 6.3. Close Friend or Relative Enlisted in the Past Six Months



NOTE: Estimates are based on interviews with 2,203 young males (812 with positive propensity and 1,391 with negative propensity), 236 older males (53 with positive propensity and 183 with negative propensity), 3,183 young females (403 with positive propensity and 2,780 with negative propensity) and 271 older females (25 with positive propensity and 246 with negative propensity).

SOURCE: Questions 510-513, 682.

having a close friend or relative who recently enlisted. This finding is consistent with the propensity effects already observed within all four market groups. The actual differences were 9 and 13 percentage points for the young males and young females, respectively, and 16 and 22 percentage points for the older males and older females, respectively.

C. Summary

This chapter examined respondents' plans to engage in a set of activities in the next year and in the next few years, and specificity of propensity toward different components of military service. In addition, interpersonal influences, attitudes, and attitudinal indicators regarding service in the military and their relationship with positive active propensity were examined.

Attending college is the most frequently mentioned future activity, being reported by between one-half and four-fifths of all respondents. The second most common expectation for males was attending vocational or technical school; for females, it was working in a business office. All of the alternate future plans were mentioned more frequently than was service in the military.

The most likely plans for October of 1987 (or following high school graduation, for relevant younger individuals) include further schooling or full-time work for most individuals. Just under half of both groups of younger respondents expect to be going to school full time, while one-third or less of these two groups expect to be working full time. Three-fourths of the older males and almost half of the older females expect to be working full time, with almost one-fifth of the latter group expecting to be full-time homemakers. Only 7 percent of young males, 2 percent of young females, and 1 percent of both older groups report service in the military as their most likely plan for this time period. Not surprisingly, positive propensity respondents in all market groups were more likely to expect to be serving in the military than their negative propensity counterparts.

For young males and especially for young females, positive propensity is also associated with estimations of greater difficulty in finding a full-time job in one's community.

Respondents with positive propensity, regardless of their overall intentions, are most likely to say that it be would more than two years before they joined the military. About half of the queried respondents gave this estimate. The large number of 16-17 year olds who anticipate being in school for another one to two years should be considered in reviewing these estimates for the younger groups.

About half of those respondents who expressed positive propensity toward serving in any component of the military were fairly nonspecific, expressing propensity toward both the active and Reserve components. The other half of the respondents, then, expressed positive propensity toward

either the active military or the Reserve. Males were four times more likely and young females twice as likely to be positive about active military service as about service in the Reserves.

Between one-third and two-fifths of the young males and young and older females, and half of the older males who had positive propensity toward the Guard or the Reserves did not specify one or the other. Conversely, then, between half and two-thirds of the groups showed positive propensity toward either the Guard or the Reserves. While the older groups were evenly divided in their preferences for one or the other of the two components, young males and young females were about twice as likely to show positive propensity toward the Reserves as toward the Guard.

Males are more likely to have given serious or some consideration to joining the military than are females (about three-quarters versus less than half of the groups). In all groups, a higher percentage of individuals with positive propensity had given prior serious consideration to serving in the military.

Expressions of personal favorable feelings about military service were most common among young men (40 percent), followed by older men (29 percent), young women (24 percent) and older women (18 percent). This pattern is repeated in the results of a question concerning perceived norms. Overall positive propensity results for active Services for the market groups follow the same pattern. On the other hand, this pattern was not found for reports of a close friend/relative enlisting in the past six months; here 41-42 percent of the young market groups and only 22-24 percent of the older groups reported this occurrence. However, for personal feelings, perceived norms, and the enlistment of a close friend or relative, positive propensity was associated with significantly higher levels of reported favorability.

The differences between market groups for a final attitudinal indicator--behavioral intent to give a positive response to a friend who asks advice about seeing a recruiter--were narrower than those reported above. Only

young males showed significantly different ratings of favorability (36 percent) than those of the other three groups (each about 32 percent). However, again, positive propensity was related to reporting more positive behavioral intent.

7. ENLISTMENT INCENTIVES AND PROPENSITY

As was noted previously, young people considering a career or seeking employment have a number of available options, including military service, with each option having both positive and negative aspects. The enlistment decision is likely to be affected by many factors, including perceptions of military life, knowledge about pay, educational benefits, time required for annual training and monthly training, and consequences for one's current and future employment status. Consequently, military recruiting and advertising are concerned with increasing young people's knowledge about the benefits of military service and with creating a favorable attitude toward the military.

This chapter examines knowledge of selected enlistment incentives and consequences of enlistment and how this knowledge relates to propensity to serve. Because the active Services and Reserve Components differ both in their basic requirements and benefits, they are discussed separately.

A. Active Services

This section examines the knowledge level of each of the four market segments about monthly starting pay and educational benefits.

1. General Intention to Enlist Given Knowledge of Monthly Starting Pay

Respondents were told that the starting monthly pay for an enlisted person is approximately \$600 and were asked on the basis of this knowledge how likely it is that they will be serving in the military in the next few years. This item is highly similar to a prior question (Q503) on general intention to serve in the military (asked without comment about the amount of starting pay). Examination of the two questions together provides a means for contrasting interest in the military before and after information about pay. Table 7.1 presents the results from Q503 as a Before measure of general intention, and Q554 data as an After measure of general intention. The assumption is that changes occurring between the first and the second administration of a parallel question can at least partly be attributed to a reaction to new information obtained--in this case, about starting pay.

Table 7.1. Change in General Intention to Serve in the Military in the Next Few Years Given Knowledge of Actual Monthly Starting Pay.

Market Likelihood of Serving	Mention of Starting Pay		Change
	Before ^a	After ^b	
<u>Young Males</u>			
Definitely	5.0 (0.3)	5.5 (0.4)	
Probably	21.3 (0.7)	22.4 (0.7)	
Total Positive	26.3 (0.7)	27.9 (0.8)	+1.6
Probably Not	31.9 (0.8)	37.3 (0.8)	
Definitely Not	41.5 (0.9)	34.8 (0.8)	
Don't Know/Refuse	0.3 (0.1)	0.0 (**)	
Total Negative	73.7 (0.7)	72.1 (0.8)	-1.6
<u>Older Males</u>			
Definitely	1.8 (0.5)	2.0 (0.5)	
Probably	9.0 (1.1)	8.9 (1.0)	
Total Positive	10.8 (1.2)	10.9 (1.1)	+0.1
Probably Not	27.5 (1.6)	30.6 (1.6)	
Definitely Not	61.5 (1.8)	58.5 (1.7)	
Don't Know/Refuse	0.2 (0.1)	0.0 (**)	
Total Negative	89.2 (1.2)	89.1 (1.1)	-0.1
<u>Young Females</u>			
Definitely	2.1 (0.3)	1.8 (0.3)	
Probably	7.8 (0.6)	10.6 (0.6)	
Total Positive	9.9 (0.6)	12.3 (0.6)	+2.4*
Probably Not	21.7 (0.8)	32.5 (0.9)	
Definitely Not	68.3 (0.9)	55.2 (1.0)	
Don't Know/Refuse	0.2 (0.1)	0.0 (**)	
Total Negative	90.1 (0.6)	87.7 (0.7)	-2.4*
<u>Older Females</u>			
Definitely	0.4 (0.2)	0.6 (0.2)	
Probably	3.3 (0.6)	5.5 (0.8)	
Total Positive	3.7 (0.7)	6.1 (0.8)	+2.4*
Probably Not	16.7 (1.3)	22.9 (1.5)	
Definitely Not	79.5 (1.4)	71.0 (1.5)	
Don't Know/Refuse	0.1 (0.1)	0.0 (**)	
Total Negative	96.4 (0.7)	94.0 (0.8)	-2.4*

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,122 older females.

*Differences are significant at the 95 percent level of confidence

**Informative standard error not available

^aRefers to responses to Q503, general intention to serve in the military

^bRefers to responses to Q554, general intention to serve in the military given knowledge of starting pay.

Source: Questions 503, 554.

Inspection of Table 7.1 reveals that the changes which occurred were relatively small. Nonetheless, both young and older females showed a significant increment (2.4 percentage points) in general intention to be serving in the military in the next few years. This seems to indicate that accurate knowledge of starting pay at the very least is not a disincentive to joining the military and may, in some cases (e.g., for females), be a definite incentive.

2. Propensity and Knowledge of Educational Benefits

All of the Services offer educational benefits to enlistees. In July 1985, a three-year test of New GI Bill benefits was initiated. Under the New GI Bill, high school graduate enlistees who contribute \$1,200 of their first year's pay receive a basic educational benefit of up to \$10,800. In addition, qualified individuals who enlist in the Army in some hard-to-fill skills can supplement the basic benefit by as much as \$14,400 for a total educational benefit of \$25,200.

Responses to questions about the existence of educational benefits and which Services pay them are presented in Table C.6 (see Appendix C) and are excerpted in Table 7.2 and Figure 7.1. Table 7.2 shows that between two- and three-fifths of all respondents believe that at least one Service has a program that helps pay for college or vocational training. Young males are most likely to believe this (59 percent) and older females least likely (44 percent). In addition, both young males and young females with positive propensity are more likely to assert this belief (65 and 58 percent, respectively) than their negative propensity counterparts (56 and 44 percent, respectively). The older groups did not show this differential tendency as a function of propensity. It is also worth noting that about 1 percent of the males and 9 percent of the females answered "Don't know" to this item.

Respondents were queried about which Services offer a program that helps pay for college or vocational training. Their overall responses are presented in Figure 7.1 and clearly show that the Army is the most common

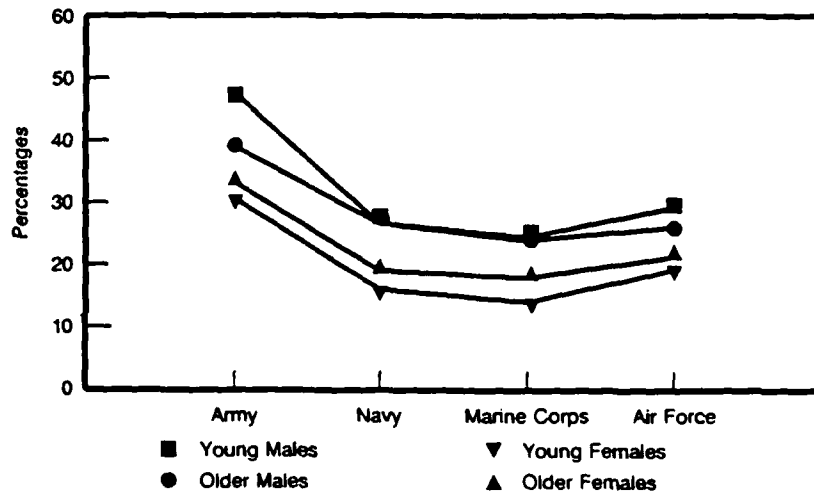
Table 7.2. Overall Beliefs that at Least One Service Helps Pay
for College or Vocational Training

Market Group	Positive Propensity	Negative Propensity	Total
Young Males	64.7	56.2	58.9 (0.8)
Older Males	52.8	49.3	49.8 (1.7)
Young Females	57.7	43.8	45.6 (1.0)
Older Females	52.7	43.8	44.3 (1.7)

Note: Tabled values are percentages of respondents saying that at least one Service helps pay for college or vocational training; standard errors are in parentheses. Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,101 older females.

Source: Questions 510-513, 559.

Figure 7.1. Overall Beliefs That Specific Individual Services Help Pay for College or Vocational Training



NOTE: Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,101 older females.

SOURCE: Question 560.

response to this item (47 percent for young males; 39 percent for older males; 31 percent for young females; 33 percent for older females). The Army consistently measures between 11 and 18 percentage points higher than the Service with the next highest percentage of affirmative responses--generally the Air Force. The Marine Corps is least likely to be mentioned in this regard. The figure also illustrates that young males show, in general, the largest percentages asserting that each Service aids in educational/vocational training.

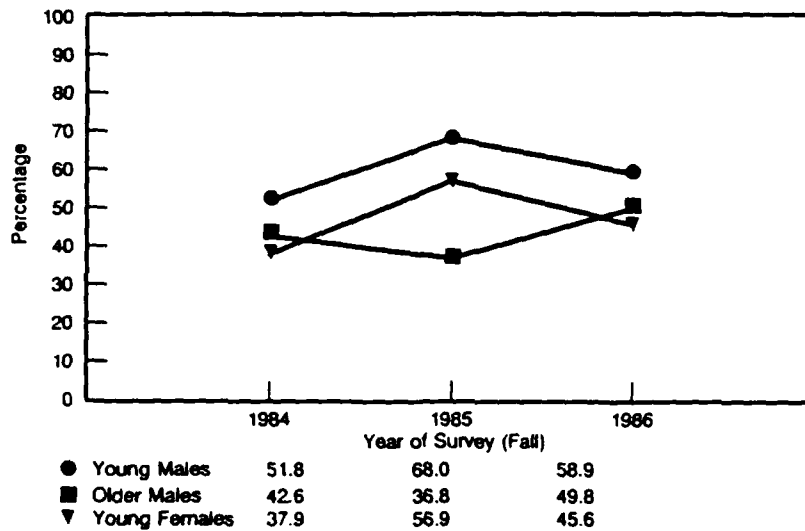
Finally, the propensity breakdowns presented in Appendix C, Table C.6, reveal two sets of fairly consistent differences. First, young males and young females with positive propensity are more likely than those with negative propensity to say that the Army has an educational benefits program. Second, young males, young females, and older females with positive propensity are more likely than their negative counterparts to believe this is true for the Air Force. These propensity differences essentially parallel the overall differences noted in Table 7.2.

3. 1984-1986 Trends in Knowledge About Educational Benefits

To better understand how knowledge of educational benefits has changed, we examined the patterns for the past three years. Young males and young females showed significant increases from 1984 to 1985 (ranging from 14 to 19 percentage points) in their level of knowledge about educational benefits. Older males, on the other hand, did not show this increase. These 1984-85 data, along with the 1986 results, are presented in Figure 7.2.

Before discussing the 1986 results, one important caveat should be noted. In 1986, the question under examination was reworded to omit the word "civilian" before "college or vocational training." Thus, the nature of the educational benefits that was probably assumed in 1984 and 1985 referred to post service use, whereas for 1986 it could refer to benefits received before, during, or after military service.

Figure 7.2. 1984-1986 Changes in Belief That at Least One Service Helps Pay for College or Vocational Training



NOTE: Prior to 1986, the question referred to "civilian college or vocational training"; in 1986, the word "civilian" was taken out. Older males' data include ages 22-24 only; 1984 and 1985 data were reanalyzed for the restricted group.

SOURCE: Question 559.

It appears from Figure 7.2, even with the wording change (which could partially account for an awareness increase), that awareness of educational benefits significantly decreased between 1985 and 1986 for both young males and young females (by 9 and 11 percentage points, respectively). The 1986 awareness levels for the two younger market groups, however, remained significantly higher than 1984 levels. Older males showed a 13 percentage point increase in awareness from their 1985 level.

4. When Educational Benefits Can be Used

For individuals who believe that the Services provide educational benefits, it is of interest to know their perceptions of when the educational benefits are available to them. Table 7.3 presents the responses to a question concerning when the money provided by educational benefits can be used: while a person is still in the military, only after a person leaves the military, or both. Accurate knowledge on this topic is fairly high. About three-fifths of all respondents correctly said "both." The incorrect responders for all groups except older males were more likely to answer that the benefits were available only while in the military than only after discharge. Only the young males showed significant response differences as a function of propensity. Those with positive propensity were less likely to believe that educational benefits would be available to them both during and after military service than those with negative propensity; positive propensity young males were relatively more likely to say that the benefits would only be available while they were in the military.

These data suggest that while the majority of individuals have the correct perceptions about when educational benefits can be used, nearly two fifths have wrong information. To the extent that correct knowledge about benefits increases propensity, the Services could consider additional efforts to better inform potential recruits about the timing of use of benefits.

Table 7.3. When Educational Benefits Can Be Used

Response	Young Males			Older Males		
	Positive Propensity (n=1045)	Negative Propensity (n=1899)	Total (n=2944)	Positive Propensity (n=68)	Negative Propensity (n=410)	Total (n=478)
While in the military	25.6	17.4	20.3 (0.9)	24.2	17.4	18.3 (2.1)
After leaving the military	15.8	16.2	16.0 (0.9)	17.3	14.2	14.6 (1.8)
Both	53.9	61.5	58.8 (1.1)	54.6	66.0	64.4 (2.5)
Don't Know	4.6	5.0	4.9 (0.5)	4.0	2.4	2.7 (0.8)

Response	Young Females			Older Females		
	Positive Propensity (n=208)	Negative Propensity (n=1033)	Total (n=1211)	Positive Propensity (n=29)	Negative Propensity (n=410)	Total (n=439)
While in the military	25.8	24.8	25.0 (1.4)	23.9	26.2	26.1 (2.5)
After leaving the military	8.1	10.4	10.0 (0.9)	2.6	10.0	9.5 (1.6)
Both	62.2	59.6	60.1 (1.5)	69.5	60.7	61.2 (2.7)
Don't Know	3.8	5.1	4.9 (0.7)	4.1	3.1	3.2 (0.9)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 563.

B. Reserve Component

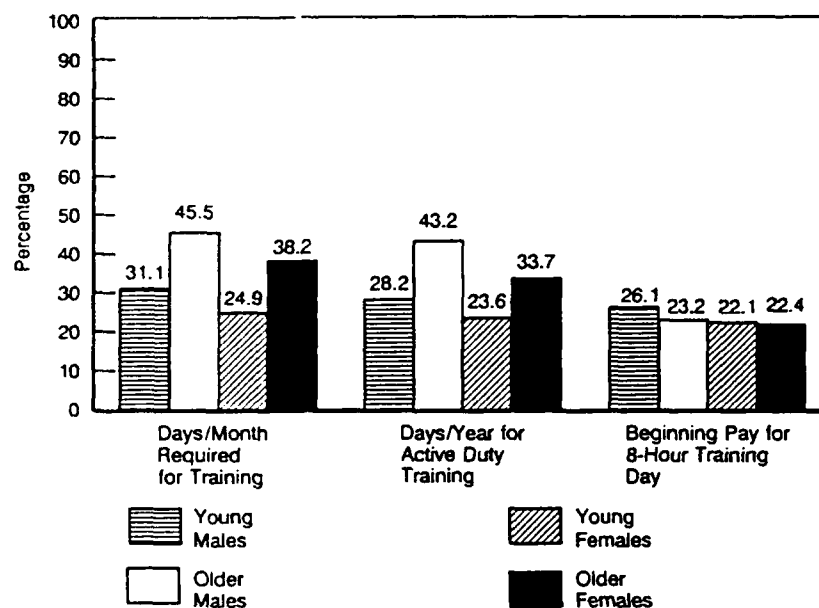
Incentives such as pay and benefits are thought to influence the decision to join the National Guard or Reserves as well as the decision to join the active Services. Additional important factors are beliefs about the time required for training. Older males are the most likely of the market groups to serve in the Guard or Reserves. Because many of them have careers and families, other relevant issues are the proximity to home of a Guard or Reserve unit, and how Reserve Component service might affect a civilian job. This section examines these issues in relation to propensity to enlist in the National Guard/Reserves (Composite Reserve Propensity).

1. Knowledge of Pay and Time Required for Guard/Reserve Participation

Tables C.7a and C.7b (Appendix C) present respondents' estimates of required training days per month, the amount of time required for annual active duty training, and beginning pay for an eight-hour weekend training day. The interviewee's open-ended responses were coded into the categories shown in the tables. Figure 7.3 summarizes graphically the overall responses of each of the four market groups to these three items.

Two days are required for monthly training in the Guard/Reserves. Older males were most likely to give the correct answer (46 percent). Older females were also more accurate (38 percent) than either the young males (31 percent) or young females (25 percent). Among the young groups, 31 percent of the males and 37 percent of the females estimated that eight days or more were required--essentially all weekends during the month. Just under one-fourth of the older groups overestimated the monthly training requirement by this degree. Believing that monthly training would interfere with all weekends and/or one's civilian occupation would certainly discourage a prospective enlistee from considering joining the Guard/Reserve.

Figure 7.3. Respondents with Correct Knowledge of Reserve Component Enlistment Factors



NOTE: Estimates are based on interviews with 2,613 young males, 1,067 older males, 3,180 young females and 1,098 older females. In 1986, 2 days per month were required for training and 14 days per year were required for annual training. Beginning pay for an 8-hour training day was \$39.38; respondents were considered correct if they responded with a figure between \$30 and \$49 inclusive.

SOURCE: Questions 571-573.

Older males and females were also more accurate than the younger groups in estimating the required number of days per year for annual training camp. Of the older groups, 43 percent of the males and 34 percent of the females correctly estimated the required 14 days per year. Only 28 percent of the young males and 24 percent of the young females were this accurate. In addition, the younger groups were more likely than the older groups to overestimate the number of required training days per year; 27 percent of the young males and 29 percent of the young females versus only 18 percent of the older males and females estimated that between 31 and 90 days of annual training time is required in the Guard/Reserves. Like the overestimates of monthly training time, these overestimates are somewhat troublesome as they may discourage some individuals from seriously considering Reserve/Guard service. Further, the percentages of respondents making these overestimates have remained consistent for the past two years.

Beginning pay for an eight-hour training day in 1986 was \$39.38. Accuracy with regard to this particular item was quite low, especially given that the margin of acceptable responses is relatively wide (\$30-\$49). Only 26 percent of the young males, 23 percent of the older males, and 22 percent of the young and older females gave fairly accurate estimates. Between 14 and 24 percent of the groups estimated beginning pay for an eight-hour training day at \$100 or more.

There were few differences in estimates for these three factors as a function of propensity. Negative Reserve propensity older males were more likely (44 percent) than their positive propensity counterparts (34 percent) to estimate correctly the required 14 annual active training days. In addition, positive Reserve propensity young males and females were more likely to vastly overestimate (\$100 or more) beginning 8-hour training-day pay than their negative propensity counterparts.

2. Effects of Potential Cash Bonus on Propensity to Enlist

Respondents were asked a series of questions to determine how likely they would be to enlist in a Reserve Component for 8 years if increasingly larger cash bonuses were offered. Unfortunately, the

interview did not obtain an adequate baseline measure of general intention to join the Reserve Component.¹ Still, the relative effects of increasing bonuses can be examined.

Computations for all bonus questions used a common base of respondents (i.e., the number responding to the initial item in each series) to permit a direct comparison among benefit amounts. It was assumed that those responding "definitely" to the first item would respond in the same way to the second item, where a greater amount was offered. Similarly, those responding "definitely" to the first and second items were assumed to make that response on the third item. Percentages were then computed for the second and third items for the bonus items based on these adjusted numbers of respondents.

Examination of Table 7.4 suggests a strong positive effect of offering a cash bonus on propensity to enlist in the Guard or Reserves. The percentage of young males who said that they would "probably" or "definitely" enlist for eight years if they were to receive a \$2,000 bonus was 23 percent. Comparable percentages for the other market groups were 15 percent for older males, 13 percent for young females, and 9 percent for older females. For all four market segments, these figures were larger than the Composite Reserve Propensity proportions. Increasing the bonus offer to \$4,000 raised these figures by 8 percentage points for young males and 6 points for older males, young females and older females. The offer of a \$6,000 bonus further increased likelihood of enrollment by an additional 7 to 11 percentage points, depending on the market group. On the whole, then, tripling the original bonus from \$2,000 to \$6,000 increased the likelihood of enlistment by 19 percentage points for young men, 15 points for older men, 14 points for young females, and 12 points

^{1/} The appropriate baseline measure would have been an item like Q503 that asked about the respondents' likelihood of joining the Guard or Reserves. Instead, items were asked about propensity to join the Reserve Component--not about the general likelihood of joining. Thus, the comparison with the follow-up questions regarding likelihood of joining, given "X" bonus, involves two different types of questions.

Table 2.1. Incremental Effects of Cash Bonus on Propensity to Enlist in Guard Reserve

Benefit Amount	Young Males		Older Males	
	Likelihood of Enlistment	Increment	Likelihood of Enlistment	Increment
Composite Reserve Propensity	20.0 (0.7)		11.5 (1.1)	
<u>Enlistment Bonus</u>				
\$2,000	22.5 (1.0)	-	15.3 (1.3)	-
\$4,000	30.4 (1.1)	7.9	21.2 (1.5)	5.9
\$6,000	41.5 (1.2)	11.1	29.8 (1.6)	8.6

Benefit Amount	Young Females		Older Females	
	Likelihood of Enlistment	Increment	Likelihood of Enlistment	Increment
Composite Reserve Propensity	7.6 (0.6)		5.5 (0.8)	
<u>Enlistment Bonus</u>				
\$2,000	13.3 (0.7)	-	8.7 (1.0)	-
\$4,000	19.5 (0.8)	6.2	14.4 (1.2)	5.7
\$6,000	27.6 (0.9)	8.1	20.9 (1.4)	6.5

Note: Tabled values are percentages of respondents who said they were "definitely" or "probably" likely to enlist in the Guard/Reserve given the bonus indicated. The number of respondents to the second and third items in each series have been adjusted to the base number responding to the first item in the series. Estimates are based on interviews with 2,604 young males, 1,065 older males, 3,187 young females and 1,095 older females.

Source: Questions 505, 507, 529-581.

the age range of the respondents are very similar to those noted in the previous reports. In fact, it is noted that the figures in previous years were for the age range 18 to 24.

A possible source of the increase in percentages which may occur by training is that the potential gains in enlistment obtained need to be weighed against the cost of training and the bonus to all enlistees.

4.2.2.2. The National Guard and the Reserves as Guard Reserve Participants

Participation in the National Guard or the Reserves is a part-time endeavor, and is subject to both civilian employment or full-time education. Therefore, several questions were asked to determine how easily Guard Reserve participation could be accommodated in a civilian career. For example, a question concerning the existence of a Guard or Reserve unit located near enough to the respondent to make enlisting feasible was asked. In addition, five questions concerning potential or actual effects of Guard Reserve participation on one's civilian job were asked. Two of the questions were fairly general and applied regardless of actual employment status. The other three items applied to employed (but not self-employed) respondents. The questions asked:

- whether an employer would hold a job for them if they were away for active duty training with the Guard Reserve for 3 to 6 months;
- whether respondents would lose job seniority during the training period for the Guard Reserve;
- whether their employer had a specific policy about Guard Reserve participation;
- whether the employer was positive toward Guard Reserve participation; and

- whether they had talked with a supervisor about their employer's policy about the Guard Reserve.

Finally, a question was added in 1986 to assess respondents' beliefs about the existence of any laws that "protect Guard and Reserve members from losing their jobs or job seniority if they are absent from work to attend military training."

Table 7.5 presents the percentages of the male market groups (totals and breakdowns by Composite Reserve Propensity) who answered "yes" to each of these items; parallel responses by the female market groups are presented in Table 7.6.

Both younger and older male groups were more likely to say that there is a Guard or Reserve unit located close enough for them to join (70 percent and 78 percent, respectively) than the younger females (59 percent) or the older females (68 percent). The older groups show larger percentages saying this than the same-gender younger groups. In addition, those with positive propensity in three of the market groups (all except older males) are more likely to say that there is a conveniently close Guard Reserve unit than are their negative propensity counterparts.

Between about two-fifths and one-half of the respondents believe that there are laws which protect them from loss of job or seniority because of military training absences; larger percentages of the older groups believe this than the younger market segments. No effects of propensity are apparent on this item.

Guard Reserve enlistment requires an initial basic training period of between 3 and 6 months. Approximately one-third to just under half of employed respondents believe that their employers would hold their jobs open during this basic training period. Older females were most likely (45 percent) and older males least likely (30 percent) to believe this. Those

Table 7.6 Males' Beliefs About Guard/Reserve Participation

Item	Young Males			Older Males		
	Positive Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total
<u>Proximity^a</u>						
There is a Guard/Reserve unit close enough to join	75.5	68.5	78.8 (1.1)	92.5	78.2	78.7 (1.5)
<u>Loss^b</u>						
Loss protect Guard/Reserve members from losing job/job seniority while training	48.8	41.8	42.5 (1.8)	56.9	63.9	64.3 (1.9)
<u>Job Effects^b</u>						
Employer would hold job open for 3-6 months (basic training)	62.9	37.9	48.9 (1.8)	44.9	45.1	45.1 (2.8)
Would lose job seniority while in (basic) training	33.9	39.1	38.8 (1.8)	34.5	34.7	34.7 (1.8)
Employer has policy about participation in Guard/Reserves	8.9	8.5	8.6 (8.9)	18.8	15.8	15.2 (1.5)
Employer is positive toward Guard/Reserve participation	36.1	21.4	24.4 (1.4)	33.9	26.8	26.8 (1.7)
Talked with supervisor about Guard/Reserve policy	15.7	4.4	6.7 (8.8)	14.7	5.8	6.7 (1.8)

Note. Tabled values are percentages answering yes to each question with standard errors in parentheses.

^aEstimates based on interviews with 2,813 young males (563 with positive propensity and 2,000 with negative propensity) and 1,887 older males (129 with positive propensity and 938 with negative propensity).

^bQuestions asked only of employed (but not self-employed) respondents. Estimates based on interviews with 1,424 young males (298 with positive propensity and 1,126 with negative propensity) and 888 older males (182 with positive propensity and 706 with negative propensity).

Source: Questions 416, 438, 585, 587, 574 578, 582

Item	Young Females			Older Females		
	Positive Reserve Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total
Proximity^a						
There is a Guard/Reserve unit close enough to join	67.8	67.9	68.7 (1.0)	64.8	66.3	65.6 (1.5)
Leave^b						
Leave protect Guard/Reserve members from losing job/job security while training	41.8	41.0	41.1 (1.4)	69.1	61.1	65.0 (2.2)
Job Effects^b						
Employer would hold job open for 3-6 months (basic training)	64.1	58.7	57.7 (2.3)	38.1	19.4	30.2 (1.0)
Would lose job security while in basic training	31.8	39.1	36.7 (1.3)	43.9	41.1	42.5 (1.4)
Employer has to retrain basic trainee if Guard/Reserve	4.4	1.0	4.9 (2.7)	14.8	1.0	15.8 (4.4)
Employer is positive toward Guard/Reserve trainee	61.2	61.1	61.4 (2.1)	60.1	61.1	60.6 (1.0)
Would be a type of Guard/Reserve unit	61.1	61.1	61.4 (2.4)	1.8	1.1	1.4 (0.7)
Note: ^a Rated on a 100-point scale where 100 is the highest and 0 is the lowest in parentheses.						
^b Distances based on interviews with 1,100 young females and 1,100 older females with positive propensity and 1,100 with negative propensity.						
Questing about the family situation of the respondent's first child based on interviews with 1,100 young females (58 with positive propensity and 1,100 with negative propensity) and 1,100 older females (42 with positive propensity and 1,100 with negative propensity).						

with positive propensity in the two young market groups were at least 15 percentage points more likely to assert this than comparable others with negative propensity. Similar percentages of respondents (35-42 percent) reported the belief that they would lose job seniority while in basic training.

Relatively small percentages--ranging from 7 percent of young males to 15 percent of older females--said that their employers have policies about participation in the Guard Reserves. The older groups were more likely than the younger groups to assert this--by about 6.5 percentage points. Somewhat larger percentages--about one-fourth of each market group--said that their employers are positive toward Guard/Reserve participation. In addition, this was even more likely to be said by positive propensity young males (36 percent) than negative propensity young males (21 percent). Finally, it would appear that many of these beliefs may be based on relatively incomplete information, because only 7 percent of the males and 2 percent of the females said that they had ever spoken with their supervisor about their employers Guard/Reserve policies. It is encouraging, however, that positive propensity young and older males were more likely to have spoken with their supervisors (16 and 15 percent, respectively) than those with negative propensity (4 and 6 percent, respectively). This may account for the somewhat more positive beliefs shown by the positive propensity young males.

5. Summary

This chapter examined respondent knowledge about a number of Active and Reserve enlistment requirements and consequences, especially with regard to pay, educational benefits, training time, and effects on one's civilian job. Propensity was also examined in light of awareness of these factors and have, where appropriate, comparisons were made with previous years' data.

Knowledge of starting pay and the existence of educational benefits were the major topics investigated with regard to enlistment in the active Services. General intentions to join the military after being told the

amount of starting pay were either similar to (males) or significantly more positive (females) than general intention levels reported before being told the actual amount of starting monthly pay for an enlisted person.

Passage of the New GI Bill in July of 1985 makes the assessment of knowledge about educational benefits provided by the military a very interesting issue. Between 44 and 59 percent of respondents know there are programs designed to help with college or vocational training, with young males showing the highest awareness levels. In addition, positive propensity young males and females had higher levels of awareness than their negative propensity counterparts. The Army was consistently and definitively most frequently mentioned as the Service providing this kind of program.

Overall trends on knowledge of educational benefits for young males and young females showed a significant increase from 1984 to 1985 (by between 16 and 19 percentage points) and then a decrease (by approximately 10 percentage points) from 1985 to 1986. The 1986 levels of awareness among the young market groups, however, remained higher than 1984 levels. In contrast, 22-24 year old males showed no significant change from 1984 to 1985 and a significant increase in awareness between 1985 and 1986.

Composite Reserve Propensity was examined in light of awareness of a number of factors related to enlistment in the National Guard or Reserves. It is clear that the older market groups--males and females--were much more accurate than the younger groups in estimating both the correct number of training days per month (2) and active duty training days per year (14). The older groups were 13-15 percentage points higher on the correct response for the monthly time requirement and 10-15 points higher on the correct response for the annual training requirement. Overall, the older groups averaged 42 percent and 39 percent accurate responses on these two items, respectively; the younger groups averaged 28 percent and 26 percent, respectively. In addition, between one-fourth and one-third of the younger respondents greatly overestimated the required number of training days per month (8 or more) and per year (31-90 days).

None of the market segments very accurately estimated the correct starting pay (\$39.38) for an eight-hour training day; only between 9 and 12 percent estimated in the correct range (\$30-\$39). Even increasing the width of the "correct" category to \$30-\$49 yields only 22-26 percent accurate estimations. Similar percentages (14-24 percent) estimated daily beginning pay at \$100 or more.

Higher proportions said they would enlist when offered hypothesized increments in the cash bonus for enlisting for eight years in the Guard/Reserves. Raising the bonus from \$2,000 to \$6,000 increased the likelihood of enlistment by 19 percentage points for young men, 15 points for older men, 14 points for young females and 12 points for older females.

Between three-fifths and four-fifths of the respondents said that there was a Guard/Reserve unit located close enough for them to join--males were more likely than females to say this.

Approximately two-fifths to one-half of employed respondents--the older groups more than the younger groups--also believe that there are laws which protect them from losing their jobs or job seniority because of absences due to Reserve/Guard training. Consistent with this figure, about one-third to one-half of employed respondents also said that their employers would hold their jobs open during the 3-6 month basic training period; proportions were even higher among positive propensity respondents. However, similar percentages said that they thought they would lose job seniority while in basic training. Only small proportions (7-15 percent) asserted that their employers have policies about Guard/Reserve participation. Somewhat higher proportions (about one-quarter of the market groups) felt that their employers are positive about Guard/Reserve participation. However, all of these perceptions are at least somewhat suspect, given that only between 2 and 7 percent of the respondents overall (about 15 percent of positive propensity males) had ever discussed their employer's policy about Guard/Reserve participation with their supervisor.

8. ADVERTISING EXPOSURE AND SERVICE IMAGES

People receive information about products, services, occupational options, etc., through a number of channels. One of the most passive of these channels, in terms of actual consumer involvement, is advertising. A major purpose of advertising is to create positive product image by increasing consumer awareness and familiarity with the product. Different media such as print, radio and television advertising, and direct mailings are used to disseminate objective and subjective information about military service and to enhance the image of military service. The expectation is that exposure to advertising, and the resultant increase in knowledge and awareness, will increase one's propensity to enlist, and, thus, the probability of enlistment. This chapter examines young people's awareness of all forms of military advertising and their perceptions of the Services.

A. Exposure to Advertising

1. Advertising Awareness

The YATS questionnaire included two measures of awareness of military advertising. Individuals were first asked: "For what Military Service or Services do you recall seeing or hearing advertising that encouraged people to enlist?" Responses to this initial question are referred to as "unaided awareness." Individuals were then asked whether they recalled advertising for each Service (specified by name) that had not been mentioned in the first answer. These latter responses are referred to as "aided awareness."

Responses to these two questions are presented in Table 8.1. Additional data, broken down by propensity, are presented in Appendix C (Table C.8a for males and Table C.8b for females). Unaided awareness of advertising by the four active Services for both young and older males range from 45 percent for the Navy to 68 percent for the Army. Unaided

Table 8.1 Levels of Awareness of Military Advertising

Sponsor/Awareness	Young Males (n=5380)	Older Males (n= 1067)	Young Females (n=3189)	Older Females (n=1100)
Army				
Unaided awareness	67.9 (0.8)	65.9 (1.7)	66.4 (0.9)	66.2 (1.7)
Aided awareness	17.7 (0.7)	16.6 (1.3)	16.7 (0.7)	16.3 (1.3)
Aided or unaided	85.6 (0.6)	82.5 (1.3)	83.1 (0.7)	82.5 (1.3)
Navy				
Unaided awareness	45.6 (0.8)	46.7 (1.8)	44.4 (1.0)	37.3 (1.7)
Aided awareness	21.6 (0.7)	19.1 (1.4)	18.4 (0.8)	20.0 (1.3)
Aided or unaided	66.6 (0.8)	65.7 (1.7)	62.7 (1.0)	57.4 (1.7)
Marine Corps				
Unaided awareness	51.0 (0.9)	50.6 (1.7)	47.3 (1.0)	45.1 (1.7)
Aided awareness	21.1 (0.7)	19.5 (1.4)	18.2 (0.7)	18.4 (1.4)
Aided or unaided	72.1 (0.8)	70.1 (1.6)	65.5 (1.0)	63.6 (1.7)
Air Force				
Unaided awareness	52.8 (0.9)	54.1 (1.8)	50.0 (1.0)	45.6 (1.7)
Aided awareness	23.7 (0.7)	20.4 (1.4)	22.6 (0.8)	20.4 (1.5)
Aided or unaided	76.4 (0.7)	74.5 (1.6)	72.6 (0.9)	66.0 (1.6)
Coast Guard				
Unaided awareness	18.8 (0.7)	22.8 (1.5)	13.4 (0.7)	13.5 (1.1)
Aided awareness	18.7 (0.7)	20.6 (1.4)	17.8 (0.8)	18.0 (1.3)
Aided or unaided	37.5 (0.8)	43.5 (1.8)	31.2 (0.9)	31.5 (1.6)
National Guard/Reserve				
Unaided awareness	21.0 (0.7)	27.5 (1.6)	18.9 (0.8)	21.8 (1.4)
Aided awareness	32.6 (0.8)	29.2 (1.5)	24.0 (0.9)	26.2 (1.5)
Aided or unaided	53.6 (0.8)	56.8 (1.7)	42.9 (1.0)	47.0 (1.7)
Joint Services^a				
Unaided awareness	13.8 (0.6)	16.8 (1.4)	10.7 (0.6)	10.9 (1.0)
Aided awareness	35.1 (0.8)	31.5 (1.6)	29.5 (0.9)	26.4 (1.5)
Aided or unaided	48.8 (0.9)	48.3 (1.8)	40.2 (1.0)	37.3 (1.6)

Note: Tabled values are percentages with standard errors in parentheses. Aided awareness is somewhat inversely related to unaided awareness in that respondents are only asked about it if they do not report unaided awareness for a given Service.

^aQuestion refers to "one ad for Joint Services."

Source: Questions 510-513, 601-608.

awareness of Coast Guard, National Guard/Reserve and Joint Services advertising was much lower, ranging from 14 percent to 28 percent of the male respondents.

Among young and older males, levels of aided awareness of advertising for the active Services and the Coast Guard are similar, averaging about 20 percent, and are lower than unaided levels. Somewhat higher levels of aided awareness were reported for the National Guard/Reserve (29-33 percent) and for the Joint Services (32-35 percent), but this result is partially a result of the lower levels of unaided awareness for these advertisers.

The advertising awareness results for the Joint advertising program must be viewed in a different light than those for the active Services. The purpose of Joint advertising is to supplement and complement the advertising efforts of the Military Services. Joint advertising is not intended to be construed as a "fifth Service." Nowhere in the advertisements is "Joint Services" mentioned (the advertisements do, however, mention the "U.S. Armed Forces") and, when the individual Services are mentioned, the order of mention of each Service is rotated.

Accordingly, the low levels of Joint Services advertising awareness presented in Table 8.1 do not necessarily mean that Joint advertising is ineffective in reaching or persuading its target audience. Although no data are available to prove the point, it is reasonable to suggest that some portion of the advertising awareness of the Military Services is the result of identifying (or misidentifying) Joint advertisements as advertisements for a specific Service. In other words, it is possible that a respondent would say, for example, that he saw an Army advertisement when, in fact, what he saw was the Army portion of a Joint advertisement for all the Services.

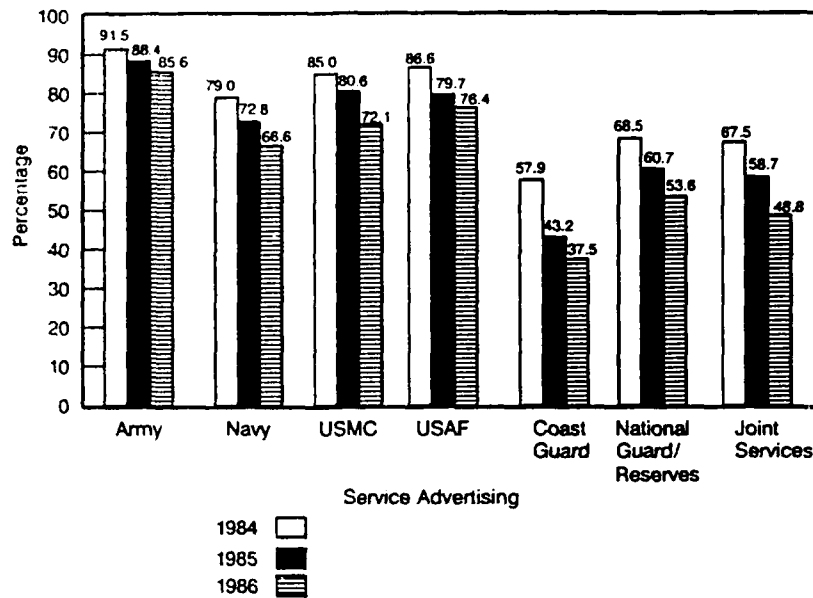
Except for the Army, levels of advertising awareness among young and older females were generally lower than those for males. The levels of awareness of Army advertising among females were nearly identical to those of the males. Between 37 percent and 50 percent of the females reported unaided awareness of advertising for the Navy, Marine Corps, and Air Force.

As was the case for the males, among the females unaided awareness of Coast Guard, National Guard/Reserve and Joint Services advertising was much lower, between 11 percent and 22 percent, than the levels for the four active Services. Aided awareness was also uniformly low with about one-fifth of the females mentioning each of the four active Services and the Coast Guard, and about one-fourth mentioning the National Guard/Reserve and the Joint Services.

Figures 8.1 and 8.2 present the combined aided and unaided advertising awareness levels for the young males and young females, respectively, for 1984 through 1986. Two basic results are shown in these figures. The first result is the consistent differential levels of awareness among the military advertisers. The second result is the decreasing levels of advertising awareness for all advertisers from 1984 to 1986. For young males and young females, the decrease in levels of advertising awareness for every one of the year-to-year comparisons for each advertiser was statistically significant.

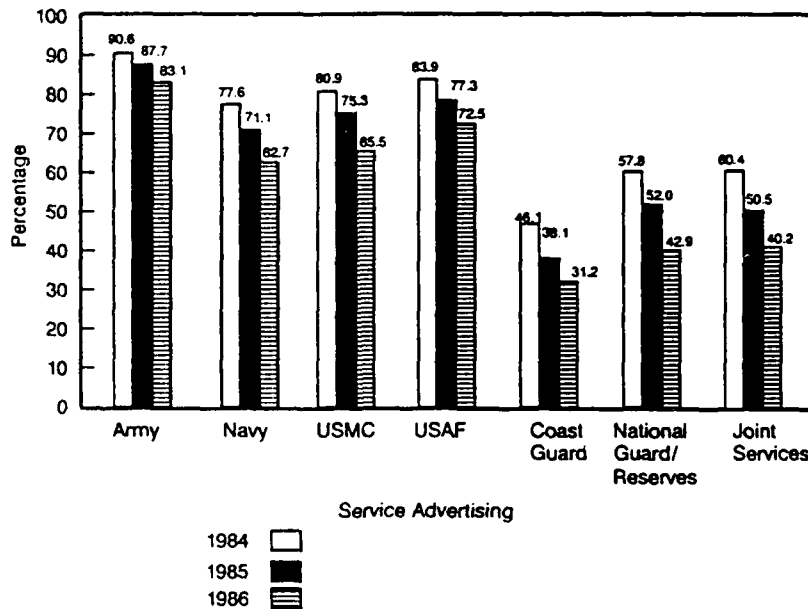
The specific reasons for these decreasing levels of advertising awareness are not explicable from the data collected in YATS. However, they may be accounted for by changes in media habits, lower Service advertising budgets, and increasing advertising costs. With the deeper market penetration of cable television and increased ownership of video cassette recorders, the market share of commercial network television stations has dropped significantly. This may mean that fewer young males and females are exposed to television advertising. At the same time that advertising budgets have been reduced, the costs of all forms of advertising have increased by 7-10 percent per year. Accordingly, these three factors taken together may have reduced the "reach" (the percentage of the target population that sees, hears, or reads an advertisement) and "frequency" (the number of times an individual is exposed to an advertisement in a fixed period of time) of military advertising.

Figure 8.1. Young Males' Aided and Unaided Awareness of Advertising, 1984-1986



SOURCE: Questions 510-513, 601-608.

Figure 8.2. Young Females' Aided and Unaided Awareness of Advertising, 1984-1986



SOURCE: Questions 510-513, 601-608.

Table 8.2 presents the order in which the individual Services were mentioned in response to the initial, unaided question about advertising. Young males and females and older females have nearly identical patterns and percentages on the initial response. The Army was the most frequently mentioned first response (36-38 percent); the Air Force second (24-29 percent); and "Other," which includes "None," third (13-15 percent). Older males differed only in that equal percentages mentioned either the Army or the Air Force first. Individuals giving a second response also mentioned the Army most frequently, between 37 and 44 percent of the respondents. The Marine Corps was generally most likely to be given as a third response, followed closely by either the Coast Guard (among the male market groups) or the Air Force (among the female market groups).

2. Recognition of Military Advertising Slogans

Recognition and identification of the sponsor of advertising slogans are more precise indicators of advertising awareness than simple self-reported exposure data. Respondents were read seven military slogans and were asked to name the sponsor of each. The Army, Navy and Air Force each had one slogan, and the Marine Corps and Joint Services each had two. The overall market group responses to these items are presented in Table 8.3. In addition, Tables C.9a (males) and C.9b (females) in Appendix C present the responses by propensity. In all of these tables, the correct sponsor for each slogan is underlined.

The three slogans which had the highest levels of correct sponsor attribution were: "Aim high.____." (Air Force), "The few, the proud, the ____." (Marine Corps) and "Be all you can be." (Army). Among the four market groups, only the young males showed significantly higher, though small, levels of correct sponsor attribution for each of these three slogans. Correct sponsor attribution for these three slogans among young males ranged from 82-89 percent compared to 75-86 percent among older males, 70-80 percent among young females, and 72-73 percent among older females. Although the Army had the overall highest level of advertising awareness, the Army slogan, "Be all you can be," did not have the highest levels of correct sponsor attribution.

Table 8.2. Order of Mention for Recall of Military Advertising

Service	Young Males			Older Males		
	First Response	Second Response	Third Response	First Response	Second Response	Third Response
Army	35.7	41.9	8.5	31.4	44.3	10.1
Navy	5.9	19.5	15.3	5.1	19.6	11.0
Marine Corps	8.5	15.1	28.7	7.6	13.5	24.8
Air Force	28.5	18.0	19.7	30.8	15.7	19.1
Coast Guard	0.6	1.9	24.3	1.0	1.7	31.2
National Guard/Reserve	2.0	3.1	2.7	4.4	4.5	2.5
One ad for all Services	5.5	0.6	0.9	5.7	0.7	1.3
Other ^a	13.3	-	-	13.9	-	-

Service	Young Females			Older Females		
	First Response	Second Response	Third Response	First Response	Second Response	Third Response
Army	38.2	36.8	8.4	38.0	37.4	10.4
Navy	6.7	23.7	16.6	5.2	20.7	11.0
Marine Corps	7.7	15.2	29.6	8.4	16.5	27.8
Air Force	25.2	17.6	22.3	23.6	16.5	21.7
Coast Guard	0.6	1.8	18.0	0.5	2.1	20.5
National Guard/Reserve	3.1	4.0	3.9	4.5	5.9	7.1
One ad for all Services	4.1	0.9	1.2	5.0	0.9	1.5
Other ^a	14.3	-	-	14.8	-	-

Note: Tabled values are column percentages. Data are for unaided mentions. Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,102 older females.

^aIncludes "None" (first response only), don't know, and refused.

Source: Question 601.

Table B.3. Correct and Incorrect Sponsor Attributions for Military Advertising Slogans

Slogan/Response	Young Males (n=6382)	Older Males (n=1068)	Young Females (n=3190)	Older Females (n=1102)
"Be all you can be."				
Army	82.4 (0.6)	75.3 (1.5)	79.8 (0.8)	73.0 (1.6)
Navy	3.3 (0.3)	4.5 (0.7)	5.0 (0.5)	6.9 (0.9)
Marine Corps	4.5 (0.4)	6.2 (0.8)	3.6 (0.4)	5.1 (0.8)
Air Force	3.8 (0.3)	5.5 (0.8)	4.1 (0.4)	6.1 (0.8)
Joint Services	3.5 (0.3)	3.8 (0.7)	4.0 (0.4)	3.2 (0.6)
Don't know	2.5 (0.3)	4.7 (0.8)	3.6 (0.4)	5.8 (1.0)
"_____ It's not just a job, it's an adventure."				
Army	31.8 (0.8)	32.3 (1.7)	33.3 (0.9)	31.0 (1.6)
Navy	38.1 (0.8)	38.2 (1.8)	24.3 (0.8)	28.5 (1.6)
Marine Corps	12.5 (0.6)	9.7 (1.0)	13.4 (0.7)	12.4 (1.1)
Air Force	7.1 (0.4)	9.8 (1.0)	12.7 (0.7)	11.6 (1.1)
Joint Services	5.5 (0.4)	5.5 (0.8)	7.0 (0.5)	5.8 (0.8)
Don't know	5.1 (0.4)	4.5 (0.8)	9.3 (0.6)	10.8 (1.2)
"The few, the proud, the _____."				
Army	3.4 (0.3)	3.1 (0.6)	7.1 (0.5)	5.8 (0.8)
Navy	3.6 (0.3)	2.9 (0.6)	6.2 (0.5)	4.4 (0.7)
Marine Corps	84.2 (0.6)	88.2 (1.2)	69.9 (0.9)	72.2 (1.6)
Air Force	2.0 (0.2)	1.9 (0.4)	4.7 (0.4)	4.2 (0.7)
Joint Services	1.4 (0.2)	1.2 (0.4)	2.9 (0.3)	3.7 (0.6)
Don't know	5.4 (0.4)	4.8 (0.8)	9.2 (0.6)	9.7 (1.1)
"Aim high, _____."				
Army	2.9 (0.3)	2.0 (0.5)	5.2 (0.4)	4.4 (0.7)
Navy	2.2 (0.2)	3.2 (0.6)	3.9 (0.4)	2.9 (0.6)
Marine Corps	1.4 (0.2)	3.6 (0.7)	3.2 (0.4)	4.8 (0.7)
Air Force	88.9 (0.5)	84.7 (1.2)	77.7 (0.8)	72.1 (1.6)
Joint Services	0.8 (0.2)	0.6 (0.3)	1.3 (0.2)	3.0 (0.5)
Don't know	3.8 (0.3)	5.9 (0.8)	8.6 (0.6)	12.8 (1.3)
"It's a great place to start."				
Army	44.7 (0.9)	40.6 (1.7)	37.7 (1.0)	34.2 (1.6)
Navy	13.6 (0.6)	17.2 (1.4)	15.0 (0.7)	12.9 (1.2)
Marine Corps	6.5 (0.4)	5.9 (0.8)	9.2 (0.6)	8.2 (0.9)
Air Force	10.1 (0.5)	10.8 (1.1)	10.4 (0.6)	10.4 (1.0)
Joint Services	13.5 (0.6)	11.8 (1.1)	10.4 (0.6)	11.7 (1.1)
Don't know	11.6 (0.6)	13.7 (1.2)	17.3 (0.8)	22.6 (1.5)
"We're looking for a few good men."				
Army	14.8 (0.6)	14.4 (1.2)	21.9 (0.8)	25.0 (1.6)
Navy	5.7 (0.4)	5.5 (0.8)	10.9 (0.6)	7.9 (0.9)
Marine Corps	64.9 (0.8)	67.5 (1.6)	39.6 (1.0)	44.4 (1.7)
Air Force	3.6 (0.3)	3.8 (0.7)	5.8 (0.5)	5.5 (0.8)
Joint Services	3.3 (0.3)	2.8 (0.5)	5.9 (0.5)	4.9 (0.7)
Don't know	7.8 (0.5)	6.0 (0.9)	15.9 (0.7)	12.2 (1.1)
"We're not a company—we're your country."				
Army	17.5 (0.6)	19.1 (1.4)	17.8 (0.8)	18.0 (1.4)
Navy	11.3 (0.5)	8.2 (0.9)	10.7 (0.6)	8.5 (0.9)
Marine Corps	10.7 (0.5)	9.8 (1.0)	10.2 (0.6)	9.2 (1.0)
Air Force	6.2 (0.4)	6.4 (0.8)	6.0 (0.5)	7.2 (0.9)
Joint Services	28.9 (0.8)	30.6 (1.6)	23.8 (0.8)	25.0 (1.5)
Don't know	25.3 (0.8)	26.0 (1.6)	31.6 (1.0)	32.1 (1.6)

Note: Tabled values are column percentages with standard errors in parentheses. The sponsor for each slogan is underlined.

Source: Questions 610-615.

The second Marine slogan, "We're looking for a few good men," was fourth most likely to be correctly recognized. The level of recognition of this slogan among males was about one and half times higher than among females. Older females were more likely than young females to correctly identify the Marine Corps as the sponsor.

The Navy slogan, "It's not just a job, it's an adventure," was the fifth most likely slogan to be correctly identified by the male market groups. Nearly as many male respondents incorrectly identified the slogan's sponsor as the Army (32 percent) as correctly identified it as the Navy's slogan (38 percent). Males were more accurate in their attribution than were females. More females incorrectly attributed the slogan to the Army (31-33 percent) than correctly attributed it to the Navy (24-29 percent).

As was the case with advertising awareness, attribution of the two Joint advertising slogans must be viewed differently from the Service-specific slogans. As noted earlier, the Joint advertising program is intended to supplement and complement the efforts of the military Services. Accordingly, the low levels of correct attribution to Joint Services of their slogans "It's a great place to start" (10-14 percent) and "We're not a company-- we're your country" (24-31 percent) should not be construed to mean that they are not making an impact.

Compared to the Service slogans, both of the Joint advertising slogans produced the highest percentages of "Don't know" responses. In addition, "We're not a company--we're your country" produced the widest dispersion of incorrect attributions to the four active Services. These results suggest some "confusion" among respondents. That is, they may recall the slogan but not the context in which they heard or saw it. This is positive evidence that Joint advertising is not being seen as an advertising campaign which competes with the Services' campaigns and that the goals of complementing and supplementing the advertising efforts of the Services is being achieved. This conclusion is particularly supported by the data for the newer of the two slogans.

"We're not a company--we're your country" was attributed to a specific Service by 43-45 percent of the market groups (18-19 percent attributed it to the Army) and elicited "Don't know" responses from 25-32 percent of the respondents. In contrast, the older slogan, "It's a great place to start" was attributed to the Army by 34-35 percent of the four market groups while 30- 35 percent attributed it to one of the other three Services. This slogan elicited "Don't know" responses from 12-23 percent of the respondents.

3. Awareness of Print and Broadcast Advertising

Respondents were asked media-specific questions regarding whether they had seen, within the past 12 months, any print advertising (magazines, newspapers, or on billboards) for the military and whether they recalled any broadcast advertising (television or radio) for the military. If they had, they were asked for which Services they had seen or heard this type of advertising. Their responses to these questions, by market group and propensity, are presented in Tables 8.4 and 8.5 for print and broadcast advertising, respectively.

Table 8.4 shows that young males (70 percent) were most likely to report having seen any print advertising within the past 12 months. About 60-65 percent of the other groups also reported this. The Army was most likely to be mentioned as the subject of print advertising. This is consistent with nearly all of the results discussed thus far and is likely a function of the Army's large advertising budget. The Marine Corps and the Air Force were next most frequently mentioned. Among the male market groups and the younger females, the Navy was fourth most likely to be mentioned. The older females mentioned Marine Corps print advertising second most frequently, followed by the Navy and the Air Force. Least likely to be mentioned by any group was print advertising for the National Guard/Reserve. All the differences observed as a function of propensity indicated that those with positive propensity were more likely to report having seen print advertising about the military in the past 12 months than those with negative propensity.

Table 8.4. Awareness of Print Media Advertising

Advertising Medium ^a /Sponsor	Young Males			Older Males		
	Positive Propensity (n=1719)	Negative Propensity (n=3665)	Total (n=5374)	Positive Propensity (n=152)	Negative Propensity (n=910)	Total (n=1062)
Saw Print Advertising of:						
Army	53.7	48.3	50.0 (0.9)	40.7	40.8	40.8 (1.7)
Navy	28.9	30.2	29.8 (0.8)	25.9	26.0	26.0 (1.5)
Marine Corps	39.5	35.5	36.8 (0.8)	33.2	32.2	32.4 (1.2)
Air Force	43.9	35.3	38.1 (0.8)	40.2	30.0	31.4 (1.7)
National Guard/Reserve ^b	11.7	7.1	8.0 (0.5)	5.8	6.8	6.7 (1.8)
Joint Services ^c	8.6	9.6	9.3 (0.5)	6.1	8.8	8.4 (1.1)
Don't remember sponsor	0.8	1.5	1.3 (0.2)	2.7	1.9	2.0 (0.5)
Saw any print advertising	74.6	68.5	70.4 (0.8)	68.8	60.8	61.9 (1.7)
Advertising Medium ^a /Sponsor	Young Females			Older Females		
	Positive Propensity (n=403)	Negative Propensity (n=2775)	Total (n=3178)	Positive Propensity (n=58)	Negative Propensity (n=1040)	Total (n=1098)
Saw Print Advertising of:						
Army	50.5	45.8	46.4 (1.0)	46.1	39.6	39.9 (1.7)
Navy	28.6	22.1	22.9 (0.9)	24.8	21.2	21.3 (1.4)
Marine Corps	29.6	27.0	27.3 (0.9)	25.3	26.3	26.3 (1.6)
Air Force	34.7	25.3	26.5 (0.9)	28.9	20.4	20.8 (1.4)
National Guard/Reserve ^b	8.0	4.3	4.6 (0.4)	8.3	5.4	5.5 (0.8)
Joint Services ^c	6.7	6.8	6.8 (0.5)	9.7	7.8	7.9 (0.9)
Don't remember sponsor	2.0	2.2	2.2 (0.3)	2.4	3.0	3.0 (0.8)
Saw any print advertising	69.2	63.9	64.6 (1.0)	66.9	60.2	60.5 (1.7)

Note: Tabled values are column percentages with standard errors in parentheses.

^aRefers to past 12 months.

^bPropensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

^c"Joint Services" represents the Joint Recruiting Advertising Program.

Source: Questions 505, 507, 510-513, 616, 617.

Table 8.5 presents the data for broadcast advertising. As was the case for print media, young males (84 percent) were most likely to report having seen or heard broadcast advertising for the military within the past 12 months. The levels for the other groups (80-81 percent) did not differ significantly. These broadcast awareness levels are significantly higher than print awareness levels by 14-15 percentage points among the young market groups, and 19 percentage points among the older market groups.

Table 8.5 shows the same patterns of likelihood of mention of broadcast advertising for the individual Services as those for print advertising shown in Table 8.4. All market groups, except the older females, were most likely to mention the Army, followed equally by the Marine Corps and Air Force, and then the Navy. Older females showed equal percentages mentioning the Navy and the Air Force after the Army and the Marine Corps. Again, the lowest levels of mention among all groups were for the National Guard/Reserve.

4. Receipt of Recruiting Literature

The young male and female market groups were asked whether they had received any unsolicited military recruiting literature in the mail in the past 12 months, and, if so, from what Service. Responses to this item, by propensity, are presented in Table 8.6. Slightly less than half (48 percent) of the young males and only one-fifth (22 percent) of the young females reported having received recruiting literature from one or more of the Services. Young males with negative propensity were more likely to report receiving literature than those expressing positive propensity. The Army was most frequently mentioned as the source of the literature by both young males (31 percent) and young females (14 percent). Among the young males, the Marine Corps was the second most frequently mentioned (21 percent), followed by about equal percentages for the Navy (17 percent) and Air Force (16 percent). Among the young females, the Air Force was mentioned second most frequently (8 percent), followed by equal

Table 8.5. Awareness of Broadcast Media Advertising

Advertising Medium ^a /Sponsor	Young Males			Older Males		
	Positive Propensity (n=1720)	Negative Propensity (n=3655)	Total (n=5375)	Positive Propensity (n=152)	Negative Propensity (n=909)	Total (n=1061)
Saw/Heard Broadcast Advertising of:						
Army	67.1	63.2	64.4 (0.8)	53.8	65.0	63.4 (1.7)
Navy	45.7	46.5	46.3 (0.8)	45.3	48.1	47.7 (1.8)
Marine Corps	54.3	52.8	53.3 (0.9)	48.7	55.1	54.2 (1.8)
Air Force	54.7	50.6	51.9 (0.9)	51.2	52.3	52.2 (1.8)
National Guard/Reserve ^b	14.9	11.6	12.3 (0.6)	12.6	12.6	12.6 (1.2)
Joint Services ^c	15.6	16.7	16.3 (0.6)	11.9	18.8	17.8 (1.4)
Don't remember sponsor	0.6	1.1	0.9 (0.2)	1.1	0.8	0.8 (0.3)
Saw any broadcast advertising	86.5	83.4	84.4 (0.6)	76.3	82.0	81.2 (1.4)
Advertising Medium ^a /Sponsor	Young Females			Older Females		
	Positive Propensity (n=405)	Negative Propensity (n=2772)	Total (n=3177)	Positive Propensity (n=58)	Negative Propensity (n=1043)	Total (n=1101)
Saw/Heard Broadcast Advertising of:						
Army	63.5	61.5	61.8 (1.0)	68.6	60.3	60.7 (1.7)
Navy	39.0	38.4	38.5 (1.0)	30.2	39.2	38.7 (1.7)
Marine Corps	45.9	44.3	44.5 (1.0)	36.1	45.5	45.0 (1.7)
Air Force	45.6	43.8	44.1 (1.0)	46.1	41.1	41.4 (1.7)
National Guard/Reserve ^b	12.2	7.3	7.7 (0.5)	16.4	9.5	9.9 (1.0)
Joint Services ^c	13.0	14.4	14.2 (0.7)	11.4	14.5	14.4 (1.2)
Don't remember sponsor	1.1	2.0	1.9 (0.3)	0.0	0.7	0.6 (0.3)
Saw any broadcast advertising	83.3	79.5	80.0 (0.8)	82.5	79.7	79.8 (1.4)

Note: Tabled values are column percentages with standard errors in parentheses.

^aRefers to past 12 months.

^bPropensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

^c"Joint Services" represents the Joint Recruiting Advertising Program.

Source: Questions 505, 507, 510-513, 618, 619.

Table 8.6. Reported Receipt of Recruiting Literature

Sponsor	Young Males			Young Females		
	Positive Propensity (n=1718)	Negative Propensity (n=3653)	Total (n=5371)	Positive Propensity (n=405)	Negative Propensity (n=2782)	Total (n=3187)
Army	25.2	33.4	30.8 (0.8)	12.2	14.4	14.1 (0.7)
Navy	14.6	17.5	16.6 (0.6)	4.2	3.8	3.8 (0.4)
Marine Corps	18.4	22.4	21.1 (0.7)	3.7	3.7	3.7 (0.4)
Air Force	14.4	16.8	16.0 (0.7)	9.2	7.6	7.8 (0.5)
National Guard/Reserve ^a	4.5	3.6	3.8 (0.3)	1.2	1.1	1.1 (0.2)
Joint Services ^b	1.2	3.8	2.9 (0.3)	0.2	1.0	0.9 (0.2)
Don't remember sponsor	0.6	1.8	1.4 (0.2)	0.8	1.0	1.0 (0.2)
Any recruiting literature	41.4	50.4	47.5 (0.9)	18.8	22.8	22.3 (0.8)

Note: Tabled values are column percentages with standard errors in parentheses.

^aPropensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

^b"Joint Services" represents the Joint Recruiting Advertising Program.

Source: Questions 510-513, 620, 621.

percentages for the Navy and Marine Corps (4 percent). Young females with negative propensity were more likely to report receipt of both Army and Marine Corps literature than were those with positive propensity. This finding parallels the propensity-related difference among young males for overall reporting of receipt of literature.

B. Service Images

A new series of questions was asked in 1986 regarding the images that respondents have of the four active Services. Specifically, respondents were asked "Which one Service do you think of first when I mention....." before each of ten image statements was read to them. The ten statements and responses are presented in Table 8.7 for the young market groups and Table 8.8 for the older market groups. In addition, propensity breakdowns for these items are presented in Tables C.10a and C.10b in Appendix C.

Table 8.7. First Service Mentioned in Response to Service Image Statements for Young Males and Females

Market/Statement	Army	Navy	Marine Corps	Air Force	None/Refused
<u>Young Males</u>					
Provides money for education	61.1	10.9	8.0	13.3	5.1
Lack of personal freedom	17.6	19.4	39.4	6.7	13.6
Teaches valuable skills and trades	34.7	16.7	13.1	29.2	4.7
Extended duty away from immediate family	19.8	44.7	18.1	9.4	6.4
Opportunities for promotion and advancement	35.3	14.3	14.1	27.5	6.7
Equal pay and advancement for men and women	49.9	12.9	8.7	18.7	7.3
Assignment to work that does not prepare you for a civilian career	20.3	17.6	30.1	11.8	15.9
Defending your country	43.3	6.1	34.4	10.7	4.5
Working in a high-technology environment	12.1	14.9	6.6	61.2	3.7
Work in or near a combat zone	44.2	6.5	39.1	5.0	3.9
<u>Young Females</u>					
Provides money for education	53.5	12.3	10.6	16.1	5.5
Lack of personal freedom	24.3	20.0	27.3	8.1	14.8
Teaches valuable skills and trades	32.9	15.3	14.4	29.6	5.5
Extended duty away from immediate family	23.4	34.5	19.6	12.1	7.3
Opportunities for promotion and advancement	32.8	14.5	13.6	29.4	6.4
Equal pay and advancement for men and women	44.4	12.7	10.0	21.5	7.7
Assignment to work that does not prepare you for a civilian career	21.5	19.8	21.6	14.0	17.4
Defending your country	57.4	7.3	20.0	9.1	4.6
Working in a high-technology environment	12.2	15.8	10.1	55.5	4.6
Work in or near a combat zone	54.8	8.9	22.4	6.8	4.8

Note: Tabled values are row percentages. Estimates are based on interviews with 5,382 young males and 1,088 older males.

Source: Questions 650-659.

Table 8.8. First Service Mentioned In Response to Service Image Statements for Older Males and Females

Market/Statement	Army	Navy	Marine Corps	Air Force	None/Refused
<u>Older Males</u>					
Provides money for education	54.5	11.3	9.0	17.4	5.4
Lack of personal freedom	16.1	24.1	39.4	6.5	10.9
Teaches valuable skills and trades	31.1	16.0	11.6	34.9	4.8
Extended duty away from immediate family	17.6	46.9	18.4	9.8	5.1
Opportunities for promotion and advancement	34.0	15.6	12.1	30.6	5.5
Equal pay and advancement for men and women	46.4	14.4	7.0	22.5	7.0
Assignment to work that does not prepare you for a civilian career	20.1	18.0	34.3	8.7	15.5
Defending your country	35.0	7.1	40.9	11.5	4.5
Working in a high-technology environment	9.4	16.4	6.1	64.0	3.3
Work in or near a combat zone	42.9	6.4	41.4	4.5	3.5
<u>Older Females</u>					
Provides money for education	47.1	10.8	10.6	20.2	8.1
Lack of personal freedom	20.5	21.2	30.8	7.0	15.0
Teaches valuable skills and trades	30.2	16.3	13.5	31.7	5.7
Extended duty away from immediate family	20.0	40.3	17.9	12.8	6.8
Opportunities for promotion and advancement	31.1	14.2	13.1	29.5	7.7
Equal pay and advancement for men and women	42.0	13.3	8.6	24.0	8.7
Assignment to work that does not prepare you for a civilian career	23.5	17.7	22.4	12.0	19.6
Defending your country	50.7	6.7	24.8	10.9	5.2
Working in a high-technology environment	10.8	17.4	8.1	56.4	5.1
Work in or near a combat zone	57.5	6.9	22.3	6.7	4.7

Note: Tabled values are row percentages. Estimates are based on interviews with 3,191 young females and 1,102 older females.

Source: Questions 650-659.

The consistent response patterns across market groups suggests that the images of the different Services are not related to age or sex. The data also suggest that when people think of military images the first Service to come to mind is the Army. For young males and young females, the Army was the Service that first came to mind for six of ten of the image statements. These images were:

- provides money for education;
- teaches valuable skills and trades;
- opportunities for promotion and advancement;
- equal pay and advancement for men and women;
- defending your country; and
- work in or near a combat zone.

The finding that most of the images were associated with the Army may be a result of the higher levels of Army advertising, compared to the other Services. This is certainly true regarding money for education. In their most recent advertising campaigns, the Army has heavily emphasized educational benefits including the G.I. Bill and the Army College Fund.

Younger females also mentioned the Army, Marine Corps, and the Navy as equally likely to assign work that does not prepare one for a civilian career. Young males also felt that the Marine Corps assigns work that does not prepare one for a civilian career.

Older males and females, like their younger counterparts, also associated the Army with the images listed above. However, both older groups saw the Army and the Air Force as equally likely to teach valuable skills and trades and provide opportunities for promotion and advancement.

Older males were also equally likely to associate both the Army and the Marine Corps with defending your country and working in or near a combat zone. Older females were equally likely to mention the Army, the Marine Corps, or "None" (or refused to answer) in response to the item regarding assignment of work that does not prepare one for a civilian career.

All four market groups mentioned the Air Force first when asked about working in a high technology environment. The Marine Corps had the highest percentage of first mentions to the image statement about lack of personal freedom. The Navy was most often thought of in response to extended duty away from one's immediate family by all four market groups.

Noteworthy is the finding that significant minorities of all market groups (11-20 percent) responded "None" (or refused to answer) with regard to the statements about lack of personal freedom and assignment to work that does not prepare one for a civilian career. In addition, between 5-6 percent of the female market groups responded "Don't know" to both these items. Despite the fact that the Marine Corps was most frequently mentioned for both of these images, the results suggest that these are characteristics common to all the Services. Certainly lack of, or a lesser degree of, personal freedom is a fact of military life. As to job assignments, many respondents may believe that they are more arbitrarily made than they really are, or think more in terms of combat occupations than technical skills.

C. Summary

This chapter examined respondents' self-reported exposure to advertising and the images of the Services. In general, overall awareness of military advertising is quite high, especially for the four active Services. Levels of advertising awareness ranged from 66 to 86 percent of the male market groups and from 58 to 83 percent of the female market groups. The Army had the highest levels of both unaided and overall awareness. Males were more aware of advertising than females. Finally, overall levels of advertising awareness for all components of the military have decreased annually from 1984 to 1986 for both young males and young

females. This decrease is likely a result of a reduction in advertising "reach and frequency" caused by a reduction in commercial network television market penetration, smaller Service advertising budgets, and higher advertising costs.

Seven advertising slogans were read to respondents who were asked to identify the sponsor. The Air Force slogan, "Aim high.____," was correctly identified by the largest percentage of respondents (72-89 percent) followed by the Marine Corps slogan, "The few, the proud,____," (70-86 percent), and the Army's slogan, "Be all you can be," (73-82 percent). The sponsor least likely to be identified accurately with its slogans was Joint advertising.

Between 10-14 percent of respondents correctly attributed "It's a great place to start" to the Joint advertising program. The Army was far more likely to be mentioned. Similarly, for "We're not a company...we're your country," respondents were equally likely to say "Don't know" as to mention the Joint Services as the sponsor. These results suggest that the Joint advertising program is achieving its goal of complementing and supplementing the advertising efforts of the four active Services.

When asked about their awareness of military print and broadcast advertising in the past 12 months, respondents again showed fairly high (60-84 percent) levels of awareness. The level of awareness among young males was consistently the highest. The Army was most likely to be mentioned as the subject of advertising in both media, followed by the Marine Corps and the Air Force. Finally, awareness of broadcast advertising was 14-15 percentage points higher than print awareness levels for all market groups.

About one-half of young males and one-fifth of young females reported receipt of unsolicited literature in the past 12 months. Young males and females most frequently mentioned the Army as the source of the literature. The Marine Corps (among young males) and the Air Force (among young females) were mentioned as the second most common source.

Respondents were asked to mention the first active Service that came to mind for each of ten image statements. The Army was mentioned most often for six of the ten statements:

- provides money for education;
- teaches valuable skills and trades;
- opportunities for promotion and advancement;
- equal pay and advancement for men and women;
- defending your country; and
- work in or near a combat zone.

The Air Force was most often mentioned as providing a high technology environment to work in, while the Marine Corps was most likely to be mentioned in response to lack of personal freedom. The Navy was thought of most often regarding extended duty away from one's immediate family.

The statement concerning assignment to work that does not prepare one for a civilian career was not consistently associated with any one Service. Between 16-20 percent of all market groups responded that none of the Services came to mind or refused to respond to this item. Among females, 5-6 percent responded "Don't know" to this item. It may be that many respondents believe that job assignments are more arbitrarily made than they really are, or think more in terms of combat occupations than technical skills.

9. INFORMATION-SEEKING ACTIVITIES AND RECRUITER CONTACT

The conceptual utility of classifying information exposure and seeking activities as lying along a passive to active continuum has been discussed in past YATS II reports. In the passive portion of this continuum, the individual is conceived of as a relatively uninvolved receiver and processor of data. Passive exposure was examined in Chapter 8.

In this chapter, the active portion of the continuum is investigated. This includes the extent to which young adults use mail, telephone, and school-based computerized career information systems to obtain information about the military, discuss military service with others (including recruiters), and take the Armed Services Vocational Aptitude Battery. Also considered are some of the differences between young males and young females who talked with a military recruiter in the previous 12 months and those who did not.

A. Information-Seeking

Relatively active, but convenient, non-committing ways to obtain information about the military are examined in this section.

1. Information-Seeking by Mail and Telephone

Calling a toll-free number and mailing a postcard or coupon for information about the military are moderately active behaviors. Table 9.1 presents the percentages of young respondents who report having made a toll-free call or having mailed a postcard or coupon in the past 12 months.

Less than 10 percent of the males and less than 4 percent of the females overall reported mailing a postcard or coupon, and significantly smaller proportions of each group reported having made a toll-free call for information about the military. Young males were more likely to have taken either such action than young females. Positive propensity respondents in both market groups were much more likely than those with negative propensity to have mailed a postcard or coupon or made a toll-free call.

Information-Seeking Activity/Service	Young Males			Young Females		
	Positive Propensity (n = 1721)	Negative Propensity (n = 3660)	Total (n = 5381)	Positive Propensity (n = 405)	Negative Propensity (n = 2786)	Total (n = 3191)
<u>Made a toll-free call for information about:</u>						
Army	2.3	0.5	1.1 (0.2)	1.3	0.7	0.8 (0.2)
Navy	1.2	0.3	0.5 (0.1)	0.6	0.2	0.2 (0.1)
Marine Corps	0.8	0.4	0.6 (0.1)	0.7	0.1	0.2 (0.1)
Air Force	1.5	0.5	0.9 (0.2)	1.0	0.3	0.5 (0.1)
National Guard/Reserve ^a	0.8	0.3	0.4 (0.1)	0.6	0.0	0.0 (0.0)
Joint Services	0.6	0.1	0.3 (0.0)	0.6	0.0	0.0 (0.0)
Don't remember Service	0.6	0.0	0.3 (0.0)	0.6	0.0	0.0 (0.0)
Made any toll-free call	5.1	1.6	2.7 (0.3)	3.6	1.2	1.5 (0.2)
<u>Mailed a postcard or coupon for information about:</u>						
Army	5.9	3.2	4.1 (0.3)	3.7	1.4	1.7 (0.3)
Navy	4.7	1.4	2.5 (0.3)	1.1	0.3	0.4 (0.1)
Marine Corps	5.4	1.6	2.8 (0.3)	1.4	0.3	0.5 (0.1)
Air Force	7.5	1.9	3.7 (0.3)	7.6	1.0	1.8 (0.3)
National Guard/Reserve ^a	1.4	0.3	0.5 (0.1)	1.3	0.1	0.2 (0.1)
Joint Services	0.3	0.1	0.2 (0.1)	0.2	0.0	0.0 (0.0)
Don't remember Service	0.1	0.1	0.1 (0.1)	0.0	0.1	0.1 (0.1)
Made any mailed request	17.3	6.4	9.9 (0.5)	10.0	2.6	3.6 (0.4)

Note: Tabled values are column percentages with standard errors in parentheses. Items were not asked of older males or older females.

^aPropensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

^{aa}Informative standard error not available.

Source: Questions 505, 507, 510-513, 622, 623, 625, 626.

This latter effect is stronger for mailing a postcard or coupon than for making a call. The Army and the Air Force were most often the subjects of the phone calls and mail queries of each market group. The Joint Services and Reserve Component were least often the subject of telephone and mail queries. Overall, however, few respondents, even those with positive propensity, used the mail and telephone to obtain information about the military.

2. Use of Computerized Career Information Systems

Three questions assessed the availability and use of school-based computerized career information systems by young males and young females to obtain information about the military. These groups were asked whether their high school had a computerized system for providing career information and, if so, whether they had ever used the system to obtain information about the military. Finally, if they had so used the system, they were asked whether the information about the military had increased their interest in the military. The responses to these items are presented in Table 9.2 and Figure 9.1.

About half of each market group reported that their school had such a career information system. Of these, about one-quarter of the young males and one-fifth of the young females had used the system to obtain information about the military. Among the young males, those with positive propensity were more likely to have used the system for this purpose than those with negative propensity. Half of the males and three-fifths of the females had also used the system for information-gathering--but not about the military; this was especially true of males and females with negative propensity.

The percentages of positive and negative propensity respondents in the past three years who reported that their interest in the military had increased as a result of using a computerized career information system at school are shown in Figure 9.1. Clearly, much larger percentages of positive propensity youths reported increased interest than did those with negative propensity. Among young males, two thirds or more of those with

Table 9.2. Presence and Use of Computerized Career Information System at High Schools

Presence of System/Use	Young Males			Young Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
System Present ^a						
Used and obtained information about military ^b	58.4	53.6	55.1 (0.9)	57.9	54.7	55.1 (1.0)
	31.0	25.3	27.2 (1.0)	25.4	19.5	20.2 (1.1)
Used but did not obtain information about military ^b	50.3	55.4	53.7 (1.1)	57.2	62.7	61.9 (1.3)
Did not use system	18.8	19.4	19.2 (0.9)	17.5	17.9	17.8 (1.1)
System Not Present	35.5	41.5	39.6 (0.9)	37.7	40.6	40.3 (1.0)
Don't Know	6.2	4.0	5.3 (0.4)	4.4	4.7	4.7 (0.4)

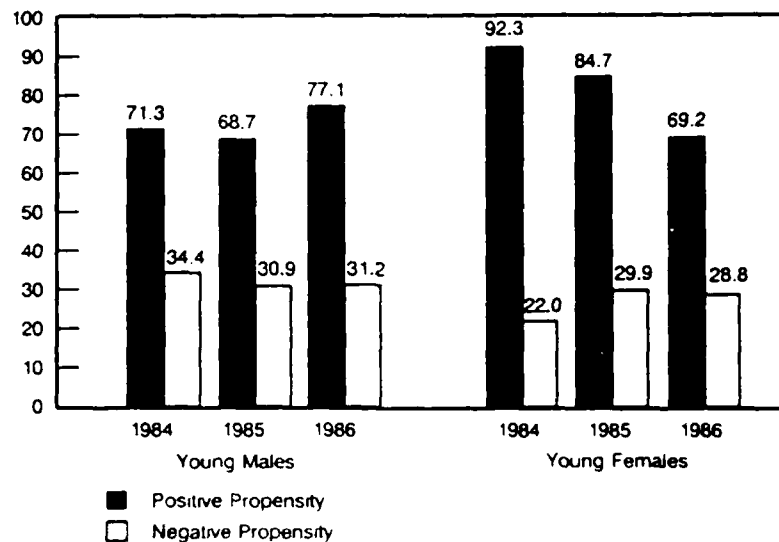
Note: Tabled values are percentages with standard errors in parentheses. Items were not asked of older males or older females.

^aEstimates are based on interviews with 5,333 young males (1,704 with positive propensity and 3,629 with negative propensity) and 3,170 young females (401 with positive propensity and 2,769 with negative propensity).

^bEstimates based on respondents who said "Yes," they had computerized career information at their high schools: 2,943 young males (988 with positive propensity and 1,955 with negative propensity) and 1,684 young females (225 with positive propensity and 1,459 with negative propensity).

Source: Questions 510-513, 710-712.

Figure 9.1. Increased Interest in the Military by Users of Computerized Information System, 1984-1986



NOTE: Values represent the percentages of respondents who used a school computerized career information system to get information about the military and had their interest in the military consequently increased.

SOURCE: Questions 510-513, 711-712.

positive propensity reported this sequence compared with one-third or less of their negative propensity counterparts. Young females show similar proportions making this report in 1986. Females also showed the only significant cross-year difference, indicating that positive propensity females in 1984 were more likely to have had their interest in the military increased (92 percent) than those in 1986 (69 percent).

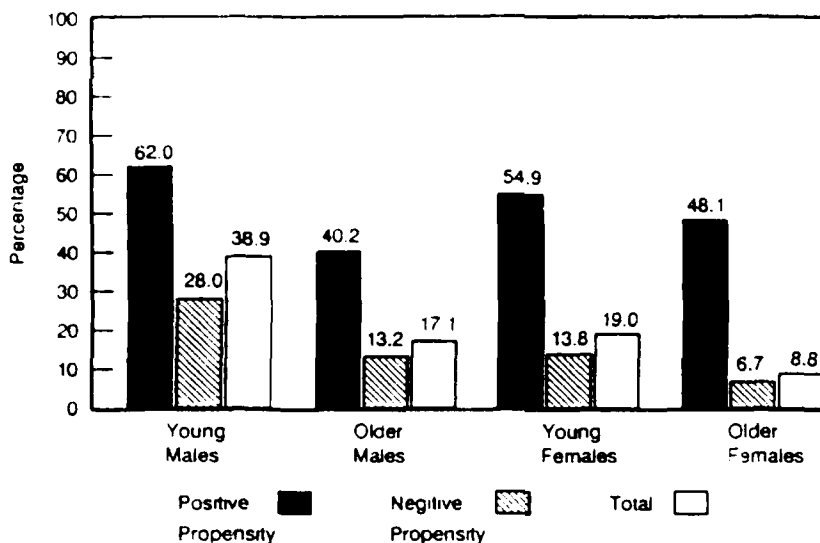
3. Informal Sources of Information

The three information-seeking activities discussed above constitute actions relatively low in personal involvement. Broaching a subject matter such as military service with a family member, friend, or other confidant would presumably be more personally involving than using the telephone or a computer system or mailing a postcard or coupon. Thus, discussing military service with another person constitutes an additional step along the active portion of a continuum of involvement.

Figure 9.2 presents the percentages, overall and by propensity, of respondents in each market group who discussed military service with anyone during the past year or so. Young males were at least twice (39 percent) as likely to have had such a discussion as the other groups (young females, 19 percent; older males, 17 percent; older females, 9 percent). Very clear differences are also apparent with regard to the effects of propensity. In each market group, respondents with positive propensity were between 2 and 7 times more likely to have discussed the possibility of serving in the military with someone than were their negative propensity counterparts.

Figure 9.3 presents data from 1983 through 1986 concerning discussions about military service. The association between having positive propensity and discussing military service is clearly evident. Those who are positive are much more likely to discuss military Service than the overall average.

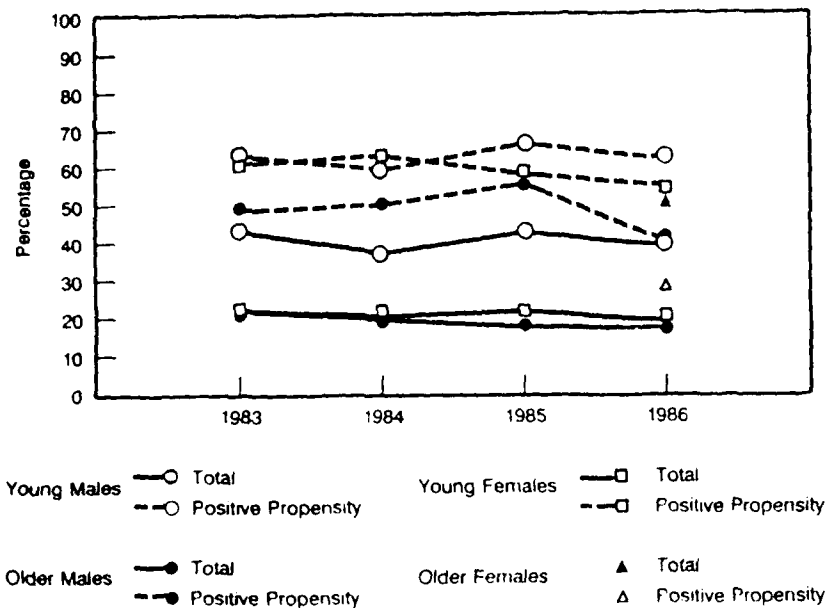
Figure 9.2. Discussed Military Service with Anyone During the Past Year



NOTE: Estimates for both older male and older female groups are for 22-24 year olds. Estimates are based on interviews with 5,375 young males (1,720 with positive propensity and 3,655 with negative propensity), 1,067 older males (153 with positive propensity and 914 with negative propensity), 3,191 young females (405 with positive propensity and 2,786 with negative propensity) and 1,101 older females (58 with positive propensity and 1,043 with negative propensity).

SOURCE: Questions 510-513, 683.

Figure 9.3. Discussed Military Service with Anyone During the Past Year, 1983-1986



NOTE: Estimates for older females have only been available since 1986. Estimates for both older males and older females are for the age group 22-24 years. Older male estimates prior to 1986 have been reanalyzed to be comparable to 1986 data.

SOURCE: Questions 510-513, 683.

Only the young males show any significant cross-year differences. Overall, the percentages of young males who had discussed military service with anyone were similar (and higher) in 1983 and 1985 (43 percent for both) than in 1984 (37 percent) and 1986 (39 percent). The 1983 and 1984 figures for respondents with positive propensity did not significantly differ (63 and 59 percent, respectively) but, parallel with the pattern shown by the overall figures, the percentage rose from 1984 to 1985 (66 percent) and then declined in 1986 (to 62 percent).

Table 9.3 presents the results from two questions regarding the person with whom military service had been discussed. Both the individuals' relationship to the respondent as well as whether the individual is currently serving in the military are indicated. About half of the younger groups and about two-fifths of the older groups who reported discussing

Table 9.3. With Whom Military Service Was Discussed

Response	Young Males			Older Males		
	Positive Propensity (n = 1660)	Negative Propensity (n = 1038)	Total (n = 2698)	Positive Propensity (n = 83)	Negative Propensity (n = 121)	Total (n = 184)
Friends in military	23.0	24.5	23.8 (1.1)	29.4	25.9	27.1 (3.9)
Friends not in military	30.0	30.9	30.4 (1.3)	31.5	29.0	29.8 (4.1)
Family in military	12.2	8.0	10.1 (0.8)	20.3	8.2	12.3 (3.4)
Family not in military	57.3	41.5	49.5 (1.4)	52.2	37.2	42.2 (4.3)
Spouse ^a in military	0.1	0.0	0.1 (0.1)	0.0	0.0	0.0 (**)
Spouse ^a not in military	3.7	4.2	4.0 (0.5)	20.9	10.9	14.2 (3.1)
Military recruiter(s)	24.3	28.3	26.3 (1.2)	19.8	22.7	21.7 (3.6)
Other ^b	9.6	5.2	7.5 (0.7)	7.2	2.6	4.1 (1.4)

Response	Young Females			Older Females		
	Positive Propensity (n = 222)	Negative Propensity (n = 373)	Total (n = 595)	Positive Propensity (n = 29)	Negative Propensity (n = 73)	Total (n = 102)
Friends in military	20.4	22.2	23.7 (2.0)	41.3	18.4	23.2 (4.9)
Friends not in military	25.5	23.8	24.4 (2.1)	27.3	32.0	30.7 (5.4)
Family in military	17.1	15.6	16.2 (1.7)	10.2	20.6	17.7 (4.3)
Family not in military	61.7	49.9	54.2 (2.3)	27.0	42.3	38.1 (5.4)
Spouse ^a in military	7.1	3.2	4.6 (1.0)	2.7	3.9	3.6 (1.8)
Spouse ^a not in military	5.9	5.5	5.6 (1.0)	15.2	14.4	14.6 (3.8)
Military recruiter(s)	17.7	23.1	21.1 (2.0)	20.1	23.3	22.4 (4.7)
Other ^b	11.3	4.0	6.7 (1.1)	2.2	4.8	4.1 (1.8)

Note: Tabled values are percentages with standard errors in parentheses.

^aSpouse^a category includes spouse and boy/girlfriend.^bOther^b category includes teachers, school counselors, co-workers and employers.

Source: Questions 510-513, 683, 684A-B6.

military service with someone said that they had had their discussion(s) with a family member who is not currently on active duty. Young males and young females with positive propensity were more likely to report this than comparable respondents with negative propensity. Friends (both in service and not in service) and military recruiters were also likely to be consulted. Not surprisingly, given the youth and marital status of the sample, relatively small proportions of respondents (4-15 percent) reported having discussed military service with a spouse (not in the military); the two older market groups were more likely to have done so than the younger respondents.

B. Armed Services Vocational Aptitude Battery (ASVAB)

Respondents were asked whether they had ever taken the the Armed Services Vocational Aptitude Battery (ASVAB). If they had, they were asked where they took the test. Responses to these items are presented in Table 9.4. As would be expected because of their advanced years, older males were more likely to have taken the ASVAB (22 percent) than young males (18 percent). However, patterns for females were different. The young females were less likely to have taken the ASVAB than young males and were more likely to have taken it than older females (14 percent and 9 percent, respectively). Positive propensity individuals were more likely than those with negative propensity to have taken the ASVAB. This relationship, however, is only significant for the older males (33 percent versus 20 percent, respectively) and young females (19 percent versus 13 percent, respectively).

It is important to note that taking the ASVAB is a more active step in some cases than in others. More specifically, taking the exam at one's high school, where the exam in effect travels to the individual, is a much less active behavior than taking it at a Military Entrance Processing Station (MEPS), where the individual must do the traveling and make recruiter contact. Older males and females were much more likely to have taken the latter action than their younger counterparts (10 percent and 3 percent, respectively, versus 4 percent and 2 percent of the young males and females, respectively). Young males and females were much more likely to have taken the exam at their school, and were equal in their likelihood of having done so.

Table 9.4. Location Where Armed Services Vocational Aptitude Battery Was Taken

Test-Taking Status	Young Males			Older Males		
	Positive Propensity (n = 1720)	Negative Propensity (n = 3652)	Total (n = 5372)	Positive Propensity (n = 163)	Negative Propensity (n = 911)	Total (n = 1064)
Ever taken ASVAB	19.8	17.5	18.2 (0.7)	32.5	20.0	21.8 (1.5)
Taken at high school	12.6	12.6	12.6 (0.6)	11.8	9.2	9.6 (1.0)
Taken at Military Entrance Processing Station	5.7	3.8	4.4 (0.3)	13.8	9.2	9.8 (1.0)
Taken somewhere else	1.5	1.2	1.3 (0.2)	7.0	1.6	2.3 (0.5)

Test-Taking Status	Young Females			Older Females		
	Positive Propensity (n = 404)	Negative Propensity (n = 2783)	Total (n = 3187)	Positive Propensity (n = 58)	Negative Propensity (n = 1043)	Total (n = 1101)
Ever taken ASVAB	19.2	13.1	13.9 (0.7)	17.4	8.6	9.1 (0.9)
Taken at high school	14.1	11.4	11.7 (0.7)	8.9	4.9	5.1 (0.7)
Taken at Military Entrance Processing Station	4.4	1.4	1.8 (0.3)	5.8	3.0	3.2 (0.6)
Taken somewhere else	0.8	0.3	0.4 (0.1)	2.6	0.7	0.7 (0.3)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 645.

C. Recruiter Contact

The recruiter is probably the most visible representative of the Services in civilian life. Short of actually beginning the formal enlistment process, which necessitates having taken the ASVAB, the most active step one can take in seeking information about military service is to talk with a recruiter. This section examines questions dealing with recruiter contact, including the extent of contact during 1986, patterns of contact over time and visits to recruiting stations.

1. Extent of Recruiter Contact

Respondents were asked whether they had ever contacted a military recruiter, which Service(s) the recruiter(s) represented, and how the contact initially had been made (e.g., by telephone, at school, at a recruiting station). The results are presented in Tables 9.5 and 9.6. Additional detailed data appear in Appendix C (Tables C.11a, C.11b).

Examination of Table 9.5 shows that overall about two-fifths of the males and one-fifth of the females reported ever having talked with a recruiter from at least one of the four active Services to get information about the military. Of those reporting contact, the greatest percentage of each market group had had contact with an Army recruiter (21-22 percent among the males and 11-13 percent among the females). Contact with the Air Force was secondarily most likely among the females and least likely among the young males. For the young males and young females, those with positive propensity were more likely to report recruiter contact--both overall and for each individual Service--than those with negative propensity. This was also the case overall and for Army recruiter contact among older females. The pattern of the older male data is consistent with these results, but the differences are statistically significant.

As shown in Table 9.6, the most common method of initial contact reported by young males and both young and older females was talking with a recruiter at school. The second most common method for the two young market groups was getting a phone call from a recruiter. The pattern for

Table 9.5. Any Contact with Recruiters by Service Represented

Service	Young Males			Older Males		
	Positive Propensity (n = 1722)	Negative Propensity (n = 3859)	Total (n = 5381)	Positive Propensity (n = 153)	Negative Propensity (n = 914)	Total (n = 1067)
Army	27.5	19.1	21.8 (0.7)	25.7	20.7	21.4 (1.5)
Navy	13.6	9.9	11.1 (0.5)	13.8	10.9	11.3 (1.1)
Marine Corps	16.1	10.6	12.3 (0.6)	16.7	11.2	12.0 (1.2)
Air Force	13.7	7.4	9.4 (0.5)	16.3	11.4	12.1 (1.1)
Any Military Recruiter	51.5	34.5	40.0 (0.8)	50.9	41.7	43.0 (1.8)

Service	Young Females			Older Females		
	Positive Propensity (n = 405)	Negative Propensity (n = 2786)	Total (n = 3191)	Positive Propensity (n = 58)	Negative Propensity (n = 1044)	Total (n = 1102)
Army	19.8	9.4	10.7 (0.6)	28.9	12.2	13.0 (1.2)
Navy	9.0	3.5	4.2 (0.4)	8.4	5.6	5.7 (0.8)
Marine Corps	8.4	3.8	4.4 (0.4)	4.7	3.7	3.7 (0.6)
Air Force	14.8	4.3	5.7 (0.5)	14.5	6.1	6.5 (0.8)
Any Military Recruiter	40.7	18.0	20.9 (0.8)	49.5	22.2	23.6 (0.5)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 628, 629.

Table 9.6. Method of First Contact with Recruiters

Method of Contact	Young Males			Older Males		
	Positive Propensity (n = 1722)	Negative Propensity (n = 3059)	Total (n = 5381)	Positive Propensity (n = 153)	Negative Propensity (n = 914)	Total (n = 1067)
Got a phone call	11.3	12.7	12.3 (0.5)	5.5	9.0	8.5 (0.9)
Made a phone call	5.2	1.9	2.9 (0.3)	9.0	3.4	4.2 (0.7)
At recruiting station	9.0	5.0	6.3 (0.4)	19.8	14.9	15.6 (0.3)
At job fair	1.1	0.6	0.8 (0.1)	0.7	0.9	0.8 (0.3)
At school	23.5	13.1	16.4 (0.6)	15.5	11.6	12.1 (1.2)
Some other way (or don't know)	5.2	3.1	3.8 (0.3)	5.1	4.3	4.4 (0.8)

Method of Contact	Young Females			Older Females		
	Positive Propensity (n = 405)	Negative Propensity (n = 2786)	Total (n = 3191)	Positive Propensity (n = 58)	Negative Propensity (n = 1044)	Total (n = 1102)
Got a phone call	4.2	3.3	3.4 (0.3)	3.7	3.4	3.4 (0.7)
Made a phone call	3.0	1.4	1.6 (0.3)	9.8	3.4	3.7 (0.6)
At recruiting station	4.7	1.9	2.3 (0.3)	20.4	4.0	4.8 (0.7)
At job fair	1.7	0.6	0.7 (0.2)	0.0	0.4	0.4 (0.2)
At school	23.8	8.6	10.6 (0.6)	10.3	7.7	7.8 (0.9)
Some other way (or don't know)	3.9	2.0	2.3 (0.3)	8.4	3.6	3.9 (0.6)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 632-641.

older males was different. They were most likely to have talked with a recruiter at a recruiting station and next most likely to have talked with a recruiter at school. This may be a function of the loss from the sample of younger males who joined the military immediately following high school graduation. Positive propensity individuals were more likely to have been contacted by each method than their negative propensity counterparts.

2. Comparisons of Recruiter Contact: 1983 to 1986

Figures 9.4 and 9.5 show recruiter contact for each Service by propensity for the past four years for young males and young females, respectively. These figures graphically show the three distinct results. These are that there is (1) a greater likelihood of contact with an Army recruiter than a recruiter from any other Service, (2) a relatively stable pattern of recruiter contact across these four years within each Service, both overall and by propensity, and (3) relatively high contact by positive propensity young females with Air Force recruiters as compared with Navy and Marine Corps recruiter contact.

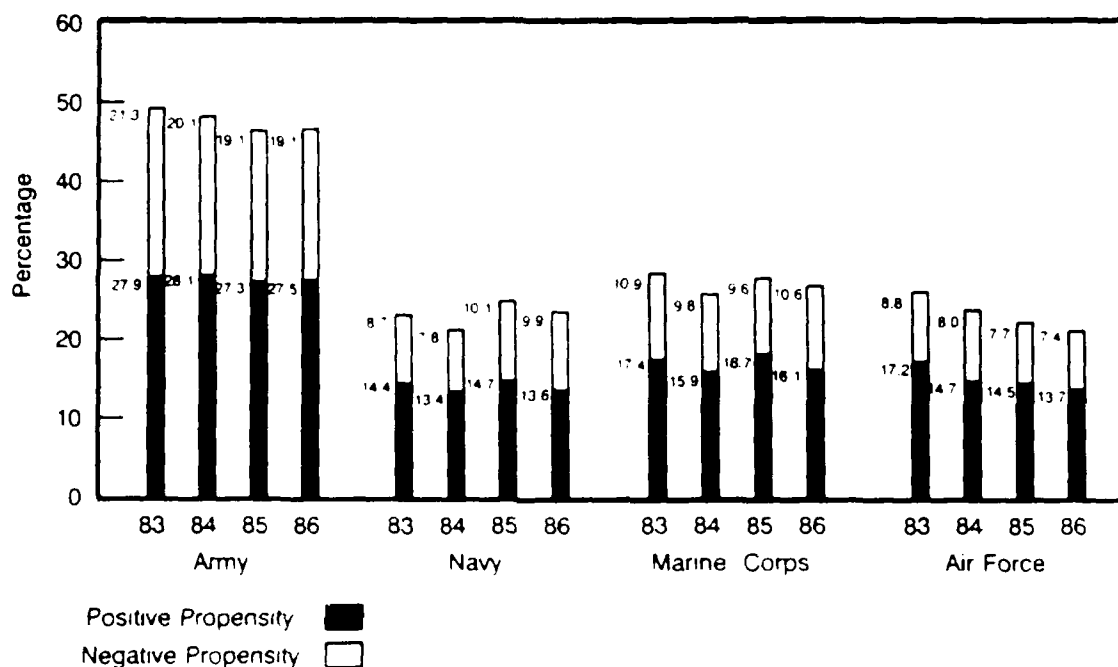
3. Visits to a Recruiting Station in the Past 12 Months

In 1986, an item was added to the YATS II questionnaire which queried young respondents about whether they had visited a recruiting station in the past 12 months for information about the military. The relatively small percentages of young males (13 percent) and even fewer young females (4 percent) who went to a recruiting station for information in the past year are graphically depicted in Figure 9.6. In addition, consistent with the results for recruiter contact, positive propensity respondents in both market groups were much more likely to have visited a recruiting station than comparable respondents with negative propensity.

D. Differences Between Respondents With and Without Recruiter Contact

Because discussing the military with a recruiter is an active step, it is of interest to determine whether there are differences between individuals who have talked with recruiters and those who have not. To examine

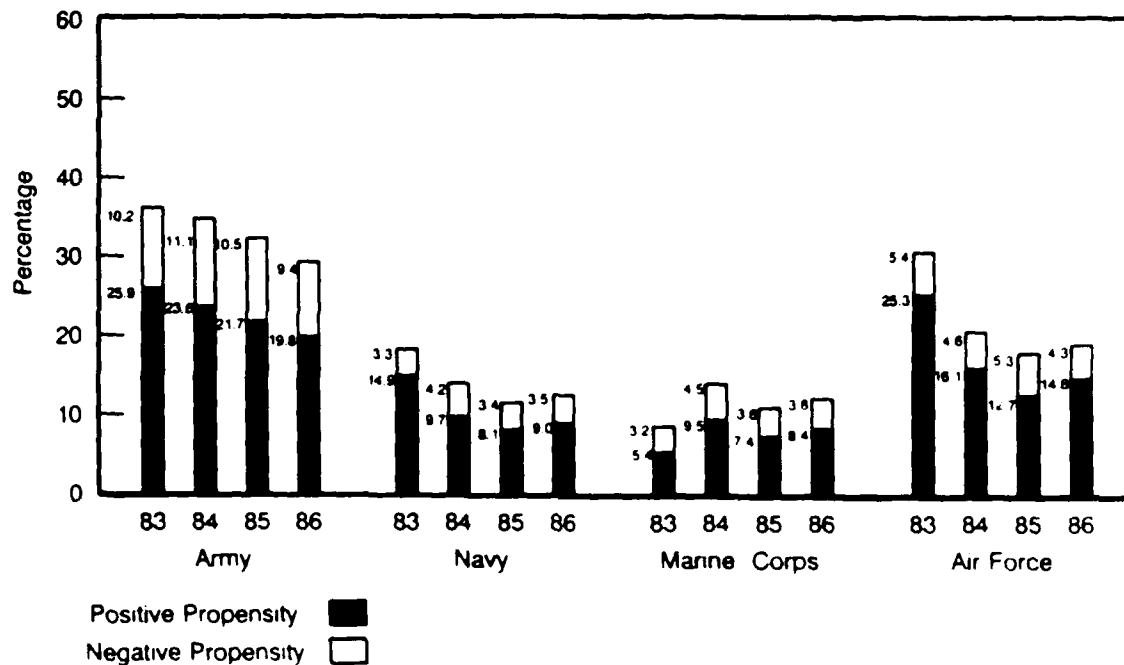
Figure 9.4. Any Contact with Recruiters by Propensity by Service for Young Males, 1983-1986



NOTE: Values represent percentages of positive and negative propensity respondents reporting recruiter contact. The bottom segment of each bar represents the proportion of positive propensity respondents who reported recruiter contact. The top segment represents the proportion of negative propensity respondents who reported recruiter contact.

SOURCE: Questions 510-513, 628, 629.

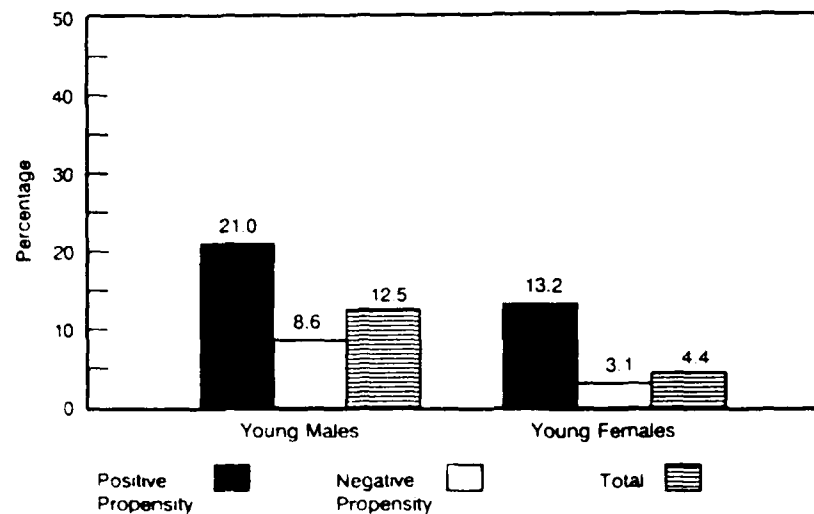
Figure 9.5. Any Contact with Recruiters by Propensity by Service for Young Females, 1983-1986



NOTE: Values represent percentages of positive and negative propensity respondents reporting recruiter contact. The bottom segment of each bar represents the proportion of positive propensity respondents who reported recruiter contact. The top segment represents the proportion of negative propensity respondents who reported recruiter contact.

SOURCE: Questions 510-513, 628, 629

Figure 9.6. Visited a Recruiting Station Within the Past 12 Months



NOTE: Estimates are based on interviews with 5,382 young males (1,722 with positive propensity and 3,660 with negative propensity) and 3,191 young females (405 with positive propensity and 2,786 with negative propensity). Question was not asked of older subsamples.

SOURCE: Questions 510-513, 627

this issue, young males and young females were divided into those having contact and those not having contact with a recruiter. These two groups were compared on a number of personally descriptive variables (e.g., sociodemographic, attitudinal/normative).

1. Differences in Sociodemographic Characteristics

Table 4.1 presents the cross-tabulations of recruiter contact with sociodemographic variables of age, race/ethnicity, marital status and employment. Results from chapters 4 and 5 (specifically Tables 4.4 and 5.3) that all of these variables were associated with propensity to enlist. Given that overall recruiter contact is also associated with positive propensity, one could anticipate that recruiter contact is related to these sociodemographic variables as well. Indeed, some parallel patterns are observed, but there is by no means complete consistency in the responses. For young males and young females, those who have had recruiter contact in the past 12 months are much more likely to be 18-19 years old than those

Table 9.7 Sociodemographic Characteristics as a Function of Recruiter Contact for Young Males and Young Females

Sociodemographic Characteristics	Young Males		Young Females	
	Recruiter Contact ^a (n = 1203)	No Contact (n = 4179)	Recruiter Contact ^a (n = 307)	No Contact (n = 2884)
<u>Age</u>				
16-17	46.8 (1.7)	49.9 (1.0)	49.3 (3.3)	48.3 (1.0)
18-19	42.1 (1.7)	28.0 (0.9)	40.4 (3.2)	31.1 (1.0)
20-21	11.1 (1.1)	22.1 (0.9)	10.2 (1.9)	22.6 (0.9)
<u>Race/Ethnicity</u>				
White	74.1 (1.5)	76.7 (0.9)	69.6 (3.0)	77.7 (0.9)
Black	15.3 (1.3)	11.1 (0.7)	21.1 (2.8)	11.2 (0.7)
Hispanic	7.7 (0.9)	8.8 (0.6)	8.0 (1.7)	8.3 (0.6)
Other	2.9 (0.5)	3.4 (0.3)	1.2 (0.6)	2.9 (0.4)
<u>Marital Status</u>				
Never married	98.3 (0.5)	95.8 (0.4)	93.2 (1.5)	87.1 (0.7)
Currently married	1.7 (0.5)	3.6 (0.4)	4.8 (1.2)	11.4 (0.7)
Other ^b	0.0 (**)	0.6 (0.2)	2.0 (0.8)	1.5 (0.3)
<u>Employment Status</u>				
Student, employed	35.8 (1.0)	34.2 (0.9)	39.0 (3.2)	32.4 (1.0)
Student, not employed	33.5 (1.0)	35.7 (1.0)	33.6 (3.1)	34.2 (1.0)
Non-student, employed	23.9 (1.5)	24.7 (0.9)	19.2 (2.4)	23.1 (0.9)
Non-student, not employed	6.8 (0.9)	5.4 (0.4)	8.3 (1.7)	10.4 (0.6)

Note: Tabled values are column percentages with standard errors in parentheses.

^aContact with a recruiter representing any of the four active Services within the previous 12 months.

^bOther^a includes widowed, divorced and separated.

Source: Questions 403, 416, 417, 633, 636, 639, 642, 713C, 714, 715.

without contact; they are correspondingly less likely to be 20 or 21 and equally likely to be 16 or 17 years of age. These differences are consistent with the recruiting policy of concentrating on contacting high school juniors and seniors. Among young males, those with recruiter contact are more likely to be Black than those without contact. This relationship is even stronger among young females. Whether these race-related differences are a function of recruiter-initiated or self-initiated contact cannot be determined, but the question remains an interesting one, especially given the previously discussed relationship of race with propensity.

For both of these market groups, respondents who have had recruiter contact are more likely to have never been married. Finally, Table 9.7 demonstrates that, at least for the employment breakdown provided, there are no significant relationships between employment status and recruiter contact. However, only very small percentages (10 percent or less) of these young groups are currently non-students and not employed.

2. Differences in Educational Background

Table 9.8 presents the results of the recruiter contact group analyses for variables related to education. Consistent with the age differences discussed above, young males with recruiter contact are less likely to have completed 10 or fewer years of school than those without contact; the recruiter contact group is also more likely to have completed either 11 or 12 years of education than their no-contact counterparts. This pattern is also evident among young females, although it is somewhat attenuated. Significant differences exist only for the "less than 10" and "12" years completed groups. Among young females, however, it is also the case that those with recruiter contact in the past 12 months are less likely to have completed at least some college than those without recent contact.

Young males who were attending school (as of October 1, 1986) do not differ from young males not attending school as a function of recruiter contact. Young females with contact, however, are much more likely to be attending school than those without contact.

Table 9.8. Education-Related Variables as a Function of Recruiter Contact for Young Males and Young Females

Education-Related Variables	Young Males		Young Females	
	Recruiter Contact ^a (n = 1203)	No Contact (n = 4179)	Recruiter Contact ^a (n = 307)	No Contact (n = 2884)
<u>Years of Education Completed</u>				
Less than 10	5.1 (0.8)	10.3 (0.6)	2.6 (1.0)	5.8 (0.5)
10	17.0 (1.3)	25.6 (0.8)	19.7 (2.7)	21.7 (0.9)
11	36.1 (1.7)	23.7 (0.8)	26.6 (2.9)	25.8 (0.9)
12	34.1 (1.6)	30.3 (1.0)	43.2 (3.2)	34.3 (1.0)
Some vocational school	0.6 (0.3)	0.8 (0.2)	0.7 (0.6)	1.4 (0.3)
Some college	7.3 (0.9)	9.3 (0.5)	7.2 (1.6)	11.0 (0.7)
<u>Current Educational Plans Status^b</u>				
Attend school	69.1 (1.6)	69.4 (0.9)	72.5 (2.8)	66.3 (1.0)
Not attend school	30.6 (1.6)	29.9 (0.9)	27.5 (2.8)	33.2 (1.0)
Don't know	0.3 (0.2)	0.7 (0.2)	0.0 (**)	0.5 (0.1)
<u>Want Further Schooling</u>				
Yes	91.3 (1.0)	87.2 (0.7)	96.3 (1.1)	89.7 (0.7)
No	8.7 (1.0)	12.8 (0.7)	3.7 (1.1)	10.3 (0.7)
<u>Mother's Years of Education</u>				
Less than 10	4.4 (0.6)	6.3 (0.5)	7.2 (1.5)	6.8 (0.5)
10	4.7 (0.7)	3.3 (0.3)	3.6 (1.1)	4.4 (0.5)
11	4.5 (0.8)	3.5 (0.3)	6.2 (1.6)	5.3 (0.5)
12	47.1 (1.7)	48.4 (1.0)	49.9 (3.3)	47.0 (1.1)
Some college or vocational school	33.0 (1.6)	28.5 (0.9)	26.4 (2.6)	29.4 (1.0)
Don't know	6.3 (0.8)	10.0 (0.7)	6.7 (1.6)	7.2 (0.5)

Note: Tabulated values are column percentages with standard errors in parentheses.

^aRecruiter contact refers to contact with a recruiter representing any of the four active services within the previous 12 months.

^bData were collected during August, September, October, and November, 1986. Questions prior to October 1 asked about planned status for October, questions after October 1 asked about actual status.

Source: Questions 404, 407, 410A, 410B, 633, 636, 639, 642, 713B.

The next report deals with whether education is related to recruiter contact. Among males and young females with contact are more likely to want further schooling than those without such contact. Perhaps recruiter contact is the result of an individual's interest in educational benefits offered by the military.

The last variable examined is related to mothers' education--often used as a proxy for socioeconomic status. No differences are evident for young females with or without recruiter contact. Among young males, those with contact are more likely than those without contact to have a mother who has completed at least some college, national schooling and are less likely to have a mother who has completed less than 12 years of schooling. The precise meaning of these differences, however, is somewhat obscure given the relatively high and differential rates of "don't knows" (10 percent of those with contact, a figure significantly greater than the 6 percent of those without recruiter contact).

1. Differences in Attitudes

The final set of variables examined as a function of recruiter contact (Table 9.2) deals with attitudes and interpersonal influences. Given the strong relationships already discussed between these variables and propensity (Table 6.1 and Figures 6.3 and 9.2), it is not surprising to find that they are also reliably related to recruiter contact. More specifically, among young males and young females, those who have had recruiter contact in the past 12 months are more likely than those who have not had contact within this period to report that:

- the people who matter most to them are favorable toward their serving in the active military;
- they themselves are very or somewhat favorable about serving in the active military;

Table 9.9. Attitudinal/Normative Variables as a Function of Recruiter Contact for Young Males and Young Females

Attitudinal/Normative Variables	Young Males		Young Females	
	Recruiter Contact ^a (n = 1199)	No Contact (n = 4103)	Recruiter Contact ^a (n = 307)	No Contact (n = 2884)
<u>Favorability of People Who Matter Most^b</u>				
Favorable	51.9 (1.8)	38.4 (1.0)	48.8 (3.2)	27.6 (1.0)
Neither favorable nor unfavorable	22.1 (1.4)	30.7 (0.9)	21.8 (2.6)	32.2 (1.0)
Unfavorable	26.0 (1.6)	30.8 (0.9)	30.1 (3.0)	40.2 (1.0)
<u>Favorability of Self^b</u>				
Favorable	56.6 (1.7)	35.4 (0.9)	47.8 (3.2)	21.4 (0.9)
Neither favorable nor unfavorable	17.6 (1.4)	18.7 (0.8)	16.2 (2.4)	17.6 (0.8)
Unfavorable	26.4 (1.5)	45.9 (1.0)	36.0 (3.0)	61.0 (1.0)
<u>Advice to a Friend^c</u>				
A waste of time	4.0 (0.7)	9.3 (0.6)	3.8 (1.2)	7.0 (0.6)
Up to him/her	43.1 (1.7)	59.3 (1.0)	42.4 (3.2)	64.2 (1.0)
A good idea	52.9 (1.7)	31.4 (0.9)	53.9 (3.2)	28.9 (1.0)
<u>Friend/Relative Enlisted in Last 6 Months</u>				
Yes	51.1 (1.7)	39.0 (1.0)	57.0 (3.2)	38.8 (1.0)
No	48.9 (1.7)	61.0 (1.0)	43.0 (3.2)	61.2 (1.0)

Note: Tabled values are column percentages with standard errors in parentheses.

^aContact with a recruiter representing any of the four active Services within the previous 12 months.

^bRefers to favorability toward serving in the military. "Favorable" includes those responding either "somewhat" or "very" favorable. "Unfavorable" includes those responding either "somewhat" or "very" unfavorable.

^cRefers to advice concerning seeing a military recruiter.

Source: Questions 633, 636, 639, 642, 682-683, 690-692.

- they would tell a good friend who asked for advice that seeing a military recruiter is a good idea; and
- a good friend or relative has enlisted in the past 6 months.

The actual percentage point differences between the two recruiter contact groups are quite impressive. The smallest differential is 12 percentage points for friend/relative enlisted in past six months (for young males; 18 percentage points for young females), and the largest is 26 percentage points for favorability of own attitude (for young females; 21 points for young males).

E. Summary

This chapter examined behaviors that require active involvement by the respondent seeking information about the military. These include phoning or mailing for information, using a computerized career information system, discussing the possibility of enlistment with someone--family member, friend or recruiter--and taking the ASVAB. An analysis was also provided of how young respondents who have spoken with a recruiter differ from those who have not.

Less than 10 percent of the respondents report having mailed a postcard or coupon in the past 12 months and even fewer reported having made a toll-free call for information. Both of these behaviors were more likely if the respondent was a young male and/or had positive propensity.

Of the approximately 50 percent of the respondents who reported the existence of a school-based computerized career information system, only one-quarter of the males and one-fifth of the females had used the system to get information about the military. Of those who used the system for this purpose, positive propensity respondents were much more likely than those with negative propensity to report having their interest increased by using the system.

More than half of the young males and young females, and between two-fifths and one-half of the older groups have spoken with someone about military service in the past year. In addition, positive propensity increases the likelihood of having such a discussion. Data for young males in 1983 and 1985 showed higher percentages having discussed military service than in 1984 and 1986. Discussions were held most frequently with a family member.

The Armed Services Vocational Aptitude Battery (ASVAB) has been taken by less than one quarter of all respondents. Older males were more likely to have taken it than young males, followed by young females and older females. Among the young respondents and older females, the test was most likely to have been taken at their high school. Older males were equally as likely to have taken it at a Military Entrance Processing Station (MEPS) and at their high school. However, older males and older females were also more likely than their younger counterparts to have performed the relatively more active behavior of taking the ASVAB at a MEPS.

About two-fifths of the males and one-fifth of the females have spoken with a military recruiter. All groups were most likely to see an Army recruiter. Among young males and both groups of females, positive propensity is associated with increased probability of having spoken with a recruiter. The most common method of initial contact was talking with a recruiter at school--for young males and all females. Older males were most likely to have initial contact with a recruiter at a recruiting station.

Less than 15 percent of young respondents have been to a recruiting station in the past 12 months. Being male and having positive propensity increases the likelihood of having performed this action.

Young males and young females who reported having had recruiter contact in the past 12 months, compared with those who did not report such contact were more likely to be:

- 18-19 years old;
- Black;
- never married;
- in their senior year of high school or beyond; and
- desirous of getting additional education in the future.

Young males with contact, but not young females, are also more likely to have a mother with some training at the college or vocational/business school level and less likely to have a mother with less than 10 years of education. Respondents with recruiter contact compared to those without contact are more likely to report that they are personally favorable toward serving in the military and that others considered important to them are also favorable toward their serving. In addition, those with recruiter contact are more likely to report having a friend or relative who enlisted during the past 6 months than those without contact.

10. PREDICTING ACTIVE PROPENSITY FOR YOUNG MALES AND YOUNG FEMALES

Throughout this report, we have examined the relationship of a large number of variables (i.e., respondent characteristics and responses) on propensity. The analyses presented in previous chapters provide useful and important information but are limited because they consider separately the relationship of only one or two variables at a time to propensity. Since many of the variables examined are interrelated (e.g., age, years of education, marital status), assessing the effects on propensity of each variable separately does not allow us to determine the independent contribution of each, apart from the impact of the other, possibly confounding variables. An analysis which examines the effects on propensity of a number of variables simultaneously, controlling for the confounding due to intercorrelations among variables, provides a more meaningful and precise view of the data. In this chapter we present results of multiple regression analyses to provide a better understanding of the variables that, in concert, best predict propensity.

A. Specification of Variables and Analytical Approach

The variables for the regression analyses were placed into two categories. The first category consists of the sociodemographic and economic variables discussed in Chapters 4 and 5. The former were collected in the survey itself, while most of the economic variables consisted of aggregate data for 1986 obtained from Bureau of Labor Statistics. The second category consists of the psychological and behavioral variables discussed in Chapters 6-9 including knowledge of service benefits, awareness of military advertising, attitudinal and normative information and actual behaviors. A description of these two categories of variables along with their definitions are listed in Tables 10.1 and 10.2. The criterion, or the predicted variable, is Composite Active Propensity. It is classified in a dichotomous fashion, where 1 = positive propensity and 0 = negative propensity. Additional detail regarding the construction of the variables is included in Appendix D.

Table 10.1. Sociodemographic/Economic Variable Definitions

Independent Variables	Variable Definition*
Age	Variable of respondent's age in single years (16-21)
Race/Ethnicity	Race/ethnic background of respondent; categorical variable* with the following categories: Black; Hispanic; other nonwhite; white
Educational Status	Highest educational level achieved by respondent; categorical variable with the following categories: 10 years or less; 11 years; more than 12 years; 12 years
Mother's Education	Highest educational level achieved by respondent's mother. Categorical variable with the following categories: 10 years or less; 11 years; more than 12 years; 12 years
Marital Status	Categorical variable with the following categories: Other than married; married
Student Status	Categorical variable with the following categories: Non-student; Part-time student; Full-time student
Local Unemployment Rate	Continuous variable representing average percent unemployed (October 1985-September 1986) in respondent's county of residence
Local Wage Rate	Continuous variable representing average hourly earnings per person employed for 1985 in respondent's county of residence
Employment Status	Categorical variable with the following categories: Unemployed and looking for a job; Employed full time; Employed part time; Unemployed and not looking for a job
County Total Labor Force	Continuous variable representing average September 1986 total labor force in respondent's county of residence

*Categorical variables are binary variables (defined as equal to 1 if they have the property or 0 if they do not) where each of the categories (except one) is entered directly into the analysis. Results for each category are interpreted as relative to the omitted category (e.g., Black relative to white, Hispanic relative to white). Other variables enter analysis directly and are interpreted as though they were continuous (e.g., age, percent unemployed).

Table 10.2. Psychological/Behavioral Variable Definitions

Independent Variables	Variable Definition
Difficulty Finding Full-Time Job	Variable representing perceived difficulty of finding a full-time job in one's community (1=almost impossible to 4=not difficult at all)
Accuracy of Slogan Sponsor Attribution	Composite measure representing the number of attributions of service slogans made to the correct sponsor (0-7)
Exposure to Different Media	Composite measure representing the number of media (of print, broadcast and mailed literature) to which respondent recalled exposure (0-3)
Knowledge of Educational Benefits	Whether any Service has a program that helps pay for college or vocational training. Categorical variable with the following categories: No, Yes
Previous Consideration of Military Service	Variable representing previous thought about joining the military (1=never thought about it to 3=gave it serious consideration)
Friend/Relative Enlisted	In the last six months had friend/relative who enlisted in one of the military services. Categorical variable with the following categories: No, Yes
Own Feelings	Variable representing favorability of one's own feelings about serving in the active military (1=very favorable to 5=very unfavorable)
Others' Feelings	Variable representing perceived favorability of others about respondent serving in the active military (1=very favorable to 5=very unfavorable)
Advice to Others	Variable representing the favorability toward a friend's seeing a military recruiter (1=a waste of time to 3=a good idea)
Called/Mailed for Information	Composite measure representing whether the respondent called a toll-free number and/or mailed a postcard or coupon for information about the military (0-2)
Discussed Serving with Someone	Within the last year or so discussed with someone the possibility of serving in the military. Categorical variable with the following categories: No, Yes
Actions Taken Toward Enlistment	Composite measure representing the number of actions the respondent took of the following: visited a recruiting station in the last 12 months; ever talked with a military recruiter; and ever took the ASVAB (0-3)

In multiple regression analysis, predictor or independent variables are examined to determine how well they can jointly account for or explain the variation that occurs in the criterion or dependent variable of interest. The size of the estimated regression parameters associated with each variable indicates the importance of that variable in effecting the criterion measure. In this case, regression analysis is used to examine sociodemographic variables and other characteristics that are most important in explaining the positive propensity of young males and females. The strength of multiple regression analysis is that it is possible to determine the unique effect of any predictor variable on propensity after adjusting for the effects of other variables.

Two regression analyses were performed for each of the young male and the young female market groups. The first of the analyses (the limited model) examined the effect of sociodemographic and economic variables on predicted propensity. The second analyses (the overall model) examined the effect of the variables included in the first analyses plus the psychological/behavioral variables on predicted propensity. Further discussion of the rationale for using this analytical approach appears in Appendix D.

B. Overview of Findings

The overall regression model which included both the sociodemographic and economic and psychological/behavioral variables proved to be significantly more effective in predicting propensity than the limited (sociodemographic and economic variables only) model, for both males and females. For the young males, using the limited model to predict propensity resulted in 13 percent of the variation in propensity being explained by the combination of predictors. Adding the psychological and behavioral variables in the overall model increased the explained variation to 40 percent. These results are somewhat attenuated among the young females, but remain predictive of propensity. For the young females, the sociodemographic and economic model explained 8 percent of the variation in propensity, while the overall model increased the explained variation to 34 percent.

Although all of the variables presented in tables 10.1 and 10.2 contributed to the predictive power, some were more important than others explaining the variation. Table 10.3 presents the variables for each market group which made a statistically significant contribution (at the percent confidence level or better) to the prediction of positive propensity in the overall model. Nine variables were significant for young males and eight variables were significant for young females. Of the total set of significant variables, seven were the same for young males and young females. The significant predictor variables indicated that, for both males and females, those with positive propensity were more likely to have favorable feelings about military service; to be nonwhite (especially black); to have less education; to have considered military service in the past; to have discussed serving in the military with someone; to be younger; and to have had less exposure to military advertising across different media.

For young males, but not for the young females, two other variables were also significant contributors. These were decreasing years of mother's completed education and giving favorable advice to a friend about seeing a military recruiter. Being unemployed but looking for a job, or secondarily, being employed either full time or part time made a significant contribution to the overall model for the young females, but not for the young males. Appendix D presents a more detailed description of the variables which contributed significantly to the prediction of propensity in both the limited and overall models for the young males and young females.

On the whole, results for both the young males and young females are particularly noteworthy in that they are very consistent with the bivariate descriptive analyses reported in earlier chapters. This pattern of confirmatory results from more sophisticated analyses should serve to strengthen confidence in the findings highlighted in the report.

Table 10.3. Variables in Overall Regression Model Significantly Associated with Increased Levels of Composite Active Propensity

Young Males	Young Females
<ul style="list-style-type: none"> • Increasing Favorability of One's Own Feelings about Military Service • Being Nonwhite--and Especially Being Black • Decreasing Years of Completed Education • Having Given Military Service Past Consideration • Having Discussed Serving in the Military With Someone in the Past Year or So • Decreasing Years of Mother's Completed Education • Giving Favorable Advice to a Friend About Seeing a Recruiter • Being Younger • Having Less Exposure to Military Advertising in Different Media 	<ul style="list-style-type: none"> • Increasing Favorability of One's Own Feelings about Military Service • Being Nonwhite--and Especially Being Black • Decreasing Years of Completed Education • Having Given Military Service Past Consideration • Having Discussed Serving in the Military With Someone in the Past Year or So • Being Unemployed but Looking for a Job, or, secondarily, Being Employed Either Full Time or Part Time • Being Younger • Having Less Exposure to Military Advertising in Different Media

C. Summary

Exploratory multiple regressions were performed on the young male and young female data. The criterion (predicted) variable was Positive Composite Active Propensity. Independent (predictor) variables included sets of sociodemographic and economic characteristics and psychological and behavioral measures. Two models were tested for each market: a limited model that included only sociodemographic and economic variables and a overall model which included both sets of predictor variables.

For young males, the sociodemographic and economic model accounted for 13 percent of the variance in predicting positive active propensity, while the overall model accounted for 40 percent of the variance. The variables which contributed significantly to the explanatory power of the overall model were: one's personal feelings about serving in the military, previous consideration of military service, discussing military service with someone, race/ethnicity, educational status, a willingness to give favorable advice to others about seeing a recruiter, mother's education, exposure to advertising from different media, and age. Educational status, age, mother's education and media exposure were negatively related to the probability of positive propensity in that increasing levels of the predictor variables were associated with a decreasing probability of positive propensity. The other predictor variables showed a direct, positive relationship with propensity.

Both regression models proved to be somewhat less effective in predicting positive propensity for young females than for young males. The sociodemographic and economic model accounted for 8 percent, and the overall model for about 34 percent of the variance. The predictor variables which were most significant in the overall model's explanatory power were, in general, the same ones which appeared in the model for the young males. They included personal feelings, previous consideration of military service, having discussed service with someone, age, race/ethnicity, educational status and media exposure. Employment status, which was significant

... in the young males' sociodemographic and economic model, was significant in both models for the young females. The direction of effect on predicting positive propensity was the same for females as it was for males.

Overall, the application of these analyses to the YATS data demonstrated a high level of explanatory power in predicting propensity. Further analyses tracing in more detail the interrelationships of sets of predictor variables (e.g., path analyses) would presumably result in even greater understanding of the underpinnings of propensity.

11. AFQT-BASED ANALYSIS OF SELECTED ISSUES FOR YOUNG MALES AND YOUNG FEMALES

The Services have been especially interested in obtaining high quality recruits. More specifically, high quality recruits are individuals with high school diplomas who score in categories I-IIIA on the Armed Forces Qualification Test (AFQT). Therefore, data analyses should also be provided as a function of both high school graduation and diploma status as well as probable score on the AFQT (the written qualifying exam). In this chapter the Predicted AFQT-category segmentation approach is described. The derived segmented groups are then used to examine a number of broad issues, including positive propensity toward the active Services and Reserve Component, various actions which may be taken toward enlistment, recruiter contact, most likely plans for next year (or after high school), and expectations for further education.

A. Predicted AFQT Market Segmentation Approach

The predicted AFQT approach was developed by Orvis and Gahart (forthcoming) of The RAND Corporation. The goal of the segmentation analysis was to develop a series of equations to estimate the probability that any individual would obtain a score at or above the 50th percentile on the AFQT (Categories I-IIIA). The equations were developed using young male respondents from the 1976-1980 fall administrations of YATS who subsequently took the AFQT. The variables used to predict AFQT category included such objective information as age at survey, race, geographic region, father's education, number and type of high school math courses completed, approximate high school grades, and current job and educational status, as well as such subjective information as general intention to enlist, recruiter contact, perceived ease of finding full-time employment and having talked with one's parents about enlisting. These equations were applied to both young male and young female data to result in the following

seven groups based on educational status and AFQT-predicted scores.¹

- High School Diploma Graduates - Category I-IIIA
- High School Diploma Graduates - Category IIIB-V
- High School Seniors - Category I-IIIA
- High School Seniors - Category IIIB-V
- Younger High School Students - Category I-IIIA
- Younger High School Students - Category IIIB-V
- Non-completers

Non-completers consist of all respondents not currently in high school who do not have regular high school diplomas including those with GEDs or ABE certificates. Non-completers were not further divided into AFQT groups because of their low recruiting priority.

The mean estimated probabilities of scoring in AFQT Categories I-IIIA among young males (i.e., the proportions of males who would score in these categories) were .602 for high school graduates, .642 for high school seniors and .509 for younger high school students. Among young females, the mean estimated probabilities of scoring in Categories I-IIIA were .557

¹/ Note that each of the two AFQT-category subgroups is composed of the entire set of respondents who have achieved the level of educational attainment specified. For example, among male high school seniors, the data for 1,118 individuals were entered into the calculations for both Categories I-IIIA and IIIB-V. This was accomplished by using the probability that each individual would fall into Categories I-IIIA (High Wt.) for the first set of calculations, and then using the probability that that individual would fall into Categories IIIB-V (1-High Wt.) for the second set. In each case, this probability was used to weight the particular measure being examined (e.g., propensity, recruiter contact, most likely plans).

for high school graduates, .558 for high school seniors and .531 for younger high school students.²

B. Positive Propensity

Tables 11.1 and 11.2 present active and Reserve positive propensity levels for the Predicted AFQT groups for young males and young females, respectively. Among young males two basic patterns are evident for active and Reserve propensity, for both the individual Services/Reserve Components and the calculated composite measure. First, positive propensity shows a strong linear relationship as a function of educational status. High School Graduates consistently show the lowest levels of propensity, while High School Seniors show the next highest levels and Younger High School Students show the highest levels of positive propensity. The second pattern clearly shown is that positive propensity is much lower among Category I-IIIA males than among Category IIIB-V males within each educational status group. The differences between Category I-IIIA and IIIB-V for Composite Active Propensity range from 12 to 23 percentage points. The differences for Composite Reserve Propensity are between 9 and 14 percentage points. However, the striking nature of these differences should be viewed within the context of the equation-building process for predicting AFQT category. Specifically, one of the variables in the equation is a combination of the respondent's response on the measure of

^{2/} Because the female YATS sample in the years measured was small, and the percentage of those who took the AFQT and were thus available for analysis was even smaller, it proved very difficult to estimate meaningful equations for females. Thus, the models developed for the male respondents were used for the females as well. This may account in part for the lower probabilities of females scoring in Categories I-IIIA. Both male and female younger high school students had lower probabilities of scoring in AFQT Categories I-IIIA than seniors. This may be because the younger student group includes individuals with lower AFQT scores who will drop out of school before their senior year. The lower probability for graduates is most likely due to the exclusion of individuals in their third or fourth years of college from the YATS sample.

Table 11.1. Young Males' Positive Propensity for Military Service

Positive Propensity Measure	Predicted AFQT Groups										Non-Completers (n= 869)	Total (n=5382)
	High School Graduates (n=2038)		High School Seniors (n=1118)		Younger High School Students (n=1367)							
	Category		Category		Category		Category					
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V				
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V				
<u>Active Propensity</u>												
Army	4.8	13.0	9.6	24.4	15.0	32.6	22.4	15.8				
Navy	5.0	9.6	9.8	14.7	12.4	19.3	13.4	11.1				
Marine Corps	3.6	8.6	8.2	16.3	11.4	23.2	14.9	11.2				
Air Force	7.8	11.9	16.1	23.9	17.6	25.6	18.8	16.0				
Composite Active Propensity	13.9	25.7	27.6	44.2	35.3	58.0	38.7	32.0				
<u>Reserve Propensity</u>												
National Guard	5.7	11.4	8.1	16.1	11.8	19.4	18.6	12.2				
Reserves	7.8	15.1	11.2	19.9	14.7	26.7	20.6	15.6				
Composite Reserve Propensity	10.1	18.9	14.6	26.2	19.9	33.7	26.3	20.0				

Note: Tabled values are column percentages of each category with positive propensity.

Source: Questions 505, 507, 510-513.

general intention to be serving in the military in the next few years (Q503) and the "unaided mentions" measure of interest in the military (Q438). Both of these measures have been shown previously to be correlated with propensity.

The same patterns noted for young males are observed in Table 11.2 for young females. The same linear relationship of increasing propensity with decreasing educational status for both the active Services and Reserve Component is evident. Young females in Category I-IIIA showed Composite Positive Active Propensity levels between 5 and 12 percentage points lower than those in Category IIIB-V. The differences for positive Composite Reserve Propensity ranged from 4 to 9 percentage points. As with young males, some of this large difference is a function of development of the Predicted AFQT groups using the general intention and unaided mentions measures.

C. Actions Taken Toward Enlistment

Individuals can seek information about military service in various ways. This information contributes to one's overall feelings about enlisting. In this section these actions are discussed as a function of educational status and Predicted AFQT.

1. Young Males

Table 11.3 presents data about enlistment actions taken by young males. No consistent patterns are evident across the range of information seeking behaviors as a function of young males' educational status. For example, High School Seniors are more likely to have discussed military service with someone, to have had contact with a recruiter in the past 12 months, and to have mailed a postcard or coupon for information about the

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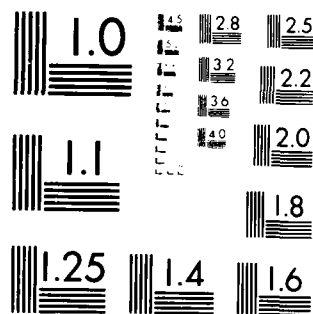
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Table 11.2. Young Females' Positive Propensity for Military Service

Positive Propensity Measure	Predicted AFQT Groups									
	High School Graduates (n=1387)		High School Seniors (n=691)		Younger High School Students (n=683)		Non-Completers (n= 430)		Total (n=3191)	
	Category	Category	Category	Category	Category	Category	Category	Category	Category	Category
	I-III	IIIB-V	I-III	IIIB-V	I-III	IIIB-V	I-III	IIIB-V	I-III	IIIB-V
<u>Active Propensity</u>										
Army	1.4	5.4	4.2	9.6	6.5	13.3	6.9	5.8		
Navy	1.5	3.0	2.4	6.3	5.4	10.4	4.5	4.1		
Marine Corps	0.7	1.7	2.1	5.0	4.9	8.7	5.2	3.3		
Air Force	3.6	6.7	5.2	11.7	11.3	17.1	8.4	8.0		
Composite Active Propensity	5.5	10.9	8.7	18.4	17.7	29.2	12.8	12.8		
<u>Reserve Propensity</u>										
National Guard	2.0	4.8	2.6	6.6	4.7	8.1	3.4	4.1		
Reserves	2.4	6.0	4.8	8.7	7.2	13.0	7.0	6.1		
Composite Reserve Propensity	3.2	7.6	5.6	10.6	9.4	16.2	7.8	7.6		

Note: Tabled values are percentages of each category with positive propensity.

Source: Questions 505, 507, 510-513.

military than High School Graduates. On the other hand, High School Graduates were more likely than High School Seniors to have ever had contact with a recruiter, to have visited a recruiting station in the past 12 months, and to have taken the ASVAB. Younger High School Students in general had the lowest percentages who had taken these actions. Non-completers were very unpredictable in terms of which group they most resembled.

Viewing each of these actions individually, we see that almost half the Seniors and one-third to two-fifths of the Graduates and Younger High School Students had discussed military service with someone within the past year or so. It has been suggested that High School Seniors are more likely than the other groups to have discussed military service with someone because graduation time is a natural enlistment decision point. At that time a change, whether it be attending college or vocational school, entering the labor market full time or joining the military, is virtually inevitable. High School Graduates and Younger High School Students in Category IIIB-V (39 percent and 41 percent, respectively) were more likely to have had such a discussion than those in Category I-IIIA (34 percent and 35 percent, respectively). These results parallel the pattern in which propensity is higher among the Category IIIB-V respondents but the overall differences are smaller because there was little difference between AFQT categories for High School Seniors. Thus, the proximity of those respondents to the natural enlistment decision point may overshadow the otherwise striking differences in interest between the two Predicted AFQT groups. However, it should also be clear that a fairly high percentage of high quality young males discuss the possibility of military service with someone. Thus, it still seems possible to appeal to the high quality group through advertising targeted toward potential discussants and influential agents (i.e., family, friends, and teachers).

Not surprisingly, in view of a longer period of opportunity, High School Graduates were more likely to report ever having had contact with a military recruiter (about one-half) than were those in any other educational status group. Age is clearly a factor here, as the Younger High School Students are least likely (about one-fourth) to report

recruiter contact. In addition, about two-fifths of High School Seniors and Non-completers report lifetime recruiter contact. Between two-fifths and one-half of groups who are, educationally at least, prime targets, then, have had recruiter contact. Quality of the potential recruit, as defined by Predicted AFQT, follows the same pattern as lifetime recruiter contact. Category IIIB-V High School Graduates and Younger High School Students are more likely to report ever having contact with a recruiter than their Category I-IIIA counterparts. In addition, although the differences between these groups among the High School Seniors are in the same direction, they are not statistically significant. This lends some further support to the hypothesis that being near the enlistment decision point of high school graduation overshadows otherwise evident differences in interest between Predicted AFQT groups.

High School Seniors are most likely to report having had contact with a recruiter in the past 12 months (about 30 percent) compared with both High School Graduates (about 23 percent) and Younger High School Students (about 15 percent). No differences are evident for 12-month contact as a function of Predicted AFQT category. However, although between 34 and 46 percent of respondents reported having discussed military service with someone in the past year, only 13 to 32 percent reported having had contact--presumably at least a brief discussion to obtain information--with a recruiter in approximately the same period of time. Thus, a number of these discussions are being held with people who may not have accurate information or favorable views about military service and who may, in fact, be much more influential than the relatively unfamiliar recruiter.

As expected, given the "lifetime" time frame involved, more High School Graduates had taken the ASVAB (about 28 percent) than High School Seniors (about 18 percent) or Young High School Students (about 5 percent). No differences are noted with respect to Predicted AFQT. This may reflect institutional administration of the ASVAB to large groups of students in the latter part of their junior year and senior year rather than any self-initiated action indicating real interest in military service. Consistent with this reasoning is the similarity of the Non-completers (also about 18 percent) to the High School Seniors.

Visits to a recruiting station in the past 12 months should be a purer measure of interest in the military than some of the other items discussed above. The pattern of recruiting station visits is interesting. Only about 6 percent of Younger High School Students visited a recruiting station. All High School Seniors and Category I-III A High School Graduates had a combined rate that was approximately twice as high (12-14 percent). Both Category IIIB-V High School Graduates and Non-completers showed the highest percentages (17-18 percent) reporting a visit in the past 12 months. It is clear that the most desirable potential recruits are not the most likely to visit a recruiting station.

Even fewer respondents mailed a postcard or coupon for information about the military in the past 12 months. High School Seniors who were, as discussed above, making career decisions were the most likely (about 16 percent) to have mailed a postcard or coupon. No differences were shown as a function of Predicted AFQT category.

The action taken by the fewest respondents was making a toll-free call for information about the military in the past 12 months. Only between 1 and 5 percent of the respondents had made a toll-free call.

2. Young Females

Table 11.4 presents data regarding enlistment actions taken by young females. Overall, young females were less likely than their male counterparts to have taken any of the examined actions toward enlistment. Females are only half or less than half as likely to have performed each of the listed behaviors except for taking the ASVAB. All groups of females who took the ASVAB, except Non-completers, were relatively much more similar to their male counterparts. Having taken the ASVAB, then, appears

Table 11.4. Young Females' Actions Taken Toward Enlistment

Action Taken ^a	Predicted AFQT Groups							
	High School Graduates (n=1387)		High School Seniors (n=691)		Younger High School Students (n=683)		Non-Completers (n=436)	Total (n=3191)
	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V		
	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V		
Discussed military service with someone	16.7	18.1	19.2	25.6	19.3	23.5	16.7	19.0
Ever had contact with recruiter	26.1	29.4	15.3	20.7	14.7	15.6	13.6	20.9
Had contact with recruiter in last 12 months	9.6	12.1	9.2	12.2	8.8	7.8	7.9	9.8
Ever took ASVAB	19.2	21.6	15.4	15.4	4.3	3.2	6.3	13.9
Visited recruiting station in last 12 months	5.1	7.7	2.2	3.7	2.4	3.4	2.9	4.4
Mailed postcard or coupon	4.1	3.8	4.9	7.2	0.7	1.3	2.8	3.6
Made toll-free call	1.8	2.3	1.4	1.6	0.3	1.1	1.3	1.5

Note: Tabled values are cell percentages.

^aDiscussed service refers to "within the last year or so" and mailed card and made toll-free call refer to "within the last 12 months."

Source: Questions 622, 625, 627, 628, 633, 636, 639, 642, 645, 683.

to be a weak measure of real interest in the military, at least for young males and females, who are most likely to have taken the test at their high school. In addition, all other Predicted AFQT differences which had appeared for young males within educational status were either very small or non-existent for young females. For that matter, even the educational status differences observed for young males are either weak or non-existent for young females. Specifically, the female High School Seniors look much more like the female Younger High School Students than was the case with the young males' data.

Less than one-quarter of any of the educational status groups had discussed military service with someone in the past year or so. High school students, particularly Seniors, were the most likely to report this. The natural enlistment decision point of high school graduation that is suggested by the young male data, then, may not be especially relevant among the young females. It is also worth noting that, similar to the males, female High School Graduates are less likely than Seniors to have discussed military service with someone in the past year. Finally, it is also interesting that one of the few significant differences between female Predicted AFQT groups occurs on the Seniors' responses to the question about having a discussion about military service. More specifically, female Category IIIB-V High School Seniors are more likely to report a discussion about military service than their Category I-IIIA counterparts (26 percent versus 19 percent, respectively). Recall that male High School Seniors showed no Predicted AFQT group differences for this or any other actions taken toward enlistment.

This Predicted AFQT category difference among High School Seniors is also observed for ever having had contact with a recruiter (15 percent for those in Category I-IIIA versus 21 percent for those in Category IIIB-V). Again, male Seniors did not show this pattern. These results, taken together, suggest that high school graduation may be an enlistment decision point for lower ability (Category IIIB-V) females, as it is for all male Seniors, but higher quality (Category I-IIIA) female Seniors do not follow this pattern. Relatively larger proportions of this latter group may have already decided that they will be attending college immediately following

high school graduation. This issue will be examined further later in the chapter.

Overall, between only 14 and 29 percent of the young female groups report ever having had contact with a military recruiter. The oldest group, High School Graduates, had the highest percentages, but this result is not surprising because the measure is lifetime contacts.

The distribution of young female respondents who report contact with a recruiter in the past 12 months shows almost no variation, with percentages ranging from only 8 to 12 percent. Neither educational status nor Predicted AFQT showed any differential association with reports of this occurrence.

As has already been noted, females appear most like their male counterparts with regard to taking the ASVAB. Between 3 and 22 percent of the groups reported having taken the ASVAB, with the greatest proportion being among High School Graduates, followed closely by High School Seniors. These findings are consistent with the hypothesis advanced earlier for the young males that the ASVAB may be administered to large groups of students late in their junior and senior years.

Very small percentages of young females report having visited a recruiting station (2-8 percent), having mailed a postcard or coupon (1-7 percent), or having made a toll-free call for information about the military (less than .5-2 percent) in the past 12 months. High School Graduates were more likely than the other educational status groups to have visited a recruiting station, and High School Seniors were more likely than the other groups to have mailed a postcard or coupon. In addition, Category IIIB-V Graduates were more likely than Category I-IIIA Graduates to have visited a recruiting station.

All in all, Tables 11.3 and 11.4 clearly demonstrate that young females had low levels of self- or other-initiated actions toward enlistment relative to the levels for young males in similar circumstances. These results also parallel the propensity differences seen between the sexes in

Tables 11.1 and 11.2. It is fairly clear, however, that high school graduation is a natural enlistment decision point by young males and may also be seen as such for young females of relatively lower ability.

D. Recruiter Contacts by Service

The discussion in the previous section revealed that contact with a military recruiter at any time during their lives was reported by between one-quarter and one-half of the young males and between one-tenth and one-third of the young females. High School Graduates showed the highest levels of contact. Fewer, of course, reported seeing a recruiter in the past 12 months than during their lifetimes. Among groups, male High School Seniors show the highest levels, while, among female groups, Seniors and Graduates show very similar levels.

This section provides an examination of whether the pattern of educational status and Predicted AFQT that was seen for contact with any military recruiter holds for recruiters from the individual Services. The data for young males presented in Table 11.5 clearly show that lifetime contacts and those within the past 12 months are most likely with Army recruiters (22 percent and 12 percent, respectively). In general, contacts with the other three active Services were very similar within educational status and between Predicted AFQT groups (lifetime contacts ranged from 9-12 percent; contacts in the past 12 months ranged from 5-7 percent). The general pattern observed for overall lifetime recruiter contacts was also observed within each Service: High School Graduates had the highest levels of recruiter contact followed by High School Seniors and Non-completers, with Younger High School Students showing the lowest levels. The pattern of overall contacts with recruiters from the individual Services in the past 12 months is similar: High School Seniors have the highest levels, followed by Graduates, Non-completers, and Younger High School Students. There were no consistent differences among any of the educational status groups as a function of Predicted AFQT.

Table 11.5. Young Males' Recruiter Contacts by Service

Recruiter Contact	Predicted AFQT Groups								Non-Completers (n = 859)	Total (n = 5382)
	High School Graduates (n = 2038)		High School Seniors (n = 1118)		Younger High School Students (n = 1387)					
	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V		
Lifetime										
Army	27.6	30.5	18.4	24.1	10.0	12.7	24.1	21.8		
Navy	15.2	14.7	12.3	9.7	4.8	6.3	10.7	11.1		
Marine Corps	15.3	18.3	11.8	13.6	5.6	8.0	11.4	12.3		
Air Force	12.6	11.9	10.3	9.9	6.2	6.6	6.4	9.4		
Any military recruiter	48.3	52.8	39.3	42.4	21.1	26.2	42.2	40.0		
Last 12 Months										
Army	12.1	13.9	14.5	16.7	6.0	8.1	11.5	11.6		
Navy	6.7	6.3	10.8	7.2	3.5	4.2	5.2	6.2		
Marine Corps	6.3	8.5	9.1	7.9	3.8	5.4	6.2	6.7		
Air Force	5.3	4.9	7.7	7.4	3.4	4.2	2.9	4.9		
Any military recruiter	21.9	24.7	31.9	30.2	13.1	16.4	20.8	22.2		

Note: Tabled values are percentages.

Source: Questions 627, 628, 629, 633, 636, 639, 642.

Parallel data for young females, which are presented in Table 11.6, support the general observations made in the earlier section regarding both lifetime and relatively recent contact with military recruiters. Also, as was the case for the males, Army recruiters had the greatest degree of contact (lifetime contacts were 11 percent and contacts in the past 12 months were 5 percent), and there were no consistent differences in contact with recruiters from the individual Services as a function of Predicted AFQT.

E. Plans for the Next Year (or After High School)

Up to this point, the discussion has focused on descriptions of how the market segmentation groups differ with respect to their propensity to enlist in the active Services and Reserve Component and how they differ in the various actions they may have taken toward enlistment. Differences on these variables were described as a function of both educational status and Predicted AFQT category. Initially it might be thought that the reason why young people differ is because they have different abilities and are at different stages in the educational stream. Some may already have expectations or potential plans for the future. A further examination of this hypothesis entails looking at young males' and young females' most likely plans for the next year (or following high school) as well as their expectations for further education.

1. Young Males

Table 11.7 presents, for the male groups, the results of asking what their most likely plans were for next year (or for after high school where the respondents are continuing in high school after October, 1987). These results reveal some interesting differences between both educational status groups and Predicted AFQT groups.

Overall, high school students, regardless of whether they are seniors, juniors or lower level, are much more likely to expect to be going to school full time than are High School Graduates (more than one-half versus about two-fifths). In contrast, High School Graduates are more likely to

Table 11.6. Young Females' Recruiter Contacts by Service

Recruiter Contact	Predicted AFQT Groups							
	High School Graduates (n=1387)		High School Seniors (n=891)		Younger High School Students (n=883)		Non-Completers (n = 438)	Total (n = 3191)
	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V		
<u>Lifetime</u>								
Army	13.7	10.3	7.9	9.6	6.3	7.1	6.9	10.7
Navy	4.7	4.9	3.7	4.9	3.2	2.9	4.3	4.2
Marine Corps	4.3	5.4	5.2	7.4	2.6	2.1	3.7	4.4
Air Force	6.7	7.5	3.7	5.3	4.5	5.9	4.1	5.7
Any military recruiter	28.1	29.4	15.3	20.7	14.7	15.6	13.6	20.9
<u>Last 12 Months</u>								
Army	6.1	7.4	4.9	5.3	3.7	2.7	3.1	5.1
Navy	1.1	1.9	2.4	2.9	2.1	2.3	1.3	1.8
Marine Corps	1.4	2.3	2.7	4.5	1.1	0.7	2.5	2.1
Air Force	2.6	2.7	2.6	2.5	3.2	3.8	1.8	2.5
Any military recruiter	9.6	12.1	9.2	12.2	8.8	7.6	7.9	9.8

Note: Tabled values are percentages.

Source: Questions 627, 628, 629, 633, 636, 639, 642.

Table 11.7. Young Males' Most Likely Plans for Next Year (or After High School)

Most Likely Plans	Predicted AFQT Groups						
	High School Graduates (n=2038)		High School Seniors (n=1118)		Younger High School Students (n=1388)		Total (n=5381)
	Category I-III	Category IIII-B-V	Category I-III	Category IIII-B-V	Category I-III	Category IIII-B-V	
Going to school full time	51.1	29.5	64.8	40.6	63.9	44.9	48.2
Going to school part time	7.8	10.4	8.1	9.9	8.2	10.4	9.5
Working full time	35.9	50.6	15.8	28.0	14.0	22.7	31.7
Working part time	2.0	2.4	3.3	4.0	2.9	3.7	3.0
Serving in the military	1.2	4.3	6.1	13.8	6.6	15.2	6.8

Note: Tabled values are column percentages.

Source: Question 517.

expect to be working full time (about two-fifths) than are either group of high school students (about one-fifth). Finally, the Graduates are also much less likely to anticipate being in military service than are high school students. The results of these comparisons should not be surprising, especially with regard to expectations about full-time work and school attendance. It is also worth noting that Graduates who enlisted in the military following graduation were excluded from the YATS sample.

Large differences are also noted as a function of Predicted AFQT group. Specifically, regardless of educational status, young males in Category I-IIIA are much more likely--between 19 and 25 percentage points--to anticipate going to school full time than are those in Category IIIB-V. On the other hand, Category IIIB-V males are more likely than those in Category I-IIIA to expect to be working full time; the differences here range from 9 to 15 percentage points. Category IIIB-V males are also more likely to anticipate serving in the military than those in Category I-IIIA--by 3 to 8 percentage points. These results suggest strongly that the military is competing with the expectation of full-time school attendance for Category I-IIIA young males, and with the full-time labor market for Category IIIB-V young males. This is especially true for the Graduates and Seniors; the discrepancies between predicted AFQT categories are less pronounced for the Younger High School Students.

Table 11.8 presents propensity levels for young males as a function of educational status, Predicted AFQT, and most likely plans. As expected, those who plan to serve in the military have high positive propensity levels (96 percent overall). Propensity tends to decrease as a function of educational status, for other categories of "most likely plans," especially for those planning to go to school full time. For those planning to work full time, both high school groups look very similar.

Among High School Graduates, propensity is at its highest level for those planning to be in school part time. This may reflect positive feelings about the Reserves. Category IIIB-V males are also more positive than comparable I-IIIA males among Graduates planning to be in school or working full time. Among High School Seniors, the Category IIIB-V males

Table 11.8. Young Males' Positive Propensity Level by Most Likely Plans

Most Likely Plans	Predicted AFQT Groups								Non-Completers (n = 859)	Total (n = 5381)
	High School Graduates (n=2038)		High School Seniors (n=1118)		Younger High School Students (n=1386)					
	Category	Category	Category	Category	Category	Category	Category	Category		
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V		
Going to school full time	11.5	23.1	22.6	34.2	28.5	51.0	31.1	28.0		
Going to school part time	23.3	31.9	16.6	37.3	40.7	59.8	41.9	35.9		
Working full time	12.8	20.1	25.1	35.7	28.8	50.0	34.0	25.8		
Working part time	13.9	22.3	34.4	46.1	35.8	47.0	40.1	34.1		
Serving in the military	92.2	96.8	98.0	96.5	92.5	93.9	99.2	95.8		

Note: Tabled values are cell percentages which indicate Positive Composite Active Propensity for each category.

Source: Questions 510-513, 517.

expecting to be in school either part time or full time also show higher propensity than their Category I-IIIA counterparts. Finally, Younger High School Students show the greatest differences in expressed propensity between Category IIIB-V and Category I-IIIA males. The propensity increments as a function of being in Category IIIB-V for Younger High School Students average 21 percentage points.

Taken together, the results presented in Tables 11.7 and 11.8 suggest that the impact on propensity of anticipated or actual post-graduation plans becomes most salient when a student reaches his senior year. This again supports the notion that the senior year is a natural enlistment decision point and that the latter part of the junior year of high school is an important time for recruiting efforts.

2. Young Females

Data parallel to those discussed above for the young males are now discussed for young females. Young females' most likely plans are depicted in Table 11.9. As was the case for the young males, female high school students, regardless of whether they are seniors or of lower standing, are much more likely to expect to be going to school full time (between three-fifths and two-thirds of these groups) than are High School Graduates (about two-fifths). Only one-quarter of the young female Non-completers--virtually the same proportion as comparable young males--have this expectation. High School Graduates, on the other hand, are much more likely to expect to be working full time than are high school students: two-fifths versus less than one-fifth, respectively. Graduates are less likely to expect to be serving in the military than either of the two high school groups. However, none of these groups, is higher than 6 percent.

Regardless of educational status, Category I-IIIA females are more likely than their IIIB-V counterparts to expect to be going to school full time; the differences range from 13 to 24 percentage points. And, as was the case for the males, Category I-IIIA females are less likely to expect to be working full time than those in Category IIIB-V (by between 5 and 15 percentage points). Finally, only High School Seniors showed Predicted

Table 11.9. Young Females' Most Likely Plans for Next Year (or After High School)

Most Likely Plans	Predicted AFQT Groups						
	High School Graduates (n=1387)		High School Seniors (n=891)		Younger High School Students (n=883)		Total (n = 3198)
	Category I-III	Category IIII-V	Category I-III	Category IIII-V	Category I-III	Category IIII-V	
Going to school full time	45.5	33.0	73.8	58.1	72.2	48.0	48.3
Going to school part time	8.9	10.7	8.9	13.4	8.2	12.9	10.6
Working full time	35.8	40.7	11.9	16.4	11.2	26.1	28.3
Working part time	4.8	5.7	2.9	3.6	3.9	5.8	5.1
Serving in the military	0.2	0.6	1.4	5.6	2.4	4.0	1.8

Note: Tabled values are column percentages.

Source: Question 517.

AFQT group differences regarding military service, with those in Category IIIB-V more likely to expect to be serving in the military than were those in Category I-IIIA. None of the patterns displayed by the young females is inconsistent with the conclusions drawn from the young male data.

Table 11.10 presents propensity data by educational status, predicted AFQT, and most likely plans. Overall, Younger High School Students show the highest levels of positive propensity, compared with both Seniors and Graduates who do not differ from each other.

Propensity differences as a function of Predicted AFQT only occurred among those expecting to attend school or work full time. More specifically, both Graduates and Younger High School Students in Category IIIB-V who are expecting to be in school full time are more likely to show positive propensity than their counterparts in Category I-IIIA. Graduate and Senior Category IIIB-V females expecting to work full time are also more likely to have positive propensity than those in Category I-IIIA. In general, the tendency for Category IIIB-V females to be more positive than those in Category I-IIIA is apparent, but large standard errors make the detection of statistically significant differences difficult. All of the young females expecting to serve in the military showed positive propensity, whereas the young males were somewhat inconsistent in this respect. The young males' overall propensity level among those expecting to serve in the military was 96 percent overall. None of these results contradicts the conclusions drawn on the basis of young males' data. The results do suggest, however, that young females may be marginally ahead of young males in weighing their high school graduation options of school, work and the military, and in making decisions regarding what they are likely to be doing at that point. For young females, the major decline in propensity appears to have occurred by the time they reach their senior year in high school. Thus, it may be advisable to start targeting females at an earlier point in time than the senior, or even the late junior, year.

Table 11.10. Young Families' Positive Propensity Level by Most Likely Plans

Most Likely Plans	Predicted AFQT Groups						Non-Completers (n = 429)	Total (n = 3199)
	High School Graduates (n=1387)		High School Seniors (n=691)		Younger High School Students (n=883)			
	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V		
Going to school full time	6.3	12.4	8.8	13.2	14.4	23.6	18.7	11.6
Going to school part time	8.7	13.9	4.2	9.7	17.7	28.1	15.2	13.6
Working full time	3.4	9.9	4.1	13.6	21.4	30.1	18.3	18.2
Working part time	6.8	7.8	6.1	14.1	19.2	27.2	7.9	18.8
Serving in the military	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Tabled values are cell percentages which indicate Positive Composite Active Propensity for each category.
Source: Questions 510-513, 517.

F. Expectations for Further Education

Young people's most likely plans for the future are related to propensity, educational status and Predicted AFQT. Are their plans also related to anticipated further education, at least at some point in the future? This variable has been shown to be a potent predictor, both alone and in conjunction with actual AFQT score, of enlistment behavior among high school senior and graduate young males (Hosek and Peterson, 1985). Table 11.11 presents for young male and female Seniors and Graduates the percentages of those expecting further education. More than four-fifths of both groups, but especially the High School Seniors, would like more schooling. Overall, young male Seniors are about 7 percentage points more likely than Graduates to want more schooling in the future; the comparable difference for young females is 10 percentage points.

The more interesting comparison, however, is between AFQT categories with regard to expectation of further education. For young male Seniors and Graduates and for young female Seniors, those in Category I-IIIA are more likely than those in Category IIIB-V to desire further education. Only female Graduates do not show this association.

The data in Table 11.12 address the question of whether the differences in educational status and AFQT groups are mirrored in propensity levels as well. Category IIIB-V youths, regardless of educational status, show higher levels of positive propensity than do Category I-IIIA youths, a result that has been consistent throughout this analysis. However, when this relationship is viewed in light of educational expectations, it is also clear that the differences between Category I-IIIA youths who do not wish additional schooling and Category IIIB-V youths who do not wish additional schooling is smaller than the differences between the average Predicted AFQT group differences. Another useful finding from this analysis is that both young male and female High School Graduates who expect more education show higher propensity than those who do not. This suggests that extensive dissemination of information about the educational benefits of the GI Bill should serve to be a valuable recruiting tool.

Table 11.11. Expectations for Further Education for
High School Seniors and Graduates

Educational Status/ Expect More Education	<u>Predicted AFQT Groups</u>		Total
	I-III A	III B-V	
<u>Young Males</u>			
<u>Seniors</u>			
Expect more education	93.0 (1.0)	84.4 (1.8)	89.9 (1.2)
Don't expect more education	6.4 (1.0)	14.1 (1.7)	9.1 (1.1)
<u>Graduates</u>			
Expect more education	84.7 (1.2)	79.5 (1.5)	82.6 (1.2)
Don't expect more education	14.4 (1.2)	19.8 (1.4)	16.6 (1.2)
<u>Young Females</u>			
<u>Seniors</u>			
Expect more education	96.4 (0.8)	92.7 (1.4)	94.8 (0.9)
Don't expect more education	3.1 (0.7)	6.5 (1.4)	4.5 (0.9)
<u>Graduates</u>			
Expect more education	85.7 (1.1)	83.4 (1.3)	84.7 (1.1)
Don't expect more education	13.4 (1.1)	15.6 (1.2)	14.4 (1.1)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 3,156 young males (1,118 seniors and 2,038 graduates) and 2,078 young females (691 seniors and 1,387 graduates).

Source: Question 410A, 410B.

Table 11.12. Positive Composite Active Propensity for High School Seniors and Graduates as a Function of Predicted AFQT and Expectation of Further Education

Educational Status/ Predicted AFQT Groups	<u>Predicted AFQT Groups</u>		Total
	I-III A	III B-V	
<u>Young Males</u>			
<u>Seniors</u>			
Expect more education	27.0 (1.7)	43.4 (2.4)	32.5 (1.7)
Don't expect more education	34.5 (7.2)	48.2 (6.5)	42.0 (6.3)
Total	27.6 (1.6)	44.2 (2.3)	33.5 (1.7)
<u>Graduates</u>			
Expect more education	14.7 (1.0)	29.9 (1.7)	20.1 (1.2)
Don't expect more education	9.7 (2.3)	13.6 (2.7)	11.5 (2.3)
Total	13.9 (1.0)	25.7 (1.5)	18.6 (1.1)
<u>Young Females</u>			
<u>Seniors</u>			
Expect more education	8.6 (1.2)	18.3 (2.2)	12.6 (1.5)
Don't expect more education	10.7 (5.5)	21.8 (8.7)	17.3 (7.2)
Total	8.7 (1.2)	18.4 (2.1)	12.7 (1.4)
<u>Graduates</u>			
Expect more education	6.0 (0.8)	12.1 (1.3)	8.6 (0.9)
Don't expect more education	1.7 (1.1)	3.3 (2.1)	2.4 (1.3)
Total	5.5 (0.7)	10.9 (1.2)	7.9 (0.8)

Note: Tabled values are cell percentages indicating Positive Composite Active Propensity with standard errors in parentheses. Estimates are based on interviews with 3,156 young males (1,118 seniors and 2,038 graduates) and 2,078 young females (691 seniors and 1,387 graduates).

Source: Question 410A, 410B, 510-513.

In summary, the results regarding expectations of further education are fairly well mirrored by the propensity levels. Most youths in Category I-IIIA were more likely to expect additional schooling compared to those in Category IIIB-V. Also, for those youths expecting additional schooling, propensity is higher among the Category IIIB-V youths than among those in Category I-IIIA. However, the overall propensity results between educational status groups do not mirror those seen earlier. More specifically, although Seniors were more likely to desire additional education than Graduates, they also show higher positive propensity levels. Here, it appears that the overall negative relationship between increasing educational status and positive propensity demonstrated previously (see Chapters 4 and 9 especially) far outweighs the contribution of desire for further schooling. Finally, the intriguing reversal of expected trends seen in the relatively higher propensity levels among male and female Graduates desiring more education would seem to suggest that educational benefits available to military enlistees should be stressed in advertising addressed to Graduates.

G. Summary

This chapter described a market segmentation analysis based on indicators of educational attainment and aptitude. Background and attitudinal variables were used to estimate the probability of scoring in Categories I-IIIA and Categories IIIB-V on the Armed Forces Qualification Test (AFQT). Seven groups were derived for the analysis that consisted of educational status groups and predicted AFQT status groups. The educational status groups were: (1) High School diploma Graduates, (2) High School Seniors, (3) Younger High School Students, and (4) Non-completers. Graduate and student groups were then each divided into the two AFQT categories: Category I-IIIA and Category IIIB-V. Both young male and young female groups were then examined for patterns of responses regarding propensity, actions taken toward enlistment and future educational and occupational plans.

Striking differences were observed for propensity to enlist in the military. More specifically, for both young males and young females, propensity decreases in a linear fashion as education increases. Younger High School Students show the highest, and High School Graduates the lowest propensity levels. In addition, propensity is much lower for Category I-IIIA than Category IIIB-V youths. The active Service propensity differences among young males range from 12-23 percentage points and for young females from 5-12 percentage points. The variables determining AFQT category, however, included a measure of interest in serving in the military which is correlated with propensity. This partially explains the size of the differences between Predicted AFQT groups.

Among the young males, High School Seniors are more likely to have discussed military service with someone, had contact with a recruiter or mailed a postcard or coupon for information about the military in the past year than either High School Graduates or Younger High School Students. This result is consistent with the view that Seniors are at a natural enlistment decision point. Similar actions measured over one's lifetime, on the other hand, are more prevalent among High School Graduates than high school students (i.e., ever had contact with a recruiter or taken the ASVAB). Differences as a function of AFQT category were, on the whole, fairly small (about 5 percentage points) and occurred only among Graduates and Younger High School Students. No differences were apparent within the Senior Predicted AFQT Groups.

Young females were overall half or less than half as likely as young males to have taken any of the actions toward enlistment except taking the ASVAB, for which the patterns of response are likely attributable to testing in the schools in students' junior and senior years. Females showed fewer clear differences as a function of either educational status or Predicted AFQT. The few differences which were significant suggest that young males and Category IIIB-V females reach the enlistment decision point in their late junior or senior year. Category I-IIIA females appear to reach that point earlier. In fact, the only significant Predicted AFQT differences occurred in Seniors for lifetime recruiter contacts and having discussed military service with someone in the past year or so.

Both lifetime and 12-month contact with recruiters from all Services for young males and young females are essentially paralleled, although to a lesser degree, with contact with recruiters from the individual Services. The Army has the highest rate of recruiter contact, with the other Services showing lower, but similar, rates of contact.

In the next year (or, where relevant, following high school graduation), high school male students are more likely than Graduates to expect to be attending school full time, whereas Graduates are more likely than students to expect to be working full time. Category I-IIIA youths are more likely than their Category IIIB-V counterparts to expect to be in school and less likely to expect to be working. Category IIIB-V youths are also more likely to expect to be serving in the military. These differences occur within each educational status group and suggest that the military is competing for quality applicants more with full-time schooling than the full-time labor market. None of the patterns displayed by the young females is inconsistent with the conclusions drawn from the young males' data.

Propensity was also examined in light of expected plans. Young males' propensity levels decreased as a function of both increased educational status and being in Category I-IIIA rather than Category IIIB-V. In addition, the magnitude of the differences associated with Predicted AFQT category decreases with increasing educational status, with Younger High School Students showing the largest discrepancies. Propensity was essentially the same within Predicted AFQT category regardless of whether individuals were expecting to go to school or work full time.

Among young females, Seniors and Graduates do not differ in expressed propensity while Younger High School Students show the highest positive propensity, regardless of future plans. The pattern of decreasing propensity with Category I-IIIA status was noted for females as it was for males.

The large majority of young male and female Seniors and Graduates said that they wanted more education. The Seniors are more likely to assert this than the Graduates. In addition, except for female graduates, within each educational status group, Category I-IIIA youths were more likely than those in Category IIIB-V to desire additional education.

Within each educational status group, Category IIIB-V youths who desire more education have significantly higher propensity levels than their Category I-IIIA counterparts. In addition, Graduates who do not want more education show lower propensity than those who do.

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Appendix A

Sampling Design, Estimation Procedures and Estimated Sampling Errors

Appendix A

Sampling Design, Estimation Procedures and Estimated Sampling Errors

This appendix summarizes the main elements of the sampling design, estimation procedures and estimated sampling errors for the 1986 YATS II survey. Additional details about the procedures appear in technical reports by Immerman and Mason (1986a,b).

A. Populations of Inferential Interest

The 1986 YATS survey was designed to provide estimates of parameters describing four populations, defined as:

- males aged 16 to 21 years
- females aged 16 to 21 years
- males aged 22 to 24 years
- females aged 22 to 24 years
- who reside in the coterminous United States in households or noninstitutional group quarters with telephones
- who have never served in the military, other than possibly high school level Reserve Officer Training activities
- who have completed two years of college or less.

The population parameters upon which the sampling design is based are the proportions of each population having a propensity toward active duty service. The 1985 YATS survey provided the propensity proportions used to design the 1986 sample.

B. Design Requirements

The YATS survey data provide national level estimates of parameters describing each of the four populations. Additionally, parameter estimates describing subpopulations or domains of the young male population, defined by Management Unit Designator (MUD) areas, are required by each of the Services.

Design requirements are specified in terms of the maximum values of the standard errors to be associated with the estimates for each of the reporting domains. The values set for the 1986 survey are summarized in Table A.1. Control over the geographic distribution of the sample is actually provided in terms of the geographic areas associated with Military Entrance Processing Stations (MEPS) rather than MUDS. For design purposes, MUD areas were classified into MEPS. Approximate geographic classifications were used in cases where MUD boundaries were not coincident with MEPS boundaries.

C. Sampling Design

The 1986 YATS II has a stratified, two-stage sampling design. Stratification variables are defined in terms of the geographic areas of the MEPS, involving a total of 66 strata. First-stage sampling units are clusters of households formed by the first eight digits of ten-digit telephone numbers. First-stage calls used the following procedure.

- A national listing of active NPA (i.e., area) codes and NXX (i.e., three-digit exchange) codes was used to form the first six digits of phone numbers.
- Basic Exchanges were formed by subtending all possible digits in positions seven and eight to the NPA-NXX codes (e.g., 202-325-01XX, 202-325-02XX).
- Eight-digit exchanges were selected at random for calling.
- Random digits were added in positions 9 and 10.

Table A.1. Precision Requirements Used to Design the 1986 Sample

Market/Reporting Domain	Required Precision ¹
<u>Young Males</u>	
National level estimates	0.0082
Estimate for any MUD ² with a total population	
<199,999	0.0662
200,000 - 249,999	0.0501
250,000 - 299,999	0.0499
300,000 - 349,999	0.0401
≥350,000	0.0272
<u>Older Males</u>	
National level estimates	0.0093
<u>Young Females</u>	
National level estimates	0.0054
<u>Older Females³</u>	
National level estimates	_____

¹Precision stated in terms of the maximum value of the standard error to be associated with the estimated proportion of persons in each reporting domain with a propensity for active service.

²Management Unit Designator (i.e., Any Recruiting Battalion, Navy Districts, Marine Corps Stations, and Air Force Squadrons).

³Not estimated for the 1986 design.

- The eight-digit exchange was designated as a cluster when the ten-digit number called identified a household.
- Another eight-digit exchange was randomly selected for calling if the ten-digit number did not produce a household.

For stratification purposes, clusters were classified into MEPS based on the county in which the Rate Center City for the NPA (i.e., area) and NXX (i.e., telephone exchange) codes is located. Second-stage sampling units are households.

Second-stage calls used the following procedure.

- Clusters identified in stage-one calls were used to form the first eight digits of telephone numbers.
- All possible terminal two-digit sequences were appended to the cluster exchanges to form the set of telephone numbers (e.g., 202-325-0100, 202-325-0101, ...202-325-0199) eligible to be called.
- A set of randomly selected telephone numbers within a cluster was called to identify the designated number of households.

The Mitofsky/Waksberg random digit dialing procedure (Waksberg, 1978) was used to construct the clusters and select the sample. The procedure produces an equal probability sample of households within each MEPS. In the case of the 1986 YATS II, the procedure was applied within each of 66 Military Entrance Processing Station (MEPS) areas. NPA-NXX codes were allocated to counties based on the county in which the Rate Center City for the NXX code was located. Counties were then classified into MEPS areas, forming nonoverlapping units which, in the aggregate, completely accounted for the geographic area of the 48 contiguous states and the District of Columbia.

Table A.2 presents the distribution of the designed sample for young males. The total sample called for 86,691 households in 12,980 clusters. On average, each cluster in the sample consisted of 8.5 households, although cluster sizes varied across MEPS.

Table A.2. Designed Distribution of the 1986 Young Male Sample

MEPS* Number	MEPS Name	Number of Sample Clusters	Households Per Cluster	Total Sample Households
1	Portland, ME	79	14	1106
2	Manchester, NH	25	13	325
3	Boston, MA	716	5	3580
4	Springfield, MA	192	7	1344
5	New Haven, CT	240	4	960
6	Albany, NY	67	9	603
7	Fort Hamilton, NY	1183	6	7098
8	Newark, NJ	299	4	1196
9	Philadelphia, PA	188	5	940
10	Syracuse, NY	46	10	460
11	Buffalo, NY	128	8	1024
12	Wilkes-Barre, PA	60	7	420
13	Harrisburg, PA	69	6	414
14	Pittsburg, PA	131	7	917
15	Baltimore, MD	150	10	1500
16	Richmond, VA	116	9	1044
17	Beckley, WV	118	8	944
18	Knoxville, TN	86	7	602
19	Nashville, TN	71	8	568
20	Louisville, KY	114	9	1026
21	Cincinnati, OH	120	8	960
22	Columbus, OH	107	8	856
23	Cleveland, OH	132	6	792
24	Detroit, MI	292	5	1460
25	Milwaukee, WI	102	9	918
26	Chicago, IL	873	6	5238
27	Indianapolis, IN	102	9	918
28	St. Louis, MO	97	10	970
29	Memphis, TN	79	8	632
30	Jackson, MS	57	10	570
31	New Orleans, LA	179	7	1253
32	Montgomery, AL	127	9	1143
33	Atlanta, GA	170	7	1190
34	Fort Jackson, SC	389	8	3112
35	Jacksonville, FL	279	7	1953
36	Miami, FL	714	4	2856
37	Charlotte, NC	397	7	2779
38	Raleigh, NC	326	7	2282
39	Shreveport, LA	59	8	472
40	Dallas, TX	150	9	1350

Table A.2 (continued)

MEPS* Number	MEPS Name	Number of Sample Clusters	Households Per Cluster	Total Sample Households
41	Houston, TX	152	6	912
42	San Antonio, TX	112	9	1008
43	Oklahoma City, OK	87	10	870
44	Amarillo, TX	13	15	195
45	Little Rock, AR	96	11	1056
46	Kansas City, MO	69	12	828
47	Des Moines, IA	78	12	936
48	Minneapolis, MN	78	12	936
49	Fargo, ND	12	14	168
50	Sioux Falls, SD	25	16	400
51	Omaha, NE	45	15	675
52	Denver, CO	105	10	1050
53	Albuquerque, NM	48	8	384
54	El Paso, TX	60	8	480
55	Phoenix, AZ	176	7	1232
56	Salt Lake City, UT	45	10	450
57	Butte, MT	19	10	190
58	Spokane, WA	27	10	270
59	Boise, ID	19	15	285
60	Seattle, WA	110	6	660
61	Portland, OR	135	7	945
62	Oakland, CA	679	7	4753
63	Fresno, CA	145	7	1015
64	Los Angeles, CA	1126	5	5630
68	San Diego, CA	138	6	828
69	Tampa, FL	552	5	2760
	U.S.	12,980	8.5	86,691

Note: There are a total of 69 MEPS of which 66 are located in the coterminous U.S. and, thus, were included in the sample. Numbers 65, 66, and 67 denoting Honolulu, San Juan, and Anchorage were not included in the study.

*Military Entrance Processing Station (MEPS) numbers as recorded in the DMDC Recruit Market Network.

The number and sizes of sample clusters allocated to each MEPS area were determined so as to satisfy the precision requirements in Table A.1 for the least cost given several practical considerations. This meant finding the least-cost allocation solution that met the variance constraints for young males. Equations describing data collection costs and sampling variances in terms of the number of sample clusters and sample housing units were developed for each MEPS. The equations were solved simultaneously for the first- and second-stage sample sizes and the allocation of each across MEPS, using numerical procedures based on Kuhn/Tucker theory (Simmons, 1975, pp. 169-209).

The sample resulting from the allocation procedure was expected to contain more than the required number of older males and females. This inefficiency was overcome by fielding the sample in waves. Based on expectations of the numbers of older males and females likely to be identified, clusters were randomly classified into three waves. Individuals in all four market groups were interviewed in wave 1 clusters, males and older females only were interviewed in wave 2 clusters, and only young males were interviewed in wave 3 clusters. The number of clusters in each wave was determined to provide the required differential sampling rates and, at the same time, to preserve the MEPS-level allocation of the sample.

Several weeks after the survey started, it became apparent that certain analytical requirements would not be met under the original sampling design. To remedy this situation, clusters were added to several MEPS. In addition, there were fewer than expected completed interviews for the older populations because their eligibility rates were lower than expected. To address this problem, households were added at random to the older population subsamples from the basic sample.

D. Estimation Procedures

The Mitofsky/Waksberg sampling procedure used in YATS II generates a self-weighting sample of households within each of 66 geographic areas defined by MEPS. The actual household level selection probabilities and,

therefore, the sampling weights, are unknown. As a consequence, ratio estimation procedures (Kendall and Stuart, 1966, Chapter 6) are required to estimate parameters that describe any population or domain that resides in more than one MEPS.

Ratio estimates are computed using the sample data plus auxiliary population level information supplied independently of the sample and assumed known. First, per sampling unit (i.e., household level) averages are computed for each MEPS. The averages are then multiplied by the current (known) number of households in the MEPS and the products summed across MEPS to obtain the estimated total of interest. Population means and proportions are estimated by first computing the numerator and the denominator totals and then dividing these to obtain the mean or the proportion (Cochran, 1963, pp. 169-170). Regression relations are estimated using a multivariate extension of the estimator for means (Shah, Holt, and Folsom, 1977).

Although the actual sampling weights are unknown, it is convenient to consider the quantities:

$$w(h) = \frac{N(h)}{\sum_{i=1}^{n(h)_1} n(h,i)_2},$$

where $h = 1, 2, \dots, 66$ denotes MEPS,

$i = 1, 2, \dots, n(h)_1$ denotes the cluster, there being a total of $n(h)_1$ clusters in the h -th MEPS,

$N(h)$ = the known total of households in the h -th MEPS at the time the survey was conducted, and

$n(h,i)_2$ = the number of sample households in the i -th cluster in the h -th MEPS,

as analytical weights. Estimates of MEPS-level domain totals can then be written as

$$\hat{T}_d(h) = \sum_{i=1}^{n(h)_1} \sum_{j=1}^{n(h,i)_2} w(h) t(h,i,j)_d,$$

where d = the domain of interest, and

$t(h,i,j)_d$ = the total value of the observation values belonging to domain d in the j -th sample household of the i -th cluster of the h -th MEPS.

Since persons within households were not subsampled, the same analytical weights can be applied to the person-level records.

Missing data compensation was undertaken at the levels of missing households and missing persons and was implemented by modifying the analytical weights. Weighting class adjustments were made at MEPS-levels.

Variance and covariance estimates for linear statistics were computed based on equal probability with replacement sampling of clusters from within MEPS (Kendall and Stuart, 1966, pp. 200-201). The variances of nonlinear statistics are computed using first order Taylor series linearizations (Shah et al., 1977).

E. Estimated Sampling Errors

The procedures and methodology described here are presented to help the reader use the estimates of sampling errors that have been calculated and printed for various proportions in this report and to enable the reader to estimate sampling errors for those proportions for which standard errors do not appear in parentheses in the tables. The estimates produced from the YATS II survey are based on a probability sample of the population rather than the entire population and, hence, are subject to sampling variability.

Sampling variability occurs because observations are made only on a sample, not on the entire population. The particular sample used in this survey is one of many that could have been selected using the same sample design. Estimates derived from different samples differ from each other. The standard error of a survey estimate is a measure of the variation among the estimates from all possible surveys. Thus, the standard error is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples.

1. Confidence Intervals and Significant Differences

Confidence intervals, or ranges that are very likely to include the true population value, can be constructed using the standard errors. The 95 percent confidence interval is computed by adding to and subtracting from the estimated proportion the result of multiplying 1.96 times the standard error for that cell. (Obviously, for very small or very large estimates, the respective smallest or largest value in the confidence interval range will be zero or 100 percent.) The interpretation of the confidence interval range is that, if the study were to be repeated with 100 identically-drawn random samples, 95 of the sample estimates would fall within the confidence interval range; thus, we are 95 percent certain that the true population value also lies within that range. Clearly, for a given confidence level (e.g., 95 percent), smaller standard errors indicate that the cell proportions estimate the true population value more precisely while larger standard errors indicate that the true population value is estimated less precisely.

In tables where standard errors do not appear, the analyst/reader may estimate approximate standard errors by referring to a similar table that shows standard errors. The table chosen for reference should show standard errors for the same groups (e.g., young males with positive and negative propensity) for which an estimated standard error is needed and should show all percentages within subgroups that are equal to the percentages for which standard errors are desired. Given similarly defined groups, one may assume that the error associated with any estimate in a cell (i.e., percentage or mean) is approximately equal to or larger than that of an

equal-sized point estimate. Appendix C Tables C.3a and C.3b may be useful reference tables since they show a range of percentage estimates with standard errors for the four market groups and, within that, for propensity groups. As an example of approximate standard errors, consider the estimates of positive and negative propensity in Table 6.2 (for which standard errors are not indicated). For the item on full-time work for young males, standard errors associated with estimates of positive (25.5 percent) or negative (34.5 percent) propensity can be approximated from the data in Table C.3a for "12 years of education." These percentage distributions closely approximate those in Table 6.2 and would suggest a standard error of approximately 1.2 percent for positive propensity and 1.1 percent for negative propensity.

For any particular percentage resulting from a sampling survey, it is not possible to know the exact amount of error that has resulted from sampling. It is possible, however, to establish estimated "confidence intervals," ranges that are very likely to include the true population values. For example, Table 4.1 shows that 32.0 percent of the young males in the 1986 sample reported positive propensity for at least one active Service with a standard error of 0.8 percent. It is possible to set up a 95 percent confidence interval, which means that 95 percent of the intervals computed in a large number of repeated surveys will include the true (population) proportion. The 95 percent confidence interval is formed by multiplying the standard error by 1.96 and then adding this result to the estimate to form the upper bound and subtracting this result from the estimate to form the lower bound. In this case, the lower and upper limits of the 95 percent interval are 30.4 percent and 33.6 percent (i.e., $32.0 \pm (1.96 \times 0.8)$).

F. Factors Influencing the Size of Confidence Intervals in this Report

From a statistical standpoint, the most straightforward types of samples are simple random samples. In such samples the confidence limits for a percentage are simple functions of the percentage value and the size of the sample or subgroup on which it is based. For example, the 95 percent confidence interval for a proportion (p) can be approximated by:

$p \pm 1.96 \sqrt{p(1p)/(N1)}$. In a more complicated sample, such as the one used in this survey, other factors are also involved in the determination of confidence limits.

1. Number of Cases (N)

When other things are equal, the larger a sample, the more precise will be an estimate based thereon and, therefore, the narrower the confidence levels. One of the factors is $1/\sqrt{N}$, the reciprocal of the square root of the size of the sample. Thus a sample of 400 will, ceteris paribus, have a confidence interval just half as wide as that for a sample of 100, because $1/\sqrt{400}$ is just half of $1/\sqrt{100}$.

2. Population Variance

Other things again being equal, percentage values around 50 percent have the largest confidence intervals because $\sqrt{p(1p)}$ (where p is a proportion between 0.0 and 1.0) is also a factor affecting the size of a confidence interval. This factor will be only three-fifths as large for 10 percent or 90 percent as for 50 percent since $\sqrt{.1 \times .9}$ is 3/5 of $\sqrt{.5 \times .5}$.

3. Design Effects in Complex Samples

Under simple random sampling, a confidence interval can be determined from the two factors just described and the appropriate constant for the confidence level desired (e.g., 1.96¹ for 95 percent, assuming degrees of freedom are very large). Stratification, clustering and differential selection probabilities (all involved in this survey) also influence sampling error. Stratification tends to increase precision. Clustering and over-sampling of subpopulations may either increase precision or reduce it. Estimates of subpopulations can be made much more

^{1/} As a general rule, 1.96 may be rounded to "2" in the calculation of confidence intervals.

cheaply using complex samples rather than simple random samples, but complex samples often yield less precise total population estimates than would simple random samples of the same size. Accordingly, use of the simple formula would generally underestimate the sampling error involved.

Kish (1965, p. 258) defined a method for correcting for this underestimation, known as the design effect (DEFF). The correction term is:

$$\text{DEFF} = \frac{\text{actual sampling variance}}{p(1p)/N}$$

If, therefore, the actual sampling variance for a proportion p is four times the value computed for a simple random sample of the same size N , the DEFF is 4.0. Because a confidence interval is based on the square root of the variance, any confidence interval set up would have to be twice as wide as the corresponding interval based on a simple random sample. The complex sample would have to be four times as large to have the same confidence interval as the simple random sample.

A simple way of using a DEFF value is to divide the actual sample size by it and obtain the "effective N ," the size of a simple random sample that would have resulted in the same degree of precision. For example, with a DEFF of 4.0 and an actual sample size of 4,000, the "effective N " is 1,000.

The value of the "effective N " can be used in the simple formula $\sqrt{p(1p)/N}$ to compute standard errors of estimate and confidence interval limits. It is therefore possible to use formulas and tables appropriate for simple random samples, regardless of the actual type of sample, by converting the sample size to the "effective N ."

Actually, every statistic derived from a complex sample has its own design effect, different from all of the others. In practice, however, DEFF values are generally computed only for a cross-section of the statistics, and averages are computed and applied to those of the same types. Often a single average DEFF is used for all percentages.

In this study, standard errors have been computed for many estimated proportions. These calculations incorporated the appropriate sample sizes, proportions, and correction for design effects. In tables (or for groups) where standard errors do not appear, a reasonable rule-of-thumb is that the sampling error associated with any point estimate is equal to or slightly larger than the standard error presented with an equal-sized estimated proportion in table cells defined by similar characteristics (e.g., market group, composite propensity group). The analyst/reader may estimate approximate standard errors, then, by referring to a table that shows estimated standard errors. The table chosen for reference should show standard errors for the same groups (e.g., young males with positive or negative propensity) for which an estimated standard error is needed and should show percentages within groups that are approximately equal to the percentages for which standard errors are desired. Appendix C, Tables C.3a and C.3b may be a useful reference table since they show a range of percentage estimates with standard errors for the four market groups and, within that, for propensity groups.

There are two general properties of standard errors of percentages that the analyst/reader should keep in mind when using a reference table to estimate an approximate standard error. Think of percentages as lying along a range from 0 percent to 100 percent.

- Standard errors are the largest in the middle of the range 0-100 percent, and smallest at either end.

That is, for a given sample size (i.e., similarly defined group), standard errors of percentages become larger as the percentages increase from 0 percent to 50 percent, then become smaller as the percentages continue to increase from 50 to 100 percent.

- Standard errors for percents that are equidistant from 50 percent in the range, 0-100 percent, are equal (for a given sample size).

For example, for a given sample size (i.e., similarly defined group), the standard error for 60 percent is equal to the standard error for 40 percent (50 percent plus/minus 10 percent). The standard error for 80 percent is equal to the standard error for 20 percent (50 percent plus/minus 30 percent).

For example, one may estimate approximate standard errors for the figures for propensity groups in Table 6.1 using Table C.3a as a reference table. Table 6.1 shows that 75 percent of young males with positive propensity said that they would be attending college in the next few years. To estimate an approximate standard error for this figure, one searches down the young male-positive propensity column in Table C.3a. Although there is no 75 percent in this column, the column does have a cell with 25 percent (equidistant from 50 percent) with a standard error of 1.3. Table 6.1 shows that 80 percent of negative propensity young females said that they would be going to college. Searching down the young female-negative propensity column in Table C.3b, one finds a standard error of 0.9 for 80 percent.

Appendix B

Data Collection Procedures, Survey Response Data and Performance Rates

Appendix B

Data Collection Procedures, Survey Response Data and Performance Rates

This appendix provides a detailed description of the data collection procedures used in the 1986 YATS II survey as well as presenting survey response data and performance rates.

A. Data Collection Procedures

This section summarizes the YATS II data collection methods and procedures, as well as a description of the CATI system and the phased approach to data collection.

1. CATI System

The 1986 YATS II project utilized a CATI system for all phases of the data collection. With this system, the questionnaires for screening (i.e., questions asked to determine if a telephone number served a household and if there were any individuals in the household who were eligible to be interviewed), interviewing, and verification were programmed, entered, and stored within the computer. Questions were displayed for interviewers in program-controlled sequences on computer terminal screens. Telephone interviewers read each question as it was relayed from the computer to the viewing screen. Routing, branching, or skip patterns were programmed so that questions appeared on the screen in the proper sequence. Interviewers entered respondents' answers, which then appeared on the screen for verification.

With CATI, the computer selectively edited the data according to a programmed set of consistency checks as interviewers entered respondents' answers. These checks tested for valid codes, respondent consistency, and completeness, thereby permitting the resolution of differences as an ongoing part of the interview.

2. Phased Approach to Data Collection

Telephone screening and interviewing using a two-phased approach took place during a 16-week period from July 28 to November 12, 1986. Phase 1 consisted of dialing to identify households. Phase 2 consisted of screening and interviewing young males and females, and older males and females. Each phase is discussed below.

a. Phase 1: Dialing. Phase 1 calling corresponded to stage one and stage-two calls of the sampling design noted above and consisted of identifying households. Randomly selected exchanges were called to identify clusters or primary numbers that contained households and, additionally, to select numbers within the clusters. The procedures simply required dialing a sampled number and, if someone answered, asking if the number served a residence, business, or something else. In addition, a quick screening was conducted to determine whether the household contained persons between the ages of 15 and 25 who were potentially eligible for the study (even though the study only used persons aged 16-24, initial screening asked about ages 15 to 25 to avoid eliminating potential eligibles prior to more thorough screening. Residential numbers containing potential eligibles were passed on to be worked in Phase 2. Numbers that were not households were classified as nonworking, business or institution, no result from dial, or answering machines. If no determination was made after five calls in different time periods, the number was classified as ring, no answer, or busy, as appropriate.

Resolution of 188,471 sample telephone numbers that were worked in an attempt to identify enough residential numbers to meet the sampling design demands produced 81,446 households. These were passed on to Phase 2. Phase 1 calling required 59,764 sample numbers to identify the 13,150 clusters (an identification rate of 22.0 percent) and 128,707 secondary sample numbers to identify 68,296 household numbers (an identification rate of 53.1 percent).

b. Phase 2: Screening and Interviewing. Numbers identified as households in Phase 1 were dialed for a more thorough screening in Phase 2.

Numbers found not to be households (i.e., since Phase 1 calling had determined that the number was nonworking or no longer a residence) were replaced with new sample numbers. At the conclusion of the data collection period, 78,088 working residential numbers had been identified from the 81,446 numbers screened in Phase 2.

When a Phase 2 number was identified as a working residential telephone number, the interviewer screened the household to identify individuals eligible for the study. Overall, 12,816 persons eligible for the study were identified and selected for interview. (All eligible young males were selected for interviewing; older males, older females, and young females were subsampled.) Unique interviews were obtained from 10,095 persons (5,033 young males, 1,011 older males, 3,019 young females and 1,032 older females). An additional 648 interviews were randomly selected for replication (duplication)¹ in clusters where all 100 possible telephone numbers had been exhausted without finding the number of households required by the sampling design. This resulted in 10,743 total Phase 2 analysis interviews (5,382 young males, 1,068 older males, 3,191 young females, and 1,102 older females).

B. Survey Response Data and Performance Rates

Performance rate information is important to assess the quality of survey field operations and the potential for nonresponse bias in the data. To compute the performance rates for the 1986 YATS II survey among the age groups of interest, response data for each of several levels must first be ascertained. These levels are the:

- Designed first-stage sample size (clusters)
- Total clusters identified
- Total clusters screened
- Designed second-stage sample size (households)

¹/ This was done to comply more closely with the assumptions for computing variance estimates under a Mitofsky/Waksberg design (see Appendix A).

- Total households identified
- Total households screened
- Total eligibles identified and selected for inclusion in the sample
- Total number of questionnaires usable for analysis

This information allows computation of various performance rates. Six different rates were computed for the 1986 YATS II data: (a) cluster screening rate, (b) household identification rate, (c) household screening rate, (d) interview completion rate, and (e) total response rate.

Response data and performance rates along with their definitions are presented for the four market groups in Table B.1. For the young male sample, 12,980 clusters were initially targeted for identification. The sample yield slightly exceeded the target and 13,150 were successfully screened. A total of 80,722 households comprised the second-stage frame for the young male sample. Of these, 81,446 (100.9 percent) were identified, and 78,088 (95.9 percent) were successfully screened. The second stage frame specified 65,255 households for the older male sample, 48,285 households for the young female sample, and 57,222 households for the older female sample. The household screening rates were 95.8 percent for older males, 96.0 percent for young females, and 95.9 percent for older females.

Interview completion rates were highest among young females (81.2 percent) followed by young males (80.4 percent), and older females (72.9 percent), and older males (71.2 percent). Final response rates, which were computed by multiplying the interview completion rates by the household screening rates, were 77.1 percent for young males, 68.2 percent for older males, 78.0 percent for young females, and 69.9 percent for older females.

Numerous calls and attempts to overcome initial refusals were conducted to compute household screening for all sample numbers and to administer a questionnaire to all selected eligibles. A thorough effort was made to obtain the highest possible response rates within the given schedule constraints.

Table B.1. 1986 YATS Response Data and Performance Rates

Item	Young Males	Older Males	Young Females	Older Females
<u>Response Data</u>				
1. First-stage sample size (clusters)	12,980	10,589	7,586	9,164
2. First-stage sample size screened ^{a,b}	13,150	10,676	7,673	9,251
3. Second-stage sample size (households)	80,722	65,255	48,285	57,222
4. Second-stage units identified ^b	81,446	67,083	49,352	58,654
5. Second-stage units screened ^c	78,088	64,269	47,370	56,237
6. Total eligibles identified/selected	6,263	1,420	3,717	1,416
7. Completed interviews	5,033	1,011	3,019	1,032
8. Analysis interviews ^d	5,382	1,068	3,191	1,102
<u>Performance Rates</u>				
9. Cluster screening rate (2+1)	101.3	100.8	101.2	101.0
10. Household identification rate (4+3)	100.9	102.8	102.2	102.5
11. Household screening rate (5+3)	95.9	95.8	96.0	95.9
12. Interview completion rate (7+6)	80.4	71.2	81.2	72.9
13. Overall response rate (11 x 12)	77.1	68.2	78.0	69.9

^aTo be counted, complete screening information was required from at least one household in the cluster.

^bNote that lines 2 and 4 which indicate the obtained sample size are larger than corresponding lines 1 and 3, which represent the number of households specified by the sample design. During data collection more households were identified than were required.

^cTo be counted, complete screening information was required for each household.

^dFinal numbers used for data analysis. Sampling was done with replacement so interviews were randomly replicated (i.e., the record was copied) in clusters where all 100 possible numbers were called, but the required number of households specified by the sampling design was not obtained.

Appendix C

Supplementary Tables

Table C.1. Service-Specific and Composite Active Propensity

Market/Item Response	Composite ^a	Army	Navy	Marine Corps	Air Force
<u>Young Males</u>					
Definitely	7.4 (0.4)	2.6 (0.3)	1.6 (0.2)	1.7 (0.2)	3.1 (0.3)
Probably	24.6 (0.7)	13.2 (0.6)	9.5 (0.5)	9.5 (0.5)	12.9 (0.6)
Total Positive	32.0 (0.8)	15.8 (0.6)	11.1 (0.5)	11.2 (0.5)	16.0 (0.6)
Probably Not	30.4 (0.8)	33.2 (0.8)	36.0 (0.8)	33.8 (0.8)	36.1 (0.8)
Definitely Not	37.6 (0.9)	50.9 (0.9)	52.7 (0.9)	54.9 (0.8)	47.8 (0.9)
Don't Know/Refuse	0.0 (**)	0.1 (0.1)	0.2 (0.1)	0.2 (0.1)	0.1 (0.1)
Total Negative	68.0 (0.8)	84.2 (0.6)	88.9 (0.5)	88.8 (0.5)	84.0 (0.6)
<u>Older Males</u>					
Definitely	2.9 (0.6)	1.6 (0.5)	0.9 (0.3)	0.7 (0.3)	1.1 (0.3)
Probably	11.3 (1.1)	6.3 (0.9)	4.7 (0.7)	4.6 (0.8)	5.9 (0.8)
Total Positive	14.2 (1.3)	7.9 (1.0)	5.6 (0.8)	5.4 (0.8)	6.9 (0.9)
Probably Not	31.2 (1.7)	29.2 (1.6)	29.4 (1.6)	29.2 (1.6)	31.1 (1.6)
Definitely Not	54.5 (1.8)	62.7 (1.8)	64.8 (1.7)	65.3 (1.7)	61.7 (1.7)
Don't Know/Refuse	0.2 (**)	0.2 (**)	0.2 (**)	0.2 (**)	0.2 (**)
Total Negative	85.8 (1.3)	92.1 (1.0)	94.4 (0.8)	94.6 (0.8)	93.1 (0.9)
<u>Young Females</u>					
Definitely	2.7 (0.4)	0.7 (0.2)	0.5 (0.1)	0.5 (0.1)	1.6 (0.3)
Probably	10.1 (0.6)	5.0 (0.5)	3.6 (0.4)	2.8 (0.3)	6.3 (0.5)
Total Positive	12.8 (0.7)	5.8 (0.5)	4.1 (0.4)	3.3 (0.4)	8.0 (0.5)
Probably Not	21.4 (0.8)	20.0 (0.8)	20.3 (0.8)	19.3 (0.8)	20.8 (0.8)
Definitely Not	65.8 (0.9)	74.2 (0.9)	75.6 (0.9)	77.3 (0.8)	71.2 (0.9)
Don't Know/Refuse	0.0 (**)	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)	0.0 (**)
Total Negative	87.2 (0.7)	94.2 (0.5)	95.9 (0.4)	96.7 (0.4)	92.0 (0.5)
<u>Older Females</u>					
Definitely	1.3 (0.4)	0.2 (0.1)	0.2 (0.1)	0.3 (0.2)	1.1 (0.4)
Probably	3.7 (0.6)	2.2 (0.5)	1.8 (0.5)	1.5 (0.5)	2.4 (0.5)
Total Positive	5.0 (0.7)	2.4 (0.5)	2.0 (0.5)	1.8 (0.5)	3.5 (0.7)
Probably Not	18.1 (1.4)	16.7 (1.3)	15.9 (1.3)	15.8 (1.3)	17.3 (1.4)
Definitely Not	76.7 (1.5)	80.8 (1.4)	82.0 (1.4)	82.2 (1.4)	78.9 (1.5)
Don't Know/Refuse	0.2 (0.1)	0.2 (0.1)	0.2 (0.1)	0.2 (0.1)	0.3 (0.2)
Total Negative	95.0 (0.7)	97.6 (0.5)	98.0 (0.5)	98.2 (0.5)	96.5 (0.7)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,102 older females. Total positive and total negative values may differ slightly from the sum of their respective components due to rounding error.

^aPropensity to serve in at least one active Service.

**Informative standard error not available.

Source: Questions 510-513.

Table C.2. Propensity to Enlist in the National Guard and Reserves

	National Guard		Reserve		Composite Reserve Propensity	
<u>Young Males^a</u>						
Definitely	1.1	(0.2)	1.5	(0.2)	2.3	(0.3)
Probably	11.1	(0.5)	14.1	(0.6)	17.8	(0.7)
Total Positive	12.2	(0.5)	15.6	(0.6)	20.0	(0.7)
Probably Not	38.3	(0.9)	38.7	(0.9)	37.7	(0.9)
Definitely Not	49.4	(0.9)	45.6	(0.9)	42.3	(0.9)
Don't Know/Refused	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)
Total Negative	87.8	(0.5)	84.4	(0.6)	80.0	(0.7)
<u>Older Males^b</u>						
Definitely	0.8	(0.3)	0.9	(0.3)	1.1	(0.4)
Probably	8.0	(1.0)	7.7	(0.9)	10.4	(1.1)
Total Positive	8.6	(1.0)	8.8	(1.0)	11.5	(1.1)
Probably Not	31.0	(1.6)	32.4	(1.7)	31.7	(1.7)
Definitely Not	59.9	(1.7)	58.8	(1.7)	56.6	(1.8)
Don't Know/Refused	0.3	(0.2)	0.3	(0.2)	0.3	(0.2)
Total Negative	91.4	(1.0)	91.2	(1.0)	88.5	(1.1)
<u>Young Females^a</u>						
Definitely	0.4	(0.1)	0.6	(0.2)	0.8	(0.2)
Probably	3.7	(0.4)	5.6	(0.5)	6.8	(0.5)
Total Positive	4.1	(0.4)	6.1	(0.5)	7.6	(0.6)
Probably Not	20.3	(0.8)	22.5	(0.8)	22.6	(0.8)
Definitely Not	75.5	(0.8)	71.2	(0.9)	69.7	(0.9)
Don't Know/Refused	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)
Total Negative	95.9	(0.4)	93.9	(0.5)	92.4	(0.6)
<u>Older Females^b</u>						
Definitely	0.1	(**)	0.4	(0.2)	0.4	(0.2)
Probably	3.7	(0.7)	3.6	(0.7)	5.1	(0.8)
Total Positive	3.7	(0.7)	4.0	(0.7)	5.5	(0.8)
Probably Not	16.7	(1.3)	17.7	(1.4)	17.8	(1.4)
Definitely Not	79.4	(1.5)	78.1	(1.5)	76.6	(1.5)
Don't Know/Refused	0.2	(0.1)	0.2	(0.1)	0.1	(**)
Total Negative	96.3	(0.7)	96.0	(0.7)	94.5	(0.8)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females and 1,102 older females. Total positive and total negative values may differ slightly from the sum of their respective components due to rounding error.

**Informative standard error not available.

Source: Questions 505, 507.

Table 2.14. US 65+ Population Active Propensity and Sociodemographic Characteristics

	Young Males			Older Males		
	Positive	Negative	Total (n=5,382)	Positive	Negative	Total (n=1,068)
	Propensity (n=1,722)	Propensity (n=3,666)		Propensity (n=153)	Propensity (n=915)	
Age^a						
16 (22)	34.7 (1.4)	22.6 (0.9)	26.5 (0.7)	38.9 (4.8)	35.4 (1.8)	36.7 (1.7)
17 (23)	24.9 (1.3)	21.0 (0.8)	22.7 (0.7)	39.6 (4.9)	31.1 (1.8)	32.2 (1.7)
18 (24)	16.2 (1.1)	17.5 (0.8)	17.1 (0.7)	22.1 (3.9)	32.5 (1.8)	31.0 (1.6)
19	12.8 (1.0)	15.1 (0.7)	14.1 (0.6)			
20	6.8 (0.7)	12.6 (0.8)	10.7 (0.6)			
21	5.3 (0.7)	10.6 (0.7)	8.9 (0.5)			
Race/Ethnicity						
White	63.1 (1.6)	82.3 (0.8)	76.1 (0.8)	53.6 (4.9)	84.1 (1.4)	79.7 (1.4)
Black	23.7 (1.3)	7.9 (0.6)	12.6 (0.6)	28.7 (4.3)	7.4 (1.0)	10.4 (1.1)
Hispanic	12.3 (1.0)	6.8 (0.5)	8.6 (0.5)	15.5 (3.4)	7.4 (1.0)	8.5 (1.0)
Other	3.9 (0.6)	3.0 (0.3)	3.3 (0.3)	2.8 (1.1)	1.1 (0.4)	1.3 (0.4)
Marital Status						
Never married	97.4 (0.6)	95.9 (0.4)	96.3 (0.3)	69.5 (4.5)	61.1 (1.9)	62.3 (1.7)
Currently married	1.9 (0.4)	3.8 (0.4)	3.2 (0.3)	22.8 (3.9)	35.8 (1.8)	33.9 (1.7)
Other ^b	0.7 (0.3)	0.3 (0.1)	0.4 (0.1)	7.7 (3.0)	3.1 (0.6)	3.7 (0.7)
Educational Plans/Status^c						
Attend school	73.5 (1.3)	67.4 (1.0)	69.3 (0.8)	13.0 (2.9)	13.2 (1.2)	13.2 (1.1)
Not attend school	25.6 (1.3)	32.1 (1.0)	30.6 (0.8)	84.8 (3.1)	85.8 (1.3)	85.7 (1.2)
Don't know	0.9 (0.3)	0.5 (0.1)	0.6 (0.1)	2.2 (1.3)	1.0 (0.4)	1.2 (0.4)
Years of Education Completed						
Less than 10	15.7 (1.1)	6.1 (0.5)	9.2 (0.5)	9.2 (3.0)	5.1 (0.9)	5.7 (0.9)
10	31.3 (1.4)	20.6 (0.8)	23.7 (0.7)	7.6 (2.0)	4.4 (0.7)	4.9 (0.7)
11	28.3 (1.3)	25.6 (0.9)	26.5 (0.7)	13.3 (3.7)	8.3 (1.1)	9.0 (1.1)
12	20.2 (1.2)	36.3 (1.1)	31.1 (0.8)	55.2 (4.7)	61.9 (1.9)	60.9 (1.8)
Some vocational school	0.4 (0.2)	0.9 (0.2)	0.7 (0.2)	0.8 (0.5)	2.9 (0.6)	2.6 (0.6)
Some college	4.1 (0.6)	11.1 (0.6)	8.8 (0.5)	13.9 (3.1)	17.4 (1.5)	16.9 (1.4)

Note: Tabled values are column percentages with standard errors in parentheses.

^aAges 22-24 apply to older males.

^bOther^a includes widowed, divorced, and separated.

^cData were collected during August, September, October and November 1986. Questions prior to October 1 asked about planned status for October. Questions after October 1 asked about actual status.

Source: Questions 403, 404, 407, 410, 417, 510-513, 713C, 714, 715.

Table 1. Attitudes and Behaviors of Women in the Study

		Young Men ^a		Young Women ^a		Total ^a		Total ^a	
		Positive Propensity (n=485)	Negative Propensity (n=2793)	Positive Propensity (n=58)	Negative Propensity (n=1043)	Positive Propensity (n=58)	Negative Propensity (n=1043)	Positive Propensity (n=58)	Negative Propensity (n=1043)
Age^a									
16	(22)	39.0 (2.6)	21.5 (0.9)	23.7 (0.8)	45.0 (7.7)	35.1 (1.7)	39.5 (1.7)	35.1 (1.7)	39.5 (1.7)
17	(23)	22.6 (2.3)	22.9 (0.9)	22.8 (0.8)	32.8 (6.5)	34.3 (1.7)	34.3 (1.7)	34.3 (1.7)	34.3 (1.7)
18	(24)	17.1 (0.7)	15.0 (1.0)	17.4 (0.8)	21.4 (6.0)	29.5 (1.5)	29.2 (1.5)	29.5 (1.5)	29.2 (1.5)
19		12.0 (1.7)	15.3 (0.8)	14.9 (0.7)					
20		5.9 (1.2)	11.5 (0.7)	10.8 (0.6)					
21		5.7 (1.2)	11.4 (0.7)	10.7 (0.6)					
Race/Ethnicity									
White		50.5 (2.9)	79.9 (3.2)	70.9 (0.9)	43.4 (7.4)	84.8 (1.4)	73.1 (1.5)	84.8 (1.4)	73.1 (1.5)
Black		20.1 (2.7)	9.0 (0.7)	12.1 (0.7)	44.5 (7.6)	77.9 (3.2)	15.3 (1.0)	77.9 (3.2)	15.3 (1.0)
Hispanic		11.4 (1.8)	7.9 (0.6)	8.3 (0.6)	11.1 (4.4)	9.1 (1.1)	9.2 (1.0)	9.1 (1.1)	9.2 (1.0)
Other		3.9 (1.1)	2.5 (0.4)	2.7 (0.3)	1.0 (1.0)	2.7 (0.6)	2.3 (0.6)	2.7 (0.6)	2.3 (0.6)
Marital Status									
Never married		24.3 (1.3)	90.7 (0.7)	87.7 (0.7)	62.0 (7.5)	33.8 (1.7)	35.2 (1.7)	33.8 (1.7)	35.2 (1.7)
Currently married		5.2 (1.3)	11.6 (0.7)	10.8 (0.6)	20.5 (8.7)	50.9 (1.0)	50.7 (1.7)	50.9 (1.0)	50.7 (1.7)
Other ^b		0.6 (0.4)	1.7 (0.3)	1.5 (0.2)	17.5 (5.3)	7.5 (5.0)	8.1 (0.9)	7.5 (5.0)	8.1 (0.9)
Educational Plans/Status^c									
Attend school		76.0 (2.3)	65.6 (1.0)	66.9 (0.9)	28.6 (7.6)	12.7 (1.1)	13.5 (1.2)	12.7 (1.1)	13.5 (1.2)
Not attend school		23.4 (2.3)	34.0 (1.0)	32.7 (0.9)	71.4 (7.6)	87.2 (1.1)	86.4 (1.2)	87.2 (1.1)	86.4 (1.2)
Don't know		0.6 (0.3)	0.4 (0.1)	0.5 (0.1)	0.0 (0.0)	0.2 (0.1)	0.2 (0.1)	0.2 (0.1)	0.2 (0.1)
Years of Education Completed									
Less than 10		11.4 (1.7)	4.6 (0.4)	5.5 (0.4)	7.6 (3.7)	5.5 (0.8)	5.6 (0.8)	5.5 (0.8)	5.6 (0.8)
10		33.8 (2.6)	19.7 (0.9)	21.5 (0.8)	3.8 (2.6)	4.1 (0.7)	4.1 (0.7)	4.1 (0.7)	4.1 (0.7)
11		24.9 (2.3)	26.0 (0.9)	25.8 (0.9)	17.6 (7.0)	6.8 (1.0)	7.3 (1.0)	6.8 (1.0)	7.3 (1.0)
12		24.2 (2.3)	30.6 (1.0)	35.2 (1.0)	49.1 (7.8)	64.0 (1.8)	63.3 (1.7)	64.0 (1.8)	63.3 (1.7)
Vocational school		9.3 (0.2)	1.5 (0.3)	1.3 (0.3)	6.3 (3.2)	2.5 (0.6)	2.7 (0.6)	2.5 (0.6)	2.7 (0.6)
Some college		5.5 (1.2)	11.4 (0.7)	10.6 (0.6)	15.6 (5.1)	17.1 (1.4)	17.0 (1.3)	17.1 (1.4)	17.0 (1.3)

Note: Tabled values are column percentages with standard errors in parentheses.

^aAges 22-24 apply to older females.

^bOthers includes widowed, divorced, and separated.

^cData were not collected during August, September, October and November 1988. Questions prior to October 1 asked about planned status for October. Questions after October 1 asked about actual status.

Source: Questions 403, 404, 407, 416, 417, 510-513, 713C, 714, 715.

Table 1. Demographic Characteristics of Interviewees

		Completed		Under 100%	
		Positive (n = 243)	Negative (n = 319)	Positive (n = 53)	Negative (n = 1042)
Age ^a					
16	(22)	33.1 (3.3)	23.0 (3.9)	45.1 (7.7)	36.0 (1.7)
17	(23)	26.3 (3.4)	22.8 (3.9)	33.4 (7.0)	34.3 (1.6)
18	(24)	17.2 (2.6)	17.1 (3.8)	21.5 (5.4)	23.6 (1.6)
19		13.3 (2.3)	15.1 (3.7)	14.9 (3.7)	
20		9.3 (1.5)	11.1 (3.7)	10.3 (3.6)	
21		5.3 (1.6)	11.1 (3.6)	10.7 (3.5)	
Race/Ethnicity					
White		51.1 (3.0)	79.0 (0.9)	59.3 (7.6)	79.8 (1.6)
Black		35.3 (3.7)	10.2 (3.7)	33.5 (7.5)	8.6 (1.0)
Hispanic		10.7 (2.2)	9.1 (3.0)	15.3 (5.3)	8.9 (1.0)
Other		2.8 (1.2)	2.7 (3.4)	0.9 (0.9)	2.7 (0.6)
Marital Status					
Never married		30.0 (2.3)	87.5 (0.7)	54.2 (7.5)	34.1 (1.7)
Currently married		8.1 (2.1)	11.0 (0.6)	27.1 (7.0)	58.4 (1.8)
Other ^b		1.8 (0.9)	1.5 (0.3)	18.7 (5.5)	7.5 (0.9)
Educational Plans/Status ^c					
Attend school		74.9 (3.1)	68.9 (0.9)	18.6 (6.6)	13.2 (1.2)
Not attend school		24.9 (3.1)	32.7 (0.9)	81.4 (6.6)	86.7 (1.2)
Don't know		0.3 (0.3)	0.5 (0.1)	0.0 (0.1)	0.2 (0.1)
Years of Education Completed					
Less than 10		12.3 (2.2)	4.9 (0.4)	7.6 (3.4)	5.5 (0.8)
10		20.8 (3.6)	20.8 (0.8)	3.4 (2.4)	4.1 (0.7)
11		25.2 (3.2)	25.9 (0.9)	14.1 (0.5)	6.9 (1.0)
12		28.3 (3.2)	35.8 (1.0)	49.2 (7.7)	84.1 (1.8)
Vocational school		6.3 (0.3)	1.4 (0.3)	3.8 (2.3)	2.6 (0.6)
Some college		4.1 (1.3)	11.2 (3.7)	22.0 (5.7)	16.7 (1.4)

Note: Tabled values are column percentages with standard errors in parentheses.

^a Ages 22-24 apply to older females.

^b Other^a includes widowed, divorced, and separated.

^c Interviews completed before October 1, 1988 asked about plans; Interviews completed after October 1 asked about current status.

^{**} Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 505, 507, 713C, 714, 715.

Table C.5a. Influences on Serving in the Active Military for Males

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Feelings of Those Who Matter Most			
Favorable	65.3	30.3	41.5 (0.9)
Neither favorable nor unfavorable	18.1	33.9	28.8 (0.8)
Unfavorable	16.7	35.9	29.8 (0.8)
Personal Feelings			
Favorable	78.8	21.9	40.1 (0.8)
Neither favorable nor unfavorable	12.4	21.1	18.3 (0.7)
Unfavorable	8.8	57.0	41.5 (0.9)
Advice to Friend About Seeing Recruiter			
Waste of time	2.4	10.8	8.1 (0.5)
Up to him/her	36.9	64.5	55.7 (0.8)
A good idea	60.8	24.7	36.2 (0.8)
<u>Older Males</u>			
Feelings of Those Who Matter Most			
Favorable	61.1	27.4	32.2 (1.7)
Neither favorable nor unfavorable	17.0	34.0	31.5 (1.7)
Unfavorable	22.0	38.6	36.3 (1.7)
Personal Feelings			
Favorable	78.0	20.6	28.7 (1.6)
Neither favorable nor unfavorable	10.6	19.8	18.5 (1.4)
Unfavorable	11.5	59.6	52.8 (1.8)
Advice to Friend About Seeing Recruiter			
Waste of time	4.8	9.6	8.9 (1.0)
Up to him/her	36.0	62.7	58.9 (1.7)
A good idea	59.2	27.7	32.2 (1.7)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,362 young males (1,715 with positive propensity and 3,647 with negative propensity) and 1,062 older males (151 with positive propensity and 911 with negative propensity).

Source: Questions 510-513, 690, 691, 692.

Table C.5b. Influences on Serving in the Active Military for Females

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Females</u>			
Feelings of Those Who Matter Most			
Favorable	64.2	24.6	29.7 (1.0)
Neither favorable nor unfavorable	15.3	33.4	31.1 (0.9)
Unfavorable	20.5	42.0	39.2 (1.0)
Personal Feelings			
Favorable	79.0	16.0	24.0 (0.9)
Neither favorable nor unfavorable	9.1	18.0	16.9 (0.8)
Unfavorable	12.0	66.0	59.1 (1.0)
Advice to Friend About Seeing Recruiter			
Waste of time	2.5	7.3	6.7 (0.5)
Up to him/her	33.9	66.1	62.0 (1.0)
A good idea	63.6	26.6	31.3 (1.0)
<u>Older Females</u>			
Feelings of Those Who Matter Most			
Favorable	45.3	21.4	22.6 (1.5)
Neither favorable nor unfavorable	19.7	25.1	24.8 (1.5)
Unfavorable	35.0	53.6	52.7 (1.7)
Personal Feelings			
Favorable	74.1	15.0	17.9 (1.3)
Neither favorable nor unfavorable	4.8	15.6	15.1 (1.3)
Unfavorable	21.2	69.4	67.0 (1.6)
Advice to Friend About Seeing Recruiter			
Waste of time	0.0	7.2	6.8 (0.8)
Up to him/her	34.3	62.6	61.1 (1.7)
A good idea	65.7	30.3	32.1 (1.7)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 3,183 young females (403 with positive propensity and 2,780 with negative propensity) and 1,099 older females (58 with positive propensity and 1,041 with negative propensity).

Source: Questions 510-513, 690, 691, 692.

Table C.6. Knowledge About Military Educational Benefits

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Yes, Service pays benefits	64.7	56.2	58.9 (0.8)
Services said to offer educational benefits ^a			
Army	51.4	45.2	47.0 (1.2)
Navy	27.4	29.7	26.3 (1.2)
Marine Corps	25.5	23.4	24.1 (0.7)
Air Force	33.3	26.7	28.1 (1.2)
Don't know	2.8	4.2	3.7 (1.2)
No, Service does not pay educational benefits	29.3	38.3	31.5 (1.2)
Don't know	6.0	5.5	5.5 (1.2)
<u>Older Males</u>			
Yes, Service pays benefits	52.8	49.3	49.3 (1.2)
Services said to offer educational benefits ^a			
Army	35.7	39.5	39.0 (1.2)
Navy	24.1	27.0	26.8 (1.2)
Marine Corps	19.7	24.6	23.0 (1.2)
Air Force	25.2	26.2	26.1 (1.2)
Don't know	6.7	4.4	4.7 (1.2)
No, Service does not pay educational benefits	33.3	45.5	44.6 (1.2)
Don't know	13.9	4.3	5.5 (0.9)
<u>Young Females</u>			
Yes, Service pays benefits	57.7	43.8	45.5 (1.2)
Services said to offer educational benefits ^a			
Army	39.5	29.3	30.6 (0.7)
Navy	21.9	15.2	16.0 (0.7)
Marine Corps	17.4	13.5	14.0 (0.7)
Air Force	29.0	17.8	19.2 (0.7)
Don't know	6.1	7.3	7.2 (0.7)
No, Service does not pay educational benefits	34.7	47.1	45.5 (1.0)
Don't know	7.6	9.1	8.9 (0.6)
<u>Older Females</u>			
Yes, Service pays benefits	52.7	40.8	44.3 (1.2)
Services said to offer educational benefits ^a			
Army	31.9	33.3	33.2 (1.2)
Navy	14.9	19.2	19.0 (1.2)
Marine Corps	12.2	18.2	17.4 (1.2)
Air Force	39.8	20.3	21.3 (1.2)
Don't know	2.3	4.0	3.0 (0.6)
No, Service does not pay educational benefits	37.4	47.1	45.6 (1.2)
Don't know	9.9	9.1	9.1 (1.2)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,382 young males (1,722 with positive propensity and 3,660 with negative propensity), 1,068 older males (153 with positive propensity and 915 with negative propensity), 3,191 young females (405 with positive propensity and 2,786 with negative propensity) and 1,101 older females (58 with positive propensity and 1,043 with negative propensity).

^aPercentages for individual Services may not total 100 percent "yes" because respondents were allowed to mention more than one Service.

Source: Questions 510-513, 559-560.

Table C.7a. Males' Knowledge of Pay and Time Required to Participate in the Reserve Component

	Young Males			Older Males		
	Positive Reserve Propensity (n=553)	Negative Reserve Propensity (n=2059)	Total (n=2612)	Positive Reserve Propensity (n=129)	Negative Reserve Propensity (n=938)	Total (n=1067)
<u>Days/Month Required for Training</u>						
1	3.2	3.4	3.4 (0.5)	2.0	3.9	3.7 (0.6)
2 ^a	27.2	32.2	31.1 (1.1)	44.3	45.7	45.5 (1.8)
3-4	19.9	17.7	18.2 (0.9)	18.8	17.7	17.8 (1.4)
5-7	16.7	15.4	15.7 (0.9)	11.9	9.5	9.7 (1.0)
8 or more	32.8	30.9	31.3 (1.1)	23.1	22.9	22.9 (1.5)
Don't know	0.2	0.4	0.3 (0.1)	0.0	0.4	0.4 (0.2)
<u>Days/Year for Active Duty</u>						
1-6	6.2	10.0	9.2 (0.7)	14.0	7.2	8.0 (0.9)
7-13	12.1	12.7	12.6 (0.8)	14.6	11.5	11.9 (1.1)
14 ^a	27.6	28.4	28.2 (1.1)	33.9	44.4	43.2 (1.8)
15-29	12.1	11.9	12.0 (0.8)	7.4	9.9	9.6 (1.0)
30	11.0	10.9	10.9 (0.8)	8.6	9.0	8.9 (1.1)
31-90	30.6	25.8	26.8 (1.1)	21.6	17.9	18.3 (1.4)
Don't know	0.5	0.3	0.4 (0.1)	0.0	0.2	0.2 (0.2)
<u>Beginning Pay for 8-hour Training Day</u>						
\$5-29	11.8	16.4	15.4 (0.9)	16.8	13.6	14.0 (1.2)
30-39 ^a	10.2	12.0	11.6 (0.8)	4.7	11.0	10.3 (1.1)
40-49 ^a	18.1	13.6	14.5 (0.9)	14.6	12.7	12.9 (1.2)
50-59	13.8	18.7	17.6 (0.9)	19.4	24.8	24.2 (1.6)
60-99	16.7	14.7	15.1 (0.8)	22.1	18.6	19.0 (1.4)
100 or more	24.5	17.8	19.2 (0.9)	13.4	13.7	13.7 (1.2)
Don't know	5.0	6.9	6.5 (0.6)	9.0	5.6	6.0 (0.8)

Note: Tabled values are column percentages with standard errors in parentheses.

^aCorrect response. Initial pay for paygrade E-1 in FY 86 was \$39.38 for one day of training.

Source: Questions 505, 507, 571, 572, 573.

Table C.7b. Females' Knowledge of Pay and Time Required to Participate in the Reserve Component

	Young Females			Older Females		
	Positive Reserve Propensity (n=235)	Negative Reserve Propensity (n=2948)	Total (n=3183)	Positive Reserve Propensity (n=60)	Negative Reserve Propensity (n=1041)	Total (n=1101)
<u>Days/Month Required for Training</u>						
1	2.2	3.1	3.0 (0.3)	0.0	4.2	4.0 (0.9)
2 ^a	22.7	25.1	24.9 (0.9)	31.1	38.6	38.2 (1.7)
3-4	21.6	18.0	18.3 (0.8)	30.1	17.6	18.3 (1.3)
5-7	20.8	15.6	16.0 (0.8)	15.0	14.1	14.2 (1.2)
8 or more	32.6	37.2	36.8 (1.0)	21.8	24.1	23.9 (1.4)
Don't know	0.0	1.1	1.0 (0.2)	2.0	1.4	1.5 (0.5)
<u>Days/Year for Active Duty</u>						
1-6	6.5	9.2	9.0 (0.6)	13.8	10.8	11.0 (1.1)
7-13	11.5	12.6	12.5 (0.7)	12.6	13.0	13.0 (1.1)
14 ^a	24.7	23.5	23.6 (0.8)	33.5	33.7	33.7 (1.7)
15-29	14.1	13.1	13.2 (0.7)	14.3	12.1	12.3 (1.2)
30	11.8	11.3	11.3 (0.6)	6.1	11.2	10.9 (1.1)
31-90	30.7	29.3	29.4 (0.9)	17.8	17.9	17.9 (1.3)
Don't know	0.8	1.1	1.1 (0.2)	2.0	1.3	1.3 (0.4)
<u>Beginning Pay for 8-hour Training Day</u>						
\$5-29	15.1	15.1	15.1 (0.7)	18.5	15.9	16.1 (1.4)
30-39 ^a	9.5	8.9	8.9 (0.6)	5.5	9.2	9.0 (1.0)
40-49 ^a	13.2	13.5	13.5 (0.7)	15.5	12.9	13.1 (1.1)
50-59	9.3	16.0	15.5 (0.7)	24.4	19.5	19.7 (1.4)
60-99	10.6	14.3	14.0 (0.7)	18.7	16.0	16.2 (1.2)
100 or more	34.2	23.4	24.2 (0.9)	14.0	18.8	18.5 (1.3)
Don't know	8.0	8.9	8.8 (0.6)	3.4	7.7	7.1 (0.9)

Note: Tabled values are column percentages with standard errors in parentheses.

^aCorrect response. Initial pay for paygrade E-1 in FY 85 was \$39.38 for one day of training.

Source: Questions 505, 507, 571, 572, 573.

Table C.3a. Males' Levels of Awareness of Military Advertising

Sponsor/Awareness	Young Males			Older Males		
	Positive Propensity (n=1720)	Negative Propensity (n=3606)	Total (n=5326)	Positive Propensity (n=153)	Negative Propensity (n=914)	Total (n=1067)
Army						
Unaided awareness	72.0	65.9	67.9 (0.8)	60.9	66.7	65.9 (1.7)
Aided awareness	17.1	18.1	17.7 (0.7)	19.3	18.2	18.6 (1.3)
Aided or unaided	89.1	84.0	86.6 (0.6)	80.3	82.9	82.5 (1.3)
Navy						
Unaided awareness	43.9	45.5	46.0 (0.8)	44.4	47.1	46.7 (1.8)
Aided awareness	22.2	21.3	21.8 (0.7)	17.5	19.3	19.1 (1.4)
Aided or unaided	66.1	66.8	66.6 (0.8)	61.9	66.4	65.7 (1.7)
Marine Corps						
Unaided awareness	53.3	50.0	51.0 (0.9)	47.7	51.1	50.6 (1.7)
Aided awareness	21.8	20.8	21.1 (0.7)	17.2	19.9	19.5 (1.4)
Aided or unaided	75.1	70.7	72.1 (0.8)	65.0	70.9	70.1 (1.6)
Air Force						
Unaided awareness	58.1	51.2	52.8 (0.9)	54.2	54.1	54.1 (1.8)
Aided awareness	23.4	23.8	23.7 (0.7)	16.1	21.1	20.4 (1.4)
Aided or unaided	79.5	75.0	76.4 (0.7)	70.2	75.2	74.5 (1.5)
Coast Guard						
Unaided awareness	10.5	10.8	10.5 (0.7)	18.7	23.5	22.6 (1.6)
Aided awareness	12.5	17.3	16.7 (0.7)	20.8	20.6	20.6 (1.4)
Aided or unaided	37.8	37.7	37.6 (0.6)	39.5	44.1	43.5 (1.8)
National Guard/Reserve^a						
Unaided awareness	22.5	25.6	21.8 (0.7)	20.6	27.6	27.5 (1.6)
Aided awareness	37.0	31.3	32.9 (0.8)	30.7	29.0	29.2 (1.5)
Aided or unaided	59.6	51.0	53.9 (0.8)	57.5	56.7	56.8 (1.7)
Joint Services						
Unaided awareness	12.1	14.0	13.8 (0.6)	10.8	17.8	16.8 (1.4)
Aided awareness	37.3	34.1	35.1 (0.8)	33.2	31.2	31.5 (1.0)
Aided or unaided	49.1	46.7	49.8 (0.5)	44.0	49.0	48.3 (1.8)

Note: Tabled values are percentages with standard errors in parentheses. Aided awareness is somewhat inversely related to unaided awareness in that respondents are only asked about it if they do not report unaided awareness for a given Service.

^aProportion for this item refers to Composite Reserve Propensity.

Question refers to awareness for Joint Services.

Source: Questionnaire data from 1980.

Table C-6b. Females' Levels of Awareness of Military Advertising

Sponsor/Awareness	Young Females			Older Females		
	Positive Propensity (n=405)	Negative Propensity (n=2784)	Total (n=3189)	Positive Propensity (n=50)	Negative Propensity (n=1042)	Total (n=1100)
Army						
Unaided awareness	67.9	68.2	68.4 (0.6)	82.0	66.4	66.2 (1.7)
Aided awareness	20.9	16.1	18.7 (0.7)	18.6	16.1	16.3 (1.3)
Aided or unaided	88.8	82.3	83.1 (0.7)	92.4	82.5	82.5 (1.3)
Navy						
Unaided awareness	41.8	44.8	44.4 (1.0)	33.6	37.7	37.3 (1.7)
Aided awareness	25.9	17.3	18.4 (0.6)	20.9	19.7	20.0 (1.3)
Aided or unaided	67.4	62.0	62.7 (1.0)	57.5	57.4	57.4 (1.7)
Marine Corps						
Unaided awareness	47.2	47.3	47.3 (1.0)	41.5	45.3	45.1 (1.7)
Aided awareness	22.9	17.6	18.2 (0.7)	30.7	17.8	18.4 (1.4)
Aided or unaided	70.1	64.9	65.5 (1.0)	72.2	63.1	63.6 (1.7)
Air Force						
Unaided awareness	55.5	49.2	50.0 (1.0)	52.1	45.2	45.6 (1.7)
Aided awareness	23.8	22.4	22.6 (0.8)	25.4	20.1	20.4 (1.5)
Aided or unaided	79.3	71.5	72.5 (0.9)	77.6	65.4	66.0 (1.6)
Coast Guard						
Unaided awareness	12.0	13.0	13.4 (0.7)	10.3	13.0	13.5 (1.1)
Aided awareness	10.1	17.5	17.8 (0.6)	28.3	17.5	18.0 (1.3)
Aided or unaided	22.1	31.1	31.2 (0.9)	38.7	31.1	31.5 (1.6)
National Guard/Reserve^a						
Unaided awareness	23.4	18.6	18.9 (0.8)	23.8	21.3	21.8 (1.4)
Aided awareness	24.2	13.2	24.0 (0.9)	41.8	24.2	25.2 (1.5)
Aided or unaided	50.0	41.6	42.5 (1.0)	70.6	45.6	47.0 (1.7)
Joint Services^b						
Unaided awareness	11.3	17.0	16.7 (0.6)	11.7	10.8	10.9 (1.0)
Aided awareness	24.3	19.1	20.5 (0.6)	34.7	25.0	26.4 (1.5)
Aided or unaided	43.0	35.7	38.2 (1.0)	46.4	35.8	37.3 (1.6)

Notes: Tabular values are percentages in this table and errors in parentheses. Aided awareness is somewhat inversely related to unaided awareness in that, as table's are only asked about it if they do not report unaided awareness for a given Service.

^aProperly for this item refers to reserve before in joint.

^bQuestion refers to the service in joint.

Source: Great Britain, 1974.

Table C.9a. Males' Recognition of Military Advertising Slogans

Slogan/Response	Young Males			Older Males		
	Positive Propensity (n=1722)	Negative Propensity (n=3660)	Total (n= 5382)	Positive Propensity (n=153)	Negative Propensity (n=915)	Total (n=1068)
"Be all you can be."						
<u>Army</u>	83.7	81.7	82.4 (0.6)	66.6	76.7	75.3 (1.5)
<u>Navy</u>	2.9	3.5	3.3 (0.3)	5.9	4.3	4.5 (0.7)
<u>Marine Corps</u>	4.1	4.7	4.5 (0.4)	7.8	5.9	6.2 (0.8)
<u>Air Force</u>	3.7	3.9	3.8 (0.3)	8.7	5.0	5.5 (0.8)
<u>Joint Services</u>	3.4	3.5	3.5 (0.3)	2.2	4.1	3.8 (0.7)
Don't know	2.2	2.7	2.5 (0.3)	8.9	4.0	4.7 (0.8)
"_____. It's not just a job, it's an adventure."						
<u>Army</u>	32.5	31.5	31.8 (0.8)	26.3	33.3	32.3 (1.7)
<u>Navy</u>	38.7	37.8	38.1 (0.8)	36.3	38.5	38.2 (1.8)
<u>Marine Corps</u>	12.4	12.5	12.5 (0.6)	10.6	9.6	9.7 (1.0)
<u>Air Force</u>	6.6	7.3	7.1 (0.4)	10.8	9.7	9.8 (1.0)
<u>Joint Services</u>	5.6	5.4	5.5 (0.4)	8.6	5.0	5.5 (0.8)
Don't know	4.3	5.4	5.1 (0.4)	7.5	4.0	4.5 (0.8)
"The few, the proud, the _____."						
<u>Army</u>	4.1	3.1	3.4 (0.3)	5.9	2.7	3.1 (0.6)
<u>Navy</u>	5.1	3.0	3.6 (0.3)	4.0	2.7	2.9 (0.6)
<u>Marine Corps</u>	81.8	85.3	84.2 (0.6)	79.9	87.3	86.2 (1.2)
<u>Air Force</u>	2.6	1.7	2.0 (0.2)	1.4	1.3	1.3 (0.4)
<u>Joint Services</u>	1.4	1.3	1.4 (0.2)	0.0	1.4	1.2 (0.4)
Don't know	5.2	5.6	5.4 (0.4)	3.8	4.1	4.5 (0.8)
"Aim high. _____."						
<u>Army</u>	1.9	3.4	2.9 (0.3)	2.6	2.0	2.0 (0.6)
<u>Navy</u>	1.6	2.4	2.2 (0.2)	1.3	3.6	3.2 (0.6)
<u>Marine Corps</u>	1.3	1.4	1.4 (0.2)	8.2	3.1	2.6 (0.7)
<u>Air Force</u>	91.3	87.8	88.9 (0.5)	80.5	85.4	84.7 (1.2)
<u>Joint Services</u>	0.7	0.9	0.8 (0.2)	0.0	0.6	0.6 (0.3)
Don't know	3.1	4.1	3.8 (0.3)	9.5	5.4	5.9 (0.9)
"It's a great place to start."						
<u>Army</u>	44.8	44.7	44.7 (0.9)	42.3	41.3	42.6 (1.7)
<u>Navy</u>	15.0	12.9	13.6 (0.6)	21.6	16.6	17.2 (1.4)
<u>Marine Corps</u>	6.7	6.4	6.5 (0.4)	5.9	5.4	5.9 (1.2)
<u>Air Force</u>	11.6	9.3	10.1 (0.5)	9.1	11.1	11.5 (1.1)
<u>Joint Services</u>	11.6	14.4	13.5 (0.6)	11.4	12.7	12.3 (1.1)
Don't know	10.2	12.3	11.6 (0.5)	11.3	14.9	13.7 (1.2)
"We're looking for a few good men."						
<u>Army</u>	15.1	14.6	14.8 (0.6)	10.0	14.1	14.4 (1.2)
<u>Navy</u>	5.8	5.7	5.7 (0.4)	5.7	3.1	3.2 (0.7)
<u>Marine Corps</u>	66.2	64.0	64.9 (0.6)	60.2	62.1	61.5 (1.1)
<u>Air Force</u>	3.6	3.5	3.6 (0.3)	4.5	2.1	2.8 (0.7)
<u>Joint Services</u>	3.2	3.4	3.3 (0.3)	1.5	2.1	2.3 (0.6)
Don't know	5.7	8.8	7.8 (0.5)	11.1	5.2	6.0 (1.0)
"We're not a company—we're a country."						
<u>Army</u>	18.6	17.0	17.5 (0.6)	22.4	18.6	19.1 (1.4)
<u>Navy</u>	12.9	10.6	11.3 (0.5)	10.0	7.9	7.2 (0.9)
<u>Marine Corps</u>	11.6	10.2	10.7 (0.5)	8.2	10.1	9.8 (1.0)
<u>Air Force</u>	6.4	6.1	6.2 (0.4)	8.8	6.0	6.4 (0.8)
<u>Joint Services</u>	28.1	29.3	28.9 (0.8)	25.3	31.2	30.6 (1.6)
Don't know	22.4	26.7	25.3 (0.8)	24.2	26.3	26.0 (1.6)

Note: Tabled values are column percentages with standard errors in parentheses; correct responses for each slogan are underlined.

Source: Questions 510-513, 610-615.

Table C.5b. Females' Recognition of Military Advertising Slogans

Slogan/Response	Young Females			Older Females		
	Positive Propensity (n=405)	Negative Propensity (n=2785)	Total (n=3190)	Positive Propensity (n=58)	Negative Propensity (n=1044)	Total (n=1102)
"Be all you can be."						
Army	78.8	79.9	79.8 (0.8)	70.6	73.2	73.0 (1.6)
Navy	6.2	4.8	5.0 (0.5)	12.8	6.6	6.9 (0.9)
Marine Corps	2.4	3.7	3.6 (0.4)	3.7	5.2	5.1 (0.8)
Air Force	4.4	4.0	4.1 (0.4)	9.7	5.9	6.1 (0.8)
Joint Services	3.9	4.0	4.0 (0.4)	1.6	3.3	3.2 (0.6)
Don't know	4.3	3.5	3.6 (0.4)	1.7	6.0	5.8 (1.0)
"It's not just a job. It's an adventure."						
Army	34.6	33.1	33.3 (0.9)	29.7	31.1	31.0 (1.6)
Navy	24.4	24.3	24.3 (0.9)	35.3	28.2	28.5 (1.6)
Marine Corps	12.5	13.5	13.4 (0.7)	6.3	12.7	12.4 (1.1)
Air Force	11.8	12.9	12.7 (0.7)	10.3	11.7	11.6 (1.1)
Joint Services	7.6	6.9	7.0 (0.5)	9.9	5.5	5.8 (0.8)
Don't know	9.1	9.4	9.3 (0.6)	8.6	10.9	10.8 (1.2)
"The few, the proud, the..."						
Army	7.4	7.0	7.1 (0.5)	9.6	5.6	5.8 (0.8)
Navy	10.7	5.6	6.2 (0.5)	4.4	4.4	4.4 (0.7)
Marine Corps	63.3	70.9	69.9 (0.9)	60.5	72.8	72.2 (1.6)
Air Force	5.3	4.6	4.7 (0.4)	4.8	4.2	4.2 (0.7)
Joint Services	2.4	3.0	2.9 (0.3)	9.6	3.4	3.7 (0.6)
Don't know	11.0	9.0	9.2 (0.6)	11.2	9.7	9.7 (1.1)
"Aim high."						
Army	4.0	5.4	5.2 (0.4)	3.2	4.4	4.4 (0.7)
Navy	2.6	4.1	3.9 (0.4)	5.8	2.8	2.9 (0.6)
Marine Corps	2.7	3.3	3.2 (0.4)	0.0	5.1	4.8 (0.7)
Air Force	82.0	77.1	77.7 (0.8)	66.1	72.4	72.1 (1.6)
Joint Services	1.0	1.4	1.3 (0.2)	4.8	2.9	3.0 (0.5)
Don't know	7.7	8.7	8.6 (0.6)	20.0	12.5	12.8 (1.3)
"It's a great place to start."						
Army	34.6	38.2	37.7 (1.0)	21.7	34.8	34.2 (1.6)
Navy	16.8	14.8	15.0 (0.7)	12.3	12.9	12.9 (1.2)
Marine Corps	9.4	9.2	9.2 (0.6)	10.2	8.1	8.2 (0.9)
Air Force	10.8	10.4	10.4 (0.6)	21.6	9.9	10.4 (1.0)
Joint Services	11.0	10.3	10.4 (0.6)	16.2	11.5	11.7 (1.1)
Don't know	17.4	17.3	17.3 (0.8)	18.0	22.9	22.6 (1.5)
"We're looking for a few good men."						
Army	19.2	22.3	21.9 (0.8)	20.2	25.2	25.0 (1.6)
Navy	11.3	12.9	10.9 (0.6)	6.3	8.0	7.9 (0.9)
Marine Corps	44.2	39.9	39.6 (1.0)	40.9	44.6	44.4 (1.7)
Air Force	5.6	5.9	5.8 (0.5)	9.5	5.3	5.5 (0.8)
Joint Services	8.1	5.5	5.9 (0.5)	11.8	4.5	4.9 (0.7)
Don't know	11.5	15.5	15.9 (0.7)	11.3	12.2	12.2 (1.1)
"We're not a company. We're a country."						
Army	14.1	19.3	17.8 (0.8)	22.2	17.8	18.0 (1.4)
Navy	11.0	10.7	10.7 (0.6)	7.7	8.6	8.5 (0.9)
Marine Corps	10.5	10.1	10.2 (0.6)	3.7	9.2	9.2 (1.0)
Air Force	7.4	5.8	5.0 (0.5)	12.3	6.9	7.2 (0.9)
Joint Services	26.6	23.4	23.8 (0.8)	17.9	25.4	25.0 (1.5)
Don't know	30.4	31.7	31.6 (1.0)	31.2	32.1	32.1 (1.6)

Note: Tabled values are column percentages with standard errors in parentheses; correct responses for each slogan are underlined.

Sources: Questions 510-512, 519-515.

Table C.10a. Service Images Among Males

Image Statement/Response ^a	Young Males			Older Males		
	Positive Propensity (n=1722)	Negative Propensity (n=3660)	Total (n=5382)	Positive Propensity (n=153)	Negative Propensity (n=415)	Total (n=1068)
Provides Money for Education						
Army	60.5	61.3	61.1 (0.3)	53.6	54.7	54.5 (1.8)
Navy	9.8	11.4	10.9 (0.5)	8.0	11.8	11.3 (1.2)
Marine Corps	8.8	7.8	8.0 (0.5)	9.3	8.9	9.0 (1.1)
Air Force	15.7	12.2	13.3 (0.6)	18.8	17.1	17.4 (1.3)
None/Refused	4.0	5.6	5.1 (0.4)	7.5	5.0	5.4 (0.8)
Don't Know	1.3	1.9	1.7 (0.2)	2.8	2.5	2.5 (0.6)
Lack of Personal Freedom						
Army	18.0	17.4	17.6 (0.6)	14.2	16.4	16.1 (1.3)
Navy	20.0	19.2	19.4 (0.7)	26.2	23.7	24.1 (1.6)
Marine Corps	39.7	39.2	39.4 (0.8)	38.0	39.6	39.4 (1.7)
Air Force	7.5	6.3	6.7 (0.4)	7.7	6.3	6.5 (0.9)
None/Refused	12.1	14.2	13.6 (0.6)	10.8	10.9	10.9 (1.1)
Don't Know	2.7	3.6	3.3 (0.3)	3.2	3.1	3.1 (0.6)
Teaches Valuable Skills and Trades						
Army	35.3	34.4	34.7 (0.8)	30.5	31.1	31.1 (1.6)
Navy	15.7	17.2	16.7 (0.6)	21.1	15.1	16.0 (1.3)
Marine Corps	14.8	12.4	13.1 (0.6)	9.1	12.0	11.6 (1.1)
Air Force	30.2	28.8	29.2 (0.8)	30.9	35.6	34.9 (1.7)
None/Refused	3.2	5.3	4.7 (0.4)	5.5	4.7	4.8 (0.8)
Don't Know	0.9	2.0	1.6 (0.2)	2.8	1.5	1.7 (0.5)
Extended Duty Away from Immediate Family						
Army	22.7	18.4	19.8 (0.7)	19.3	17.4	17.6 (1.4)
Navy	42.6	45.8	44.7 (0.8)	38.6	48.3	46.9 (1.8)
Marine Corps	19.1	17.6	18.1 (0.6)	24.5	17.4	18.4 (1.4)
Air Force	9.6	9.3	9.4 (0.5)	8.5	10.0	9.8 (1.0)
None/Refused	4.6	7.3	6.4 (0.4)	8.1	4.6	5.1 (0.8)
Don't Know	1.4	1.7	1.6 (0.2)	1.1	2.4	2.2 (0.5)
Opportunities for Promotion and Advancement						
Army	34.9	35.6	35.3 (0.8)	37.6	33.4	34.0 (1.7)
Navy	13.4	14.7	14.3 (0.6)	13.1	16.0	15.6 (1.3)
Marine Corps	15.9	13.3	14.1 (0.6)	11.1	12.2	12.1 (1.1)
Air Force	30.0	28.4	27.5 (0.8)	29.8	30.7	30.6 (1.6)
None/Refused	4.7	7.7	6.7 (0.4)	7.5	5.2	5.5 (0.8)
Don't Know	1.3	2.5	2.1 (0.2)	0.9	2.8	2.3 (0.5)
Equal Pay and Advancement for Men and Women						
Army	49.8	50.0	49.9 (0.8)	46.3	46.4	46.4 (1.8)
Navy	13.3	12.7	12.9 (0.6)	9.5	15.2	14.4 (1.2)
Marine Corps	9.2	8.5	8.7 (0.5)	7.2	7.0	7.0 (0.9)
Air Force	21.4	17.4	18.7 (0.7)	26.8	21.8	22.5 (1.5)
None/Refused	4.7	8.5	7.3 (0.4)	8.8	6.8	7.0 (0.9)
Don't Know	1.6	3.0	2.6 (0.3)	1.4	2.9	2.7 (0.6)
Assignment to Work That Does Not Prepare You for a Civilian Career						
Army	21.4	19.8	20.3 (0.7)	23.9	19.5	20.1 (1.4)
Navy	18.6	17.1	17.6 (0.6)	17.3	18.2	18.0 (1.3)
Marine Corps	30.1	30.0	30.1 (0.8)	35.8	34.1	34.3 (1.7)
Air Force	12.5	11.5	11.8 (0.5)	6.4	9.1	8.7 (1.0)
None/Refused	13.9	16.9	15.9 (0.6)	14.3	15.7	15.5 (1.3)
Don't Know	3.6	4.6	4.3 (0.4)	2.7	3.4	3.3 (0.6)
Defending Your Country						
Army	42.3	43.7	43.3 (0.9)	35.1	35.0	35.0 (1.7)
Navy	6.7	5.8	6.1 (0.4)	10.1	6.6	7.1 (1.0)
Marine Corps	39.0	33.7	34.4 (0.8)	36.9	41.5	40.9 (1.7)
Air Force	11.3	10.4	10.7 (0.5)	13.5	11.2	11.5 (1.1)
None/Refused	3.1	5.2	4.5 (0.3)	4.5	4.5	4.5 (0.8)
Don't Know	0.6	1.2	1.0 (0.2)	0.0	1.2	1.0 (0.3)
Working in High Technology Environment						
Army	13.7	11.4	12.1 (0.5)	9.8	9.3	9.4 (1.0)
Navy	15.0	14.8	14.9 (0.6)	15.5	16.5	16.4 (1.3)
Marine Corps	7.2	6.3	6.6 (0.4)	8.8	5.7	6.1 (0.8)
Air Force	60.9	61.4	61.2 (0.8)	60.8	64.5	64.0 (1.7)
None/Refused	2.5	4.3	3.7 (0.3)	5.1	3.0	3.3 (0.7)
Don't Know	0.7	1.7	1.4 (0.2)	0.0	1.0	0.8 (0.3)
Work in or Near a Combat Zone						
Army	45.3	43.8	44.2 (0.9)	40.1	43.4	42.9 (1.8)
Navy	6.1	6.7	6.5 (0.4)	9.5	5.9	6.4 (0.9)
Marine Corps	39.5	38.9	39.1 (0.8)	39.2	41.8	41.4 (1.7)
Air Force	5.3	4.8	5.0 (0.4)	6.6	4.2	4.5 (0.7)
None/Refused	2.7	4.4	3.9 (0.3)	3.9	3.4	3.5 (0.6)
Don't Know	1.2	1.5	1.4 (0.2)	0.7	1.4	1.3 (0.4)

Note: Tabular values are column percentages with standard errors in parentheses.

^aService mentioned is the one respondent thought of first in response to each image statement.

Source: Questions 510-613, 650-659.

Table C.10b. Service Images Among Females

Image Statement/Response ^a	Young Females			Older Females		
	Positive Propensity (n=405)	Negative Propensity (n=2786)	Total (n=3191)	Positive Propensity (n=68)	Negative Propensity (n=1044)	Total (n=1102)
Provides Money for Education						
Army	54.0	53.5	53.5 (1.0)	41.8	47.4	47.1 (1.7)
Navy	11.0	12.4	12.3 (0.6)	16.3	10.5	10.8 (1.1)
Marine Corps	10.3	10.7	10.8 (0.7)	2.7	11.0	10.6 (1.1)
Air Force	19.1	15.7	18.1 (0.7)	30.5	19.7	20.2 (1.4)
None/Refused	4.8	5.6	5.5 (0.5)	3.2	8.4	8.1 (1.0)
Don't Know	1.1	2.1	2.0 (0.3)	5.4	3.1	3.2 (0.6)
Lack of Personal Freedom						
Army	26.5	23.9	24.3 (0.8)	25.8	20.3	20.5 (1.4)
Navy	18.7	20.2	20.0 (0.8)	15.1	21.5	21.2 (1.4)
Marine Corps	27.6	27.3	27.3 (0.9)	36.6	30.5	30.8 (1.6)
Air Force	8.9	8.0	8.1 (0.6)	4.8	7.1	7.0 (1.0)
None/Refused	14.7	14.8	14.8 (0.7)	10.3	15.3	15.0 (1.2)
Don't Know	3.7	5.8	5.5 (0.5)	7.4	5.3	5.4 (0.8)
Teaches Valuable Skills and Trades						
Army	27.6	33.7	32.9 (0.9)	34.5	30.0	30.2 (1.6)
Navy	17.4	15.0	15.3 (0.7)	7.5	16.8	16.3 (1.3)
Marine Corps	12.0	14.8	14.4 (0.7)	6.4	13.8	13.5 (1.2)
Air Force	35.3	28.8	29.6 (0.9)	48.1	30.8	31.7 (1.6)
None/Refused	5.6	5.5	5.5 (0.5)	1.8	5.9	5.7 (0.8)
Don't Know	2.3	2.2	2.2 (0.3)	1.7	2.7	2.6 (0.6)
Extended Duty Away from Immediate Family						
Army	23.7	23.3	23.4 (0.8)	29.5	19.5	20.0 (1.4)
Navy	35.2	34.4	34.5 (0.9)	31.8	40.7	40.3 (1.7)
Marine Corps	19.0	19.7	19.8 (0.8)	15.6	18.0	17.9 (1.4)
Air Force	14.0	11.9	12.1 (0.7)	13.6	12.7	12.8 (1.1)
None/Refused	5.8	7.5	7.3 (0.5)	4.2	6.9	6.8 (0.8)
Don't Know	2.4	3.3	3.1 (0.4)	5.4	2.1	2.3 (0.6)
Opportunities for Promotion and Advancement						
Army	29.4	33.3	32.8 (0.9)	32.5	31.0	31.1 (1.6)
Navy	14.7	14.5	14.5 (0.7)	18.7	14.0	14.2 (1.2)
Marine Corps	17.8	13.0	13.6 (0.7)	14.0	13.0	13.1 (1.2)
Air Force	29.4	29.4	29.4 (0.9)	26.5	29.7	29.5 (1.6)
None/Refused	4.7	6.6	6.4 (0.5)	3.0	8.0	7.7 (0.9)
Don't Know	4.0	3.2	3.3 (0.4)	5.4	4.3	4.4 (0.7)
Equal Pay and Advancement for Men and Women						
Army	37.9	45.4	44.4 (1.0)	34.5	42.4	42.0 (1.7)
Navy	11.0	13.0	12.7 (0.7)	13.8	13.3	13.3 (1.2)
Marine Corps	12.8	9.5	10.0 (0.6)	13.0	8.4	8.6 (1.1)
Air Force	27.3	20.6	21.5 (0.8)	33.8	23.5	24.0 (1.5)
None/Refused	6.4	7.9	7.7 (0.5)	3.2	9.0	8.7 (0.9)
Don't Know	4.6	3.6	3.8 (0.4)	1.7	3.5	3.4 (0.7)
Assignment to Work That Does Not Prepare You for a Civilian Career						
Army	24.5	21.0	21.5 (0.8)	19.8	23.6	23.5 (1.5)
Navy	20.3	19.8	19.8 (0.8)	16.6	17.8	17.7 (1.3)
Marine Corps	22.4	21.5	21.6 (0.8)	21.5	22.4	22.4 (1.5)
Air Force	14.7	13.9	14.0 (0.7)	16.6	11.7	12.0 (1.1)
None/Refused	16.0	17.6	17.4 (0.8)	19.9	19.6	19.6 (1.3)
Don't Know	2.2	6.3	5.8 (0.5)	5.7	4.9	5.0 (0.8)
Defending Your Country						
Army	56.5	57.6	57.4 (1.0)	41.1	51.2	50.7 (1.8)
Navy	9.6	7.0	7.3 (0.5)	6.2	6.7	6.7 (0.8)
Marine Corps	20.2	20.0	20.0 (0.8)	30.9	24.5	24.8 (1.6)
Air Force	10.1	8.9	9.1 (0.6)	14.6	10.7	10.9 (1.0)
None/Refused	3.0	4.9	4.6 (0.4)	1.8	5.4	5.2 (0.7)
Don't Know	0.7	1.7	1.6 (0.2)	5.4	1.5	1.7 (0.4)
Working in High Technology Environment						
Army	12.0	12.2	12.2 (0.6)	11.5	10.8	10.8 (1.0)
Navy	15.3	15.8	15.8 (0.8)	18.5	17.3	17.4 (1.3)
Marine Corps	11.1	9.9	10.1 (0.6)	13.9	7.8	8.1 (0.9)
Air Force	55.7	55.4	55.5 (1.0)	50.3	56.7	56.4 (1.7)
None/Refused	3.3	4.7	4.6 (0.4)	4.2	5.2	5.1 (0.7)
Don't Know	2.6	1.9	2.0 (0.3)	1.7	2.2	2.2 (0.5)
Work in or Near a Combat Zone						
Army	54.8	54.7	54.8 (1.0)	50.3	57.9	57.5 (1.7)
Navy	9.9	8.8	8.9 (0.6)	13.0	6.6	6.9 (1.0)
Marine Corps	20.9	22.7	22.4 (0.8)	20.3	22.5	22.3 (1.4)
Air Force	7.4	6.7	6.8 (0.5)	11.8	6.4	6.7 (0.8)
None/Refused	4.0	4.9	4.8 (0.4)	3.0	4.8	4.7 (0.7)
Don't Know	3.1	2.2	2.4 (0.3)	1.7	1.9	1.8 (0.5)

Note: Tabled values are column percentages with standard errors in parentheses.

^aService mentioned is the one the respondent thought of first in response to each image statement.

Source: Questions 510-513, 650-659.

Table C.11a. Males' Contact with Recruiters by Service Represented and Method of First Contact

Sponsor/Method of First Contact	Young Males			Older Males		
	Positive	Negative	Total	Positive	Negative	Total
	Propensity	Propensity		Propensity	Propensity	
	(n = 1722)	(n = 3659)	(n = 5381)	(n = 153)	(n = 914)	(n = 1067)
Army						
Got a phone call	6.1	7.3	6.9 (0.4)	0.4	4.6	4.0 (0.7)
Knew a phone call	2.7	1.0	1.5 (0.2)	5.4	1.2	1.8 (0.4)
At recruiting station	4.5	1.9	2.7 (0.3)	7.5	7.9	7.8 (1.0)
At job fair	0.6	0.3	0.4 (0.1)	0.0	0.6	0.5 (0.3)
At school	11.2	7.3	8.6 (0.5)	10.3	5.1	5.8 (0.8)
Some other way (Don't know)	2.5	1.2	1.6 (0.2)	2.0	1.3	1.4 (0.4)
Any contact with Army recruiter	27.5	19.1	21.8 (0.7)	25.7	20.7	21.4 (1.5)
Navy						
Got a phone call	3.6	3.6	3.6 (0.3)	2.4	2.2	2.4 (0.5)
Knew a phone call	1.3	0.5	0.7 (0.1)	2.8	1.1	1.4 (0.4)
At recruiting station	2.1	1.5	1.7 (0.2)	2.8	2.7	2.7 (0.5)
At job fair	0.3	0.1	0.1 (0.1)	0.7	0.1	0.2 (0.1)
At school	5.8	3.5	4.2 (0.4)	4.2	3.6	3.6 (0.7)
Some other way (Don't know)	0.6	0.9	0.8 (0.1)	0.9	1.2	1.1 (0.4)
Any contact with Navy recruiter	13.6	9.9	11.1 (0.5)	13.8	10.9	11.3 (1.1)
Marine Corps						
Got a phone call	3.0	4.2	3.8 (0.3)	1.4	2.8	2.6 (0.6)
Knew a phone call	0.8	0.4	0.5 (0.1)	0.8	0.6	0.6 (0.3)
At recruiting station	2.2	1.1	1.5 (0.2)	6.8	3.0	3.5 (0.6)
At job fair	0.5	0.1	0.2 (0.1)	0.0	0.4	0.3 (0.2)
At school	8.0	3.9	5.2 (0.4)	6.7	3.1	3.6 (0.6)
Some other way (Don't know)	1.5	0.9	1.1 (0.2)	1.1	1.3	1.3 (0.5)
Any contact with Marine Corps recruiter	16.1	10.6	12.3 (0.6)	16.7	11.2	12.0 (1.2)
Air Force						
Got a phone call	1.8	2.1	2.0 (0.2)	1.3	2.1	2.0 (0.5)
Knew a phone call	1.2	0.4	0.7 (0.1)	2.0	1.4	1.5 (0.4)
At recruiting station	2.5	1.3	1.7 (0.2)	5.0	3.7	3.9 (0.6)
At job fair	0.1	0.2	0.2 (0.1)	0.0	0.1	0.1 (0.1)
At school	7.3	2.9	4.3 (0.3)	6.5	3.1	3.6 (0.7)
Some other way (Don't know)	0.8	0.5	0.6 (0.1)	1.5	0.9	1.0 (0.3)
Any contact with Air Force recruiter	13.7	7.4	9.4 (0.5)	16.3	11.4	12.1 (1.1)
Military Recruiter						
Got a phone call	11.3	12.7	12.3 (0.5)	5.5	9.0	8.5 (0.9)
Knew a phone call	5.2	1.9	2.9 (0.3)	9.0	3.4	4.2 (0.7)
At recruiting station	9.0	5.0	6.3 (0.4)	19.8	14.9	15.6 (1.3)
At job fair	1.1	0.6	0.8 (0.1)	0.7	0.9	0.8 (0.3)
At school	23.5	13.1	16.4 (0.6)	15.5	11.6	12.1 (1.2)
Some other way (Don't know)	5.2	3.1	3.8 (0.3)	5.1	4.3	4.4 (0.8)
Any contact with a military recruiter	51.5	34.5	40.0 (0.8)	50.9	41.7	43.0 (1.8)

Note: Tabulated values are column percentages with standard errors in parentheses. Estimates for contact with Army, Navy, Marine Corps, and Air Force Recruiters include active and Reserve components. "Any contact" includes all reported contacts.

Source: Questions 510-513, 628, 629, 632, 635, 638 and 641.

Table C.11b. Females' Contact with Recruiters by Service Represented and Method of First Contact

Sponsor/Method of First Contact	Young Females			Older Females		
	Positive Propensity (n = 405)	Negative Propensity (n = 2786)	Total (n = 3191)	Positive Propensity (n = 58)	Negative Propensity (n = 1044)	Total (n = 1102)
Army						
Got a phone call	2.9	2.1	2.2 (0.3)	1.7	2.1	2.0 (0.6)
Made a phone call	1.6	0.6	0.7 (0.2)	6.9	1.4	1.7 (0.4)
At recruiting station	2.4	0.9	1.1 (0.2)	10.2	2.3	2.7 (0.5)
At job fair	0.3	0.4	0.4 (0.1)	0.0	0.2	0.2 (0.1)
At school	10.9	4.5	5.3 (0.5)	6.7	4.7	4.8 (0.7)
Some other way (Don't know)	1.6	0.9	1.0 (0.2)	3.3	1.7	1.8 (0.4)
Any contact with Army recruiter	19.8	9.4	10.7 (0.6)	28.9	12.2	13.0 (1.2)
Navy						
Got a phone call	0.4	0.6	0.5 (0.1)	0.0	0.3	0.3 (0.2)
Made a phone call	0.7	0.3	0.4 (0.1)	0.0	1.2	1.2 (0.4)
At recruiting station	0.8	0.4	0.5 (0.1)	6.7	0.6	0.9 (0.4)
At job fair	1.2	0.1	0.2 (0.1)	0.0	0.2	0.2 (0.1)
At school	4.8	1.8	2.1 (0.3)	1.8	2.1	2.1 (0.5)
Some other way (Don't know)	1.0	0.4	0.5 (0.1)	0.0	1.2	1.1 (0.3)
Any contact with Navy recruiter	9.0	3.5	4.2 (0.4)	8.4	5.6	5.7 (0.8)
Marine Corps						
Got a phone call	0.7	0.5	0.5 (0.1)	0.0	0.8	0.8 (0.3)
Made a phone call	0.5	0.2	0.3 (0.2)	1.3	0.6	0.6 (0.3)
At recruiting station	1.0	0.4	0.5 (0.1)	0.0	0.2	0.2 (0.1)
At job fair	0.2	0.1	0.1 (0.1)	0.0	0.0	0.0 (**)
At school	5.3	1.9	2.4 (0.3)	1.8	1.5	1.5 (0.4)
Some other way (Don't know)	0.6	0.7	0.7 (0.2)	1.6	0.6	0.6 (0.3)
Any contact with Marine Corps recruiter	8.4	3.8	4.4 (0.4)	4.7	3.7	3.7 (0.6)
Air Force						
Got a phone call	0.7	0.3	0.4 (0.1)	1.9	0.7	0.8 (0.3)
Made a phone call	1.3	0.3	0.5 (0.1)	1.6	1.1	1.1 (0.3)
At recruiting station	1.9	0.5	0.7 (0.2)	5.9	1.2	1.4 (0.3)
At job fair	1.0	0.1	0.2 (0.1)	0.0	0.2	0.2 (0.1)
At school	9.1	2.8	3.6 (0.4)	1.6	2.4	2.4 (0.5)
Some other way (Don't know)	0.9	0.3	0.3 (0.1)	3.4	0.5	0.7 (0.2)
Any contact with Air Force recruiter	14.8	4.3	5.7 (0.5)	14.5	6.1	6.5 (0.8)
Any Military Recruiter						
Got a phone call	4.2	3.3	3.4 (0.3)	3.7	3.4	3.4 (0.7)
Made a phone call	3.0	1.4	1.6 (0.3)	9.8	3.4	3.7 (0.6)
At recruiting station	4.7	1.9	2.3 (0.3)	20.4	4.0	4.8 (0.7)
At job fair	1.7	0.6	0.7 (0.2)	0.0	0.4	0.4 (0.2)
At school	23.8	8.6	10.6 (0.6)	10.3	7.7	7.8 (0.9)
Some other way (Don't know)	3.9	2.0	2.3 (0.3)	8.4	3.6	3.9 (0.6)
Any contact with a military recruiter	40.7	18.0	20.9 (0.8)	49.5	22.2	23.6 (1.5)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates for contact with Army, Navy, Marine Corps, and Air Force Recruiters include active and Reserve components. "Any contact" includes all reported contacts.

Source: Questions 510-513, 628, 629, 632, 635, 638 and 641.

Appendix D

Multiple Regression Variables, Analytical Approach
and Detail of Results

Appendix D

Multiple Regression Variables, Analytical Approach and Detail of Results

This appendix provides detailed information about the multiple regression analyses (reported in Chapter 10) which were conducted on the young male and young female data. The first section defines the variables which were used in the analyses and details how the variables were constructed. The second section provides the rationale for the analytical approach. The last two sections provide a discussion of the parameters from the models for the young males and the young females.

A. Variable Definitions

The dependent variable for the regression analyses is Composite Active Propensity. It is classified in a binary fashion, where 1 = positive propensity and 0 = negative propensity.

The independent variables fall into two groups broadly described as sociodemographic/economic variables and as psychological/behavioral variables.

1. Sociodemographic/Economic Variables

Ten sociodemographic/economic variables were used in the regression analyses. They were respondent's age, race/ethnicity, educational status, mother's education, marital status, student status, local unemployment rate, local wage rate, employment status and county total labor force. For the analyses, the coding of the independent variables determined the comparisons which were made.

- Age retained its original coding of years (16-21) [Q403].
- Race/ethnicity was coded to compare Blacks, Hispanics and "other nonwhites" to whites [Qs 714 and 715].

- Educational status was defined as number of years of education completed and coded to compare those who had completed 10 years or less, 11 years, and more than 12 years with those who had completed 12 years of education [Q404].
- Mother's education was also defined as number of years of education completed and coded to compare those who had completed 10 years or less, 11 years, and more than 12 years with those who had completed 12 years of education [Q713].
- Marital status was coded to compare those who were "other than married" (widowed, separated, divorced or never married) with those who were married [Q713C].
- Student status was coded to compare non-student and part-time students with full-time students [Qs 407 and 409A].
- Local unemployment rate was defined and coded as the average percent unemployed (October 1985 - September 1986) in the respondent's county of residence [Data were obtained from the Bureau of Labor Statistics].
- Local wage rate was defined and coded as the average hourly earnings per person employed for 1985 in the respondent's county of residence [Data were obtained from the Bureau of Labor Statistics].
- Employment status was coded to compare those who were unemployed and looking for a job, employed full time, and employed part time with those who were unemployed but not looking for a job [Qs 416 and 417].
- County total labor force was defined as the average total labor force in the respondent's county of residence in September 1986 [Data were obtained from the Bureau of Labor Statistics].

2. Psychological/Behavioral Variables

Twelve psychological/behavioral variables were used in the regression analyses. Four of these variables were constructed as composites of two or more questionnaire items. Three of these variables were coded dichotomously to reflect yes-no comparisons in response to the item specified. Responses to the remaining five variables had been made on scales and were thus coded as continuous variables.

- Difficulty finding a full-time job represented the respondent's perception of how difficult it is for "someone your age to get a full-time job in your community." Responses were coded on a 1-4 scale with "1" representing "almost impossible" and "4" representing "not difficult at all" [Q436].
- Accuracy of slogan sponsor attribution is a composite measure. For each correct sponsor attribution for the seven Service slogans, the score for this measure was incremented by one. Thus, scores could range from "0" (no correct sponsor attributions) to "7" (correct sponsor attributions for all seven slogans) [Qs 610-612, 613A, 614, 615A, 615B].
- Exposure to different media is a composite measure. For each form of advertising media exposure (print, broadcast, unsolicited mailed recruiting literature) to which the respondent reported exposure, the score for this measure was incremented by one. Thus, scores could range from "0" (no recalled exposure) to "3" (exposure to all three sources) [Qs 616, 618 and 620].
- Knowledge of educational benefits was coded to contrast whether the respondent knew that at least one Service has a program that helps pay for college or vocational training (Yes) or not (No) [Q559].

- Previous consideration of military service is coded on a 1-3 scale where "1" indicates that the respondent had never considered the possibility of joining the military prior to the survey date; "2" indicates some consideration; and "3" indicates serious consideration [Q525].
- Friend/relative enlisted was coded to contrast whether the respondent had a good friend or close relative who had signed up with one of the military services within the last 6 months (Yes) or not (No) [Q682].
- Own feelings is a scaled measure representing how the respondent feels about serving in the active military. Responses were coded on a 1-5 scale where lower numbers indicated greater favorability [Q692].
- Others' feelings is a scaled measure representing the respondent's perceptions of how the people who matter most feel about the respondent's serving in the active military. Responses were coded on a 1-5 scale where lower numbers indicated greater favorability [Q691].
- Advice to others is a scaled measure representing advice the respondent would give to a friend asking about seeing a military recruiter. Responses were coded on a 1-3 scale where 1 = a waste of time; 2 = up to him or her; and 3 = a good idea [Q690].
- Called/mailed for information is a composite measure. It represents whether the respondent called a toll-free telephone number and/or sent a postcard or coupon for information about the military in the past 12 months. For each of these actions reported, the scores in this measure was incremented by one. Thus, scores could range from "0" (neither action performed) to "2" (both actions performed) [Qs 622 and 625].

- Discussed serving with someone was coded to contrast whether the respondent had discussed the possibility of serving in the military with someone in the past year (Yes) or not (No) [Q683].
- Actions taken toward enlistment is a composite measure. It represents the number of actions toward enlistment taken by the respondent. Possible actions include: visiting a recruiting station in the past 12 months; ever having talked with a recruiter; and ever having taken the ASVAB. For each action taken, the score for the measure was incremented by one. Thus, scores could range from "0" (no actions taken) to "3" (all actions taken) [Qs 627, 628 and 645).

B. Rationale of Analytical Approach

There are a number of approaches for modeling a binary (0,1) dependent measure such as Composite Positive Propensity. Two widely used approaches are ordinary multiple regression and logistic regression. Ordinary multiple regression makes the assumption that the probability of the outcome measure (e.g., positive propensity) is a linear function of the independent variables. Thus, it is sometimes referred to as a linear probability model. In contrast, the logistic regression model assumes a non-linear relationship between the independent variables and the probability of the outcome measure. The relationship between each independent variable and the probability of the outcome measure is assumed to approximate a normal distribution function (i.e., an s-shaped curve).

A linear probability model was chosen over a logistic regression model as the analytic technique used in Chapter 10 of this report because of its ease of interpretation and its consistency with the use of probabilities (percentages) presented in the descriptive tables. The estimated regression parameters can be interpreted forthright as differences in probabilities of positive propensity between levels of a particular independent variable adjusting for the effects of other independent variables in the model. Although the linear probability model does have certain limitations as discussed below, for the purposes of our analyses, these limitations were not problematic.

The linear probability model can sometimes result in predicted probabilities that are outside the range of 0 to 1, the admissible values for probabilities. However, we are not as interested in predicted probabilities as we are in the separate effects of the independent variables on the probability of positive propensity. The linear probability model is unbiased but is inefficient; but with the large sample size for YATS, this is not a critical limitation.

Logistic regression alleviates the problems discussed above. This technique transforms probabilities to a log odds scale that can take the range of $-\infty$ to $+\infty$. The parameters of the logistic model then have to be interpreted with respect to the log odds scale (or with respect to the odds scale with a transformation of the parameters), however, rather than with the probabilities themselves. Interpreting parameters of the log odds scale (or the odds scale) is less informative and less straightforward for most people.

For the analyses conducted in Chapter 10, the results of the linear probability model and the logistic regression model would be highly similar with respect to the statistically significant predictors of positive enlistment propensity. The reason for the similarities is that overall probability of positive propensity was about .30 and the logistic function is essentially linear for probabilities centered about .30.

C. Explaining Propensity for Young Males

Table D.1 presents a detailed description of the variables which contributed significantly to the prediction of propensity, in both the limited and overall models for the young males. These findings are discussed below.

Table D.1. Parameter Estimates of Significantly Contributing Variables for Regression Models of Positive Composite Active Propensity for Young Males

Independent Variables/Categories	Sociodemographic/ Economic Model	Overall Model
Age (Years)	-0.021*	-0.016*
Race/Ethnicity		
Black vs. white	0.261***	0.176***
Hispanic vs. white	0.146***	0.096***
Other nonwhite vs. white	0.128**	0.063
Educational Status		
10 years or less vs. 12 years	0.220***	0.134***
11 years vs. 12 years	0.123***	0.054**
More than 12 years vs. 12 years	0.000	0.012
Mother's Education		
10 years or less vs. 12 years	0.054	0.029
11 years vs. 12 years	0.057	0.004
More than 12 years vs. 12 years	-0.051**	-0.039**
Marital Status		
Single vs. Married	0.102**	a
Employment Status		a
Unemployed-Looking vs. Unemployed-Not Looking	0.107**	
Employed F-T vs. Unemployed-Not Looking	0.049	
Employed P-T vs. Unemployed-Not Looking	0.059**	
County Total Labor Force	-0.020*	a
Exposure to Different Media	-	-0.017*
Previous Consideration of Military Service	-	0.086***
Own Feelings	-	0.122***
Advice to Others (About Seeing a Recruiter) -		0.036**
Discussed Serving with Someone (Yes vs. No) -		0.096***
R ²	.13	.40

Note: Tabled values are regression parameters (beta values). Analyses used weighted data. The criterion (dependent measure) was Positive Composite Active Propensity (yes, no). Values of the regression parameters indicate the change in positive propensity that is produced by each independent variable after that variable has been adjusted for all the other variables appearing in the model.

aVariable was not statistically significant.

*p<.05

**p<.01

***p<.001

1. Sociodemographic and Economic Model

Table D.1 shows that the sociodemographic and economic variables which had a significant effect on prediction of propensity for the initial, limited model included: age, race/ethnicity, educational status, mother's education, marital status, employment status, and the total labor force in the respondent's county of residence. The clearest way to understand the meaning of the tabled parameter values is to think of them as indicating the relative change in the probability of positive propensity which is produced by a unit change in the independent variable for continuous variables, or by the comparison of the base category with the tested category for the categorical variables. For example, race was the sociodemographic variable showing the strongest effect on propensity. The parameter contrasting the effect of Blacks versus whites indicates that Blacks have a probability of positive propensity that is .26 higher than whites. Hispanics have a probability of positive propensity that is .15 higher than whites, while other nonwhites have a probability of positive propensity that is .13 higher than whites. These are all sizeable differences given that propensity can only range from 0.0 to 1.0.

Educational status was also a strong predictor of propensity. Decreasing years of completed education were associated with increasing probability of positive propensity. Compared with the base of 12 years of education, young males with 11 years had a probability of positive propensity which was .12 higher, and those with 10 years had a probability which was .22 higher.

As was shown in Chapter 4, increasing age was significantly associated with decreasing probability of positive propensity. However, the regression analysis indicated that propensity was more a function of educational level and race/ethnicity than of age. Regardless, age still contributed significantly to the prediction of propensity even after adjustment for the effects of these and other variables in the model. More specifically, each yearly increase in age was associated with a .02 decrease in the probability of positive propensity. Thus, a 21-year-old was predicted to have .10 lower probability of positive propensity than a 16-year-old.

Mother's education, which was selected as a proxy measure for socio-economic status, also had a significant effect on propensity. Respondents whose mothers completed fewer than 12 years of education had higher (.05-.06), and those whose mothers completed more than 12 years had lower (also about .05) probabilities of positive propensity than those whose mothers had 12 years of education.

Marital status also affected propensity after controlling for other factors in the model. Those who were single (including never married, divorced, or widowed) showed a probability of positive propensity .10 higher than those who were married.

The two final variables with significant contributions to the socio-demographic and economic model were individual employment status and total county labor force. Of the two variables, the former variable had a stronger effect on propensity. Respondents who were unemployed and looking had a probability of positive propensity that was .11 higher than respondents who were unemployed and not looking for work. Being employed either full time or part time yielded an increase of .05 to .06. Finally, county labor force revealed that the probability of positive propensity decreased as the number of individuals in the labor force in the county where the respondent lives increased--i.e., as one moves from rural to metropolitan areas.

2. Overall Model

The overall model shown in Table D.1 added a series of psychological and behavioral measures to the initial model described above. Addition of these variables to the model both greatly increased the explanatory power (from $R^2 = .13$ to $R^2 = .40$) and decreased the relative impact of all of the sociodemographic and economic variables. In fact, the contributions of marital status, employment status and total county labor force were not statistically significant in the overall model. These results suggest that the contribution to the prediction of propensity of the economic variables, and at least part of that of the sociodemographic variables, may be

indirect, mediated through the individual's beliefs, attitudes and behaviors surrounding the notion of military service.

One's own favorable feelings toward serving in the active military was a very powerful predictor of propensity. Every unit increase in favorability along the five-point attitude scale (e.g., movement from slightly favorable to very favorable) was associated with a .12 increase in the probability of positive propensity.

Similarly, having discussed the possibility of serving in the military with someone in the past year was associated with an increase of .10 in the probability of positive propensity. Having previously considered military service and being willing to advise a friend to see a recruiter were both variables which were shown earlier to be associated with an increase in the probability of expressing positive propensity.

Finally, exposure to media was the only variable related to advertising that proved to be a significant contributor to the prediction of propensity. The relationship, however, is somewhat puzzling. The negative regression parameter indicates that as the number of recalled sources of exposure to military advertising (of print and broadcast media and receipt of mailed recruiting literature) increased, the probability of positive propensity decreased. However, the regression parameter is small and just significant at the .05 level. Follow-up tabulations indicated that media exposure and propensity had a non-linear relationship. There was a decrease in propensity when exposure increased from two to three sources. The small negative parameter in the regression model resulted from fitting a linear component to a non-linear relationship. One possible explanation may be that recruiting literature is sent to the brighter students. As seen in Chapter 11, these highly competent students were less likely to have positive propensity and thus may produce this negative result.

D. Explaining Propensity for Young Females

Table D.2 presents the variables which contributed significantly to the prediction of propensity in both the limited and overall models for young females.

1. Sociodemographic and Economic Model

Examination of Table D.2 reveals that, unlike the results for young males, age, marital status, and total county labor force were not significantly predictive of propensity in this limited model for young females. Similar to the results for the young males, however, race/ethnicity, educational status, mother's education, and employment status did have statistically significant effects.

For young females, being Black increased the probability of positive propensity by .17 over that of the white comparison group. Both nonwhites and Hispanics were also more likely to show a higher probability of positive propensity (by .09 and .06, respectively) than whites. As was the case for young males, decreasing years of completed education were associated with an increasing probability of showing positive propensity. The differences between years, however, were not as striking among the young women as they were among young men.

Both mother's education and employment status showed patterns similar to those observed for the young males. Increasing years of mother's education were associated with decreasing probability of positive propensity. Young females who were unemployed but looking for a job had a probability of positive propensity that was .09 higher than the base group of those who were unemployed and not looking for work. Those who were employed full time and part time were increasingly less likely to show a greater probability of positive propensity than the base group (by .06 and .02, respectively).

Table D.2. Parameter Estimates of Significantly Contributing Variables for Regression Models of Positive Composite Active Propensity for Young Females

Independent Variables/Categories	Sociodemographic/ Economic Model	Overall Model
Age (Years)	a	-0.017**
Race/Ethnicity		
Black vs. white	0.174***	0.099***
Hispanic vs. white	0.060*	0.028
Other nonwhite vs. white	0.089	0.074*
Educational Status		
10 years or less vs. 12 years	0.088***	0.049**
11 years vs. 12 years	0.011	-0.003
More than 12 years vs. 12 years	-0.008	0.009
Mother's Education		
10 years or less vs. 12 years	0.064**	a
11 years vs. 12 years	0.042	
More than 12 years vs. 12 years	-0.011	
Employment Status		
Unemployed-Looking vs. Unemployed-Not looking	0.095***	0.060**
Employed F-T vs. Unemployed-Not looking	0.056**	0.038*
Employed P-T vs. Unemployed-Not looking	0.024	0.011
Exposure to Different Media	-	-0.014*
Previous Consideration of Military Service	-	0.079***
Own Feelings	-	0.080***
Wanted Serving with Someone (Yes vs. No)	-	0.103***
	.08	.34

a. Unfilled values are regression parameters (beta values). Analyses were conducted on the reported data. The criterion (dependent measure) was Positive Composite Active Propensity (yes, no). Values of the regression parameters represent the change in positive propensity that is produced by each independent variable after that variable has been adjusted for all the other variables appearing in the model.

* = statistically significant.

2. Overall Model

The overall model added psychological and behavioral variables to the young females' sociodemographic and economic model. As was the case for the young males, these additional variables also changed the effect of the sociodemographic and economic variables. The contribution of mother's education, for example, dropped below the designated level of statistical significance. Also, the estimated regression parameters for the categories of race/ethnicity, educational status, and employment status were all smaller than they had been in the limited model. Finally, age became a significantly contributing predictor of propensity in the overall model. The negative regression parameter indicates that increasing age was associated with a decreasing probability of expressing positive propensity. Again, the reader should keep in mind that the significant parameters for both age and educational status mean that each of these variables is making a meaningful, independent contribution to the prediction of positive propensity.

The psychological and behavioral variables which made significant contributions to the explanatory power of the overall model were: own feelings about serving in the military; previous consideration of military service; having discussed the possibility of serving in the military with someone in the past year; and degree of exposure to military advertising from different media/sources. For the first three of these four items, an increased score was associated with increased probability of positive active propensity. These results parallel those for the young males, although only the discussion variable shows an equal impact on prediction for the females as it did for the males. The other effects were attenuated somewhat, as shown by the relatively small regression parameters.

In addition, young females showed the same puzzling negative association of propensity and exposure to advertising that was observed among the young males. The same possible explanation regarding ability and directed recruiting literature may apply to them.

Appendix E

Cross Reference - 1986, 1985, 1984, and 1983 YATS Questionnaires

Cross Reference
1983-1986 YATS II Questionnaires

Question Number				Comments*
1986	1985	1984	1983	
401	401	401	A1	Same
402	402	402	A2	Same
403	403	403	A3	Same
404	404	404	A4	Reworded in 1984. Response categories added in 1986
--	--	--	A5/A6	Dropped in 1984
405	405	405	A7	Same
406	406	406	--	Added in 1984
407	407	407	A11	Same
408A	408	408	A12	Same
408B	--	--	--	Added in 1986
408C	--	--	A13	Dropped in 1984. Reworded and added in 1986
409A	409	409	A14	Same
409B	--	--	--	Added in 1986
410A	410A	410A	--	Added in 1984
410B	410B	410B	A8	Reworded in 1984
411	411	411	A9	Same
412-414	412-414	412-414	--	Added in 1984
415	415	415	A10	Reworded in 1984
--	--	--	A15-A16	Dropped in 1984
416	416	416	A17	Same
417	417	417	A18	Reworded in 1984
--	--	418	--	Added in 1984. Dropped in 1985
419	419	419	A19	Same
--	--	420	A20	Same. Dropped in 1985
--	--	421	A21	Same. Dropped in 1985
422A	422	422	A22	Reworded in 1984
422B	--	--	--	Added in 1986
--	--	423		Added in 1984. Dropped in 1985
424B	424	424	A23	Same
--	425	425	A24	Same. Dropped in 1986

*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

Cross Reference

1983-1986 YATS II Questionnaires (continued)

Question Number				Comments*
1986	1985	1984	1983	
--	--	426/427	A26	Reworded in 1984. Dropped in 1985
--	--	428	A25	Same. Dropped in 1985
--	--	429	A27	Same; Dropped in 1985
--	--	--	A28	Dropped in 1984
--	--	--	A29	Dropped in 1984
430	430	430	A30	Same
--	--	--	A31-A34	Dropped in 1984
431	431	431	A35	Reworded in 1984
--	432	432	A36	Same. Dropped in 1986
--	--	433	A37	Same; Dropped in 1985
434	434	434	A38	Reworded in 1984
435	435	435	A39	Probe added in 1984
436	436	436	A40	Same
437	437	437	A41	Same
438	438	438	A42	Same
--	439	439	A43	Same. Dropped in 1986
440	440	440	A44	Same
441	441	441	A45	Same
442	442	442	A46	Same
443	443	443	A47	Same
444-500	444-500	444-500	--	Not used
501	501	501	B1	Same
502	502	502	B2	Same
503	503	503	B3	Same
504	504	504	B4	Same
505	505	505	B5	Same
506	506	506	B6	Same
507	507	507	B7	Same
508	508	508	B8	Same
509	509	509	B9	Same

*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

Cross Reference

1983-1986 YATS II Questionnaires
(continued)

Question Number				Comments*
1986	1985	1984	1983	
510	510	510	B10	Same
511	511	511	B11	Same
512	512	512	B12	Same
513	513	513	B13	Same
514	514	514	B14	Same
515	515	515	B15	Same
516	516	516	--	Added in 1984
517	517	517	--	Added in 1984
518	518	518	--	Not used in 1984 or 1985. Added in 1986
519	519	519	--	Not used
520	520	520	B16	Same
521	521	521	B17	Same
--	--	--	B18	Dropped in 1984
522	522	522	B19	Same
--	523	523	--	Added in 1984. Dropped in 1986
--	524	524	--	Added in 1984. Dropped in 1986
525	525	525	--	Not used in 1984 or 1985. Added in 1986
526-550	526-550	526-550	--	Not used
--	--	--	B20-B34	Dropped in 1984
--	551-553	551-553	B37	Same. Dropped in 1986.
554	554	554	B38	Same. Amount updated in 1986
--	555-558	555-558	B39-B42	Split sample with 559-562 in 1983-1985. Dropped in 1986
559/562	559/562	--		Added in 1984. Split sample with 555-558 in 1984-1985.
559	559	559	--	Reworded & not split sampled in 1986
560	560	560	--	Same. Not split sampled in 1986
561	561	561	--	Same. Not split sampled in 1986
--	562	562	--	Same. Dropped in 1986
563	563	563	--	Not used in 1984 or 1985. Added in 1986
564-570	564-570	564-570	--	Not used.
--	--	--	C1-C32	Dropped in 1984

*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

Cross Reference

1983-1986 YATS II Questionnaires (continued)

Question Number				Comments*
1986	1985	1984	1983	
571	571	571	C33	Same. Reworded in 1986
572	572	572	C34	Same. Reworded in 1986
573	573	573	C35	Same. Reworded in 1986
--	--	--	C36	Dropped in 1984
574	574	574	C37	Same. Reworded in 1986
575	575	575	C38	Same. Reworded in 1986
576	576	576	C39	Same
577	577	577	C40	Same
578A	578	578	C41	Same
578B	--	--	--	Added in 1986
--	--	--	C42	Dropped in 1984
579	579	579	C43	Amount updated in 1984. Service time updated in 1986
580	580	580	C44	Amount updated in 1984. Service time updated in 1986
581	581	581	C45	Amount updated in 1984. Service time updated in 1986
582	582	582	C49	Same
583	583	583	C50	Same. Dropped in 1986
--	--	584	C51	Same. Dropped in 1985
--	--	585	C46	Amount updated in 1984. Dropped in 1985
--	--	586	C47	Amount updated in 1984. Dropped in 1985
--	--	587	C48	Amount updated in 1984. Dropped in 1985
--	--	588	C52	Split sample test in 1984. Dropped in 1985
--	--	589	C53	Same. Dropped in 1985
590-600	590-600	590-600	--	Not used
601	601	601	D1	Same. Reworded in 1986
602-608	602-608	602-608	D2	Same
609A	609A	609A	D3	Same
609B	609B	609B	--	Added in 1984

*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

Cross Reference

1983-1986 YATS II Questionnaires (continued)

Question Number				Comments*
1986	1985	1984	1983	
610	610	610	D4	Same
611	611	611	D5	Same
612	612	612	D6	Same
--	613	613	--	Added in 1984. Dropped in 1986
613A	613A	--	--	Added in 1985
614	614	614	D7	Same
615A	615	615	D8	Same
615B	--	--	--	Added in 1986
616	616	616	D9	Same
617	617	617	D10	Same
618	618	618	D11	Same. Reworded in 1985
619	619	619	D12	Same. Reworded in 1985
620	620	620	D13	Same. Reworded in 1985
621	621	621	D14	Same. Reworded in 1985
622	622	622	D15	Same. Reworded in 1985
623	623	623	D16	Same. Reworded in 1985
--	--	624	D17	Same. Dropped in 1985
625	625	625	D18	Same. Reworded in 1985
626	626	626	D19	Same. Reworded in 1985
--	--	627	D20	Same. Dropped in 1985
627	--	--	--	New item added in 1986
628	628	628	D21	Same
629	629	629	D22	Same. Reworded in 1986
630	630	630	D23	Same. Reworded in 1985
631	631	631	D24	Same
632A	632	632	D25	Reworded in 1984
632B	--	--	--	Added in 1986
--	--	--2	D26	Dropped in 1984
--	--	--	D27	Dropped in 1984
633	633	633	D28	Same
634	634	634	D29	Same
635A	635	635	D30	Reworded in 1984
635B	--	--	--	Added in 1986

*"Same" without additional comment indicates the question wording was the same for all four years. "Same" Followed by a Comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year of the year noted.

Cross Reference

1983-1986 YATS II Questionnaires
(continued)

Question Number				Comments*
1986	1985	1984	1983	
--	--	--	D31	Dropped in 1984
--	--	--	D32	Dropped in 1984
636	636	636	D33	Same
637	637	637	D34	Same
638A	638	638	D35	Reworded in 1984
638B	--	--	--	Added in 1986
--	--	--	D36	Dropped in 1984
--	--	--	D37	Dropped in 1984
639	639	639	D38	Reworded in 1984
640	640	640	D39	Same
641A	641	641	D40	Reworded in 1984
641B	--	--	--	Added in 1986
--	--	--	D41	Dropped in 1984
--	--	--	D42	Dropped in 1984
642	642	642	D43	Same
--	--	643	D44	Dropped in 1985
--	644	644	D45	Same. Dropped in 1986
645	645	645	D46	Reworded in 1984
--	--	--	D47	Dropped in 1984
646	646	646	D48	Reworded in 1984
647	647	647	--	Added in 1984. Dropped in 1986
--	--	648	--	Added in 1984. Dropped in 1985
--	649-678	649-678	--	Added in 1984
650-659	650-659	650-659	--	Added in 1984. Different series substituted in 1986
--	660-678	660-678	--	Added in 1984. Dropped in 1986
--	--	679	D49	Same. Dropped in 1985
--	--	680	D50	Reworded & split sampled in 1984. Dropped in 1985
--	--	681	D51	Reworded & split sampled in 1984. Dropped in 1985
--	--	--	D52-D58	Dropped in 1984
682	682	682	--	Added in 1984

*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

Cross Reference

1983-1986 YATS II Questionnaires (continued)

Question Number				Comments*
1986	1985	1984	1983	
683	683	683	D59	Reworded in 1984
684A	684/688/ 689	684/688/ 689	D60/D62/ D63	Collaped into item in 1986
685B1- 685B6	--	--	--	Added in 1986
--	685-687	685-687	D61	Same. Dropped in 1986
--	688-689	688-689	D62	Same. Combined into 684A in 1986
690	690	690	D63	Same
691	691	691	--	Added in 1984
692	692	692	--	Added in 1984
--	--	--	D65-D67	Dropped in 1984
--	--	695	D69	Same. Dropped in 1985
--	--	696	--	Added in 1984. Dropped in 1985
--	--	697	D79	Reworded in 1984. Dropped in 1985
698	698	698	D70	Same
699	699	699	D71	Same
700	700	700	D72	Same
701	701	701	D73	Same
702-709	702-709	702-709	D74	Same
710-712	710-712	710-712	--	Added in 1984
713A	713F	713F	D75	Same
--	--	--	D76	Dropped in 1984
713B	713	713M	D77	Same
713C	693	693	D64	Same. Reworded in 1986
713D	694	694	D68	Same. Reworded in 1986
713E	--	--	--	Added in 1986
713F	--	--	--	Added in 1986
713G1-G8	--	--	--	Added in 1986
713H	--	--	--	Added in 1986
--	--	--	D78	Dropped in 1984
714	714	714	D80	Same
715	715	715	D81	Same
--	--	--	D81A1	Added in 1983. Dropped in 1984
--	--	--	D81A2	Added in 1983. Dropped in 1984
716	716	716	D82	Same
717	717	717	D83	Same
--	--	718	--	Added in 1984. Dropped in 1985

*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

Appendix F

1986 Screener and Questionnaire

Survey Screener

Questionnaire Section SC--Screening Households for Eligibles

SC_01 Hello, my name is _____. I am calling from the Research Triangle Institute, a non-profit research firm in North Carolina. I am trying to reach (TELEPHONE NUMBER). Did I dial the correct number?

- 1 = Yes
- 2 = No + [SKIP TO NUMBER VERIFICATION SCREEN]
- 3 = LANGUAGE BARRIER + [SKIP TO CALL RECORD SCREEN-TERMINATION]

SC_03 We are conducting an important study for the Federal Government and are calling a random sample of telephone numbers. I need to know what type of number this is. Does it serve a residence, a business, or something else?

- 1 = RESIDENCE + [SKIP TO SC_07]
- 2 = BUSINESS INSTITUTION
- 3 = OTHER

SC_04A Does anyone live there on the premises?

- 1 = Yes
- 2 = No + [SKIP TO CALL RECORD SCREEN-TERMINATION]

SC_04B Is this the number they use as their home phone?

- 1 = Yes
- 2 = No + [SKIP TO CALL RECORD SCREEN-TERMINATION]

SC_07 Is this telephone number just for (your one) household or does it also serve as the home telephone number for people in other households as well?

- 1 = Serves one household +[SKIP TO SC_09A]
- 2 = Serves more than one household

SC_08 Can you tell me the total number of households served by this telephone number?

ENTER THE TOTAL NUMBER OF HOUSEHOLDS.

Now, I would like to talk about your household only.

SC_09A Do ten or more persons currently live in this household?

- 1 = Yes
- 2 = No + [SKIP TO SC_10A]

SC_09B Are any of these persons related to each other?

- 1 = Yes
- 2 = No + [SKIP TO THANK YOU SCREEN-TERMINATION]

SC_10A Is there a telephone with a different number at this residence on which you could also be reached?

1 = Yes

2 = No → [SKIP TO SC_11A]

SC_10B How many different residential numbers, including this number, are there for (your home this structure)?

ENTER NUMBER OF TELEPHONE NUMBERS

SC_11A How many persons 15 or older live in this household? Please include anyone living or staying there now, such as friends, relatives, or boarders, and anyone who usually lives there but is now away from home such as at school, travelling, or in the hospital.

ENTER THE NUMBER

SC_11B And how many are between the ages of 15 and 25?

ENTER THE NUMBER → [IF "0" SKIP TO TERMINATION.]

SC_11C And how many are 25 years or older?

ENTER THE NUMBER

Now, I would like to ask you a couple of questions about each person in your household between 15 and 25 (starting with the youngest).

SC_15 (First, is the youngest person (between 15 and 25 years of age) male or female?/ Now, for the next person (between 15 and 25 years of age). Is this person male or female?)

1 = MALE

2 = FEMALE

3 = NO MORE PEOPLE TO ENTER IN ROSTER → [SKIP TO SC_MORE]

SC_16 How old was (he/she) on (his/her) most recent birthday?

ENTER AGE

SKIP

(IF SC_15 = 1 AND (SC_16 <16 OR SC_16 >25) OR SC_15 = 2 AND (SC_16 <16 OR SC_16 >21)), SKIP TO THE NEXT PERSON AND 25.

SC_17 Is (he/she) currently a high school graduate, or attending high school?

1 = Yes → [SKIP TO SC_18]

2 = No

AD-A185 418

YOUTH ATTITUDE TRACKING STUDY II WAVE <17> -- FALL
<1986> (U) RESEARCH TRIANGLE INST RESEARCH TRIANGLE PARK
NC M M OSTROVE ET AL. JUN 87 RIR/3624/86-02ER
UNCLASSIFIED DMDC MRB-TR-10 MDA903-86-C-0066 F/G 5/9

4/4

NL

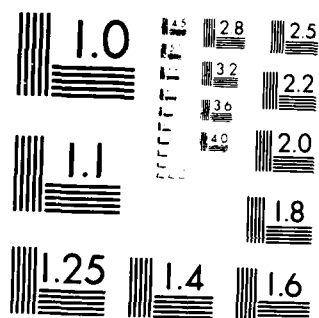
END

DATE

FILED

12 87

11



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

SC_18 Has (he/she) ever been in the military service, college ROTC, the National Guard, or the Reserves?

1 = Yes → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]
2 = No

SC_19 Has (he/she) been accepted for service in a branch of the Armed Forces and is now waiting to go on active duty?

1 = Yes → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]
2 = No

SC_20 Is (he/she) currently living here (at this telephone number)?

1 = Yes → [SKIP TO SC_24]
2 = No

SC_21 Does (he/she) have a telephone?

1 = Yes
2 = No → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]

SC_22 Does (he/she) share the telephone with ten or more people to whom (he/she) is not related?

1 = Yes
2 = No → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]

SC_23 What is (his/her) telephone number?

ENTER TELEPHONE NUMBER

SC_24 What is (his/her) name?

ENTER FIRST AND LAST NAME

REPEAT SC_15 THROUGH SC_24 FOR EACH PERSON IN HOUSEHOLD BETWEEN AGES 15 AND 25.

SC_MORE Are there any other people in the household between 15 and 25 other than those that we have already discussed?

1 = Yes
2 = No → [SKIP TO SC_14]

SC_HWMNY How many others?

ENTER NUMBER

REPEAT SC_15 THROUGH SC_74 ADDITIONAL ELIGIBLE PERSON IDENTIFIED.
IF NO ELIGIBLE PERSONS ARE IDENTIFIED, SKIP TO TERMINATION.

SC_14 The person(s) we need to interview for this study (is/are): (LIST OF NAMES). I would like to speak to (NAME).

- 1 = PERSON AVAILABLE
- 2 = PERSON NOT AT HOME → [SKIP TO CALL BACK SCREEN]
- 3 = REFUSAL - PERSON REFUSES TO GET ELIGIBLE PERSON(S) TO PHONE → [SKIP TO CONVERSION SCREEN]
- 4 = REFUSAL OF ELIGIBLE PERSON → [SKIP TO TERMINATION]

RTI/232U-3624/02-02D

August 22, 1986

Youth Attitude Tracking Study II
1986

SURVEY QUESTIONNAIRE

OMB # 0704-0069
Expires 30 Sep 1989

Contract MDA903-86-C-0066
Expiration Date: 4/1/87

Questionnaire Section A -- Education and Employment Items

401 I would like to speak with (NAME). IS (he/she) available?

- 1 = PERSON AVAILABLE
- 2 = PERSON NOT AVAILABLE + [SKIP TO CALL BACK SCREEN]
- 3 = REFUSAL - PERSON REFUSES TO GET ELIGIBLE PERSON TO
PHONE + [SKIP TO CONVERSION SCREEN]
- 4 = REFUSAL OF ELIGIBLE PERSON + [SKIP TO TERMINATION]

(Hello, my name is _____. I am calling from the (Research Triangle Institute/Amrignon), a private research organization in (North Carolina/ Michigan).)

We are conducting a study to help the Federal government learn more about the career and educational plans of young adults. While your participation is voluntary and you may choose not to answer any question, the information you give us is protected under the Privacy Act of 1974. This means your answers will be kept confidential and your identity will never be known to anyone except the research project staff. We are authorized to conduct this study under United States Code 10-503 and 2358 and Executive Order No. 9397.

402 WHAT IS THE GENDER OF THE PERSON ON THE LINE? [ASK IF NECESSARY:
Are you male or female?]

- 1 = MALE
- 2 = FEMALE

403 Just to be sure that the information we got earlier is correct,
what was your age on your last birthday?

ENTER AGE IN YEARS

FORMAT: 12
RANGE: 16-24

404

Now I have a few questions about your educational experiences and plans. What is the highest grade or year of school or college that you have completed and gotten credit for?

GRADE SCHOOL

07 = LESS THAN 8th GRADE

08 = 8th GRADE

HIGH SCHOOL

09 = 9th GRADE

10 = 10th GRADE

11 = 11th GRADE

12 = 12th GRADE

4-YEAR COLLEGE OR UNIVERSITY

RESOLVE → {

13 = 1st (FRESHMAN) YEAR

14 = 2nd (SOPHOMORE) YEAR

15 = 3rd (JUNIOR) YEAR

16 = 4th (SENIOR) YEAR

GRADUATE OR PROFESSIONAL SCHOOL

RESOLVE → {

17 = 5th YEAR COLLEGE/1st YR GRAD or PROF SCHOOL

18 = 2nd YEAR GRAD or PROF SCHOOL

19 = 3RD YEAR GRAD or PROF SCHOOL

20 = MORE THAN 3 YEARS GRAD or PROF SCHOOL

JUNIOR OR COMMUNITY COLLEGE

RESOLVE → {

21 = 1st YEAR

22 = 2nd YEAR

VOCATIONAL, BUSINESS, OR TRADE SCHOOL

RESOLVE → {

23 = 1st YEAR

24 = 2nd YEAR

25 = MORE THAN 2 YEARS

RESOLVE →

98 = DK → [OUT OF RANGE]

99 = RE

405 What kinds of degrees, diplomas, or certificates have you received from the school(s) you've attended or for the training you've received? [ENTER CODE FOR EACH MENTION.]

- 01 = NONE + [ALLOWED FOR FIRST ENTRY ONLY, SKIP TO Q.407.]
- 02 = ADULT BASIC EDUCATION (ABE) CERTIFICATE
- 03 = GENERAL EDUCATIONAL DEVELOPMENT (GED) H.S. EQUIVALENCY CERTIFICATE
- 04 = HIGH SCHOOL DIPLOMA
- 05 = CERTIFICATE FROM VOCATIONAL, BUSINESS OR TRADE SCHOOL (e.g., LICENSE TO PRACTICE A TRADE).

RESOLVE → {
06 = 2-YEAR JUNIOR OR COMMUNITY COLLEGE (ASSOCIATE) DEGREE
07 = BACHELOR'S DEGREE
08 = ADVANCED GRADUATE OR PROFESSIONAL DEGREE (e.g., Masters, Ph.D., M.D., J.D., D.D.S.)

09 = OTHER DEGREE, DIPLOMA, CERTIFICATE

SKIP	IF Q.404 ≤11, SKIP TO Q.407
------	-----------------------------

406 Do you have a regular high school diploma, a GED, an ABE, or some other kind of certificate (of high school completion)?

- 1 = REGULAR HIGH SCHOOL DIPLOMA
- 2 = ABE (ADULT BASIC EDUCATION) CERTIFICATE (e.g., CORRESPONDENCE, NIGHT SCHOOL)
- 3 = GED (GENERAL EDUCATIONAL DEVELOPMENT) EQUIVALENCY CERTIFICATE
- 4 = SOME OTHER KIND OF CERTIFICATE OF HIGH SCHOOL EQUIVALENCY
- 5 = NONE OF THE ABOVE

407 (In October, will you be/Are you) enrolled in any school, college, vocational or technical program, apprenticeship, or job training course?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.409B.]

408A What kind of school or training program (will you be/are you) enrolled in? [IF MULTIPLE RESPONSES, ENTER HIGHEST CODE.]

01 = NO SCHOOLS OR TRAINING PROGRAM + [1st ENTRY ONLY, SKIP TO Q.409B.]

IF Q.404 { 02 = ADULT BASIC EDUCATION (ABE) (H.S. COURSES IN NIGHT SCHOOL
⇒ 12 OR BY CORRESPONDENCE)
RESOLVE { 03 = TAKING HIGH SCHOOL COURSES IN REGULAR, DAY HIGH SCHOOL
04 = GED OR H.S. EQUIVALENCY PROGRAM

05 = SKILL DEVELOPMENT PROGRAM (e.g., PUBLIC EMPLOYMENT, JOBS, OIC, WIN, JTPA)

06 = ON-THE-JOB TRAINING PROGRAM

07 = APPRENTICESHIP PROGRAM

IF Q.404 { 08 = VOCATIONAL, BUSINESS, OR TRADE SCHOOL
<12, 09 = 2-YEAR JUNIOR OR COMMUNITY COLLEGE
RESOLVE { 10 = 4-YEAR COLLEGE OR UNIVERSITY

SKIP

IF Q.408A ≠ 03 OR ≠ 09 OR ≠ 10, SKIP TO Q.409A.

408B (Will you be/Are you) in the (9th/10th/11th/12th) grade/(1st/2nd) year of college) (in October 1986/now)?

1 = YES +[Assign value: Q408C = Q.404 +1; SKIP TO Q.409A.]

2 = NO

408C What grade or year of college (will you be/are you) enrolled in (in October 1986/now)?

07 = LESS THAN 8th GRADE

08 = 8th GRADE

09 = 9th GRADE

10 = 10th GRADE

11 = 11th GRADE

12 = 12th GRADE

13 = 1st (FRESHMAN) YEAR OF 4-YEAR COLLEGE OR UNIVERSITY

14 = 2nd (SOPHOMORE) YEAR OF 4-YEAR COLLEGE OR UNIVERSITY

21 = 1st YEAR OF JUNIOR COLLEGE OR UNIVERSITY

22 = 2nd YEAR OF JUNIOR COLLEGE OR UNIVERSITY

23 = 1st YEAR OF VOCATIONAL, BUSINESS OR TRADE SCHOOL

24 = 2nd YEAR OF VOCATIONAL, BUSINESS OR TRADE SCHOOL

25 = BEYOND 2nd YEAR OF VOCATIONAL, BUSINESS, OR TRADE SCHOOL

98 = DK

99 = RE

- 409A (Will you be/Are you) enrolled ...
- 1 = full-time or }
2 = part-time } + [SKIP TO Q.410.A]
- 409B When did you last attend school? Please give me the month and year.
- ENTER MONTH FORMAT: 12 [USE LEADING ZERO]
 RANGE: 01 - 12
- ENTER YEAR FORMAT: 12
 RANGE: 75 - 86
- 410A Think about the 1987-1988 school year--that is, the school year after the one that starts this fall. Would you like to get more education or training by attending some kind of school or college during the '87-'88 school year?
- 1 = YES + [SKIP TO Q.411.]
2 = NO
- 410B How about sometime further into the future--would you like to get more schooling?
- 1 = YES
- 2 = NO }
8 = DK } + [SKIP TO Q.415.]
9 = RE }
- 411 What kind of school or college would you like to attend?
- 1 = HIGH SCHOOL + [SKIP TO Q.415.]
- 2 = VOCATIONAL, BUSINESS, OR TRADE SCHOOL
3 = TWO-YEAR JUNIOR OR COMMUNITY COLLEGE
4 = FOUR-YEAR COLLEGE OR UNIVERSITY
5 = GRADUATE OR PROFESSIONAL SCHOOL
- 412 Would that be as a full-time or part-time student?
- 1 = FULL-TIME
2 = PART-TIME

413 Considering all school and living expenses, approximately how much do you think it will cost you for one year of college or vocational training? Will it cost...
[PROBE: Just your best guess will do.]

- 1 = less than 1,000 dollars,
- 2 = at least 1,000 but less than 2,000 dollars,
- 3 = at least 2,000 but less than 3,000 dollars,
- 4 = at least 3,000 but less than 4,000 dollars
- 5 = at least 4,000 but less than 5,000 dollars, or
- 6 = 5,000 dollars or more?

414 Taking into account scholarships, government grants and loans, your own savings and earnings, and help from your family, how much of your yearly school and living expenses could you cover if you go to school? Would you say...

- 1 = all of your expenses,
- 2 = more than three-fourths
- 3 = about three-fourths,
- 4 = about half,
- 5 = about one-fourth
- 6 = less than one-fourth, or
- 7 = none of your expenses?

- 415 (Although you do not plan to be attending school in 1987-1988, what/What) is the highest grade or year of school or college that you would eventually like to complete?

GRADE SCHOOL

07 = LESS THAN 8th GRADE

08 = 8th GRADE

HIGH SCHOOL

09 = 9th GRADE

10 = 10th GRADE

11 = 11th GRADE

12 = 12th GRADE

4-YEAR COLLEGE OR UNIVERSITY

13 = 1st (FRESHMAN) YEAR

14 = 2nd (SOPHOMORE) YEAR

15 = 3rd (JUNIOR) YEAR

16 = 4th (SENIOR) YEAR

GRADUATE OR PROFESSIONAL SCHOOL

17 = 5th YEAR COLLEGE/1st YR GRAD or PROF SCHOOL

18 = 2nd YEAR GRAD or PROF SCHOOL

19 = 3rd YEAR GRAD or PROF SCHOOL

20 = MORE THAN 3 YEARS GRAD or PROF SCHOOL

JUNIOR OR COMMUNITY COLLEGE

21 = 1st YEAR

22 = 2nd YEAR

VOCATIONAL, BUSINESS, OR TRADE SCHOOL

23 = 1st YEAR

24 = 2nd YEAR

25 = MORE THAN 2 YEARS

98 = DK + [OUT OF RANGE]

99 = RE

- 416 Are you currently employed, either full time or part time?

1 = YES +[SKIP TO Q.422A.]

2 = NO

- 417 Are you looking for work now?

1 = YES

2 = NO

- 419 Have you ever had a job for pay?

1 = YES + [SKIP TO Q.422B.]

2 = NO } + [SKIP TO Q.434.]

9 = RE

422A Have you been looking for ...

- 1 = a new job,
- 2 = an additional job, or
- 3 = some other way to increase your income?
- 4 = NOT LOOKING.

422B During the last 12 months, how many weeks were you employed in which you worked for pay at least 10 hours per week?

ENTER NUMBER OF WEEKS

FORMAT: 12 [USE LEADING ZERO]
RANGE: 00 - 52

Now, I have some questions about your (present/last) employment. If you (have/had) more than one job at the same time, I want you to answer for your main job. Usually, that's the job you work(ed) the most hours at, but you should answer for the job that you consider to (be/have been) your main job.

424A How many hours per week (do/did) you usually work at your (main/last) job?

ENTER NUMBER OF HOURS

FORMAT: 12 [USE LEADING ZERO]
RANGE: 01-80

SKIP	IF Q.416 ≠ 2, SKIP TO Q.430.
------	------------------------------

424B When did you last work for pay? Please give me the month and year.

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO]
RANGE: 01-12

ENTER YEAR

FORMAT: 12
RANGE: 73 - 86

430 At your (main/last) job, (are/were) you...

- 1 = an employee of a private company,
- 2 = a government employee
- 3 = self-employed in your own business, or
- 4 = working without pay in a family business or farm?

431 How satisfied (are/were) you with your (present/last) job?
(Are/were) you...

- 1 = extremely satisfied,
- 2 = somewhat satisfied,
- 3 = neither satisfied nor dissatisfied
- 4 = somewhat dissatisfied, or
- 5 = extremely dissatisfied?

434 If you were to get a (different) full-time job within the next year, what wage, salary, or other rate of pay do you think you would earn?

ENTER AMOUNT OF PAY

FORMAT: 12345.67

RANGE: [SEE Q.435.]

435 Is that per... [PROBE: I have to be able to record that rate of pay using these time periods. Is that per...]

- | | |
|---------------------|--------------------------------|
| 1 = hour, | Q.434 RANGE: 1.00 - 25.00 |
| 2 = per day, | Q.434 RANGE: 3.00 - 100.00 |
| 3 = per week, | Q.434 RANGE: 20.00 - 600.00 |
| 4 = every two weeks | Q.434 RANGE: 20.00 - 1,100.00 |
| 5 = twice a month, | Q.434 RANGE: 20.00 - 1,100.00 |
| 6 = per month, or | Q.434 RANGE: 30.00 - 3,000.00 |
| 7 = per year? | Q.434 RANGE: 80.00 - 50,000.00 |

436 How easy or difficult is it for someone your age to get a full-time job in your community? Is it...

- 1 = almost impossible,
- 2 = very difficult,
- 3 = somewhat difficult, or
- 4 = not difficult at all?

437 And how easy or difficult is it for someone your age to get a part-time job in your community? Is it...

- 1 = almost impossible,
- 2 = very difficult,
- 3 = somewhat difficult, or
- 4 = not difficult at all?

438 Now, let's talk about your plans for the next few years. What do you think you might be doing? [PROBE: Anything else?] [ENTER CODE FOR ALL MENTIONS.]

- | | |
|----------------------------------|----------------------|
| 1 = GOING TO SCHOOL | } → [SKIP TO Q.501.] |
| 2 = WORKING | |
| 3 = DOING NOTHING | |
| 4 = OTHER | |
| 5 = JOINING THE MILITARY/SERVICE | |

440 You said you might be joining the military. Which branch of the service would that be?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = COAST GUARD
- 4 = MARINE CORPS
- 5 = NAVY
- 8 = DK }
- 9 = RE } [SKIP TO Q.501.]

441 Which type of service would that be? Would it be...

- 1 = active duty,
- 2 = the Reserves, or
- 3 = the National Guard?

442 If you found for some reason you couldn't join the (Q.440 SERVICE), what service would be your next choice?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = COAST GUARD
- 4 = MARINE CORPS
- 5 = NAVY
- 6 = NONE }
- 8 = DK } +[SKIP TO Q.501.]
- 9 = RE }

443 Which type of service would that be? Would it be...

- 1 = active duty,
- 2 = the Reserves, or
- 3 = the National Guard?

Questionnaire Sections B and C

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.

501 First, how likely is it that you will be working as a (waitress in a restaurant/laborer in construction)? Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?

502 How likely it is that you will be working at a desk in a business office? Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?

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

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?

504 How likely is it that you will be working as a (saleswoman/salesman)? Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?

SERIES 505, 507, 509-513 ASKED IN SEQUENTIAL ORDER AFTER RANDOM START.

505 How likely is it that you will be serving in the National Guard? (Would you say...

- 1 = definitely,
 - 2 = probably,
 - 3 = probably not, or
 - 4 = definitely not?)
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.507.]

506 Is that the...

- 1 = Air National Guard, or the
- 2 = Army National Guard?

507 How likely is it that you will be serving in the Reserves?
(Would you say...)

- 1 = definitely,
 - 2 = probably,
 - 3 = probably not, or
 - 4 = definitely not?)
 - 8 = DK
 - 9 = RE
- } + [SKIP TO Q.509.]

508 Is that the...

- 1 = Air Force Reserve,
- 2 = the Army Reserve,
- 3 = the Coast Guard Reserve,
- 4 = the Marine Corps Reserve, or
- 5 = the Naval Reserve?

509 How likely is it that you will be serving on active duty in the
Coast Guard? (Would you say...)

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

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

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

511 How likely is it that you will be serving on active duty in the
Air Force? (Would you say...)

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

512 How likely is it that you will be serving on active duty in the Marine Corps? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

513 How likely is it that you will be serving on active duty in the Navy? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

514 Now, how likely is it that you will be going to college? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

515 How likely is it that you will be going to vocational or technical school? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

SKIP	IF MALE, SKIP TO Q.517.
------	-------------------------

516 How likely is it that you will be a full-time homemaker? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

517 We've talked about several things you might be doing in the next few years. Taking everything into consideration, what are you most likely to be doing (in October 1987--that is, a year from this fall/after you finish high school)?

- 1 = GOING TO SCHOOL FULL-TIME
 - 2 = GOING TO SCHOOL PART-TIME
 - 3 = WORKING FULL-TIME
 - 4 = WORKING PART-TIME
 - 5 = SERVING IN THE MILITARY
 - 6 = BEING A FULL-TIME HOMEMAKER
 - 7 = OTHER
- [IF "GOING TO SCHOOL" OR "WORKING," PROBE: Will that be full-time or part-time?]

SKIP A	IF Q.517 \neq 2 or \neq 4, SKIP TO "SKIP B"
--------	---

518 In addition to (going to school/working) part-time, what are you most likely to be doing (in October 1987/after you finish high school)?

- 1 = GOING TO SCHOOL FULL-TIME
 - 2 = GOING TO SCHOOL PART-TIME
 - 3 = WORKING FULL-TIME
 - 4 = WORKING PART-TIME
 - 5 = SERVING IN THE MILITARY
 - 6 = BEING A FULL-TIME HOMEMAKER
 - 7 = OTHER
- [IF "GOING TO SCHOOL" OR "WORKING," PROBE: Will that be full-time or part-time?]

SKIP B	IF ONLY 1 OF Q.510-Q.513 \leq 2, SKIP TO Q.521. IF ALL OF Q.510-Q.513 \Rightarrow 3, SKIP TO Q.522.
--------	--

520 You mentioned that you might serve in more than one military service. Which service are you most likely to serve in?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY

521 If you were to join the military service, when do you think you would join? Would you join...

- 1 = within 6 months,
- 2 = between 6 months and 1 year from now,
- 3 = more than 1 year from now but less than 2 years, or
- 4 = would you join more than 2 years from now?

522 Now, I'd like to ask you in another way about the likelihood of your serving in the military. Think of a scale from zero to ten, with ten standing for the very highest likelihood of serving and zero standing for the very lowest likelihood of serving. How likely is it that you will be serving in the military in the next few years?

ENTER NUMBER FORMAT: 12 [USE LEADING ZERO.]
RANGE: 00 (Lowest likelihood)--
10 (Highest likelihood)

525 Before we talked today, had you ever considered the possibility of joining the military? Would you say that...

1 = you never thought about it,
2 = you gave it some consideration, or
3 = you gave it serious consideration?

554 The starting monthly pay for an enlisted person is approximately 600 dollars. Knowing this, how likely it is that you will be serving in the military in the next few years? Would you say...

1 = definitely,
2 = probably,
3 = probably not, or
4 = definitely not?

559 As far as you know, does any service have a program that helps pay for college or vocational training?

1 = YES
2 = NO
8 = DK } → [IF ACTIVE AND RESERVE SUBSAMPLE, SKIP TO Q.571.]
9 = REJ [IF ACTIVE-ONLY SUBSAMPLE, SKIP TO Q.601.] }

560 Which service or services offer a program that helps pay for college or vocational training? [ENTER CODE FOR EACH MENTION.
PROBE: Any others?]

1 = AIR FORCE
2 = ARMY
3 = MARINE CORPS } → [IF ONLY 1 SERVICE MENTIONED, SKIP
4 = NAVY TO Q. 563.]

8 = DK } → [IF ACTIVE AND RESERVE SUBSAMPLE, SKIP TO Q.571.]
9 = REJ [IF ACTIVE-ONLY SUBSAMPLE, SKIP TO Q.601.] }

561 Which service offers the largest educational benefits or do they all offer the same benefits? [PROBE: Just your best guess will do.]

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL SERVICES OFFER SAME BENEFITS.

563 As you understand it, do the educational benefits provide money for college or vocational training...

- 1 = while a person is still in the military,
- 2 = only after a person leaves the military, or
- 3 = both?

SKIP

IF ACTIVE-ONLY SUBSAMPLE, SKIP TO Q.601.

Now, I'm going to ask you a few questions about the National Guard and the Reserves. As you may know, once basic training is completed, National Guard and Reserve members train every month and also attend a longer training period every year called "annual training."

571 How many days do you think members of the National Guard and Reserve train each month, once their basic training is completed? Do not include days spent at annual training. [PROBE: Just your best guess will do.]

ENTER NUMBER OF TRAINING
DAYS PER MONTH

FORMAT: 12 [USE LEADING ZERO]
RANGE: 01-30

572 How many days do you think National Guard and Reserve members spend at annual training camp each year? [PROBE: Just your best guess will do.]

ENTER NUMBER OF DAYS
FOR ANNUAL TRAINING

FORMAT: 12 [USE LEADING ZERO]
RANGE: 01-90

573 How much money do you think someone beginning service in the Guard or Reserves earns for each eight-hour training day?
[PROBE: Just your best guess will do.]

ENTER AMOUNT OF PAY PER DAY

FORMAT: 123 [USE LEADING ZERO]
RANGE: 001-555

SKIP	IF Q.416 = > 2, SKIP TO Q.579. IF Q.416 = 1 AND (3 <= Q.430 <=4), SKIP TO Q.579.
------	---

574 Currently, initial training in the National Guard or Reserve requires 3 to 6 months, full-time. Do you think your employer would hold a job for you if you were away for 3 to 6 months?

1 = YES
2 = NO

575 If your employer held a job for you, do you think you would lose your job seniority during the initial 3 to 6 month training period for the National Guard or Reserves?

1 = YES
2 = NO

576 Does your employer have a specific policy about participation in the National Guard or Reserves?

1 = YES
2 = NO

577 With respect to Guard or Reserve participation, would you say your employer is ...

1 = positive,
2 = neutral, or
3 = negative?

578A Have you ever talked with any supervisor about your employer's policy about the National Guard or Reserves or has any supervisor ever talked about this with you?

1 = YES
2 = NO

578B Are there any laws to protect Guard and Reserve members from losing their jobs or job seniority if they are absent from work to attend military training?

- 1 = YES
- 2 = NO
- 8 = DK

579 How likely would you be to enlist in the National Guard or Reserves for eight years if you received a 2,000 dollar bonus for joining? Would you ...

- 1 = definitely enlist + [SKIP TO Q.582.]
- 2 = probably enlist,
- 3 = probably not enlist, or
- 4 = definitely not enlist?

580 What if you received a 4,000 dollar bonus for eight years in the National Guard or Reserves? Would you...

- 1 = definitely enlist, + [SKIP TO Q.582.]

IF Q.580 {
XQ.579, { 2 = probably enlist,
RESOLVE { 3 = probably not enlist, or
4 = definitely not enlist?

581 How about a 6,000 dollar bonus for eight years? (Would you...

- 1 = definitely enlist,

IF Q.581 {
XQ.580, { 2 = probably enlist,
RESOLVE { 3 = probably not enlist, or
4 = definitely not enlist?)

582 Is there a National Guard or Reserve unit located close enough to you for you to join?

- 1 = YES
- 2 = NO

Questionnaire Section D -- Advertising, Recruiter Contact, and
Demographic Items

601 For which military services do you recall seeing or hearing advertising that encouraged people to enlist in one or more of the services? [ENTER CODE FOR EACH MENTION. PROBE: Any other services?]

0 = NONE → [ALLOWED FOR FIRST MENTION ONLY--SKIP TO Q.602.]

1 = AIR FORCE

2 = ARMY

3 = COAST GUARD

4 = MARINE CORPS

5 = NAVY

6 = NATIONAL GUARD/RESERVES

7 = ONE AD FOR ALL SERVICES

8 = DK → [ALLOWED FOR FIRST MENTION ONLY--SKIP TO Q.602.]

9 = RE → [ALLOWED FOR FIRST MENTION ONLY--SKIP TO INTRO. BEFORE Q.610.]

THE Q.602-Q.608 SERIES IS ASKED CONTINGENT UPON RESPONSES TO Q.601, ACCORDING TO THE FOLLOWING ROUTINE:

1. IF EVERY SERVICE WAS MENTIONED IN Q.601, SKIP TO Q.609A.
2. IF Q.601 ≠ 7 AND RANDOM HALF-SAMPLE VALUE (RANGE = 00-99) < 50, ASK Q.608 BEFORE ASKING ANY OF Q.602-Q.607; OTHERWISE ASK Q.608 AFTER ASKING ALL OF Q.602-Q.607 (THAT HAVE TO BE ASKED).
3. PRESENT Q.602-Q.607 IN RANDOM ORDER. AS EACH QUESTION IN THE SERIES IS SELECTED BY THE RANDOMIZING ROUTINE FOR PRESENTATION, EXECUTE THE FOLLOWING STEP PRIOR TO ACTUAL PRESENTATION ON THE MONITOR: IF THE SERVICE WAS MENTIONED IN Q. 601, SKIP TO (THE NEXT QUESTION IN THE SERIES Q.602-Q.607/Q.608/Q.609A).

602 Do you recall seeing or hearing any advertising for the Air Force recently?

1 = YES

2 = NO

3 = MENTIONED IN Q.601

- 603 Do you recall seeing or hearing any advertising for the Army recently?
- 1 = YES
2 = NO
3 = MENTIONED IN Q.601
- 604 Do you recall seeing or hearing any advertising for the Coast Guard recently?
- 1 = YES
2 = NO
3 = MENTIONED IN Q.601
- 605 Do you recall seeing or hearing any advertising for the Marine Corps recently?
- 1 = YES
2 = NO
3 = MENTIONED IN Q.601
- 606 Do you recall seeing or hearing any advertising for the Navy recently?
- 1 = YES
2 = NO
3 = MENTIONED IN Q.601
- 607 Do you recall seeing or hearing any advertising for the National Guard/Reserves recently?
- 1 = YES
2 = NO
3 = MENTIONED IN Q.601
- 608 Do you recall seeing or hearing any advertising for all the services in one ad recently?
- 1 = YES
2 = NO
3 = MENTIONED IN Q.601

SKIP	IF NONE OF Q.602 - Q.608 = 1 OR = 3, SKIP TO INTRO BEFORE Q.610.
------	--

609A Other than trying to get you to enlist in the military, what was the main idea the advertising for (SERVICE SELECTED RANDOMLY FROM ALL SERVICES MENTIONED IN Q.601 AND ANY ADDITIONAL SERVICES WHOSE ADVERTISING WAS RECALLED IN Q.602-Q.608) was trying to get across?

[PROBE: What did it say or show?]

ENTER VERBATIM RESPONSE.

609B What slogan do you recall seeing or hearing in the advertising for the (Q.609A SERVICE)?

ENTER VERBATIM RESPONSE.

I am going to mention some slogans used by the military in its advertising. After I read each slogan, please tell me whether it is used by...

RANDOM HALF- SAMPLES	the Army, the Air Force, the Marine Corps, the Navy, or, by all four active duty services together in the same ad or commercial?	→ [SERVICES LISTED IN THIS SEQUENTIAL ORDER AFTER RANDOM START]
	all four active duty services together in the same ad or commercial, or by the Army, the Air Force, the Marine Corps or the Navy?	→ [SERVICES LISTED IN THIS SEQUENTIAL ORDER AFTER RANDOM START]

SERIES Q.610-Q.615B ASKED IN RANDOM ORDER.

610 Who in the military uses the advertising slogan, "Blank. It's not just a job. It's an adventure"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

611 Who in the military uses the advertising slogan, "The few. The proud. The Blank"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

612 Who in the military uses the advertising slogan, "Be all you can be"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

- 613A Who in the military uses the advertising slogan, "We're looking for a few good men"?
- 1 = AIR FORCE
 - 2 = ARMY
 - 3 = MARINE CORPS
 - 4 = NAVY
 - 5 = ALL FOUR SERVICES IN SAME AD
- 614 Who in the military uses the advertising slogan, "It's a great place to start"?
- 1 = AIR FORCE
 - 2 = ARMY
 - 3 = MARINE CORPS
 - 4 = NAVY
 - 5 = ALL FOUR SERVICES IN SAME AD
- 615A Who in the military uses the advertising slogan, "Aim high.
Blank"?
- 1 = AIR FORCE
 - 2 = ARMY
 - 3 = MARINE CORPS
 - 4 = NAVY
 - 5 = ALL FOUR SERVICES IN SAME AD
- 615B Who in the military uses the advertising slogan, "We're not a company--we're your country"?
- 1 = AIR FORCE
 - 2 = ARMY
 - 3 = MARINE CORPS
 - 4 = NAVY
 - 5 = ALL FOUR SERVICES IN SAME AD
- 616 Within the last 12 months, do you recall seeing any advertising for the military in magazines, newspapers, or on billboards?
- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } →[SKIP TO Q.618.]

617 For which military services did you see this kind of advertising?
[PROBE: Any others? ENTER CODE FOR EACH MENTION.]

- 1 = ARMY
- 2 = NAVY
- 3 = AIR FORCE
- 4 = MARINE CORPS
- 5 = COAST GUARD
- 6 = ALL ACTIVE SERVICES IN SAME AD
- 7 = ARMY NATIONAL GUARD
- 8 = ARMY RESERVE
- 9 = NAVAL RESERVE
- 10 = AIR NATIONAL GUARD
- 11 = AIR FORCE RESERVE
- 12 = MARINE CORPS RESERVE
- 13 = ALL NATIONAL GUARD/RESERVES

618 Within the last 12 months, do you recall any television or radio advertising for the military?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } + [SKIP TO Q.620.]

619 For which military services did you see or hear this kind of advertising? [PROBE: Any others? ENTER CODE FOR EACH MENTION.]

- 1 = ARMY
- 2 = NAVY
- 3 = AIR FORCE
- 4 = MARINE CORPS
- 5 = COAST GUARD
- 6 = ALL ACTIVE SERVICES IN SAME AD
- 7 = ARMY NATIONAL GUARD
- 8 = ARMY RESERVE
- 9 = NAVAL RESERVE
- 10 = AIR NATIONAL GUARD
- 11 = AIR FORCE RESERVE
- 12 = MARINE CORPS RESERVE
- 13 = ALL NATIONAL GUARD/RESERVES

EXAMPLES, SKIP TO Q.628.

620 Within the last 12 months, have you received any military recruiting literature in the mail without asking for it?

1 = YES

2 = NO }
8 = DK } + [SKIP TO Q.622.]
9 = RE }

621 Which military services did you get literature about? [ENTER CODE FOR EACH MENTION. DO NOT PROBE.]

1 = AIR FORCE
2 = ARMY
3 = MARINE CORPS
4 = NAVY
5 = ALL SERVICES TOGETHER
6 = NATIONAL GUARD
7 = RESERVES

622 Within the last 12 months, have you made a toll-free call for information about the military?

1 = YES

2 = NO }
8 = DK } +[SKIP TO Q.625]
9 = RE }

623 Which military services did you call about? [ENTER CODE FOR EACH MENTION. DO NOT PROBE.]

1 = AIR FORCE
2 = ARMY
3 = MARINE CORPS
4 = NAVY
5 = ALL SERVICES TOGETHER
6 = NATIONAL GUARD
7 = RESERVES

Within the last 12 months, have you sent a postcard or coupon for information about the military?

1 = YES

2 = NO }
8 = DK } + [SKIP TO Q.627.]
9 = RE }

626 Which military services did you send for information about?
[ENTER CODE FOR EACH MENTION. DO NOT PROBE.]

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL SERVICES TOGETHER
- 6 = NATIONAL GUARD
- 7 = RESERVES

627 Within the last 12 months, have you visited a recruiting station
for information about the military?

- 1 = YES
- 2 = NO

628 Have you ever talked with any military recruiter to get
information about the military?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.630.]

629 What service or services of the military did the recruiter
represent? [ENTER CODE FOR EACH MENTION. PROBE: Any other
service's recruiter? UNTIL NO MORE MENTIONS.]

- 1 = AIR FORCE
 - 2 = ARMY
 - 3 = MARINE CORPS
 - 4 = NAVY
 - 8 = DK
 - 9 = RE
- } [SKIP TO Q.645.]

SKIP

IF Q.629 = 1, SKIP TO Q.631.
IF Q.629 ≠ 1 AND Q.629 = 2, SKIP TO Q.634.
IF Q.629 ≠ 1 OR 2 AND Q.629 = 3, SKIP TO Q.637.
IF Q.629 ≠ 1 OR 2 OR 3 AND Q.629 = 4, SKIP TO Q.640.

630 Do you think that, in the future, you might talk to a recruiter to get information about the military?

1 = YES }
2 = NO }
8 = DK } →[SKIP TO Q.645.]
9 = RE }

631 Did the Air Force recruiter represent the... [ENTER CODE FOR EACH MENTION.]

1 = active Air Force,
2 = the Air Force Reserve, or
3 = the Air National Guard?

632A How did you and the Air Force recruiter get in touch the first time you talked? Did you...

1 = get a phone call from the recruiter, or }
2 = did you call the recruiter, or }
3 = talk at a recruiting station, or } →[SKIP TO Q.633.]
4 = talk at a job fair, or }
5 = talk at school, or }
6 = did you get in touch some other way? }

632B How did you and the Air Force recruiter get in touch the first time you talked?

ENTER VERBATIM RESPONSE.

633 When did you last talk with the Air Force recruiter--what month and year was your last contact with an Air Force recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]
RANGE: 01-12

ENTER YEAR

FORMAT: 12
RANGE: 73-86

SKIP	IF Q.629 ≠ 2 AND Q.629 = 3, SKIP TO Q.637. IF Q.629 ≠ 2 OR 3 AND Q.629 = 4, SKIP TO Q.640. IF Q.629 ≠ 2 OR 3 OR 4, SKIP TO Q.645.
------	---

634 Did the Army recruiter represent the... [ENTER CODE FOR EACH MENTION.]

- 1 = active Army,
- 2 = the Army Reserve, or
- 3 = the Army National Guard?

635A How did you and the Army recruiter get in touch the first time you talked? Did you...

- 1 = get a phone call from the recruiter, or
 - 2 = did you call the recruiter, or
 - 3 = talk at a recruiting station, or
 - 4 = talk at a job fair, or
 - 5 = talk at school, or
- } → [SKIP TO Q.636.]

6 = did you get in touch some other way?

635B How did you and the Army recruiter get in touch the first time your talked?

ENTER VERBATIM RESPONSE.

636 When did you last talk with the Army recruiter--what month and year was your last contact with an Army recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]
RANGE: 01-12

ENTER YEAR

FORMAT: 12
RANGE: 73-86

SKIP	IF Q.629 ≠ 3 AND Q.629 = 4, SKIP TO Q.640. IF Q.629 ≠ 3 OR 4, SKIP TO Q.645.
------	---

637 Did the Marine Corps recruiter represent the...

- 1 = active Marine Corps, or
- 2 = the Marine Corps Reserve?
- 3 = BOTH OF THE COMPONENTS ABOVE

638A How did you and the Marine Corps recruiter get in touch the first time you talked? Did you...

- 1 = get a phone call from the recruiter, or
 - 2 = did you call the recruiter, or
 - 3 = talk at a recruiting station, or
 - 4 = talk at a job fair, or
 - 5 = talk at school, or
 - 6 = did you get in touch some other way?
- } → [SKIP TO Q.639.]

6388 How did you and the Marine Corps recruiter get in touch the first time you talked?

ENTER VERBATIM RESPONSE.

639 When did you last talk with the Marine Corps recruiter--what month and year was your last contact with a Marine Corps recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]

RANGE: 01-12

ENTER YEAR

FORMAT: 12

RANGE: 73-86

SKIP	IF Q.629 ≠ 4, SKIP TO Q.645.
------	------------------------------

640 Did the Navy recruiter represent the...

1 = active Navy, or

2 = the Naval Reserves?

3 = BOTH OF THE COMPONENTS ABOVE

641A How did you and the Navy recruiter get in touch the first time you talked? Did you...

1 = get a phone call from the recruiter, or

2 = did you call the recruiter, or

3 = talk at a recruiting station, or

4 = talk at a job fair, or

5 = talk at a school, or

6 = did you get in touch some other way?

} → [SKIP TO Q.642.]

641B How did you and the Navy recruiter get in touch the first time you talked?

ENTER VERBATIM RESPONSE.

642 When did you last talk with the Navy recruiter--what month and year was your last contact with a Navy recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]

RANGE: 01-12

ENTER YEAR

FORMAT: 12

RANGE: 73-86

645 Have you ever taken the three-hour written test called the ASVAB that is required to enter the military?

1 = YES + [SKIP TO Q.647.]

2 = NO

8 = DK

646 Do you think you might take the written test required for the military in the future?

1 = YES
2 = NO
8 = DK } + [SKIP TO Q.649.]

647 Where did you take this written test? Did you take the ASVAB...

1 = at your high school,

2 = at a Military Entrance Processing Station (MEPS), OR

3 = somewhere else?

Now, I'd like to get some opinions about the four active-duty Services. Please tell me which Service, if any, you think about first when I mention each item.

SERIES Q.650--Q.659 ASKED IN RANDOM ORDER.

WITHIN EACH QUESTION IN THE SERIES Q.650--Q.659, THE SERVICES ARE LISTED IN ONE OF FOUR SEQUENCES. THE PARTICULAR SEQUENCE IS DETERMINED RANDOMLY BEFORE ANY QUESTION IN THE SERIES IS PRESENTED AND THAT SEQUENCE IS USED FOR EVERY QUESTION IN THE SERIES.

650 (Which one Service do you think of first when I mention...)

"Provides money for education? Do you first think of the...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "provides money for education?"]

651 (Which one Service do you think of first when I mention...)

"Lack of personal freedom?" (Do you first think of the ...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "lack of personal freedom?"]

652 (Which one Service do you think of first when I mention...)

"Teaches valuable skills and trades?" (Do you first think of the...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "teaches valuable skills and trades?"]

653 (Which one Service do you think of first when I mention...)

"Extended duty away from immediate family?" (Do you first think of the ...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: "Which one Service do you think of first when I mention extended duty away from immediate family?"]

654 (Which one Service do you think of first when I mention...)

"Opportunities for promotion and advancement?" (Do you first think of the ...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "opportunities for promotion and advancement?"]

655 (Which one Service do you think of first when I mention...)

"Equal pay and advancement for men and women?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "equal pay and advancement for men and women?"]

656 (Which one Service do you think of first when I mention...)

"Assignment to work that does not prepare you for a civilian career?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "assignment to work that does not prepare you for a civilian career?"]

657 (Which one Service do you think of first when I mention...)

"Defending your country?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "defending your country?"]

658 (Which one Service do you think of first when I mention...)

"Working in a high-technology environment?" (Do you first think of the ...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "working in a high-technology environment?"]

659 Which one Service do you think of first when I mention...

"Work in or near a combat zone?" (Do you first think of the ...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "work in or near a combat zone?"]

682 Has a good friend or close relative of yours signed up with one of the military services within the last 6 months?

- 1 = YES
- 2 = NO

683 Within the last year or so, have you discussed with anyone the possibility of your serving in the military?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } + [SKIP TO Q.690.]

684A With whom did you discuss serving in the military? [DO NOT READ LIST. PROBE: Anyone else?] [ENTER CODE FOR EACH MENTION.]

- 01 = FRIENDS
- 02 = MOTHER
- 03 = FATHER
- 04 = A BROTHER OR SISTER
- 05 = SOME OTHER RELATIVE
- 06 = BOY/GIRL FRIEND OR SPOUSE
- 07 = A TEACHER
- 08 = A COUNSELOR AT SCHOOL
- 09 = A RECRUITER
- 10 = A CO-WORKER
- 11 = AN EMPLOYER

SKIP	IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 OR ≠ 6, SKIP TO Q.690. IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 AND = 6, SKIP TO Q.684B6 IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 OR ≠ 4 AND = 5, SKIP TO Q.684B5. IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 AND = 4, SKIP TO Q.684B4. IF Q.684A ≠ 1 OR ≠ 2 AND = 3, SKIP TO Q.684B3. IF Q.684A ≠ 1 AND = 2, SKIP TO Q.684B2.
------	--

684B1 (Is this/Are any of these) friend(s) currently serving on active duty in the military?

- 1 = YES
- 2 = NO

SKIP	IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 OR ≠ 6), SKIP TO Q.690. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 AND = 6), SKIP TO Q.684B6. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 AND = 5), SKIP TO Q.684B5. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 AND = 4), SKIP TO Q.684B4. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 AND = 3), SKIP TO Q.684B3. IF Q.684B1 ≠ 1 AND Q.684 = 2, SKIP TO Q.684B2.
------	--

SKIP	IF Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 OR ≠ 6, SKIP TO Q.690. IF Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 AND = 6, SKIP TO Q.684B6. IF Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 AND = 5, SKIP TO Q.684B5. IF Q.684A ≠ 2 OR ≠ 3 AND = 4, SKIP TO Q.684B4. IF Q.684A ≠ 2 AND = 3, SKIP TO Q.684B3.
------	---

684B2 Is your mother currently serving on active duty in the military?

- 1 = YES
- 2 = NO

SKIP	IF Q.684A ≠ 3 OR ≠ 4 OR ≠ 5 OR ≠ 6, SKIP TO Q.690. IF Q.684A ≠ 3 OR ≠ 4 OR ≠ 5 AND = 6, SKIP TO Q.684B6. IF Q.684A ≠ 3 OR ≠ 4 AND = 5, SKIP TO Q.684B5. IF Q.684A ≠ 3 AND = 4, SKIP TO Q.684B4.
------	--

684B3 Is your father currently serving in the active duty in the military?

- 1 = YES
- 2 = NO

SKIP	IF Q.684A ≠ 4 OR ≠ 5 OR ≠ 6, SKIP TO Q.690. IF Q.684A ≠ 4 OR ≠ 5 AND = 6, SKIP TO Q.684B6. IF Q.684A ≠ 4 AND = 5, SKIP TO Q.684B5.
------	--

Q684B4 Is your brother or sister currently serving on active duty in the military?

- 1 = YES
- 2 = NO

SKIP	IF Q.684A ≠ 5 OR ≠ 6, SKIP TO Q.690. IF Q.684A ≠ 5 AND = 6, SKIP TO 684B6.
------	---

Q684B5 Is your (other relative) currently serving on active duty in the military?

- 1 = YES
- 2 = NO

SKIP	IF Q.684A ≠ 6, SKIP TO Q.690.
------	-------------------------------

684B6 Is your ((boy/girl) friend/spouse) currently serving on active duty in the military?

- 1 = YES
- 2 = NO

690 If a good friend of yours asked your advice about seeing a military recruiter, would you say it was...

- 1 = a waste of time,
- 2 = up to him or her, or
- 3 = a good idea?

691 How do the people who matter most to you feel about your serving in the active military? Would you say that most of them are...

- 1 = very favorable
- 2 = somewhat favorable,
- 3 = neither favorable nor unfavorable,
- 4 = somewhat unfavorable, or
- 5 = very unfavorable toward your serving in the active military?

692 How do you feel about serving in the active military yourself?
Are you...

- 1 = very favorable
- 2 = somewhat favorable,
- 3 = neither favorable nor unfavorable,
- 4 = somewhat unfavorable, or
- 5 = very unfavorable toward your serving in the active military?

Next, I have a few questions about your education.

698 Have you ever taken a college entrance examination such as the PSAT (Preliminary Scholastic Aptitude Test), the SAT (Scholastic Aptitude Test), or the ACT (American College Testing Program)?

- 1 = YES → [SKIP TO Q.700.]
- 2 = NO

699 In the future do you plan to take a college entrance examination?

- 1 = YES
- 2 = NO

SKIP	IF Q.404 <9 AND Q.407⇒ 2, SKIP TO Q.713A.
------	---

700 What grades (do/did) you usually get in high school?

- 1 = Mostly A's (a numerical average of 90-100)
- 2 = Mostly A's and B's (85-89)
- 3 = Mostly B's (80-84)
- 4 = Mostly B's and C's (75-79)
- 5 = Mostly C's (70-74)
- 6 = Mostly C's and D's (65-69)
- 7 = Mostly D's and F's (64 and below)

701 (Is/Was) your high school program...

- 1 = academic or college preparatory,
- 2 = commercial or business training,
- 3 = vocational or technical?

Now I have a list of high school mathematics and technical courses. As I read each one, please tell me whether you have taken or plan to take that course in regular high school.

702 Elementary algebra (ALGEBRA I)

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

703 Plane geometry

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

704 Business math

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

705 Computer science

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

706 Intermediate algebra (ALGEBRA II)

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

707 Trigonometry

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

708 Calculus

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

709 Physics

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

SKIP IF OLDER MALE, SKIP TO Q.713A.
--

710 (Does/Did) your high school have a computerized system that provide(s/d) information about careers?

- 1 = YES
- 2 = NO
- 3 = DK } +[SKIP TO Q.713A.]

711 In using this system, did you get any information about the military?

- 1 = YES
- 2 = NO
- 3 = DID NOT USE SYSTEM }+ [SKIP TO Q.713A]

712 Did the information about the military that you got from the system increase your interest in the military?

- 1 = YES
- 2 = NO

713A What is the highest grade or year of school or college that your father completed?

- 07 = LESS THAN 8th GRADE
- 08 = 8th GRADE
- 09 = 9th GRADE
- 10 = 10th GRADE
- 11 = 11th GRADE
- 12 = 12th GRADE
- 13 = 1st YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS., OR TRADE SCHOOL (FRESHMAN)
- 14 = 2nd YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS., OR TRADE SCHOOL (SOPHOMORE)
- 15 = 3rd YEAR OF 4-YEAR COLLEGE (JUNIOR)
- 16 = 4th YEAR OF 4-YEAR COLLEGE (SENIOR)
- 17 = 5th YEAR COLLEGE/1st YEAR GRAD. OR PROF. SCHOOL
- 18 = 2nd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 19 = 3rd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 20 = MORE THAN 3 YEARS GRADUATE/PROFESSIONAL SCHOOL

713 What is the highest grade or year of school or college that your mother completed?

07 = LESS THAN 8th GRADE
08 = 8th GRADE
09 = 9th GRADE
10 = 10th GRADE
11 = 11th GRADE
12 = 12th GRADE
13 = 1st YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS.,
OR TRADE SCHOOL (FRESHMAN)
14 = 2nd YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS.,
OR TRADE SCHOOL (SOPHOMORE)
15 = 3rd YEAR OF 4-YEAR COLLEGE (JUNIOR)
16 = 4th YEAR OF 4-YEAR COLLEGE (SENIOR)
17 = 5th YEAR COLLEGE/1st YEAR GRAD. OR PROF. SCHOOL
18 = 2nd YEAR GRADUATE OR PROFESSIONAL SCHOOL
19 = 3rd YEAR GRADUATE OR PROFESSIONAL SCHOOL
20 = MORE THAN 3 YEARS GRADUATE/PROFESSIONAL SCHOOL

713C Just to be sure we are representing all groups in our survey, I need to ask you a few more questions. Please tell me whether you are currently...

1 = married,
2 = widowed,
3 = separated,
4 = divorced, or
5 = are you single and never been married?

713D Not counting yourself (but counting your spouse), how many dependents do you have--that is, how many people depend on you for more than 50 percent of their support?

ENTER NUMBER OF DEPENDENTS FORMAT: 12 [USE LEADING ZERO.]
RANGE: 00-10

713E How many brothers do you have? Please include step-brothers and half-brothers.

ENTER NUMBER OF BROTHERS FORMAT: 12 [USE LEADING ZERO.]
RANGE: 00-27

713F How many sisters do you have? Please include step-sisters and half-sisters.

ENTER NUMBER OF SISTERS FORMAT: 12 [USE LEADING ZERO.]
RANGE: 00-27

Which of the following people live in the same household with you?

713G1 Your mother?

1 = YES

2 = NO → [PROBE: What about a step-mother or female guardian?]

713G2 Your father?

1 = YES

2 = NO → [PROBE: What about a step-father or male guardian?]

SKIP	IF Q.713E = 0 AND Q.713F = 0 AND Q.713C ≠ 1, SKIP TO Q.713G6. IF Q.713E = 0 AND Q.713F = 0 AND Q.713C = 1, SKIP TO Q.713G5. IF Q.713E = 0 AND Q.713F > 0, SKIP TO Q.713G4.
------	--

713G3 (Your brother(s)?)

1 = YES

2 = NO → [PROBE: What about step-brother(s) or half-brother(s)?]

SKIP	IF Q.713F = 0 AND Q.713C ≠ 1, SKIP TO Q.713G6. IF Q.713F = 0 AND Q.713C = 1, SKIP TO Q.713G5.
------	--

713G4 (Your sister(s)?)

1 = YES

2 = NO → [PROBE: what about step-sister(s) or half-sister(s)?]

SKIP	IF Q.713C ≠ 1, SKIP TO Q.713G6.
------	---------------------------------

713G5 (Your (husband,wife)?)

1 = YES

2 = NO

713G6 Your children?

1 = YES

2 = NO → [PROBE: What about step-children or wards?]

713G7 Any other relatives?

1 = YES

2 = NO

713G8 Any non-relatives?

1 = YES

2 = NO

SKIP	IF ANY OF Q.713G1 through Q.713G8 = 1, SKIP to Q.714.
------	---

713H Do you live alone then?

1 = YES

RESOLVE→ 2 = NO

8 = DK → [OUT OF RANGE.]

714 Do you consider yourself... [IF "HISPANIC" PROBE: Do you consider your race to be white, black, Asian, or American Indian?]

1 = white?

2 = black?

3 = Asian or Pacific Islander? (INCLUDES CHINESE, JAPANESE, FILIPINO, KOREAN, VIETNAMESE, PACIFIC ISLANDER, ASIAN INDIAN, OR OTHER ASIAN)

4 = American Indian or Alaskan Native?

715 Are you of Hispanic background? [INCLUDES SPANISH-AMERICAN, MEXICAN-AMERICAN, PUERTO RICAN, CHICANO, CUBAN-AMERICAN, ETC.]

1 = YES, HISPANIC BACKGROUND

2 = NO, NOT HISPANIC BACKGROUND

716 Now, I need to record your Social Security Number. By law, you do not have to tell me your Social Security Number, but it would help our study--so, can you tell me what it is? [PROBE: Would you look it up? I'll wait.]

ENTER THE 9 DIGIT SOCIAL SECURITY NUMBER OR THE CHARACTERS BELOW.

FORMAT: 123456789

DK = Doesn't know

N = No SSN

RE = Refusal

X = Asked questions

SKIP	IF Q.716 ≠ RE or X, SKIP TO Closing Statement.
------	--

717

We need this information for use in another study that matches enlistments in the Armed Forces to some of the ideas we've been discussing in this interview.

ENTER THE 9 DIGIT SOCIAL SECURITY NUMBER OR THE CHARACTERS BELOW.

FORMAT: 123456789

DK = Doesn't know

N = No SSN

RE = Refusal

DATE
FILMED
28