

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

AD-A161 857



DEFENSE

MANPOWER DATA CENTER

**YOUTH ATTITUDE TRACKING
STUDY II
RESEARCH TRIANGLE INSTITUTE
WAVE 15 - FALL 1984
REPORT**

DMC FILE COPY

**DTIC
ELECTE
S DEC 2 1985 D
A**

This document has been approved
for public release and sale; its
distribution is unlimited.

1600 WILSON BOULEVARD ARLINGTON, VIRGINIA 22209

85 09 04 06 7

①

YOUTH ATTITUDE TRACKING STUDY II
Fall 1984

DTIC
ELECTE
S DEC 2 1985 D
R A

by

Robert M. Bray
Mary Ellen McCalla
Frederick W. Immerman
L. Lynn Guess
George H. Dunteman

RTI/2927/05-02FR
April 1985

This document has been approved
for public release and sale; its
distribution is unlimited.

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
<i>After an file</i>	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
<i>A1</i>	



This report has been prepared for the Directorate of Accession Policy, Office of the Assistant Secretary of Defense (Force Management and Personnel) under Contract Number MDA903-83-C-1072, expiring April 1, 1985. The Research Triangle Institute (RTI) has been the contractor of 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.

Additional copies of this report may be obtained from

Defense Manpower Data Center
 Survey and Market Analysis Division
 1600 N. Wilson Boulevard, Suite 400
 Arlington, VA 22209

TABLE OF CONTENTS

	<u>Page</u>
PREFACE	xi
EXECUTIVE SUMMARY	xiii
1. RELATIONSHIP BETWEEN ENLISTMENT INTENTIONS AND ENLISTMENT BEHAVIOR	1
A. Background and Measures	1
B. Intentions, Enlistments, and Test Taking.	3
C. Controlling for the Effects of Background Characteristics on Enlistment.	5
D. Contributions of Intention Groups	7
E. Aggregate Intention and Enlistment Rates.	8
F. Summary	9
2. INTRODUCTION TO THE 1984 YOUTH ATTITUDE TRACKING STUDY II.	11
A. 1984 YATS II Objectives	11
B. 1984 YATS II Features	11
1. Distinctive Features	12
2. Propensity as an Organizing Theme.	12
3. Market Segmentation Approach	13
4. Market Groups.	13
C. Report Organization	15
1. Background and Methodology	15
2. The Three Market Groups.	15
3. Recruiting Priority Groups for Active Services	16
4. Targeting the Market	17
3. METHODOLOGY OF YATS II	19
A. Sampling Design Overview.	19
B. Data Collection Procedures.	24
1. CATI System.	24
2. Phased Approach to Data Collection	24
a. Phase I and Phase II.	24
b. Phase III	25
c. Phase IV.	25
C. Survey Response Data and Performance Rates.	26
D. Survey Questionnaire.	28
1. Content of the Interview	28
2. Configuration of Question Sets	28
E. Characteristics of Respondent Population.	29
4. ENLISTMENT PROPENSITY AND MILITARY ORIENTATIONS.	33
A. Measurement of Propensity	33
B. Propensity Toward Active Service and the Reserve Component.	34
1. Service-Specific and Composite Active Propensity	34
2. Comparison of Active Propensity in 1983 and 1984	36
3. Propensity to Enlist in the National Guard and Reserves.	36
4. Unaided Mentions of Plans to Join the Military	39

TABLE OF CONTENTS (continued)

	<u>Page</u>
C. Trends in Positive Active Propensity.	42
D. Demographic Profiles of Active Propensity Groups.	47
E. Understanding 1983-1984 Changes in Propensity	50
1. Comparing Demographics of 1983 and 1984 Respondents.	50
2. Employment Status and Propensity	52
F. Summary	57
5. CONSIDERATION OF MILITARY AND CIVILIAN ALTERNATIVES.	61
A. Desired Job Characteristics	61
B. Perceptions of the Occurrence of Job Characteristics in the Military.	64
C. Military Service and Other Plans.	66
1. Alternative Activities	66
2. Most Likely Plans.	69
3. Composite Active Propensity and Reserve Propensity	69
D. Previous Consideration of Military Service.	74
E. Normative and Attitudinal Influences on Plans to Serve.	76
F. Summary	78
6. ENLISTMENT INCENTIVES AND MILITARY ORIENTATIONS.	81
A. Active Services	81
1. Orientations Toward Active Military Service.	81
2. General Intentions and Knowledge of Monthly Starting Pay.	83
3. Effect of Starting Pay Information on Probability of Serving.	86
4. Propensity and Knowledge of Enlistment Bonus	88
5. Propensity and Knowledge of Educational Benefits	90
B. Reserve Component	92
1. Knowledge of Pay and Time Required for Guard/Reserve Participation.	92
2. Effects of Cash Bonuses and Tuition Assistance	94
3. Proximity to Guard/Reserve Unit and Transfer Policies.	97
4. Perceived Influence of Guard/Reserve Participation on a Civilian Job	99
5. Likelihood of Joining an Individual Ready Reserve Program.	101
C. Summary	105

TABLE OF CONTENTS (continued)

	<u>Page</u>
7. INFORMATION SEEKING AND RECRUITER CONTACT.	109
A. Advertising Awareness	109
B. Recognition of Military Advertising Slogans	113
C. Media-Specific Awareness of Military Advertising.	115
D. Informal Sources of Information	117
E. Information Seeking by Mail and Telephone	120
F. Contact with Recruiters	120
G. Physical and Written Tests.	123
H. Levels of Information Exposure.	123
I. Summary	127
8. RECRUITING PRIORITY GROUPS AND PROPENSITY.	133
A. Defining Recruiting Priority Groups	133
1. Defining Enlistment Desirability	133
2. Classification of Recruiting Priority Groups	134
B. Sociodemographic Characteristics of RPGs.	137
1. Young Males.	139
2. Females.	139
C. Educational Characteristics of RPGs	142
1. Young Males.	142
2. Females.	144
D. Employment Characteristics of RPGs.	146
1. Young Males.	146
2. Females.	146
E. Enlistment Prospects of RPGs.	150
F. Alternative Classification of Recruiting Groups	153
1. Defining Alternative Recruiting Groups	153
2. Comparison of RPGs and Alternative Groups.	154
3. Characteristics of Alternative Groups.	156
G. Summary	160
9. RECRUITING PRIORITY GROUPS AND SELECTED ENLISTMENT-RELATED ISSUES.	165
A. Knowledge of Pay and Enlistment Incentives for RPGs	165
B. Awareness of Military Advertising for RPGs.	167
C. Information Seeking Among RPGs.	169
D. Recruiter Contact and Military Test Taking Among RPGs	172
E. Preference and Achievability of Job Characteristics for RPGs.	174
F. Most Likely Plans for Next Year Among RPGs.	178
G. Summary	181

TABLE OF CONTENTS (continued)

	<u>Page</u>
10. MULTIVARIATE ANALYSES OF PROPENSITY FOR RECRUITING PRIORITY GROUPS	187
A. Measures	187
B. Analytical Approach of Linear Discriminant Function Analysis.	189
1. Overview	189
2. Specific Analyses.	191
C. Results for Males	192
1. Data Patterns.	192
2. Discriminant Function 1: An Attitudinal Dimension	198
3. Discriminant Function 2: An Age/Race Dimension.	199
D. Results for Females	201
1. Data Patterns.	201
2. Discriminant Function 1: An Attitudinal Dimension	205
E. Summary	207
REFERENCES.	211
Appendix A: Sampling Design and Estimation Procedures.	213
Appendix B: Estimated Sampling Errors.	225
Appendix C: Sociodemographic Characteristics by Reserve Propensity	233
Appendix D: Errata to Supplementary Tabulations.	237
Appendix E: History and Methodology.	263
Appendix F: Questionnaire Cross Reference.	295
Appendix G: Survey Screener and Questionnaire.	309

LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1.1	Enlistment and Production ASVAB Testing Rates by Intention Level	3
1.2	Variables Used in Regression Testing Significance of Intention Information	5
1.3	Effect of Positive Intentions on Enlistment Decision After Controlling for Background Factors.	6
1.4	Contributions of Intention Groups to Total Enlistments.	7
2.1	Relationship of YATS, RCAS, and YATS II Surveys	14
3.1	Designed Distribution of the 1984 Young Male New Sample	22
3.2	1984 YATS Response Data and Performance Rates	27
3.3	Question Sets and Sample Respondents.	29
3.4	Estimates of Sociodemographic Characteristics of Respondent Population.	30
4.1	Distribution of Propensity to Enlist in the Active Military, 1984.	35
4.2	Composite Active Propensity, 1983 and 1984.	37
4.3	Active-Duty, Service-Specific Propensity for 1983 and 1984.	38
4.4	Distribution of Propensity to Enlist in the National Guard and Reserves, 1983 & 1984	40
4.5	Positive Propensity to Enlist in the Reserve Components, 1983 and 1984	41
4.6	Unaided Mentions of Interest in Serving in the Military, 1983 and 1984	43
4.7	Composite Active Propensity and Sociodemographic Characteristics	48
4.8	Positive Composite Active Propensity by Race/Ethnicity and Age	49
4.9	Sociodemographic Characteristics for 1983 and 1984.	51
4.10	Age, Employment Status, and Active Propensity for Young Males in 1983 and 1984.	53
5.1	Desired Job Characteristics	62
5.2	Whether Job Characteristics Are More Likely to Occur in Military or Civilian Job.	65
5.3	General Intention to Join the Military by Alternative Plans	67
5.4	Most Likely Plan for Next Year (or After High School) by General Intention to Serve in the Military.	70
5.5	Propensity for Serving in Active Services and Reserve Components.	72
5.6	Propensity for Serving in Guard and Reserves.	73
5.7	Previous Consideration of Military Service.	75
5.8	Influences on Serving in the Active Military.	77

LIST OF TABLES (continued)

	<u>Page</u>
6.1 Attitudes Towards Draft Registration.	82
6.2 Composite Active Propensity and Attitudes Toward a National Service Program for Males and Females	84
6.3 General Intention and Knowledge of Monthly Starting Pay	85
6.4 Effect of Being Informed of Actual Starting Pay on General Intention to Serve in the Military.	87
6.5 Knowledge About Cash Enlistment Bonus	89
6.6 Knowledge About Post Military Educational Benefits.	91
6.7 Knowledge of Pay and Time Required to Participate in the Reserve Component	93
6.8 Incremental Effects of Cash Bonus and Tuition Assistance on Propensity to Enlist in Guard/Reserve	95
6.9 Proximity to Guard/Reserve Unit and Perceptions of Transferability	98
6.10 Perceived Influence of Guard/Reserve Participation on a Civilian Job.	100
6.11 Propensity to Enlist in the Individual Ready Reserve (IRR) Program	102
6.12 Effects of \$1,000 Bonus on Plans to Join the Individual Ready Reserve	104
7.1 Levels of Awareness of Military Advertising	110
7.2 Order of Mention for Recall of Military Advertising	112
7.3 Recognition of Military Advertising Slogans.	114
7.4 Receipt of Recruiting Literature and Awareness of Print and Broadcast Media Advertising	116
7.5 Presence and Effect of Computerized Career Information at High Schools	118
7.6 Informal Sources of Information About Military Service.	119
7.7 Information-Seeking by Mail and Telephone	121
7.8 Contact with Recruiters by Service Represented and Method of First Contact	122
7.9 Content of Discussions with Recruiters.	124
7.10 Physical or Written Test Taking	125
7.11 Levels of Information Exposure.	126
7.12 Summary of Information Awareness and Information-Seeking Behavior.	128
8.1 Comparison of 1983-1984 RPGs for Young Males.	138
8.2 Selected Sociodemographic Characteristics of Young Male Recruiting Priority Groups.	140
8.3 Selected Sociodemographic Characteristics of Female Recruiting Priority Groups.	141
8.4 Educational Characteristics of Young Male Recruiting Priority Groups	143
8.5 Educational Characteristics of Female Recruiting Priority Groups.	145
8.6 Employment Characteristics of Young Male Recruiting Priority Groups	147

LIST OF TABLES (continued)

	<u>Page</u>
8.7. Employment Characteristics of Female Recruiting Priority Groups.	148
8.8. Positive Enlistment Propensity of Young Male Recruiting Priority Groups	151
8.9. Positive Enlistment Propensity of Female Recruiting Priority Groups.	152
8.10. Comparison of Recruiting Priority Groups and Alternative Recruiting Groups for Young Males	155
8.11. Selected Educational Characteristics of Alternative Recruiting Groups for Young Males	157
8.12. Selected Employment Characteristics of Alternative Recruiting Groups for Young Males	158
8.13. Positive Propensity Rates for Alternative Recruiting Groups for Young Males.	159
9.1. Knowledge of Monthly Starting Pay and Enlistment Incentives Among Recruiting Priority Groups.	166
9.2. Levels of Awareness of Service Broadcast Advertising Among Recruiting Priority Groups.	168
9.3. Information Seeking Among Recruiting Priority Groups.	170
9.4. Recruiter Contact and Military Test-Taking Among Recruiting Priority Groups.	173
9.5. Preferred Job Characteristics Among Recruiting Priority Groups	175
9.6. Whether Job Characteristics are More Likely in a Military or Civilian Job for Young Male RPGs	177
9.7. Whether Job Characteristics are More Likely in a Military or Civilian Job for Female RPGs	179
9.8. Most Likely Plans for Next Year (or After High School) Among Recruiting Priority Groups	180
10.1. Discriminant Analyses Variable Definitions	188
10.2. Discriminant Analyses Results for Young Male RPGs.	193
10.3. Propensity Group Means for Discriminant Functions for Young Male RPGs.	195
10.4. Correlation of Variables with Discriminant Functions for Young Male Male RPGs	196
10.5. Discriminant Analysis Results for Female RPGs.	203
10.6. Propensity Group Means for Discriminant Functions for Female RPGs.	204
10.7. Correlation of Variables with Discriminant Function for Female RPGs.	206

LIST OF FIGURES

Figure No.

1.1	Enlistment Rates for Intention Levels Over Time	4
4.1	Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Young Males	45
4.2	Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Females	46
4.3	Young Male Trends in Annual Unemployment Rates and in Positive Propensity for Any Active Duty Service	55
4.4	Female Trends in Annual Unemployment Rates and in Positive Propensity for Any Active Duty Service	56
8.1	Rank Order and Composition of Recruiting Priority Groups. . .	136
10.1	Propensity Group Centroids on the Discriminant Functions for Young Male RPGs	194
10.2	Propensity Group Centroids on the Discriminant Functions for Female RPGs	202

PREFACE

This report documents a study performed by Research Triangle Institute under Contract MDA 903-83-C-0172 as part of the Joint Market Research Program sponsored by the Office of the Assistant Secretary of Defense (Force Management and Personnel).

The Youth Attitude Tracking Study II (YATS II) is a key component of the Joint Market Research Program which contributes to policy formation 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 Component. It also measures awareness of military advertising, contact with recruiters, and knowledge of the financial incentives for enlisting.

The Project Directors for the 1984 YATS II were Dr. Jay R. Levinsohn and Dr. Robert M. Bray of Research Triangle Institute. L. Lynn Guess had responsibility for instrument development, Dr. Robert E. Mason for the sampling design, and Dale S. DeWitt for data collection. Ronald Smith coordinated data collection at Amrigon. Dr. Mary Ellen McCalla, Frederick W. Immerman, and Dr. George H. Dunteman made substantial contributions to the analyses and writing of the final report. Lillian Clark completed the typing and clerical requirements. Special thanks are due for the tireless efforts of the telephone survey staff in completing the interviews, both at RTI and Amrigon; to Dr. Jay R. Levinsohn for CATI design and implementation; to Janice L. Whelan for CATI programming; to Kathleen Jordan for assistance with the data analyses; to Elizabeth Cavanaugh for editorial assistance; 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 guidance during the effort. J. J. Miller, Chief, Market Research Branch, provided helpful comments on questionnaire design and an earlier draft of this report. Dr. Michael T. Laurence and Dr. Sue T. Bridges, Market Research Branch, were the principal DoD contacts and provided

specific direction during all stages of the effort. They provided the historical background for the YATS surveys presented in Appendix E and the Questionnaire Cross Reference in Appendix F. Vonda L. Kiplinger, also of the Market Research Branch, provided valuable technical assistance in the areas of sample design and selection. Dr. Bruce R. Orvis and Martin T. Gahart of The Rand Corporation are the authors of Chapter 1 and the concluding section of Chapter 8.

In OASD(FM&P), Dr. W. S. Sellman, Director, Accession Policy, CAPT Louise C. Wilmot, U.S. Navy, Deputy Director 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 valuable suggestions for the questionnaire construction and analytic design.

EXECUTIVE SUMMARY

Maintaining the required manpower strength of the Armed Forces is a continuing challenge, particularly in times of declining pools of potential recruits and increased competition from the civilian sector. The military seeks high quality young men and women who will successfully adapt to military life, learn the skills of an occupational specialty, and perform their jobs. Effective targeting of recruiting efforts requires that the Department of Defense (DoD) and the individual Services understand the backgrounds, attitudes, and motivations of young men and women, and their intentions to serve in the military.

This report describes the 1984 YATS II study conducted by the Research Triangle Institute with the aid of Amrignon Enterprises, Inc.

A. Research Objectives

The overall goal of the 1984 YATS II study is to provide: (1) an integrated understanding of the factors influencing the propensity of the current pool of young adults to enlist in the military, and (2) information useful to recruiting managers, advertising personnel, military commanders, and other government officials. In order to meet these goals, several objectives were defined:

- Assess current levels of propensity to enlist in the active Services and in the Reserve Component
- Assess trends in propensity to enlist in the active Services
- Measure attitudes and motivations of potential recruits, especially as these relate to enlistment propensity
- Assess the awareness of military advertising
- Examine the potential effect of enlistment incentives
- Develop further the market segmentation analysis begun in the 1983 YATS II.

B. Organization of the Report

The current report consists of 10 chapters describing the methodology for and results of the 1984 YATS II survey. Chapters 1-3 discuss the background and methodology for the study. Chapters 4-7 present descriptive results for the three market groups--young males, older males, and females.

Enlistment propensity provides the organizing theme for these analyses and presentation of results. Chapters 8-9 present a segmentation analysis in which Recruiting Priority Groups (RPGs) are defined and examined for young males and females. Chapter 10 presents multivariate analyses having implications for ways to target the market. The remaining sections of this summary highlight the methodology of the study and the key results.

C. Methodology (Chapter 3)

Data for the 1984 YATS II consist of responses to a 30-minute, computer-assisted telephone interview. The sample of participants was selected using a random digit dialing procedure. A total of 7,940 interviews were used for analyses for the three market groups (5,058 young males, 1,398 older males, 1,503 females). For young males, 1,836 interviews were obtained from a "callback" sample (selected from households identified as eligible for the 1983 YATS survey) and 3,222 interviews were obtained from a "new" sample (selected in June 1984). Older male and female interviews were all obtained from the new sample. Final response rates were 63.5 percent for the young male callback sample, 75.0 percent for the young male new sample, 80.1 percent for older males, and 85.5 percent for females.

D. Enlistment Propensity Overview (Chapter 4)

Positive Composite Active Propensity is defined as the percentage of respondents saying that they either "definitely" or "probably" will be serving in one or more of the four active Services in the next few years. Similarly, Positive Composite Reserve Propensity is defined as the percentage of respondents saying that they either "definitely" or "probably" will be serving in one or more branches of the Reserve Components. A third indicator of interest in joining the military is "unaided mentions," unprompted responses of "joining the military/service" to a question about respondent's plans for the next few years. Table X.1 presents 1983 and 1984 survey results for each of these measures of positive propensity. Also presented in Table X.1 are the percentages of positive propensity respondents for each of the Active Services included in the Positive Composite Active Propensity measure and each of the branches of the Reserve Components included in the Positive Composite Reserve Propensity measure.

Table X.1. Positive Propensity to Enlist in the Active Military and Reserve Components, 1983 and 1984

Propensity Measures	Market								
	Young Males			Older Males			Females		
	1983	1984	Change	1983	1984	Change	1983	1984	Change
Composite Active Propensity	35.4	29.9	-5.5*	13.8	10.3	-3.5*	11.7	13.2	+1.5
Army	17.5	14.3	-3.2*	7.2	4.6	-2.6*	4.4	5.6	+1.2
Navy	13.0	10.9	-2.1*	5.5	5.5	0.0	4.7	4.3	-0.4
Marine Corps	12.1	9.6	-2.5*	4.8	3.8	-1.0	2.6	3.3	+0.7
Air Force	18.8	15.3	-3.5*	7.3	6.3	-1.0	6.8	9.0	+2.8
Reserve Components Propensity	25.4	19.4	-6.0*	13.8	9.3	-4.5*	8.1	9.2	+0.9
Army National Guard	9.8	7.3	-2.5*	6.0	4.1	-1.9	2.7	2.4	-0.3
Air Force National Guard	5.2	3.4	-1.8*	3.8	2.6	-1.2	1.4	1.9	+0.5
Army Reserve	7.2	6.1	-1.1	4.5	2.9	-1.6	2.8	3.0	+0.2
Naval Reserve	2.1	2.3	+0.2	0.5	0.5	0.0	0.9	1.1	+0.2
Marine Corps Reserve	2.6	1.8	-0.8*	1.0	0.7	-0.3	0.6	0.3	-0.3
Air Force Reserve	5.9	4.2	-1.7*	3.4	1.7	-1.7*	2.3	2.9	+0.6
Coast Guard Reserve	1.1	0.7	-0.4*	0.9	1.0	+0.1	0.2	0.6	+0.4
Unaided Mentions	10.0	7.5	-2.5*	1.4	0.9	-0.5	1.7	1.9	+0.2

Note: Tabled values are percentages with standard errors in parentheses. Estimates for 1984 are based on interviews with 5,058 young males, 1,379 older males, and 1,503 females. Estimates for 1983 are based on interviews with 4,416 young males, 798 older males, and 876 females.

* 1983-84 comparisons were statistically significant at the 95 percent confidence level.

Source: Questions 438, 505-508 (in the 1984 questionnaire) and A42, B5-B8 (in the 1983 questionnaire).

Between 1983 and 1984, all three measures of propensity to enlist showed a statistically significant decline for the young males. Positive Composite Active Propensity decreased from 35.4 percent to 29.9 percent, while positive Composite Reserve Components Propensity decreased from 25.4 percent to 19.4 percent. Unaided mentions decreased from 10.0 percent to 7.5 percent. For each of the four Active Services included in the positive Composite Active Propensity measure, there was a statistically significant decrease in positive propensity between 1983 and 1984.

For older males, positive Composite Active Propensity declined from 13.8 percent to 10.3 percent and positive Reserve propensity declined from 13.8 percent to 9.3 percent. Estimates of unaided mentions for the older males were not significantly different. Females showed no significant changes in any of the three measures.

E. Consideration of Military and Civilian Alternatives (Chapter 5)

Serving in the military is only one of a number of occupations or pursuits available to young adults. The desirability and accessibility of other alternatives such as school or civilian employment constitute the context within which young people evaluate the characteristics of military service.

From a list of 15 job characteristics asked about in the 1984 YATS, six were rated as "extremely important" or "very important" by 73 percent or more of young males, older males, and females:

- Enjoying your work
- Job security
- Good income
- Personal freedom
- Learn a valuable trade or skill
- Adequate retirement benefits.

In addition, 83 percent of females also rated "equal pay and opportunity for men and women" as important. Positive or negative propensity made little difference in job characteristic ratings for any market group.

Respondents were also asked whether the 15 job characteristics were more likely to occur in a military job or in a civilian job, or were equally likely to occur in either sector. Of the six characteristics rated as highly important, more than one-fourth in each market group rated "job security" as more likely to occur in the military. One-fourth or more rated "personal

freedom," "good income," and "enjoy your work" as more likely to occur in a civilian job. A majority of males and 47 percent of females saw "personal freedom" as more likely to occur in a civilian job.

Respondents with positive general intentions to join the military are also positive toward other alternatives. Half to three-quarters of those in each market group with positive general intentions to enlist also expressed positive intentions to continue their education or to work. When queried about their most likely activity in a year (or after high school), three-quarters or more in each market group expected to be going to school or working full time. Six percent or less believed they would most likely be in the military.

Beliefs about what others expect one to do and one's own feelings about military service are related to the likelihood of joining. Young males were more likely to report that "those who matter most" hold favorable opinions toward their joining the military. Older males and females were more likely to report that the opinions of "those who matter most" were unfavorable toward their joining the military. Young males were also more likely to report positive personal feelings about the military (38 percent) than older males (29 percent) and females (26 percent). These beliefs and feelings were strongly related to propensity. Those with positive propensity were much more likely to report having positive feelings about serving in the military (70 to 80 percent) and the support of significant others (52 to 60 percent) than were those with negative propensity.

F. Enlistment Incentives and Military Orientations (Chapter 6)

Enlistment incentives are a major part of recruiting and advertising efforts. For the active Services, knowledge of monthly starting pay and enlistment bonuses is low, but knowledge of educational benefits is high. One-fourth of the males and one-third of the females could not provide an estimate of monthly starting pay without prompting. Informing respondents of the correct amount of starting pay affected the general intentions of about 30 percent of respondents in that changers who initially underestimated pay tended to become more positive toward serving in the military whereas those who had overestimated pay tended to become more negative.

For bonuses, median estimates of the maximum bonus paid were considerably lower than actual bonus amounts. Females with positive propensity were more likely than those with negative propensity to believe that the Services pay enlistment bonuses, but bonuses were not related to propensity for males. Approximately 50 percent of males and 38 percent of females believe that the Services provide educational benefits. Knowledge about educational benefits is unrelated to propensity.

Reserve Component questions addressed time requirements, pay, benefits, incentives, and civilian employer attitudes. About one-third of young males, one-fourth of older males, and two-fifths of females said they did not know the number of drill days per month or estimated it at eight or more days. About two-fifths of young males, one-third of older males, and half of females said they did not know the active duty training time or estimated it at 30 or more days per year. More than 40 percent of each market group did not know or incorrectly estimated pay per drill day. Reserve propensity is unrelated to knowledge of training time and drill pay.

G. Information Seeking and Recruiter Contact (Chapter 7)

Information seeking and enlistment influences are seen on a passive-to-active continuum. Receiving direct mail recruiting literature, awareness of broadcast or print advertising, and knowing someone who enlisted are relatively passive activities. More active behaviors include making a toll-free call, mailing a card for information, and initiating contact with a recruiter.

More than 75 percent of young males and more than 67 percent of older males and females reported awareness of broadcast advertising for each of the four active Services. Awareness is highest for Army advertising (more than 80 percent in each group mention seeing it) and lower for the Joint Services (54 to 63 percent), National Guard/Reserves (53 to 65 percent), and Coast Guard (42 to 54 percent). Propensity to enlist is unrelated to advertising awareness for young males, but positive propensity females have higher awareness of advertising.

Majorities in each market group correctly identified advertising slogans for the Army, Marine Corps, and Air Force. Recognition is low for Navy and Joint Services slogans and for the "Great Way of Life" Air Force slogan.

Incorrect responders usually attributed these slogans to the Army (which advertises much more than the other Services or the Joint Recruiting Advertising Program). Males are somewhat more able than females to identify slogans correctly.

More than 70 percent of young males and females have seen print advertising, and more than 80 percent have seen or heard broadcast advertising for the military. About 56 percent of young males report receiving direct mail recruiting literature compared to a third of females.

Only about one third or fewer of respondents have discussed joining the military with friends or family in the past year. Those with positive propensity are much more likely than those with negative propensity to have discussed enlisting with someone.

More active behaviors include making a toll-free phone call, mailing a card for information about the military or contacting recruiters. Fewer than 20 percent of young males have mailed a card, and only about 4 percent have made a toll-free call. Females are less likely to seek information by either phone or mail. Positive propensity and information-seeking behavior are positively related for both market groups. Almost 40 percent of males (young and older alike) and 25 percent of females have had contact with a military recruiter at some time in the past. In all three market groups, those with positive propensity are considerably more likely to report recruiter contact than those with negative propensity.

H. Recruiting Priority Groups and Propensity (Chapter 8)

The young male and female market groups were segmented into Recruiting Priority Groups (RPGs) as an aid in targeting recruiter activities. Information about high school graduation and high school grades was used to construct five RPGs which were assigned the following recruiting priorities:

- 1) Higher Aptitude High School Graduates
- 2) Lower Aptitude High School Graduates
- 3) College Students
- 4) Young High School Students
- 5) Non-completers.

The groups were differentiated on the basis of sociodemographic, educational, and employment characteristics.

The five RPGs differ both on Composite Active Propensity and on Composite Reserve Propensity as shown in Table X.2. For young males, Young High School Students have the highest propensity followed by Non-completers, High School Graduates (regardless of aptitude classification), and College Students. For females, Young High School Students have the highest propensity with the remaining four groups all showing similar propensities. In general, groups ranked as having lower priority (Young High School Students and Non-completers) reported the highest propensity. The two highest propensity groups (Higher and Lower Aptitude High School Graduates) consistently show about equal propensity levels. Higher Aptitude Graduates may have more options. But, the similarity indicates that they may be about equally likely to consider military service.

Table X.2. Active and Reserve Positive Propensity for Recruiting Priority Groups

Recruiting Priority Groups	Young Males		Females	
	Active Propensity	Reserve Propensity	Active Propensity	Reserve Propensity
Young High School Students	43.9	26.2	18.6	12.1
Non-completers	36.6	24.7	12.6	11.9
Higher Aptitude H.S. Grads.	27.5	18.6	12.9	9.0
Lower Aptitude H.S. Grads.	27.1	18.1	11.5	9.1
College Students	19.1	12.6	11.7	6.8

Note: Entries are percentages.

I. Selected Enlistment-Related Issues and RPGs (Chapter 9)

As an aid to targeting recruiting policies and activities, the young male and female Recruiting Priority Groups (RPGs) were examined for differences in their knowledge of military pay and enlistment incentives, their awareness of military advertising, their information-seeking behavior, and recruiter contact. In addition, the RPGs were examined for differences in their perceptions of military and civilian alternatives.

There is little or no systematic variation among RPGs for either young males or females in their knowledge of monthly starting pay or enlistment incentives (cash enlistment bonuses and educational benefits). Advertising

awareness does not vary among female RPGs. Among young male RPGs, College Students have the highest awareness (ranging from 89 percent for Army to 58 percent for Coast Guard) and Non-completers the lowest (ranging from 81 percent for Army to 58 percent for Joint Services).

Higher Aptitude Graduates, Lower Aptitude Graduates, and College Students are more likely to report receiving direct mail recruiting literature than the two lowest groups. Two-thirds or more of these three highest young male priority groups report having received recruiting literature in the mail, compared with about two-fifths or fewer in the lowest priority groups (High School Students, Non-completers). For females, about two-fifths or more of the three highest priority groups report having received literature, compared with less than one-fifth of the two lowest priority groups. Similarly, the three highest RPGs in both market groups are somewhat more likely to report having mailed a card for information than are the two lowest priority groups.

Recruiter contact and test-taking are most common in the two highest priority groups. About half of young males in these two groups had recruiter contact (vs. 23 to 40 percent in other groups). The ASVAB is less likely to have been taken by Young High School Students (6 percent) than by members of the other RPGs (18 to 28 percent). Among females, Young High School Students (12 percent) report less recruiter contact than other RPGs (21 to 28 percent). From 10 to 16 percent of the three highest RPGs have taken the ASVAB (vs. 4 to 5 percent of the two lower priority groups).

J. Multivariate Analyses of Propensity for Recruiting Priority Groups (Chapter 10)

Multivariate discriminant analyses were conducted to determine how well individuals who answered "definitely," "probably," "probably not," or "definitely not" on Composite Active Propensity could be distinguished from each other. Thirteen variables were used as the basis for discriminating among the propensity categories. Separate discriminant analyses were conducted for each of the young male and female RPGs and overall for each market group.

For young males, analyses showed two significant discriminant functions: an attitudinal dimension and a sociodemographic dimension with the attitudinal dimension as the more important of the two functions. All four propensity categories were clearly distinguished and ordered along the attitudinal

dimension. The "definitely not" propensity category had the most negative attitudes whereas the "definitely" propensity category had the most positive attitudes. The sociodemographic dimension was defined primarily by race and age variables. Those who were non-white and younger were more likely to be in the positive propensity categories.

For females, analyses showed one significant discriminant function: an attitudinal dimension. As with young males, propensity categories were clearly ordered and distinguished along the attitudinal dimension. The "definitely not" category had the most negative attitudes and the "positive" category had the most positive attitudes.

Discriminant analyses results suggest some implications for recruiting activities. All analyses showed a strong attitudinal dimension associated with reports of propensity. Respondents with positive attitudes tended to have positive propensity toward serving whereas those with negative attitudes tended to have negative propensity. This suggests that most increases in positive propensity can be achieved by creating favorable attitudes toward serving or by changing negative attitudes to positive attitudes toward serving.

1. RELATIONSHIP BETWEEN ENLISTMENT INTENTIONS AND ENLISTMENT BEHAVIOR*

The Youth Attitude Tracking Study (YATS) has been conducted annually for the last 10 years to provide data for the military recruiting effort. This series of surveys has assessed the backgrounds, attitudes, and motivations of young men and women and their intentions to serve in the military. In 1983 the study design was reconfigured and became known as the Youth Attitude Tracking Study II (YATS II). This report describes and analyzes the results of the 1984 YATS II conducted by the Research Triangle Institute with the assistance of Amrigon Enterprises.

The present chapter addresses a special issue of interest concerning the relationship between enlistment intentions and enlistment behavior. A main focus of YATS studies is to obtain information about respondents' intentions (or propensity) to serve in the military. The question remains, however, about how well these intention data predict enlistment behavior. The relationship between propensity or intention to enlist and a variety of other attitudes, motivations and background characteristics is a central concern of the remaining chapters in the report. This chapter, then, provides useful background to aid understanding of other data reported here.

A. Background and Measures

Among several U.S. youth surveys, YATS asks respondents how likely they are to enter military service. This information about intentions to serve (often referred to as propensity to serve) is used in a variety of ways--two of which are to help anticipate enlistment rates and to help allocate recruiting/advertising resources. These applications of enlistment intention data presume a direct relationship between the strength of a person's stated intention to serve and his actual likelihood of enlisting. Yet, until recently, there has been little systematic research conducted to evaluate the validity of this assumption. The work summarized in this chapter assesses the extent of the relationship between stated intentions and actual enlistments and evaluates whether intentions convey more information about an individual's likelihood of enlisting than would be known from his demographic characteristics alone.

* This chapter was prepared by Bruce R. Orvis and Martin T. Gahart of the Rand Corporation.

To conduct the work, enlistment and production Armed Services Vocational Aptitude Battery (ASVAB) information for YATS respondents who enlisted in or tested for the military was linked with enlistment intention and demographic information from the YATS survey.* The survey data were obtained from 16-21 year old men interviewed in the 13 YATS administrations conducted from spring 1976 through fall 1983. The enlistment and written testing data were obtained from Defense Manpower Data Center extracts of Military Entrance Processing Station (MEPS) Reporting System records. This composite database was used to examine the relationship between intentions and actual enlistment decisions.

A composite of two particular YATS intention measures does a good job of tracking the enlistment actions of the respondents. These are the unaided mention measure and the general intention measure. In the unaided mention measure, the respondent is asked what he thinks he might be doing in the next few years. If he says he will be joining the military, he is considered to have an unaided mention of plans for military service. Here, unaided mentions have been restricted to mentions of plans to join the active duty services by using responses to additional questions in the YATS survey. The general intention measure comes later and asks the respondent specifically about the likelihood that he will serve in the military; he can reply "definitely," "probably," "probably not," or "definitely not."

The results for the unaided mention and general intention measures were combined to form a composite measure with three categories. Persons in the top category, those with the strongest enlistment intentions, had unaided mentions of plans to join an active duty service and also had positive intentions as assessed by the general intention measure; that is, they also said that they definitely or probably would serve. Persons in the second category said that they definitely or probably would serve but did not have unaided mentions. Finally, persons in the third category expressed negative enlistment intentions; that is, they said they would probably not or definitely not serve.**

* Production ASVABs are those taken at Military Entrance Processing Stations or mobile examination sites. They do not include institutional administrations of the written test (e.g., at high schools).

** As is the usual practice in YATS analyses, the negative intention category also includes the small number of individuals who said they did not know how likely they were to serve.

B. Intentions, Enlistments, and Test Taking

Table 1.1 shows the relationship between strength of enlistment intention in the YATS and actual enlistment and production (noninstitutional) ASVAB testing rates. The actual behavior of the respondents, in terms of enlistments and production ASVABs, shows a very strong and statistically significant relationship to strength of enlistment intention. In the enlistment column, note that 37 percent of those with the most positive intention level, positive intention and unaided mention, actually enlisted within the follow-up period. This falls systematically to an enlistment rate of only 6 percent among those with negative intentions. The production ASVAB testing rates also show a strong relationship to intention level. The results indicate that 55 percent of those with the most positive intention level took the written test by the end of the follow-up period. In comparison, only 28 percent of those in the middle group and only 12 percent of those with negative intentions did so. A less obvious result should also be noted: the conversion rates vary systematically in the expected direction with strength of enlistment intention. For the most positive intention level, people with positive intentions and unaided mentions, two-thirds of those testing also enlisted. The conversion rate falls to 6 of 12, or 50 percent, for persons with negative intentions.

Table 1.1. Enlistment and Production ASVAB Testing Rates by Intention Level

Enlistment Intention Level	Percentage Enlisting by March 1984	Percentage Testing by March 1984
Positive intention and unaided mention	37	55
Positive intention, no unaided mention	15	28
Negative intention	6	12

Note: Data are taken from combined YATS surveys, spring 1976-fall 1980. Results are weighted to ensure representativeness ($N = 33,809$). The enlistment and testing rates are significantly different for the three intention levels at the 95 percent confidence level.

The analysis summarized in Table 1.1 is based on a March 1984 follow-up of respondents to the spring 1976-fall 1980 YATS waves. This provides a

minimum follow-up period of three and one-half years. A long follow-up period is required to observe the full relationship between intentions and enlistments, because many of the enlistment actions are undertaken long after the respondents' intentions are measured. This can be seen in Figure 1.1.

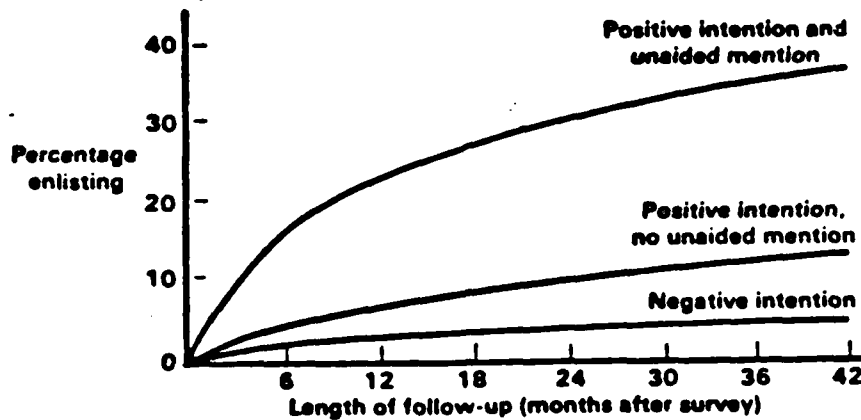


Figure 1.1. Enlistment Rates for Intention Levels Over Time. Data are from combined YATS surveys, spring 1976-fall 1980. Results are weighted to ensure representativeness (N=33,809).

Figure 1.1 shows the total or cumulative enlistment rate at 6-month intervals following the survey, from 6 months afterward to 3½ years later. Rates are shown separately for the three intention groups introduced in Table 1.1. Note that enlistments continue to occur throughout the entire period; the lines continue to move upward throughout. This illustrates the need for a long follow-up to observe the full relationship between intentions and enlistments. The figure also shows that it is reasonable to use the intention measure over this long term. The discriminating power of the measure is best within the first year or so following the survey; it is in this initial period that the slopes of the three lines are most different. However, note that the slopes remain different even 3 years after the survey. In other words, the measure continues to discriminate differences in enlistment rates by intention level even long after the survey.

C. Controlling for the Effects of Background Characteristics on Enlistment

The results in Table 1.1 and Figure 1.1 demonstrate a strong relationship between intentions and enlisting or testing. However, people with different intentions also differ in background characteristics. Thus, enlistment and testing rate differences could be due simply to the different background characteristics of members of different intention groups. On the other hand, intentions may tell us more about a person's likelihood of enlisting than his background characteristics alone, reflecting an attitudinal or taste for service component.* This is an important issue in considering what uses to make of the intention information we collect.

To investigate this issue, intention level information was entered into Ordinary Least Squares (OLS) regressions of enlistment or taking the production ASVAB, together with a great variety of background information on the individual from the YATS, as seen in Table 1.2. The background information included in the analyses is known from previous research to be related to the likelihood of enlisting. The question here is whether intention information is still a significant factor in predicting enlistment or testing when the other factors are controlled, i.e., when the differences in background characteristics of members of different intention groups are taken into account.

Table 1.2 Variables Used in Regressions Testing Significance of Intention Information

-
- Enlistment Intention
 - Background Characteristics
 - Age
 - Geographic region
 - Race
 - Education status
 - Academic courses and grade point average
 - Father's education
 - Employment history
 - Recruiter contacts
 - Discussions about enlisting
 - YATS survey wave
-

*The question of whether intentions capture an attitudinal or taste for service component is discussed in more detail by Orvis and Gahart (1985) and in Chapter 10 of this report.

The results suggest very strongly that this is the case. Table 1.3 shows the relationship between intention level and enlistment decision, after controlling for the effects of the background factors in Table 1.2. The regression coefficients indicate that even if we remove the effects of these factors on enlistment, persons with positive intentions and unaided mentions still have an enlistment rate 24 percentage points higher than persons with negative intentions. In other words, if the enlistment rate among persons with negative intentions is 6 percent, we would expect persons with the same background characteristics who express positive intentions and unaided mentions to enlist at a rate of 30 percent. Similarly, the analysis suggests that persons with positive intentions but no unaided mentions would also enlist at a significantly higher rate than those with negative intentions--by 5 percentage points--even if they had the same background characteristics.*

Table 1.3. Effect of Positive Intentions on Enlistment Decision After Controlling for Background Factors

Enlistment Intention Level	Increase in Enlistment Percentage	Increase in Testing Percentage
Positive intention and unaided mention	24	30
Positive intention, no unaided mention	5	9

Note: Data are taken from combined YATS surveys, spring 1976-fall 1980. Increases compared to enlistment/testing percentage for negative intention level after controlling for background factors (N = 33,809).

A parallel analysis was performed for production ASVAB rates. As seen in the right column of Table 1.3, this analysis produced very similar results to those found for enlistment. Again, even after removing the effects of the background characteristics in Table 1.2 on the testing rate, respondents

*The percentage of variance accounted for by the OLS regression equations is increased significantly by the inclusion of the intention variables. A logit analysis produced similar estimates of the effects of intention level on enlistment.

expressing positive intentions and unaided mentions and those expressing positive intentions but no unaided mentions were both significantly more likely to test than persons in the negative intention group. Thus, the evidence suggests quite strongly that intentions provide important information about a person's likelihood of enlisting not available from background factors.*

D. Contributions of Intention Groups

As has been shown, there is considerable evidence of a strong relationship between intention level and actual enlistment or written examination rate. However, we must also take into consideration the division of the population into different intention groups to get a sense of the contribution of these groups to the total enlistment picture. The first column of Table 1.4 shows how the sample is divided into the three intention groups. Note that nearly three-fourths of the sample express negative intentions; this is the largest group by far. The second group, those with positive intentions but no unaided mentions, contains the vast majority of the remaining individuals. This particular division of the population has important implications, as can be seen in the right column of Table 1.4. The column shows the percentage of total enlistees coming from each intention group. Note that nearly half the enlistees came from the negative intention group, that is, from people who indicated initially that they were not likely to serve. About two-thirds of the remaining enlistees came from the middle group, those with positive intentions but no unaided mentions.

Table 1.4. Contributions of Intention Groups to Total Enlistments

Enlistment Intention Level	Percentage of Sample	Percentage of Enlistees
Positive intention and unaided mention	5	18
Positive intention, no unaided mention	23	36
Negative intention	72	46

Note: Results are weighted to ensure representativeness (N = 33,809 YATS respondents, spring 1976-fall 1980; N = 3,259 enlistees).

* It is possible, of course, that the enlistment differences between intention groups could be due, at least in part, to differences on unmeasured background factors. However, the inclusion of a large number of important factors in the current analysis makes it seem unlikely that unmeasured background factors account for the effects reported here.

The results, then, show an interesting pattern. The contributions of the different intention groups to total enlistments correspond to the sizes of the groups rather than the enlistment rates associated with the groups. In other words, the differences in the sizes of the intention groups are large enough to offset the differences in enlistment rates for the groups. The fact that many enlistees are drawn from the negative intention group implies that enlistment analyses should not focus simply on differences between persons with positive and negative enlistment intentions, but should attempt to identify factors that promote enlistment for the persons in each group. Moreover, considering the size of the negative intention group together with the very low enlistment rate observed among the persons in the group, it may be noted that even a small increase in the enlistment rate of that group could represent an important source of additional recruits.

E. Aggregate Intention and Enlistment Rates

The relationship between aggregate intention levels and aggregate enlistment rates was also analyzed. Two types of effects were examined. The first concerns the effect of aggregate intention levels on enlistment rates during the same time period, i.e., concurrent intention effects. The second concerns lagged effects of intention levels on enlistments, i.e., the relationship between past intention levels and current enlistment rates (or between current intention levels and future enlistments). Evidence of lagged effects is particularly important in justifying the use of intention measures as early warnings or barometers of upcoming enlistment rates and as outcome measures to help evaluate the effects of policy options that attempt to alter attitudes toward military service in order to increase enlistments. To conduct the analysis, YATS information on enlistment intentions was aggregated by state into 17 geographical regions and matched with information from another database on regional enlistments, economic factors, recruiter levels, and enlistment options.* The analysis found statistically significant evidence that aggregate intention levels have both concurrent and lagged effects on the enlistment rate.

* The database was developed by Robert Cotterman, formerly of the Rand Corporation.

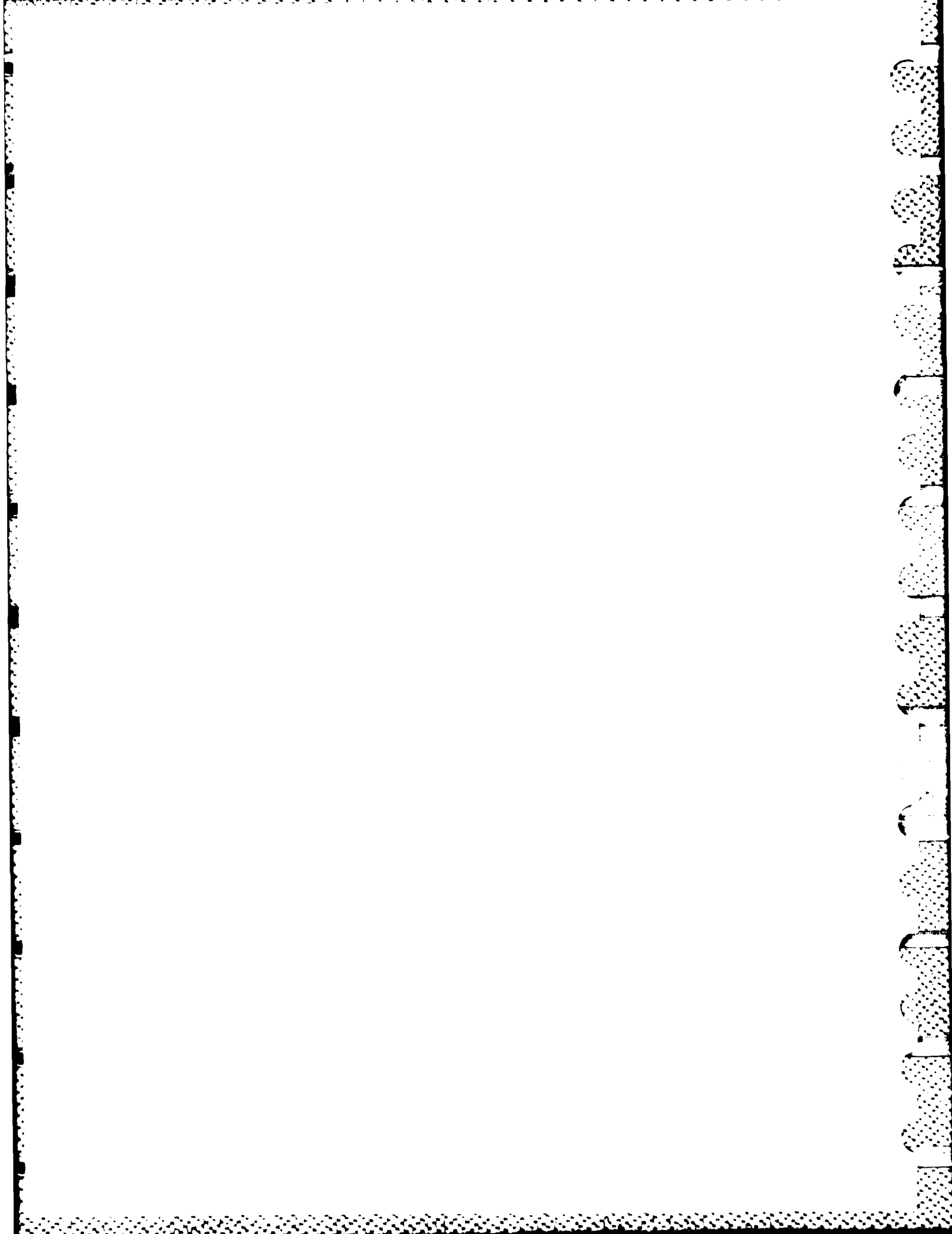
F. Summary

Information about enlistment intentions is used in a variety of ways, for example, to help anticipate enlistment rates or allocate recruiting/advertising resources. Such applications presume a direct relationship between stated intentions and actual likelihood of enlisting. The work summarized in this chapter assesses this relationship, and evaluates whether intentions convey more information about an individual's likelihood of enlisting than would be known from his background characteristics alone. The work draws on a combined enlistment survey-database, formed by linking enlistment and production ASVAB information from military records with enlistment intention and demographic information in the YATS.

A composite of the unaided mention and the general intention measures does a good job of tracking the enlistment actions of YATS respondents. The composite measure has three categories. Persons in the top category (strongest intentions) have unaided mentions of plans to join an active duty service and also have positive intentions as assessed by the general intention measure. Persons in the second category have positive intentions but do not have unaided mentions. Finally, the third category contains persons expressing negative enlistment intentions.

The results indicate that respondents' enlistment intentions in the YATS are significantly related to their actual enlistment decisions. Moreover, regression analyses suggest that intentions reveal more about a person's likelihood of enlisting than do his background characteristics alone. The results also indicate, however, that the negative intention group is an important source of enlistees, accounting for almost half of them. One implication of this finding is that recruiting research should attempt to identify enlistment motivators within intention groups, and not focus simply on identifying differences between persons with different intention levels. Moreover, because the negative intention group is so large, even a small increase in the enlistment rate among people with negative intentions could represent an important source of additional recruits.

Analyses of the relationship between aggregate intention levels and enlistment rates provide evidence of significant concurrent and lagged intention effects on enlistments. These results support the use of intention measures as barometers of future enlistment rates or as outcome measures to help evaluate policy options that attempt to increase enlistments by altering attitudes toward military service.



2. INTRODUCTION TO THE 1984 YOUTH ATTITUDE TRACKING STUDY II

Effectively targeting 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 merges the former YATS and the non-prior service portion of RCAS into a single study. This chapter provides an overview of the 1984 YATS II survey.

A. 1984 YATS II Objectives

The conduct of YATS II in 1984 was guided by a number of broad objectives:

- Assess current levels of propensity to enlist in the active Military Service and in the Reserve Components
- Assess trends in propensity to enlist in the active military
- Measure attitudes and motivations of potential recruits, especially as these relate to enlistment propensity
- Assess respondent awareness of military advertising programs
- Examine the potential effect of enlistment incentives on propensity to enlist
- Develop further the market segmentation analysis begun in the 1983 YATS II

The 1984 YATS II analyses build upon the 1983 YATS II survey as well as upon the YATS and RCAS studies of previous years to provide an integrated understanding of the factors that affect enlistment propensity of men and women.

B. 1984 YATS II Features

A recognized overlap between the YATS and RCAS surveys prompted the Department of Defense to combine them into a single study in 1983. The reconfigured YATS II required changes in the populations that were sampled (i.e., 22-29 year old males were included) and required that questions be asked about the active Services and about the Reserve Components. In 1983, one subsample answered questions about the active Services and the other answered questions about the Reserve Components. The 1983 YATS II final report presented data

for the subsamples in separate sections. In the current report, we present data on the active Services and the Reserve Component together according to topic. Also, central to this current analysis is the market segmentation analysis using Recruiting Priority Groups that was begun on an exploratory basis in the 1983 YATS II report.

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 1984 YATS II are:

- An advanced Computer Assisted Telephone Interviewing (CATI) system for conducting interviews (also used in 1983). This system handled screening and interviewing activities, issuing of phone numbers, and control of call-back appointments. It also controlled skip patterns in the questionnaires, 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 (also used in 1983). The design allocated the sample across 66 Military Entrance Processing Stations (MEPS) to meet DoD-specified precision requirements.
- More coverage of females and older males than provided in the YATS 1983 report for basic descriptive analyses.
- A market segmentation analysis, concentrating on 16-21 year-olds, in an effort to define and describe five Recruiting Priority Groups on the basis of educational status and average grades earned in high school. Females were included for the first time in the segmentation analysis.

2. Propensity as an Organizing Theme

Assessing respondents' positive propensity (i.e., responses that individuals "definitely" or "probably" will join one of the Services) is the primary focus for the Youth Attitude Tracking Studies. This same focus is maintained in the 1984 YATS II survey. Propensity serves as the organizing theme for the analyses and presentation of descriptive results of the various market groups. Analyses examine levels of propensity among the three market groups and the relationship of propensity to other variables.

3. Market Segmentation Approach

To aid military recruiters in their task of selecting and enlisting the best qualified people from the civilian labor pool, the concept of Recruiting Priority Groups (RPGs) was developed in the 1983 YATS II survey. Five RPGs were defined for young males based on educational status and average grades in high school. In the 1984 YATS II, the definition of the five groups is refined, and the analysis is expanded to include 16-21 year-old females.

4. Market Groups

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

- Males aged 16-21 (young males)
- Males aged 22-29 (older males)
- Females aged 16-21 (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.

YATS began in the fall of 1975 as a semi-annual survey of young males aged 16 to 21. Females were included in the fall of 1980 when the survey became an annual study. The RCAS began as an annual survey in 1977. The non-prior service portion of the study included males and females aged 17½ to 26. Beginning in 1981, data were based on respondents aged 17 to 26. Because RCAS surveys imposed no educational restrictions on participants, they included college graduates as well as students beyond the second year of college.

The relationship of the target populations and YATS II eligibility requirements to previous YATS and RCAS surveys is summarized in Table 2.1. As shown, the criteria of age and educational level distinguish RCAS respondents from YATS II respondents.

Comparison of 1984 YATS II results to previous results in RCAS reports is not possible because RCAS data are based on a sample selected from 17 to 26 year olds with no educational restrictions. In addition, the measure of Reserve propensity used in 1984 differs substantially from that used in RCAS (see Chapter 4). Comparison of Reserve propensity in 1984 with RCAS years (1977-1982), therefore, would be doubly misleading and should not be attempted.

Table 2.1. Relationship of YATS, RCAS, and YATS II Surveys

Respondent Sex/Age	Survey		
	YATS ^a (Active)	RCAS ^b (Reserve)	YATS II
<u>Males</u>			
16-21	X		X
17-26 ^c		X	
22-29			X
<u>Females</u>			
16-21	X		X
17-26 ^c		X	

Note: Besides differences in age requirements for the various surveys, there were also differences in educational criteria. YATS and YATS II surveys limited participation to individuals who had completed no more than two years of college; the RCAS survey imposed no educational restrictions.

^aYATS surveys for Fall 1975 - Spring 1980 consisted only of males aged 16-21; females aged 16-21 were added to the study beginning in Fall 1980.

^bApplies to non-prior service portion of the survey only.

^cDuring 1978, 1979 and 1980, the RCAS non-prior service data were based on respondents aged 17½-26. Beginning in 1981 the data have been based on respondents aged 17-26.

It is possible to select RCAS data which meet YATS sample criteria for ages 17 to 21 with no more than two years of college and to make rough comparisons between data sets. Even these comparisons are somewhat tenuous since RCAS data were not weighted to population estimates. Caution should be used where question format, question sequence, or analytical technique varies between YATS II and RCAS. In addition, it should be noted that YATS II and RCAS samples were drawn using different techniques and at different times of the year.

In contrast, it is possible to compare YATS II data with prior YATS results for young males and females. However, such comparisons will require reweighting of YATS data collected prior to 1983 (and, hence, reanalysis) for them to be comparable to the 1983 and 1984 surveys. Appendix E describes the procedures for reweighting.

C. Report Organization

This report describes the methodology employed and the results obtained for the 1984 YATS II survey. The four parts of the report are:

- Background and Methodology (Chapters 1-3)
- The Three Market Groups (Chapters 4-7)
- Recruiting Priority Groups for active Services (Chapters 8-9)
- Targeting the Market (Chapter 10).

Material in each of these sections is discussed briefly below.

A companion volume of supplementary tabulations by Active Service Propensity and Reserve Component Propensity is available. Appendix D of the present volume contains additional supplementary tabulations.

1. Background and Methodology

Part 1 consists of Chapters 1-3 which provide information on the general background and methodology of YATS II. Chapter 1 presents information about the relationship between enlistment intentions and enlistment behavior. Chapter 2 provides a general introduction and overview of the 1984 YATS II survey. Chapter 3 describes the methodology for the current study including the data collection procedures, computation of a variety of performance rates, and characteristics of sample respondents. The remaining report chapters provide results of the data analysis.

2. The Three Market Groups

Part 2, comprising Chapters 4 through 7, presents descriptive results for analyses of the three market groups of young males, older males, and females

Chapter 4 contains an analysis of propensity of young males, older males, and females to join the military and results for the traditional measures of Service-specific and composite propensity for the active Services and for the Reserve Component. The chapter also discusses trends in Composite Active Propensity for young males and females, and presents demographic profiles of positive and negative propensity groups.

Chapter 5 examines the propensity to enlist within the context of the range of military and civilian alternatives. A discussion of the specific job characteristics desired by individuals in the three market groups and the perceived achievability of these characteristics in the military follows. The chapter continues with the consideration of the likelihood of military plans relative to other occupational plans, and the likelihood of joining the active Services or Reserve Components. Chapter 5 concludes with reports of the influences of important persons on military plans and personal feelings toward military service.

Chapter 6 examines the relationship between enlistment incentives and active and Reserve propensity to enlist for the three market groups. Data for the active Services mainly address general attitudes or orientations toward military service, knowledge of monthly starting pay and cash enlistment bonuses. Data for the Reserve Components focus on knowledge of various features such as time required for drill and the two weeks active duty obligation, starting pay, and incentives such as enlistment bonuses and tuition assistance.

Chapter 7 examines the level of exposure of the three market groups to enlistment decision information sources and presents information on contact with military recruiters. Topics such as awareness levels of military advertising and Service slogans, receipt of direct mail recruiting literature, informal sources of information about military service, active information-seeking by mail or telephone, and contact with military recruiters are addressed.

3. Recruiting Priority Groups for Active Services

Part 3 of the report. Chapters 8 and 9, present data from a market segmentation analysis. Chapters 8 and 9 examine the enlistment propensity of Recruiting Priority Groups (RPGs) for young males and females based on the concepts of persistence and trainability. Five groups are defined in order of expected recruiting priority:

- Higher Aptitude High School Graduates
- Lower Aptitude High School Graduates
- College Students
- Young High School Students
- Non-completers.

Part 3 includes a discussion of the 1984 refinement of definitions and a 1983-1984 group comparison. Sociodemographic characteristics and propensity to join the military are the RPG-comparison factors.

The presentation in Chapter 9 includes discussion of the knowledge and perceptions of enlistment incentives by young male and female RPGs and the differences among higher and lower priority groups that might suggest varying targeting strategies. RPG data for knowledge of starting pay and bonuses, awareness of military advertising, information-seeking about the military, recruiter contact and test-taking, and desired job characteristics and their perceived availability in the military complete the chapter.

4. Targeting the Market

Part 4 of the report examines results of multivariate analyses which may have implications for ways to target the market. Chapter 10 reports discriminant analyses for the RPGs of young males and females. Analyses focus on identifying underlying dimensions distinguishing respondents with positive propensity from those with negative propensity.

3. METHODOLOGY OF YATS II

The 1984 YATS II survey utilized a Computer Assisted Telephone Interviewing (CATI) system to gather information on the propensity of a national sample of youth and young adults to join the military. This chapter describes the sample design, data collection procedures, survey performance rates, and organization and content of the survey questionnaire for YATS II. The chapter concludes with comments on the 1984 YATS II survey respondents.

A. Sampling Design Overview

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

- . Young Males aged 16-21
- . Older Males aged 22-29
- . Females aged 16-21.

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 selected for each of the three markets was determined from DoD specifications of precision requirements for estimates of propensity (see Appendix A). Young males were identified as 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. This number of households produced more eligible older males and females than were needed to satisfy the precision requirements for these market groups. Subsamples of these eligible older males and females 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 that is 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) has been identified, numbers subsequently called in the same exchange are more likely to be assigned to households than numbers in other exchanges.

More specifically, 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.
- 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.

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 procedure generates a two-stage equal probability sample of households. In the case of the 1984 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.

Much of the YATS data collection effort consisted of identifying the sample households. Given the ongoing nature of YATS II, one way to reduce overall survey costs is to make use of the sampling frame information

developed in the previous year's YATS. This strategy was implemented in the 1984 YATS sample design by selecting two independent samples of young males. One sample, referred to as the "callback sample," was selected from households identified in the 1983 YATS as having one or more eligible young males. The other sample, referred to as the "new sample," was obtained from households sampled from the June 1984 list of active NPA-NXX codes, using the Mitofsky-Waksberg procedure. The female and older male samples were selected exclusively from households sampled from the 1984 list of NPA-NXX codes.

To combine correctly the data from the callback sample with that of the new sample young males, the subset of the new sample belonging to the callback target population had to be identified. The callback target population consists of that portion of the 1983 YATS young male target population still eligible for YATS and reachable at the same telephone number during the 1984 YATS survey. To identify the new sample subset, two questions were asked for each young male in the new sample. Could he have been reached at the same telephone number in October 1983; and, would he have been 16 to 21 years old at that time? Affirmative answers to both questions define the necessary subset.

Comparisons of this subset of the new sample with the callback sample indicated differences in estimated population sizes and age distributions. Compensation was made for these differences by weighting class adjustments. Subsequent comparisons of estimates obtained from the new sample alone and the combined sample (i.e., the new sample plus the callback sample) showed no significant differences (see Appendix A for a detailed technical discussion).

Table 3.1 presents the distribution of the designed new sample for young males. The total sample called for 48,167 households in 4,695 clusters. On average, each cluster in the sample consisted of 10.3 households, although cluster sizes varied across MEPS. Females and older males were subsampled from 38,173 and 29,420 households, respectively.* Additional details about the sampling design are provided in Appendix A.

*The original subsample for the females consisted of 19,426 households. An error occurred in setting a control variable used by the CATI software to indicate the market groups to be interviewed in a household. This resulted in the collection of interviews from females in households outside of the originally designated subset. These interviews were retained in the analyses, and were correctly weighted by adding 18,797 households to the female subsample.

Table 3.1. Designed Distribution of the 1984 Young Male New Sample

MEPS* Number	MEPS Name	Number of Sample Clusters	Households Per Cluster	Total Sample Households
1	Portland, ME	19	15	285
2	Manchester, NH	13	28	364
3	Boston, MA	170	10	1,700
4	Springfield, MA	49	10	490
5	New Haven, CT	30	8	240
6	Albany, NY	12	12	156
7	Fort Hamilton, NY	332	7	2,324
8	Newark, NJ	110	8	880
9	Philadelphia, PA	178	8	1,424
10	Syracuse, NY	22	10	220
11	Buffalo, NY	37	11	407
12	Wilkes-Barre, PA	20	15	300
13	Harrisburg, PA	125	11	1,375
14	Pittsburg, PA	50	11	550
15	Baltimore, MD	69	11	759
16	Richmond, VA	35	15	525
17	Beckley, WV	48	11	528
18	Knoxville, TN	38	10	380
19	Nashville, TN	30	11	330
20	Louisville, KY	44	11	484
21	Cincinnati, OH	38	13	494
22	Columbus, OH	72	11	792
23	Cleveland, OH	132	8	1,056
24	Detroit, MI	113	10	1,130
25	Milwaukee, WI	55	13	715
26	Chicago, IL	250	10	2,500
27	Indianapolis, IN	70	11	770
28	St. Louis, MO	48	15	720
29	Memphis, TN	67	10	670
30	Jackson, MS	17	13	221
31	New Orleans, LA	74	10	740
32	Montgomery, AL	52	11	572
33	Atlanta, GA	86	11	946
34	Fort Jackson, SC	65	13	845
35	Jacksonville, FL	29	13	377

Table 3.1 (continued)

MEPS* Number	MEPS Name	Number of Sample Clusters	Households Per Cluster	Total Sample Households
36	Miami, FL	290	5	1,450
37	Charlotte, NC	51	11	561
38	Raleigh, NC	48	10	480
39	Shreveport, LA	47	7	329
40	Dallas, TX	160	15	2,400
41	Houston, TX	145	7	1,015
42	San Antonio, TX	63	13	819
43	Oklahoma City, OK	30	15	450
44	Amarillo, TX	8	28	224
45	Little Rock, AR	28	13	364
46	Kansas City, MO	34	20	680
47	Des Moines, IA	29	25	725
48	Minneapolis, MN	56	13	728
49	Fargo, ND	6	23	138
50	Sioux Falls, SD	7	21	147
51	Omaha, NE	10	30	300
52	Denver, CO	61	15	915
53	Albuquerque, NM	17	15	255
54	El Paso, TX	28	11	308
55	Phoenix, AZ	39	15	585
56	Salt Lake City, UT	26	15	390
57	Butte, MT	5	26	130
58	Spokane, WA	7	18	126
59	Boise, ID	6	31	186
60	Seattle, WA	59	11	649
61	Portland, OR	102	11	1,122
62	Oakland, CA	192	8	1,536
63	Fresno, CA	62	13	806
64	Los Angeles, CA	252	10	2,520
68	San Diego, CA	70	11	770
69	Tampa, FL	158	5	790
	U.S.	4,695	10.3	48,167

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

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

B. Data Collection Procedures

This section summarizes the YATS II data collection methods and procedures. Included are a description of the CATI system and the phased approach to data collection.

1. CATI System

The 1984 YATS II project utilized a CATI system for all phases of the data collection. With this system, the questionnaires for screening, interviewing and verification were programmed, entered and stored within the computer. Questions were displayed for interviewers in program-controlled sequences on cathode ray tube (CRT) computer terminals. 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 four-phased approach took place during a 12-week period from July 15 to September 30, 1984. Phases I, II, and III were used to identify and interview new sample young males, females and older males, while Phase IV included interviewing call-back sample young males. RTI made all cluster and household identification calls. Approximately half of the interviews were completed by RTI in North Carolina and the other half by Amrigon Enterprises in Detroit, Michigan.

a. Phase I and Phase II. Phase I and Phase II calling corresponds to stage one and stage two calls of the sampling design noted above and consisted of identifying households and screening for age eligibles in the households. Phase I calls were placed to randomly selected exchanges to identify clusters or primary numbers that contained households. Phase II calls were placed to randomly selected numbers in the clusters. During Phases I and II, interviewers determined for each residential number whether any members of the household were within the target

age range. A total of 110,254 sample telephone numbers were needed to identify the 48,167 households that were specified by the sampling design. Calls to determine the status of the numbers (e.g., nonworking, business, residential) produced 47,550 households for the survey. Phase I calling required 21,592 sample numbers to identify the required 4,695 clusters for a household identification rate of 21.74 percent. In Phase II, 88,662 sample numbers were dialed and resolved, producing 42,852 households for a rate of 48.33 percent.

b. Phase III. In Phase III, screening for eligibility was completed and interviews were conducted. Households identified in Phases I and II as having no members within the target age groups were not passed to Phase III. All other households became part of Phase III and a list was obtained of age-eligibles who were screened for prior-service and educational status. In the 25,796 Phase III households, 7,367 persons fully eligible for the study were identified and selected for interview. (All fully eligible young males were selected for interviewing; older males and females were subsampled.) Usable interviews from Phase III were obtained from 6,086 persons (3,209 young males, 1,377 older males, and 1,500 females). An additional 18 interviews were randomly selected for replication (duplication)* in clusters where all 100 possible telephone numbers were called, but the number of households required by the sampling design had not been obtained. This resulted in 6,104 total Phase III analysis interviews (3,222 young males, 1,379 older males, and 1,503 females).

c. Phase IV. In Phase IV data collection, the telephone numbers of households identified in the 1983 YATS as having one or more eligible young males were called. Efforts were made to interview all young males found during the screening who still resided at the number and who satisfied all criteria for study-eligibility.

Of the total of 5,325 telephone numbers in Phase IV, screening information was obtained for 4,001 households. In those, 2,495 eligibles were identified, and usable interviews were obtained for 1,832 young males. Random replication* of interviews was conducted in clusters where all possible telephone numbers had been called, but the number of households required by the sampling design was not obtained. The replication procedure resulted in 1,836 total Phase IV analysis interviews.

* This was done to more closely comply with the assumptions for computing variance estimates under a Mitofsky/Waksberg design (see Appendix A).

C. Survey Response Data and Performance Rates

Performance rate information is important as an aid both for assessing the quality of survey field operations and for assessing the nonresponse bias potential that may exist in the data. To compute the performance rates for the 1984 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)
- 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 1984 YATS II data: (a) cluster identification rate, (b) cluster screening rate, (c) household identification rate, (d) household screening rate, (e) interview completion rate, and (f) total response rate.

Response data and performance rates along with their definitions are presented for the three market groups in Table 3.2. For the young male new sample (Phase III), 4,696 clusters were identified and successfully screened. A total of 48,167 households were in the second stage frame for the young male new sample. Of these, 47,550 (98.7 percent) were identified, and 45,999 (95.5 percent) were successfully screened. The second stage frame specified 29,420 households for the older male sample and 38,173 households for the female sample. The household screening rate for older males was 94.8 percent and for females was 94.6 percent.

Interview completion rates were highest among females (90.4 percent) and lowest among callback young males (73.4 percent). The new sample, young male rate was 78.5 percent, and the older male rate was 85.1 percent.

Final response rates were 65.3 percent for callback sample young males, 75.0 percent for new sample, young males, 80.1 percent for older males, and 85.5 percent for females.

Table 3.2. 1984 YATS Response Data and Performance Rates

Item	Young Males		Older Males		Females
	Phase IV ^a	Phase III	Phase III	Phase III	Phase III
<u>Response Data</u>					
1. First stage designed sample size (clusters)	(6,085)	4,695	4,695	4,695	4,695
2. First stage sample size identified	(6,085)	4,698	4,698	4,698	4,698
3. First stage sample size screened ^b	(6,078)	4,696	4,696	4,696	4,696
4. Second stage sample size (households)	(72,240)	48,167	29,420	38,173	38,173
5. Second stage units identified	(70,135)	47,550	29,260	37,602	37,602
6. Second stage units screened ^c	(64,226)	45,999	27,880	36,097	36,097
7. Total eligibles identified/selected	2,495	4,088	1,619	1,660	1,660
8. Completed interviews	1,832	3,209	1,377	1,500	1,500
9. Analysis interviews ^d	1,836	3,222	1,379	1,503	1,503
<u>Performance Rates</u>					
10. Cluster identification rate (2 ÷ 1)	100%	100%	100%	100%	100%
11. Cluster screening rate (3 ÷ 1)	99.9%	100%	100%	100%	100%
12. Household identification rate (5 ÷ 4)	97.1%	98.7%	99.5%	99.5%	98.5%
13. Household screening rate (6 ÷ 4)	88.9%	95.5%	94.8%	94.8%	94.6%
14. Interview completion rate (8 ÷ 7)	73.4%	78.5%	85.1%	85.1%	90.4%
15. Total response rate (13 x 14)	63.5%	75.0%	80.1%	80.1%	85.5%

Note: Phase III refers to calls made to telephone numbers in the new sample; phase IV (applicable to young males only) refers to calls made to telephone numbers in the callback sample for the 1983 YATS II survey.

^aCluster and household counts in parentheses represent 1983 data.

^bTo be counted, complete screening information was required from at least one household in the cluster.

^cTo be counted, complete screening information was required for each household.

^dFinal numbers used for data analysis. A small number of interviews were randomly replicated in clusters where all 100 possible numbers were called but the required number of households specified by the sampling design were not obtained.

The fact that the callback response rate was lower than the new sample response rates is not surprising. Callback sample households were originally identified 9-11 months prior to the callback screening and could have changed telephone numbers in the intervening period. In addition, since many callback members had already responded to a questionnaire in 1983, some were less willing to cooperate than new sample members who were being interviewed for the first time.

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.

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 1984 questionnaire is similar to the 1983 instrument. Appendix F shows items cross-referenced between the 1983 and 1984 questionnaires. The questionnaire was revised based on pretesting and 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 G 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 about advertising, recruiter contact, and respondent demographics.

2. Configuration of Question Sets

In the 1984 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 instance, 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 (Q408). The latter question (called a "filtered" question) was 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 G).

Questions 551-562 apply only to active duty service and were asked only of a subset of respondents. Similarly, questions 571-589 apply only to service in the Reserve Components and were asked of another subset of respondents. The numbers of analysis interviews for these subsets of items and for the total study appear in Table 3.3.

Table 3.3. Question Sets and Sample Respondents

Subsample	Question Sets	Young Males	Older Males	Females	Total
Active only	551-562	4,401	929	955	6,285
Reserve only	571-589	657	450	548	1,655
All respondents	404-524 601-718	5,058 ^a	1,379 ^a	1,503 ^a	7,940

Note: Numbers 525-550, 563-570, and 590-600 were not used for items in the questionnaire.

^aTotal analysis interviews for the study. The numbers of respondents to specific items vary because of missing data and questionnaire routing (skip) patterns.

E. Characteristics of Respondent Population

Estimates of the sociodemographic characteristics of the 1984 respondent population are presented in Table 3.4. 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.

Table 3.4. Estimates of Sociodemographic Characteristics of Respondent Population

Characteristic	Young Males (n = 5,058)	Older Males (n = 1,379)	Females (n = 1,503)
<u>Age^a</u>			
16 (22)	23.0 (0.8)	14.0 (1.0)	23.1 (1.1)
17 (23)	21.9 (0.7)	15.2 (1.1)	22.2 (1.2)
18 (24)	19.2 (0.7)	13.5 (1.0)	17.2 (1.0)
19 (25)	14.8 (0.6)	12.8 (0.9)	15.5 (1.0)
20 (26)	11.4 (0.5)	10.8 (0.9)	11.7 (0.9)
21 (27)	9.7 (0.5)	11.3 (0.9)	10.4 (0.9)
(28)		12.9 (1.0)	
(29)		9.5 (0.9)	
<u>Race/Ethnicity</u>			
White	77.1 (0.8)	81.0 (1.2)	75.4 (1.4)
Black	12.2 (0.6)	9.1 (0.9)	12.4 (1.0)
Hispanic	8.0 (0.5)	7.9 (0.9)	9.1 (0.9)
Other	2.7 (0.3)	2.0 (0.4)	3.1 (0.5)
<u>Marital Status</u>			
Never married	95.9 (0.3)	41.5 (1.5)	85.8 (1.0)
Married	3.5 (0.3)	51.3 (1.5)	12.5 (1.0)
Other ^b	0.6 (0.1)	7.2 (0.7)	1.7 (0.3)
<u>Educational Plans^c</u>			
Attend school	65.1 (0.8)	15.2 (1.1)	63.8 (1.4)
Not attend school	33.7 (0.8)	83.2 (1.1)	35.3 (1.4)
Don't know	1.2 (0.2)	1.5 (0.4)	0.9 (0.3)
<u>Years of Education Completed</u>			
Less than 10	7.0 (0.5)	4.5 (0.6)	5.4 (0.7)
10	20.2 (0.8)	4.7 (0.6)	19.1 (1.1)
11	27.4 (0.7)	7.6 (0.8)	28.4 (1.3)
12	34.9 (0.8)	62.2 (1.4)	34.1 (1.3)
Some college/ vocational school	10.6 (0.5)	20.9 (1.2)	13.0 (1.0)
<u>Employment Status</u>			
Employed full-time	34.6 (0.8)	83.7 (1.1)	22.2 (1.1)
Employed part-time	26.7 (0.8)	6.8 (0.8)	27.4 (1.2)
Not employed, looking	21.5 (0.7)	6.9 (0.8)	26.8 (1.3)
Not employed, not looking	17.1 (0.6)	2.6 (0.5)	23.6 (1.2)

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

^aAges 22-29 apply to older males.

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

^cData were collected in August and September 1984. Question asked about their planned status for October.

Source: Questions 403, 404, 407, 416, 417, 424, 693, 714, 715.

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 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, and 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 any other 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 an equal-sized point estimate. Table 4.7 may be a useful reference table since it shows a range of percentage estimates with standard errors for the three market groups and, within that, for propensity groups. Appendix B contains additional information about standard errors and their use.

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 are based on weighted data.

As shown in Table 3.4, about one-fifth of the young males and females are age 16 and about one-fifth are 17. Decreasing percentages of interviews were obtained for each of the ages 18 to 21. Older males show a more even distribution across years. The majority of respondents interviewed are white, with older males showing a slightly larger proportion than the other groups (young

males, 77 percent; older males, 81 percent; females, 75 percent). Other differences between the groups are primarily a function of age differences between young males and females on the one hand and older males on the other. For example, most young males (96 percent) and females (86 percent) have never been married, while about half of older males are currently married (51 percent). Approximately 65 percent of young males and females are currently in school compared with only 15 percent of older males. About 45 percent of young males and females have completed 12 or more years of school, and about half are employed (full time or part time), compared with about 80 percent of older males who have completed 12 or more years of school and about 90 percent who are employed.

4. ENLISTMENT PROPENSITY AND MILITARY ORIENTATIONS

Positive propensity of young people to enlist in the active military or Reserve Component is our primary interest. In this chapter, we examine this issue in detail and begin with a brief discussion of the definition and measurement of Service-specific and composite propensity. Next, we present basic results for the 1984 YATS II data for the active military and the Reserves with major emphasis 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 the Army (Q510 in the questionnaire), the Navy (Q513), the Marine Corps (Q512), or Air Force (Q511), and by a composite measure assessing the likelihood of serving in any of the four active Services.

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," and "refuse" to the question.

The four Service-specific propensity items form the Composite Active Propensity measure. It is the most widely used measure throughout this report and assesses propensity to join one or more of the four active-duty Services. It is constructed as the most positive response given to the four questions. Thus, respondents who answered "definitely" or "probably" on at least one individual Service item were classified as "positive" for the composite measure. Composite Active Propensity was divided into positive and negative propensity in the same way as items for the individual Services.

The 1984 YATS II survey also assessed Reserve propensity based on two questions--one about joining the National Guard (Q505) and the other about joining the Reserves (Q507). The questions were as follows:

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

Definitely,
Probably,
Probably not, or
Definitely not?

A Composite Reserve Propensity measure was formed from these two items and was constructed in the same manner as the Composite Active Propensity measure.

There are, then, five measures of propensity to enlist for active duty (one for each of the Services and a composite measure) and three measures of propensity to enlist in the Reserve Component (one each for the Reserve and the National Guard and a composite measure). These eight measures are used extensively throughout this report. Several additional measures are used occasionally. They include unaided mentions of enlisting in the military (in response to question 438 about respondents' plans for the next few years), and general intention to join the military (Q503).

B. Propensity Toward Active Service and the Reserve Component

This section begins with a discussion of 1984 propensity results for the active Services and then compares 1983 and 1984 propensity data. Next, we present Reserve propensity followed by data for unaided mentions of interest in serving in the military. A distinction is made between mentions of any military service and active military service.

1. Service-Specific and Composite Active Propensity

Table 4.1 presents the distributions of responses for young males, older males and females regarding Service-specific and Composite Active Propensity. Overall, positive composite propensity for the three market groups in 1984 was:

- 29.9 percent for young males
- 10.3 percent for older males
- 13.2 percent for females.

As shown, the positive propensity of young males to join the active service is substantially higher than the positive propensity of older males or females.

Table 4.1. Distribution of Propensity to Enlist in the Active Military, 1984

Market/Item Response	Service				Composite Active Propensity ^a
	Army	Navy	Marine Corps	Air Force	
<u>Young Males</u>					
Definitely Probably	2.0 (0.2)	1.3 (0.2)	1.5 (0.2)	2.5 (0.3)	6.1 (0.4)
Total Positive	12.3 (0.5)	9.6 (0.5)	8.2 (0.5)	12.8 (0.6)	23.9 (0.7)
Probably Not	14.3 (0.6)	10.9 (0.5)	9.6 (0.5)	15.3 (0.6)	29.9 (0.8)
Definitely Not	34.5 (0.8)	35.5 (0.8)	34.8 (0.8)	37.5 (0.8)	32.5 (0.8)
Don't Know/Refuse	51.0 (0.9)	53.3 (0.9)	55.3 (0.8)	47.0 (0.9)	37.4 (0.8)
Total Negative	0.2 (0.1)	0.3 (0.1)	0.3 (0.1)	0.2 (0.1)	0.1 (0.1)
	85.7 (0.6)	89.1 (0.5)	90.4 (0.5)	84.7 (0.6)	70.1 (0.8)
<u>Older Males</u>					
Definitely Probably	0.4 (0.2)	0.4 (0.2)	0.5 (0.2)	1.0 (0.3)	1.7 (0.4)
Total Positive	4.1 (0.6)	5.1 (0.7)	3.3 (0.5)	5.3 (0.7)	8.6 (0.8)
Probably Not	4.6 (0.6)	5.5 (0.7)	3.8 (0.6)	6.3 (0.8)	10.3 (0.9)
Definitely Not	27.5 (1.3)	26.1 (1.3)	26.9 (1.3)	29.0 (1.3)	29.9 (1.3)
Don't Know/Refuse	67.7 (1.4)	68.2 (1.4)	69.0 (1.4)	64.3 (1.4)	59.7 (1.4)
Total Negative	0.2 (0.1)	0.1 (0.1)	0.2 (0.1)	0.3 (0.2)	0.1 (0.1)
	95.4 (0.6)	94.5 (0.7)	96.2 (0.6)	93.7 (0.8)	89.7 (0.9)
<u>Females</u>					
Definitely Probably	0.6 (0.2)	0.5 (0.2)	0.2 (0.1)	1.0 (0.2)	1.9 (0.4)
Total Positive	5.0 (0.6)	3.8 (0.5)	3.1 (0.5)	8.0 (0.8)	11.3 (0.9)
Probably Not	5.6 (0.6)	4.3 (0.6)	3.3 (0.5)	9.0 (0.8)	13.2 (1.0)
Definitely Not	17.4 (1.1)	18.8 (1.1)	18.2 (1.1)	19.1 (1.1)	20.2 (1.2)
Don't Know/Refuse	76.9 (1.2)	76.9 (1.1)	78.4 (1.2)	71.8 (1.3)	66.5 (1.4)
Total Negative	0.0 (**)	0.0 (**)	0.0 (**)	0.0 (**)	0.0 (**)
	94.4 (0.6)	95.7 (0.6)	96.7 (0.5)	91.0 (0.8)	86.8 (1.0)

Note: Tabled values are percentages with standard errors in parentheses. Total positive and total negative values may differ slightly from the sum of their respective components because of rounding error. Estimates are based on interviews with 5,058 young males, 1,379 older males, and 1,503 females.

^aPropensity to serve in at least one active Service.

**Informative standard error not available.

Source: Questions 510-513.

Service-specific positive propensity in 1984 ranged between 9.6 percent and 15.3 percent for young males, 3.8 percent and 6.3 percent for older males, and 3.3 percent and 9.0 percent for females. For all groups, positive propensity to join the Air Force was highest, whereas propensity to join the Marine Corps was lowest.

2. Comparison of Active Propensity in 1983 and 1984

Table 4.2 contrasts the 1983 and 1984 Composite Active Propensity data. As shown, young males (35.4 percent versus 29.9 percent) and older males (13.8 percent versus 10.3 percent) showed a significant decline in positive propensity in 1984 compared to 1983. Declines occurred in both the "definitely" and "probably" categories, with an increase in those who answered that they were "definitely not" likely to join the military. Females showed no significant change in propensity between 1984 and 1983.

Table 4.3 presents the 1983 and 1984 propensity data for each active Service. Young males were significantly less likely to express positive propensity to join any of the active Services in 1984 than in 1983. Total positive propensity declined from 18.8 percent to 15.3 percent for the Air Force; from 17.5 percent to 14.3 percent for the Army; from 13.0 percent to 10.9 percent for the Navy; and from 12.1 percent to 9.6 percent for the Marine Corps. For older males, positive propensity shows a declining pattern for the Army, Marines, and Air Force between 1983 and 1984, but only the Army was significantly lower (7.2 percent to 4.6 percent). Positive propensity for females in 1984 remained consistent with 1983 propensity levels. There were no significant 1983-1984 differences among females for any of the Services.

3. Propensity to Enlist in the National Guard and Reserves

As noted above, in addition to providing information about their likelihood of joining the active Services, respondents also answered questions about their likelihood of joining the National Guard or the Reserve. Answers to these two items were also combined to form a composite measure of Reserve propensity (see Section A).

Table 4.2. Composite Active Propensity, 1983 and 1984

Market/Item Response	Composite Active Propensity ^a				83-84 Change
	1983		1984		
<u>Young Males</u>					
Definitely	7.3	(0.5)	6.1	(0.4)	-1.2
Probably	28.2	(0.8)	23.9	(0.7)	-4.4
Total Positive	35.4	(0.9)	29.9	(0.8)	-5.5*
Probably Not	33.1	(0.8)	32.5	(0.8)	-0.6
Definitely Not	31.4	(0.8)	37.4	(0.8)	+6.0
Don't Know/Refuse	0.1	(0.1)	0.1	(0.1)	+0.0
Total Negative	64.6	(0.9)	70.1	(0.8)	+5.5
<u>Older Males</u>					
Definitely	2.5	(0.6)	1.7	(0.4)	-0.8
Probably	11.2	(1.2)	8.6	(0.8)	-2.6
Total Positive	13.8	(1.2)	10.3	(0.9)	-3.5*
Probably Not	34.1	(1.7)	29.9	(1.3)	-7.7
Definitely Not	52.1	(1.8)	59.7	(1.4)	+7.6
Don't Know/Refuse	0.0	(**)	0.1	(0.1)	+0.1
Total Negative	86.2	(1.2)	89.7	(0.9)	+3.5
<u>Females</u>					
Definitely	1.5	(0.5)	1.9	(0.4)	+0.4
Probably	10.2	(1.1)	11.3	(0.9)	+1.1
Total Positive	11.7	(1.1)	13.2	(1.0)	+1.5
Probably Not	23.2	(1.5)	20.2	(1.2)	-3.0
Definitely Not	65.1	(1.6)	66.5	(1.4)	+1.4
Don't Know/Refuse	0.1	(0.1)	0.0	(**)	-0.1
Total Negative	88.3	(1.1)	86.8	(1.0)	-1.5

Note: Tabled values are percentages with standard errors in parentheses. Data for 1983 are taken from the Fall 1983 Youth Attitude Tracking Study (Bray et al., 1984). Total positive and total negative may differ slightly from the sum of their respective component because of rounding error. Estimates for 1983 are based on interviews from 4,416 young males, 798 older males, and 876 females; estimates for 1984 are based on interviews from 5,058 young males, 1,379 older males, and 1,503 females. Tests of significance were computed for the 1983-1984 total positive comparisons.

^aPropensity to serve in at least one active Service.

*1983-1984 comparisons were statistically significant at the 95 percent confidence level.

**Informative standard error not available.

Source: Questions 510--513.

Table 4.3. Active-Duty, Service-Specific Propensity for 1983 and 1984

Market/Item Response	Service							
	Army		Navy		Marine Corps		Air Force	
	1983	1984	1983	1984	1983	1984	1983	1984
Young Males								
Definitely Probably	2.5 (0.3)	2.0 (0.2)	2.0 (0.3)	1.3 (0.2)	1.7 (0.2)	1.5 (0.2)	2.7 (0.3)	2.5 (0.3)
Total Positive	15.0 (0.6)	12.3 (0.5)	11.0 (0.6)	9.6 (0.5)	10.4 (0.6)	8.2 (0.5)	16.1 (0.7)	12.8 (0.6)
Probably Not	17.5 (0.7)	14.3 (0.6)*	13.0 (0.6)	10.9 (0.5)*	12.1 (0.6)	9.6 (0.5)*	18.8 (0.7)	15.3 (0.6)*
Definitely Not	35.7 (0.8)	34.5 (0.8)	37.5 (0.8)	35.5 (0.8)	34.6 (0.8)	34.8 (0.8)	38.1 (0.8)	37.5 (0.8)
Don't Know/Refuse	46.5 (0.9)	51.0 (0.9)	49.3 (0.8)	53.3 (0.9)	53.1 (0.9)	55.3 (0.8)	43.0 (0.9)	47.0 (0.9)
Total Negative	0.3 (0.1)	0.2 (0.1)	0.2 (0.1)	0.3 (0.1)	0.1 (0.1)	0.3 (0.1)	0.1 (0.1)	0.2 (0.1)
	82.5 (0.7)	85.7 (0.6)	87.0 (0.6)	89.1 (0.5)	87.9 (0.6)	90.4 (0.5)	81.2 (0.7)	84.7 (0.6)
Older Males								
Definitely Probably	1.0 (0.4)	0.4 (0.2)	0.8 (0.3)	0.4 (0.2)	0.7 (0.3)	0.5 (0.2)	1.1 (0.4)	1.0 (0.3)
Total Positive	6.2 (0.8)	4.1 (0.6)	4.7 (0.8)	5.1 (0.7)	4.2 (0.7)	3.3 (0.5)	6.2 (0.9)	5.3 (0.7)
Probably Not	7.2 (0.9)	4.6 (0.6)*	5.5 (0.8)	5.5 (0.7)	4.8 (0.8)	3.8 (0.6)	7.3 (0.9)	6.3 (0.8)
Definitely Not	30.6 (1.7)	27.5 (1.3)	32.6 (1.7)	26.1 (1.3)	31.8 (1.7)	26.9 (1.3)	35.0 (1.7)	29.0 (1.3)
Don't Know/Refuse	62.1 (1.7)	67.7 (1.4)	61.9 (1.8)	68.2 (1.4)	63.4 (1.7)	69.0 (1.4)	57.5 (1.7)	64.3 (1.4)
Total Negative	0.1 (0.1)	0.2 (0.1)	0.0 (**)	0.1 (0.1)	0.0 (**)	0.2 (0.1)	0.2 (0.2)	0.3 (0.2)
	92.8 (0.9)	95.4 (0.6)	94.5 (0.8)	94.5 (0.7)	95.2 (0.8)	96.2 (0.6)	92.7 (0.9)	93.7 (0.8)
Females								
Definitely Probably	0.5 (0.2)	0.6 (0.2)	0.1 (0.2)	0.5 (0.2)	0.3 (0.2)	0.2 (0.1)	0.9 (0.3)	1.0 (0.2)
Total Positive	3.8 (0.7)	5.0 (0.6)	4.6 (0.7)	3.8 (0.5)	2.3 (0.5)	3.1 (0.5)	6.0 (0.8)	8.0 (0.8)
Probably Not	4.4 (0.7)	5.6 (0.6)	4.7 (0.7)	4.3 (0.6)	2.6 (0.5)	3.3 (0.5)	6.8 (0.9)	9.0 (0.8)
Definitely Not	17.4 (1.3)	17.4 (1.1)	18.4 (1.3)	18.8 (1.3)	17.4 (1.3)	18.2 (1.1)	20.8 (1.4)	19.1 (1.1)
Don't Know/Refuse	78.0 (1.5)	76.9 (1.2)	76.8 (1.5)	76.9 (1.5)	79.7 (1.4)	78.4 (1.2)	72.2 (1.6)	71.8 (1.3)
Total Negative	0.2 (0.2)	0.0 (**)	0.1 (0.1)	0.0 (**)	0.2 (0.2)	0.0 (**)	0.2 (0.2)	0.0 (**)
	95.6 (0.7)	94.4 (0.6)	95.7 (0.7)	95.7 (0.6)	97.4 (0.5)	96.7 (0.5)	93.2 (0.9)	91.0 (0.8)

Note: Tabled values are percentages with standard errors in parentheses. Data for 1983 are taken from the Fall 1983 Youth Attitude Tracking Study (Bray et al., 1984). Total positive and total negative values may differ slightly from the sum of their respective components because of rounding error. Estimates for 1983 are based on interviews from 4,416 young males, 798 older males, and 876 females; estimates for 1984 are based on interviews from 5,058 young males, 1,379 older males, and 1,503 females. Tests of significance were computed for the 1983-1984 total positive comparisons.

*1983-1984 comparisons were statistically significant at the 95 percent confidence level.

**Informative standard error not available.

Source: Questions 510--513.

Table 4.4 presents Reserve propensity data from the 1984 survey.* As shown, Composite Reserve Propensity is:

- 19.4 percent for young males
- 9.3 percent for older males
- 9.2 percent for females.

Positive propensities to serve in the National Guard and the Reserve, respectively, are 10.8 percent and 15.3 percent for young males, 6.9 percent and 6.8 percent for older males, and 4.3 percent and 8.0 percent for females.

Table 4.4 also shows data from the corresponding items from the 1983 YATS survey. Comparison of estimates for the two years show significant declines for young males in composite Reserve propensity (25.4 percent versus 19.4 percent), Guard propensity (15.4 percent versus 10.8 percent), and Reserve propensity (19.4 percent versus 15.3 percent). Older males also showed significant declines in composite Reserve Component propensity (13.8 percent versus 9.3 percent), Guard propensity (9.8 percent versus 6.9 percent), and Reserve propensity (10.4 percent versus 6.8 percent). Females showed no significant change between 1983 and 1984.

Table 4.5 shows the comparisons of positive propensity among the Reserve Components for 1983 and 1984. Among young males, there were significant declines in propensity for the Army National Guard, the Air Force National Guard, the Marine Corps Reserve, the Air Force Reserve and the Coast Guard. Older males showed a significant decline only for the Air Force Reserve. Females showed no significant changes between 1983 and 1984.

4. Unaided Mentions of Plans to Join the Military

Another measure of propensity to join the military is called "unaided mentions" and refers to an answer the respondent volunteers without being prompted by the interviewer. The unaided mention measure was obtained by a question that asked:

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

* The Composite Reserve Propensity measure for 1984 used in this report was based on two YATS questions. The Composite Reserve Propensity measure used in the 1983 YATS II final report was based on six questions from the Reserve Component Attitude Study (RCAS). Consequently, data from these two measures are not directly comparable. The 1983 Reserve Propensity data presented in Table 4.4 below conform to the 1984 report methodology and are comparable to the 1984 data presented there.

Table 4.4. Distribution of Propensity to Enlist in the National Guard and Reserves, 1983 & 1984

Market/Item Response	National Guard		Reserve		Composite Reserve Propensity	
	1983	1984	1983	1984	1983	1984
Young Males						
Definitely Probably Total Positive	0.8 (0.2) 14.6 (0.6) 15.4 (0.7)	0.8 (0.1) 10.1 (0.5) 10.8 (0.5)*	1.5 (0.2) 17.9 (0.7) 19.4 (0.7)	1.1 (0.2) 14.2 (0.6) 15.3 (0.6)*	2.1 (0.3) 23.3 (0.8) 25.4 (0.8)	1.6 (0.2) 17.9 (0.7) 19.4 (0.7)*
Probably Not Definitely Not Don't Know/Refused Total Negative	40.0 (0.8) 44.2 (0.9) 0.4 (0.1) 84.6 (0.7)	38.8 (0.8) 50.2 (0.9) 0.2 (0.1) 89.2 (0.5)	41.6 (0.9) 38.7 (0.9) 0.3 (0.1) 80.6 (0.7)	38.5 (0.8) 46.0 (0.9) 0.2 (0.1) 84.5 (0.6)	40.0 (0.9) 34.4 (0.8) 0.2 (0.1) 74.6 (0.8)	37.8 (0.8) 42.5 (0.9) 0.2 (0.1) 80.6 (0.7)
Older Males						
Definitely Probably Total Positive	0.6 (0.3) 9.2 (1.0) 9.8 (1.1)	0.5 (0.2) 6.4 (0.7) 6.9 (0.7)*	0.8 (0.3) 9.6 (1.1) 10.4 (1.1)	0.2 (0.1) 6.5 (0.7) 6.8 (0.7)*	1.2 (0.4) 12.6 (1.2) 13.8 (1.2)	0.6 (0.2) 8.7 (0.8) 9.3 (0.8)*
Probably Not Definitely Not Don't Know/Refused Total Negative	34.6 (1.7) 55.6 (1.8) 0.0 (**) 90.2 (1.1)	31.2 (1.4) 61.7 (1.4) 0.2 (0.1) 93.1 (0.7)	36.9 (1.7) 52.8 (1.8) 0.0 (**) 89.6 (1.1)	31.7 (1.4) 61.3 (1.4) 0.2 (0.1) 93.2 (0.7)	36.4 (1.7) 49.8 (1.8) 0.0 (**) 86.2 (1.2)	32.2 (1.4) 58.3 (1.5) 0.1 (0.1) 90.7 (0.8)
Females						
Definitely Probably Total Positive	0.0 (**) 4.0 (0.7) 4.0 (0.7)	0.3 (0.1) 4.0 (0.6) 4.3 (0.6)	0.2 (0.2) 6.9 (0.9) 7.1 (0.9)	0.4 (0.2) 7.6 (0.8) 8.0 (0.8)	0.2 (0.2) 7.9 (1.0) 8.1 (1.0)	0.6 (0.2) 8.7 (0.8) 9.2 (0.8)
Probably Not Definitely Not Don't Know/Refused Total Negative	19.7 (1.4) 76.0 (1.5) 0.2 (0.2) 96.0 (0.7)	20.5 (1.1) 75.2 (1.2) 0.0 (**) 95.7 (0.6)	22.4 (1.5) 70.3 (1.6) 0.2 (0.2) 92.9 (0.9)	21.5 (1.2) 70.4 (1.3) 0.0 (**) 92.0 (0.8)	24.2 (1.5) 67.5 (1.6) 0.2 (0.2) 91.9 (1.0)	22.6 (1.2) 68.1 (1.3) 0.0 (**) 90.8 (0.8)

Note: Tabled values are percentages with standard errors in parentheses. Estimates for 1984 are based on interviews with 5,058 young males, 1,379 older males, and 1,503 females. Estimates for 1983 are based on interviews with 4,416 young males, 798 older males, and 876 females. Tests of significance were computed for the 1983-1984 Total Positive comparisons.

* 1983-84 comparisons were statistically significant at the 95 percent confidence level.

** Informative standard error not available.

Source: Questions 505, 507 (in the 1984 questionnaire) and B5, B7 (in the 1983 questionnaire).

Table 4.5. Positive Propensity to Enlist in the Reserve Components, 1983 and 1984

Market/Propensity Measure	1983	1984	Change
<u>Young Males</u>			
Composite Reserve Propensity	25.4 (0.8)	19.4 (0.7)	-6.0*
Army National Guard	9.8 (0.5)	7.3 (0.5)	-1.5*
Air Force National Guard	5.2 (0.4)	3.4 (0.3)	-1.8*
Army Reserve	7.2 (0.5)	6.1 (0.4)	-1.1
Naval Reserve	2.1 (0.3)	2.3 (0.2)	+0.2
Marine Corps Reserve	2.6 (0.3)	1.8 (0.2)	-0.8*
Air Force Reserve	5.9 (0.4)	4.2 (0.3)	-1.7*
Coast Guard	1.1 (0.2)	0.7 (0.1)	-0.4*
<u>Older Males</u>			
Composite Reserve Propensity	13.8 (1.2)	9.3 (0.8)	-4.5*
Army National Guard	6.0 (0.8)	4.1 (0.6)	-1.9
Air Force National Guard	3.8 (0.7)	2.6 (0.5)	-1.2
Army Reserve	4.5 (0.7)	2.9 (0.5)	-1.6
Naval Reserve	0.5 (0.3)	0.5 (0.2)	0.0
Marine Corps Reserve	1.0 (0.3)	0.7 (0.3)	-0.3
Air Force Reserve	3.4 (0.7)	1.7 (0.4)	-1.7*
Coast Guard	0.9 (0.3)	1.0 (0.3)	+0.1
<u>Females</u>			
Composite Reserve Propensity	8.1 (1.0)	9.2 (0.8)	+0.9
Army National Guard	2.7 (0.6)	2.4 (0.4)	-0.3
Air Force National Guard	1.4 (0.4)	1.9 (0.4)	+0.5
Army Reserve	2.8 (0.6)	3.0 (0.5)	+0.2
Naval Reserve	0.9 (0.3)	1.1 (0.3)	+0.2
Marine Corps Reserve	0.6 (0.3)	0.3 (0.2)	-0.3
Air Force Reserve	2.3 (0.5)	2.9 (0.5)	+0.6
Coast Guard	0.2 (0.2)	0.6 (0.2)	+0.4

Note: Tabled values are percentages with standard errors in parentheses. Estimates for 1984 are based on interviews with 5,058 young males, 1,379 older males, and 1,503 females. Estimates for 1983 are based on interviews with 4,416 young males, 798 older males, and 876 females.

* 1983-84 comparisons were statistically significant at the 95 percent confidence level.

** Informative standard error not available.

Source: Questions 505-508 (in the 1984 questionnaire) and B5-B8 (in the 1983 questionnaire).

Responses of joining the military or one of the Services are defined as unaided mentions of interest to enlist. Respondents who gave such responses were subsequently asked about the Service they planned to join and whether the type of service would be active duty, the Reserves, or the National Guard?

Table 4.6 displays the 1983 and 1984 percentages of young males, older males, and females with unaided mentions of joining any branch of the military and of joining the active military. For 1984, 7.5 percent of young males, 0.9 percent of older males, and 1.9 percent of females gave unaided mentions of joining the military. Unaided mentions by young males, declined significantly (by 2.5 percentage points) between 1983 and 1984. The propensity of older males and females showed no significant 1983-1984 differences.

Percentages of unaided mentions of joining the active Services are also displayed in Table 4.6. As expected, the figures for active Service are lower than those for any military service. For 1984, unaided mentions for active Service are 5.6 percent for young males, 0.6 percent for older males, and 1.0 percent for females. Comparisons of these data with 1983 estimates indicated a significant decline for young males but no difference for older males and females.

C. Trends in Positive Active Propensity

For trend data to be interpreted correctly, research methodology and questionnaire items must be comparable. For the YATS surveys, key items such as propensity have remained constant across years, but there have been differences in the sampling methods, sampling strata and weighting schemes. An analysis of the effects of these changes on estimates made from the data in various years and a restatement of propensity data for the various years adjusted for differences in sampling and weighting have recently been completed (see Appendix E). 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 and for females in Figure 4.2.

For young males (Figure 4.1) the data 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. From 1979 to 1982 Composite Active Propensity increased, with a leveling in 1983 and a significant decline in 1984. Service-specific propensities generally increased from 1979 through 1981. From 1981 through 1984 the Services show distinct patterns. The Air Force shows an initial decline (1981-1982), a

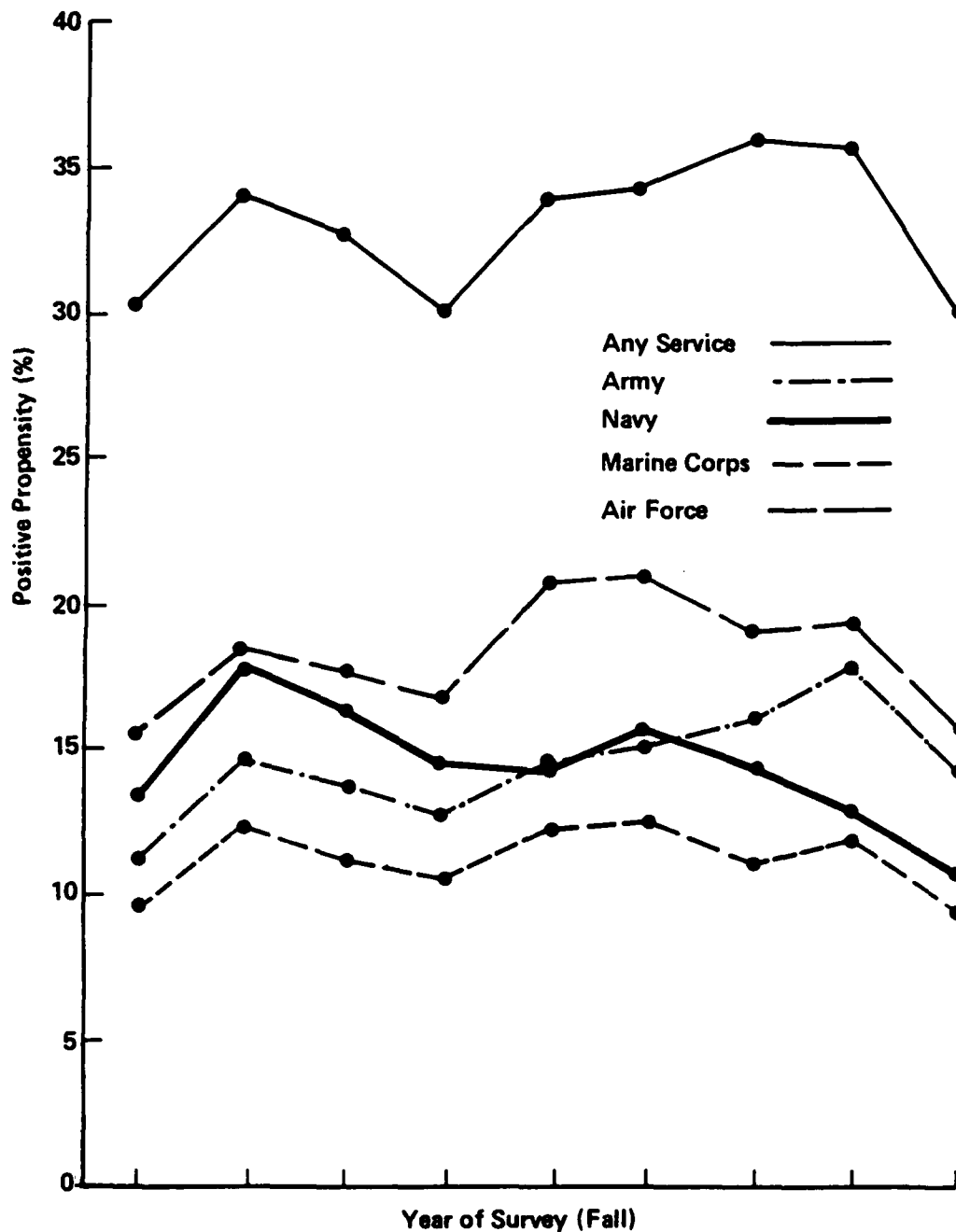
Table 4.6. Unaided Mentions of Interest in Serving in the Military, 1983 and 1984

Type of Service/Market	Unaided Mentions		83-84 Change
	1983	1984	
<u>Any Military</u>			
Young Males	10.0 (0.6)	7.5 (0.4)	-2.5*
Older Males	1.4 (0.4)	0.9 (0.4)	-0.5
Females	1.7 (0.5)	1.9 (0.4)	+0.2
<u>Active Military</u>			
Young Males	7.6 (0.5)	5.6 (0.4)	-2.0*
Older Males	1.0 (0.4)	0.6 (0.4)	-0.4
Females	1.0 (0.4)	1.0 (0.3)	0.0

Note: Tabled values are percentages with standard errors in parentheses. Data for 1983 are taken from the Fall 1983 Youth Attitude Tracking Study (Bray et al., 1984). Estimates for 1983 are based on interviews with 4,416 young males, 798 older males, and 876 females; estimates for 1984 are based on interviews from 5,058 young males, 1,379 older males and 1,503 females.

* 1983-84 comparisons were statistically significant at the 95 percent confidence level.

Source: Questions 438-441.



	1976	1977	1978	1979	1980	1981	1982	1983	1984
Any Service	30.5	34.1	32.4	30.0	33.7	34.3	35.8	35.4	29.9
Army	11.4	14.8	13.9	12.9	14.6	15.0	16.0	17.5	14.3
Navy	13.8	17.5	16.2	14.5	14.4	15.4	14.4	13.0	10.9
Marine Corps	9.3	12.7	11.8	10.8	12.3	12.4	11.7	12.1	9.6
Air Force	15.4	18.3	17.7	16.6	20.6	20.9	18.7	18.8	15.3

NOTE: Estimates prior to 1983 have been reweighted to be comparable with those in 1983 and 1984 (see Appendix E).

Figure 4-1. Trends in positive propensity to serve on active duty in specific services and any service for young males.

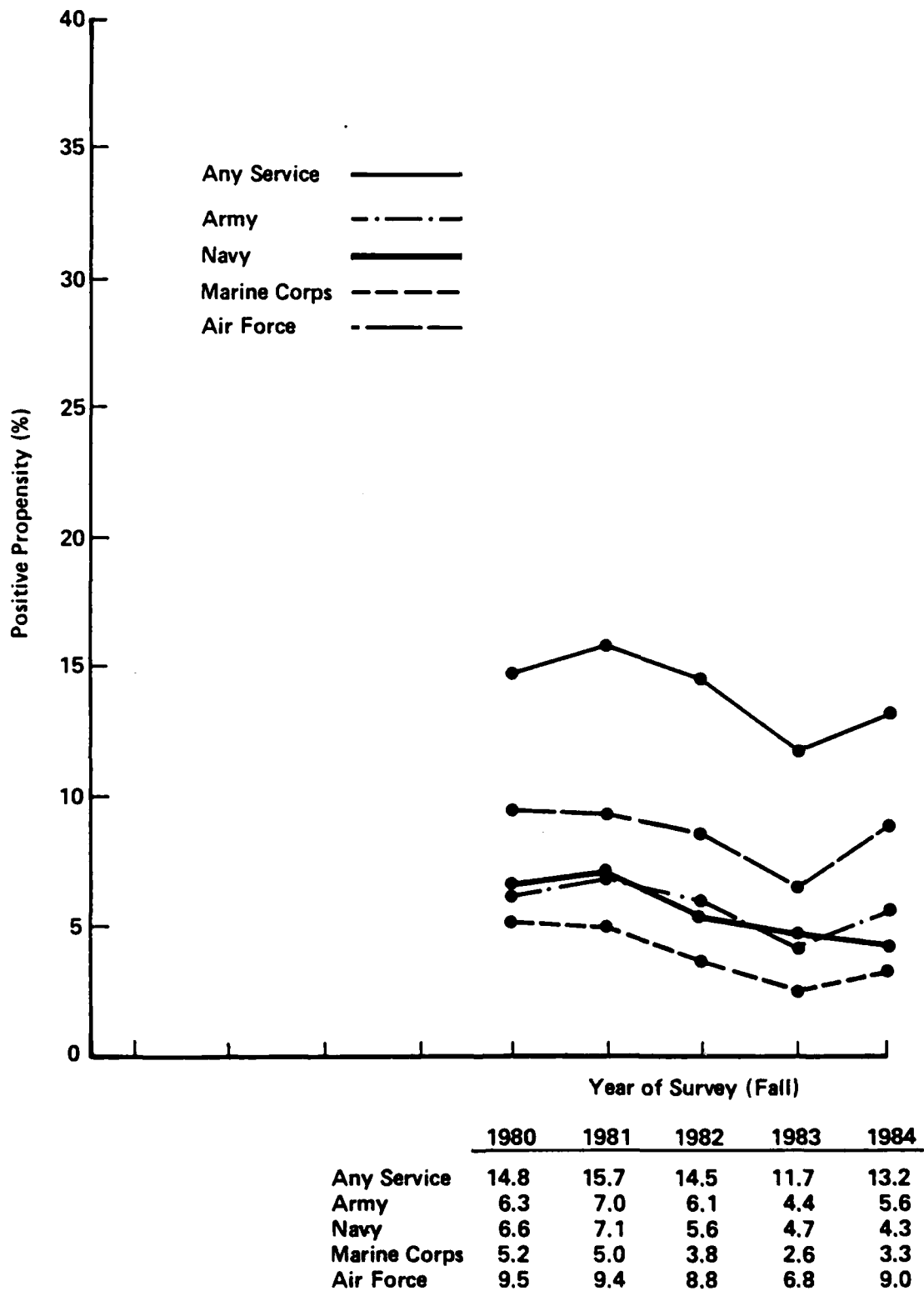
leveling off (1982-1983) and another decline (1983-1984). The Army shows an increase between 1981-1983 followed by a decline. The Navy has shown a steady declining pattern since 1981. The Marine Corps has shown a decline, an increase and another decline.

Another approach to understanding the accuracy of an estimate for a single year is to estimate the average over the series of surveys and contrast the particular year with the average. The 1979-1984 average for Composite Active Propensity is 32.9 percent. The range of deviation around this mean is rather narrow. The highest value is 35.8 percent (in 1982) and the lowest is 29.9 percent (in 1984). Since 1980, Composite Active Propensity has been above average each year except for the current year which is considerably below average.

Turning to Service-specific positive propensity, the 1979-1984 average for the Air Force is 18.0 percent, for the Army, 14.5 percent; for the Navy, 14.5 percent; and for the Marine Corps, 11.4 percent. During the period 1980-1984 the Air Force and Marines have been at or above their averages except for the present year when they fell below. The Army was also above average from 1980 to 1983, then fell to about average for 1984. Since 1980 the Navy basically stayed at its average for three years and then dropped below for the past two years.

Figure 4.2 presents comparable data for females. Females were first included in the YATS series in 1980, so data for only five years, 1980-1984, are available for them. Female positive propensity for each active Service and Composite Active Propensity are all lower than for young males. Female Composite Active Propensity rose between 1980 and 1981, dropped in 1982 and 1983, and rose again in 1984. Service-specific propensities followed the same general pattern as Composite Active Propensity for females, except that their propensity to join the Marine Corps and Air Force remained stable in 1981. Females, like males, had highest propensity to join the Air Force. The positive propensities for the Army and Navy were very close in past years, though in 1984 females seemed to prefer the Army over the Navy. Females were least likely to have a positive propensity to join the Marines.

It is useful to examine the variation in female Composite Active and Service-specific propensity levels in terms of the deviation of these levels from the averages for the five-year period in the manner done for young males.



NOTE: Estimates prior to 1983 have been reweighted to be comparable with those in 1983 and 1984 (see Appendix E).

Figure 4-2. Trends in positive propensity to serve on active duty in specific services and any service for females.

The average positive Composite Active Propensity for females from 1980 to 1984 was 14.0. Again, we can see that the range of deviation above and below this level is narrow; the highest value was 15.7 (in 1982) and the lowest, 11.7 (in 1983). In other years (1980, 1982, and 1984), female composite propensity was about average.

Turning to Service-specific propensity, the 1980-1984 average for the Air Force is 9.0; for the Army, 5.6; for the Navy, 4.3; and for the Marine Corps, 3.3. All Services had their lowest value below average in 1983. Otherwise female propensity to join the Air Force has been at or near its average in every year. Propensity to join the Army (7.0) and Navy (7.1) were at their highest values above average in 1981. Female propensity to join the Marine Corps was at its highest value (5.2) above average in 1980; in other years it has been about average.

D. Demographic Profiles of Active Propensity Groups

A number of studies have found the propensity to join the military to be related closely to age, race, employment opportunities, educational attainment, and family/financial responsibilities and obligations. Younger persons, nonwhites, those with fewer employment opportunities, lower levels of education, and fewer family and financial obligations are generally more favorable toward military service.

Table 4.7 presents the relationship of propensity to selected sociodemographic characteristics for YATS II data. Results are highly consistent across all three market groups. Young males, older males, and females with positive propensity are more likely than those with negative propensity to be:

- less well educated (11 or fewer years versus 12 or more years)
- unemployed but looking for a job (pattern varies for older males)
- attending school
- younger
- nonwhite
- single.

Some of these findings are clearly related to the age of the respondents.

Table 4.8 provides additional information about the effects of age and race/ethnicity on Composite Active Propensity. Prior YATS surveys have shown that both of these variables are strongly related to propensity. These same findings are also evident in the present survey. The data show a consistent pattern across all market groups for propensity to decrease as age increases.

Table 4.7. Composite Active Propensity and Sociodemographic Characteristics

	Young Males			Older Males			Females		
	Positive Propensity (n = 1,423)	Negative Propensity (n = 3,635)	Total (n = 5,058)	Positive Propensity (n = 138)	Negative Propensity (n = 1,241)	Total (n = 1,379)	Positive Propensity (n = 197)	Negative Propensity (n = 1,306)	Total (n = 1,503)
Age^a									
16 (22)	30.7 (1.5)	19.7 (0.9)	23.0 (0.8)	23.6 (3.9)	12.9 (1.0)	14.0 (1.0)	30.9 (3.6)	21.9 (1.2)	23.1 (1.1)
17 (23)	25.1 (1.3)	20.6 (0.8)	21.9 (0.7)	13.7 (3.0)	15.3 (1.2)	15.2 (1.1)	18.9 (3.1)	22.6 (1.1)	22.1 (1.0)
18 (24)	17.5 (1.1)	19.9 (0.9)	19.2 (0.7)	14.2 (3.1)	13.4 (1.1)	13.5 (1.0)	20.0 (3.1)	16.8 (1.1)	17.2 (1.0)
19 (25)	12.2 (1.0)	15.9 (0.7)	14.8 (0.6)	13.1 (3.1)	12.8 (1.0)	12.8 (0.9)	13.4 (2.5)	15.8 (1.1)	15.5 (1.0)
20 (26)	7.6 (0.8)	13.0 (0.7)	11.4 (0.5)	14.7 (4.0)	10.4 (1.0)	10.8 (0.9)	7.8 (2.0)	12.3 (1.0)	11.7 (0.9)
21 (27)	7.0 (0.8)	10.9 (0.6)	9.7 (0.5)	9.7 (2.9)	11.5 (1.0)	11.3 (0.9)	9.1 (2.2)	10.7 (1.0)	10.4 (0.9)
22 (28)				4.8 (1.9)	13.8 (1.1)	12.9 (1.0)			
23 (29)				6.2 (2.2)	9.9 (0.9)	9.5 (0.9)			
Race/Ethnicity									
White	65.3 (1.6)	82.1 (0.8)	77.1 (0.8)	62.2 (4.5)	83.2 (1.2)	81.0 (1.2)	54.6 (4.0)	78.6 (1.4)	75.4 (1.4)
Black	18.9 (1.2)	9.4 (0.6)	12.2 (0.5)	15.3 (3.4)	8.4 (0.9)	9.1 (0.9)	27.3 (3.6)	10.1 (1.0)	12.4 (1.0)
Hispanic	12.3 (1.1)	6.1 (0.5)	8.0 (0.5)	17.9 (3.6)	6.7 (0.9)	7.9 (0.9)	11.9 (2.6)	8.7 (1.0)	9.1 (0.9)
Other	3.5 (0.6)	2.3 (0.3)	2.7 (0.3)	4.6 (1.9)	1.7 (0.4)	2.0 (0.4)	6.3 (2.0)	2.6 (0.5)	3.1 (0.5)
Marital Status									
Never married	97.2 (0.6)	95.4 (0.4)	95.9 (0.3)	56.1 (4.7)	39.8 (1.6)	41.5 (1.5)	92.9 (2.0)	84.7 (1.1)	85.8 (1.0)
Married	2.4 (0.5)	4.0 (0.4)	3.5 (0.3)	38.2 (4.5)	52.8 (1.6)	51.3 (1.5)	4.4 (1.7)	13.7 (1.1)	12.5 (1.0)
Other	0.5 (0.2)	0.6 (0.2)	0.6 (0.1)	5.7 (2.3)	7.4 (0.8)	7.2 (0.7)	2.6 (1.1)	1.6 (0.3)	1.7 (0.3)
Educational Plans^c									
Attend School	67.9 (1.4)	64.0 (1.0)	65.1 (0.8)	24.2 (4.4)	14.2 (1.1)	15.2 (1.1)	68.6 (3.6)	63.1 (1.5)	63.8 (1.4)
Not Attend School	30.3 (1.4)	35.1 (1.0)	33.7 (0.8)	75.2 (4.5)	84.2 (1.1)	83.2 (1.1)	29.9 (3.6)	36.2 (1.5)	35.3 (1.4)
Don't Know	1.8 (0.4)	0.9 (0.2)	1.2 (0.2)	0.6 (0.6)	1.7 (0.4)	1.5 (0.4)	1.6 (0.9)	0.8 (0.3)	0.9 (0.3)
Years of Education Completed									
Less than 10	11.5 (1.0)	5.1 (0.5)	7.0 (0.5)	6.9 (2.3)	4.2 (0.6)	4.5 (0.6)	4.3 (1.9)	5.6 (0.7)	5.4 (0.7)
10	27.1 (1.4)	17.2 (0.9)	20.2 (0.8)	6.6 (2.1)	4.5 (0.6)	4.7 (0.6)	26.8 (3.5)	17.9 (1.1)	19.1 (1.1)
11	31.9 (1.4)	25.5 (0.9)	27.4 (0.7)	12.8 (3.2)	7.1 (0.8)	7.6 (0.8)	30.7 (3.6)	28.1 (1.4)	28.4 (1.3)
12	25.2 (1.3)	39.0 (1.0)	34.9 (0.8)	60.5 (4.7)	62.4 (1.5)	62.2 (1.4)	30.7 (3.5)	34.6 (1.4)	34.1 (1.3)
Some college/vocational school	4.3 (0.6)	13.3 (0.7)	10.6 (0.5)	13.2 (3.1)	21.8 (1.3)	20.9 (1.2)	7.4 (2.0)	13.9 (1.1)	13.0 (1.0)
Employment Status									
Employed full-time	26.7 (1.3)	38.0 (1.0)	34.6 (0.8)	75.4 (4.0)	84.7 (1.2)	83.7 (1.1)	18.4 (2.9)	22.7 (1.3)	22.2 (1.1)
Employed part-time	27.0 (1.3)	26.6 (0.9)	26.7 (0.8)	11.8 (3.1)	6.3 (0.8)	6.8 (0.8)	23.0 (3.3)	28.1 (1.3)	27.4 (1.2)
Not employed, looking	32.2 (1.4)	17.0 (0.8)	21.5 (0.7)	9.2 (2.6)	6.6 (0.8)	6.9 (0.8)	38.3 (3.8)	25.0 (1.4)	26.8 (1.3)
Not employed, not looking	14.0 (1.1)	18.4 (0.8)	17.1 (0.6)	3.6 (1.7)	2.4 (0.5)	2.6 (0.5)	20.3 (3.1)	24.2 (1.3)	23.6 (1.2)

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

^a Ages 22-29 apply to older males.

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

^c Data were collected in August and September 1984. Question asked about their planned status for October.

^{**} Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 424, 693, 714, 715.

Table 4.8. Positive Composite Active Propensity by Race/Ethnicity and Age

Market/Age	Race/Ethnicity				Total
	White	Black	Hispanic	Other	
<u>Young Males</u>					
16-17	33.3 (1.4)	49.3 (3.4)	54.7 (4.6)	37.8 (7.8)	37.2 (1.2)
18-21	19.0 (1.0)	43.2 (3.1)	39.3 (4.3)	40.2 (6.3)	24.0 (1.0)
Total	25.3 (0.8)	46.1 (2.4)	46.1 (3.0)	39.1 (5.1)	29.9 (0.8)
<u>Older Males</u>					
22-24	10.5 (1.5)	22.8 (5.7)	12.2 (4.8)	33.1 (14.7)	12.4 (1.4)
25-29	6.0 (1.1)	12.1 (4.6)	33.4 (7.0)	15.8 (10.4)	8.7 (1.2)
Total	7.9 (0.9)	17.2 (3.6)	23.3 (4.5)	23.8 (8.9)	10.3 (0.9)
<u>Females</u>					
16-17	11.7 (1.6)	27.3 (5.6)	17.8 (5.8)	24.7 (9.2)	14.7 (1.5)
18-21	7.9 (1.2)	30.7 (5.0)	16.8 (4.9)	31.1 (12.8)	12.1 (1.3)
Total	9.6 (1.0)	29.2 (3.7)	17.3 (3.7)	27.0 (7.6)	13.3 (1.0)

Note. Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,030 young males (3,927 white, 609 Black, 369 Hispanic, and 125 "other"), 1,376 older males (1,123 white, 125 Black, 103 Hispanic, and 25 "other"), and 1,495 females (1,150 white, 183 Black, 118 Hispanic, and 44 "other").

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

For example, young male 16-17 year olds show a propensity of 37.2 percent compared to 24.0 percent for 18-21 year olds. Similar patterns hold for older males aged 22-24 (12.4 percent) compared to those aged 25-29 (8.7 percent) and for females aged 16-17 (14.7 percent) compared to those aged 18-21 (12.1 percent).

Among young males, whites (25.3 percent) have lower propensity than blacks (46.1 percent), Hispanics (46.1 percent), or others (39.1 percent). For older males and females, too, there is a clear pattern for propensity to be markedly higher among minority groups than among whites.

E. Understanding 1983-1984 Changes in Propensity

In an attempt to understand the reasons for the large decline in positive active propensity between 1983 and 1984, differences in demographic characteristics for the two years are assessed. An examination of employment characteristics and propensity for the two years follows.

1. Comparing Demographics of 1983 and 1984 Respondents

A first step in understanding propensity changes is to compare the demographic characteristics of the 1983 and 1984 samples. Inspection of Table 4.9 indicates that there are only minor variations in the 1983-1984 distributions for age, race/ethnicity, and marital status for the three market groups. Comparisons of educational status, years of education completed, and employment status, however, show more substantial differences between the two years.

The proportion of 1984 respondents (interviewed in August and September) who reported planning to be in school in October was larger than the proportion of 1983 respondents (interviewed in September and October) who reported being in school. These differences are 65 percent versus 56 percent for young males, 15 percent versus 11 percent for older males, and 64 percent versus 55 percent for females.

For years of education completed, the pattern indicates that male respondents in 1984 had completed more years of secondary education than those in 1983. Among young males, for example, 7 percent had completed less than 10 years and 35 percent had completed 12 years for 1984, compared to 11 percent and 32 percent, respectively, for 1983. A similar pattern is also evident for older males. Females, on the other hand, do not appear significantly different from those in 1983 with respect to education completed.

Table 4.9. Sociodemographic Characteristics for 1983 and 1984

	Young Males		Older Males		Females	
	1983 (n=4,416)	1984 (n=5,058)	1983 (n=798)	1984 (n=1,379)	1983 (n=876)	1984 (n=1,503)
Age^a						
16 (22)	21.7 (0.7)	23.0 (0.8)	16.0 (1.3)	14.0 (1.0)	21.9 (1.4)	23.1 (1.1)
17 (23)	22.9 (0.7)	21.9 (0.7)	14.6 (1.3)	15.2 (1.1)	21.9 (1.4)	22.1 (1.2)
18 (24)	17.6 (0.7)	19.2 (0.7)	13.5 (1.2)	13.5 (1.0)	16.3 (1.3)	17.2 (1.0)
19 (25)	16.2 (0.7)	14.8 (0.6)	11.8 (1.2)	12.8 (0.9)	16.5 (1.3)	15.5 (1.0)
20 (26)	12.6 (0.6)	11.4 (0.5)	12.9 (1.3)	10.8 (0.9)	11.6 (1.1)	11.7 (0.9)
21 (27)	9.0 (0.5)	9.7 (0.5)	11.8 (1.2)	11.3 (0.9)	11.8 (1.1)	10.4 (0.9)
(28)	-	-	11.3 (1.2)	12.9 (1.0)	-	-
(29)	-	-	8.2 (1.0)	9.5 (0.9)	-	-
Race/Ethnicity						
White	77.4 (0.9)	77.1 (0.8)	81.9 (1.4)	81.0 (1.2)	79.6 (1.5)	75.4 (1.4)
Black	12.4 (0.7)	12.2 (0.6)	8.4 (1.0)	9.1 (0.9)	11.3 (1.2)	12.4 (1.0)
Hispanic	6.2 (0.5)	8.0 (0.5)	6.5 (0.9)	7.9 (0.9)	6.1 (0.9)	9.1 (0.9)
Other	4.0 (0.4)	2.7 (0.3)	3.3 (0.6)	2.0 (0.4)	3.1 (0.6)	3.1 (0.5)
Marital Status						
Never married	95.7 (0.3)	95.9 (0.3)	41.4 (1.8)	41.5 (1.5)	84.8 (1.3)	85.8 (1.0)
Married	3.8 (0.3)	3.5 (0.3)	52.5 (1.8)	51.3 (1.5)	12.1 (1.2)	12.5 (1.0)
Other ^b	0.5 (0.1)	0.6 (0.1)	6.1 (0.9)	7.2 (0.7)	3.1 (0.6)	1.7 (0.3)
Educational Plans^c						
Attend School	56.5 (0.9)	65.1 (0.8)	11.0 (1.1)	15.2 (1.1)	54.7 (1.8)	63.8 (1.4)
Not Attend School	43.5 (0.9)	33.7 (0.8)	89.0 (1.1)	83.2 (1.1)	45.3 (1.8)	35.3 (1.4)
Don't Know	-	1.2 (0.2)	-	1.5 (0.4)	-	0.9 (0.3)
Years of Education Completed						
Less than 10	11.0 (0.5)	7.0 (0.5)	8.0 (1.0)	4.5 (0.6)	6.9 (0.9)	5.4 (0.7)
10	21.4 (0.7)	20.2 (0.8)	4.9 (0.8)	4.7 (0.6)	23.0 (1.5)	19.1 (1.1)
11	24.3 (0.8)	27.4 (0.7)	5.1 (0.8)	7.6 (0.8)	23.3 (1.4)	28.4 (1.3)
12	31.7 (0.8)	34.9 (0.8)	54.1 (1.8)	62.2 (1.4)	31.8 (1.6)	34.1 (1.3)
Some college/ vocational school	11.7 (0.6)	10.6 (0.5)	27.9 (1.6)	20.9 (1.2)	15.0 (1.3)	13.0 (1.0)
Employment Status						
Employed full time	25.8 (0.8)	34.6 (0.8)	79.2 (1.5)	83.7 (1.1)	16.8 (1.3)	22.2 (1.1)
Employed part time	29.5 (0.8)	26.7 (0.8)	7.4 (0.9)	6.8 (0.8)	32.6 (1.6)	27.4 (1.2)
Not employed, looking	25.4 (0.8)	21.5 (0.7)	9.4 (1.1)	6.9 (0.8)	24.3 (1.6)	26.8 (1.3)
Not employed, not looking	19.3 (0.7)	17.1 (0.6)	4.1 (0.7)	2.6 (0.5)	26.2 (1.6)	23.6 (1.2)

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

^aAges 22-29 apply to older males.

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

^cIn 1983, the responses were categorized "in school," "not in school." The data collected in August and September 1984 asked about their planned status for October.

^{**}Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 424, 693, 714, 715.

Employment status indicates a greater percentage of respondents were employed full time in 1984 than in 1983. Among young males, 35 percent were employed full time in 1984 compared to 26 percent in 1983. Of older males, 84 percent were employed in 1984 compared to 79 percent in 1983. Of females, 22 percent were employed in 1984 compared to 17 percent in 1983.

Clearly, the characteristics of educational status, years of education completed, and employment status indicate some significant differences between the respondents of the 1983 and 1984 surveys and suggest some possible reasons for the decline in propensity for 1984 among young males. Individuals with more education, with plans to attend school or with full-time employment might be expected to show less interest in the military.

2. Employment Status and Propensity

To help understand the pattern of differences between the two years, exploratory analyses were undertaken for young males that examined changes in distributions of characteristics and changes in positive propensity for a variety of subgroups. These analyses suggested that the decline in propensity is partially explained by an improvement in the job market in 1984 compared to 1983.

Table 4.10 presents distributions of employment status and positive propensity for young males for 1983 and 1984. The data show significant increases in full-time employment between 1983 and 1984 and a corresponding pattern of decreases in the other employment categories (though there were not significant declines for 16-17 year-olds). Changes in propensity show a pattern of consistent decline across all employment groups, though many are not significant. The most important finding is that the decline in propensity is more pronounced for the 16-17 year-olds (7.6 percentage point change) compared to 18-21 year-olds (3.8 percentage point change). For the 16-17 year-olds, significant declines in propensity occur for those employed full-time (22.9 percentage point change) and for those not employed and not looking (11.7 percentage point change), whereas no significant decline occurred for any of the employment groups for the 18-21 year-olds.

Considered together, these data indicate that changes in employment occurred across all age groups, but the strongest declines in propensity occurred for the 16-17 year-olds. Since propensity has traditionally been highest among the younger respondents (e.g., 37.2 percent for 16-17 year-olds

Table 4.10. Age, Employment Status, and Active Propensity for Young Males in 1983 and 1984

Age/Employment Status	Employment			Positive Propensity			83-84 Change
	1983	1984	83-84 Change	1983	1984	83-84 Change	
16-17 Year Olds							
Employed Full Time	5.0 (0.6)	13.7 (0.9)	+8.7*	54.8 (5.9)	31.9 (3.1)	-22.9*	
Employed Part Time	34.5 (1.3)	32.5 (1.2)	-2.0	40.0 (2.2)	35.6 (2.1)	-4.4	
Not Employed, Looking	33.3 (1.2)	28.2 (1.2)	-5.1*	52.0 (2.2)	49.2 (2.5)	-2.8	
Not Employed, Not Looking ^a	27.2 (1.1)	25.6 (1.1)	-1.6	40.3 (2.5)	28.6 (2.2)	-11.7*	
Total	100.0	100.0	-	44.8 (1.3)	37.2 (1.2)	-7.6*	
18-21 Year Olds							
Employed Full Time	42.5 (1.3)	51.7 (1.2)	+9.2*	24.5 (1.6)	21.2 (1.2)	-3.3	
Employed Part Time	25.4 (1.0)	22.0 (1.0)	-3.4*	25.0 (2.2)	23.9 (2.1)	-1.1	
Not Employed, Looking	19.1 (0.9)	16.1 (0.9)	-3.0*	42.0 (2.7)	38.5 (2.8)	-3.5	
Not Employed, Not Looking ^b	13.0 (0.9)	10.2 (0.7)	-2.8*	23.3 (2.8)	16.1 (2.6)	-7.2	
Total	100.0	100.0	-	27.8 (1.1)	24.0 (1.0)	-3.8*	
Total							
Employed Full Time	25.8 (0.8)	34.6 (0.8)	+8.8*	27.2 (1.6)	23.1 (1.1)	-4.1*	
Employed Part Time	29.5 (0.8)	26.7 (0.8)	-2.8*	32.8 (1.6)	30.3 (1.6)	-2.5	
Not Employed, Looking	25.4 (0.8)	21.5 (0.7)	-3.9*	47.9 (1.7)	44.8 (1.9)	-3.1	
Not Employed, Not Looking	19.3 (0.7)	17.1 (0.6)	-2.2*	34.0 (1.9)	24.5 (1.7)	-9.5*	
Total	100.0	100.0	-	35.4 (0.9)	29.9 (0.8)	-5.5*	

Note: Table entries are percentages with standard errors in parentheses.

^aPrimarily students still in high school.

^bPrimarily students attending college.

Source: Questions 403, 416, 417, 424, 510-513.

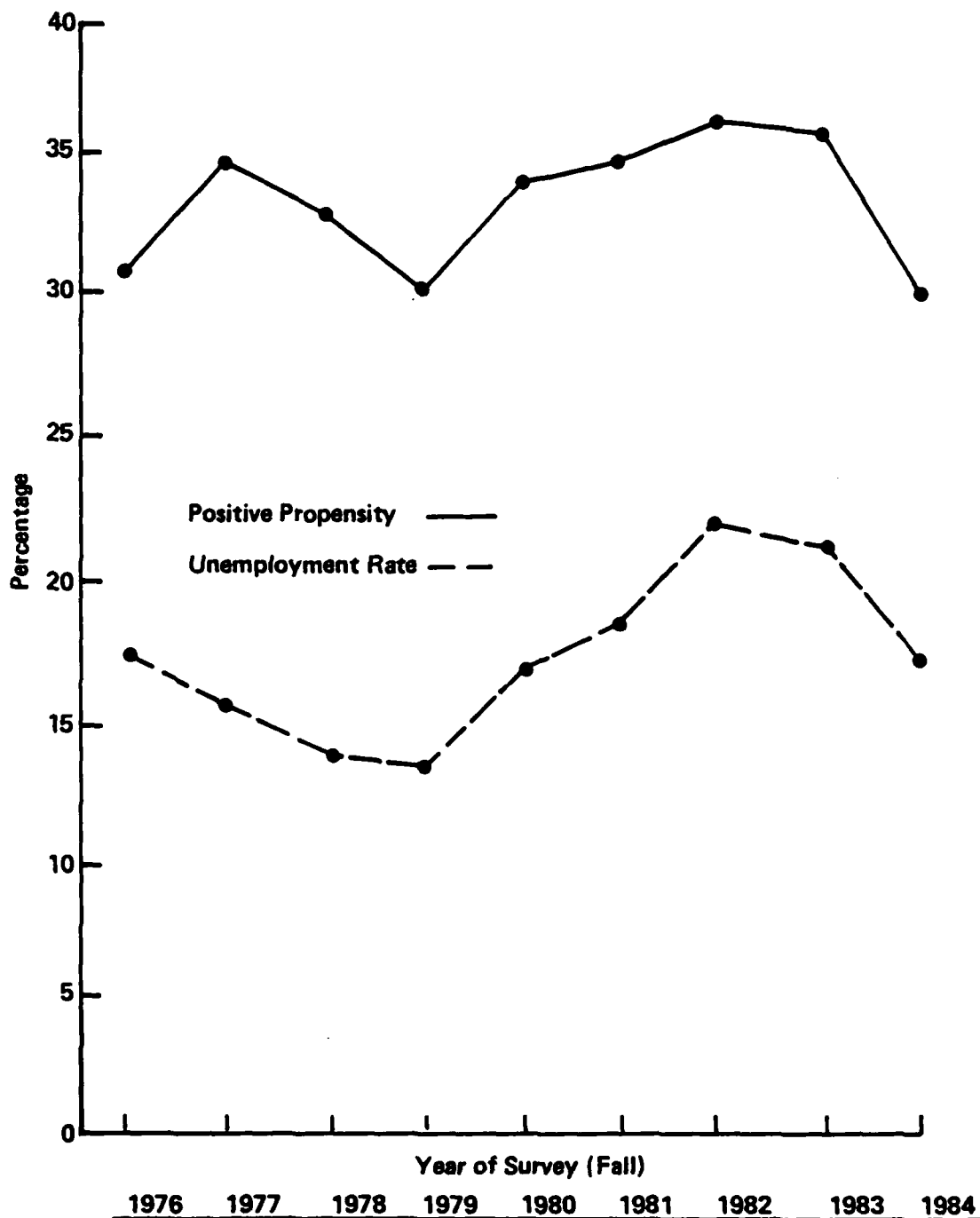
* 1983-1984 comparisons were statistically significant at the 95 percent confidence level.

versus 24.0 percent for 18-21 year-olds in 1984), their greater change relative to 18-21 year-olds probably underlies the large decline in propensity observed in 1984. The greater change in propensity among the 16-17 year-olds may indicate that younger respondents' attitudes and perceptions are less stable. That is, 16-17 year-olds may have perceived greater employment changes and opportunities and may have been more optimistic about the future than 18-21 year olds. Such an interpretation is consistent with this group's limited job market experience and financial responsibilities and the numerous media and government references during 1984 to improvements in the economy.

To explore further the notion that changes in employment underlie changes in propensity, data showing unemployment rates for 16-21 year-old males since 1976 were compared to data for propensity during this same period. Figure 4.3 shows the trends for the two types of data for young males. The similar pattern among the data is striking, particularly since 1979, showing a correlation of .66 for the nine-year period. This suggests that when civilian unemployment is high, military Service is more attractive to young males. When many job alternatives are available, the military appears to have less appeal.

Even though these data suggest that employment opportunities help to explain the decline in propensity between 1983 and 1984, it is important to note that this is only a partial explanation. Certainly a number of other factors must be taken into account to explain all of the observed variation in the data (e.g., educational opportunities, attitudes toward serving in the military).

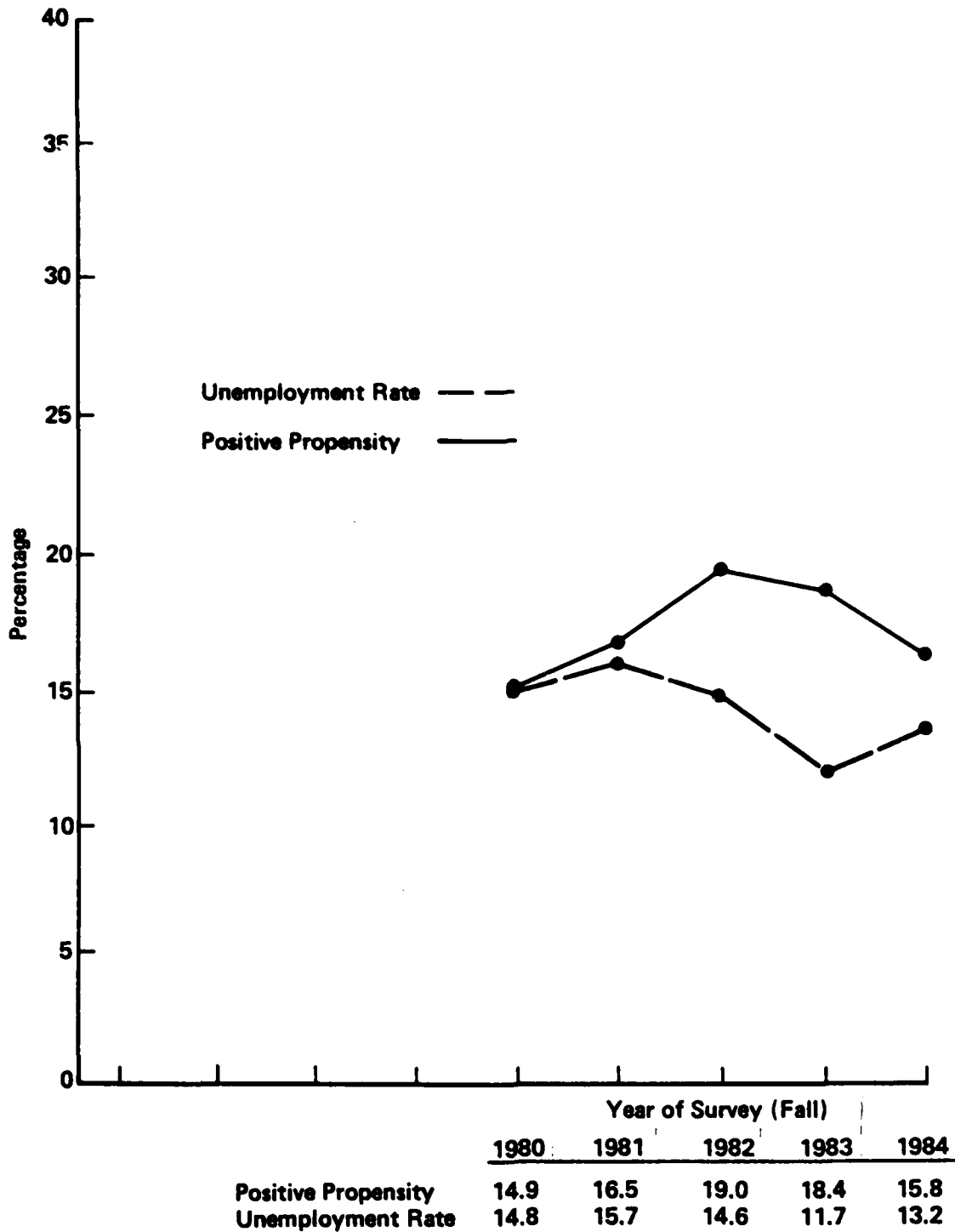
In view of the rather striking pattern between unemployment rates and positive Composite Active Propensity for young males (Figure 4.3), it is of interest to examine this same relationship for females. Figure 4.4 shows the trend lines for unemployment rates and positive propensity during the five-year period from 1980-1984 that female data have been collected in YATS. The data show a very different pattern than that observed for young males. Instead of showing a strong positive relationship (indicated by the parallel lines in Figure 4.3), the trend lines show a rather divergent pattern with a correlation between the two curves of $-.35$. Thus, whereas unemployment rates may be suggestive of propensity estimates for young males, they are far less predictive of the same information for females.



	1976	1977	1978	1979	1980	1981	1982	1983	1984
Positive Propensity	30.5	34.1	32.4	30.0	33.7	34.3	35.8	35.4	29.9
Unemployment Rate	17.2	15.5	13.9	13.6	16.8	18.0	21.9	21.1	17.1

NOTE: Propensity estimates are based on surveys in the fall of each year. Those prior to 1983 have been reweighted to be comparable with those in 1983 and 1984 (see Appendix E). Unemployment figures are annual estimates provided by the Bureau of Labor Statistics for 16-21 year old males. Correlation of the two curves is .86.

Figure 4-3. Young male trends in annual unemployment rates and in positive propensity for any active duty service.



NOTE: Propensity estimates are based on surveys in the fall of each year. Those prior to 1983 have been reweighted to be comparable with those in 1983 and 1984 (see Appendix E). Unemployment figures are annual estimates provided by the Bureau of Labor Statistics for 16-21 year old females. Correlation of the two curves is $-.35$.

Figure 4-4. Female trends in annual unemployment rates and in positive propensity for any active duty service.

The finding that propensity estimates for females are not strongly related to unemployment rates is not readily explained by data collected in the YATS surveys. This result may be due to differences in labor force participation rates between men and women. Further, females may perceive military recruiting policies in a way different from males.

F. Summary

Analyses presented in this chapter describe propensity to serve in the military for young males, older males, and females. Results are reported for Service-specific propensity and composite propensity for the active Services and the Reserve Component. This summary highlights the major findings.

1. Propensity Toward the Active and the Reserve Service

- Between 1983 and 1984, positive Composite Active Propensity for young males declined significantly from 35.4 percent to 29.9 percent and for older males from 13.8 percent to 10.3 percent. Females showed no significant change from 1983 (11.7 percent) to 1984 (13.2 percent).
- Reserve propensity showed a significant decline between 1983 and 1984 for young males (25.4 percent to 19.4 percent) and older males (13.8 percent to 9.3 percent). Female propensity did not change significantly (8.1 percent to 9.2 percent).
- The percentage of young males with unaided mentions to join the military was 7.5 percent in 1984, a significant decrease from 10.0 percent in 1983. Older males (1.4 percent versus 0.9 percent) and females (1.7 percent versus 1.9 percent) did not show significant changes.

2. Trends in Positive Active Propensity

- For young males, the overall trend in positive propensity decreased between 1977 (34.1 percent) and 1979 (30.0 percent), increased until 1983 (35.4 percent), and declined in 1984 (29.9 percent).
- For females, there has been little overall change in positive propensity from 1980 compared to 1984, although there was a significant two-year decline from 1981 (15.7 percent) to 1983 (11.7 percent).

- For young males, service specific propensities show a change over time in Service preferences. Prior to 1980, the rank ordering of Service propensities was Air Force first followed by Navy, Army, and Marine Corps. During 1980 and 1981, Army propensity increased and was tied with the Navy for the second place rank. This trend of increasing propensity for the Army has continued along with a decline for the Navy so that the current ranking is Air Force, Army, Navy, Marine Corps.
- For females ranking of service specific propensities shows a consistent pattern with Air Force the highest followed by the Navy and Army at comparable levels and the Marines the lowest.

3. Demographic Profiles of Active Propensity Groups

- For all market groups, respondents with positive propensity are more likely than those with negative propensity to have less education, to be unemployed but looking for work, attending school, to be younger, to be nonwhite, and to be unmarried.

4. Understanding 1983-1984 Changes in Propensity

- Comparisons of demographic characteristics for the 1983 and 1984 surveys showed no differences in distributions for age, race or marital status. However, there were substantial increases in 1984 in plans to attend school, in years of education completed, and in full-time employment.
- Changes in employment status provide a partial explanation for the decline in propensity in 1984 among young males. Propensity decreased more for 16-17 year-olds than for 18-21 year-olds, although full-time employment for both age groups increased about the same amount. The 16-17 year-olds showed significant declines in propensity of 23 percent between 1983-1984 for those employed full-time and 12 percent for those not employed and not looking compared to nonsignificant declines of 3 percent and 7 percent, respectively, for the 18-21 year-olds. These findings suggest greater optimism on the part of 16-17 year olds regarding civilian job opportunities and a corresponding lower interest in the military.

For young males, the relationship between positive propensity and unemployment rates between 1976 and 1984 showed a positive correlation of .66. Thus, positive propensity generally increased when unemployment rates increased and decreased when unemployment rates decreased. For females, the relationship was much weaker and in the opposite direction. The correlation between propensity and unemployment rates between 1980 and 1984 showed a correlation of -.35.

5. CONSIDERATION OF MILITARY AND CIVILIAN ALTERNATIVES

Serving in the military is only one of a number of occupations or activities available to young adults. The desirability and accessibility of other alternatives such as school or civilian employment constitute the context within which young people evaluate the characteristics of military service, and affect the likelihood of their joining the military. This chapter examines the effects of a number of the non-military alternatives on propensity. First, we discuss how job characteristics considered important by young adults are related to propensity. Next, we discuss perceptions about the achievability of those job characteristics in the military. General intentions to join the military are then compared with the likelihood that respondents will pursue several specific non-military activities. We then present data about the prior consideration respondents have given to military service. Finally, the influence of significant others (i.e., family and friends) and personal attitudes about the military are related to propensity to serve.

A. Desired Job Characteristics

While military service is unique in a number of important ways, it also has properties of other jobs in that individuals are paid for services performed. Understanding the importance which potential enlistees assign to specific job characteristics enhances the study of propensity. Accordingly, all respondents were asked to rate the importance of 15 job characteristics along a four-point scale (extremely, very, somewhat, or not important). Results are presented in Table 5.1.

Six job characteristics were rated as "extremely important" or "very important" by three-fourths or more of all young male respondents. In descending order of importance, these job characteristics are:

- Enjoying your work
- Job security
- Good income
- Personal freedom
- Learn a valuable trade or skill
- Adequate retirement benefits.

The least important characteristics (rated important by fewer than half of the young males) are:



Table 5.1. Desired Job Characteristics

Job Characteristics	Young Males			Older Males			Females		
	Positive Propensity (n=1,418)	Negative Propensity (n=3,619)	Total (n=5,037)	Positive Propensity (n=138)	Negative Propensity (n=1,239)	Total (n=1,377)	Positive Propensity (n=197)	Negative Propensity (n=1,304)	Total (n=1,501)
1. Enjoy your work	87.4	88.9	88.5 (0.6)	86.8	89.1	88.8 (0.9)	94.3	90.8	91.2 (0.8)
2. Job security	85.7	86.5	86.3 (0.8)	94.8	90.9	91.2 (1.2)	87.9	88.9	88.7 (1.2)
3. Good income	83.4	82.0	82.4 (0.7)	85.0	87.4	87.2 (1.0)	83.6	84.5	84.4 (1.0)
4. Personal freedom	75.3*	82.0	80.0 (0.7)	80.7	82.7	82.5 (1.1)	78.9*	82.8	82.3 (1.1)
5. Learn valuable trade or skill	81.9*	77.8	79.1 (0.7)	87.3*	79.1	80.0 (1.2)	84.7*	77.0	78.1 (1.2)
6. Adequate retirement benefits	78.4*	73.6	75.1 (0.8)	82.7	80.5	80.8 (1.1)	79.7*	72.4	73.4 (1.3)
7. Promotion opportunities	70.1	69.3	69.5 (0.8)	77.0*	65.9	67.1 (1.4)	79.1*	68.3	69.7 (1.3)
8. Get money for education	72.1*	58.5	62.8 (0.8)	66.1*	46.9	48.9 (1.5)	82.2*	67.2	69.2 (1.3)
9. Equal pay and opportunity for men and women	64.2*	56.4	58.7 (1.1)	63.8*	57.6	58.1 (2.1)	79.8	83.7	83.2 (1.5)
10. Do something for country	68.9*	48.4	54.6 (0.9)	67.9*	54.4	55.8 (1.5)	71.2*	49.9	52.7 (1.4)
11. Have a lot in common with co-workers	57.6*	50.7	52.8 (0.9)	64.0*	52.8	53.9 (1.5)	49.9	52.5	52.2 (1.4)
12. Training for leadership	61.9*	47.3	51.6 (0.8)	61.7*	51.0	52.1 (1.5)	67.2*	46.8	49.5 (1.4)
13. High status and prestige	49.4*	46.1	47.0 (0.8)	54.0*	41.0	42.3 (1.5)	62.2*	46.2	48.4 (1.4)
14. Stay in area	39.1*	48.2	45.5 (0.8)	49.2*	58.9	57.9 (1.5)	33.8*	51.5	49.2 (1.4)
15. Parents' approval	45.2*	38.7	40.6 (0.8)	39.0*	27.8	28.9 (1.4)	50.9	48.0	48.4 (1.4)

Note: Tabled values are percents with standard errors in parentheses. Responses are the percent who indicated extremely important or very important.

* Individuals with positive propensity were significantly different at the 95 percent confidence level from individuals with negative propensity.

Source: Questions 510-513, 649, 651, 653, ... 677 (all odd items between 653 and 677).

- High status and prestige
- Stay in the area (with family and friends)
- Parents' approval.

Comparing market groups, we see that the six most desired job characteristics for young males also rank highest for older males although there are minor differences in order of preference. Compared to young males, more older males think staying in the area is important, and fewer think money for education is highly important. These results may in part reflect older males' status in a more settled stage of life.

Generally females also rated the same characteristics as important as young males and older males. However, females considered "equal pay and opportunity for men and women" of greater importance than did males. It ranked fourth in the list (between "good pay" and "personal freedom") and was rated important by 83 percent of the females.

When we look at job characteristics by positive and negative propensity for young males, we see that differences in ratings of the three most desired job characteristics are minor. Differences in the next three are statistically significant. Eighty-two percent of the negative propensity young males compared to 75 percent of the positive propensity young males regard "personal freedom" as important. On the other hand, more positive than negative propensity young males rate "learn a valuable trade or skill" (82 vs. 78 percent), "adequate retirement benefits" (78 vs. 74 percent), and "get money for education" (72 vs. 59 percent) as important. With the exception of "stay in the area," the remaining job characteristics are desired by more positive propensity than negative propensity young males.

For older males, significantly more positive than negative propensity respondents rate "learning a valuable trade or skill" (87 vs. 79 percent), "promotion opportunities" (77 vs. 66 percent), and "getting money for education" (66 vs. 47 percent) as highly important. Again, more positive than negative propensity respondents said the remaining job characteristics (items 9-15) were desirable.

Among the six job characteristics rated important by females, "learning a valuable trade or skill" (85 vs. 77 percent) and "getting money for education" (82 vs. 67 percent) are rated important by significantly more positive than negative propensity respondents. As with young males, negative propensity females (83 percent) are significantly more likely to rate "personal freedom"

as highly important than are positive propensity females (79 percent). Items 6, 7, 10, 12, 13, and 14 also showed significant differences between responses of positive propensity females and negative propensity females.

Taken together, the results show that all respondents view the desirability of job characteristics similarly. Virtually all consider enjoying the work, job security, income, and personal freedom important characteristics, whereas parents' approval and high status and prestige are highly important for less than half of the young adults. In the young male and female market groups, fewer than half think staying in the area with family and friends is important.

B. Perceptions of the Occurrence of Job Characteristics in the Military

Most young adults tend to rate the importance of job characteristics similarly. It is instructive to consider their perceptions about these characteristics in the military. If highly desired job characteristics are believed to be unavailable in military jobs, then military service may be eliminated as an alternative. To examine this issue, respondents were asked whether each job characteristic was more likely to occur in a military job, in a civilian job, or was equally likely to occur in either sector.

Table 5.2 lists the 15 job characteristics in the order of importance shown in Table 5.1. For each it shows the proportions in each market group rating the job characteristic as more likely to occur in a military job or in a civilian job. There are five characteristics that one-quarter or more of the young males thought more likely to occur in a military job (while very many fewer thought them more likely to occur in a civilian job):

- Do something for the country (42 percent)
- Training for leadership (37 percent)
- Job security (30 percent)
- Get money for education (27 percent)
- Equal pay and opportunities for men and women (26 percent).

Older males and females concurred, with similarly substantial proportions rating these characteristics as most likely to be found in the military. Only one of these characteristics, "job security," is among those rated as highly important by relatively large proportions in the three market groups. And "equal pay and opportunity for men and women" was highly important to women. The others appear to be of moderate importance to the young people.

Table 5.2. Whether Job Characteristics Are More Likely to Occur in Military or Civilian Job

	Young Males		Older Males		Females	
	More Likely Military	More Likely Civilian	More Likely Military	More Likely Civilian	More Likely Military	More Likely Civilian
1. Enjoy your work	3.3 (0.3)*	31.2 (0.8)	1.8 (0.4)*	30.8 (1.4)	2.8 (0.4)*	27.4 (1.2)
2. Job security	29.8 (1.1)*	10.5 (0.8)	30.0 (2.0)*	7.2 (1.9)	26.2 (1.7)*	7.7 (1.0)
3. Good income	5.4 (0.4)*	34.4 (0.8)	2.3 (0.4)*	43.9 (1.5)	7.8 (0.7)*	19.9 (1.2)
4. Personal freedom	3.3 (0.3)*	56.0 (0.9)	1.5 (0.3)*	60.1 (1.4)	3.4 (0.5)*	47.6 (1.4)
5. Learn valuable trade or skill	16.3 (0.6)*	12.4 (0.6)	13.9 (1.1)	13.8 (1.0)	15.2 (1.0)*	8.2 (0.8)
6. Adequate retirement benefits	18.9 (0.7)*	12.3 (0.6)	19.2 (1.2)*	11.2 (0.9)	18.7 (1.1)*	10.2 (0.9)
7. Promotion opportunities	11.3 (0.5)*	15.5 (0.6)	11.6 (0.9)*	14.2 (1.0)	9.6 (0.8)	11.4 (0.9)
8. Get money for education	27.3 (0.8)*	14.5 (0.6)	33.1 (1.4)*	13.9 (1.0)	25.8 (1.3)*	11.5 (0.9)
9. Equal pay and opportunity for men and women	25.6 (1.0)*	8.5 (0.6)	33.0 (2.0)*	5.1 (0.9)	23.4 (1.6)*	7.1 (1.0)
10. Do something for country	42.3 (0.9)*	8.9 (0.5)	37.0 (1.5)*	10.6 (0.9)	41.2 (1.4)*	7.7 (0.7)
11. Have a lot in common with co-workers	10.4 (0.5)*	18.0 (0.6)	9.1 (0.9)*	15.5 (1.0)	8.7 (0.8)*	13.4 (1.0)
12. Training for leadership	37.2 (0.8)*	8.9 (0.5)	32.0 (1.4)*	10.2 (0.9)	33.1 (1.4)*	6.6 (0.7)
13. High status and prestige	12.9 (0.5)*	17.0 (0.6)	11.1 (0.9)*	15.6 (1.1)	8.8 (0.8)	11.9 (0.9)
14. Stay in area	3.6 (0.3)*	56.5 (0.8)	3.1 (0.5)*	60.6 (1.4)	2.9 (0.5)*	54.9 (1.4)
15. Parents' approval	7.1 (0.4)*	26.2 (0.8)	5.1 (0.6)*	22.4 (1.2)	6.0 (0.7)*	26.6 (1.2)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,040 young males, 1,375 older males, and 1,502 females.

* The proportion of individuals rating a job characteristic more likely to occur in the military is significantly different at the 95 percent confidence level than the proportion rating it more likely to occur in a civilian job.

Source: Questions 649, 651, ... 677 (all odd items between 651 and 677).

There are five job characteristics that young males said were more likely to occur in a civilian job (while very many fewer said they were likely to occur in the military):

- Stay in area (57 percent)
- Personal freedom (56 percent)
- Good income (34 percent)
- Enjoy your work (31 percent)
- Parents approval (26 percent).

Again, older males and females concurred. Two of these, "stay in area" and "parents' approval," were the least important characteristics for young males and females. "Parents' approval" was less important for older males as well, but "stay in area" was fairly important to this group. The three remaining, "personal freedom," "good income," and "enjoy your work," were all rated as important by a large percentage of each market group.

The remaining characteristics are believed to be about as likely to occur in military as in civilian jobs by all three market groups. Indeed, fewer than one-fifth in any group characterize these as either military or civilian. They include "learn valuable trade or skill," "adequate retirement benefits," "promotion opportunities," "have a lot in common with co-workers," and "high status or prestige." Substantial majorities in all three market groups thought these job characteristics about equally likely to be found in either a military or a civilian setting.

C. Military Service and Other Plans

We now examine specific other jobs or alternatives that young people might pursue. The likelihood of engaging in these activities provides another way of understanding what factors influence potential enlistees.

1. Alternative Activities

The decision to join the military, even among those who state that they probably or definitely will do so, exists within the context of alternative plans. The alternatives of civilian jobs or school influence the propensity to join the military and provide a commentary on the utility of propensity measures.

Table 5.3 presents the relationship of the likelihood of alternative plans to the general intention to join the military. The general intention measure (Q503) is used as the propensity measure because it was one of the items included in the set of alternative plans asked of respondents and is

Table 5.3. General Intention to Join the Military by Alternative Plans

Likelihood of Alternative Plans ^a	General Intention to Join the Military		
	Positive	Negative	Total
<u>Young Males</u>			
Working as a laborer in construction	42.4	28.2	31.7 (0.8)
Working at a desk in a business office	26.6	27.7	27.4 (0.7)
Working as a salesman	19.5	25.4	24.0 (0.7)
Going to college	69.5	72.1	71.5 (0.8)
Going to vocational or technical school	58.9	46.0	49.2 (0.9)
<u>Older Males</u>			
Working as a laborer in construction	61.7	26.2	29.0 (1.3)
Working at a desk in a business office	39.9	25.9	27.0 (1.3)
Working as a salesman	22.1	23.2	23.1 (1.2)
Going to college	57.8	43.2	44.3 (1.4)
Going to vocational or technical school	64.9	46.5	48.0 (1.5)
<u>Females</u>			
Working as a waitress in a restaurant	33.4	20.8	22.1 (1.2)
Working at a desk in a business office	56.2	53.0	53.3 (1.5)
Working as a saleswoman	32.7	39.1	38.5 (1.4)
Going to college	76.8	81.2	80.7 (1.1)
Going to vocational or technical school	55.6	40.8	42.3 (1.4)
Being a full-time homemaker	22.2	30.2	29.4 (1.3)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,054 young males (1,178 with positive propensity and 3,876 with negative propensity), 1,378 older males (105 with positive propensity and 1,273 with negative propensity), and 1,503 females (143 with positive propensity and 1,360 with negative propensity).

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

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

similar in format to those items. The percentages who responded that they "definitely" or "probably" were going to join the military in response to the general intention measure are:

- 24.6 percent of young males
- 8.1 percent of older males
- 9.8 percent of females.

These figures are lower than those for Composite Active Propensity but show the same relative levels among the groups. Data presented for young males in the total column in Table 5.3 show that their likelihood of working at a desk (27 percent), as a salesman (24 percent), or as a laborer (32 percent) is comparable or somewhat higher than their likelihood of serving in the military (25 percent). In contrast, the likelihood of young males going to college (72 percent) or vocational or technical school (49 percent) is substantially higher than the likelihood of joining the military (25 percent).

For older males and females, the likelihood of any alternative plan is substantially higher than joining the military. For young males and females, going to college is a highly likely alternative, followed by vocational or technical school for young males and by working at a desk in a business office for females. Among females, being a full-time homemaker is more than three times as likely as joining the military. Older males are slightly more likely to go to vocational or technical school, followed by going to college.

Joining the military is not an exclusive plan. Among young males and older males with a positive general intention, 58 to 69 percent indicate plans for college or vocational school in the next few years. For females who have a positive general intention to join the military, more than half state they are likely to work in a business office or go to vocational or technical school. More than three-fourths of the females intending to join the military also plan to go to college. Although each of the questions refers to plans for the next few years, the fact that there is considerable overlap in plans among positive likelihood respondents suggests caution in interpreting propensity measures. Among respondents with a negative general intention of joining the military, college and vocational or technical school were also highly likely alternatives.

2. Most Likely Plans

To specify the status of "intention to serve in the military" relative to other plans, an item was asked about what a respondent thought he or she would most likely be doing in October 1985, one year after the 1984 interview.* Results are presented in Table 5.4. Consistent with the results in Table 5.3, most young adults said they would most likely be going to school full time or working full time. Most young males and females expect to be going to school, while most older males expect to be working, a result that reflects the age differences between the groups. Most interestingly, the proportions of those in all groups who state that they are most likely to be serving in the military one year after the interview are highly similar to the proportions of unaided mentions of interest in joining the military (Table 4.6).

Among respondents with a positive general intention to serve in the military, going to school or working are still the most likely activities one year after the interview (or after high school). Only 23 percent of the young males, 16 percent of the females, and 6 percent of the older males who expressed positive general intention to serve expect they will actually be in the military one year later. About one-third in these two market groups expect to be in school full time, continuing their educations. Twenty-nine percent of the young males and 27 percent of the females with positive general intentions to join expect that working full time rather than serving in the military will be their most likely activity a year after the interview. It is not clear why these young people report alternate plans to joining the military for the near future. It should be noted, however, that the general intention item (Q503) asks about plans for the next few years. Therefore, these groups may be a fruitful source of recruits.

3. Composite Active Propensity and Reserve Propensity

Young adults can also serve in the National Guard or Reserves. In addition to items about the active Services, respondents were asked about service in the Reserve Components (items 505--508). This section examines the relationship of Composite Active Propensity and Reserve Component Propensity.

* Respondents who might still be in high school at that time (i.e., those with 11 years or less of completed education, and who were less than 19 years old) were asked about their most likely plans "after you finish high school."

Table 5.4. Most Likely Plan for Next Year (or After High School) by General Intention to Serve in the Military

Most Likely Plan	Young Males			Older Males			Females		
	Positive (n=1180)	Negative (n=3874)	Total (n=5054)	Positive (n=105)	Negative (n=1273)	Total (n=1378)	Positive (n=143)	Negative (n=1360)	Total (n=1503)
Going to school full-time	33.3	47.3	43.8 (0.9)	12.4	6.5	7.0 (0.7)	34.7	48.0	46.7 (1.4)
Going to school part-time	7.6	7.8	7.7 (0.4)	4.9	4.8	4.8 (0.6)	10.5	10.7	10.7 (0.9)
Working full-time	29.1	37.9	35.8 (0.8)	69.6	82.4	81.4 (1.1)	27.6	26.9	26.9 (1.3)
Working part-time	3.0	3.1	3.1 (0.3)	3.6	2.4	2.5 (0.4)	5.8	5.3	5.4 (0.7)
Serving in the military	22.7	0.6	6.0 (0.4)	6.1	0.0	0.5 (0.2)	15.8	0.2	1.7 (0.4)
Being a full-time homemaker	0.0	0.1	0.1 (**)	1.7	0.1	0.2 (0.1)	3.9	6.5	6.3 (0.8)
Other	2.7	1.9	2.1 (0.2)	1.0	2.3	2.2 (0.4)	0.0	1.7	1.5 (0.3)

Note: Tabled values are 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 1985.

** Informative standard error not available.

Source: Questions 503, 517.

Analyses presented in Chapter 4 showed that 29.9 percent of young males, 10.3 percent of older males, and 13.2 percent of females had positive Composite Active Propensity. Similarly, positive propensity to join the Reserve Component was 19.4 percent for young males, 9.3 percent for older males, and 9.2 percent for females. Thus, about 11 percent fewer young males and 4 percent fewer females said they were likely to join the Reserve component than to join the active Services. The propensity of older males to join the active Services is about equal to their propensity to join the Reserve Component.

Values presented in Table 5.5 illustrate that the propensity to join the military is often not specific to the active Services or Reserve Component. In 1984, about one-half of those with positive Composite Active Propensity also have positive propensity toward joining the Reserve Component (49 percent for young males, 56 percent for older males, and 52 percent for females). About three-fourths of young males and females with positive Reserve propensity, and about three-fifths of older males, also have positive propensity to join active Services. More than three-fifths of young males and four-fifths of older males and females have negative propensity toward both active service and the Reserve Component. There are small but notable segments in each market group that have positive propensity for either active service or the Reserve Component. Fifteen percent of young males, five percent of older males and six percent of females are positive only to active service. About five percent of each male market group and two percent of females are positive only to the Reserve Component.

Table 5.6 also shows that propensity to join the Reserve Component is not specific to either the Reserve or the Guard. In 1984, about two-fifths of young males and females, and about three-fifths of older males, with positive propensity to join the Reserve also are positive toward the Guard. About three-fifths of young and older males, and almost three-fourths of females, with positive Guard propensity are also positive toward the Reserves. About 80 percent of young males and 90 percent of older males and females have negative propensity toward both the Reserve and the National Guard.

For some, positive propensity toward either active Service or the Reserve Component is likely to reflect positive orientations toward military service in general. Those with negative propensity for active Service are also likely to be negative for the Reserves. Further, as seen in the

Table 5.5. Propensity for Serving in Active Services and Reserve Components

Propensity Response/Component	Young Males		Older Males		Females	
	1983 (n=4416)	1984 (n=5058)	1983 (n=798)	1984 (n=1379)	1983 (n=876)	1984 (n=1053)
Positive - Active Only	16.1	15.3	6.8	4.5	6.3	6.4
Positive - Reserve Only	6.1	4.9	6.8	3.6	2.7	2.4
Positive - Both	19.3	14.6	7.0	5.8	5.4	6.8
Negative - Both	58.3	65.1	79.4	86.0	85.4	84.3
Don't Know/Refused	0.2	0.2	0.0	0.2	0.2	0.0
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Active positive respondents expressing positive intentions for the Reserve Component	54.6	48.6	50.7	55.9	46.5	51.7
Reserve positive respondents expressing positive intentions for the active Services	76.1	74.8	50.6	61.4	67.1	73.9

Note: Tabled values are percentages. They may not sum to 100.0 due to rounding.

Source: Questions 505, 507, 510-513.

Table 5.6. Propensity for Serving in Guard and Reserves

Propensity Response/ Component	Young Males		Older Males		Females	
	1983 (n=4416)	1984 (n=5058)	1983 (n=798)	1984 (n=1379)	1983 (n=876)	1984 (n=1053)
Positive - Reserve Only	10.0	8.6	4.0	2.5	4.1	5.0
Positive - Guard Only	6.0	4.1	3.4	2.5	1.0	1.2
Positive - Both	9.4	6.7	6.4	4.3	3.0	3.1
Negative - Both	74.2	80.4	86.2	90.4	91.7	90.7
Don't Know/Refused	0.5	0.2	0.0	0.3	0.2	0.0
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Reserve positive respondents expressing interest in the Guard	48.2	43.7	61.6	63.8	42.6	38.4
Guard positive respondents expressing interest in the Reserve	60.8	62.0	65.2	62.8	74.3	71.6

Note: Tabled values are percentages. They may not sum to 100.0 due to rounding.

Source: Questions 505, 507, 510-513.

previous section, the stated propensity to join the active Services does not preclude having alternative plans. Substantial proportions of those who have positive propensity for active Service also report alternative plans for military service such as enlistment in the Guard or Reserves. Possibly, respondents view these alternatives serially, i.e., active military and then Reserve service (or the reverse).

D. Previous Consideration of Military Service

In all markets, potential enlistees generally rate the importance of job characteristics similarly, and they perceive many of the desirable job characteristics as likely to occur in a military job. However, working at a civilian job or going to school are equally or more likely alternative activities, even among youth and young adults with positive propensity for the military. To help understand these results, it is useful to know whether individuals seriously considered military service before being interviewed for YATS. Results to questions on this issue appear in Table 5.7.

Overall, 63.4 percent of young males, 56.5 percent of older males, and 39.1 percent of females report that they had thought about joining the military prior to being interviewed in 1984. The striking finding from this table, however, is the number who reported that they had not previously considered joining the military or who had considered it only "slightly seriously" or "not seriously." Overall 62 percent of young males, 65 percent of older males, and 80 percent of the females had previously considered military service only cursorily, if at all.

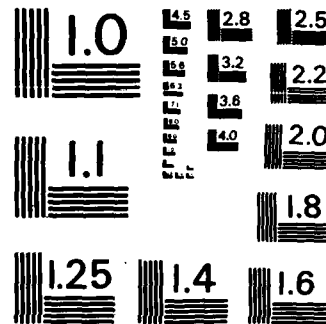
When previous consideration of joining the military is examined in terms of Composite Active Propensity, it is gratifying to see that among those with negative propensity, 44.4 percent of young males, 47.1 percent of older males, and 24.5 percent of the females have considered the military option slightly more seriously. On the other hand, nearly half of all males and 68.5 percent of all females who probably or definitely will not enlist reported that they have never even considered serving prior to being interviewed. It is possible that these groupings represent an opportunity for fruitful recruiting. Their negative propensity, rather than resulting from negative attitudes, may only exist relative to the attractiveness of alternatives combined with their just never having thought about the military.

Table 5.7. Previous Consideration of Military Service

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Yes	87.9 (1.0)	52.9 (1.0)	63.4 (0.8)
Very seriously	34.0 (1.4)	10.0 (0.6)	17.2 (0.6)
Somewhat seriously	31.8 (1.4)	16.7 (0.8)	21.2 (0.7)
Slightly seriously	17.8 (1.2)	17.7 (0.7)	17.7 (0.6)
Not seriously	4.3 (0.6)	8.5 (0.5)	7.3 (0.4)
No	12.1 (1.0)	47.1 (1.0)	36.6 (0.8)
<u>Older Males</u>			
Yes	75.2 (4.1)	54.3 (1.5)	56.5 (1.5)
Very seriously	30.8 (4.2)	17.8 (1.2)	19.1 (1.2)
Somewhat seriously	23.9 (4.4)	14.9 (1.1)	15.8 (1.1)
Slightly seriously	18.1 (3.5)	14.5 (1.1)	14.8 (1.1)
Not seriously	2.4 (1.1)	7.2 (0.8)	6.7 (0.7)
No	24.8 (4.1)	45.7 (1.5)	43.5 (1.5)
<u>Females</u>			
Yes	89.3 (2.3)	31.5 (1.4)	39.1 (1.4)
Very seriously	33.8 (3.7)	4.5 (0.6)	8.4 (0.8)
Somewhat seriously	35.3 (3.8)	7.9 (0.8)	11.5 (0.9)
Slightly seriously	18.1 (3.0)	12.0 (1.0)	12.8 (0.9)
Not seriously	2.1 (1.0)	7.0 (0.7)	6.3 (0.7)
No	10.7 (2.3)	68.5 (1.4)	60.9 (1.4)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,056 young males, 1,379 older males and 1,503 females.

Source: Questions 510-513, 523, 524.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Finally, it was stated earlier that propensity results should be interpreted cautiously because some respondents may tend to answer all questions positively. The reason for such caution is apparent in Table 5.7. Of those with positive propensity, 12 percent of young males, 25 percent of older males, and 11 percent of the females said they never considered joining the military. The positive propensity of those who have given no serious thought to military service is unlikely to persist without reinforcing recruiting efforts.

E. Normative and Attitudinal Influences on Plans to Serve

Many factors affect the formation of plans to join the military. In addition to perceptions of availability of desirable job characteristics in the military and of the competition presented by alternatives, beliefs about what others think one should do (norms) and one's own likes and dislikes (attitudes) about serving are expected to be related to the likelihood of joining. Table 5.8 shows data on the feelings of those who matter most to respondents about the respondents' entering active military service, and respondents' own feelings on this topic. Additionally, the table presents data on respondents' recommendations about seeing a recruiter to a friend who is considering joining the military.

Overall for young males, both the feelings of those that matter (influencers) and their own personal feelings are at least as likely to be favorable as unfavorable. Only slightly more than a quarter of young males think that significant others' opinions are unfavorable, though more than a third of the young males indicate they dislike the idea of serving. Among older males, about 30 percent report favorable attitudes about their entering the active Services, both for significant others and for themselves. A third of the older males report that significant others are unfavorable, and nearly half (46 percent) are unfavorable toward serving themselves. The fact that the majority hold favorable or at least neutral opinions is encouraging because in this market group many of the most positive persons have already enlisted and, therefore, have been excluded from the study. Interestingly, even though 55 percent of females are unfavorable about serving themselves, more than a quarter think that the people who matter most to them are favorable toward their joining the military.

Table 5.8. Influences on Serving in the Active Military

Market/Item Response	Positive Propensity	Negative Propensity	Total	
<u>Young Males</u>				
Feelings of Those Who Matter Most				
Favorable	60.1	28.4	38.0	(0.8)
Neither favorable nor unfavorable	22.3	40.2	34.8	(0.8)
Unfavorable	17.6	31.3	27.2	(0.7)
Personal Feelings				
Favorable	72.5	23.1	37.9	(0.8)
Neither favorable nor unfavorable	16.2	28.8	25.0	(0.7)
Unfavorable	11.3	48.1	37.1	(0.8)
Advice to Friend About Seeing Recruiter				
Waste of time	2.9	9.7	7.7	(0.6)
Up to him/her	45.1	69.6	62.2	(0.9)
A good idea	52.0	20.8	30.1	(0.8)
<u>Older Males</u>				
Feelings of Those Who Matter Most				
Favorable	52.2	26.5	29.1	(1.3)
Neither favorable nor unfavorable	23.7	37.6	36.2	(1.4)
Unfavorable	24.1	35.8	34.6	(1.4)
Personal Feelings				
Favorable	70.3	24.5	29.2	(1.3)
Neither favorable nor unfavorable	13.1	26.5	25.1	(1.3)
Unfavorable	16.6	49.0	45.6	(1.5)
Advice to Friend About Seeing Recruiter				
Waste of time	4.5	7.4	7.1	(0.7)
Up to him/her	44.2	68.2	65.8	(1.4)
A good idea	51.3	24.4	27.2	(1.3)
<u>Females</u>				
Feelings of Those Who Matter Most				
Favorable	55.9	21.9	26.4	(1.3)
Neither favorable nor unfavorable	22.8	39.8	37.5	(1.4)
Unfavorable	21.3	38.3	36.1	(1.4)
Personal Feelings				
Favorable	79.5	18.2	26.3	(1.3)
Neither favorable nor unfavorable	11.2	20.1	18.9	(1.1)
Unfavorable	9.2	61.7	54.7	(1.4)
Advice to Friend About Seeing Recruiter				
Waste of time	3.2	6.1	5.7	(0.7)
Up to him/her	35.6	70.6	65.9	(1.3)
A good idea	61.2	23.3	28.3	(1.3)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,037 young males (1,421 with positive propensity and 3,616 with negative propensity), 1,375 older males (138 with positive propensity and 1,237 with negative propensity), and 1,501 females (197 with positive propensity and 1,304 with negative propensity).

Source: Questions 51-513, 690, 691, 692.

Table 5.8 also shows, as expected, that propensity reflects both normative support and a positive attitudinal predisposition. For all markets, a majority of respondents with positive propensity report favorable beliefs among significant others about their joining. Those with negative propensity are only about half as likely as positive propensity respondents to report such normative support. Furthermore, from 70 to 80 percent of those likely to join report that their personal attitudes about military service are favorable, indicating that their likelihood is based on positive attitude toward the military rather than lack of alternatives or pressure from significant others. Even among respondents with negative propensity, no more than 38 percent report unfavorable views toward their serving on the part of persons whose opinions matter most; rather, half or slightly more of negative propensity young adults dislike the idea of serving themselves. Nevertheless, from 38 percent of the females to 52 percent of the young males with negative propensity report neutrality or positive attitudes about the idea of their joining, suggesting that there is no personal distaste for the military that must be overcome by recruiting efforts. This group may represent a very important market segment for recruits.

As a measure of possible peer influence, respondents were asked what advice they would give a good friend about seeing a military recruiter. Only very small minorities of respondents, even among those with negative propensity, would suggest that talking to a recruiter was a waste of time. Most respondents were relatively noncommittal, leaving the decision up to the friend; even among those with negative propensity, about 70 percent would leave the decision up to the friend. On the other hand, 51 to 61 percent of those in all markets with positive propensity would encourage the friend to see a recruiter, indicating a strong positive peer influence.

F. Summary

The decision to join the active Services must be viewed within the context of opportunities, economic conditions, alternative activities, and personal attitudes and others' opinions. Evaluations of the importance of job characteristics, perceptions of the availability of these characteristics in military jobs, the existence and likelihood of alternative plans, and norms and attitudes toward serving in the military are all informative about propensity to enlist. Highlights of results for these issues are presented below.

1. Levels of Importance Assigned to Different Job Characteristics

- For all market groups, 75 percent or more think enjoying the work, job security, good income, personal freedom, learning a valuable skill or trade, and adequate retirement benefits are very important or extremely important features of a job.
- Equal pay and opportunity is rated highly important by 83 percent of females, compared with 59 percent of young males and 58 percent of older males.
- Positive propensity young males were more likely than those with negative propensity to assign importance to three of the six most desired job characteristics: learn a valuable trade or skill, adequate retirement benefits, and get money for education.

2. Perceptions of Occurrence of Job Characteristics in the Military

- Approximately 25 percent or more in each market group rated five characteristics as more likely to occur in the military than in a civilian job: do something for the country, training for leadership, job security, get money for education, and equal pay and opportunities for women. Of these, job security was the only characteristic previously rated as highly important.
- Approximately 25 percent or more in each market group rated five characteristics as more likely to occur in a civilian job than in the military: stay in area, personal freedom, good income, enjoy your work, and parents' approval. Of these personal freedom, good income, and enjoy your work were characteristics previously rated as highly important.

3. Military Service and Alternative Activities

- College, vocational or technical school, and (for females) working at a desk in a business office are cited more often than joining the military as plans for the next few years.
- Of those with positive general intentions to join the military, more than half to three-fourths also report positive intentions to go to college or to vocational or technical school.
- Three-fourths or more of all respondents expect to be attending school full time or working full time one year after the interview.

- Only 6 percent of young males, 0.5 percent of older males, and 1.7 percent of females think they will most likely be serving in the military in October 1985.
- About half of those with positive active propensity also have positive propensity for the Reserve Component; at least 93 percent of those with negative active propensity also report negative Reserve propensity.

4. Previous Consideration of Military Service

- When asked if they had considered joining the military before being interviewed, 44 percent of young males, 50 percent of older males, and 67 percent of the females replied not at all or not seriously.
- At least 52 percent of all respondents with negative propensity have never seriously considered the possibility of military service.
- Even among those with positive propensity, 12 percent of the young males, 25 percent of the older males, and 11 percent of the females had never even thought about joining the military prior to being interviewed.

5. Norms and Attitudes about Military Service

- For young males, the opinions of significant others are more favorable than unfavorable about military service; for older males and females, those who matter most are somewhat more likely to be unfavorable.
- Positive personal feelings (attitudes) toward military service were reported by 38 percent of young males, 29 percent of older males and 26 percent of the females.
- Beliefs about feelings of significant others (norms) and personal feelings (attitudes) toward military service are strongly related to propensity. Those with positive propensity are much more likely to indicate supportive norms and positive attitudes than are those with negative propensity.
- Only about half the males and three-fifths of the females with negative propensity express personal dislike for military service.
- Although most young people would leave the decision up to a friend, from 27 to 30 percent of them would encourage a friend to see a recruiter if asked for advice.

6. ENLISTMENT INCENTIVES AND MILITARY ORIENTATIONS

Military Service is one option that young people seeking employment or choosing a career may consider. Their knowledge of pay, time required for training and drills, cash bonuses, and educational benefits may affect whether they choose to enlist. Military recruiting and advertising are primarily concerned with increasing young people's knowledge of the benefits to enlisting in the military and with creating a favorable attitude toward the military.

In this chapter, we examine young people's knowledge of enlistment incentives and measures of their orientation toward the military (attitudes toward draft registration, a national service program, and an Individual Ready Reserve Program). Because the active Services and Reserve Components differ both in their basic requirements and in benefits offered, they are considered separately.

A. Active Services

In this section we examine orientations of the three market groups--young males, older males, and females--toward the active military in terms of their feelings about draft registration and a national service program. The level of knowledge about starting pay, cash enlistment bonuses, and post-military educational benefits is then addressed. The effect of such knowledge on propensity to enlist is a major concern.

1. Orientations Toward Active Military Service

Respondents were asked two questions, the answers to which can serve as indicators of general orientation toward active service. One question asked them to report their feelings about the draft registration requirement for 18-year-old males. The other question asked for their feelings about a program that required all young men and women to give one year of service to the Nation--either in the military forces or in non-military work such as in hospitals or with elderly people.

As shown in Table 6.1, draft registration was favored by 48.0 percent of young males, 62.1 percent of older males, and 29.0 percent of females. No opinion about the requirement (neither in favor of nor against) was reported by 32.4 percent of young males, 25.6 percent of older males and 36.8 percent of females. Opposition to the requirement was reported by 19.6 percent of young males, 12.2 percent of older males and 24.2 percent of females. Thus, although these attitudes are not overwhelmingly favorable, only a minority of respondents were against draft registration.

Table 6.1. Attitudes Toward Draft Registration

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Strongly in favor	26.0 (1.3)	17.4 (0.8)	20.0 (0.7)
Somewhat in favor	30.4 (1.4)	26.9 (0.9)	28.0 (0.8)
Neither in favor nor against	28.0 (1.3)	34.2 (1.0)	32.4 (0.8)
Somewhat against	9.3 (0.9)	11.9 (0.6)	11.1 (0.5)
Strongly against	6.2 (0.7)	9.5 (0.8)	8.5 (0.6)
<u>Older Males</u>			
Strongly in favor	31.4 (4.3)	30.7 (1.5)	30.8 (1.4)
Somewhat in favor	36.8 (4.9)	30.7 (1.4)	31.3 (1.4)
Neither in favor nor against	22.5 (3.9)	25.9 (1.3)	25.6 (1.3)
Somewhat against	2.7 (1.5)	6.3 (0.8)	5.9 (0.7)
Strongly against	6.6 (2.4)	6.3 (0.7)	6.3 (0.7)
<u>Females</u>			
Strongly in favor	13.9 (2.5)	10.1 (0.9)	10.6 (0.8)
Somewhat in favor	32.4 (3.6)	27.8 (1.3)	28.4 (1.3)
Neither in favor nor against	30.9 (3.6)	37.6 (1.5)	36.8 (1.4)
Somewhat against	15.0 (2.8)	15.6 (1.1)	15.5 (1.0)
Strongly against	7.9 (2.1)	8.8 (0.9)	8.7 (0.8)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,033 young males (1,419 with positive propensity and 3,614 with negative propensity); 1,375 older males (136 with positive propensity and 1,239 with negative propensity); and 1,497 females (195 with positive propensity and 1,302 with negative propensity).

Source: Questions 510-513, 679.

Table 6.1 also shows the relationship of positive and negative propensity to attitudes toward draft registration. The data show a clear pattern for those with positive propensity to favor the draft registration requirement more than those who have negative propensity.

Table 6.2 presents findings concerning attitudes toward a required national service program for each market group and by positive and negative propensity. About half of each market group favors a national service program--young males, 48 percent; older males, 50 percent; and females, 55 percent. The approval rating for such a program was more than 20 percentage points higher for those with positive propensity than for those with negative propensity for each market group.

2. General Intentions and Knowledge of Monthly Starting Pay

Table 6.3 presents the relationship between the accuracy of individuals' knowledge of monthly starting pay in the active Services and their general intention to enlist.* At the time of the 1984 survey, monthly starting pay was \$573.60. Respondents were asked as an "initial question" to estimate the monthly starting pay for an enlisted person. Those who responded that they did not know were asked for their best guesses. The answers to both questions are categorized according to their relationship to the correct amount. A close estimate in Table 6.3 is defined as one within \$100** above or below \$575, while an underestimate is one \$100 or more below \$575, and an overestimate is one \$100 or more above \$575.

The indications are that the level of knowledge about starting pay is low in the three market groups, although on the average the estimates are close. When asked the initial question, only about a quarter of each group of males was able to give a close estimate--28.8 percent of young males and 25.9 percent of older males. Nearly as many said they did not know--24.1 percent of young males and 22.4 percent of older males. Young males were somewhat more likely to underestimate (27.0 percent) than to overestimate (20.0 percent) the monthly pay, whereas, older males tended to overestimate (27.0 percent) rather than underestimate it (24.6 percent). Females, for whom military service is less salient generally, had more difficulty in estimating. Fully a third

*General intention (Q503) is presented here instead of Composite Active Propensity. This provides consistency of interpretation with Table 6.4 which includes Q554, an item more closely related to general intention than to composite propensity.

**The \$100 range is arbitrary and was chosen for consistency with results reported in prior years.

Table 6.2. Composite Active Propensity and Attitudes Toward a National Service Program for Males and Females^a

Market/Item Response	Positive Propensity	Negative Propensity	Total	
<u>Young Males</u>				
Strongly favor	19.1	7.4	10.9	(0.5)
Probably favor	45.4	33.2	36.9	(0.8)
Probably oppose	23.6	36.6	32.7	(0.8)
Strongly oppose	11.9	22.8	19.6	(0.6)
<u>Older Males</u>				
Strongly favor	31.5	14.0	15.8	(1.1)
Probably favor	37.7	34.1	34.5	(1.4)
Probably oppose	16.7	30.6	29.2	(1.4)
Strongly oppose	14.0	21.3	20.5	(1.2)
<u>Females</u>				
Strongly favor	24.6	10.5	12.3	(0.9)
Probably favor	48.5	42.0	42.9	(1.4)
Probably oppose	18.8	32.4	30.6	(1.3)
Strongly oppose	8.1	15.2	14.2	(1.0)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,029 young males (1,414 with positive propensity and 3,615 with negative propensity); 1,364 older males (136 with positive propensity and 1,228 with negative propensity); and 1,491 females (195 with positive propensity and 1,296 with negative propensity).

^aQ680 and Q681 were intended to be asked about men and women, respectively, or vice-versa, with half of the sample randomly being asked each order (see Appendix B). However, an error in the random selection variable of the CATI system made it impossible to separate responses applying to males from responses applying to females. Thus, both items can be interpreted only as applying to men and women collectively.

Source: Questions 510-513, 680.

Table 6.3. General Intention and Knowledge of Monthly Starting Pay

Market/Measures of Knowledge of Starting Pay	Initial Question	Probe	Positive ^a General Intention	Negative ^a General Intention
<u>Young Males</u>				
Underestimate ^b	27.0 (0.8)	21.4 (1.5)	25.7	27.5
Close estimate	28.8 (0.8)	12.3 (1.3)	32.7	27.6
Overestimate	20.0 (0.7)	18.6 (1.4)	16.0	21.3
Don't know	24.1 (0.8)	47.7 (1.9)	25.7	23.7
Median	\$500	\$500	\$500	\$500
<u>Older Males</u>				
Underestimate	24.6 (1.5)	20.2 (3.0)	33.0	23.9
Close estimate	25.9 (1.6)	13.0 (2.6)	27.6	25.8
Overestimate	27.0 (1.6)	15.8 (2.6)	22.3	27.5
Don't know	22.4 (1.5)	51.0 (3.8)	17.0	22.9
Median	\$575	\$500	\$500	\$600
<u>Females</u>				
Underestimate	26.1 (1.6)	19.7 (2.5)	27.3	25.9
Close estimate	18.7 (1.4)	14.7 (2.1)	19.4	18.6
Overestimate	20.7 (1.4)	15.7 (2.1)	17.9	21.0
Don't know	34.5 (1.7)	49.9 (3.0)	35.4	34.4
Median	\$500	\$500	\$500	\$500

Note: With the exception of the median dollar entries, all tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 4,369 young males (1,029 with positive general intention and 3,340 with negative general intention); 921 interviews with older males (73 with positive general intention and 848 with negative general intention); and 949 interviews with females (95 with positive general intention and 854 with negative general intention).

^aTabulation of General Intention (Q503) and the Initial Question (Q551).

^b"Close estimate" refers to an estimate within \$100 above or below the \$575 approximate amount of starting pay; "underestimate" refers to an estimate more than \$100 below \$575, while "overestimate" refers to an estimate more than \$100 above \$575. Monthly starting pay at the time of the 1984 survey was \$573.60.

Source: Questions 503, 551, 552.

(34.5 percent) said they did not know. Fewer than one in five (18.7 percent) gave a close estimate. The rest tended to underestimate (26.1 percent) rather than overestimate (20.7 percent) enlistees' pay.

When "don't know" responders to the initial question were asked for their best guesses, somewhat more than one in ten of them gave a close estimate (12.3 percent of young males, 13.0 percent of older males, and 14.7 percent of females). The others tended to underestimate correct answers. Roughly half of each group continued to maintain that they did not know (47.7 percent of young males, 51.0 percent of older males, and 49.9 percent of females).

On the average, each marketing group's estimate of starting monthly pay is "close." The median estimate made by young males in response to the initial question is \$500, an amount that falls within \$100 of the actual figure. The median for females is the same. For older males, the median estimate is the correct amount of \$575. The medians of probed responses for all three groups are \$500.

Knowledge of starting pay is not strongly related to general intention to serve in the military (Table 6.3). Respondents with positive general intentions in the three market groups are slightly more likely to give close estimates of enlistee pay than those with negative general intention. However, the positive respondents are also about as likely as others to say they don't know. Median estimates are \$500 for both positive and negative intention respondents in the three marketing groups (except for negative older males who estimate \$600 per month). These median estimates are all within \$100 of the correct amount.

3. Effect of Starting Pay Information on Probability of Serving

Respondents were told that monthly starting pay was approximately \$575 and asked again about their general intention to serve in the military. If economic incentives encourage people to enlist, higher incentives should result in more positive intentions. Those who had underestimated starting pay are expected to be more willing to join upon learning the correct amount. Those who overestimated the starting pay are expected to be less willing.

The results are presented in Table 6.4. Categories of response to the initial question are shown as column headings. These initial responses are cross-tabulated with the effect of being informed of the starting pay and initial general intention. Examination of the results shows that expectations

Table 6.4. Effect of Being Informed of Actual Starting Pay on General Intention to Serve in the Military

Market/Effect of Being Informed of Starting Pay	Knowledge of Starting Pay ^a				Total
	Under- Estimated (-\$100)	Closely Estimated (±\$100)	Over Estimated (+\$100)	Don't Know (No Estimate)	
Young Males					
Initially Positive ^{b,c}					
Became more likely	1.5	2.7	1.5	1.5	1.8
Did not change	16.6	19.0	11.6	17.6	16.5
Became less likely	5.3	6.2	6.6	7.1	6.3
Initially Negative ^b					
Became more likely	19.4	15.7	12.7	16.5	16.3
Did not change	52.9	50.5	60.0	51.4	53.3
Became less likely	4.3	5.9	7.7	6.0	5.8
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Older Males					
Initially Positive ^b					
Became more likely	0.5	0.5	0.0	0.8	0.4
Did not change	7.1	5.3	3.6	1.7	4.5
Became less likely	3.7	3.1	3.4	3.9	3.5
Initially Negative ^b					
Became more likely	19.3	17.1	7.7	14.0	14.4
Did not change	62.1	64.9	74.9	67.0	67.4
Became less likely	7.3	9.0	10.5	12.6	9.8
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Females					
Initially Positive ^b					
Became more likely	1.3	0.6	0.0	1.5	0.9
Did not change	6.6	8.5	6.0	7.9	7.3
Became less likely	3.1	1.8	3.1	1.4	2.3
Initially Negative ^b					
Became more likely	26.5	21.7	18.8	19.4	21.6
Did not change	59.3	63.3	67.2	65.5	63.8
Became less likely	3.2	4.1	4.9	4.3	4.1
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Note: Tabular values are percentages. Estimates are based on interviews with 4,369 young males, 921 older males, and 949 females.

^a"Close estimate" refers to an estimate within \$100 above or below the actual amount of starting pay; "Underestimate" refers to an estimate more than \$100 below the actual amount, while "Overestimate" refers to an estimate more than \$100 above the actual amount. Monthly starting pay at the time of the 1984 survey was \$573.60, or approximately \$575.

^bRefers to responses to Q503, the general intention to serve in the military.

^cInstructions for reading table: First figure (first row and column), of the young males who originally underestimated starting pay, 1.5 percent were initially positive (answered probably or definitely), but became more likely to join after being informed of the correct amount. Continuing down this column, 16.6 percent of this group did not change and 5.3 percent became less likely (answered probably not or definitely not). Reading the "Total" column: Of all young males, 1.8 were initially positive and became more likely to join after being informed of the correct monthly starting pay, 16.5 did not change and 6.3 became less likely.

Source: Questions 503, 551, 554. Note: Only the unprobed response to knowledge of starting pay was used (Q551). The probed responses (Q552) were not included.

are borne out in a general way where intention changed although there are some exceptions. Data show general pattern as described, but there are some exceptions. Respondents who overestimated starting pay (and who changed) tended to become more negative when told the amount (regardless of initial intention). Those who underestimated starting pay (and whose initial intention was negative) tended to become more positive. For the most part, however, there was no change in intention as a result of being informed of starting pay. Regardless of the closeness of the original estimate, or whether general intention was positive or negative before learning the actual starting pay, approximately 70 percent of each market group reported no change.

In summary, being informed of actual starting pay affected the general intention to join the military of about one-third of respondents, and its effect was generally consistent with expectations. Of those who changed, those who underestimated pay tended to become more positive, while those who overestimated pay became more negative. These findings suggest that accurate information about starting pay may affect the likelihood of serving for some respondents.

4. Propensity and Knowledge of Enlistment Bonus

All services paid a bonus for enlisting in 1984, with the Army paying a maximum of \$8,000 for selected military occupational specialties and the other Services paying as much as \$4,000. Table 6.5 presents responses to questions regarding cash bonuses, which Services pay bonuses, and the maximum bonus in relation to propensity.

The level of knowledge about enlistment bonuses is low; only about one-third of young males and older males and one-fifth of females say that one or more of the Services pay a bonus. About two-fifths of young and older males, and about two-thirds of females say there are no enlistment bonuses. Roughly a tenth of each market group said they did not know. Those who believe that any Service pays a bonus cite the Army most frequently. Median estimates of the maximum bonus paid are \$1,000 for young males, \$1,500 for older males, and \$500 for females.

Knowledge about enlistment bonuses shows almost no relationship to propensity to enlist. Only females with positive propensity are more likely than those with negative propensity to know that bonuses are given (34.3 percent vs. 20.4 percent). Yet the median estimate for the maximum bonus for this group is only \$500. There are no substantial differences by propensity for the two male market groups.

Table 6.5. Knowledge About Cash Enlistment Bonus

Market/Item Response	Positive Propensity	Negative Propensity	Total
Young Males			
Yes, Service pays bonus	31.4	29.5	30.1 (1.3)
Median estimate of maximum bonus	\$1,000	\$1,000	\$1,000
Services said to pay bonus ^a			
Army	21.1	18.8	19.5 (1.0)
Navy	10.3	9.9	10.0 (0.8)
Marine Corps	11.1	10.9	11.0 (0.8)
Air Force	12.0	11.1	11.4 (0.8)
Don't know	1.3	4.6	3.6 (1.0)
No, Service does not pay bonus	59.1	62.6	61.5 (1.4)
Don't know	9.5	7.8	8.3 (0.7)
Older Males			
Yes, Service pays bonus	33.2	30.6	30.9 (2.3)
Median estimate of maximum bonus	\$1,000	\$1,500	\$1,500
Services said to pay bonus ^a			
Army	10.5	16.4	15.7 (1.8)
Navy	9.0	11.2	10.9 (1.6)
Marine Corps	11.7	9.5	9.7 (1.4)
Air Force	10.5	8.9	9.1 (1.5)
Don't know	8.1	6.0	6.3 (1.2)
No, Service does not pay bonus	64.6	60.9	61.3 (2.5)
Don't know	2.2	8.5	7.7 (1.3)
Females			
Yes, Service pays bonus	34.3	20.4	22.6 (2.0)
Median estimate of maximum bonus	\$ 500	\$ 800	\$ 500
Services said to pay bonus ^a			
Army	20.7	11.7	13.1 (1.7)
Navy	4.2	6.0	5.7 (1.1)
Marine Corps	5.5	6.5	6.4 (1.2)
Air Force	10.9	6.5	7.2 (1.2)
Don't know	5.4	3.6	3.9 (0.9)
No, Service does not pay bonus	57.6	69.0	67.3 (2.3)
Don't know	8.1	10.5	10.1 (1.5)

Note: Tabled values are median estimates of the amount of bonus and percentages with standard errors in parentheses. Estimates are based on interviews with 2,180 young males (637 with positive propensity and 1,543 with negative propensity); 469 older males (55 with positive propensity and 414 with negative propensity); and 500 females (74 with positive propensity and 426 with negative propensity).

^aPercentages for individual Services may not total percent "Yes" because respondents were allowed to mention more than one Service.

Source: Questions 510-513, 555, 556, 558.

5. Propensity and Knowledge of Educational Benefits

The Services also offer post-military educational benefits to enlistees. All the Services offered the same basic Veterans Education Assistance Program in which contributions by "the enlistee" up to \$2,700 were matched on a two for one basis, for a total benefit of \$8,100. In addition, the Army offered "kickers" of up to \$12,000 for selected enlistees, for a maximum of \$20,100. Responses to a series of questions regarding the existence of educational benefits, which Services pay them, and their maximum amounts are shown in Table 6.6.

Knowledge about post-military educational benefits is higher in the three market groups than is knowledge about enlistment cash bonuses. More than half of those in the two male groups and almost two-fifths of females stated that one or more Services pays such benefits. About two-fifths of the males and half of the females believed that there were no educational benefits, and between 5 and 7 percent in each group said they did not know. Again, respondents were more likely to attribute the benefits to the Army than to any of the other Services. Median estimates of the maximum amount of benefits for a four-year enlistment were somewhat higher for young males (\$7,000) and for older males (\$6,000) than for females (\$4,000).

As was observed for the cash enlistment bonuses, positive or negative propensity to enlist makes little substantial or consistent difference in knowledge about educational benefits. The only consistent difference is that positive propensity groups believe that these benefits are lower on the average than do negative propensity groups. This difference is fairly small for older males (a median estimate of \$5,000 for those with positive propensity vs. \$6,000 for the negative group). For young males and females it is larger. Positive propensity young males' median estimate is \$5,750 compared with \$8,000 for the negative group. For females, the positive propensity group shows a median of \$2,250 compared with \$4,000 for the negative propensity group.

As noted in Chapter 4, higher proportions of respondents with negative propensity have some college or vocational school background than do those with positive propensity (see Table 4.7). This does not mean that educational benefits are not important. Positive propensity respondents are younger and may have had less opportunity to learn about educational benefits.

Table 6.6. Knowledge About Post Military Educational Benefits

Market/Item Response	Positive Propensity	Negative Propensity	Total
Young Males			
Yes, Service pays benefits	51.0	52.1	51.8 (1.3)
Median Estimate of Educational Benefits	\$5,750	\$8,000	\$7,000
Services said to offer educational ^a benefits			
Army	38.1	40.9	40.1 (1.2)
Navy	19.4	23.7	22.4 (1.1)
Marine Corps	18.1	22.8	21.4 (1.1)
Air Force	24.4	27.3	26.5 (1.1)
Don't know	4.2	4.0	4.1 (0.5)
No, Service does not pay educational benefits	44.5	42.7	43.2 (1.3)
Don't know	4.5	5.3	5.0 (0.5)
Older Males			
Yes, Service pays benefits	46.2	50.8	50.3 (2.6)
Median Estimate of Educational Benefits	\$5,000	\$6,000	\$6,000
Services said to offer educational ^a benefits			
Army	27.2	40.5	39.2 (2.5)
Navy	32.5	29.0	29.3 (2.3)
Marine Corps	18.1	28.3	27.3 (2.3)
Air Force	26.0	30.8	30.3 (2.3)
Don't know	7.2	4.2	4.5 (1.0)
No, Service does not pay educational benefits	44.2	43.2	43.3 (2.5)
Don't know	9.7	6.1	6.4 (1.3)
Females			
Yes, Service pays benefits	38.6	37.8	37.9 (2.5)
Median Estimate of Educational Benefits	\$2,250	\$4,000	\$4,000
Services said to offer educational ^a benefits			
Army	23.5	25.2	25.0 (2.2)
Navy	18.1	11.0	11.9 (1.7)
Marine Corps	4.8	11.1	10.4 (1.5)
Air Force	24.8	12.4	13.9 (1.8)
Don't know	2.3	8.4	7.7 (1.5)
No, Service does not pay educational benefits	57.9	54.5	54.9 (2.5)
Don't know	3.6	7.6	7.1 (1.3)

Note: Tabled values are median estimates of the amount of bonus and percentages with standard errors in parentheses. Estimates are based on interviews with 2,220 young males (606 with positive propensity and 1,614 with negative propensity); 460 older males (42 with positive propensity and 418 with negative propensity); and 455 females (54 with positive propensity and 401 with negative propensity).

^aPercentages for individual Services may not total percent "Yes" because respondents were allowed to mention more than one Service.

Source: Questions 510-513, 559-562.

B. Reserve Component

As with the active Services, it is expected that enlistment in the Reserve Components is affected by beliefs about the time required for drill and training and the pay and benefits available. These factors are often stressed in recruiting. In addition, since those serving in the National Guard/Reserve are generally older males with civilian jobs and families, such issues as proximity of a Guard/Reserve unit, transfer policies and the perceived effect of such service on a civilian job are of interest. This section examines propensity to enlist in the Individual Ready Reserve and the effect of a cash enlistment bonus on propensity.

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

Table 6.7 presents respondents' estimates of the number of drill days required per month, the number of days of active duty required per year, and beginning pay for an 8-hour drill day. Responses were open-ended, and initial responses of "don't know" were followed by a probe for "just your best guess."

Estimates of 1-4 drill days per month were made by 50.9 percent of young males, 67.6 percent of older males and 40.4 percent of females. In fact, two drill days per month are required. Because of the probe (the request for "your best guess"), the proportions of "don't know" responses were relatively low: 12.2 percent for females and only about 10 percent for each group of males. However, 44 percent of all females, 37 percent of all younger males, and 24 percent of older males either did not know or estimated that eight or more drill days are required each month. Since eight or more days per month would require virtually all one's weekends or interfere with a civilian job, such misunderstanding may prevent young people from even considering Reserve participation. Overall, older males most accurately estimated the number of drill days per month. There are no differences within each market group by Reserve propensity in the number of drill days estimated. Young males and females with positive propensity, however, are significantly less likely to say they did not know.

Among those making an estimate of the annual active duty obligation, 1 to 14 days were estimated by 46.2 percent of young males, 62.4 percent of older males and 38.3 percent of females. The correct response was 14 days. The percentages responding "don't know" (after the probe) were low. Correct estimates of exactly 14 days were given by 24.6 percent of young males, 45.3

Table 6.7. Knowledge of Pay and Time Required to Participate in the Reserve Component

Item/Response	Young Males			Older Males			Females		
	Positive Reserve Propensity (n = 121)	Negative Reserve Propensity (n = 532)	Total (n = 653)	Positive Reserve Propensity (n = 33)	Negative Reserve Propensity (n = 413)	Total (n = 446)	Positive Reserve Propensity (n = 48)	Negative Reserve Propensity (n = 495)	Total (n = 543)
Days/Month Required for Drill									
1	4.6	4.2	4.3 (0.8)	5.3	5.8	5.8 (1.2)	0.0	3.8	3.5 (1.0)
2 ^a	32.2	31.2	31.4 (2.1)	37.0	41.8	41.4 (2.6)	21.7	20.4	20.5 (1.9)
3-4	14.2	15.4	15.2 (1.6)	21.1	20.3	20.4 (2.3)	17.1	16.4	16.4 (1.7)
5-7	16.2	11.0	12.0 (1.5)	7.2	8.2	8.1 (1.4)	18.1	15.6	15.8 (1.7)
8 or more	29.9	25.4	26.3 (2.0)	27.1	14.2	15.3 (1.9)	40.3	30.9	31.7 (2.2)
Don't know	2.9	12.8	10.8 (1.5)	2.3	9.7	9.1 (1.4)	2.7	13.0	12.2 (1.5)
Days/Year for Active Duty									
1-6	16.1	8.9	10.3 (1.4)	7.4	5.4	5.5 (1.2)	9.7	9.2	9.3 (1.4)
7-13	12.2	11.1	11.3 (1.5)	12.8	11.5	11.6 (1.6)	8.8	9.7	9.6 (1.4)
14 ^a	21.6	25.3	24.3 (1.8)	48.8	45.0	45.3 (2.7)	29.3	18.5	19.4 (1.8)
15-29	13.1	11.3	11.7 (1.5)	5.0	6.7	6.6 (1.3)	9.0	11.5	11.3 (1.5)
30	8.0	11.7	11.0 (1.4)	0.0	12.8	11.8 (2.0)	16.8	13.1	13.4 (1.7)
31-90	24.4	19.9	20.8 (1.7)	18.9	8.0	8.9 (1.4)	23.7	26.8	26.5 (2.1)
Don't know	4.7	11.6	10.3 (1.3)	6.9	10.6	10.3 (1.5)	2.7	11.2	10.5 (1.5)
Beginning Pay for 8-hour Drill Day									
\$5-29	16.7	15.9	16.1 (1.6)	14.0	13.5	13.6 (1.9)	12.0	15.8	15.4 (1.7)
30-39 ^a	10.9	11.7	11.5 (1.4)	25.0	7.7	9.1 (1.5)	20.6	13.6	14.2 (1.7)
40-49	9.9	14.4	13.5 (1.4)	6.0	16.4	15.5 (1.9)	8.1	12.7	12.3 (1.9)
50-59	7.9	16.9	15.1 (1.6)	11.0	21.4	20.6 (2.0)	14.8	14.9	14.9 (1.7)
60-99	16.3	9.7	11.0 (1.5)	19.3	14.9	15.3 (2.0)	15.9	7.1	7.9 (1.2)
100 or more	24.9	15.2	17.1 (1.8)	12.0	12.0	12.0 (1.7)	22.9	17.0	17.5 (1.7)
Don't know	13.5	16.3	15.7 (1.6)	12.8	14.1	14.0 (1.7)	5.8	18.8	17.7 (1.8)

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

Source: Questions 505, 507, 571, 572, 573.

^a Correct response. Initial pay for paygrade E-1 in FY 84 was \$38.24 for one day of drill.

percent of older males, and 19.4 percent of females. About 42 percent of young males, 31 percent of older males, and 50 percent of females either did not know or estimated that the active duty obligation required 30 or more days each year. Such misunderstanding may discourage these persons from considering joining the Reserve Component. Again, young males and females with positive propensity were more likely than those with negative propensity to attempt an estimate. There were no differences between propensity groups, however, in the estimates given.

The estimates of beginning pay for each eight hours of drill among those making an estimate were not very accurate. Even when "don't know" responses are counted, 25.0 percent of young males, 24.6 percent of older males, and 26.5 percent of females provided an estimate between \$30 and \$49 for pay per drill day. Thus, only about one-fourth of respondents gave estimates close to the actual amount of \$38.24. Propensity was not related to the accuracy of these estimates.

2. Effects of Cash Bonuses and Tuition Assistance

Respondents were asked two series of questions to determine how likely they would be to enlist in a Reserve Component for six years if increasingly larger cash bonuses or grants for tuition assistance were offered. Unfortunately, the interview did not obtain an adequate measure of baseline general intention to join the Reserve Component.* Still, the relative effects of increasing bonuses or educational grants can be examined.

Table 6.8 provides data about the incremental effect of the benefit amounts. To permit a direct comparison among benefit amounts, computations were made that placed all bonus (and tuition) questions on a common base of respondents (i.e., the number responding to the initial item in each series). To do this, it was assumed that those responding "definitely" to the first item would respond in the same way to the second item. 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 and tuition items based on these adjusted numbers of respondents.

*The appropriate baseline measure would be an item like Q503 that asked about joining the Guard or Reserves. Items were asked about propensity to join the Reserve Component but not about the general likelihood of joining.

Table 6.8. Incremental Effects of Cash Bonus and Tuition Assistance on Propensity to Enlist in Guard/Reserve

Benefit Type/ Amount	Young Males		Older Males		Females	
	Likelihood of Enlistment	Increment	Likelihood of Enlistment	Increment	Likelihood of Enlistment	Increment
Composite Reserve Propensity	19.4		9.3		9.2	
<u>Enlistment Bonus</u>						
\$2,000	26.0	-	18.2	-	15.5	-
\$4,000	35.1	9.1	23.9	5.7	24.5	9.0
\$6,000	42.2	7.1	30.7	6.8	30.9	6.4
Tuition Assistance for 4 Years						
\$1,000 per year	32.1	-	23.3	-	23.2	-
\$1,500 per year	35.2	3.1	25.6	2.3	28.3	5.1
\$2,000 per year	42.3	7.1	29.4	3.8	34.4	6.1

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 650 young males, 447 older males, and 545 females.

Source: Questions 579-581, 585-587.

The proportions of those saying they would "definitely" or "probably" enlist in the Reserve Component if they received a \$2,000 cash bonus are 26.0 percent of young males, 18.2 percent of older males, and 15.5 percent of females. These proportions are substantially higher than Composite Reserve Propensity for these groups. Doubling the hypothetical bonus to \$4,000 increases the reported likelihood of enlistment by 9.1 percentage points for young males, 5.7 percentage points for older males, and 9.0 percentage points for females. When the original \$2,000 cash bonus is tripled, the "positive" groups increase by another 7.1 percentage points for young males, 6.8 percentage points for older males, and 6.4 percentage points for females. Overall, raising the bonus from \$2000 to \$6000 increases positively-inclined young males and older males each by about two-thirds and doubles positively-inclined females.

The proportions of those saying they would "definitely" or "probably" enlist for six years in the Reserve Component if they received tuition assistance of \$1,000 per year for four years (i.e., a total of \$4,000) are 32.1 percent of the young males, 23.3 percent of the older males and 23.2 percent of the females. Tuition assistance, then, appears to have about the same effect on likelihood of joining as a cash bonus in about the same amount. When offered tuition assistance of \$1,500 per year (for a total of \$6,000), another 3.1 percentage points of all young males, 2.3 percentage points of all older males, and 5.1 percentage points of all females express positive intentions to enlist in the Reserve Component. A total grant of \$2,000 per year (total of \$8,000) increases positive interest by 7.1 percentage points for young males, 3.8 percentage points for older males, and 6.1 percentage points for females. Overall, increasing tuition assistance from \$1,000 to \$2,000 results in an increase in the pools of positively-inclined young males by about one-third, that of positively-inclined older males by about one-fourth, and that of positively-inclined females by about half.

Another way to view the effects of incentives like cash bonuses and educational benefits is in terms of their impact on persons who at lesser amounts asserted they would "definitely not" enlist in the Reserves. Computations (not shown) indicate that 36 percent of the young males, 43 percent of the older males, and 44 percent of the females who indicated they would definitely not enlist when offered \$2,000 become less than definitely negative (by about 20 percent for young males and females, about 10 percent for older

males) when offered a cash bonus of \$6,000. There is little change, however, in proportions in any market group originally saying they would "definitely not" enlist when offered tuition assistance of \$1,000 per year when subsequently offered educational aid of \$2,000 per year.

3. Proximity to Guard/Reserve Unit and Transfer Policies

Individuals in the three market groups were asked about their proximity to a National Guard or Reserve unit, about their perceptions of geographic transferability, and about the effect of these perceptions on their interest in Guard/Reserve enlistment. Table 6.9 cross-tabulates responses by Reserve propensity.

Overall, approximately four-fifths of each of the male marketing groups and two-thirds of the female groups say that there is a National Guard or Reserve unit located close enough for them to join. Young males (92.3 percent) and females (74.6 percent) with positive propensity are substantially more likely than those with negative propensity (75 percent, 65.5 percent, respectively) to say they have a Guard/Reserve unit nearby. Propensity makes no difference in the awareness of a nearby unit for older males. This suggests that propensity may be an important factor in inducing younger people to look into Reserve service enough to find out about its availability in their areas, something older men may have learned about by experience.

Knowledge about transferability of service is also high. Almost four-fifths in each of the market groups believe that the military would allow them to transfer or go inactive if they enlisted in a Guard/Reserve unit and then moved to another geographic area. For each group, those with positive Reserve propensity are somewhat more likely than those with negative propensity to believe Guard/ Reserve service is transferable.

Less than five percent of any market group says that transferability of Guard/Reserve service would make them "very much more interested." Adding in those who say it would increase their interest "somewhat," we see that about one-fifth of the young males and females, and about 14 percent of older males, have their interest in Guard/Reserve service increased by transferability. Those with positive propensity in all three groups are much more likely to report increased interest, including "very much more interested"; however, the proportions whose interest would increase "very much" remain less than 17 percent. This suggests that knowledge about the transferability of Guard/ Reserve service (which is fairly widespread in any case) is not, by itself, a particularly significant factor in encouraging interest in these services.

Table 6.9. Proximity to Guard/Reserve Unit and Perceptions of Transferability

Item/Response	Young Males			Older Males			Females		
	Positive Reserve Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total
Unit close enough to join									
Yes	92.3	75.0	78.5 (2.2)	83.6	82.9	82.9 (2.1)	74.6	65.5	66.4 (2.5)
No	7.7	25.0	21.5 (2.2)	16.4	17.1	17.1 (2.1)	25.4	34.5	33.6 (2.5)
If moved, believe could transfer or go inactive									
Yes	82.6	73.9	75.7 (2.1)	87.6	76.6	77.6 (2.2)	83.4	78.5	79.0 (2.1)
No	17.4	26.1	24.3 (2.1)	12.4	23.4	22.4 (2.2)	16.6	21.5	21.0 (2.1)
If could transfer/go inactive with move would become									
Very much more interested	6.8	3.0	3.7 (0.8)	16.7	2.1	3.3 (1.0)	14.4	3.1	4.0 (0.9)
Somewhat more interested	39.9	13.3	18.6 (1.9)	16.6	9.9	10.5 (1.6)	47.2	12.5	15.5 (1.7)
Slightly more interested	28.6	29.9	29.7 (2.1)	37.5	22.7	23.9 (2.1)	28.8	27.6	27.7 (2.1)
Not at all more interested	24.7	53.8	48.0 (2.4)	29.2	65.2	62.3 (2.6)	9.6	56.8	52.8 (2.4)

Note: Tabled values are percentages answering yes and standard errors are in parentheses. Estimates are based on interviews with 644 young males, 447 older males, and 544 females.

Source: Questions 505, 507, 582, 583, 584.

4. Perceived Influence of Guard/Reserve Participation on a Civilian Job

Since Guard/Reserve participation is only a part-time activity, it is reasonable to expect potential enlistees to consider the possible consequences of such participation for their full-time civilian jobs. All respondents were asked two questions to determine perceptions about:

- 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 they would lose job seniority during the training period for the Guard/Reserve.

Respondents employed by others were asked three additional questions:

- Whether their employer had a specific policy about Guard/Reserve participation
- Whether their employer was positive toward Guard/Reserve participation
- Whether they had talked with a supervisor about their employer's policy about the Guard/Reserve.

Table 6.10 presents the percentages of respondents answering yes to these five items. About two-fifths of young males and females and half of older males think an employer will hold a position open during the three to six months they would be away for active-duty training. More than a third of young males and females, but only a quarter of older males, expect to lose job seniority while away for basic training. The two younger market groups, then, express more concern about possible negative effects of the absence required by basic training than do the older males. The younger people may have been responding mainly in terms of an abstract job, whereas older males were more likely to be responding in terms of a job they have held. These results, particularly with regard to having an employer hold a job open, probably represent ignorance about civilian employment rights, some misperception about potentially beneficial effects of Guard/Reserve participation in the civilian workplace (e.g., skill training, discipline), and lack of contact with the military recruiters.

Among those employed by others (Table 6.10), only 10.1 percent of young males and 6.2 percent of females, but 20.6 percent of older males, think their employer has a specific policy about Guard/Reserve participation. Similarly, only about one-fourth of young males and females, and about a third of older males, believe their employer is positive toward Guard/Reserve participation.

Table 6.10. Perceived Influence of Guard/Reserve Participation on a Civilian Job

Group/Item	Young Males			Older Males			Females		
	Positive Reserve Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total
<u>All Respondents</u>									
Employer would hold job open for 3 to 6 months (basic) training	50.9	41.4	43.1 (2.8)	80.5	47.3	50.3 (2.9)	47.8	37.9	38.6 (3.1)
Would lose job seniority while in (basic) training	34.8	37.0	36.6 (3.0)	34.3	25.7	26.5 (2.6)	28.8	34.6	34.2 (3.0)
<u>Employed Respondents^a</u>									
Employer has policy about participation in Guard/Reserves	9.8	10.2	10.1 (1.8)	42.2	18.5	20.6 (2.3)	15.8	5.5	6.2 (1.5)
Employer is positive toward Guard/Reserve participation	38.2	22.6	25.4 (2.6)	57.2	30.6	33.0 (2.8)	34.2	24.1	24.8 (2.8)
Talked with supervisor about Guard/Reserve policy	2.6	4.7	4.3 (1.1)	14.9	3.7	4.7 (1.2)	10.4	2.6	3.1 (1.2)

Note: Tabled values are percentages answering yes, and standard errors are in parentheses. Estimates are based on interviews with 399 young males, 355 older males, and 280 females.

Source: Questions 416, 430, 505, 507, 574-578.

^aOmits respondents who are self-employed.

The low rates of positive responses may reflect a lack of salience as much as definite knowledge that employers do not have policies. Fewer than 5 percent in any market group have ever spoken to a supervisor about their employer's policy regarding Reserve service. Furthermore, most respondents who did not say that their employer had a positive attitude toward the Guard/ Reserve said the employer was neutral rather than negative--about two-thirds of young males and females and 55 percent of older males.

Table 6.10 also shows how propensity and perceptions about Guard/Reserve participation in a civilian job are related. In every market, positive propensity respondents are more likely to believe that their employers are positive toward employee Guard/Reserve participation. In the older male and female markets, those with positive propensity were significantly more likely to say that the employer had a policy on Guard/Reserve participation and they had talked with a supervisor about Guard/Reserve policy. In the young male market, knowledge of employer policy and discussion with a supervisor were apparently unrelated to positive propensity.

It appears, then, that most employees do not know what effects Guard/ Reserve participation would have on their jobs. Both ignorance and misperception about the effects of Reserve Component service on a civilian job may be disincentives to enlistment.

5. Likelihood of Joining an Individual Ready Reserve Program

Many believe that the Individual Ready Reserve (IRR) program is a cost-effective method for assuring a pool of trained individuals in the event of a national emergency. As conceptualized for the 1984 survey, the IRR would require a 12-week active-duty commitment for basic combat training with pay at \$575 per month plus full benefits. Thereafter, there would be no obligation to attend regular meetings or drills, but individuals could be called to active duty in national emergencies.

For this item, half of the respondents were asked about serving in the IRR for an eight-year period.* As shown in Table 6.11, 31.8 percent of young males, 23.2 percent of older males, and 21.9 percent of females indicated that

*The other half were asked about serving for a six-year period. Since, on June 1, 1984, the Secretary of Defense increased the military obligation to eight years, only the eight-year data are presented.

Table 6.11. Propensity to Enlist in the Individual Ready Reserve (IRR) Program

Market/Item Response	Composite Reserve Propensity		Total	
	Positive	Negative		
<u>Young Males</u>				
Join IRR				
Very likely to join	15.9	8.8	10.3	(2.0)
Somewhat likely to join	38.8	16.6	21.5	(2.9)
Only slightly likely to join	35.9	32.1	33.0	(3.2)
Not at all likely to join	9.3	42.5	35.1	(3.3)
Join IRR With \$1,000 Bonus ^a				
Very likely to join	6.4	1.8	2.8	(1.1)
Somewhat likely to join	57.8	20.1	28.0	(3.3)
Only slightly likely to join	25.9	34.2	32.5	(3.2)
Not at all likely to join	10.0	43.9	36.8	(3.5)
<u>Older Males</u>				
Join IRR				
Very likely to join	31.3	9.0	10.7	(2.2)
Somewhat likely to join	5.7	13.1	12.5	(2.2)
Only slightly likely to join	34.3	28.4	28.8	(3.4)
Not at all likely to join	28.7	49.5	48.0	(3.6)
Join IRR With \$1,000 Bonus ^a				
Very likely to join	0.0	1.8	1.7	(1.0)
Somewhat likely to join	16.6	19.9	19.7	(2.8)
Only slightly likely to join	50.1	26.4	27.8	(3.7)
Not at all likely to join	33.3	51.8	50.8	(3.7)
<u>Females</u>				
Join IRR				
Very likely to join	39.8	5.3	9.0	(1.9)
Somewhat likely to join	39.0	9.8	12.9	(2.2)
Only slightly likely to join	15.6	30.6	29.0	(3.1)
Not at all likely to join	5.6	54.3	49.1	(3.3)
Join IRR With \$1,000 Bonus ^a				
Very likely to join	7.4	1.5	1.9	(0.9)
Somewhat likely to join	62.3	14.6	17.9	(2.6)
Only slightly likely to join	27.1	30.2	30.0	(3.3)
Not at all likely to join	3.2	53.8	50.2	(3.4)

Note: Tabled values are percentages with standard errors in parentheses. Estimates for the main question were based on interviews with 312 young males, 243 older males, and 280 females for the 8-year period.

^a Respondents were asked this item only if they did not answer "Very likely to join" to the preceding item. Thus, percentages for this item are based on 280 young males, 217 older males, and 255 females.

Source: Questions 505, 507, 588, 589.

they were "very likely" or "somewhat likely" to join the IRR without a cash bonus. As expected, among those with positive propensity toward the Reserve Component, far larger percentages for all three market groups said they would be likely to join the proposed IRR than among those with negative propensity. Nevertheless, even among those with negative Reserve propensity, considerable interest was expressed regarding the IRR program (young males, 25 percent; older males, 22 percent; females, 15 percent).

Estimates for the three market groups on positive propensity toward the Reserve Component (see Table 4.4) were 19.4 percent for young males, 9.3 percent for older males, and 9.2 percent for females. Thus, the positive propensity to join the IRR program is more than one and one-half to two times higher than the positive propensity for the Reserve Component. Apparently, the annual active duty obligation and weekend drills required in the Guard/Reserve makes it less appealing than the IRR, especially to older males.

After the main question, respondents who gave any answer except "very likely to join" the IRR were asked how likely they would be to join the program if a \$1,000 enlistment bonus was given. Table 6.11 shows the distribution of responses among this reduced sample. As shown, among young males, 30.8 percent said they were very or somewhat likely to make a commitment. The corresponding figure for older males was 21.4 percent and for females, 19.8 percent. As expected, those with a positive Reserve propensity were more likely to respond to such an inducement than those with a negative propensity.

The exclusion of "very likely to join" respondents from the bonus question makes it difficult to measure the impact of the bonus on likelihood to enlist. The data presented in Table 6.12 adjust responses for the two questions to a common base, so that the actual increment in plans to join the IRR can be examined. As shown in Table 6.12, the proportions of young males who reported they were "very likely" or "somewhat likely" to join increased by 6 percentage points, from 32 to 38 percent. For older males the bonus increased the potential joiners by 7 percentage points, from 23 to 30 percent. The corresponding change for females was 5 percentage points, from 22 to 27 percent. Stated another way, the bonus resulted in an average marginal increase in plans to enlist in the IRR of 19.8 percent for young males, 28.9 percent for older males, and 23.7 percent for females. (This was computed as the value of the increment for an entire market group--i.e., the percentage point increase--divided by the percentage with plans to join the IRR without the bonus.) One

Table 6.12. Effects of \$1,000 Bonus on Plans to Join the Individual Ready Reserve.

Market/Item Response	Composite Reserve Propensity		Total
	Positive	Negative	
<u>Young Males</u>			
Without bonus	54.7	25.4	31.8
With bonus ^a	70.5	28.9	38.1
Increment due to bonus	15.8	3.5	6.3
<u>Older Males</u>			
Without bonus	37.0	22.1	23.2
With bonus ^a	42.7	28.9	29.9
Increment due to bonus	5.7	6.8	6.7
<u>Females</u>			
Without bonus	78.8	15.1	21.9
With bonus ^a	81.8	20.6	27.1
Increment due to bonus	3.0	5.5	5.2

Note: Data are percentages of respondents who indicated they were "very likely" or "somewhat likely" to join the IRR. Estimates for the main question were based on interviews with 312 young males, 243 older males, and 280 females for the eight-year period.

^aComputations assume that those who are "very likely to join" without a bonus would respond the same to joining with a bonus.

Source: Questions 505, 507, 588, 589.

should note that this may not be cost effective because all enlistees would receive the \$1,000 bonus, not just the incremental percentage.

While these average overall effects for the three market groups are impressive, it is useful to examine the differential effects by Composite Reserve Propensity level. Thirty-seven percent of older males, 55 percent of females, and 79 percent of young males with positive propensity say that they are likely to join the IRR even without a bonus. Of those with negative propensity, 22 percent of older males, 15 percent of females, and 25 percent of young males say they are likely to join the IRR without a bonus. The effects of offering a bonus on the intention to join increases the percentage likely to join more for older males and females with negative propensity than for those with positive propensity, but the effect of offering a bonus was stronger for positive than negative young males.

Overall, these results suggest that a cash enlistment bonus might substantially influence individuals who are apparently not otherwise in the market for traditional Reserve participation, particularly older males and females. Because those with negative Reserve propensity include 80.6 percent of young males, 90.7 percent of older males, and 90.1 percent of females, even slight increases in the percentage of IRR enlistees from this group would translate into large numbers.

C. Summary

In this chapter, we examined the knowledge of enlistment benefits and measures of orientation toward the military for the marketing groups addressed by military recruiting and advertising.

1. Active Services

- The level of knowledge about monthly starting pay and the existence and size of enlistment bonuses is low.
- One-fourth of males and one-third of females were unable to provide an estimate of monthly starting pay, but among those who did, estimates on the average were only \$75 lower than the actual pay.
- Knowledge of monthly starting pay is not related to the general intention to serve in the military.
- Being informed of the correct amount of starting monthly pay affected the general intention to serve in the military of about 30 percent of respondents. Respondents who initially

underestimated pay tended to become more positive toward serving in the military, whereas those who overestimated pay tended to become more negative.

- About 30 percent of males and 23 percent of females correctly believe that the Services pay an enlistment bonus. Median estimates of the maximum amount of the enlistment bonus were \$1,000 for young males, \$1,500 for older males, and \$500 for females, amounts that are considerably lower than actual bonus amounts.
- Knowledge of enlistment bonuses is strongly related to composite propensity only for females; those with positive propensity are more likely to believe that the Services offer bonuses.
- Knowledge of post-military educational benefits is higher than that of enlistment bonuses. Half of males and almost two-fifths of females correctly reported that the Services pay post-military educational benefits.
- Median estimates of the maximum education benefit paid are \$7,000 for young males, \$6,000 for older males, and \$4,000 for females.
- Knowledge of educational benefits is unrelated to propensity.
- Draft registration for 18-year-old males was favored by 48.0 percent of young males, 62.1 percent of older males and 39.0 percent of females. Only a small percentage actually opposed the draft requirement.
- Approximately half of the respondents favored a National Service Program. From 64 to 73 percent of the respondents with positive Composite Active Propensity favored the National Service Program.

2. Reserve Component

- About one-third of young males, one-fourth of older males and two-fifths of females did not know the number of drill days required per month or estimated it at eight or more days.
- About two-fifths of young males, one-third of older males, and half of females estimated the annual active duty obligation at 30 or more days or said they did not know.
- Approximately 75 percent of each market group did not know or incorrectly estimated beginning pay per drill day.

- The higher the cash enlistment bonuses and tuition assistance grants, the higher the proportions of persons with positive Guard/Reserve propensity.
- More young males and females believe Guard/Reserve participation would negatively affect a civilian job than do older males, possibly because of their ignorance of both the working world and of the Guard/Reserve.
- More respondents were positive to the idea of an IRR program than to the standard Guard/Reserve program. Positive responses toward joining the IRR (without a bonus) for an eight-year commitment were given by about 32 percent of young males, 23 percent of older males, and 22 percent of females.
- Among those with a negative propensity for the Guard/Reserve, the proportions favorable toward the IRR (without the \$1,000 bonus) for the eight-year commitment are 25 percent for young males, 22 percent for older males, and 15 percent for females. This suggests that there is a market segment interested in the IRR.

7. INFORMATION SEEKING AND RECRUITER CONTACT

Analyses in this chapter examine level of exposure to enlistment decision influencers and information sources, and the degree of contact with recruiters. Influencers and information-seeking activities are seen as a passive-to-active continuum. Receiving direct mail literature, seeing print advertising, seeing or hearing broadcast advertising, and knowing someone who enlisted are instances of relatively passive exposure. More active behaviors include mailing a card for information, making a toll-free call for information, and initiating contact with military recruiters. Analyses examine exposure to these information sources separately for each of the three market groups, along with a summary count of all information sources to which an individual is exposed.

A. Advertising Awareness

The level of awareness of military advertising was measured in two ways. First, individuals were asked: "For what military Service or Services do you recall seeing or hearing advertising that encouraged people to enlist?" Responses are referred to as "unaided awareness." Close-ended questions asked whether individuals recalled advertising for each Service (specified by name) not mentioned in the first answer. These latter responses are referred to as "aided awareness."

Table 7.1 shows that 91.5 percent of young males report aided or unaided awareness of advertising for the Army, 79.0 percent for the Navy, 85.0 percent for the Marine Corps, 86.6 percent for the Air Force, 57.9 percent for the Coast Guard, 68.5 percent for the National Guard/Reserve, and 67.5 percent for Joint Service advertising. For each of the four active Services, young males are more likely to report awareness of its advertising spontaneously (i.e., unaided) without the probe for specific Service. In the unaided question, 72.2 percent mention the Army; 50.3 percent, the Navy; 58.9 percent, the Marine Corps; and 59.9 percent, the Air Force. They are less familiar with advertising for the Coast Guard (23.5 percent mention it unaided), National Guard/Reserve (23.4 percent unaided), and the Joint Recruiting Advertising Program (16.8 percent unaided). However, considerably more members of these three groups mention awareness of the advertising when asked specifically: 34.5 percent for the Coast Guard, 45.1 percent for the National Guard/Reserve, and 50.7 for the Joint program. The other two market groups, older males and



Table 7.1. Levels of Awareness of Military Advertising

Sponsor/Awareness	Young Males			Older Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
Army									
Unaided awareness	72.3	72.1	72.2 (0.8)	62.7	64.7	64.5 (1.4)	77.4	71.1	71.9 (1.3)
Aided awareness	20.6	18.7	19.3 (0.7)	23.5	21.8	21.9 (1.2)	15.3	19.2	18.7 (1.1)
Aided or unaided	92.9	90.9	91.5 (0.4)	86.2	86.4	86.4 (1.0)	92.7	90.3	90.6 (0.9)
Navy									
Unaided awareness	46.7	51.9	50.3 (0.8)	36.8	45.7	44.8 (1.5)	48.6	48.8	48.7 (1.4)
Aided awareness	30.5	27.8	28.6 (0.8)	30.3	27.9	28.2 (1.3)	31.7	28.4	28.9 (1.3)
Aided or unaided	77.3	79.7	79.0 (0.7)	67.1	73.7	73.0 (1.3)	80.3	77.2	77.6 (1.2)
Marine Corps									
Unaided awareness	58.5	59.1	58.9 (0.8)	49.4	53.4	53.0 (1.5)	46.1	53.5	52.5 (1.4)
Aided awareness	26.7	25.9	26.2 (0.7)	27.6	25.9	26.1 (1.3)	34.4	27.5	28.4 (1.3)
Aided or unaided	85.2	85.0	85.0 (0.6)	77.0	79.3	79.1 (1.2)	80.5	80.9	80.9 (1.1)
Air Force									
Unaided awareness	59.3	60.1	59.9 (0.8)	49.5	52.7	52.3 (1.5)	64.4	54.7	56.0 (1.4)
Aided awareness	28.2	26.1	26.8 (0.7)	30.7	28.6	28.9 (1.3)	21.2	28.9	27.9 (1.2)
Aided or unaided	87.5	86.2	86.6 (0.6)	80.2	81.3	81.2 (1.1)	85.6	83.6	83.9 (1.0)
Coast Guard									
Unaided awareness	18.7	25.5	23.5 (0.7)	15.7	21.3	20.7 (1.2)	15.7	14.7	14.8 (1.0)
Aided awareness	37.3	33.3	34.5 (0.8)	34.8	33.6	33.7 (1.4)	37.6	30.3	31.3 (1.3)
Aided or unaided	56.0	58.8	57.9 (0.8)	50.6	54.9	54.5 (1.5)	53.4	45.0	46.1 (1.4)
National Guard/Reserve^a									
Unaided awareness	23.3	23.5	23.4 (0.7)	26.8	21.8	22.3 (1.2)	18.4	17.0	17.2 (1.1)
Aided awareness	48.3	44.3	45.1 (0.9)	46.1	44.7	44.8 (1.5)	43.5	40.3	40.6 (1.4)
Aided or unaided	71.6	67.8	68.5 (0.8)	73.0	66.5	67.1 (1.3)	61.9	57.4	57.8 (1.4)
Joint Services^b									
Unaided awareness	13.7	18.1	16.8 (0.6)	11.1	14.2	13.9 (1.0)	8.5	10.9	10.6 (0.9)
Aided awareness	53.4	49.5	50.7 (0.8)	39.8	45.1	44.5 (1.5)	55.4	49.0	49.9 (1.4)
Aided or unaided	67.1	67.6	67.5 (0.8)	50.9	59.3	58.5 (1.5)	63.9	59.9	60.4 (1.4)

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. Estimates are based on interviews with 5,057 young males, 1,379 older males, and 1,502 females.

^aPropensity for this item refers to Guard/Reserve propensity. See Chapter 4 for a description of the construction of measure. Note that the measure differs from the Reserve Propensity measure used in YATS 1983.

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

Source: Questions 510-513, 601-608.

females, do not differ substantially from the young males in aided and unaided awareness of military advertising.

Positive and negative propensity groups show some statistically significant differences in awareness of advertising for some services. In terms of absolute percentage points, however, these differences are small for the most part. For example, positive young males report higher overall awareness of Army advertising (92.9 percent aided and unaided) than the negative group (90.9 percent), but nearly everyone in both groups is aware of Army advertising. Positive propensity young males also show higher overall awareness of National Guard/Reserve advertising (71.6 percent aided and unaided) than the negative group (67.8 percent). Negative propensity respondents show higher overall awareness than positive propensity respondents for Navy advertising (79.7 percent vs. 77.3 percent) and of Coast Guard advertising (58.8 percent vs. 56.0 percent).

Females with positive propensity are more likely than those with negative propensity to be aware of advertising for the Army (92.7 vs. 90.3 percent); Navy (80.3 vs. 77.2 percent); Coast Guard (53.4 percent vs. 45.0 percent), National Guard/Reserve (61.9 vs. 57.4 percent); and Joint Services (63.9 percent vs. 59.9 percent).

Older males with positive propensity display a higher awareness of advertising for National Guard/Reserve than those with negative propensity (73.0 percent vs. 66.5 percent). Older males with positive propensity to enlist are less likely than the negative group to be aware of the advertising for the Navy (67.1 percent vs. 73.7 percent), Coast Guard (50.6 percent vs. 54.9 percent), and the Joint Services (50.9 percent vs. 59.3 percent).

Table 7.2 shows the order in which individuals mentioned the Services in response to the unaided question. About 40 percent of young males mentioned the Army first while 26 percent mentioned the Air Force first, with other Services mentioned first by fewer than 20 percent. The Army was also mentioned most often as the second response, by 34 percent of the respondents. The set of responses mentioned third is more diverse. The results for older males and females are very similar to those for young males.

Overall, awareness of military advertising appears to be high for all three market groups. The Joint Services advertising is mentioned by a majority in each market group. The Army is recognized by nearly everyone. It is the most frequently mentioned in response to the unaided question (Table 7.1) and

Table 7.2. Order of Mention for Recall of Military Advertising

Service	Order of Mention											
	Young Males			Older Males			Females					
	First Response	Second Response	Third Response	First Response	Second Response	Third Response	First Response	Second Response	Third Response			
Army	39.6	34.1	10.2	32.8	37.6	10.1	44.8	29.9	9.3			
Navy	5.2	24.1	14.2	7.8	21.7	14.1	7.7	27.4	15.8			
Marine Corps	10.9	15.3	23.6	11.9	14.4	29.1	8.3	16.7	28.0			
Air Force	25.8	20.7	26.8	26.0	19.5	21.1	20.6	20.0	29.5			
Coast Guard	0.6	2.1	21.1	1.3	2.6	21.1	0.6	2.3	13.5			
National Guard/ Reserve	2.2	2.5	3.0	3.4	2.7	3.6	2.8	2.9	3.0			
Other ^a	15.6	1.3	1.2	16.8	1.6	0.8	15.2	0.9	0.9			

Note: Tabled values are column percentages. Data are for unaided mentions. Estimates are based on interviews with 5,057 young males, 1,379 older males, and 1,503 females.

^aIncludes "None" (first response only), one ad for all Services, don't know, and refused.

Source: Question 601.

is also most frequently mentioned first (Table 7.2). This probably reflects the fact that the Army does more advertising than the other Services.

B. Recognition of Military Advertising Slogans

Recognition of military advertising slogans is one indicator of advertising awareness. Respondents were asked to match each of six slogans with the four major Services (there were two slogans for the Air Force) and the Joint Services. Responses to these questions are shown in Table 7.3 with correct answers underlined.

Young males identified the Marine Corps slogan, "The few, the proud, the _____," correctly most often (86.8 percent). This was followed by the Air Force slogan, "Aim high. _____.", which 82.9 percent identified correctly; and the Army slogan, "Be all you can be.", which was correctly identified by 76.3 percent of the respondents. Only 33.2 percent of this group correctly identified the Navy slogan, "_____. It's not just a job, it's an adventure."; 22.2 percent correctly identified the second Air Force slogan, "_____. A great way of life."; and 18.4 percent correctly identified the Joint Services slogan, "It's a great place to start." Propensity to enlist is not related to ability to identify slogans for this marketing group.

Older males show the same overall pattern as young males. More than 85 percent correctly identified the Marine Corps slogan--about the same rate as for the younger men. The older men then correctly identified the Air Force slogan at a rate of 75.6 percent and the Army slogan at a rate of 63.5 percent. These are followed by the Navy slogan (correctly identified by 30.8 percent), the second Air Force slogan (correctly identified by 17.5 percent), and the Joint Services slogan (correctly identified by 12.5 percent). Although the older males are able to identify these five slogans in the same order as are young males, the rate at which older men make correct identifications is consistently lower--especially for the Air Force and Army. Those with positive propensity are below the level for the negative group in correctly identifying the slogans for the Marine Corps (77.9 percent vs. 86.1 percent) and the Army (54.1 percent vs. 64.6 percent). Otherwise, composite propensity is unrelated to slogan identification for this group.

Table 7.3. Recognition of Military Advertising Slogans

Slogan/Response	Young Males			Older Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
"Be all you can be."									
Army	75.1	76.8	76.3 (0.7)	54.1	64.6	63.5 (1.4)	81.3	75.8	76.6 (1.2)
Navy	6.2	4.9	5.3 (0.4)	7.1	6.1	6.2 (0.7)	4.7	6.4	6.2 (0.7)
Marine Corps	6.9	6.8	6.8 (0.4)	14.2	10.6	11.0 (0.9)	1.9	4.3	4.0 (0.5)
Air Force	4.6	3.9	4.1 (0.3)	11.0	7.8	8.2 (0.9)	5.3	4.5	4.6 (0.6)
Joint Services	5.2	4.4	4.6 (0.3)	7.1	3.5	3.9 (0.6)	3.3	4.6	4.5 (0.6)
Don't know	2.0	3.3	2.9 (0.3)	6.5	7.3	7.2 (0.7)	3.5	4.3	4.2 (0.5)
"It's not just a job, it's an adventure."									
Army	32.6	32.4	32.5 (0.8)	30.4	32.5	32.3 (1.4)	37.2	36.4	36.5 (1.4)
Navy	35.0	32.4	33.2 (0.8)	31.9	30.7	30.8 (1.4)	25.5	22.1	22.5 (1.2)
Marine Corps	14.2	15.8	15.3 (0.6)	17.2	13.1	13.5 (1.0)	15.1	15.1	15.1 (1.0)
Air Force	8.4	8.1	8.2 (0.5)	10.8	11.8	11.7 (1.0)	13.8	12.4	12.6 (1.0)
Joint Services	5.4	5.7	5.6 (0.4)	4.3	4.3	4.3 (0.6)	4.7	5.5	5.4 (0.6)
Don't know	4.4	5.5	5.2 (0.3)	5.5	7.6	7.3 (0.7)	3.7	8.4	7.8 (0.7)
"The few, the proud, the..."									
Army	4.2	3.8	4.0 (0.3)	5.9	4.8	4.9 (0.6)	6.6	7.1	7.0 (0.7)
Navy	3.2	2.7	2.8 (0.3)	2.4	2.2	2.2 (0.4)	8.5	5.6	6.0 (0.7)
Marine Corps	85.7	87.2	86.8 (0.6)	77.9	86.1	85.3 (1.1)	70.2	74.2	73.7 (1.3)
Air Force	2.1	2.1	2.1 (0.2)	5.3	1.9	2.3 (0.5)	5.8	3.4	3.7 (0.5)
Joint Services	1.8	1.1	1.3 (0.2)	3.1	0.7	0.9 (0.3)	4.4	2.8	3.0 (0.5)
Don't know	2.9	3.1	3.0 (0.3)	5.3	4.3	4.4 (0.6)	4.5	6.9	6.6 (0.8)
"Aim high..."									
Army	4.3	3.9	4.0 (0.3)	7.3	4.4	4.7 (0.6)	9.1	4.8	5.4 (0.6)
Navy	2.5	3.2	3.0 (0.3)	3.8	3.1	3.2 (0.5)	5.2	5.0	5.0 (0.6)
Marine Corps	2.7	3.5	3.2 (0.3)	3.0	4.8	4.7 (0.6)	3.2	4.6	4.4 (0.6)
Air Force	84.7	82.2	82.9 (0.6)	77.3	75.4	75.6 (1.3)	70.4	71.1	71.0 (1.3)
Joint Services	1.8	1.6	1.7 (0.2)	2.1	1.7	1.7 (0.5)	5.0	2.5	2.8 (0.5)
Don't know	4.0	5.7	5.2 (0.4)	6.5	10.6	10.2 (1.0)	7.1	12.0	11.3 (0.9)
"It's a great place to start."									
Army	37.6	37.3	37.3 (0.8)	45.7	40.6	41.2 (1.5)	34.0	29.7	30.3 (1.3)
Navy	14.9	14.2	14.4 (0.6)	14.1	14.7	14.6 (1.0)	16.2	13.6	13.9 (1.0)
Marine Corps	9.1	8.4	8.6 (0.5)	6.0	5.7	5.7 (0.6)	13.0	10.0	10.4 (0.8)
Air Force	12.4	10.7	11.2 (0.5)	8.3	8.4	8.4 (0.8)	7.5	11.1	10.6 (0.9)
Joint Services	16.6	19.1	18.4 (0.6)	11.2	12.7	12.5 (1.0)	17.0	18.2	18.0 (1.1)
Don't know	9.4	10.3	10.0 (0.6)	14.8	17.9	17.6 (1.1)	12.4	17.4	16.8 (1.0)
"... a great way of life."									
Army	26.6	28.5	27.9 (0.8)	20.2	25.6	25.1 (1.2)	20.2	27.3	26.4 (1.2)
Navy	19.2	19.7	19.6 (0.7)	24.2	20.8	21.2 (1.2)	20.8	19.3	19.5 (1.1)
Marine Corps	10.2	9.8	9.9 (0.5)	8.2	8.7	8.7 (0.8)	15.3	8.7	9.6 (0.8)
Air Force	25.7	20.6	22.2 (0.7)	24.5	16.7	17.5 (1.1)	23.7	16.2	17.2 (1.1)
Joint Services	8.9	9.8	9.6 (0.5)	10.2	10.2	10.2 (1.0)	10.4	9.7	9.8 (0.9)
Don't know	9.4	11.5	10.8 (0.6)	12.6	17.9	17.3 (1.1)	9.6	18.8	17.6 (1.1)

Note: Tabled values are percentages with standard errors in parentheses; correct responses for each slogan are underlined. Estimates are based on interviews with 5,041 young males, 1,376 older males, and 1,503 females.

Source: Questions 510-513, 610-615.

The pattern for females differs somewhat from those for males. Again, they are more likely to identify correctly slogans for the Army (76.6 percent), Marine Corps (73.7 percent), and Air Force (71.0 percent) than they are the remaining slogans. The rates are slightly lower than the comparable rates for young males. Again, propensity is unrelated to slogan identification.

Where fewer than half of respondents identified a slogan correctly, substantial proportions (usually in the range of 30 to 40 percent) guessed that the Army was the correct answer. Again, these data may be a reflection of the fact that the Army has done more advertising than the other Services, or that "the Army" has become a generic term for military service.

C. Media-Specific Awareness of Military Advertising

Young males and females were asked whether they had had contact with three specific types of advertising: broadcast advertising (within the past 12 months), print advertising (within the past 12 months) and recruiting literature received in the mail (at any time). Table 7.4 presents their responses.

Overall, 83.2 percent of young males have seen or heard broadcast advertising for one or more of the Services, 76.4 percent have seen print advertising, and 55.6 percent report receiving direct mail recruiting literature. Females do not differ substantially from young males with regard to print or broadcast advertising, but they are considerably less likely to have received direct mail literature (33.3 percent). Propensity makes no apparent difference for either marketing group in their recall of print or broadcast advertising. However, those with negative propensity are more likely to report having received direct mail recruiting literature than those with positive propensity. This difference is small for females (34.2 percent with negative propensity received literature vs. 27.4 percent with positive propensity). But the difference for young males is considerably larger (60.3 percent of those with negative propensity received literature vs. 44.6 percent of those with positive propensity).*

*When these data are examined for Recruiting and Priority Groups (RPGs) in Chapter 9, we will see that this apparent problem is the result of advertising policy and the negative age/propensity relationship. Direct mail programs focus on higher priority groups, with mailings to high school seniors and 19-year-olds on Selective Service lists, deliberately avoiding some high propensity (but less desirable) groups--young students and high school drop-outs.

Table 7.4. Receipt of Recruiting Literature and Awareness of Print and Broadcast Media Advertising

Advertising Medium ^a /Sponsor	Young Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
Received Literature from:						
Army	29.5	40.1	36.9 (0.8)	16.7	22.1	21.4 (1.1)
Navy	13.0	21.4	18.9 (0.7)	5.7	5.9	5.9 (0.7)
Marine Corps	19.8	25.5	23.8 (0.8)	3.4	6.3	5.9 (0.7)
Air Force	14.0	21.1	19.0 (0.6)	9.2	8.4	8.5 (0.8)
National Guard/Reserve ^b	4.7	4.1	4.2 (0.3)	0.0	2.0	1.8 (0.4)
Joint Services	3.9	6.5	5.7 (0.4)	1.9	1.5	1.6 (0.4)
Don't remember sponsor	0.0	0.0	0.0 (**)	0.0	0.0	0.0 (**)
Any recruiting literature	44.6	60.3	55.6 (0.9)	27.4	34.2	33.3 (1.3)
Saw Print Advertising of:						
Army	47.1	45.2	45.8 (0.9)	57.6	47.2	48.6 (1.4)
Navy	25.1	23.7	24.1 (0.7)	25.1	21.0	21.5 (1.2)
Marine Corps	33.0	29.8	30.7 (0.8)	29.7	27.6	27.8 (1.3)
Air Force	38.2	31.2	33.3 (0.8)	34.1	24.3	25.6 (1.2)
National Guard/Reserve ^b	12.2	7.4	8.3 (0.5)	14.4	5.5	6.3 (0.7)
Joint Services	17.8	21.0	20.1 (0.7)	13.9	14.4	14.3 (1.0)
Don't remember sponsor	1.0	1.7	1.5 (0.2)	0.7	2.0	1.9 (0.4)
Any print advertising	78.0	75.7	76.4 (0.7)	80.3	72.0	73.1 (1.3)
Saw/Hear Broadcast Advertising of:						
Army	51.6	46.5	48.0 (0.9)	56.0	53.5	53.8 (1.4)
Navy	30.1	30.6	30.4 (0.8)	33.4	30.6	31.0 (1.3)
Marine Corps	37.3	34.5	35.3 (0.8)	38.7	35.3	35.8 (1.4)
Air Force	39.6	35.9	37.0 (0.8)	42.2	34.4	35.4 (1.4)
National Guard/Reserve ^b	15.9	12.7	13.4 (0.6)	12.9	9.9	10.2 (0.8)
Joint Services	27.3	33.3	31.5 (0.8)	20.4	26.1	25.3 (1.2)
Don't remember sponsor	0.9	1.0	1.0 (0.2)	0.4	2.1	1.8 (0.4)
Any broadcast advertising	85.1	82.3	83.2 (0.6)	85.2	83.9	84.1 (1.0)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,048 young males and 1,501 females. Items were not asked of older males.

** Informative standard error not available.

^aReceived literature" items refer to having ever received, while print advertising and broadcast advertising refer to past 12 months.

^bPropensity estimates refer to Guard/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, 616-621.

Both of these marketing groups were also asked about contact with computerized career information at their high schools. The results, presented in Table 7.5, show few differences between the two market groups. About half of young males (50.7 percent) and females (49.4 percent) report that a computerized career information system is available at their high schools (with the remaining half saying they have no such system or don't know). Among those with a system available, just over one-fifth of both groups have used the system to obtain information about the military (24.7 percent of young males and 21.1 percent of females). Those remaining in both groups have used the system but did not obtain information about the military, or have not used the system.

For those who used a computerized system to obtain information about the military, this use was more likely to increase young males' interest in the military than to increase females' interest. About 46 percent of young males who used computer-generated information report it increased their interest in the military, compared to about 33 percent of females. This increase in interest is significantly related to propensity in each market group. About 71 percent of positive young males who obtained information about the military from a computerized system report increased interest compared to 34 percent of negative young males. Similarly, 92 percent of positive females who had used a system in this way report increased interest compared with 22 percent of negative females.

D. Informal Sources of Information

Table 7.6 shows the proportions of the three market groups with informal sources of information about the military. Young males are more likely than older males or females to have discussed the possibility of military service with friends or family in the past year. This may be an indicator of interest in military service as well as a source of information. About 37 percent of young males had such discussions compared with 15 percent of older males and 20 percent of females. Positive propensity individuals in all three groups are much more likely than negative propensity individuals to have had such discussions.

About 39 percent of young males and 37 percent of females had a close friend or relative who had enlisted in the past six months as did 21 percent of older males. Older males and females with positive propensity are more likely to report having a close friend or relative who recently enlisted than

Table 7.5. Presence and Effect of Computerized Career Information at High Schools

Presence of System/Effect	Young Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
Yes ^a	51.3	50.5	50.7 (0.9)	47.1	49.7	49.4 (1.5)
Used and obtained information about military	26.5	23.9	24.7 (1.0)	25.8	20.4	21.1 (1.7)
Increased interest in military ^c	71.3	34.4	46.3 (2.3)	92.3	22.2	33.1 (4.3)
Did not increase interest in military	28.7	65.6	53.7 (2.3)	7.7	78.0	66.9 (4.3)
Used but did not obtain information about military ^b	56.3	57.9	57.5 (1.2)	52.7	63.8	62.3 (2.0)
Did not use system ^b	17.2	18.2	17.9 (0.9)	21.4	15.8	16.5 (1.5)
No ^a	45.3	45.4	45.4 (0.9)	48.5	46.2	46.5 (1.4)
Don't know ^a	3.4	4.1	3.9 (0.5)	4.4	4.0	4.1 (0.6)

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

^aEstimates are based on interviews with 4,980 young males (1,395 with positive propensity and 3,585 with negative propensity) and 1,483 females (196 with positive propensity and 1,287 with negative propensity).

^bEstimates based on respondents who said "Yes" had computerized career information at their high schools: 2,473 young males (698 with positive propensity and 1,775 with negative propensity) and 743 females (95 with positive propensity and 648 with negative propensity).

^cEstimates based on respondents who "Used and obtained information about military": 599 young males (180 with positive propensity and 419 with negative propensity) and 150 females (24 with positive propensity and 126 with negative propensity).

Source: Questions 710-712.

Table 7.6. Informal Sources of Information About Military Service

Sources of Information	Young Males			Older Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
<u>Discussed service in the military with anyone during past year</u>									
Yes	59.2	27.7	37.1 (0.8)	37.6	12.3	14.9 (1.0)	63.1	13.9	20.4 (1.1)
Friends	32.5	15.9	20.6 (0.7)	21.1	7.1	8.6 (0.8)	39.5	7.9	12.0 (0.9)
Family	38.5	15.6	22.5 (0.7)	21.0	6.7	8.2 (0.8)	38.5	7.2	11.3 (0.9)
Other	7.5	2.8	4.2 (0.3)	1.9	0.1	0.2 (0.1)	8.2	1.6	2.4 (0.4)
No	40.8	72.3	62.9 (0.8)	62.4	87.7	85.1 (1.0)	36.9	86.1	79.6 (1.1)
<u>Close friend/relative enlisted within past six months</u>									
Yes	40.1	37.8	38.5 (0.8)	30.4	19.9	21.0 (1.2)	45.1	36.2	37.4 (1.4)
No	59.9	62.2	61.5 (0.8)	69.6	80.1	79.0 (1.2)	54.9	63.8	62.6 (1.4)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,053 young males, 1,379 older males, and 1,501 females.

Source: Questions 510-513, 682-684.

group members with negative propensity. Propensity makes no difference in this reporting for young males.

E. Information Seeking by Mail and Telephone

Young males and females were asked whether they had ever actively sought information about the military either by telephone or mail. Results displayed in Table 7.7 show that only 4.4 percent of young males and 2.6 percent of females made such a toll-free call. Toll-free calls were made by about 6 percent of those with positive propensity and 3 percent of those with negative propensity.

Individuals are more likely to have mailed a card for information about a Service than to have made a toll-free call. Overall, 15.9 percent of young males sought information this way as did 9.7 percent of females. Positive propensity respondents in both groups are more likely than others to have sought information by mail. About a fourth of both young males and females with positive propensity have sought information by mail compared with 16 percent for all young males and 10 percent for females.

Respondents most often ask for information on the Army, regardless of marketing group or propensity level. Females seek information about the Air Force with nearly as much frequency as they do about the Army.

F. Contact with Recruiters

All three market groups were asked about contacts with recruiters. Table 7.8 presents the percentages who recall ever having had recruiter contact and their method of first contact. Overall, 38.9 percent of young males, 36.9 percent of older males and 23.7 percent of females have had some contact with a military recruiter about military service. For young males, contact with an Army recruiter is most frequent (22.5 percent), followed by Marine Corps recruiters, Air Force recruiters, and Navy recruiters (each around 10 percent).

For older males, the pattern of first recruiter contact is similar to that for young males in that it is also most frequent for Army recruiters (17.4 percent), and lower but similar for recruiters from the other Services (again, about 10 percent).

Females also show the same pattern but at still lower levels. Contact with Army recruiters is greatest (12.7 percent), and contact with recruiters of other Services is lower but very similar at about 5 percent each.

First contact with recruiters at school is the most common for the young males and females. Older males are most likely to have visited a recruiting station or to have had contact at school.

Table 7.7. Information-Seeking by Mail and Telephone

Information-Seeking Activity/Service	Young Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
<u>Made a toll-free call for information about:</u>						
Army	2.8	1.0	1.5 (0.2)	3.7	1.0	1.3 (0.3)
Navy	1.5	0.8	1.0 (0.2)	0.8	0.3	0.3 (0.2)
Marine Corps	1.7	0.6	0.9 (0.2)	0.0	0.5	0.4 (0.2)
Air Force	1.7	0.8	1.1 (0.2)	2.5	0.5	0.8 (0.2)
National Guard/Reserve ^a	1.6	0.2	0.5 (0.2)	0.0	0.2	0.1 (0.1)
Joint Services	0.1	0.1	0.1 (0.1)	0.0	0.0	0.0 (**)
Don't remember Service	0.0	0.0	0.0 (**)	0.0	0.0	0.0 (**)
Any toll-free call	6.6	3.4	4.4 (0.4)	4.9	2.2	2.6 (0.4)
<u>Mailed a postcard or coupon for information about:</u>						
Army	12.0	5.8	7.6 (0.4)	14.6	3.8	5.2 (0.6)
Navy	5.4	2.2	3.2 (0.3)	3.2	0.9	1.2 (0.3)
Marine Corps	7.3	3.0	4.3 (0.3)	2.2	1.1	1.2 (0.3)
Air Force	8.0	4.7	5.7 (0.4)	13.1	2.4	3.8 (0.5)
National Guard/Reserve ^a	2.3	0.7	1.0 (0.2)	1.0	0.2	0.3 (0.2)
Joint Services	0.8	0.3	0.4 (0.1)	0.0	0.2	0.2 (0.1)
Don't remember Service	0.0	0.0	0.0 (**)	0.8	0.0	0.1 (0.1)
Any mailed request	24.5	12.3	15.9 (0.6)	23.8	7.6	9.7 (0.8)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,055 young males and 1,503 females. Items were not asked of older males.

** Informative standard error not available.

^a Propensity estimates refer to Guard/Reserve Propensity; all other estimates refer to composite active propensity.

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

Table 7.8. Contact with Recruiters by Service Represented and Method of First Contact

Sponsor/Method of First Contact	Young Males			Older Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
Army									
Got a phone call	5.0	6.4	6.0 (0.4)	1.3	2.5	2.4 (0.4)	3.1	1.9	2.1 (0.4)
Made a phone call	2.1	0.9	1.3 (0.2)	2.6	1.8	1.8 (0.4)	1.8	0.2	0.5 (0.2)
At recruiting station	6.0	2.3	3.4 (0.3)	8.3	4.7	5.1 (0.6)	4.1	1.2	1.6 (0.3)
At job fair	0.3	0.3	0.3 (0.1)	0.5	0.2	0.2 (0.1)	0.7	0.4	0.4 (0.2)
At school	11.6	8.9	9.7 (0.5)	3.5	6.0	5.8 (0.7)	12.4	6.3	7.1 (0.7)
Some other way (or don't know)	3.1	1.3	1.8 (0.2)	1.7	2.2	2.1 (0.4)	1.5	1.1	1.1 (0.3)
Any contact with Army recruiter	28.1	20.1	22.5 (0.7)	17.8	17.4	17.4 (1.1)	23.6	11.1	12.7 (0.9)
Navy									
Got a phone call	2.3	2.1	2.2 (0.2)	0.0	0.9	0.8 (0.3)	0.3	0.5	0.5 (0.2)
Made a phone call	1.2	0.2	0.5 (0.1)	1.2	1.0	1.0 (0.3)	0.0	0.3	0.3 (0.2)
At recruiting station	3.4	1.5	2.1 (0.2)	10.5	3.2	4.0 (0.6)	1.6	0.7	0.9 (0.3)
At job fair	0.3	0.2	0.2 (0.1)	0.5	0.2	0.2 (0.1)	0.0	0.1	0.1 (0.1)
At school	5.3	3.3	3.9 (0.3)	1.4	3.4	3.2 (0.5)	6.9	2.2	2.8 (0.5)
Some other way (or don't know)	0.9	0.5	0.6 (0.1)	0.0	1.2	1.1 (0.3)	0.8	0.2	0.3 (0.2)
Any contact with Navy recruiter	13.4	7.8	9.5 (0.5)	13.5	10.0	10.4 (0.9)	9.7	4.2	4.9 (0.6)
Marine Corps									
Got a phone call	3.9	3.2	3.4 (0.3)	0.0	1.5	1.3 (0.3)	0.7	0.4	0.5 (0.2)
Made a phone call	0.5	0.3	0.4 (0.1)	1.7	0.7	0.8 (0.2)	0.7	0.1	0.2 (0.1)
At recruiting station	2.5	1.6	1.9 (0.2)	7.2	3.6	3.9 (0.6)	0.4	0.7	0.7 (0.2)
At job fair	0.4	0.1	0.2 (0.1)	1.0	0.2	0.3 (0.1)	0.3	0.3	0.3 (0.2)
At school	6.9	3.9	4.8 (0.3)	3.7	2.4	2.5 (0.4)	6.3	2.4	2.9 (0.5)
Some other way (or don't know)	1.6	0.8	1.0 (0.2)	1.1	1.1	1.1 (0.3)	1.1	0.6	0.6 (0.2)
Any contact with Marine Corps recruiter	15.9	9.8	11.6 (0.5)	14.6	9.5	10.0 (0.9)	9.5	4.5	5.1 (0.6)
Air Force									
Got a phone call	1.9	1.2	1.4 (0.2)	2.6	0.8	1.0 (0.3)	1.2	0.8	0.9 (0.3)
Made a phone call	1.4	0.6	0.8 (0.1)	3.2	1.5	1.7 (0.4)	1.3	0.1	0.2 (0.1)
At recruiting station	3.2	1.1	1.7 (0.2)	2.5	4.1	3.9 (0.6)	1.8	0.7	0.8 (0.2)
At job fair	0.4	0.2	0.3 (0.1)	0.6	0.1	0.1 (0.1)	1.7	0.2	0.4 (0.2)
At school	7.2	4.4	5.2 (0.4)	5.1	3.0	3.2 (0.5)	9.3	2.5	3.4 (0.5)
Some other way (or don't know)	0.6	0.6	0.6 (0.1)	1.2	0.9	0.9 (0.3)	0.8	0.4	0.4 (0.2)
Any contact with Air Force recruiter	14.7	8.0	10.0 (0.5)	15.1	10.4	10.9 (1.0)	16.1	4.6	6.1 (0.7)
Any Military Recruiter									
Got a phone call	10.4	10.3	10.3 (0.5)	2.9	4.4	4.2 (0.6)	4.7	3.0	3.2 (0.5)
Made a phone call	4.2	1.8	2.5 (0.3)	7.8	4.4	4.7 (0.6)	3.8	0.8	1.2 (0.3)
At recruiting station	11.9	5.3	7.3 (1.1)	22.1	12.3	13.3 (1.1)	5.8	2.8	3.2 (0.5)
At job fair	1.2	0.6	0.8 (0.1)	1.6	0.5	0.6 (0.2)	1.7	0.6	0.8 (0.3)
At school	21.7	15.0	17.0 (0.6)	6.7	11.7	11.2 (0.9)	27.3	11.3	13.4 (0.9)
Some other way (or don't know)	5.9	2.9	3.8 (0.3)	3.9	4.7	4.6 (0.6)	3.5	2.1	2.3 (0.4)
Any contact with a military recruiter	50.6	34.0	38.9 (0.8)	46.0	35.8	36.9 (1.4)	42.2	20.9	23.7 (1.2)

Note: Tabled values are percentages with standard errors in parentheses. Contact with Army, Navy, Marine Corps, Air Force use composite Active Propensity estimates. Estimates for contact with Army, Navy, Marine Corps, and Air Force Recruiters include active and Reserve components. Estimates are based on interviews with 5,055 young males, 1,378 older males, and 1,503 females. *Any contact* includes all reported contacts.

Source: Questions 510-513, 628, 629, 632, 635, 638 and 641.

Table 7.9 presents responses to an open-ended question regarding the content of discussions with recruiters. The responses are very diverse, ranging from enlistment bonuses to the types of training to various characteristics of military service. No single response was recalled by a majority, but "money for education after service" was recalled by almost 13 percent of all young males; cash bonuses, good pay, and skills training were recalled by about 5 percent. Recall among older males and females generally followed this same pattern.

G. Physical and Written Tests

Taking a physical or written test may suggest a genuine interest in the military. Table 7.10 shows that, overall, 19.3 percent of young males had taken the Armed Services Vocational Aptitude Battery (ASVAB), as had 17.8 percent of older males and 11.3 percent of females. The test was taken most often at high school for young males (12 percent) and females (10 percent), whereas older males (9 percent) were most likely to have taken the exam at a Military Entrance Processing Station (MEPS). Overall, in each market individuals with positive propensity are more likely to have taken tests group than those with negative propensity.

Only a few YATS respondents reported taking the physical examination. About 5 percent of older males, 2 percent of young males, and less than .5 percent of females indicated they had taken it. These figures should be viewed with some caution since some individuals who have passed the written test and physical may actually enlist, and thus, are excluded from the YATS survey population.

H. Levels of Information Exposure

As a general indicator of information exposure, we have counted the number of information sources with which the three marketing groups have had contact. Five information sources are considered:

- advertising
- informal contacts (friends, family, school)
- mailing a card, making a toll-free phone call
- recruiter contact
- test-taking.

Table 7.11 presents an index ranging from 0 to 5 which is created from the number of information sources cited.

Table 7.9. Content of Discussions with Recruiters

Discussion Content	Young Males			Older Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
Money for education after service	14.6	11.8	12.6 (0.5)	10.4	9.1	9.2 (0.8)	13.3	7.7	8.4 (0.8)
Cash bonus	7.3	4.6	5.4 (0.4)	6.5	3.7	4.0 (0.6)	3.8	1.8	2.1 (0.4)
Good pay	7.6	4.3	5.3 (0.4)	7.6	3.8	4.2 (0.6)	3.0	2.2	2.3 (0.4)
Skills training	5.1	3.3	3.9 (0.4)	6.2	3.7	4.0 (0.6)	5.6	1.4	2.0 (0.4)
Travel	4.2	3.3	3.6 (0.3)	4.2	4.7	4.6 (0.6)	3.5	1.9	2.1 (0.4)
Guaranteed type of training	5.2	2.8	3.6 (0.3)	3.5	3.5	3.5 (0.5)	4.0	1.8	2.1 (0.4)
Guaranteed job assignment at end of training	2.2	1.3	1.5 (0.2)	4.3	1.4	1.7 (0.3)	1.7	1.1	1.2 (0.3)
Guaranteed location for training	1.2	1.2	1.2 (0.2)	1.4	1.1	1.2 (0.3)	1.4	0.3	0.4 (0.2)
Job satisfaction	1.8	1.0	1.2 (0.2)	1.3	1.3	1.3 (0.3)	3.1	0.4	0.7 (0.2)
Advance pay grade	1.8	0.8	1.1 (0.2)	0.6	0.9	0.9 (0.3)	0.2	0.6	0.5 (0.2)
Training for leadership	1.7	0.8	1.0 (0.2)	1.4	0.6	0.7 (0.2)	0.3	0.8	0.8 (0.2)
Two-year enlistment	1.0	0.6	0.7 (0.1)	0.3	0.6	0.6 (0.2)	1.0	0.4	0.5 (0.2)
Adventure	0.6	0.8	0.7 (0.1)	1.6	1.2	1.3 (0.3)	0.0	0.2	0.2 (0.1)
Good people to work with	0.6	0.3	0.4 (0.1)	1.0	0.2	3.2 (0.2)	0.9	0.0	0.2 (0.1)
Equal opportunity	0.2	0.4	0.4 (0.1)	0.8	0.1	0.1 (0.1)	0.5	0.1	0.2 (0.1)
Other	13.0	8.5	9.8 (0.5)	12.1	9.0	9.3 (0.8)	11.7	3.1	4.2 (0.6)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,055 young males, 1,378 older males, and 1,503 females. Data indicate the percent of individuals from the total sample who talked to recruiters about the listed item. Respondents could give multiple responses to the question; therefore, tabled percentages will not sum to 100 percent.

Source: Questions 510-513, 628, 644.

Table 7.10. Physical or Written Test Taking

Test-Taking Status	Young Males			Older Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
Ever taken ASVAB ^a test	22.3	18.1	19.3 (0.7)	23.6	17.2	17.8 (1.1)	17.4	10.3	11.3 (0.9)
Taken at high school	12.1	12.4	12.3 (0.6)	3.7	6.8	6.5 (0.7)	15.1	9.1	9.9 (0.8)
Taken at MEPS ^b	8.9	4.6	5.9 (0.4)	15.3	8.5	9.2 (0.8)	2.1	0.8	1.0 (0.3)
Taken somewhere else	1.2	1.1	1.1 (0.2)	4.7	1.9	2.1 (0.4)	0.3	0.4	0.4 (0.2)
Ever taken physical examination	1.9	2.2	2.1 (0.3)	6.1	4.6	4.7 (0.6)	1.2	0.1	0.3 (0.1)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,050 young males, 1,377 older males and 1,502 females.

^aArmed Forces Vocational Aptitude Battery.

^bMilitary Entrance Processing Station.

Source: Questions 510-513, 645, 648.

Table 7.11. Levels of Information Exposure

Levels of Information Exposure	Young Males			Older Males			Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
No information exposure	2.9	5.7	4.9 (0.4)	34.4	48.0	46.6 (1.5)	2.5	6.4	5.9 (0.7)
One source only	14.6	29.6	25.1 (0.7)	26.1	29.1	28.8 (1.3)	15.9	39.2	36.1 (1.3)
Two sources only	29.4	32.5	31.6 (0.8)	22.3	16.7	17.2 (1.1)	30.2	35.7	35.0 (1.3)
Three sources only	27.6	18.3	21.1 (0.7)	17.2	6.2	7.4 (0.8)	31.8	12.3	14.9 (1.0)
Four sources only	17.8	10.5	12.7 (0.5)	0.0	0.0	0.0 (**)	14.8	5.1	6.4 (0.7)
All five sources	7.7	3.4	4.7 (0.4)	0.0	0.0	0.0 (**)	4.7	1.3	1.8 (0.4)

Note: Tabled values are percentages with standard errors in parentheses. Estimates are based on interviews with 5,058 young males, 1,379 older males, and 1,503 females.

^aSources include advertising, informal contacts (friends, family, school personnel), mailing card or coupon, making toll-free call, recruiter contact, and test-taking whether it is relevant to the active services or the reserves.

Source: Questions 510-513, 616, 618, 620, 622, 625, 645, 648, 682, 683.

Almost all of the young males and females have had contact with at least one source, the majority with one or two sources. Only a little more than half (53.6 percent) of older males have had one or more contacts. Young males have the most contacts; about 38.5 percent of this group have three or more sources of information. Females and older males are much less likely (23.1 percent and 7.4 percent, respectively) to recall this much exposure to information about the military. This result probably reflects both the different interests of those in the market groups and the concentration of the majority of Service advertising and recruiting practices on young males, who are the primary recruit market.

Another approach to understanding information exposure is to categorize influences and information seeking behavior along a passive-to-active continuum. Passive activities involve exposure to information sources with no direct action required from the recipient. Active behaviors are those initiated by individuals to learn more about the military. Logically one would expect the percentage of activities to decrease as individuals move from passive exposure to active behaviors.

Table 7.12 presents a summary of indicators drawn from earlier tables in this chapter. These indicators are ordered along a passive-active dimension from top to bottom of the table. As shown, the percentage of respondents with awareness of the various information sources and involvement in the behaviors generally follows a declining pattern, except for older males' and females' ever initiating recruiter contact. Females are as likely to have contacted a recruiter at some time in the past as they are to have discussed service in the past year. Contacting a recruiter is the most likely behavior for older males, perhaps because they are older. Although not conclusive, these data are consistent with the notion of the passive-active continuum.

I. Summary

The progression of influences and information seeking about military service is conceptualized as lying on a passive-to-active continuum. Passive activities generally involve exposure to information sources with no direct action required from the recipient (e.g., seeing or hearing advertising). Active behaviors are those initiated by individuals to learn more about the military (e.g., mail card, visit a recruiter).

Table 7.12. Summary of Information Awareness and Information-Seeking Behavior

Source Table	Information Source/Behavior	Young Males	Older Males	Females
7.1	Advertising awareness (aided or unaided)--all Services			
	Maximum reported	91.5 (0.4)	86.4 (1.0)	90.6 (0.9)
	Minimum reported	57.9 (0.8)	54.5 (1.5)	46.1 (1.4)
7.3	Slogan recognition--active Services only			
	Maximum reported	86.8 (0.6)	85.3 (1.1)	76.6 (1.2)
	Minimum reported	18.4 (0.6)	12.5 (1.0)	17.2 (1.1)
7.4	Saw/heard broadcast advertising	83.2 (0.6)	-	84.1 (1.0)
7.4	Saw print advertising	76.4 (0.7)	-	73.1 (1.3)
7.4	Received literature	55.6 (0.9)	-	33.3 (1.3)
7.6	Close friend/relative enlisted in past six months	38.5 (0.8)	21.0 (1.2)	37.4 (1.4)
7.6	Discussed service in past year	37.1 (0.8)	14.9 (1.0)	20.4 (1.1)
7.8	Any recruiter contact ^a	28.6 (0.8)	32.7 (1.4)	20.5 (1.1)
7.5	Used computer system at school to obtain information about military	12.5 (0.5)	-	10.4 (0.9)
7.7	Mailed card	15.9 (0.6)	-	9.7 (0.8)
7.7	Made toll-free call	4.4 (0.4)	-	2.6 (0.4)
7.10	Has taken ASVAB ^b	7.0 (0.4)	11.3 (0.8)	1.4 (0.3)
7.10	Has taken physical exam	2.1 (0.3)	4.7 (0.6)	0.3 (0.1)

Note: Data are percentages with standard errors in parentheses.

^aExcludes "got a phone call" as first contact with any recruiter.

^bExcludes ASVAB taken at high school.

1. Advertising Awareness

- Awareness of advertising for each of the four active Services ranges from 79 to 92 percent for young males, 73 to 86 percent for older males and 78 to 91 percent for females. Awareness of advertising is lower for the Coast Guard (46 to 58 percent), National Guard/Reserve (58 to 68 percent) and Joint Services (59 to 68 percent).
- Awareness of Army advertising is highest, with more than 86 percent in each group mentioning having seen it.
- Propensity to enlist is not related to awareness of advertising for young males; there is some indication that positive propensity in females is related to their awareness generally and that propensity to enlist among older males is related to awareness of advertising for the National Guard/Reserve rather than the active Services, but the differences are small.

2. Recognition of Military Advertising Slogan

- The majority of each of the market groups correctly identified advertising slogans for the Army, Marine Corps, and Air Force.
- Recognition is low for Navy and Joint Services advertising and for the "Great Way of Life" Air Force slogan. Most incorrect responders attributed these slogans to the Army.
- Males are somewhat more able than females to identify slogans correctly.

3. Media-Specific Awareness of Service Advertising

- More than 70 percent of young males and females have seen print advertising. More than 80 percent have heard broadcast advertising for military service. About 56 percent of young males have received unsolicited recruiting literature; a third of females have.
- There is little difference by propensity in awareness of print and broadcast advertising for young males; females with positive propensity to enlist are more aware than average for their group of print advertising.
- Young males and females are most likely to report receiving recruiting literature from the Army. Secondarily, young males report receiving literature from the Marine Corps.

- About half of young males and females report computerized career information systems are available in their high schools. Of these, about 25 percent of young males and 21 percent of females have used the computerized systems to obtain information about the military.
- About 46 percent of young males and 33 percent of females who used the computerized system became more interested in the military after obtaining information from the system.

4. Informal Sources of Information

- About 37 percent of young males have discussed enlisting with someone in the past year, as have 20 percent of females and 15 percent of older males. Such discussions were much more likely among those with positive propensity for all three market groups.
- About 39 percent of young males, 37 percent of females and 21 percent of older males have had a close friend or relative enlist within the past six months. Older males and females with positive propensity are much more likely than those with negative propensity to report having someone close to them enlist.

5. Information Seeking by Mail and Telephone

- Less than 20 percent of young males have sought information by mail, and only about 4 percent have made a toll-free phone call; females are less likely to seek information by phone or mail.
- Positive propensity is positively related to information-seeking behavior: about a quarter of both young males and females with positive propensity have mailed a card, while about 5 percent of both groups have made toll-free calls.

6. Contact With Recruiters

- Almost two in five males (young and older alike) and one in four females have had contact with a recruiter at some time in the past. For young males and females these contacts occurred most frequently at school. For older males, recruiter contacts

are about equally likely to have been at school and at a recruiting station. For all three market groups, those with positive propensity are considerably more likely to report contact with recruiters than those with negative propensity.

- In discussions with recruiters, educational benefits were mentioned most often, though still infrequently (by 13 percent of young males, 9 percent of older males, and 8 percent of females).

7. Physical or Written Tests

- About 19 percent of young males, 18 percent of other males, and 11 percent of females had taken the ASVAB test for military service. Young males and females are more likely to have taken it in high school and older males are most likely to have taken it at a Military Entrance Processing Station. Less than 5 percent of any market group reported taking the physical exam.

8. Levels of Information Exposure

- More than 90 percent of young males and females recall one or more sources of information about military service and more than half recall one or two sources; among older males, 53 percent recalled one or more sources of information.
- Young males reported the greatest number of different information sources. About 39 percent reported three to five sources of information compared with 23 percent of females and 7 percent of older males.

8. RECRUITING PRIORITY GROUPS AND PROPENSITY

Analyses presented in prior chapters of this report have examined the propensity of youth and young adults to join the military and the relationship of propensity to sociodemographic characteristics, alternative activities, attitudes, enlistment incentives, advertising issues and recruiter contact. These analyses have presented overall results for the three market groups of young males, older males, and females. In this chapter and the next two, we extend these analyses for young males and females using a market segmentation approach. This approach builds on the work on Recruiting Priority Groups (RPGs) presented in the 1983 YATS report.

A discussion of RPGs including their definitions and classification scheme begins the chapter. Recruiting Priority Groups are then compared on selected sociodemographic, educational, and employment characteristics. We then discuss the propensity of individuals in the RPGs to join the active military and the Reserve Component. The chapter concludes by considering an alternative classification of recruiting groups.

A. Defining Recruiting Priority Groups

The concept of Recruiting Priority Groups was devised in an attempt to make YATS II data more useful. This section defines the concept of recruit desirability and develops a classification scheme for Recruiting Priority Groups.

1. Defining Enlistment Desirability

The primary objective of military recruiters is to select and enlist the best qualified people available from the civilian labor pool. Recruits are desired who will be successful in adapting to military life, in learning the skills of an occupational specialty, and in performing their jobs. To this end, it is useful to characterize potential recruits in terms of their enlistment desirability, and then to classify individuals into distinct market segments that can be ranked by their recruiting priority. In turn, recruiting efforts can be more effectively targeted toward higher priority groups.

Two widely established indicators of recruit quality, and hence, of enlistment desirability, are educational attainment and aptitude (Cheatham, 1978; Department of Defense, 1981; Reeg, 1981; Toomepuu, 1981; Vitola, Guinn, & Wilbourn, 1977). An important indicator of educational attainment is earning a high school diploma. In fact, completing high school is considered the

best single indicator of a person's potential for adapting to military life (Department of Defense, 1978). For example, nearly 80 percent of those with a high school diploma complete the first three years of service compared to 60 percent of nongraduates (Department of Defense, 1981). In the process of completing high school, individuals mature, participate in group learning situations, learn tolerance and adaptability to rules and regulations, show determination, and the like. These characteristics probably more than the particular courses taken or the educational attainment signified by the diploma underlie success in the military.

The second broad indicator of enlistment desirability is aptitude. The Services desire to recruit individuals who score at or above the 50th percentile on the Armed Forces Qualification Test (AFQT). Clearly, recruits must meet minimum standards to ensure that military personnel have the skills required by increasingly complex technology. The military wants recruits who can learn and competently perform new tasks. Unfortunately, AFQT scores are not available for most YATS respondents, so high school grades were selected as a rough approximation of aptitude. Grades are not intended to be surrogate AFQT scores. They were selected as a measure because they are related to AFQT scores, are available, and are easily understood and applied.

2. Classification of Recruiting Priority Groups

High school diploma and high school grades are the basis for a scheme for classifying and segmenting the recruit market into Recruiting Priority Groups (RPGs) and identifying their characteristics. The goal is to provide useful information so that recruiting efforts can be targeted more effectively.

To form the RPGs, respondents were first categorized as high school graduates or nongraduates. High school graduates were then divided into three groups: those in college, those not in college who had higher grades, and those not in college who had lower grades.

Non-graduates were also divided into three groups: high school seniors, high school sophomores and juniors, and those not in school. It was assumed that seniors would successfully graduate, so they were categorized with graduates. Seniors with lower grades were designated as Lower Aptitude High School Graduates; seniors with higher grades who were planning college were designated as College Students, and seniors with higher grades and no plans for college were designated Higher Aptitude High School Graduates.

The five RPGs and their composition are described in Figure 8.1. High school graduates with higher grades who are not currently enrolled in college and current seniors with higher grades who do not plan to attend college have the highest enlistment priority. These Higher Aptitude High School Graduates (current and future) constitute 16.6 percent of the sample of young males and 21.2 percent of females.

High school graduates with lower grades who are not currently enrolled in school and current seniors with lower grades regardless of plans for college are referred to as Lower Aptitude High School Graduates (current and future). This group has the second highest enlistment priority and constitutes 20.7 percent of the sample of young males and 14.3 percent of females.

Third in enlistment priority are high school graduates currently attending college plus high school seniors with higher grades who plan to go to college. "College Students" constitute 26.2 percent of the young male sample and 32.6 percent of the female sample.

Current high school sophomores and juniors are fourth in terms of enlistment priority; they are young and their attitudes and plans still unstable. They are called Young High School Students and constitute 19.6 percent of the young male sample and 16.2 percent of the female sample.

Those who left high school without graduating are the lowest priority group. They are labeled Non-completers and constitute 16.9 percent of young males and 15.9 percent of females.

The current algorithm for defining RPGs differed somewhat from the algorithm used in YATS 1983. Improvements and refinements were the result of more precise measurement of high school graduation status (i.e., a question was asked about graduation status explicitly in 1984, whereas it had to be inferred from answers to several questions in 1983) and in use of grades to help distribute high school seniors among the three highest priority groups. This change in algorithms means that estimates produced in 1984 are not strictly comparable to estimates produced and reported in 1983; that is, differences that appear between the two years are, in part, a result of the refinement in definition of RPGs in 1984.

Figure 8.1. Rank Order and Composition of Recruiting Priority Groups

<u>Young Males</u>	<u>Females</u>	<u>RPG Description</u>
Higher Aptitude High School Graduates 16.6%	Higher Aptitude High School Graduates 21.2%	<u>Higher Aptitude High School Graduates</u> GRADUATES who had higher high school grades and who are not currently in college SENIORS with higher grades who do not plan to go to college
Lower Aptitude High School Graduates 20.7%	Lower Aptitude High School Graduates 14.3%	<u>Lower Aptitude High School Graduates</u> GRADUATES who had lower high school grades and who are not currently in college SENIORS with lower grades
College Students 26.2%	College Students 32.6%	<u>College Students</u> GRADUATES who are now college freshmen and sophomores SENIORS with higher grades who plan to go to college
Young High School Students 19.6%	Young High School Students 16.2%	<u>Young High School Students</u> High school sophomores and juniors.
Non-completers 16.9%	Non-completers 15.9%	<u>Non-completers</u> Those who left high school without graduating

Note: Percentages are based on weighted data.

Source: Questions 404, 406-408, 411, and 711.

To understand better the effect of the change in algorithms between the two years, we compared RPGs created (with the 1984 data) using an algorithm as close as possible to the 1983 definition to RPGs created (with the same data set) using the 1984 algorithm. Table 8.1 shows this comparison in columns (2) and (3). The refined 1984 definition produced increases in the High Aptitude High School Graduates (from 9.9 percent to 16.6 percent), and in Lower Aptitude High School Graduates (from 17.1 percent to 20.7 percent), decreases in College Students (from 33.4 percent to 26.2 percent) and in Non-Completers (from 20.1 percent to 16.9 percent), and no change in Young High School Students (19.5 percent to 19.6 percent). These changes are attributable to more precise information about high school graduation status and more stringent use of grade information for the placement of seniors.

In addition to the algorithm changes, changes in sampling and interviewing procedures in 1984 (particularly the use of a callback sample and interviewing earlier in the year) affected the distributions in the groups to some extent. This can be seen by comparing columns (1) and (2) in Table 8.1, the distributions of the 1983 data and the 1984 data using the 1983 algorithm. Higher Aptitude High School Graduates are very similar for the two years (9.5 percent versus 9.9 percent); Lower Aptitude High School Graduates are a higher proportion of respondents in 1984 (14.8 percent to 17.1 percent). In 1984 there are more College Students (27.3 percent to 33.4 percent), a similar number of Young High School Students (19.4 percent to 19.5 percent), and fewer Non-completers (29.0 percent to 20.1 percent). Differences between the groups may reflect a combination of changes in the eligible population and data collection procedures during the two years (e.g., a data collection period that was shorter and took place slightly earlier in the year in 1984).

B. Sociodemographic Characteristics of RPGs

In this section, Recruiting Priority Groups are compared on selected sociodemographic characteristics. Results are presented separately for young males and females.

Table 8.1. Comparison of 1983-1984 RPGs for Young Males

Recruiting Priority Group	1983 Data		1984 Data	
	(1)	(2)	(3)	
	'83 Algorithm	'83 Algorithm	'84 Algorithm	
1. Higher Aptitude High School Graduates	9.5	9.9	16.6	
2. Lower Aptitude High School Graduates	14.8	17.1	20.7	
3. College Students	27.3	33.4	26.2	
4. Young High School Students	19.4	19.5	19.6	
5. Non-completers	29.0	20.1	16.9	

Note: Entries are weighted percentages of respondents in each RPG. The 1984 algorithm represents a refinement of the 1983 algorithm in that in 1984 more complete information about high school graduation status was available and grade information was used more stringently for placement of current high school seniors in the RPGs.

1. Young Males

Table 8.2 presents selected sociodemographic characteristics (age, race/ethnicity, marital status, and mean number of family or financial responsibilities) for the five young male RPGs. Since high school graduation is closely related to age, correspondence is expected between age and RPG classification. Nearly all of the Young High School Students are 16 or 17 years old (97.2 percent), whereas the majority in each of the other groups is 18 and older. Members of the two highest priority groups are also the oldest, on the average; 71 percent of Higher Aptitude High School Graduates and 82 percent of Lower Aptitude High School Graduates are 18 and older. About 60 percent of both College Students and Non-completers are 18 or older.

Differences in race/ethnicity among the RPGs are small. Of the total sample of young males, 77 percent are white and the majority of the remainder is Black. The three highest priority groups have slightly higher proportions of whites than the two lowest priority groups.

Nearly all the young males are single (95.9 percent overall). Non-completers (7 percent), and the Higher Aptitude (7 percent) and Lower Aptitude (5 percent) High School Graduates are most likely to be married. Not surprisingly, then, these three groups show the highest mean number of financial and family responsibilities (0.3).*

2. Females

Table 8.3 presents the selected sociodemographic characteristics for the female RPGs. Like the young males, the two highest priority groups contain about 80 percent of respondents who are 18 and older. About 52 percent of College Students and 58 percent of Non-completers are between 18 and 21 years of age (inclusive); 97 percent of the Young High School Students are 16 or 17.

The overall distribution of race/ethnicity for females is nearly identical to that for young males, about 75 percent white and 12 percent Black. The Lower Aptitude High School Graduates have fewer whites (69.6 percent) and more Blacks (18.2 percent), and Non-completers have fewer Blacks (8.3 percent).

* Four items form the Mean Number of Financial/Family Responsibilities and Objectives Scale. A respondent was given one point each for: home ownership, being married, having one or more dependents, and having dependents under the age of six years. The range of scores was 0 to 4.

Table 8.2. Selected Sociodemographic Characteristics of Young Male Recruiting Priority Groups

Sociodemographic Characteristic	Recruiting Priority Group					Total (n = 5058)
	(1) Higher Aptitude High School Graduates (n = 878)	(2) Lower Aptitude High School Graduates (n = 1133)	(3) College Students (n = 1468)	(4) Young High School Students (n = 764)	(5) Non-completers (n = 815)	
<u>Age</u>						
16	8.7	2.7	7.2	82.8	17.1	23.0 (0.8)
17	20.0	15.1	33.7	14.4	22.7	21.9 (0.7)
18	21.0	22.4	30.1	2.1	16.3	19.2 (0.7)
19	17.3	22.2	18.2	0.2	14.9	14.8 (0.6)
20	17.8	18.0	7.0	0.4	16.6	11.4 (0.5)
21	15.2	19.7	3.8	0.1	12.5	9.7 (0.5)
<u>Race/Ethnicity</u>						
White	76.8	80.3	79.7	73.5	73.8	77.1 (0.8)
Black	11.9	12.0	10.2	14.5	13.4	12.2 (0.6)
Hispanic	9.4	6.3	7.0	8.7	9.5	8.0 (0.5)
Other	1.9	1.5	3.1	3.3	3.3	2.7 (0.3)
<u>Marital Status</u>						
Never married	92.6	94.0	99.4	99.9	91.7	95.9 (0.3)
Married	7.0	5.0	0.4	0.1	7.0	3.5 (0.3)
Other ^a	0.4	1.1	0.2	0.0	1.4	0.6 (0.1)
<u>Mean Number of Financial/Family Responsibilities and Obligations^b</u>	0.3	0.3	0.1	0.1	0.3	0.2 (*)

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

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

^bIndex constructed from items concerning home ownership, marital status, or 3 or more dependents, and dependents under age 6.

* Estimate rounds to zero.

Source: Questions 403, 404, 406-408, 411, 693-695, 697, 700, 714, 715.

Table 8.3. Selected Sociodemographic Characteristics of Female Recruiting Priority Groups

Sociodemographic Characteristic	Recruiting Priority Group					Total (n = 1503)
	(1) Higher Aptitude High School Graduates (n = 311)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 501)	(4) Young High School Students (n = 256)	(5) Non-completers (n = 231)	
Age						
16	4.1	5.5	11.0	88.7	21.4	23.1 (1.1)
17	16.2	14.5	36.6	8.6	21.0	22.1 (1.2)
18	19.0	17.0	25.4	1.0	14.6	17.2 (1.0)
19	21.4	21.9	15.8	1.6	15.3	15.5 (1.0)
20	18.5	21.3	8.7	0.0	12.6	11.7 (0.9)
21	20.9	19.9	2.6	0.0	15.1	10.4 (0.9)
Race/Ethnicity						
White	74.7	69.6	77.1	76.6	76.8	75.4 (1.4)
Black	12.0	18.2	12.3	12.0	8.3	12.4 (1.0)
Hispanic	12.2	9.6	7.2	6.6	11.1	9.1 (0.9)
Other	1.1	2.6	3.4	4.7	3.7	3.1 (0.5)
Marital Status						
Never Married	72.7	75.3	98.2	98.7	73.7	85.8 (1.0)
Married	25.7	23.3	0.8	0.8	21.4	12.5 (1.0)
Other ^a	1.6	1.5	1.0	0.5	4.9	1.7 (0.3)
Mean Number of Financial/ Family Responsibilities and Obligations^b	0.8	0.8	0.1	0.1	1.0	0.5 (*)

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

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

^b Index constructed from items concerning home ownership, marital status, one or more dependents, and dependents under age six.

* Estimate rounds to zero.

Source: Questions 403, 404, 406-408, 411, 693-695, 697, 700, 714, 715.

Females are more likely to be married (12.5 percent of the total) than young males (3.5 percent). The highest proportions married are found among the Higher Aptitude (26 percent) and Lower Aptitude High School Graduates (23 percent), and Non-completers (21 percent). Females in these three RPGs average almost 1.0 on the Financial and Family Responsibilities scale.

C. Educational Characteristics of RPGs

1. Young Males

Table 8.4 presents data on educational characteristics of RPGs for young males. Since high school graduation is one basis for construction of the priority groups, it is closely related to the number of years of education completed. The three highest priority groups include all respondents with 11 or more years of education. Young High School Students include respondents with 10 years of schooling or less. The Non-completers show a spread across the distribution of responses. At first glance, the responses appear inconsistent. For example, 11.6 percent of Non-completers say they completed 12 years of education. These individuals represent those with Adult Basic Education (ABE) or General Educational Development (GED) certificates. Assignment of current high school seniors to the three highest priority groups results in those groups having substantial proportions completing only 11 years of education.

Two-thirds of all young males say their high school curriculum was or is college preparatory. This is true of 86 percent of College Students, 72 percent of Young High School Students, and 64 percent of Higher Aptitude Graduates but only 54 percent of Lower Aptitude Graduates and Non-completers. Most young males with some other type of curriculum say they have had a vocational/technical curriculum.

The great majority of young males say they want more education or training, including about three-fourths of the two highest priority high school graduate groups. Those desiring more education or training were asked to estimate the proportion of the cost they could pay (including scholarships, loans, savings, earnings, help from family). About one-third of the Higher Aptitude Graduates and two-fifths of the Lower Aptitude Graduates believe they could pay half the cost or less for further schooling. This interest in further education and perceived difficulty in paying for it suggests that educational benefits may be an important incentive to enlist.

Table 8.4. Educational Characteristics of Young Male Recruiting Priority Groups

Educational Characteristic	Recruiting Priority Group					Total (n = 5056)
	(1) Higher Aptitude High School Graduates (n = 878)	(2) Lower Aptitude High School Graduates (n = 1133)	(3) College Students (n = 1468)	(4) Young High School Students (n = 763)	(5) Non-completers (n = 814)	
<u>Years of Education Completed</u>						
Less than 10	0.0	0.0	0.0	20.2	17.9	7.0 (0.5)
10	0.0	0.0	0.1	79.8	27.0	20.0 (0.8)
11	33.0	20.5	40.5	0.0	41.8	27.4 (0.7)
12	54.4	69.6	36.0	0.0	11.6	34.9 (0.8)
Some college/vocational school	12.6	9.9	23.4	0.0	1.8	10.6 (0.5)
<u>Type of High School Curriculum</u>						
College preparatory	63.6	54.0	85.9	71.6	54.4	67.7 (0.8)
Vocational/technical	29.1	36.9	10.1	23.4	37.9	25.9 (0.8)
Business/commercial	7.3	9.1	4.0	5.0	7.7	6.4 (0.4)
<u>Desire More Education or Training</u>						
	77.9	76.7	99.0	97.2	77.1	86.9 (0.6)
<u>How Much Educational Expense Could You Pay</u>						
All	22.7	19.8	32.8	5.0	13.6	19.8 (0.7)
More than half	15.5	15.8	18.9	6.8	12.2	14.2 (0.6)
About one half	23.2	23.7	23.8	9.4	21.1	20.4 (0.7)
About one fourth	6.9	10.7	14.9	3.8	9.1	9.6 (0.5)
Less than one fourth	3.8	4.8	7.8	2.3	6.9	5.3 (0.4)
<u>Taken College Entrance Exam</u>						
	45.4	37.3	77.8	18.7	23.4	43.3 (0.9)
<u>High School Math/Technical Courses^a</u>						
Elementary courses ^b	2.0	1.7	2.2	2.0	1.7	1.9 (*)
Advanced courses ^c	1.7	1.1	2.6	2.3	1.4	1.9 (*)
Total courses	3.7	2.8	4.8	4.3	3.1	3.8 (*)

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

^aData are mean number of courses taken or planned to take in high school.

^bIncludes elementary algebra, plane geometry, and business math.

^cIncludes computer science, intermediate algebra, trigonometry, calculus, physics.

*Estimate rounds to zero.

Source: Questions 404, 406, 407, 408, 410, 411, 414, 698, 700, 701, 702-709.

About two-fifths of young males have taken a college entrance examination. This is related to age (lowest among the Young High School Students) and aptitude (highest among College Students, and higher among High Aptitude Graduates than Lower Aptitude Graduates). Overall, young males have taken or plan to take about 3.8 math or technical courses in high school. This is highest for College Students and Young High School Students, and lowest for Lower Aptitude Graduates and Non-completers.

2. Females

As shown in Table 8.5, the educational characteristics of females are similar to those of young males. The overall distribution of years of education completed for females is about the same as that for males and is highly related to RPGs. Almost three-fourths of all females say their high school curriculum was or is college preparatory (somewhat higher than for young males). About 66 percent of female Higher Aptitude High School Graduates and 82 percent of College Students have had a college preparatory curriculum, as opposed to approximately 60 percent of Lower Aptitude Graduates and Non-completers. Females who have had some other type of curriculum are about equally likely, overall, to report a vocational/technical and a business/commercial curriculum.

Like young males, the great majority of females say they want more education or training; nearly all College Students and Young High School Students and about four-fifths of the two highest priority groups desire more training. Interestingly, about 90 percent of Non-completers also want more training, indicating that they realize the benefits of training.

Females are less likely than young males to believe they could pay for a substantial proportion of the cost of additional schooling. Almost half of Higher Aptitude Graduates and 55 percent of Lower Aptitude Graduates estimate that they could pay half or less of this cost.

About two-fifths have taken a college entrance examination. As with the young males, these results are strongly related to age and aptitude. Young High School Students (22.7 percent) and Non-completers (18.0 percent) are least likely to have taken an examination. College students are most likely to have done so (71.7 percent), and Higher Aptitude Graduates (46.1 percent) are more likely to have done so than Lower Aptitude Graduates (28.8 percent).

Table 8.5. Educational Characteristics of Female Recruiting Priority Groups

Educational Characteristic	Recruiting Priority Group					Total (n = 1503)
	(1) Higher Aptitude High School Graduates (n = 311)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 501)	(4) Young High School Students (n = 256)	(5) Non-completers (n = 231)	
<u>Years of Education Completed</u>						
Less than 10	0.0	0.0	0.4	9.8	23.4	5.4 (0.7)
10	0.0	0.0	0.0	90.2	27.8	19.1 (1.1)
11	21.3	19.1	46.3	0.0	38.7	28.4 (1.3)
12	61.0	71.9	30.3	0.0	7.1	34.1 (1.3)
Some college/vocational school	17.8	9.1	23.0	0.0	3.1	13.0 (1.0)
<u>Type of High School Curriculum</u>						
College preparatory	66.2	59.3	82.3	76.6	63.9	72.0 (1.4)
Vocational/technical	16.7	23.2	6.6	13.7	21.0	14.4 (1.1)
Business/commercial	17.1	17.5	11.1	9.7	15.1	13.6 (1.0)
<u>Desire More Education or Training</u>						
	81.1	78.1	98.8	98.9	89.7	90.7 (0.8)
<u>How Much Educational Expense Could You Pay</u>						
All	17.4	12.0	28.7	4.2	12.0	17.3 (1.1)
More than half	12.8	11.1	15.3	7.8	17.1	13.2 (1.0)
About one half	31.8	29.0	26.6	11.3	22.1	24.8 (1.2)
About one fourth	8.8	11.9	13.3	8.3	8.5	10.6 (0.9)
Less than one fourth	7.8	13.6	13.9	4.2	14.6	11.1 (0.9)
<u>Taken College Entrance Exam</u>						
	46.1	28.8	71.7	22.7	18.0	43.7 (1.4)
<u>High School Math/Technical Courses^a</u>						
Elementary courses ^b	1.9	1.5	2.1	2.0	1.6	1.9 (*)
Advanced courses ^c	1.5	0.8	2.1	2.2	1.2	1.7 (*)
Total courses	3.4	2.3	4.2	4.2	2.8	3.6 (0.1)

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

^aData are mean number of courses taken or planned to take in high school.

^bIncludes elementary algebra, plane geometry, and business math.

^cIncludes computer science, intermediate algebra, trigonometry, calculus, physics.

*Estimate rounds to zero.

Source: Questions 404, 406, 407, 408, 410, 411, 414, 698, 700, 701, 702-709.

On the average, females have taken or plan to take 3.6 math and technical courses in high school, about as many as young males. College Students and Young High School Students have taken the most (averaging 4.2 courses), while Lower Aptitude Graduates and Non-completers have taken the fewest (2.3 and 2.8, respectively).

Given the interest expressed in further schooling and perceived difficulty in paying for it, educational benefits may be an important incentive to both young males and females in the three highest priority groups.

D. Employment Characteristics of RPGs

1. Young Males

Table 8.6 presents the employment characteristics of young male Recruiting Priority Groups. Overall, about one-third of young males are employed full time and one-fourth, half time; the remainder who are not employed are somewhat more likely to be looking for work (21.5 percent) than not (17.1 percent). About three-fourths of Higher Aptitude and Lower Aptitude Graduates are employed either full time or part time. Those in other groups are less likely to be employed. About 62 percent of College Students, 36 percent of Young High School Students, and 61 percent of Non-completers are employed either part time or full time. Unemployed Young High School or College Students are less likely to be looking for work than members of other groups.

About four-fifths of all young males believe that finding a full-time job is difficult, and about half believe that finding a part-time job is difficult. The perceptions vary little by RPG.

Of those who are working, Higher and Lower Aptitude Graduates work an average of nearly 40 hours a week, and Non-completers work nearly 35 hours. Students work less, but they average more than 20 hours a week. Half to two-thirds of all groups work weekends more than once a month, and 63 to 72 percent work weekends at least some of the time (an issue important to the Reserve Components). About four-fifths in the four top priority groups are satisfied with their jobs; only 72 percent of Non-completers are satisfied.

2. Females

Table 8.7 presents the employment characteristics of females. Overall, females are somewhat less likely to be employed than young males (about one-fifth are employed full time and one-fourth part-time). Those

Table 8.6. Employment Characteristics of Young Male Recruiting Priority Groups

Employment Characteristic	Recruiting Priority Group					Total (n = 5049)
	(1) Higher Aptitude High School Graduates (n = 878)	(2) Lower Aptitude High School Graduates (n = 1130)	(3) College Students (n = 1467)	(4) Young High School Students (n = 762)	(5) Non-completers (n = 1260)	
<u>Employment Status</u>						
Employed full-time	53.2	56.9	22.8	6.8	39.8	34.6 (0.8)
Employed part-time	20.7	18.2	39.1	29.0	21.2	26.7 (0.8)
Not employed, looking	18.1	17.1	14.8	33.4	27.0	21.5 (0.7)
Not employed, not looking	8.0	7.8	23.3	30.8	12.0	17.1 (0.6)
<u>Perception that Finding a Job is Difficult</u>						
Full-time job	79.6	80.2	79.1	79.7	77.6	79.3 (0.7)
Part-time job	51.6	52.0	46.2	53.0	58.5	51.7 (0.9)
<u>Characteristics of Work</u>						
Mean hours worked per week	36.3	37.2	28.5	23.9	34.4	32.0
<u>Frequency of weekend work</u>						
Every week	35.6	35.5	48.2	47.4	36.6	41.1 (0.9)
2 or 3 times a month	16.2	18.6	15.3	17.1	18.0	17.0 (0.8)
Once a month or less	11.6	9.6	7.9	7.6	9.0	9.1 (0.5)
Never	36.6	36.3	28.6	27.9	36.4	32.9 (0.8)
Satisfied with Present Job	81.3	78.9	77.8	79.8	71.6	77.9 (0.8)

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

Source: Questions 404, 406, 407, 408, 411, 416, 417, 419, 424, 425, 431, 436, 437, 700.

Table 8.7. Employment Characteristics of Female Recruiting Priority Groups

Employment Characteristic	Recruiting Priority Group					Total (n = 1497)
	(1) Higher Aptitude High School Graduates (n = 310)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 498)	(4) Young High School Students (n = 254)	(5) Non-completers (n = 231)	
<u>Employment Status</u>						
Employed full time	39.6	33.3	16.2	6.2	17.7	22.2 (1.1)
Employed part time	22.9	25.1	36.3	22.9	21.8	27.4 (1.2)
Not employed, looking	19.8	28.8	20.9	39.0	33.6	26.8 (1.3)
Not employed, not looking	17.6	12.8	26.6	31.9	26.9	23.6 (1.2)
<u>Perception that Finding a Job is Difficult</u>						
Full-time job	82.6	85.7	81.6	88.8	79.6	83.2 (1.0)
Part-time job	50.4	56.3	49.1	57.0	60.8	53.6 (1.4)
<u>Characteristics of Work</u>						
Mean hours worked per week	31.8	30.6	25.8	21.0	27.9	27.7
<u>Frequency of weekend work</u>						
Every week	35.2	34.0	48.5	41.3	37.5	40.7 (1.5)
2 or 3 times a month	15.5	17.6	12.6	19.3	14.4	15.1 (1.1)
Once a month or less	8.5	7.8	4.0	5.2	8.2	6.4 (0.8)
Never	40.7	40.6	34.9	34.2	39.9	37.8 (1.5)
<u>Satisfied with Present Job</u>	77.2	61.9	77.0	77.8	75.4	74.6 (1.4)

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

Source: Questions 404, 406, 407, 408, 411, 416, 417, 419, 424, 425, 431, 436, 437, 700.

who are not employed are somewhat more likely to be looking for work (26.8 percent) than not (23.6 percent). The differences in employment status among female RPGs are very similar to those observed for young males. The two highest priority groups are most likely to be employed full time (39.6 percent of the Higher Aptitude Graduates and 33.3 percent of the Lower Aptitude Graduates), and to be employed at all (about 63 percent of Higher Aptitude Graduates and 58.4 percent of Lower Aptitude Graduates). About 52 percent of College Students, 29 percent of Young High School Students, and 39 percent of Non-completers are employed part time or full time. Of the unemployed in the various RPGs, most are looking for work. Among female Non-completers, the proportion not employed and not looking is about as high as for College Students (26.9 percent vs. 26.6 percent).

Like young males, about four-fifths of females believe that finding a full-time job is difficult, and about half believe that finding a part-time job is difficult. Unlike young males, there is some variation among female RPGs in this respect. Younger and lower aptitude groups are somewhat more likely than others to see difficulty in finding either full- or part-time jobs, or both.

Females with jobs work somewhat fewer hours than young males. Female Higher and Lower Aptitude Graduates and Non-Completers work around 30 hours a week on the average. Again, students work less, but they average more than half time. Females are also slightly less likely to work weekends than are young males, but the majority (59 to 66 percent) do, and 51 to 61 percent work more than one weekend a month. About three-fourths of employed female respondents for all RPGs are satisfied with their current jobs. Three-fifths of Lower Aptitude Graduates are satisfied.

These results support the rationale for constructing RPGs using high school graduation and high school grades as measures of attainment for both young males and females. College students in both market groups appear to be the highest quality on the basis of their educational level and the number of math and technical courses taken, but they are likely to continue in college rather than to join the military. As expected, Higher Aptitude High School Graduates appear to be of higher quality than Lower Aptitude High School Graduates and Non-completers. They are more likely to have taken a college preparatory curriculum, a college entrance examination, and more high school math and technical courses. The Lower Aptitude Graduates appear to be more

persistent than Non-completers in that they are more likely to be gainfully employed (especially full time), work more hours a week on the average, and have completed high school (or are current seniors). The capabilities and plans of the Young High School Students are less predictable.

E. Enlistment Prospects of RPGs

Tables 8.8 and 8.9 show the enlistment propensity of the RPGs for young males and females. Data are reported for Service-specific propensity, Composite Active Propensity, propensity to enlist in the National Guard and Reserve, and composite Reserve Component propensity.

As shown in Table 8.8, 29.9 percent of young males show overall positive Composite Active Propensity to enlist in one or more of the active Services, and 19.4 percent show overall positive Composite Reserve Propensity.

Examination of propensity for the two composite measures shows the same rank order among the RPGs:

	<u>Active</u>	<u>Reserve</u>
Young High School Students	43.9	26.2
Non-Completers	36.6	24.7
Higher Aptitude H.S. Grads.	27.5	18.6
Lower Aptitude H.S. Grads.	27.1	18.1
College Students	19.1	12.6

Of the active Services, the three highest priority groups are consistent in showing the highest propensity levels for the Air Force, followed by the Army, the Navy, and the Marine Corps, but the differences are small. All five RPGs show higher propensity for the Reserve than for the National Guard.

Female RPGs follow the same general pattern as young males on both active and Reserve propensity but at considerably lower levels and with little variation between groups (Table 8.9). Composite Active and Reserve propensities for the female RPGs are as follows:

	<u>Active</u>	<u>Reserve</u>
Young High School Students	18.6	12.1
Non-Completers	12.6	11.9
Higher Aptitude H.S. Grads.	12.9	9.0
Lower Aptitude H.S. Grads.	11.5	9.1
College Students	11.7	6.8

Table 8.8. Positive Enlistment Propensity of Young Male Recruiting Priority Groups

Propensity Measure	Recruiting Priority Group					Total (n = 5058)
	(1) Higher Aptitude High School Graduates (n = 878)	(2) Lower Aptitude High School Graduates (n = 1133)	(3) College Students (n = 1468)	(4) Young High School Students (n = 764)	(5) Non-completers (n = 815)	
<u>Active Propensity</u>						
Army	11.5 (1.3)	12.9 (1.2)	7.0 (0.8)	23.4 (1.7)	19.3 (1.7)	14.3 (0.6)
Navy	10.9 (1.2)	9.7 (1.1)	6.8 (0.8)	16.0 (1.4)	13.0 (1.5)	10.9 (0.5)
Marine Corps	9.1 (1.2)	8.0 (0.9)	3.8 (0.6)	15.8 (1.5)	14.1 (1.5)	9.6 (0.5)
Air Force	15.5 (1.4)	13.7 (1.2)	12.3 (1.1)	20.8 (1.6)	15.2 (1.6)	15.3 (0.6)
Composite Active Propensity	27.5 (1.8)	27.1 (1.6)	19.1 (1.2)	43.9 (2.0)	36.6 (2.2)	29.9 (0.8)
<u>Reserve Component Propensity</u>						
National Guard	9.9 (1.1)	11.0 (1.1)	5.5 (0.7)	14.0 (1.3)	16.1 (1.7)	10.8 (0.5)
Reserve	15.1 (1.3)	14.2 (1.2)	9.8 (0.9)	21.2 (1.6)	18.7 (1.8)	15.3 (0.6)
Composite Reserve Component Propensity	18.6 (1.5)	18.1 (1.3)	12.6 (1.0)	26.2 (1.7)	24.7 (2.0)	19.4 (0.7)

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

Source: Questions 404, 406, 407, 408, 411, 505, 507, 510-513, 700.

Table 8.9. Positive Enlistment Propensity of Female Recruiting Priority Groups

Propensity Measure	Recruiting Priority Group					Total (n = 1503)
	(1) Higher Aptitude High School Graduates (n = 311)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 501)	(4) Young High School Students (n = 256)	(5) Non-completers (n = 231)	
<u>Active Propensity</u>						
Army	5.9 (1.5)	5.5 (1.5)	3.8 (0.9)	9.2 (2.0)	5.6 (1.7)	5.6 (0.6)
Navy	3.3 (1.1)	4.6 (1.6)	3.5 (0.9)	7.0 (1.9)	4.6 (1.6)	4.3 (0.6)
Marine Corps	3.5 (1.1)	3.8 (1.3)	2.2 (0.8)	3.8 (1.3)	4.4 (1.6)	3.3 (0.5)
Air Force	8.3 (1.7)	7.8 (1.8)	8.0 (1.3)	12.9 (2.6)	9.3 (2.1)	9.0 (0.8)
Composite Active Propensity	12.9 (2.0)	11.5 (2.4)	11.7 (1.5)	18.6 (2.9)	12.6 (2.4)	13.2 (1.0)
<u>Reserve Propensity</u>						
National Guard	4.3 (1.4)	5.3 (1.5)	3.0 (0.8)	5.2 (1.5)	5.1 (1.5)	4.3 (0.6)
Reserve	8.6 (1.7)	7.2 (1.8)	5.3 (1.1)	11.3 (2.3)	10.1 (2.2)	8.0 (0.8)
Composite Reserve Propensity	9.0 (1.8)	9.1 (2.0)	6.8 (1.2)	12.1 (2.4)	11.9 (2.4)	9.2 (0.8)

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

Source: Questions 404, 406, 407, 408, 411, 505, 507, 510-513, 700.

The finding that propensity is highest among Young High School Students is age-related; previous YATS and other studies have found that propensity is higher among younger individuals. Other propensity differences among RPGs may reflect differences in employment opportunities and alternative plans available to them (e.g., school). Further research on this topic would be useful.

The fact that the highest levels of positive propensity are consistently found for the lowest priority market segments--the very young or Non-completers--for both young males and females suggests that policy makers should interpret propensity findings with care. On the other hand, it is notable that the two highest priority groups fairly consistently show about equal propensity levels. Higher Aptitude Graduates display more ability than the Lower Aptitude Graduates and may have more options open to them. The similarity in propensity, however, suggests that they are about equally likely to consider military service.

F. Alternative Classification of Recruiting Groups*

This section presents a brief introduction to an alternative classification of recruiting groups. The alternative method is designed to segment the recruiting market into groups that reflect the high school status of young adults and military recruiting policy. It is illustrated for data with young males.

1. Defining Alternative Recruiting Groups

YATS respondents in high school differ from those not in high school in fundamental ways. A large proportion of enlistments occur during or shortly after the senior year of high school. Respondents out of high school have not chosen to enlist after leaving high school; otherwise they would have been excluded from the YATS sample. They also have had the opportunity to enter the labor force or go to college. For these reasons, it is important to distinguish respondents in high school from those not in high school.

A major consideration in developing alternative groups is military recruiting policy. The Services are particularly interested in recruiting high quality individuals, i.e., high school diploma graduates who score in categories I-IIIA on the Armed Forces Qualification Test (the written qualifying examination). Thus, it is important to identify individuals who are likely

* This section was written by Bruce R. Orvis and Martin T. Gahart of the Rand Corporation.

to score in categories I-III A on the AFQT (i.e., at or above the 50th percentile). Among respondents who have finished high school, it is therefore also important to identify those who have regular high school diplomas.

For the reasons outlined above, YATS respondents were placed into one of five groups according to predicted AFQT score and school status. The groups are: (1) category I-III A high school diploma graduate; (2) category IIIB-V high school diploma graduate; (3) category I-III A high school student; (4) category IIIB-V high school student; and (5) non-completer, i.e., an individual without a high school diploma who is not continuing in high school. Only respondents with regular high school diplomas were classified as high school diploma graduates; persons with GEDs or ABE certificates were not included. AFQT category was estimated using a method developed by the Rand Corporation. The method predicts the AFQT percentile scores YATS respondents would obtain if they took the written test, based on their background characteristic information in the YATS; it correctly classifies approximately 70-75 percent of the respondents in AFQT categories I-III A or categories IIIB-V (Orvis and Gahart, 1985).*

2. Comparison of RPGs and Alternative Groups

Table 8.10 compares the distributions of the YATS respondents generated by the alternative recruiting group approach and the recruiting priority group approach. Respondents classified in the lower aptitude high school graduate and non-completer recruiting priority groups are classified similarly by the new method. However, a large proportion of persons in the higher aptitude high school graduate recruiting priority group are classified in the category IIIB-V high school graduate group by the new method (i.e., 41.2 percent of the higher aptitude graduates would actually be expected to score in AFQT categories IIIB-V). The grade-only criterion used to construct RPGs and the AFQT criterion used to construct alternative groups show the largest disparity for these individuals. The grade-only criterion suggests that these respondents have higher aptitude than the AFQT criterion indicates.

* The background information used to predict AFQT score includes age at survey, geographic region, race, parents' education, and academic factors such as math courses completed and high school grades.

Table 8.10. Comparison of Recruiting Priority Groups and Alternative Recruiting Groups for Young Males

Recruiting Priority Group	Alternative Recruiting Group					Total (n = 5058)
	(1) Category I-III High School Graduates (n = 1037)	(2) Category IIIB-V High School Graduates (n = 1367)	(3) Category I-III High School Students (n = 948)	(4) Category IIIB-V High School Students (n = 809)	(5) Non-completers (n = 897)	
Higher Aptitude High School Graduates (n = 878)	25.2	41.2	15.1	15.9	2.6	100.0
Lower Aptitude High School Graduates (n = 1133)	10.6	68.9	5.8	13.4	1.3	100.0
College Students (n = 1468)	43.9	14.7	30.8	8.6	2.0	100.0
Young High School Students (n = 764)	0.9	0.6	41.9	53.4	3.2	100.0
Non-completers (n = 815)	0.0	0.8	0.0	0.0	99.2	100.0
Total (n = 5058)	18.0	25.2	20.0	18.2	18.6	100.0

Note: Tabled values are weighted percentage distributions of RPG groups into alternative recruiting groups (i.e., rows add to 100 percent). Actual n's are shown in parentheses.

The majority of respondents classified as college students by the recruiting priority group approach are placed in the category I-IIIA high school graduate, or, for seniors, category I-IIIA high school student group by the new approach. The college distinction is not maintained. Finally, the new approach distinguishes young high school students according to their aptitude (i.e., predicted AFQT category), a distinction not made by the recruiting priority group approach.

3. Characteristics of Alternative Groups

The educational characteristics of the alternative recruiting groups are presented in Table 8.11. Not surprisingly, there is a strong relationship between estimated aptitude and educational attainment. For instance, members of the category I-IIIA groups have completed more years of schooling, have finished more math and technical courses, are more likely to have followed a college preparatory curriculum in high school, and are more likely to have taken college entrance examinations than are members of the corresponding category IIIB-V groups. Category I-IIIA high school graduates are much more likely to be in college than are category IIIB-V graduates. While an overwhelming majority of the respondents desire more education or training, category I-IIIA respondents are more likely to be able to pay for such training.

Table 8.12 shows three measures of employment for the recruiting groups. Notice that category IIIB-V high school graduates are more often engaged in full-time employment than are category I-IIIA high school graduates, who are more likely to be working part-time or to be out of the labor force (i.e., not employed and not looking for work). This is consistent with the finding that category I-IIIA high school graduates are more likely to attend college than category IIIB-V graduates. Among high school students, category I-IIIA respondents are more likely to be employed part-time, while category IIIB-V individuals are more often looking for work. Not surprisingly, category I-IIIA persons think it is easier to find employment than do category IIIB-V persons. The groups do not differ much in terms of job satisfaction, with the exception that non-completers express less job satisfaction than other respondents, as might be expected.

Table 8.13 shows propensity to enlist in the military for the alternative recruiting groups. In the upper panel, propensity measures for each of the active-duty Services are shown, as well as the composite measure of propensity

Table 8.11. Selected Educational Characteristics of Alternative Recruiting Groups for Young Males

Educational Characteristic	Alternative Recruiting Group					Total (n = 5058)
	(1) Category I-III A High School Graduates (n = 1037)	(2) Category III B-V High School Graduates (n = 1367)	(3) Category I-III A High School Students (n = 948)	(4) Category III B-V High School Students (n = 809)	(5) Non-completers (n = 897)	
<u>Years of Education Completed</u>						
Less than 10	0.0	0.2	3.7	16.4	17.3	7.1
10	0.9	0.5	37.4	41.2	26.6	20.0
11	1.0	0.5	58.9	41.8	41.5	27.4
12	62.3	83.9	0.0	0.6	12.7	34.9
More than 12	35.8	14.9	0.0	0.0	1.9	10.6
<u>Type of High School Curriculum</u>						
College preparatory	83.7	55.9	86.6	60.8	53.1	67.4
Vocational/technical	12.4	34.9	9.3	32.7	39.5	25.8
Business/commercial	3.9	9.2	4.1	6.5	7.4	6.8
<u>Desire More Education or Training</u>	94.5	77.9	96.2	89.8	78.6	86.9
<u>Could Pay More than Half of Educational Expense</u>	59.3	50.3	48.2	37.7	41.8	52.9
<u>Taken College Entrance Exam</u>	81.8	41.5	49.7	20.4	23.7	43.3
<u>Currently Attending College</u>	65.0	15.1	0.0	0.0	5.5 ^a	16.3
<u>Number of High School^b Math/Technical Courses</u>	5.2	3.8	5.3	3.2	3.1	3.8

Note: Entries are weighted percentages for respondents with valid responses. Responses with skips, don't know responses, and refusals are not included in the total.

^aRepresents persons without formal high school diplomas (e.g., persons with GEDs or ABE certificates) who are taking college classes.

^bIncludes both elementary and advanced courses.

Source: Questions 404, 408, 410, 414, 698, 701-709.

Table 8.12. Selected Employment Characteristics of Alternative Recruiting Groups for Young Males

Employment Characteristic	Alternative Recruiting Group					Total (n = 5058)
	(1) Category I-III A High School Graduates (n = 1037)	(2) Category III B-V High School Graduates (n = 1367)	(3) Category I-III A High School Students (n = 948)	(4) Category III B-V High School Students (n = 809)	(5) Non-completers (n = 897)	
<u>Employment Status</u>						
Employed full-time	40.8	61.8	11.2	11.9	39.2	34.7
Employed part-time	30.9	16.7	39.5	27.7	21.2	26.7
Not employed, looking	10.9	15.7	19.6	36.7	27.3	21.5
Not employed, not looking	17.4	5.8	29.7	23.7	12.4	17.1
<u>Perception that Finding a Job Is Almost Impossible or Very Difficult</u>						
Full-time job	27.9	36.7	30.3	38.8	40.8	35.0
Part-time job	11.3	16.2	8.4	18.0	23.0	15.3
Satisfied with Present Job	78.0	80.3	78.5	82.1	70.3	77.9

Note: Entries are weighted percentages for respondents with valid responses. Responses with skips, don't know responses, and refusals are not included in the total.

Source: Questions 416, 417, 424, 431, 436, 437.

Table 8.13. Positive Propensity Rates for Alternative Recruiting Groups for Young Males

	Alternative Recruiting Group					Total (n = 5058)
	(1) Category I-III High School Graduates (n = 1037)	(2) Category IIIB-V High School Graduates (n = 1367)	(3) Category I-III High School Students (n = 948)	(4) Category IIIB-V High School Students (n = 809)	(5) Non-completers (n = 897)	
Positive Propensity						
<u>Active Propensity</u>						
Army	2.6	11.7	10.6	28.4	19.3	14.3
Navy	4.0	9.9	10.3	17.8	13.0	10.9
Marine Corps	2.4	6.8	7.5	18.7	14.1	9.6
Air Force	7.1	14.9	16.3	22.3	15.7	15.3
Composite Active Propensity	10.9	25.1	29.0	49.8	36.7	29.9
<u>Reserve Propensity</u>						
National Guard	3.2	10.6	7.7	16.9	15.8	10.8
Reserves	5.5	15.0	14.1	24.1	18.2	15.3
Composite Reserve Propensity	6.8	18.9	18.0	29.5	24.3	19.4

Note: Entries are weighted percentages.

Source: Questions 505, 507, 510-513.

to enlist in any active-duty Service. The lower panel shows propensity for the National Guard, the Reserves, and for a composite measure of propensity to enlist in the Guard/Reserves. The finding is the same for each measure: the propensity to enlist of high school students is much greater than that of high school graduates, and the propensity of category IIIB-V respondents is much greater than that of category I-IIIA respondents. The AFQT category propensity differences are striking. On the Composite Active Propensity Measure, for example, category IIIB-V high school students have a positive propensity level 20 percentage points greater than category I-IIIA high school students (49.8 versus 29.0 percent); the difference between category IIIB-V and category I-IIIA high school graduates is nearly 15 percentage points (25.1 versus 10.9 percent).^{*} Differences between the high school student and high school graduate groups are also large and can be explained partially by the fact that high school graduation is a natural enlistment decision point. Since enlistees have been excluded from the YATS--and since enlistment is related to positive propensity--respondents in post-high school groups will tend to express lower enlistment propensities.

G. Summary

Young Male and Female populations were segmented into Recruiting Priority Groups (RPGs) as an aid in focusing recruiter activities. Priority groups were constructed using information about high school graduation and high school grades. The RPGs were named: (1) Higher Aptitude High School Graduates, (2) Lower Aptitude High School Graduates, (3) College Students, (4) Young High School Students, and (5) Non-completers. The groups were compared on sociodemographic, educational, and employment characteristics and propensity to join the military. The validity of the criteria on which the groups were created and ordered is generally supported by data on amount and quality of education.

^{*}The difference in positive propensity levels between high school graduates in AFQT categories I-IIIA and categories IIIB-V cannot be attributed to the higher concentration of college students in the former group. The positive propensity rates differ by AFQT for both students and nonstudents, specifically, 9.7 versus 20.3 percent for college students and 12.9 versus 26.0 percent for nonstudents in categories I-IIIA versus IIIB-V, respectively.

1. Sociodemographic Characteristics of RPGs

- RPGs differ by age in similar ways for both young males and females. The two highest priority groups, Higher and Lower Aptitude High School Graduates, are the oldest on the average for both males and females (70 to 80 percent of each RPG are 18 and older); Young High School Students are youngest (with 97 percent of both males and females 16 and 17); and College Students and Non-completers show the broadest age ranges (50 to 60 percent are 18 or older).
- There is little difference among young male or female RPG's in racial composition; 75 to 80 percent of each group is white, with most of the remainder being Black.
- Females are more likely to be married (12.5 percent) than males (3.5 percent).
- For both young males and females, the highest proportions of married respondents are found in the two highest priority groups, Higher and Lower Aptitude Graduates (about 5 percent for males and 25 percent for females), and in the Non-completers (about 7 percent for males and 20 percent for females).
- Few financial or family obligations are reported by either young males or females.
- Those in the two highest priority RPG's, Higher and Lower Aptitude Graduates, report more family/financial obligations than others; on a scale ranging from 0 to 4, higher priority males report an average of 0.3 obligations; females report 0.8.
- Marriage and family responsibilities may pose a barrier to recruiting females in higher priority RPGs.

2. Educational Characteristics of RPGs

- Years of completed education is strongly related to RPGs.
- About 68 percent of young males and 75 percent of females report having a college preparatory high school curriculum. This is most likely to be the case for College Students and Young High School Students.
- Young males who do not follow a college preparatory curriculum are more likely to select a vocational/technical path than a business path; females, however, are about equally likely to select either of these noncollege programs.

- Large majorities of both young males and females in all RPGs desire more education or training; for Higher and Lower Aptitude Graduates, the percentages range from 78 to 81 percent; nearly all College Students want more schooling.
- Young males and females in the three highest priority groups (Higher and Lower Aptitude Graduates and College Students) believe they will have some difficulty paying for further schooling; two-fifths to one-half of young males in these RPGs say they could pay for half or less of the estimated costs involved; one-half or more of females in these RPGs could pay half these costs or less.
- Given the interest expressed in further schooling and perceived difficulty in paying for it, educational benefits may be an important incentive to both young males and females in the three highest priority groups.

3. Employment Characteristics of RPGs

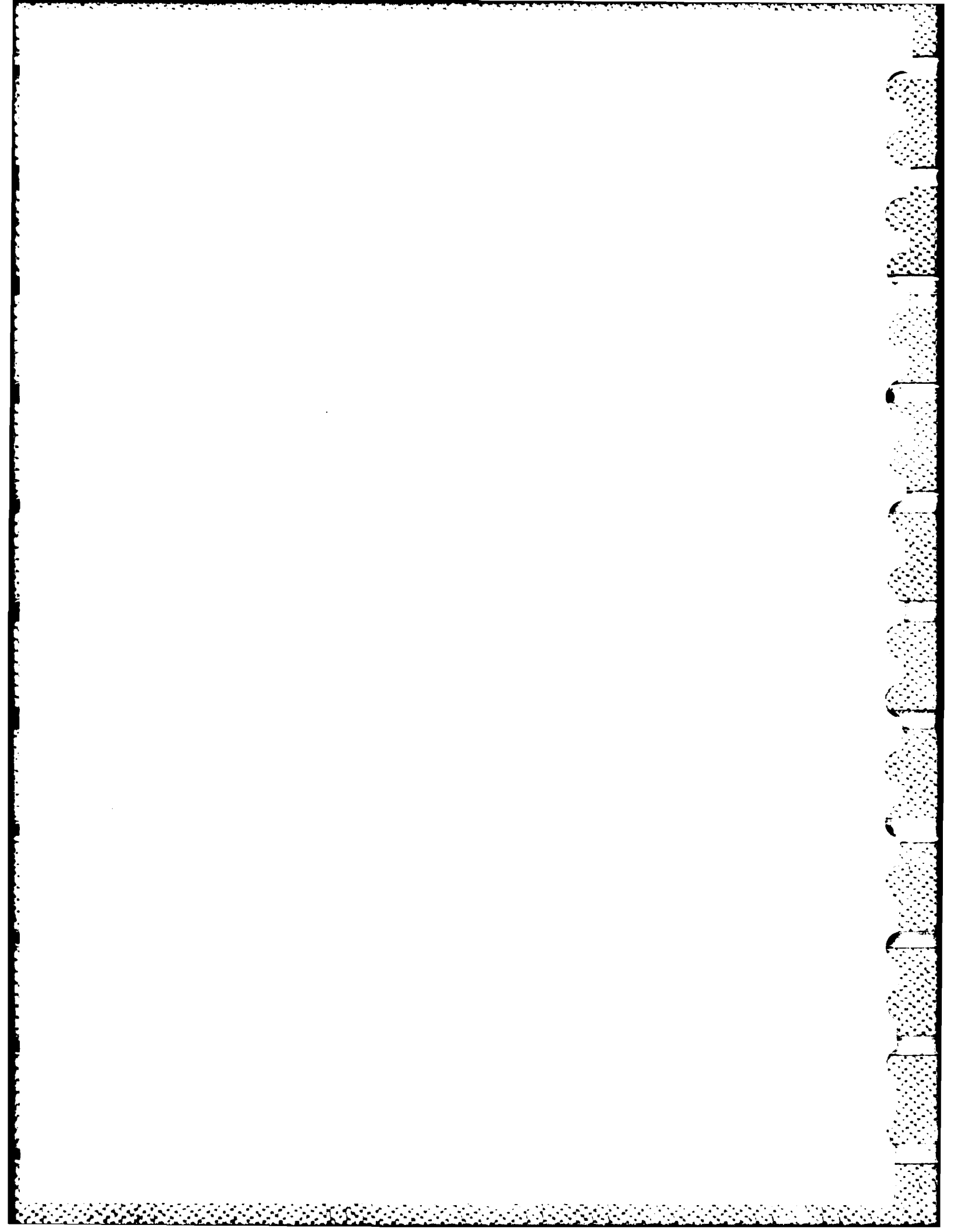
- About half of both males and females in the three highest priority groups (Higher and Lower Aptitude Graduates and College Students) believe it is difficult to find a part time job; about 80 percent believe it is difficult to find a full-time job.
- For young males, about three-fourths of Higher and Lower Aptitude Graduates are employed (about 55 percent in each group work full time and about 20 percent work part time).
- About three-fifths of female Higher and Lower Aptitude Graduates are employed (around 40 percent work full time and 20 percent work part time).
- Employed young male Higher and Lower Aptitude Graduates work an average of almost 40 hours a week; comparable females average about 30 hours a week. Half or more in these four groups work weekends twice a month or more.
- About 80 percent of young male Higher and Lower Aptitude Graduates say they are satisfied with their current jobs; 77 percent of female Higher Aptitude Graduates and 62 percent of Lower Aptitude Graduates are similarly satisfied.

4. Enlistment Prospects of RPGs

- The five RPGs differ both on Composite Active Propensity and on Composite Reserve Propensity, but both measures show the same ranking for young males.
- For young males, Young High School Students have the highest propensity (43.9 percent active, 26.2 percent Reserve), followed by Non-completers (36.6 percent active, 24.7 percent Reserve), Higher Aptitude High School Graduates (27.5 percent active, 18.6 percent Reserve), Lower Aptitude High School Graduates (27.1 percent active, 18.1 percent Reserve) and College Students (19.1 percent active, 12.6 percent Reserve).
- Propensity across RPGs for females is consistently lower than for males.
- For females, Young High School Students have the highest propensity (18.6 percent active, 12.1 percent Reserve), with the remaining four groups all showing similar propensity (11.5 to 12.5 percent active, 7 to 12 percent Reserve).

5. Alternative Recruiting Groups for Young Males

- An alternative classification of recruiting groups was developed based on high school graduation status and predicted AFQT scores. Five groups were defined as: Category I-III A High School Graduates, Category IIIB-V High School Graduates, Category I-III A High School Students, Category IIIB-V High School Students, and Non-completers.
- There is a strong relationship between estimated aptitude and educational attainment. Respondents in the higher aptitude groups have completed more schooling and are more likely to have taken a college preparatory curriculum than lower aptitude groups.
- Propensity to enlist in the active duty Services and the Reserves showed a similar pattern among the groups. Propensity to enlist was significantly higher for high school students than for high school graduates and the propensity of category IIIB-V respondents was much greater than that of category I-III A respondents.



9. RECRUITING PRIORITY GROUPS AND SELECTED ENLISTMENT RELATED ISSUES

We have examined propensity to join the military in the context of the attractiveness and availability of various military and non-military alternatives. Knowledge of military pay and enlistment incentives, desired job characteristics and the availability of these characteristics in the military, and the existence of alternative plans for employment or schooling in the near future appear salient to interest in the military. This chapter examines these factors for differences among the five Recruiting Priority Groups (RPGs), for young males and females. In addition, we considered differences among RPGs in exposure to military advertising and contact with recruiters.

A. Knowledge of Pay and Enlistment Incentives for RPGs

Table 9.1 presents knowledge of monthly starting pay, cash enlistment bonuses, and military educational benefits for young male and female RPGs. The data on monthly pay are based on responses to a question (Q551) which asked respondents to estimate the amount (before taxes). At the time of the 1984 survey, the starting pay for an E-1 was approximately \$575 per month. Table 9.1 shows percentages in each group who "underestimated" this amount (by \$100 or more), gave "close" estimates (within \$100 above or below \$575), "overestimated" the amount (by \$100 or more), or said they did not know. Median estimates are also shown.

There appears to be little difference among pay estimates of young male RPGs, except for the Young High School Students. About 20.3 percent of this group were able to give a close estimate, while 33.9 percent said they did not know. These figures are from 8 to 12 percent lower than the other groups for the close estimate and from 10 to 14 percent higher for the "don't know" category. The median estimate for each group was \$500, which is within the close estimate range.

Females were less likely than young males to give close estimates of starting monthly pay and more likely to say they did not know. The highest priority female group, Higher Aptitude Graduates, appears to be most able to give a close estimate (22.6 percent). This proportion declines with the priority of the group, 19.6 percent for Lower Aptitude Graduates, 18.2 percent for College Students, 17.2 percent for Young High School Students, and 15.4 percent for Non-completers. Each of the female RPGs shows a median estimate of \$500.

Table 9.1. Knowledge of Monthly Starting Pay and Enlistment Incentives Among Recruiting Priority Groups

	Young Males					Females					
	(1) Higher Aptitude High School Graduates (n = 755)	(2) Lower Aptitude High School Graduates (n = 972)	(3) College Students (n = 1286)	(4) Young High School Students (n = 660)	(5) Non- completers (n = 696)	(1) Higher Aptitude High School Graduates (n = 193)	(2) Lower Aptitude High School Graduates (n = 133)	(3) College Students (n = 311)	(4) Young High School Students (n = 169)	(5) Non- completers (n = 143)	Total (n = 949)
Monthly Starting Pay^a											
Underestimate	28.4	28.9	25.0	27.9	25.6	24.0	21.8	25.4	31.2	28.5	26.1 (1.6)
Close estimate	30.9	33.0	28.4	20.3	32.2	22.6	19.6	18.2	17.2	15.4	18.7 (1.4)
Overestimate	20.3	17.4	24.5	17.8	18.3	21.1	25.8	20.9	15.9	20.2	20.7 (1.4)
Don't know/refused	20.4	20.6	22.1	33.9	23.9	32.3	32.8	35.4	35.6	35.8	34.5 (1.7)
Median	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Cash Enlistment Bonus^b											
Yes	28.2	32.8	31.1	27.1	30.3	17.7	25.3	27.0	21.6	19.3	22.6 (2.0)
No	64.9	58.4	61.5	62.5	61.4	71.0	69.6	63.0	64.4	70.5	67.3 (2.3)
Don't know	6.8	8.9	7.4	10.5	8.3	11.3	5.1	10.0	13.9	10.2	10.1 (1.5)
Educational Benefits^c											
Yes	49.2	53.6	60.8	48.8	41.1	46.2	31.7	41.8	37.2	31.2	37.9 (2.5)
No	44.6	40.3	36.3	45.0	54.2	51.7	61.4	48.8	57.4	66.3	54.9 (2.5)
Don't know	6.2	6.1	2.9	6.2	4.7	8.1	6.9	9.4	5.4	2.5	7.1 (1.3)

Note: With the exception of the median dollar entries, all tabled values are percentages with standard errors in parentheses. The questions were asked of the active subsample of respondents which accounts for the reduced number of respondents.

^aBased on initial, nonprobe question (Q551). "Close estimate" refers to an estimate within \$100 above or below the actual amount of starting pay; "underestimate" refers to an estimate more than \$100 below the actual amount; "overestimate" refers to an estimate more than \$100 above the actual amount. Monthly starting pay at the time of the 1984 survey was \$573.60, or approximately \$575.

^bEstimates for the Cash Enlistment Bonus are based on interviews with 2,180 young males (371 higher aptitude high school graduates, 502 lower aptitude high school graduates, 637 college students, 314 young high school students, and 356 non-completers); and 500 females (103 higher aptitude high school graduates, 88 lower aptitude high school graduates, 142 college students, 94 young high school students, and 73 non-completers). The questions about cash bonuses and educational benefits were asked of separate one-half samples randomly selected within each market group.

^cEstimates for Educational Benefits are based on interviews with 2,220 young males (389 higher aptitude high school graduates, 476 lower aptitude high school graduates, 659 college students, 350 young high school students, and 346 non-completers); and 455 females (92 higher aptitude high school graduates, 45 lower aptitude high school graduates, 170 college students, 77 young high school students, and 71 non-completers).

Source: Questions 404, 406-408, 411, 700, 551, 555, 559.

Table 9.1 also presents data on knowledge of enlistment incentives. About 30 percent of all young males say that the military gives cash enlistment bonuses, 62 percent say they do not, and the remaining 8 percent do not know. Differences among young male RPGs are small and non-significant. The pattern of response for the female RPGs is similar to that for young males, though again their level of knowledge is lower. Overall, about 23 percent of females believe cash enlistment bonuses are given, about 67 percent believe they are not, and 10 percent do not know. There are no significant differences among the RPGs in this respect.

Knowledge of the existence of military educational benefits is greater than knowledge of enlistment bonuses for both market groups; overall, males are more likely to know of educational benefits (51.8 percent) than females (37.9 percent). Among males, College Students (60.8 percent) are more likely than the total group, and Non-completers (41.1 percent) less likely than the total group, to know of educational benefits. College Students are also significantly more likely to know of these benefits than other RPGs. Among the female RPGs, Higher Aptitude Graduates (46.2 percent) and College Students (41.8 percent) are significantly more likely than Non-completers (31.2 percent) to know of these benefits.

It is interesting to note the knowledge of the existence of educational benefits among the three higher priority groups. In Chapter 8, we saw that three-fourths or more of the young people in these groups said they wanted more education or training (Tables 8.4 and 8.5). Here, 49 to 61 percent of the higher priority young males report knowledge of educational benefits, as do 32 to 46 percent of higher priority females. It appears, then, that fewer report knowledge of the benefits than express some interest in further education or training. About half to two-thirds of these higher priority young males, and three-fifths to two-thirds of the females, said they could not pay for all of this additional training from their own (or their families') resources. Military educational benefits, then, may be a particularly useful enlistment incentive for young people in the higher priority groups.

B. Awareness of Military Advertising for RPGs

Table 9.2 shows levels of awareness among RPGs of military broadcast advertising. Advertising awareness was indicated by respondents' reporting recall of military advertising. Overall, high proportions of all young males

Table 9.2. Levels of Awareness of Service Broadcast Advertising Among Recruiting Priority Groups

Sponsor/Awareness ^a	Young Males					Females					
	(1) Higher Aptitude High School Graduates (n = 878)	(2) Lower Aptitude High School Graduates (n = 1133)	(3) College Students (n = 1468)	(4) Young High School Students (n = 764)	(5) Non- completers (n = 814)	(1) Higher Aptitude High School Graduates (n = 310)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 501)	(4) Young High School Students (n = 256)	(5) Non- completers (n = 231)	Total (n = 1502)
Army	83.1	86.4	89.0	87.3	81.4	81.3	86.2	85.4	83.6	77.4	83.1 (1.1)
Navy	72.1	74.7	79.2	72.2	71.4	70.7	72.5	74.0	70.3	67.3	71.4 (1.2)
Marine Corps	78.6	80.4	85.4	79.1	76.3	74.4	79.8	76.8	75.6	67.9	75.1 (1.2)
Air Force	79.5	81.0	86.5	82.3	77.2	77.2	80.2	80.3	74.6	73.7	77.7 (1.2)
Coast Guard	52.8	52.9	57.6	52.1	53.8	42.2	43.4	46.2	38.3	41.3	42.9 (1.4)
National Guard/Reserves	63.3	66.4	68.0	64.4	60.4	51.8	55.2	54.4	53.8	49.3	53.1 (1.4)
Joint Services ^b	60.9	61.1	66.6	63.9	57.6	54.4	52.4	57.9	61.5	46.5	55.2 (1.4)

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

^aRefers to aided or unaided awareness.

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

Source: Questions 404, 406-408, 411, 700, 601-608.

recall seeing or hearing advertising for the individual active Services (85.9 percent for the Army, 81.8 percent for the Air Force, 80.5 percent for the Marine Corps, and 74.4 percent for the Navy). College Students are significantly above the average for the total young male group in awareness of active Service advertising (ranging from 89 percent aware of Army advertising to 79 percent aware of Navy). Non-completers are below the average for the total group (ranging from 81 percent aware of Army to 71 percent aware of Navy advertising). Higher Aptitude Graduates, Lower Aptitude Graduates, and Young High School Students are about like the total group in their awareness of individual active Service advertising.

In general, awareness of advertising is lower for the National Guard/Reserve (64.9 percent), the Joint Services (62.5 percent), and the Coast Guard (54.1 percent). The pattern for RPGs is generally the same as for active Service advertising. College Students are significantly above average, Non-completers are significantly below, and Higher and Lower Aptitude Graduates and Young High School Students are about like the average for the total group.

The great majority of females are also aware of advertising for the individual active Services at about the same levels as for young males; 83.1 percent of females are aware of Army advertising, 77.7 percent of Air Force advertising, 75.1 percent of Marine Corps advertising, and 71.4 percent of Navy advertising. Among the female RPGs, Non-completers again appear to be slightly less aware of the active Service advertising. Differences among the other groups are very small, however, and no clear pattern emerges.

Females are significantly less likely than young males to report awareness of advertising for the National Guard/Reserve (53.1 percent), Joint Services (55.2 percent) and Coast Guard (42.9 percent). Again there are no consistent patterns of response among the RPGs.

C. Information Seeking Among RPGs

Table 9.3 presents data on information seeking among young male and female RPGs. As noted in Chapter 7, the various activities listed in the table can be seen as existing on a passive-to-active continuum. Receiving military recruiting literature and seeing advertising are relatively passive activities. Making a toll-free call or mailing a card are relatively active.

More than half of all young males report receiving recruiting literature. Differences among RPGs may serve as an indicator of how mailings are targeted.

Table 9.3. Information Seeking Among Recruiting Priority Groups

Item ^a	Young Males					Females						
	(1) Higher Aptitude High School Graduates (n = 875)	(2) Lower Aptitude High School Graduates (n = 1131)	(3) College Students (n = 1467)	(4) Young High School Students (n = 763)	(5) Non- completers (n = 812)	Total (n = 5048)	(1) Higher Aptitude High School Graduates (n = 311)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 500)	(4) Young High School Students (n = 256)	(5) Non- completers (n = 230)	Total (n = 1501)
Received recruiting literature	65.3	71.0	72.4	19.3	43.1	55.6 (0.9)	38.2	37.2	47.4	9.1	19.1	33.3 (1.3)
Saw print advertising	73.5	74.5	82.5	78.4	69.8	76.4 (0.7)	74.8	71.1	78.5	73.9	50.6	73.1 (1.3)
Saw/heard broadcast advertising	81.2	84.8	86.1	85.2	76.1	83.2 (0.6)	87.9	83.4	86.4	85.2	73.9	84.1 (1.0)
Made toll-free call	4.3	4.8	4.6	2.2	6.0	4.4 (0.4)	3.0	3.8	2.1	0.5	4.0	2.6 (0.4)
Mailed postcard or coupon	15.6	17.0	21.6	9.7	13.4	15.9 (0.6)	11.4	11.1	11.9	4.9	6.8	9.7 (0.8)
Discussed Military Service with someone	33.7	35.5	38.6	37.8	39.3	37.1 (0.8)	17.9	19.2	24.9	19.8	16.2	20.4 (1.1)

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

^aReceived recruiting literature refers to "ever received," print and broadcast advertising refers to "past 12 months," made toll-free call and mailed card refer to "ever," and discussed Service refers to "within the last year or so."

Source: Questions 404, 406-408, 411, 700, 616, 618, 620, 622, 683.

The three highest priority groups are the most likely to report having received literature from the military. About 65 percent of Higher Aptitude Graduates, 71 percent of Lower Aptitude Graduates, and 72 percent of College Students report having received recruiting literature some time in the past. Non-completers (43 percent) and Young High School Students (19 percent) are much less likely to have received literature.*

Young male Non-completers are less likely than the other RPGs to be aware of print (70 percent) or broadcast advertising (76 percent). About 83 percent of College Students have seen print advertising, as have about 73 percent of Higher Aptitude Graduates and about 74 percent of Lower Aptitude Graduates. About 86 percent of College Students, 81 percent of Higher Aptitude Graduates, and 85 percent of Lower Aptitude Graduates have seen or heard broadcast advertising.

Turning to the more active behaviors, we see that few young males in any RPG have made a toll-free call to obtain information about the military. About 4 percent of Higher Aptitude Graduates, 5 percent of Lower Aptitude Graduates, and 5 percent of College Students have made toll-free calls. Young High School Students (2 percent) are slightly less likely and Non-completers (6 percent) may be slightly more likely to have done so. About 16 percent of Higher Aptitude Graduates, 17 percent of Lower Aptitude Graduates, and 22 percent of College Students have sought information by mail, compared with only 10 percent of Young High School Students and 13 percent of Non-completers.

There is little difference among RPGs in whether joining the military was discussed with someone in the last year or so; between 34 and 39 percent in each group report such behavior.

Patterns for female RPGs are similar to those of young males. Females overall (33.3 percent) are less likely than young males (55.6 percent) to report having received military recruiting literature. Those in the higher priority groups are more likely to report receiving literature (about 38 percent of Higher Aptitude Graduates, 37 percent of Lower Aptitude Graduates, and 47 percent of College Students) than those in the lower groups (about 19 percent of Non-completers and 9 percent of Young High School Students).

* This result is due in part to the fact that direct mail programs focus on higher priority groups, with mailings to high school seniors and 19-year-olds.

Female Non-completers are somewhat less likely than those in other groups to report having seen print or broadcast advertising in the past 12 months. About 61 percent report seeing print advertising for the military compared with 71 to 78 percent for the other groups. Similarly, about 74 percent report having seen or heard broadcast advertising compared with 83 to 88 percent of the other groups.

Like young males, relatively few females in any RPG have engaged in the more active information seeking behaviors. About 3 percent of Higher Aptitude Graduates, 4 percent of Lower Aptitude Graduates, and 2 percent of College Students have made toll-free calls for information compared with about 1 percent of Young High School Students and 4 percent of Non-completers. Similarly, about 11 percent of each group of Graduates, and 12 percent of College Students have sought information by mail compared with about 5 percent of Young High School Students and 7 percent of Non-completers.

There is little difference among RPGs in whether joining the military was discussed with someone. Around one in five of those in each group have had such discussions in the past year or so.

D. Recruiter Contact and Military Test Taking Among RPGs

Table 9.4 presents information on recruiter contact and test-taking for young male and female RPGs. Having contact with a military recruiter and taking tests are seen as an active form of information-seeking behavior. Among young males, Lower Aptitude High School Graduates are most likely to report contact with any recruiter (50.8 percent) followed by the Higher Aptitude Graduates (44.7 percent). Young High School Students report the least contact (22.7 percent). College students (39.5 percent) and Non-completers (36.7 percent) are about average for all young males in their rates of contact with military recruiters. For all RPGs, contact with Army recruiters is greater than contact with recruiters of other Services, which is not surprising since the Army has the most recruiters and highest advertising budget of the Services.

Armed Services Vocational Aptitude Battery (ASVAB) test-taking among male RPGs follows the same rank order observed for recruiter contacts. Lower Aptitude Graduates (27.9 percent) are most likely to report having taken the ASVAB followed by Higher Aptitude Graduates (23.1 percent) and College Students (20.7 percent). Young High School Students (6.2 percent) and Non-completers (18.2 percent) are less likely to have taken the written test. Very few in any group have taken a physical examination (2 percent overall).

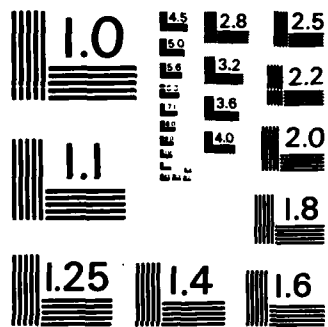
Table 9.4. Recruiter Contact and Military Test-Taking Among Recruiting Priority Groups

Item	Young Males					Females					
	(1) Higher Aptitude High School Graduates (n = 878)	(2) Lower Aptitude High School Graduates (n = 1132)	(3) College Students (n = 1467)	(4) Young High School Students (n = 764)	(5) Non- completers (n = 814)	(1) Higher Aptitude High School Graduates (n = 311)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 501)	(4) Young High School Students (n = 256)	(5) Non- completers (n = 231)	Total (n = 1503)
Recruiter Contact											
Army	26.7	29.6	20.5	12.6	24.1	14.1	13.8	15.2	6.2	11.6	12.7 (0.9)
Navy	11.9	11.9	11.0	5.6	6.5	6.1	4.0	6.8	0.7	4.6	4.9 (0.6)
Marine Corps	12.1	16.3	12.7	6.2	10.1	5.5	6.8	5.8	3.9	3.1	5.1 (0.6)
Air Force	12.8	14.1	11.9	5.0	4.9	7.5	7.4	7.4	2.4	4.1	6.1 (0.7)
Any military recruiter	44.7	50.8	39.5	22.7	36.7	27.5	23.8	28.4	12.0	20.7	23.7 (1.2)
Test-Taking Status											
ASVAB test ^a	23.1	27.9	20.7	6.2	18.2	15.3	9.9	16.1	4.1	4.7	11.3 (0.9)
Physical examination	2.6	3.7	1.7	0.1	2.5	0.2	0.8	0.3	0.0	0.0	0.3 (0.1)

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

^aArmed Forces Vocational Aptitude Battery.

Source: Questions 404, 406-408, 411, 700, 628, 629, 645, 648.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Females are considerably less likely than young males to have had contact with recruiters or to have taken the ASVAB or a physical. About 24 percent report some recruiter contact, about 11 percent report having taken the ASVAB, and only 3 percent have had a physical exam. The three highest priority groups are most likely to have seen a recruiter (24 to 28 percent) followed by Non-completers (21 percent) and Young High School Students (12 percent). The three highest priority groups are also most likely to have taken the ASVAB. About 15 percent of the female Higher Aptitude Graduates, 10 percent of Lower Aptitude Graduates, and 16 percent of College Students have taken the written test compared with about 4 percent in the two lower priority groups.

E. Preference and Achievability of Job Characteristics for RPGs

It was noted in Chapter 5 that perceptions about military service as a job--in terms of preferred job characteristics and beliefs about their achievability in the military--are likely to be important factors in propensity to join.

Table 9.5 shows preferred characteristics for young male and female RPGs. Overall, three-fourths or more of all young males rate six job characteristics as "extremely important" or "very important":

- Enjoying your work
- Job security
- Good income
- Personal freedom
- Learn a valuable trade or skill
- Adequate retirement benefits

Young males in the individual Recruiting Priority Groups generally concur in preference for these six characteristics, with minor variations in order. The two highest priority groups are very similar to the average for all young males in rating the importance of these items. One of the most notable difference among RPGs for young males is that College Students and Young High School Students show more interest in educational benefits than do other groups.

Females overall, and particularly those in the higher priority groups, rate these six job characteristics in about the same way as young males (Table 9.5). The main difference for females is that they show much greater interest in equal pay and opportunity for men and women; overall, 83 percent

Table 9.5. Preferred Job Characteristics Among Recruiting Priority Groups

Item	Young Males					Females					
	(1) Higher Aptitude High School Graduates (n = 875)	(2) Lower Aptitude High School Graduates (n = 1132)	(3) College Students (n = 1456)	(4) Young High School Students (n = 764)	(5) Non- completers (n = 808)	(1) Higher Aptitude High School Graduates (n = 311)	(2) Lower Aptitude High School Graduates (n = 204)	(3) College Students (n = 500)	(4) Young High School Students (n = 256)	(5) Non- completers (n = 229)	Total (n = 1500)
Enjoy your work	91.1	86.7	91.5	89.5	82.0	90.0	92.6	94.1	89.9	87.0	91.2 (0.8)
Job security	88.5	87.5	84.7	83.2	89.2	89.2	88.9	91.2	85.8	84.6	88.7 (1.2)
Good income	83.8	85.1	81.2	80.2	82.3	82.5	84.2	84.0	83.4	88.4	84.4 (1.0)
Personal freedom	83.2	80.9	81.4	76.8	77.2	80.0	83.5	83.6	81.4	82.5	82.3 (1.1)
Learn valuable trade or skill	80.8	80.2	75.5	80.3	80.1	74.1	78.5	83.3	76.0	74.1	78.1 (1.2)
Adequate retirement benefits	75.8	77.4	75.3	74.2	72.0	75.0	70.2	75.3	71.4	72.2	73.4 (1.3)
Promotion opportunities	73.6	70.0	71.5	65.8	66.2	68.4	68.1	71.9	70.6	67.7	69.7 (1.3)
Get money for education	59.4	56.9	66.9	67.5	61.3	61.6	67.6	73.4	77.2	68.8	69.2 (1.3)
Equal pay and opportunity for men and women	61.0	57.4	58.8	63.6	52.2	72.9	80.9	88.7	90.7	77.8	83.2 (1.5)
Do something for country	53.5	55.9	51.8	58.4	53.7	52.5	50.5	50.0	55.8	57.3	52.7 (1.4)
Have a lot in common with co-workers	53.8	53.5	49.7	54.6	53.6	49.9	51.2	52.8	54.4	52.4	52.2 (1.4)
Training for leadership	52.5	50.8	51.6	52.9	50.4	47.8	52.1	51.0	48.3	47.5	49.5 (1.4)
High status and prestige	48.8	48.2	46.2	44.1	48.5	49.8	53.0	44.8	48.1	49.9	48.4 (1.4)
Stay in area	48.7	46.8	40.6	45.2	48.4	51.8	53.8	42.3	50.2	54.7	49.2 (1.4)
Parents' approval	42.6	36.0	36.5	49.5	40.6	44.9	43.3	49.8	53.2	49.6	48.4 (1.4)

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

Source: Questions 404, 406-408, 411, 700, 649, 651, 653, 655, 657, 659, 661, 663, 665, 667, 669, 671, 673, 675, and 677.

of females say this characteristic is "extremely" or "very" important compared with 59 percent of young males. College Students (89 percent) and Young High School Students (91 percent) are particularly likely to believe this, although strong majorities (about three-fourths) of the other RPGs also say that equal pay and opportunity is important. At the same time, females are somewhat less likely than young males to value learning a trade or skill, and more likely to value educational benefits.

Table 9.6 presents young males' perceptions of whether job characteristics are achievable mainly in the military or mainly in a civilian job. One-fourth or more of the young males saw five of the job characteristics as available mainly in the military:

- Do something for the country (42 percent)
- Training for leadership (37 percent)
- Job security (30 percent)
- Get money for education (27 percent)
- Equal pay and opportunity for women (26 percent).

Of these "job security" is among the five most desired characteristics, while the others are of lesser importance to the young males.

One-fourth or more saw another five as mainly available in a civilian job:

- Stay in area (57 percent)
- Personal freedom (56 percent)
- Good income (34 percent)
- Enjoy your work (31 percent)
- Parents' approval (26 percent).

Three of these characteristics, "personal freedom," "enjoy your work," and "good income," are among the five most important. The two remaining are the least important.

Young males in the two highest priority groups are similar to the average for all young males in their perceptions of these characteristics. The one exception is "job security" which Higher Aptitude Graduates are significantly less likely to see as more likely achievable in the military than this average.

Young male college students differ from other RPGs in that they are more likely to say "job security" and "training for leadership" are mainly available in the military. They are more likely to say that several characteristics are

Table 9.6. Whether Job Characteristics are More Likely in a Military or Civilian Job for Young Male RPGs

	(1)		(2)		(3)		(4)		(5)			
	Higher Aptitude High School Graduates	Military Civilian (n = 875)	Lower Aptitude High School Graduates	Military Civilian (n = 1132)	College Students	Military Civilian (n = 1456)	Young High School Students	Military Civilian (n = 764)	Non-completers	Military Civilian (n = 808)	Total	Military Civilian (n = 5035)
Enjoy your work	1.9	29.9	2.4	31.9	2.0	36.4	5.6	27.9	5.2	27.5	3.3 (0.3)	31.2 (0.8)
Job security	22.0	12.4	28.1	9.7	34.6	8.9	30.8	11.7	29.9	11.3	29.8 (1.1)	10.5 (0.8)
Good income	4.2	32.9	4.1	32.7	3.7	43.5	9.1	30.0	6.5	28.7	5.4 (0.4)	34.4 (0.8)
Personal freedom	2.9	53.9	1.8	58.6	2.8	62.3	5.0	52.0	4.2	50.2	3.3 (0.3)	56.1 (0.9)
Learn valuable trade or skill	14.0	12.9	15.2	11.7	16.0	11.9	22.0	12.9	13.6	12.9	16.2 (0.6)	12.4 (0.6)
Adequate retirement benefits	15.9	12.7	20.6	10.7	20.3	11.4	19.0	13.5	17.3	13.7	18.9 (0.7)	12.3 (0.6)
Promotion opportunities	9.2	14.8	10.4	16.6	11.7	15.2	13.6	17.1	11.6	13.1	11.4 (0.5)	15.5 (0.6)
Get money for education	26.2	15.7	28.1	15.3	28.0	13.9	28.4	14.5	25.0	13.0	27.3 (0.8)	14.5 (0.6)
Equal pay and opportunity for men and women	25.7	6.7	24.3	6.8	29.1	9.0	27.2	9.5	19.5	10.2	25.6 (1.0)	8.5 (0.6)
Do something for country	38.8	9.8	40.7	9.0	41.1	9.0	49.7	7.2	39.8	10.2	42.3 (0.9)	8.9 (0.5)
Have a lot in common with co-workers	9.1	15.5	9.3	17.9	11.1	20.1	13.1	19.2	9.2	15.6	10.5 (0.5)	18.0 (0.6)
Training for leadership	33.9	9.1	33.8	9.9	38.6	7.7	45.0	8.5	33.5	10.6	37.2 (0.8)	8.9 (0.5)
High status and prestige	11.3	17.9	13.3	17.9	12.1	18.7	15.5	15.9	11.9	13.9	12.9 (0.5)	17.1 (0.6)
Stay in area	3.6	59.4	3.3	58.9	2.7	60.1	4.1	54.1	4.7	48.5	3.5 (0.3)	56.6 (0.8)
Parents' approval	7.7	23.5	6.2	25.7	6.2	30.6	8.1	25.6	8.1	22.2	7.2 (0.4)	26.2 (0.8)

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

Source: Questions 404, 406-408, 411, 700, 649, 651, 653, 655, 657, 659, 661, 663, 665, 667, 669, 671, 673, 675, 677.

mainly available in civilian jobs, including "enjoy your work," "good income," "personal freedom," "having a lot in common with co-workers," and "parents approval."

Young High School Students are more likely than other RPGs to say "enjoy your work," "good income," "do something for the country," and "training for leadership" are available mainly in the military.

Table 9.7 shows this evaluation of whether job characteristics are more likely to occur in the military or a civilian job for female RPGs. Overall, females' perceptions of the military/civilian availability of these job characteristics are the same as young males'. The only substantial difference between young males and females is that the latter are less likely to say "good income" is more characteristic of civilian jobs (19.9 percent vs. 34.4 percent for young males).

There are few significant differences among female RPGs. Again the two highest priority groups are similar to the average for all females. College Students and Young High School Students are more likely than other RPGs to say "enjoy your work" and "parents' approval" are characteristics more likely to occur in civilian jobs. Young High School Students are also significantly more likely than other groups to believe that "get money for education" and "do something for country" are more likely to occur in the military.

F. Most Likely Plans for Next Year Among RPGs

Table 9.8 shows the most likely plans for the near future of the young male and female RPGs. Respondents currently in high school who might not finish in the coming year (i.e., those who had completed 11 years or less of education and were less than 19 years old at the time of the interview) were asked what they most likely would be doing when they finished high school. All others were asked what they most likely would be doing in the fall of the next year--October 1985. Among young males, the most likely plans were going to school full time (44 percent). Nearly 80 percent of College Students and 52 percent of Young High School Students expect to be in school full time. This contrasts with 26 percent of the Higher Aptitude High School Graduates, and 23 percent of Lower Aptitude Graduates, and 22 percent of Non-completers. The second most likely plan is working full time. Young males not currently in school are more likely than students to expect to be working full time. About 51 percent of Higher Aptitude Graduates, 56 percent of Lower Aptitude Graduates and 52 percent of Non-completers expect to be working full time

Table 9.7. Whether Job Characteristics Are More Likely in a Military or Civilian Job for Female RPGs

	(1) Higher Aptitude High School Graduates Military Civilian (n = 311)	(2) Lower Aptitude High School Graduates Military Civilian (n = 203)	(3) College Students Military Civilian (n = 499)	(4) Young High School Students Military Civilian (n = 254)	(5) Non-completers Military Civilian (n = 226)	Total Military Civilian (n = 1493)
Enjoy your work	1.0	2.5	2.1	4.7	4.7	2.8 (0.4)
Job security	23.7	27.0	26.7	25.2	29.4	26.2 (1.7)
Good income	3.2	8.7	7.3	11.4	10.5	7.8 (0.7)
Personal freedom	1.6	51.2	2.5	6.4	4.9	3.4 (0.5)
Learn valuable trade or skill	10.5	5.7	13.5	21.9	16.4	15.3 (1.0)
Adequate retirement benefits	18.4	8.1	21.1	16.2	17.0	18.7 (1.1)
Promotion opportunities	9.5	12.1	9.5	11.6	7.5	9.7 (0.8)
Get money for education	25.6	8.1	25.4	31.9	21.5	25.8 (1.3)
Equal pay and opportunity for men and women	21.6	5.7	21.4	7.9	27.2	23.4 (1.6)
Do something for country	39.3	6.9	43.2	48.9	34.2	41.2 (1.4)
Have a lot in common with co-workers	6.7	12.5	11.1	13.8	6.1	8.7 (0.8)
Training for leadership	33.1	4.0	32.6	5.7	32.1	33.1 (1.4)
High status and prestige	8.5	7.8	8.6	11.6	7.3	8.8 (0.8)
Slay in area	2.6	57.1	2.6	57.7	2.7	2.9 (0.5)
Parents' approval	2.9	24.4	4.6	30.4	8.5	6.0 (0.7)

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

Source: Questions 404, 406-408, 411, 700, 649, 651, 653, 655, 657, 659, 661, 663, 665, 667, 669, 671, 673, 675, 677.

compared to 11 percent of College Students and 21 percent of Young High School Students.

Overall, about 6 percent of young males expect to be serving in the military: 12 percent of the Young High School Students, 8 percent of Non-completers, 7 percent of Higher Aptitude Graduates, 4 percent of Lower Aptitude Graduates, and 1 percent of College Students.

Among females, the proportions expecting to be in school full time are very similar to young males and are distributed among Recruiting Priority Groups in about the same way. About 10 percent of females expect to be full-time homemakers a year from the interview (12.5 percent of all females are married). Very few females expect to be serving in the military (5 percent of Young High School Students, 2 percent of Higher Aptitude Graduates, 1 percent of Lower Aptitude Graduates and Non-completers).

G. Summary

The decision to join the active military is made within the context of the attractiveness and availability of various military and non-military alternatives. As an aid to targeting recruiting policies and activities, the five Recruiting Priority Groups (RPGs) defined for young males and for females have been examined for differences in their knowledge of military pay and enlistment incentives, their awareness of military advertising, their information seeking behavior, and their recruiter contact and test taking. In addition, the RPGs have been examined for differences in preferred job characteristics, perceived achievability of these characteristics in the military or civilian jobs, and their most likely plans for the next year. Highlights of results for these issues are presented below.

1. Knowledge of Pay and Enlistment Bonuses Among RPGs

- Overall, there is little difference among RPGs for either young males or females in their knowledge of starting monthly pay.
- About 29 percent of young males and 19 percent of females gave close estimates of monthly starting pay.
- For young male RPGs, there is little difference among the pay estimates except for the Young High School Students. About 20 percent give a close estimate, whereas 34 percent said they did not know. These figures are approximately 10 percentage points lower than the other groups for the close estimate and approximately 12 percentage points higher for the don't know category.

- About one-third of all female RPGs could not estimate monthly starting pay.
- About 23 percent of female Higher Aptitude Graduates give a close estimate of starting pay; this proportion declines to 15 percent for Non-completers, the lowest priority group.
- Knowledge of cash enlistment bonuses and educational benefits show some differences but little systematic pattern among RPGs for either young males or females.

2. Awareness of Military Advertising Among RPGs

- There is little systematic variation among RPGs for either young males or females in awareness of broadcast advertising for the active Services or Reserve Component.
- For young males, awareness of broadcast advertising for all Services ranges from 86 percent aware of Army advertising to 54 percent aware of Coast Guard advertising average.
- Awareness levels in female RPGs are also near the average for all females, ranging from approximately 83 percent for Army advertising to 43 percent for the Coast Guard, overall.

3. Information Seeking Among RPGs

- Higher priority groups report receiving more recruiting literature by mail than lower priority groups, for both young males and females.
- Among young males, 65 percent of Higher Aptitude Graduates, 71 percent of Lower Aptitude Graduates and 72 percent of College Students report having received recruiting literature, compared to 19 percent of Young High School students and 43 percent of Non-completers.
- Among females, 38 percent of Higher Aptitude Graduates, 37 percent of Lower Aptitude Graduates and 47 percent of College Students state that they have received recruiting literature, compared to 9 percent of Young High School Students and 19 percent of Non-completers.
- For both young males and females, Non-completers are less aware of print and broadcast advertising than higher priority groups.
- Overall, levels of making toll-free calls for information about the military are low both for young males (4 percent) and females (3 percent).

- For young males, 16 to 22 percent of the three highest priority groups have mailed cards (vs. 10 percent of Young High School Students and 13 percent of Non-completers); for females, 11 to 12 percent of the three highest priority groups have mailed cards (vs. 5 percent of Young High School Students and 7 percent of Non-completers).
- There is little difference among RPGs for either young males or females in discussing joining the military with someone (e.g., family or friends).

4. Recruiter Contact and Test Taking Among RPGs

- Among young males, Lower Aptitude Graduates (51 percent) and Higher Aptitude Graduates (45 percent) have had recruiter contact more often than College Students (40 percent), Young High School Students (23 percent), or Non-completers (37 percent).
- Among females, Young High School Students (12 percent) show less recruiter contact than other RPGs (21 to 28 percent).
- Among females, 27 percent of Higher Aptitude Graduates, 24 percent of Lower Aptitude Graduates and 28 percent of College Students have had recruiter contact (vs. 12 to 21 percent of other groups).
- In all RPGs, young males and females have had more contact with Army recruiters than with recruiters of any other Service. This is consistent with expectations since the Army has more recruiters and a larger advertising budget than the other Services.
- For young males, the two highest priority groups are more likely than the lowest priority groups to have taken the Armed Services Vocational Aptitude Battery (ASVAB); 24 percent of Higher Aptitude Graduates and 28 percent of Lower Aptitude Graduates have taken the ASVAB (vs. 6 percent of Young High School Students and 18 percent of Non-completers).
- For females, 10 to 16 percent of those in these highest priority groups have taken the ASVAB (vs. 4 to 5 percent of the two lowest priority groups).

5. Preference for and Achievability of Job Characteristics

- Three-fourths or more of all young males rate six job characteristics as important: enjoying your work, job security, good income, personal freedom, learn a valuable trade or skill, and adequate retirement benefits. Young males in the RPGs generally concur in preference for these six characteristics with minor variations in order.
- College Students and Young High School Students show more interest in educational benefits (about 67 percent) than those in other groups (61 percent or less).
- Females generally concur in the rating of the same six job characteristics preferred by most young males. Females show much greater interest in equal pay and opportunity (83 percent) than young males (53 percent). Among RPGs, College Students (89 percent) and Young High School Students (91 percent) are more likely to rate this as important than other RPGs (about 75 percent).
- Five job characteristics were rated as most likely to occur in the military by at least 25 percent of young male respondents: do something for country, training for leadership, job security, get money for education, and equal pay and opportunity. Females generally concurred.
- Five job characteristics were rated as more likely to occur in a civilian job by at least 25 percent of young male respondents: stay in area, personal freedom, good income, enjoy your work, and parents' approval. Only 20 percent of females believed good income to be characteristic of civilian jobs. Otherwise they agreed with young males.
- The two highest priority groups for both young males and females are about average for their market groups in these ratings. Young male College Students are more likely than other young male RPGs to rate job security, and training for leadership as more likely military, and good income, enjoy your work, and personal freedom as more likely civilian.

6. Most Likely Plans for Next Year

- Most young males not currently in school plan to be working full time next year: 51 percent of Higher Aptitude Graduates, 56 percent of Lower Aptitude Graduates, and 52 percent of Non-completers.
- About one-third of young male Higher and Lower Aptitude Graduates expect to be in school.
- Overall, 6 percent of young males expect to be serving in the military: 7 percent of Higher Aptitude Graduates, 4 percent of Lower Aptitude Graduates, 1 percent of College Students, 12 percent of Young High School Students and 8 percent of Non-completers.
- Most females not currently in school plan to be working next year (around 40 percent of Higher and Lower Aptitude Graduates and 33 percent of Non-completers) or to be full-time homemakers (around 10 percent of these three RPGs).
- Very few (less than two percent, overall) females plan to be serving in the military.

10. MULTIVARIATE ANALYSES OF PROPENSITY FOR RECRUITING PRIORITY GROUPS

Thus far, this report has discussed the propensity of youth and young adults to join the military and has provided profiles of those with positive and negative propensity. In addition, this report has analyzed Recruiting Priority Groups (RPGs) and their relationship to various sociodemographic variables and to propensity to join the military. These analyses provide useful and important information about propensity, but they are limited by the fact that they have considered separately the effects of only one or two variables related to propensity. A more meaningful type of analysis would examine the simultaneous effects on propensity of a number of variables. In this chapter the technique of multiple discriminant function analysis is applied to this task.

The aim of these discriminant analyses is to determine how well individuals who were classified as "definitely," "probably," "probably not," or "definitely not" on the Composite Active Propensity measure can be distinguished from each other. Thirteen intercorrelated variables were chosen for assessment of their individual and group contribution to the differences among propensity groups. The 13 variables, considered one at a time, may show relatively small differences among the propensity groups, but together the differences may be large. Discriminant analysis considers the intercorrelations among the variables and estimates the unique contribution of each variable in discriminating among the propensity groups. In addition, the analyses indicate the relative distances of the propensity groups from each other.

The discussion begins with a description of measures used in the analysis. A brief discussion of discriminant function analysis as an analytical tool follows. The remaining sections summarize the results of the analyses.

A. Measures

The measures that were used in the discriminant analyses include variables that assess sociodemographic characteristics, attitudes, awareness of military advertising, and recognition of slogans. Variables that had previously shown a relationship to propensity or that were expected to bear a relationship from logical and theoretical considerations were included.

Table 10.1 provides names and detailed definitions of the 13 variables used in the current analyses. Sociodemographic variables include age, race, a composite of father's and mother's education (PARENTED), and high school



Table 10.1. Discriminant Analyses Variable Definitions

Variable Name	Variable Definition
AGE	Continuous variable of respondent's age in years (16-21)
RACE	Race of respondent (1 = non-white, 0 = white)
PARENTED	Continuous composite variable of the mean of mother's and father's education (each scaled from 07 (less than 8th grade) to 20 (more than three years of graduate/professional school))
HSCURR	High school curriculum (0 = college preparatory, 1 = otherwise)
NTECHCRS	Number of science and math courses taken (or planned) in high school excluding business math (continuous variable, range 0-7).
DRAFTREG	Favorability towards draft registration (1 = in favor of draft, 0 = otherwise)
OTHERFEEL	Respondent's perception of the favorability of significant others towards the respondent serving in the active Services (1 = favorable, 0 = otherwise)
PERSFEEL	Respondent's personal feelings (attitudes) toward serving in the active Services (1 = favorable, 0 = Otherwise)
MILJOBSAT	A composite variable that is the mean of all job and career goals that are perceived to be satisfied in the military weighted by their importance to the respondent (continuous variable scaled from 0, not at all important to 3, extremely important)
ENTREXAM	Whether the respondent had taken a college entrance examination (1 = exam not taken, 0 = exam taken)
MEDIAEXP	Number of types of advertising media (print, broadcast, direct mail) to which respondent was exposed (continuous variable, range 0-3)
SLOGANS	Number of military slogans used in advertising that are correctly identified (continuous variable, range 0-6)
LOOKJOB	Currently looking for work or dissatisfied with present job (1 = looking or dissatisfied, 0 = otherwise)

Source: Questions 403, 417, 431, 616, 618, 620, 622, 625, 628, 629, 632, 635, 638, 641, 645, 648-679, 682, 683, 691-692, 698, 701-703, 705-709, 713F, 713M, 714, 715.

curriculum (HSCURR). Related variables include whether the respondent was looking for work (LOOKJOB), the number of math and technical courses taken (excluding business math) in high school (NTECHCRS) and whether the respondent took a college entrance exam (ENTREXAM). Attitudinal variables include whether the respondent favored draft registration (DRAFTREG), the respondent's perception of feelings of significant others towards his or her joining the Service (OTHERFEEL), the respondent's own feelings towards joining the Service (PERSFEEL), and a composite of perceived benefits of the military (e.g., job, career, retirement, and other quality of life factors) weighted by the importance the respondent attached to the benefit (MILJOBSAT). The remaining two variables were an index of the number of types of advertising media to which the respondent reported exposure (MEDIAEXP) and the number of Service slogans correctly identified (SLOGANS).

Multiple discriminant function analysis was used to determine how well the 13 measures could discriminate among the following four composite propensity groups for young males.

- 1) definitely will be serving in the active military
- 2) probably will be serving in the active military
- 3) probably will not be serving in the active military
- 4) definitely will not be serving in the active military

For females there were too few respondents in the "definitely will" propensity group, so it was combined with the "probably will" group to form a single positive group. Consequently, there were only three propensity groups for females.

B. Analytical Approach of Linear Discriminant Function Analysis

1. Overview

When several groups are being compared on two or more variables simultaneously, then discriminant analysis is a useful tool for distinguishing among the groups. In the case of a positive propensity group and a negative propensity group, the idea behind discriminant analysis is to find the best (linear) combination of independent variables that distinguishes between the groups (i.e., that maximizes the mean difference between the two groups). Recall that a linear combination consists of forming a new variable from a set of existing variables by weighting each variable in the set (e.g., $Y = a_1X_1 + a_2X_2 + \dots + a_nX_n$, where X_i = variables and a_i = weights). In discriminant analysis, the relative size of the weights associated with each variable

indicates the relative contribution of each variable in separating or discriminating the groups from each other.

The basic idea of discriminant analysis is similar to regression analysis in which a linear combination of independent variables having the maximum correlation with the criterion or dependent variable is derived. For discriminant analysis one finds a linear combination of variables having the maximum association with groups. In the case of three or more criterion groups, more than one discriminant function might be needed to explain all of the differences between the groups. The maximum number of discriminant functions is equal to the lesser of the number of groups minus one or the number of variables. In the analyses for young males, there are four propensity groups and 13 variables; thus, three discriminant functions are possible. Since females have been classified into three propensity groups (recall that groups one and two were combined) and 13 variables were examined, only two discriminant functions are possible.

In discriminant analysis, the first discriminant function (i.e., linear combination of variables) accounts for the most variation between the groups and each succeeding independent discriminant function accounts for less variation. Each discriminant function can be tested for statistical significance, and only those functions meeting this criterion are retained for possible interpretation. Sometimes discriminant functions which are statistically significant because of a large sample size may account for so little group variation that their practical significance in describing group differences is limited.

Each discriminant function has a canonical correlation* associated with it. The canonical correlation indicates the extent to which the discriminant function scores are associated with group membership (in our case propensity groups). Like an ordinary correlation, a canonical correlation of zero would indicate that (propensity) group membership is not associated with discriminant function scores while a correlation of one would indicate that (propensity) group membership is perfectly associated with discriminant function scores. Put another way, a small canonical correlation would indicate large overlaps

*A canonical correlation is a multivariate extension of multiple correlation, involving two or more criterion variables.

in the discriminant function score distributions for the various (propensity) groups whereas a large canonical correlation would indicate little overlap or large separation among the discriminant score distributions for the various (propensity) groups.

There are two major indicators for interpreting results of discriminant analysis: the weights (and associated correlations) and the group means. The weights indicate the relative importance of each variable in discriminating or separating the groups (e.g., propensity groups), whereas the correlations are useful in interpreting the nature of the discriminant function much the same as in principal components analysis or factor analysis. The group means of the discriminant functions can be plotted to aid interpretation of the results. The positions of the group centroids (coordinates of the group discriminant function means) in the discriminant function space (defined by the x and y axes) allow one to see the relative distances of the groups from each other and their relative ordering on each of the discriminant functions. The ideal situation is to be able to describe virtually all of the group differences on the basis of one or two discriminant functions.

2. Specific Analyses

For the 1984 YATS II data, a discriminant function analysis was conducted separately for each of the RPGs for young males and for females. In addition, overall discriminant function analyses, aggregating across the five priority groups, were conducted separately for males and females. Consequently, there was a total of twelve discriminant function analyses.

For each discriminant analysis the following information is presented:

- a plot of the centroids (means of discriminant functions) of the propensity groups in the discriminant function space
- the discriminant function weights for the 13 variables for the first two discriminant functions
- the correlations of the 13 variables with the first two discriminant functions
- the percentage of between-group variation accounted for by each discriminant function
- the canonical correlation associated with each discriminant function

The analyses did not test the significance of the individual discriminant function weights although they did test the overall statistical significance

of each discriminant function. To give some idea of the significance of the individual variables in the discriminant functions, we have relied on results of some earlier multiple regression analyses. Two binary measures of propensity (positive versus negative and "definitely not" versus "probably not") were separately regressed upon the same 13 variables. The regression weights for each of the two analyses are proportional to discriminant function weights that would have been obtained if a series of two group discriminant function analyses had been conducted instead. Consequently, statistically significant regression weights indicate statistically significant discriminant function weights for the corresponding two group discriminant function. These significance levels were used to approximate the significance of the individual variables in linear discriminant function analysis and are presented in Tables 10.2 for young males and Table 10.5 for females. Note that these significance levels refer to the added discriminatory power of that variable over and above the remaining 12 variables in the model. Unfortunately, the significance level of the variable cannot be attached to a particular discriminant function, but it is more likely to be associated with the discriminant function with the largest weight.

C. Results for Young Males

1. Data Patterns

The results of the discriminant analyses for the five young male Recruiting Priority Groups (RPGs) and young males overall are summarized in Figure 10.1 and in Tables 10.2 - 10.4. Figure 10.1 shows plots of the discriminant function means (group centroids) using the two discriminant functions as axes; Table 10.2 reports discriminant function weights, percent of between group variation, and canonical correlations; Table 10.3 provides means for the propensity groups on the discriminant functions; and Table 10.4 presents correlations of the variables with the discriminant functions. A cursory examination of the six plots in Figure 10.1 indicates that for each case most of the variation in the group centroids is in the horizontal direction along the first discriminant function axis. This indicates that the first discriminant function is considerably more important than the second discriminant function (represented by the vertical axis) in distinguishing among the groups although in all cases both discriminant functions are highly significant.

Table 10.2. Discriminant Analyses Results for Young Male RPGs

Variable	Recruiting Priority Groups											
	Higher Aptitude H.S. Graduates Discriminant Function		Lower Aptitude H.S. Graduates Discriminant Function		College Students Discriminant Function		Young H.S. Students Discriminant Function		Non-Completers Discriminant Function		Overall Discriminant Function	
	I	II	I	II	I	II	I	II	I	II	I	II
	(n=829)		(n=1043)		(n=1395)		(n=683)		(n=729)		(n=4679)	
AGE	-.326	.342 ³	-.217	.414 ²	-.180	.318 ³	.128	.480	-.106	-.137	-.266	.658 ¹
RACE	.161	.365 ³	.250	.645 ¹	.186	.132 ²	.182	.454	.103	-.282	.181	.499 ¹
PARENTED	-.236	-.138 ²	.024	.022	.017	.477	-.111	.138	-.194	.002	-.098	-.042 ³
HSCURR	.102	.039	.147	-.234	.006	.488	.066	-.292	.052	.524	.083	-.140 ³
NTECHCRS	-.288	.295	-.017	-.061	-.042	.084	.014	.161	.027	-.289	-.055	.319
DRAFTREG	-.119	-.542 ²	.030	.018	.077	-.241	.090	.493	-.077	.065	.000	-.146 ²
OTHERFEEL	.018	.446	.073	-.440	.164	.422 ²	.179	-.091	.229	-.043	.140	.072 ¹
PERSFEEL	.844	.120 ¹	.821	.300 ¹	.872	.014 ¹	.791	-.203 ¹	.864	-.168 ¹	.829	.180 ¹
MILJOBSAT	.267	-.324 ³	.403	-.332 ¹	.214	-.259 ²	.210	-.403 ¹	.185	.369	.239	-.366 ¹
ENTREXAM	.024	.218	.092	.268	.224	.136 ²	.141	.049	-.105	-.542	.149	.342
MEDIAEXP	.237	-.364 ³	.008	-.092	.042	.040	-.083	-.179	-.007	.336	.019	-.427
SLOGANS	.123	.067	.167	-.368 ³	.087	-.436	.125	.321	.155	-.293 ³	.132	.046 ²
LOOKJOB	.076	.055	.051	.080	.067	-.349	.266	.280 ²	.255	.281 ³	.136	.026 ¹
Percent of Between Group Variation	83 ¹	12 ¹	88 ¹	7 ¹	93 ¹	5 ³	88 ¹	8 ³	82 ¹	12 ¹	95 ¹	3 ¹
Canonical Correlation	.53	.23	.54	.18	.55	.16	.56	.21	.52	.19	.56	.12

Note: Entries for named variables are weights which indicate the relative importance of the variables in forming the linear composite for the discriminant function.

¹Significant at .001 level.

²Significant at .01 level.

³Significant at .05 level.

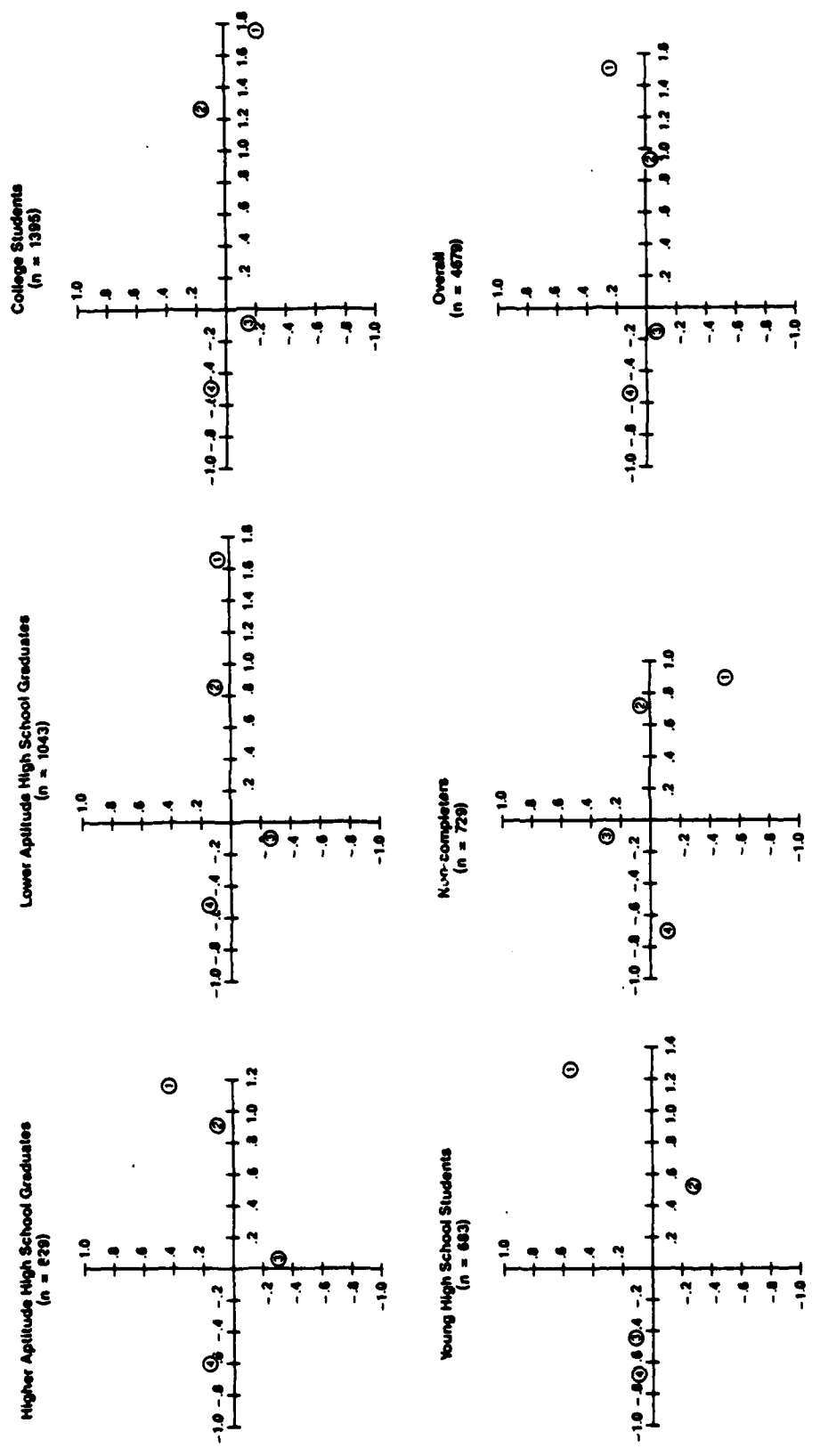


Figure 10-1. Propensity Group Centroids on the Discriminant Functions for Young Male RPGs.

The horizontal axis depicts discriminant function I, an attitudinal dimension, and the vertical axis depicts discriminant function II, an age/race dimension. The centroids are the plotted means of the two functions for the respondents in each category of Composite Active Propensity. The centroid labels are ① = definitely will serve, ② = probably will serve, ③ = probably will not serve, and ④ = definitely will not serve.

Table 10.3. Propensity Group Means for Discriminant Functions for Young Male RPGs

Propensity Group ^a	Recruiting Priority Groups											
	Higher Aptitude H.S. Graduates Discriminant Function		Lower Aptitude H.S. Graduates Discriminant Function		College Students Discriminant Function		Young H.S. Students Discriminant Function		Non-Completers Discriminant Function		Overall Discriminant Function	
	I	II (n)	I	II (n)	I	II (n)	I	II (n)	I	II (n)	I	II (n)
1 Definitely	1.1648	.4090 (45)	1.633	.072 (50)	1.771	-.212 (41)	1.260	.447 (74)	.926	-.538 (51)	1.482	.213 (261)
2 Probably	.8888	.0908 (165)	.826	.088 (217)	1.231	.156 (201)	.545	-.253 (225)	.743	.026 (214)	.931	-.012 (1022)
3 Probably Not	.025	-.336 (273)	-.151	-.259 (354)	-.077	-.193 (522)	-.433	.074 (222)	-.121	.316 (208)	-.174	-.149 (1579)
4 Definitely Not	-.600	.158 (346)	-.548	.163 (422)	-.489	.119 (631)	-.709	.039 (162)	-.714	-.163 (256)	-.585	.105 (1817)

Note: Entries are mean scores (n's in parentheses) for the discriminant function linear composites. Plots of pairs of these values represent the group centroids in Figure 10.1.

^aRefers to responses on Composite Active Propensity.

Table 10.4. Correlation of Variables with Discriminant Functions for Young Male RPGs

Variable	Recruiting Priority Groups											
	Higher Aptitude H.S. Graduates Discriminant Function		Lower Aptitude H.S. Graduates Discriminant Function		College Students Discriminant Function		Young H.S. Students Discriminant Function		Non-Completers Discriminant Function		Overall Discriminant Function	
	I	II	I	II	I	II	I	II	I	II	I	II
AGE	.39	.21	-.22	.37	-.22	.22	.19	.36	-.16	.02	-.30	.46
RACE	.23	.45	.36	.59	.27	.17	.30	.35	.25	-.32	.29	.53
PARENTED	-.28	-.15	-.12	-.07	-.07	.35	-.32	.24	-.29	.00	-.23	-.14
HSCURR	.21	.10	.15	-.13	.08	.47	.17	-.37	.12	.56	.17	-.04
NTECHCRS	-.30	.20	-.08	-.10	-.18	-.04	-.13	.18	.02	-.32	-.14	.08
DRAFTREG	.11	-.45	.32	-.05	.30	-.16	.34	.30	.20	.06	.24	-.15
OTHERFEEL	.40	.38	.50	-.22	.61	.31	.61	-.12	.61	-.04	.58	.11
PERSFEEL	.80	.13	.88	.12	.91	.04	.88	-.14	.91	-.08	.89	.05
MILJOBSAT	.41	-.26	.54	-.25	.43	-.25	.48	-.33	.38	.29	.44	-.28
ENTREXAM	.18	.21	.22	.27	.33	.15	.26	.02	.09	-.32	.34	.25
MEDIAEXP	.13	-.40	.04	-.16	-.04	-.05	-.05	-.09	-.01	.39	-.09	-.42
SLOGANS	.13	-.07	.12	-.37	.07	-.38	.08	.36	.13	-.21	.06	-.08
LOOKJOB	.22	.11	.14	.11	.16	-.31	.37	.24	.39	.23	.29	.06

Note: Correlation coefficients are a measure of linear relationship that can range from -1.00 to 1.00, with higher numbers (either positive or negative) indicating stronger relationships. A correlation of 0 between two variables means that each variable has no linear predictive ability for the other.

Observations from Figure 10.1 can be verified by referring to the corresponding data in Table 10.2 on the percent of the total between-group variation associated with the first (largest) discriminant functions. This varies between 82 percent for Non-completers to 93 percent for College Students and is 95 percent for the overall analysis.

Table 10.2 shows that the canonical correlations associated with the first discriminant function for each RPG ranged from .52 for Non-completers to .56 for Young High School Students. The sizes of the canonical correlations indicate that there was substantial separation among the propensity groups on the first discriminant function. The canonical correlations associated with the second discriminant function were predominantly in the teens and low twenties indicating low separation of the propensity groups on the second discriminant function. The plots along with these statistics indicate the large separation among propensity groups on the first (largest) discriminant function.

Figure 10.1 also shows that the propensity groups are clearly ordered left to right on the first discriminant function from lowest propensity to highest propensity in all six instances. Members in the highest propensity group (definitely will serve) have the highest mean score on this function, whereas members in the lowest propensity group (definitely will not serve) have the lowest mean score. Propensity groups 2 (probably will serve) and 3 (probably will not serve) have the second and third highest mean scores, respectively, on this discriminant function. Although the discriminant function score distribution for individuals across propensity groups will overlap, there will be less overlap in individual score distributions the further the propensity group centroids are from each other. For example, there will be more overlap in the discriminant function scores for propensity groups 3 and 4 than between propensity groups 1 and 4. If one attempted to assign the male respondents to propensity groups on the basis of their discriminant function scores, there would be more misclassifications between neighboring groups (e.g., groups 3 and 4) than between distant groups (e.g., groups 1 and 4).

In general, the four centroids tend to form two clusters, one composed of the two negative propensity groups and the other composed of the two positive propensity groups. Stated another way, there is a larger separation in group centroids between the negative and positive propensity groups than there is between the two negative propensity groups and between the two positive propensity groups.

Although the four propensity groups form two loose clusters, the two group centroids of the negative propensity groups were significantly different at the .001 level as were the centroids of the two positive propensity groups. The differences among all four propensity groups were significantly different from each other at the .001 level.

2. Discriminant Function 1: An Attitudinal Dimension

For all six discriminant analyses, the first (and largest) discriminant function seemed to be an attitudinal dimension. The variable that consistently had the largest weight by far on this function was the item measuring favorability toward serving in the active military (PERSFEEL).^{*} The composite of perceived military benefits weighted by their importance to the individual also had a relatively large weight in most of the analyses (MILJOBSAT). It had the second largest weight for Low Aptitude High School Graduates; the third largest weight for College Students, Young High School Students and overall; the fourth largest weight for High Aptitude High School Graduates; and the fifth largest weight for Non-completers. These were the only variables that were consistently significant across all six analyses.

While the discriminant function coefficients are useful in that they indicate the additional contribution of the respective variables in discriminating among the propensity groups, the correlations of the variables with the discriminant functions can be more useful in interpreting the underlying nature of the discriminant function. It can be seen from Table 10.4, that the correlation of favorability towards serving in the active military (PERSFEEL) with the first discriminant function ranges from .80 to .91 for the RPGs. These extremely high correlations indicate that this single attitudinal variable alone could be used to represent this discriminant function. With a correlation of .90 there would be little loss of discriminatory power.^{**}

^{*}Recall that discriminant function weights are like regression weights in that the coefficient is adjusted for the contributions of the remaining variables in maximizing between-group variation.

^{**}It is important to recognize that although there is a strong relationship between PERSFEEL and propensity, PERSFEEL is an attitude variable and quite distinct conceptually from the criterion variable, propensity, which is a measure of behavioral intentions (see Fishbein and Ajzen, 1975). To verify that the first discriminant function is best described as an attitudinal dimension, the analyses were rerun omitting the PERSFEEL variable. The reduced model showed the same basic pattern of results as in the original model with attitudinal variables playing the major role in discriminating among the propensity groups. As expected, however, the reduced model showed a significant loss of discriminability among the propensity groups both for young male analyses and for female analyses.

The other variables that have high correlations with this dimension across the six male analyses are the perceived military benefits composite (MILJOBSAT) and the perceived attitude of significant others towards the military (OTHERFEEL). The correlations of the perceived military benefits composite with the first discriminant function ranged from .38 (Non-Completers) to .54 (Lower Aptitude High School Graduates). It would be expected that individuals favorably disposed to the military would also be more likely to value perceived benefits of the military. The correlations of the perceived attitude of significant others towards individuals joining the military (OTHERFEEL) with the first discriminant function ranged from .40 (High Aptitude High School Graduates) to .61 (College Students, Young H.S. Students, and Non-completers). This variable reflects normative influences on the respondent.

The consistently high correlations of the PERSFEEL, OTHERFEEL, and MILJOBSAT variables with the first discriminant function across the six analyses indicate that the first discriminant function defines an attitudinal dimension. The remaining variables which are a mixture of sociodemographic and advertising awareness variables have consistently lower correlations with the first discriminant function across all of the analyses. In addition, their discriminant function weights are in most instances statistically insignificant. These results clearly illustrate that attitudes and perceptions substantially dominate sociodemographic type variables in the prediction of propensity.

3. Discriminant Function 2: An Age/Race Dimension

The second discriminant function, while statistically significant in all six analyses, has lesser importance. The percentage of between group variation accounted for by the second discriminant function ranged from 3 percent (overall analysis) to 12 percent (Higher Aptitude High School Graduates and Non-completers), with the percentages for the remaining three RPGs falling into the 5 to 8 percent range.

The second discriminant function was similar across the priority groups in that non-attitudinal variables (i.e., sociodemographic and advertising awareness variables) had the highest weights in the discriminant function and the largest correlations with it. However, there was little similarity in the nature of this dimension across the groups as evidenced from either the pattern of discriminant weights or the correlations. Many of the variables had insignificant weights on this function, suggesting that some of the differences across the RPGs may simply be due to sampling variation.

There was a tendency for age and, especially, race to be among the more important variables defining the second discriminant function as evidenced from inspection of the weights (Table 10.2) and correlations (Table 10.4). This was especially true for Lower Aptitude High School Graduates (correlations of race and age with the second discriminant function were .59 and .37, respectively); Higher Aptitude High School Graduates (correlations were .45 and .21, respectively); and Young High School Students (correlation of .35 and .36, respectively). However, each of the five RPG groups had a different rank ordering of the propensity groups on the second discriminant function. Since the units are unstable across the RPG groups we will focus most of our interpretation on the overall analysis.

The overall discriminant analysis for young males, which tends to balance out the idiosyncrasies of the individual RPGs, also showed that race and age had the largest weights for the second discriminant function and the largest correlation with it (.53 and .46, respectively). The level of media exposure had the third largest discriminant weight and the third highest correlation (-.42).

For the overall analysis, the "definitely will join" and the "definitely will not join" propensity groups had the highest mean scores on this dimension while the "probably will" and "probably will not" propensity groups had the lowest scores. Consequently, this dimension contrasts those who have definitely made up their minds one way or the other with those who have not definitely made up their minds. Thus, the high positive weights for age and race indicate that older non-whites had a more definite propensity, either positive or negative, towards the military while younger whites had a less definite propensity, either positive or negative. Note that the first discriminant function rank orders the groups in terms of propensity so that we would expect age and race to have opposite signs. From the nature of the second discriminant function, age and race would not necessarily be expected to have the same sign.

In summary, the discriminant analyses for young males suggest that most of the between group variation (82 to 95 percent) among the four propensity groups is associated with a psychological dimension reflecting attitudes and perceptions about the military. The small amount of remaining between-group variation is associated with a second discriminant function that is defined by a mixture of sociodemographic variables with age and race being among the more prominent ones.

D. Results for Females

1. Data Patterns

The sample sizes for the female RPGs were roughly one-third of the size of the corresponding male groups. As mentioned earlier, the two positive propensity groups were combined because there were only a few cases in the "definitely will join" propensity groups. Thus, three propensity groups rather than four were defined for the female discriminant function analyses: (1) definitely or probably will join; (2) probably will not join; and (3) definitely will not join.

As in the case of the young males, a linear discriminant function analysis was conducted separately for each of the five RPGs as well as the overall female sample. Since there were three propensity groups, only two linear discriminant functions were possible. Results showed that only the first discriminant function was significant for all six analyses (Table 10.5). It accounted for between 92 and 97 percent of the between-group variation across the five RPGs and for 99 percent of the between group variation for the overall analysis.

Figure 10.2 shows the centroids of the three propensity groups in the discriminant function space of the two discriminant functions for each of the six analysis groups (group means for the discriminant functions appear in Table 10.6). Even though the variation in the direction of the second discriminant function was not statistically significant, it was retained in the figure for ease of comparison with the young male analyses presented above. For all six analyses, the three propensity groups were ordered by propensity on the first discriminant function. Respondents in the positive propensity group had the highest mean on the linear composite defining the largest linear discriminant function, and respondents in the "definitely not" propensity group had the lowest mean score. The mean of the "probably not" propensity groups was between the other two propensity groups. In all six analyses, the differences in the centroids among the three propensity groups were statistically significant. However, in some instances the "probably not" propensity group was equidistant from the "definitely not" and positive propensity groups; in other instances, the two negative propensity groups were significantly closer to each other than either one was to the positive propensity group. That is, in some instances the negative propensity groups tended to cluster in the discriminant function space; in other instances, all groups were equidistant.

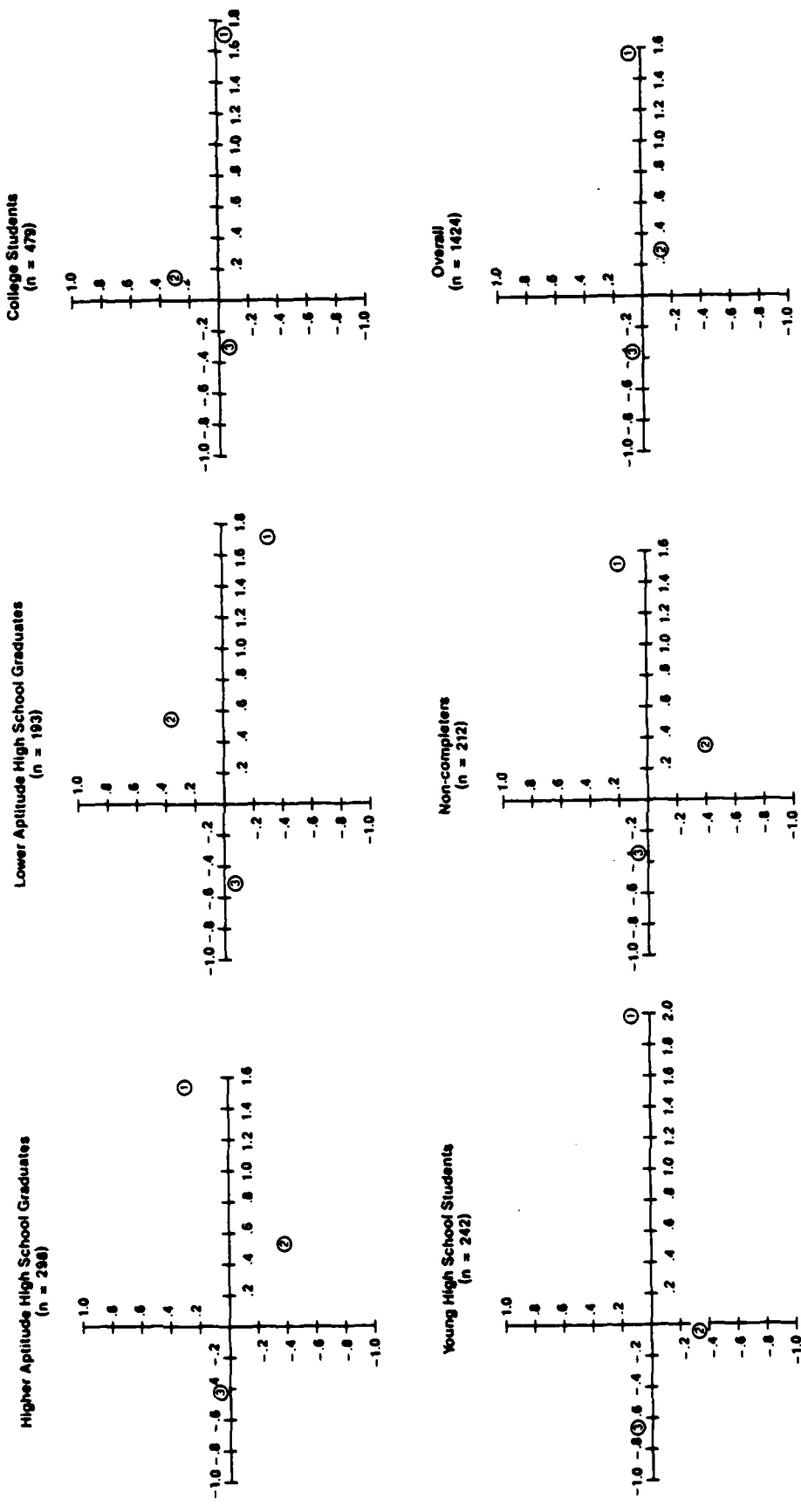


Figure 10-2. Propensity Group Centroids on the Discriminant Functions for Female RPGs.

The horizontal axis depicts discriminant function I, an attitudinal dimension, and the vertical axis depicts discriminant function II (nonsignificant for females). The centroids are the plotted means of the two functions for the respondents in each category of Composite Active Propensity. The centroid labels are ① = definitely will or probably will serve, ② = probably will not serve, and ③ = definitely will not serve.

Table 10.5. Discriminant Analysis Results for Female RPGs

Variable	Recruiting Priority Groups											
	Higher Aptitude H.S. Graduates Discriminant Function		Lower Aptitude H.S. Graduates Discriminant Function		College Students Discriminant Function		Young H.S. Graduates Discriminant Function		Non-Completers Discriminant Function		Overall Discriminant Function	
	I	II	I	II	I	II	I	II	I	II	I	II
	(n=298)		(n=193)		(n=479)		(n=242)		(n=212)		(n=1424)	
AGE	-.224	.210	-.139	.184	-.062	.104	-.275	-.023 ¹	.149	.340	-.160	.413 ³
RACE	.295	.489 ³	.084	-.249	.117	-.126	.174	.408	.560	.487 ²	.197	.667 ²
PARENTED	-.169	.544	.111	.383	-.203	.312 ²	-.063	.107	-.139	.390	-.130	-.034
HSCURR	-.125	.062	.036	.142	.067	.879	.267	.568 ²	.203	.337	.105	.065
NTECHCRS	-.014	-.176	-.026	-.097	.092	.482	.071	.285	.272	-.042	.122	-.079
DRAFTREG	.150	-.163	-.063	.191	-.180	-.042	.095	.319	.087	-.415	-.023	-.251
OTHEREEEL	-.167	.278	.146	-.491	.182	.001	.051	-.223	-.038	.117	.065	.334
PERSFEEL	.989	-.091 ¹	1.075	.349 ¹	.948	-.311 ¹	1.166	-.068 ¹	.840	-.292 ¹	.990	-.216 ¹
MILDOBSAT	.125	.388 ³	.223	.274	.142	.339	.107	-.716	.010	.261	.150	-.337 ³
ENTREXAM	.024	-.088	.356	-.524 ¹	-.142	.200	.016	.016	-.081	.379	.022	-.015
MEDIAEXP	.182	-.613	.037	-.460	-.160	.006	-.014	.033	.384	-.143 ³	.061	-.241
SLOGANS	-.083	-.215	.025	.151	.166	.076	.289	.326	-.017	.015	.073	.061
LOOKJOB	.063	.086	-.007	.097	.178	.052	.202	.231	-.041	-.190	.115	.005

Percent of Between Group Variation	93	7	93	7	97	3	96	4	92	8	99	1
Canonical Correlation	.56 ¹	.19	.61 ¹	.21	.54 ¹	.15	.70 ¹	.20	.54 ¹	.18	.55 ¹	.06

Note: Entries for named variables are weights which indicate the relative importance of the variables in forming the linear composite for the discriminant function.

¹Significant at .001 level.

²Significant at .01 level.

³Significant at .05 level.

Table 10.6. Propensity Group Means for Discriminant Functions for Female RPGs

Propensity Group ^a	Recruiting Priority Groups																	
	Higher Aptitude H.S. Graduates Discriminant Function		Lower Aptitude H.S. Graduates Discriminant Function		College Students Discriminant Function		Young H.S. Students Discriminant Function		Non-Completers Discriminant Function		Overall Discriminant Function							
	I	II	(n)	I	II	(n)	I	II	(n)	I	II	(n)	I	II	(n)			
1 Probably or Definitely	1.586	.276	(35)	1.725	-.332	(28)	1.704	-.127	(55)	1.951	.112	(41)	1.511	.193	(27)	1.546	.069	(186)
2 Probably Not	.544	-.383	(54)	.598	.394	(39)	.159	.289	(97)	-.020	-.362	(59)	.353	-.411	(37)	.292	-.129	(286)
3 Definitely Not	-.404	.051	(209)	-.501	-.062	(126)	-.334	-.067	(327)	-.662	.118	(142)	-.363	.058	(148)	-.392	.025	(952)

Note: Entries are mean scores (n's in parentheses) for the discriminant function linear composites. Plots of pairs of these values represent the group centroids in Figure 10.2.

^aRefers to responses on Composite Active Propensity.

2. Discriminant Function 1: An Attitudinal Dimension

As in the male analyses, the first discriminant function defined an attitudinal dimension. Attitudes towards joining the military (PERSFEEL) had the largest weight in the linear composite of the 13 variables defining the discriminant function and the highest correlation with it (Table 10.7). Except for Non-completers, all of the correlations of attitude towards joining the military with the first discriminant function were in the low .90's. It was .94 in the overall analysis.

In general, the first discriminant function was similar for the male and female analyses. Propensity groups were ordered by propensity on this function. The correlation of attitude toward serving in the military (PERSFEEL) with this dimension was somewhat higher for females than for males. In all but one analysis (.78 for Non-completers), this attitude variable alone would do nearly as good a job in discriminating among the three propensity groups as the linear discriminant function (which is a weighted linear combination of all 13 variables). Perceived attitude of significant others towards the respondent joining the military (OTHERFEEL) and the perceived satisfaction with the military (MILJOBSAT) also tended to have low to moderate correlations with the first linear discriminant function. However, these correlations tended to be lower in the female than in the male analyses. Race also had low to moderate correlations with this dimension, reflecting the observation that non-whites tend to have a more favorable attitude toward the military and a higher enlistment propensity than whites.

In general, the demographic variables were not as important in discriminating among the propensity groups for females as they were for males. This occurs primarily because the first discriminant function in the female analyses reflected an attitudinal dimension which explained virtually all of the variation among the three propensity groups. The second discriminant function, defined more by sociodemographic variables than attitudinal variables, was not statistically significant in the female analyses. Sociodemographic variables were less important for females than for males in explaining propensity group membership.

For both female Recruiting Priority Groups 1 and 2 (Lower and Higher Aptitude Graduates), the "probably not join" propensity group was equidistant from the "definitely not" and positive propensity groups, indicating that all three propensity groups were quite different from each other. For the remaining three female RPGs, the two negative propensity groups were more similar to one another than they were to the positive propensity group.

Table 10.7. Correlation of Variables with Discriminant Functions for Female RPGs

Variable	Recruiting Priority Groups											
	Higher Aptitude H.S. Graduates Discriminant Function		Lower Aptitude H.S. Graduates Discriminant Function		College Students Discriminant Function		Young H.S. Students Discriminant Function		Non-Completers Discriminant Function		Overall Discriminant Function	
	I	II	I	II	I	II	I	II	I	II	I	II
AGE	-.19	.05	-.17	.06	-.13	-.07	-.13	.00	.11	.24	-.17	.44
RACE	.46	.44	.28	-.23	.35	-.06	.25	.21	.55	.41	.39	.66
PARENTED	-.24	.36	.04	.39	-.20	.27	-.26	.11	-.20	.30	-.18	-.25
HSCURR	-.02	.20	-.03	.09	.26	.70	.31	.37	.19	.23	.15	.23
NTECHCRS	.01	-.02	-.05	-.07	.03	.32	.04	.12	.21	.08	.07	-.22
DRAFTREG	.27	-.18	.08	.31	-.01	-.11	.23	.09	.23	-.46	.13	-.29
OTHEREFEEL	.32	.32	.53	-.21	.57	-.03	.42	-.33	.37	.06	.48	.27
PERSFEEL	.91	.06	.92	.17	.92	-.08	.91	-.17	.78	-.33	.94	-.05
MILJOBSAT	.29	.34	.35	.25	.33	.28	.39	-.58	.24	.07	.35	-.34
ENTREXAM	.01	-.04	.22	-.55	.16	.12	.05	.05	.05	-.42	.13	.12
MEDIAEXP	.27	-.44	-.03	-.41	-.18	-.01	.07	-.02	.23	-.06	.03	-.24
SLOGANS	-.07	-.24	.05	.11	.09	.08	.10	.32	.17	-.10	.06	-.08
LOOKJOB	.22	.10	.09	.02	.21	.04	.26	.18	.09	-.33	.21	.06

Note: Correlation coefficients are a measure of linear relationship that can range from -1.00 to 1.00, with higher numbers (either positive or negative) indicating stronger relationships. A correlation of 0 between two variables means that each variable has no linear predictive ability for the other.

An implication of this is that it may be easier to convert the members of the "probably not join" propensity group in the former two RPGs to a positive propensity status than it would be to make a similar conversion for the latter three RPGs. More recruiting effort aimed at the Higher Aptitude High School Graduates may pay off.

Consideration of the discriminant analyses results for males and females suggests some implications for recruiting activities. Both sets of analyses showed a strong attitudinal dimension associated with reports of propensity. The analyses quantified the degree to which respondents with positive attitudes tended to have positive propensity toward serving and the degree those with negative attitudes tended to have negative propensity. The implication for recruiting is that increases in positive propensity might be achieved by creating favorable attitudes toward serving or by changing negative attitudes to positive attitudes toward serving. This confirms the notion that recruiting approaches (e.g., media advertising, recruiter strategies) could be aimed at fostering positive feelings toward military service. Moreover, the implication that attitude is more important than particular demographic variables tends to support the notion that recruiting approaches and advertising may be general, as opposed to specifically tailored to various populations.

To create favorable attitudes or to change negative attitudes requires a careful analysis of approaches or strategies used to communicate about the military. Where needed, these approaches could be modified using established principles of attitude formation and change based on current ongoing studies. Media advertising, for example, should continue to be examined to determine the relationship between communication objectives and messages and the subsequent effects of the advertising on respondents' beliefs and attitudes. Media effectiveness studies should focus on the nature of the attitudes for those who are negative. It is important to know the intensity with which negative attitudes are held and the beliefs underlying the attitudes. Moderately negative attitudes will be easier to change than strongly negative attitudes. Understanding the belief structure of individuals with negative attitudes will provide a basis for targeting change efforts.

E. Summary

Multivariate discriminant analyses were conducted to determine how well individuals who answer "definitely," "probably," "probably not," or "definitely not" on Composite Active Propensity can be distinguished. Thirteen variables

were used as the basis for discriminating among the propensity groups. The variables included sociodemographic (e.g., age, race, parents' education) and related variables (e.g., whether looking for work, number of technical courses taken in high school), attitudinal variables (e.g., feelings about draft registration, about service in the military, about perceived benefits of the military), and media variables (e.g., number of slogans recognized and exposure to advertising media).

For young males and females, separate discriminant analyses were conducted for each of the five RPGs and overall for the entire sample. Analyses for males were used to discriminate among the four propensity groups, whereas analyses for females were used to discriminate among three propensity groups ("definitely" and "probably" respondents were combined because of small sample sizes). Results of the analyses for young males and females are noted below.

1. Results for Young Males

- Analyses for each RPG and the overall sample of young males showed two significant discriminant functions: an attitudinal dimension and a sociodemographic dimension.
- The attitudinal dimension was the more important of the two functions and accounted for approximately 80 to 95 percent of the explained variation among propensity groups. Correlations of attitudes toward serving in the military with this dimension ranged from about .80 to .90. Other attitudinal and belief variables were also related to the first discriminant function.
- All four propensity groups were clearly distinguished and ordered along the attitudinal dimension. The "definitely not" propensity group had the most negative attitudes, whereas the "definitely" propensity group had the most positive attitudes.
- The two positive propensity groups and the two negative propensity groups tended to cluster. Distances between the "probably not" and "probably" propensity groups were larger than distances between the "probably not" and "definitely not" groups or between the "probably" and "definitely" groups.
- The sociodemographic dimension accounted for about 5 to 12 percent of the variation among propensity groups. This function was defined primarily by race and age variables, but the

pattern of weights and correlations differed substantially across RPGs. Those who were non-white and older were more likely to be in the definite propensity groups.

- The suggestion of the discriminant analyses findings is that increases in positive propensity might be achieved by creating favorable attitudes toward serving in the military or by changing negative attitudes to positive attitudes toward serving.

2. Results for Females

- Analyses for each RPG and the overall sample for females showed one significant discriminant function: an attitudinal dimension. Sociodemographic variables were less important for females than for males.
- The attitudinal dimension was strongly related to attitudes toward serving in the military. Correlations of this variable with the first discriminant function were generally in the .90s for the RPGs.
- As with males, propensity groups were clearly ordered and distinguished along the attitudinal dimension. The "definitely not" group had the most negative attitude and the "positive" group had the most positive attitude.

REFERENCES

- Bray, R.M., Guess, L.L., Marsden, M.E., Mason, R.E., & Smith, D.G. (1984). Youth Attitude Tracking Study II, Fall 1983 (RTI/2622/05-02FR). Research Triangle Park, NC: Research Triangle Institute.
- Cheatham, C.W. (1978). The high school graduate, an indicator of a quality Marine? Master's thesis, U.S. Army Command and General Staff College, Fort Leavenworth, KS.
- Cochran, W.G. (1963). Sampling techniques (2nd ed.). New York: John Wiley and Sons.
- Cox, W.G. (1977). Sampling Techniques (3rd ed.). New York: John Wiley and Sons.
- Department of Defense. (1978). America's volunteers. A report on the All-Volunteer Armed Forces. Washington, DC: Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).
- Department of Defense. (1981). Implementation of new Armed Services Vocational Aptitude Battery and actions to improve the enlistment standards process. Report to the House and Senate Committees on Armed Services. Washington, DC: Office of the Assistant Secretary of Defense.
- Fishbein, M. & Ajzen, I. (1975). Belief, attitude, intention and behavior. Reading, MA: Addison-Wesley.
- Immerman, F.W. & Mason, R.E. (1984). Sampling Design, Youth Attitude Tracking Study, 1984 (RTI/2927/02-01W). Research Triangle Park, NC: Research Triangle Institute.
- Kendall, M.G., & Stuart, A. (1966). The advanced theory of statistics (Vol. 3). New York: Hafner Publishing Company.
- Kish, L. (1965). Survey Sampling. New York: John Wiley and Sons.
- Konijn, H.S. (1973). Statistical theory of sample survey designs and analysis. New York: American Elsevier Publishing Company, Inc.
- Mason, R.E. (1984). Estimation Procedures, 1984 Youth Attitude Tracking Study (RTI/2927/7-01S). Research Triangle Park, NC: Research Triangle Institute.
- Orvis, B.R. (1982). Forecasting enlistment actions from intention information: Validity and improvement (N-1954-MRAL). Santa Monica, CA: Rand.
- Orvis, B.R. & Gahart, M.T. (1985). Relationship of enlistment intention and market survey information to enlistment in active duty military service (N-2292-MIL). Santa Monica, CA: The Rand Corporation.

- Reeg, F.J. (1981). United States Navy enlisted qualifications/quality. Washington, DC: U.S. Navy Recruiting Command.
- Shah, B.V., Holt, M.M., & Folsom, R.E. (1977). Inferences about regression models from sample survey data (Reprint series no. S144). Research Triangle Park, NC: Research Triangle Institute
- Simmons, D.M. (1975). Nonlinear programming for operations research. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Toomepuu, J. (1981). Soldier-capability-Army combat effectiveness (SCACE), Vol. I, Main Report (ACN64024). Fort Benjamin Harrison, IN: U.S. Army Soldier Support Center, USAREC.
- Vitola, B.M., Guinn, N., & Wilbourn, J.M. (1977). Impact of various enlistment standards on the procurement-training system (AFHRL-TR-77-6). Brooks Air Force Base, TX: Air Force Human Resources Laboratory.
- Waksberg, J. (1978). Sampling methods for random digit dialing. Journal of the American Statistical Association, 73(36), 40-46.

Appendix A

Sampling Design and Estimation Procedures

Appendix A

Sampling Design and Estimation Procedures

This appendix summarizes the main elements of the sampling design and the estimation procedures for the 1984 YATS II survey. Additional details about the procedures appear in technical reports by Immerman and Mason (1984) and by Mason (1984).

A. Populations of Inferential Interest

The 1984 YATS survey was designed to provide estimates of parameters describing three populations, defined as follows:

- males aged 16 to 21 years
- females aged 16 to 21 years
- males aged 22 to 29 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 not more than two years of college.

The population parameters upon which the sampling design is based are the proportions of each population having a propensity toward active duty service. The 1983 YATS survey provided the propensity proportions used to design the 1984 sample.

B. Design Requirements

The YATS survey data provide national level estimates of parameters describing each of the three 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 1984 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



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

Market/Reporting Domain	Required Precision ¹
<u>Young Males</u>	
National level estimates	0.01000
Estimate for any MUD ² with a total population	
<100,000	0.10000
100,000 - 149,999	0.10000
150,000 - 199,999	0.10000
200,000 - 249,999	0.07500
250,000 - 299,999	0.05000
300,000 - 499,999	0.05000
≥ 500,000	0.05000
Estimates for Advertising Mix Test Cells	
Test Cell A, White	0.02875
Test Cell B, Blue	0.02875
Test Cell C, Green	0.02875
Test Cell D, Red	0.02875
<u>Older Males</u>	
National level estimates	0.01805
<u>Females</u>	
National level estimates	0.01805

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).

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.

The reporting domains identified as Test Cells in Table A.1 are associated with a program to evaluate the effectiveness of military advertising, the joint advertising mix test. The evaluation is performed using the YATS II sample data, requiring the imposition of precision constraints on the test cells constructed for the evaluation in addition to the MUD and national level constraints.

C. Sampling Design

The 1984 YATS II sampling design for young males is a modified difference design in which two independent samples are selected. Difference designs are used to increase efficiency in repeated surveys such as YATS (Cox, 1977; Konijan, 1973). The modification developed by RTI minimizes the variance of the resultant estimates.

One sample, the callback sample, was selected from the frame developed for YATS 1983. Sampling units are defined in terms of sample clusters (i.e., the first eight digits of telephone numbers) identified in YATS 1983 as containing one or more telephone numbers associated with households. Within selected clusters, all households* identified in 1983 as containing one or more eligible young males are included in the sample.

The sampling design for the other young male sample, the new sample, as well as for older males and females, can be described as a stratified, two-stage 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. 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.

*Note that the callback sample was not restricted to households that appeared in the test cells for the advertising mix test.

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.

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 and made maximal use of the callback frame information. 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 females. This inefficiency was overcome by fielding the sample in waves. The size of the first wave was determined based on expectations of the number of female eligibles likely to be identified, such that the targeted sample size for females would be met. As planned, interviews would be collected from young males and older males in both waves, and from females in the first wave only.

Following several weeks of survey implementation, it became apparent that the expected number of callback respondents would not be achieved. To remedy this situation, cluster sizes in all new sample clusters were increased to compensate for the reduced number of callback respondents. The additional households in each cluster were treated as a third wave, in which only young males were interviewed.

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. Although the procedure is known to generate a self-weighting sample within 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 non-linear statistics are computed using first order Taylor series linearizations (Shah et al., 1977).

For young males, the estimation process is complicated by the fact that the sample actually consisted of two independent samples, one drawn from the 1983 YATS frame and the other from the 1984 frame. Computation of unbiased estimates and their associated variances requires that this fact be taken into account in the estimation procedure.

The use that can be made of an earlier frame is limited by the fact that the correspondence between households and telephone numbers changes in both directions. Several operational possibilities exist. One is to call only those telephone numbers that yielded at least one eligible person in the earlier survey. If the number of eligible persons was successfully determined in most of the households, such that cumulative missing data problems are not severe, proceeding along these lines would be expected to be somewhat more efficient than other operational choices.

The population surveyed by calling only those households previously containing at least one eligible person is obviously some subset of the population of inferential interest. A recalled telephone number may or may not yield a household. An identified household may or may not be the same household as previously identified and may or may not produce eligible persons. An identified eligible person may or may not be the same individual previously identified. Considering these points jointly, the population surveyed using the previous frame can be operationally defined in terms of persons:

- a) residing in households or noninstitutional group quarters with telephones (i.e., following the definitions established for the YATS population of inferential interest) that are,
- b) accessed by the same number at both the previous and the current times of the survey (but need not be the same individuals interviewed in the previous survey),
- c) eligible for participation in the YATS at both times.

Parameters describing this population have unknown biases with respect to the population of inferential interest. Unbiased parameter estimates are, of course, available from sample data obtained using the current frame. Further, the biased parameters can also be estimated using the current frame if sample individuals who are also members of the population surveyed using the previous frame are identified. Differences between all individuals in the current sample and the subset of individuals who are contained in the previous frame but are also in the current sample provide the information needed to estimate the biases. Combining this information with the sample data obtained using the previous frame in the form of a difference estimator provides unbiased estimates of parameters describing the population of inferential interest.

Hence, two unbiased estimates, the difference estimate and the estimate obtained using only the current information, are available for every parameter. The two estimates can, in general, be arbitrarily averaged to produce the final unbiased parameter estimate. The particular average chosen is reasonably based on variance considerations, choosing the average having the smallest variance.

The modified difference estimator used to combine the information from each frame can be written as the sum of three components. To estimate a domain total \hat{T} , the estimator takes the form,

$$\beta \hat{T}_a + (1 - \beta) \hat{T}_b + \hat{T}_c,$$

- where
- \hat{T}_a = the estimated domain total based on the callback sample
 - \hat{T}_b = the estimated domain total based on the subset of the new sample that also belonged to the population surveyed using the 1983 frame
 - \hat{T}_c = the estimated domain total based on the subset of the new sample that did not belong to the population surveyed using the 1983 frame
 - β = the averaging factor, chosen so as to minimize the variance of the estimate

It can be shown that the β -value that minimizes the variance of the estimate is,

$$\beta = \frac{\text{Var}(\hat{T}_b) + \text{Cov}(\hat{T}_b, \hat{T}_c)}{\text{Var}(\hat{T}_a) + \text{Var}(\hat{T}_b)}$$

In general, this value is different for each response variable. However, a considerable reduction in computational effort can be achieved by reducing the number of β -values used in the analysis. Choosing only one or a few β -values is defensible if the minimum variance values for different response variables are numerically similar. Minimum variance β -values computed for a number of propensity variables were all approximately 0.5. Therefore, a single β -value of 0.461, the minimum variance value for the composite active propensity variable, was used for all young male analyses.

Use of the modified difference estimator requires the new sample that belongs to the population surveyed using the 1983 frame to be correctly identified. Two questions were included in the 1984 YATS questionnaire to permit identification of this subset, and the subset was defined on the basis of these questions for all analytical purposes. However, there were some significant differences between the callback sample and the new sample subset in estimated population size and in age distribution. These differences indicate that identification of the proper subset of the new sample was not entirely successful. This was compensated for by adjusting the analytical weights of the callback sample. Within each MEPS, callback weights were adjusted so that their sum (the estimated population total for the MEPS) equaled the population total of the MEPS estimated from the new sample subset. The callback weights were then further adjusted so that the estimated national population totals in each age class equaled those for the new sample subset.

A variety of propensity estimates, computed for the combined young male callback and new samples using the adjusted callback analytical weights and the modified difference estimator, were compared with corresponding estimates based solely on the new sample young males. Table A.2 displays the estimates used in the comparison. None of the estimates derived from

the combined sample were significantly different from those derived from the new sample alone. This indicates that the 1984 propensity estimates were not significantly affected by the callback procedure.

Table A.2. Young Male Propensity Estimates for the New Sample and for the Combined Sample

Item/Service	New Sample (n = 3222)	Combined Sample ^a (n = 5058)
<u>Positive Active Propensity</u>		
Army	15.2 (0.7)	14.3 (0.6)
Navy	11.9 (0.7)	10.9 (0.5)
Marine Corps	9.9 (0.6)	9.6 (0.5)
Air Force	16.1 (0.7)	15.3 (0.6)
Composite active propensity	30.9 (0.9)	29.9 (0.8)
<u>Positive Reserve Propensity</u>		
National Guard	11.8 (0.7)	10.8 (0.5)
Reserves	15.8 (0.8)	15.3 (0.6)
Composite reserve propensity	20.4 (0.8)	19.4 (0.7)
<u>Unaided mentions</u>	7.4 (0.5)	7.5 (0.4)

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

^aEstimates derived from the combined sample are not significantly different from the estimates derived from the new sample alone.

Source: Questions 438, 505, 507, 510-513.

Appendix B
Estimated Sampling Errors

PREVIOUS PAGE
IS BLANK 

Appendix B

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 a large number of possible samples that could have been selected using the same sample design. Estimates derived from the different possible samples would 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.

A. Confidence Intervals and Significant Differences

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 which are very likely to include the true population values. For example, Table 4.1 shows that 29.9 percent of the young males in the 1984 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 in a large number of repeated surveys 95 percent of the intervals computed will include the true (population) proportion. As a general rule, the 95 percent confidence interval is formed by doubling the standard error 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 28.3 percent and 31.5 percent (i.e., $29.9 \pm (2 \times 0.8)$).

PREVIOUS PAGE
IS BLANK

B. 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: $p \pm 2 \left(\sqrt{p(1-p)/(N-1)} \right)$. In a more complicated sample, such as the one used in this survey, there are other factors 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 square root of the reciprocal 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, since $1/\sqrt{400}$ 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 $\sqrt{p(1-p)}$ (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., 1.96^a for 95 percent (assuming degrees of freedom are very large). Where stratification, clustering and differential selection probabilities are involved, as in this survey, all of these also influence sampling error. Stratification tends to increase precision, but clustering and oversampling of subpopulations may either increase or reduce it. Designed to provide advantages too expensive to achieve with simple random samples, complex samples often yield less precision for total population estimates than would be obtained by the use of a simple random sample of the same size. Accordingly, use of the simple formula would generally underestimate the sampling error involved.

^aRounded to "2" in the preceding discussion.

There are methods for correcting for this underestimation, however. Kish (1965, p. 258) has defined a correction term known as the design effect (DEFF) where,

$$\text{DEFF} = \frac{\text{actual sampling variance}}{p(1-p)/N}$$

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. In order to have the same confidence interval, it would be necessary to have a sample four times as large.

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 $\sqrt{p(1-p)/N}$ 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 approximate 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 percentages within groups that are approximately equal to the percentages for which standard errors are desired. Table 4.7 may be a useful reference table since it shows a range of percentage estimates with standard errors for the three 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 5.1 using Table 4.7 as a reference table. Table 5.1 shows that 75 percent of young males with positive propensity said personal freedom was an important job characteristic. To estimate an approximate standard error for this figure, one searches down the young male-positive propensity column in Table 4.7. Although there is no 75 percent in this column, it does show 25 percent (equidistant from 50 percent) with a standard

error of 1.3. Table 5.1 shows that 82 percent of negative propensity young males said that personal freedom was important. Searching down the young male-negative propensity column in Table 4.7, one finds a standard error of 0.8 for 82 percent.

Appendix C
Sociodemographic Characteristics by Reserve Propensity



Appendix C
Sociodemographic Characteristics by Reserve Propensity

As noted in Chapter 4, the propensity to join the military has been found to be related closely to age, employment opportunities, educational attainment, and other measures of responsibilities and obligations. Younger persons, those with fewer employment opportunities, lower levels of education, and fewer family and economic responsibilities and obligations are generally more favorable than others toward military service. This appears to be true for Reserve propensity as well as for active propensity.

The relationship of Reserve propensity to selected sociodemographic characteristics for YATS II data, presented in Table C.1, is generally consistent across all three market groups. Young males, older males, and females with positive propensity are more likely than those with negative propensity to be:

- less well educated (11 or fewer years versus 12 or more years),
- unemployed but looking for a job (pattern varies for older males),
- younger,
- nonwhite.

Older males with positive Reserve propensity are more likely to be attending school and to be single. Some of these results are clearly related to the age of the respondents.



Table C.1. Composite Reserve Propensity and Sociodemographic Characteristics

	Young Males			Older Males			Females		
	Positive Propensity (n=962)	Negative Propensity (n=4,096)	Total (n=5,058)	Positive Propensity (n=127)	Negative Propensity (n=1,252)	Total (n=1,379)	Positive Propensity (n=137)	Negative Propensity (n=1,366)	Total (n=1,503)
Age^a									
16 (22)	27.0 (1.8)	22.0 (0.8)	23.0 (0.8)	28.0 (4.2)	12.5 (1.0)	14.0 (1.0)	31.1 (4.4)	22.2 (1.2)	23.1 (1.1)
17 (23)	24.1 (1.5)	21.4 (0.7)	21.9 (0.7)	12.4 (3.0)	15.5 (1.2)	15.2 (1.1)	15.5 (3.3)	22.8 (1.2)	22.1 (1.2)
18 (24)	19.0 (1.4)	19.2 (0.8)	19.2 (0.7)	11.8 (3.1)	13.7 (1.1)	13.5 (1.0)	15.2 (3.1)	17.4 (1.1)	17.2 (1.0)
19 (25)	13.0 (1.3)	15.2 (0.6)	14.8 (0.6)	15.6 (3.5)	12.5 (1.0)	12.8 (0.9)	13.6 (3.0)	15.6 (1.1)	15.5 (1.0)
20 (26)	10.2 (1.3)	11.7 (0.6)	11.4 (0.5)	8.1 (2.6)	11.1 (1.0)	10.8 (0.9)	8.1 (2.5)	12.1 (1.0)	11.7 (0.9)
21 (27)	6.7 (0.9)	10.5 (0.6)	9.7 (0.5)	11.7 (3.1)	11.2 (1.0)	11.3 (0.9)	16.4 (3.4)	9.8 (0.9)	10.4 (0.9)
(28)				6.8 (2.3)	13.5 (1.1)	12.9 (1.0)			
(29)				5.6 (2.2)	9.9 (0.9)	9.5 (0.9)			
Race/Ethnicity									
White	64.8 (1.9)	80.1 (0.8)	77.1 (0.8)	56.4 (4.8)	83.6 (1.2)	81.0 (1.2)	42.8 (4.7)	78.7 (1.4)	75.4 (1.4)
Black	20.6 (1.5)	10.2 (0.6)	12.2 (0.6)	19.9 (4.0)	8.0 (0.9)	9.1 (0.9)	37.4 (4.6)	9.9 (0.9)	12.4 (1.0)
Hispanic	12.0 (1.4)	7.0 (0.5)	8.0 (0.5)	19.9 (3.9)	6.7 (0.8)	7.9 (0.9)	13.2 (3.2)	6.7 (1.0)	9.1 (0.9)
Other	2.6 (0.6)	2.7 (0.3)	2.7 (0.3)	3.8 (2.0)	1.8 (0.4)	2.0 (0.4)	6.5 (2.5)	2.7 (0.5)	3.1 (0.5)
Marital Status									
Never married	97.3 (0.7)	95.6 (0.4)	95.9 (0.3)	55.4 (4.8)	40.1 (1.6)	41.5 (1.5)	86.0 (3.1)	85.7 (1.1)	85.8 (1.0)
Married	2.5 (0.7)	3.7 (0.3)	3.5 (0.3)	39.4 (4.7)	52.5 (1.6)	51.3 (1.5)	10.0 (2.8)	12.7 (1.0)	12.5 (1.0)
Other	0.2 (0.1)	0.7 (0.2)	0.6 (0.1)	5.1 (2.2)	7.4 (0.8)	7.2 (0.7)	4.0 (1.6)	1.5 (0.3)	1.7 (0.3)
Educational Plans^c									
Attend School	66.5 (1.8)	64.8 (0.9)	65.1 (0.8)	20.8 (3.8)	14.6 (1.1)	15.2 (1.1)	59.7 (4.4)	64.2 (1.5)	63.8 (1.4)
Not Attend School	32.4 (1.8)	34.0 (0.9)	33.7 (0.8)	78.3 (3.9)	83.8 (1.2)	83.2 (1.1)	39.2 (4.4)	34.9 (1.5)	35.3 (1.4)
Don't know	1.1 (0.3)	1.2 (0.2)	1.2 (0.2)	0.9 (0.9)	1.6 (0.4)	1.5 (0.4)	1.1 (0.8)	0.9 (0.3)	0.9 (0.3)
Years of Education Completed									
Less than 10	10.6 (1.1)	6.1 (0.5)	7.0 (0.5)	8.4 (2.6)	4.1 (0.6)	4.5 (0.6)	4.7 (2.2)	5.5 (0.7)	5.4 (0.7)
10	26.3 (1.7)	18.7 (0.9)	20.2 (0.8)	4.6 (1.8)	4.8 (0.6)	4.7 (0.6)	28.1 (4.3)	18.2 (1.1)	19.1 (1.1)
11	30.2 (1.8)	26.7 (0.8)	27.4 (0.7)	11.1 (3.0)	7.3 (0.8)	7.6 (0.8)	28.1 (4.2)	28.5 (1.3)	28.4 (1.3)
12	27.7 (1.6)	36.6 (0.9)	34.9 (0.8)	58.5 (4.7)	62.6 (1.5)	62.2 (1.4)	31.3 (4.1)	34.3 (1.3)	34.1 (1.3)
Some college/vocational school	5.1 (0.8)	11.9 (0.6)	10.6 (0.5)	17.4 (3.7)	21.3 (1.3)	20.9 (1.2)	7.8 (2.3)	13.5 (1.0)	13.0 (1.0)
Employment Status									
Employed full-time	30.7 (1.7)	35.6 (0.9)	34.6 (0.8)	71.3 (4.4)	85.0 (1.2)	83.7 (1.1)	20.7 (3.7)	22.3 (1.2)	22.2 (1.1)
Employed part-time	25.8 (1.6)	27.0 (0.9)	26.7 (0.8)	12.7 (3.2)	6.2 (0.8)	6.8 (0.8)	16.0 (3.2)	28.6 (1.3)	27.4 (1.2)
Not employed, looking	31.7 (1.8)	19.1 (0.8)	21.5 (0.7)	13.7 (3.3)	6.2 (0.8)	6.9 (0.8)	42.4 (4.5)	25.2 (1.3)	26.8 (1.3)
Not employed, not looking	11.8 (1.2)	18.4 (0.7)	17.1 (0.6)	2.3 (1.6)	2.6 (0.5)	2.6 (0.5)	21.0 (3.7)	23.9 (1.2)	23.6 (1.2)

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

^a Ages 22 to 29 apply only to older males.

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

^c Data were collected in August and September 1984. Question asked about their planned status for October.

^{aa} Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 424, 505, 507, 693, 714, 715.

Appendix D
Errata to Supplementary Tabulations

Appendix D
Errata to Supplementary Tabulations

Results from the 1984 Youth Attitude Tracking Study II (YATS II) are presented in the present report and in a companion volume, Supplementary Tabulations. Supplementary Tabulations show the distributions of responses to the questionnaire items and present two types of information:

- Marginal item distributions for young males, older males, and females
- Cross tabulations of items with Composite Propensity for each market group.

Tables are presented in two parts, one using Composite Active Propensity and the other using Composite Reserve Propensity.

Since the release of the volume of Supplementary Tabulations, an error was discovered in items 602-608. Corrected tables are presented here. For users who wish to use these variables in other analyses, the algorithm using SAS code to correct the error is as follows:

```
ARRAY RAWUN (I) V601AIRF V601ARMY V601CGRD V601MARN V601NAVY
                V601NATL V601AD1;

ARRAY RAWAID (I) Q602-Q608;

DO I=1 TO 7;
    IF RAWUN=1, THEN RAWAID=3;
END;
```

PREVIOUS PAGE
IS BLANK



Active Service Propensity Tables

The propensity measure used for the tables in this section is Composite Active Propensity. Composite Active Propensity was based on responses to questions regarding the likelihood of serving on active duty in the Army (A510), Navy (A513), Marine Corps (Q512), or Air Force (Q511).

The response options for each of the items are "definitely enlist," "probably enlist," "probably not enlist" and "definitely not enlist." Composite propensity is the respondent's most positive response to the four items about enlisting in the Active military. For example, an individual who indicated that he would "probably enlist" in the Army, but "probably not enlist" in the Navy, the Air Force, or the Marine Corps was assigned a value of "probably enlist" on the Composite Active Propensity measure. Individuals whose responses were "definitely enlist" or "probably enlist" on the composite measure comprise the positive propensity category shown in the tables. The negative propensity category includes all other respondents.



DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
G602 - THE AIR FORCE?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES	OLDER MALES	FEMALES	YOUNG MALES	OLDER MALES	FEMALES			
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	MALES	MALES				
	POSITIVE	NEGATIVE	POSITIVE	---TOTAL---	---TOTAL---	---TOTAL---			
	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---			
YES	28.1	26.1	30.7	28.6	21.2	28.9	26.7	28.9	27.9
NO	12.5	13.7	19.8	18.6	14.4	16.3	13.3	18.7	16.1
MENTIONED IN G601 244	59.4	60.1	49.5	52.7	64.4	54.7	59.9	52.3	56.0
DONT KNOW	0.0	0.1	0	0.1	0	0.0	0.1	0.1	0.0
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
---NUMBER	1423	3634	138	1241	197	1305	5057	1379	1502

---RESPONSES---

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
G603 - THE ARMY?

	MARKET				MARKET				
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES		
	PROPENSITY				PROPENSITY				
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	TOTAL	TOTAL	TOTAL	TOTAL	
	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	
YES	20.6	18.7	23.5	21.8	15.3	19.2	19.3	21.9	18.7
NO	6.9	9.1	13.0	13.5	7.3	9.6	8.5	13.4	9.3
MENTIONED IN G601	72.3	72.1	62.7	64.7	77.4	71.1	72.2	64.5	71.9
DONT KNOW	0.1	0.0	0.8	0.1	0	0.1	0.0	0.2	0.1
--TOTAL--	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	1423	3634	138	1241	197	1305	5057	1379	1502

--RESPONSES--

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
G604 - THE COAST GUARD?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES		
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	YOUNG MALES	OLDER MALES	FEMALES		
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	---TOTAL---	---TOTAL---	---TOTAL---	---TOTAL---	
	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	
YES	37.2	33.3	34.8	33.6	37.6	30.2	34.5	33.7	31.2
NO	43.7	41.2	48.8	44.9	46.6	54.5	41.9	45.3	53.5
MENTIONED IN G601	18.9	25.5	15.7	21.4	15.7	15.1	23.5	20.8	15.1
DONT KNOW	0.2	0.0	0.7	0.1	0	0.2	0.1	0.2	0.2
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
---NUMBER	1423	3634	138	1241	197	1305	5057	1379	1502

---RESPONSES---

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
 G605 - THE MARINE CORPS?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES		
	-----PROPENSITY-----	-----PROPENSITY-----	-----PROPENSITY-----		-----PROPENSITY-----	-----PROPENSITY-----	-----PROPENSITY-----		
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	
	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	
YES	26.6	25.9	27.4	25.8	34.4	27.4	26.1	26.0	28.4
NO	14.7	14.9	21.6	20.6	19.5	18.9	14.8	20.7	19.0
MENTIONED IN G601	58.5	59.1	49.7	53.6	46.1	53.5	58.9	53.2	52.5
DONT KNOW	0.2	0.1	1.3	0	0	0.1	0.1	0.1	0.1
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	1423	3634	138	1241	197	1305	5057	1379	1502

---RESPONSES---

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
G606 - THE NAVY?

	-----MARKET-----				-----MARKET-----			
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES	
	----PROPENSITY----		----PROPENSITY----		----PROPENSITY----		----PROPENSITY----	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT
---RESPONSES---								
YES	30.5	27.8	30.3	27.9	31.7	28.4	28.6	28.1
NO	22.7	20.2	32.9	26.0	18.6	22.5	21.0	26.7
MENTIONED IN								
G601	46.8	51.9	36.8	45.9	48.6	48.8	50.4	44.9
DONT KNOW	0	0.0	0	0.3	1.2	0.3	0.0	0.2
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	1423	3634	138	1241	197	1305	5057	1379
								1502

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
G607 - THE NATIONAL GUARD/RESERVES?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES		OLDER MALES		FEMALES		FEMALES		
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---		
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	
	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	
YES	46.5	44.4	45.0	44.7	45.0	39.9	45.0	44.7	40.5
NO	30.7	31.5	33.7	32.6	35.7	43.0	31.3	32.7	42.0
MENTIONED IN G601	22.8	24.0	20.4	22.7	19.3	17.0	23.6	22.4	17.3
DONT KNOW	0.0	0.1	0.9	0	0	0.1	0.1	0.1	0.1
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	1423	3634	138	1241	197	1305	5057	1379	1502

---RESPONSES---

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
 G608 -- ONE AD FOR ALL THE SERVICES?

	-----MARKET-----				-----MARKET-----			
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES	
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---		YOUNG MALES	OLDER MALES	FEMALES	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	---TOTAL---	---TOTAL---	---TOTAL---	
	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	-----PCT-----	
---RESPONSES---								
YES	53.4	49.5	39.8	45.0	55.3	48.8	50.6	44.5
NO	32.8	32.2	48.5	40.4	36.0	39.7	32.4	41.3
MENTIONED IN G601	13.8	18.2	11.1	14.3	8.7	11.2	16.9	14.0
DONT KNOW	0	0.1	0.7	0.2	0	0.3	0.1	0.3
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
---NUMBER	1423	3634	138	1241	197	1305	5057	1379
								1502

Reserve Component Propensity Tables

The propensity measure used for the tables in this section is Composite Reserve Propensity. Composite Reserve Propensity was based on responses to two questions regarding the likelihood of serving in the National Guard (Q505) or in the Reserves (A507).

The response options for each of the items are "definitely enlist," "probably enlist," "probably not enlist" and "definitely not enlist." Composite propensity is the respondent's most positive response to the two items about enlisting in the Reserve components. For example, an individual who indicated that he would "probably enlist" in the National Guard, but "probably not enlist" in the Reserves was assigned a value of "probably enlist" on the Composite Reserve Propensity measure. Individuals whose responses were "definitely enlist" or "probably enlist" on the composite measure belong to the positive propensity category shown in the tables. The negative propensity category includes all other respondents.

It should also be noted the Composite Reserve Propensity presented in these tables differs from the Composite Reserve Propensity computed for the 1983 YATS II tables. The 1983 measure was based on six items taken from the Reserve Component Attitude Study (RCAS) rather than the two items used here. Thus, results of Reserve propensity are not directly comparable for the two years.



DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
 G602 - THE AIR FORCE?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES		
	-----PROPENSITY-----			-----PROPENSITY-----	-----PROPENSITY-----				
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	
	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	
YES	28.1	26.4	30.5	28.7	27.3	28.0	26.7	28.9	27.9
NO	12.4	13.6	15.0	19.1	12.8	16.4	13.3	18.7	16.1
MENTIONED IN G601	59.5	60.0	54.4	52.1	59.9	55.6	59.9	52.3	56.0
DONT KNOW	0	0.1	0	0.1	0	0.0	0.1	0.1	0.0
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	962	4095	127	1252	137	1365	5057	1379	1502

---RESPONSES---

PREVIOUS PAGE IS BLANK

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
 Q603 - THE ARMY?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES		
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	YOUNG MALES	OLDER MALES	FEMALES		
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	---TOTAL---	---TOTAL---	---TOTAL---	---TOTAL---	
	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	
---RESPONSES---									
YES	18.8	19.4	23.3	21.8	15.1	19.1	19.3	21.9	18.7
NO	6.2	9.0	11.9	13.6	5.7	9.7	8.5	13.4	9.3
MENTIONED IN Q601	75.0	71.5	63.9	64.5	79.2	71.2	72.2	64.5	71.9
DONT KNOW	0	0.1	0.9	0.1	0	0.1	0.0	0.2	0.1
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	962	4095	127	1252	137	1365	5057	1379	1502

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
G604 - THE COAST GUARD?

	MARKET				MARKET			
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES	
	---PROPENSITY---		---PROPENSITY---		---TOTAL---		---TOTAL---	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT
---RESPONSES---								
YES	38.4	33.5	34.4	33.7	38.9	30.4	34.5	33.7
NO	43.3	41.6	46.9	45.1	49.3	53.9	41.9	45.3
MENTIONED IN G601	18.0	24.9	18.7	21.0	11.9	15.5	23.5	20.8
DONT KNOW	0.2	0.0	0	0.2	0	0.2	0.1	0.2
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	962	4095	127	1252	137	1365	5057	1379
								1502

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
 G605 - THE MARINE CORPS?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES		
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	YOUNG MALES	OLDER MALES	FEMALES		
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	---TOTAL---	---TOTAL---	---TOTAL---	---TOTAL---	
	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	---PCT---	
---RESPONSES---									
YES	26.8	26.0	30.6	25.5	36.2	27.6	26.1	26.0	28.4
NO	14.9	14.8	17.3	21.1	13.2	19.6	14.8	20.7	19.0
MENTIONED IN G601	58.3	59.1	52.0	53.3	50.6	52.7	58.9	53.2	52.5
DONT KNOW	0	0.1	0	0.1	0	0.1	0.1	0.1	0.1
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
---NUMBER	962	4095	127	1252	137	1365	5057	1379	1502

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
G606 - THE NAVY?

	-----MARKET-----				-----MARKET-----				
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES		
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	YOUNG MALES	OLDER MALES	FEMALES		
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	-TOTAL-	-TOTAL-	-TOTAL-	-TOTAL-	
	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	
YES	30.0	28.3	30.5	27.9	27.4	29.0	28.6	28.1	28.8
NO	22.4	20.6	26.2	26.8	15.0	22.7	21.0	26.7	22.0
MENTIONED IN G601	47.6	51.1	43.3	45.1	56.7	48.0	50.4	44.9	48.8
DONT KNOW	0	0.0	0	0.3	0.9	0.3	0.0	0.2	0.4
--TOTAL--	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	962	4095	127	1252	137	1365	5057	1379	1502

--RESPONSES--

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
 G607 - THE NATIONAL GUARD/RESERVES?

	-----MARKET-----				-----MARKET-----			
	YOUNG MALES	OLDER MALES	FEMALES		YOUNG MALES	OLDER MALES	FEMALES	
	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---	---PROPENSITY---
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT	-----PCT
---RESPONSES---								
YES	48.1	44.3	45.4	44.7	43.5	40.2	45.0	44.7
NO	28.3	32.0	26.6	33.4	38.1	42.4	31.3	32.7
MENTIONED IN G601	23.7	23.6	28.0	21.9	18.4	17.2	23.6	22.4
DONT KNOW	0	0.1	0	0.1	0	0.1	0.1	0.1
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	962	4095	127	1252	137	1365	5057	1379

DO YOU RECALL SEEING OR HEARING ADVERTISING FOR...
 Q608 - ONE AD FOR ALL THE SERVICES?

	MARKET				MARKET				
	YOUNG MALES		OLDER MALES		FEMALES		FEMALES		
	PROPENSITY	PROPENSITY	PROPENSITY	PROPENSITY	PROPENSITY	PROPENSITY	PROPENSITY		
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	
	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	
YES	54.1	49.8	47.0	44.2	56.7	49.0	50.6	44.5	49.7
NO	33.6	32.1	43.0	41.1	36.5	39.5	32.4	41.3	39.2
MENTIONED IN Q601	12.3	18.0	10.0	14.4	6.8	11.3	16.9	14.0	10.9
DONT KNOW	0.0	0.1	0	0.3	0	0.3	0.1	0.3	0.2
---TOTAL---	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
--NUMBER	962	4095	127	1252	137	1365	5057	1379	1502

Appendix E
History and Methodology

TECHNICAL NOTE

**YOUTH ATTITUDE TRACKING STUDY:
Historical Evolution and Characteristics**

**Michael T. Laurence and Sue T. Bridges
Market Research Branch
Survey and Market Analysis Division**

**Defense Manpower Data Center
1600 Wilson Boulevard, Arlington, VA 22209**

January 1985

This report was prepared for the Directorate of Accession Policy in the Office of the Deputy Assistant Secretary of Defense (Military Personnel and Force Management) (ODASD(MP&FM)(AP)). Any interpretations or viewpoints contained in this report should not be construed as an official Department of Defense position.

Additional copies of this report may be obtained from:

Defense Manpower Data Center
Survey and Market Analysis Division
1600 Wilson Boulevard - Suite 400
Arlington, VA 22209

Preface

This Technical Note summarizes for the first time the details of the evolution of the Youth Attitude Tracking Study (YATS) into its present form. It also discusses and presents comparative propensity data for all the administrations of YATS.

As is always the case when working with an effort as large and complex as YATS, the preparation of this Technical Note would not have been possible without the assistance of many others. Within the Directorate of Accession Policy, Office of the Secretary of Defense, Dr. W. S. Sellman, Director, and Captain Louise C. Wilmot, USN, Deputy Director, have provided policy guidance for YATS and encouraged efforts to improve it.

In the Survey and Market Analysis Division, Defense Manpower Data Center, Zahava D. Doering and J. J. Miller provided overall direction and review. Vonda Kiplinger provided guidance and review in the analysis of weighting issues. Barbara A. Saunders, Elaine Sellman, and Mark Howell contributed by conducting historical research and verifying the weights used in past YATS.

At the Research Triangle Institute, James R. Chromy and Fredrick W. Immerman conducted the analysis reported in Appendix D of the Final Report: 1983 YATS and summarized here. At the Rand Corporation, Bruce Orvis and Martin Gahart conducted the weighting analysis of the YATS male propensity data for the pre-1982 surveys as well as that for females in those years in which they were interviewed. Without their insight, technical expertise, and attention to detail, the work summarized here would not have been possible.

Table of Contents

	Page
Preface.	i
Introduction	1
Summary of Details of Survey Operations.	3
Summary of Survey Methodology.	7
Restatement of Waves 2 through 13 Propensity Data.	15
Summary.	27

Tables

1. Summary of Details of Survey Operations.	4
2. Summary of Survey Methodology.	8
3. Comparison of Wave 13 (Fall 1982) Young Male Positive Propensity as Originally Reported and as Reweighted.	17
4. Comparison of Young Male Positive Propensity as Originally Reported and as Reweighted	20
5. Comparison of Female Positive Propensity as Originally Reported and as Reweighted.	22
6. Summary of Geographic Weight and Data File Location for Proper Weighting of YATS Data	23
7. Tracking Area Weights for Waves 2-5 (Spring 1976 - Fall 1977).	24
8. Adjustment Factors Used in Reweighting Female Propensity Data for Waves 11-13 (Fall 1980 - Fall 1982).	25

YOUTH ATTITUDE TRACKING STUDY:
Historical Evolution and Characteristics

Introduction

The Youth Attitude Tracking Study (YATS) will, in a few months, mark its tenth anniversary. What began as a relatively simple survey of military-age young males in Fall 1975 has evolved into a complex and sophisticated survey of young men, young women, and older men that is recognized as the principal source of data regarding the propensity of the military-age population for joining the military. While the YATS has evolved over the years, with changes made between adjacent data collections, changes made in the Fall 1983 survey merited the redesignation of the survey as YATS II. Distinguishing YATS II from its predecessor are expanded market coverage and increased methodological and statistical rigor.

Few individuals who currently use the YATS data, or participate in the annual execution of the survey, were present at its creation in 1975. Thus, there is little institutional memory of how the YATS developed into its present form and no context in which to relate the most recent findings to those obtained in earlier years. The institutional memory that exists regarding YATS resides in the many published reports that have been produced by contractors over the last ten years and in internal memoranda in the Office of the Secretary of Defense (OSD) and in the Services. Most current users of YATS are either not in possession of all these reports and memoranda, nor do they have the time or inclination to trace fully the history of the survey. The Defense Manpower Data Center (DMDC) retraced the history, by necessity, as part of an effort to ensure the comparability

of data in adjacent data collections. Thus, the purpose of this paper: to summarize in one place the details of the evolution of YATS into its present form. The last section of this paper, which is less historical in nature, discusses and presents comparative propensity data for all the administrations of YATS in a manner that adjusts and compensates for the conversion of YATS into YATS II, as well as previous changes. This paper does not provide justification for changes which have been made, as the documentation frequently omits it. In general, these changes have been made to meet the changing data requirements of both the policy and operational recruiting communities in OSD and the Services, by incorporating new statistical and data collection methodologies. In addition, some changes have resulted from budgetary constraints.

Summary of Details of Survey Operations

The details of the Youth Attitude Tracking Study (YATS) survey operations including the wave number, data of survey, contractor, target markets sampled, sample sizes, and the data collection periods are summarized in Table 1. Each of these details will be discussed in turn.

Wave number. This is a sequential number assigned to each YATS data collection effort.

Date of survey. The season (Spring/Fall) year of the data collection effort.

Contractors. Since it began, only two contractors have conducted YATS. Waves 1 through 13 (Fall 1975 through Fall 1982) were performed by Market Facts, Inc. As a result of the competition for the YATS contract, Waves 14 and 15 (Fall 1983 and Fall 1984) were conducted by the Research Triangle Institute (RTI). In addition to certain methodological differences which are discussed below, the most significant operational change in the conduct of this survey resulting from the change in contractors was the implementation of Computer Assisted Telephone Interviewing (CATI) in Wave 14 (Fall 1983) by RTI. Prior to this wave, most telephone interviews were conducted using traditional paper and pencil recording methods.

Within the Department of Defense (DoD), the Directorate of Accession Policy (AP) in the Office of the Deputy Assistant Secretary of Defense (Military Personnel and Force Management) (ODASD(MP&FM)) was directly responsible for monitoring the technical performance of contractors in Waves 1 through 12 (Fall 1975 through Fall 1981). With Wave 13 (Fall 1982)

TABLE 1
 YOUTH ATTITUDE TRACKING STUDY
 Summary of Details of Survey Operations

Wave	Date	Contractor	Samples ^a		Data Collection	
			Males 16-21	Females 22-29	Period	Number of Days
1	Fall 1975	Market Facts	3,167	0	10/27-11/29/75	34
2	Spring 1976	Market Facts	3,008	0	4/22-5/17/76	26
3	Fall 1976	Market Facts	5,475	0	10/19-11/30/76	43
4	Spring 1977	Market Facts	5,520	0	4/11-5/28/77	48
5	Fall 1977	Market Facts	5,280	0	10/18-11/27/77	40
6	Spring 1978	Market Facts	4,006	0	1/1-6/15/78	166
7	Fall 1978	Market Facts	5,199	0	10/6-12/8/78	63
8	Spring 1979	Market Facts	5,203	0	4/15-5/27/79	42
9	Fall 1979	Market Facts	5,187	0	10/1-11/9/79	39
10	Spring 1980	Market Facts	5,217	0	3/31-5/9/80	39
11	Fall 1980	Market Facts	5,111	0	10/17-12/10/80	54
12	Fall 1981	Market Facts	5,201	0	10/21-12/16/81	65
13	Fall 1982	Market Facts	5,993	0	9/20-11/7/82	48
14	Fall 1983	Research Triangle	4,948	1,153	9/12-12/21/83	100
15	Fall 1984	Research Triangle	5,058	1,379	8/1-9/30/84	61

a) Criteria after inclusion in the survey were:

- 1) No prior or current military service,
- 2) Not beyond the second year of college,
- 3) Fall within the age limits specified.

these responsibilities were transferred to the Market Research Branch, Survey and Market Analysis Division, Defense Manpower Data Center (DMDC). Policy guidance for YATS has always resided in ODASD(MP&FM)(AP), or its predecessors, with assistance and advice from the Joint Market Analysis and Research Committee (JMARC).

Samples. Waves 1 through 10 (Fall 1975 through Spring 1980) were semi-annual surveys, conducted in the Spring and Fall, of approximately 5,200 (Wave 3 and beyond) young males, aged 16-21. Beginning with Wave 11 (Fall 1980) YATS became an annual survey and females, in approximate equal proportion to the males, were included in the survey. The size of the female sample was reduced to approximately 1,300 in Wave 13 (Fall 1982) and succeeding waves. In Wave 14 (Fall 1983) a nationally representative sample of older men, aged 22-29, was introduced.

In all waves of the YATS, the basic eligibility criteria have remained unchanged with the exception of the participation of respondents in ROTC programs. The basic eligibility criteria for inclusion in the sample require that respondents have 1) no prior or current military service; 2) not be beyond the second year of college; and 3) fall within the age limits of 16-21 years for young males and females and 22-29 years for the older males. In Waves 1 through 12 (Fall 1975 through Fall 1981), participation in any form of ROTC was not considered to be military service. In Wave 13 (Fall 1982) participation in any form of ROTC was considered to be military service and participants were excluded from the survey. In Wave 14 and 15 (Fall 1983 and Fall 1984), college ROTC was considered to be military service while high school ROTC was not. Accordingly, those individuals who participated in high school ROTC were eligible for inclusion in the survey.

Data Collection Period. For all the waves appearing in Table 1 the median duration of the data collection period was 48 days. The shortest data collection period was 26 days for Wave 2 (Spring 1976) in which 3,008 interviews were conducted and the longest was 166 days in Wave 6 (Spring 1978) in which 4,006 interviews were conducted. Even though data collection in Wave 6 spanned a five and one-half month period, the report indicates that statistical tests revealed no month-to-month differences and the data were collapsed and treated similarly to the other waves.

Data collection for the Spring waves normally began in mid-April except for Wave 6 (Spring 1978) which began at the beginning of January. Data collection for the Fall waves normally began in the mid-September to mid-October period. Wave 15 (Fall 1984) began on August 1 so that interviewing would be entirely completed prior to the end of the FY 1984 Advertising Mix Test, which ended on September 30, 1984. (YATS Waves 14 and 15 were among the principal measuring instruments for this test).

Summary of Survey Methodology

Table 2 summarizes the sampling methods, sampling strata, and weighting schemes employed over the 15 waves of YATS. The sampling method will be discussed first, followed by the sample strata and weighting scheme together since the latter is dependent on the former.

Sampling method. Since its beginning YATS has employed random digit dialing techniques to locate eligible respondents. The published reports for Waves 1 through 4 (Fall 1975 through Spring 1977) are uninformative as to whether a true random digit dialing procedure was employed or whether some procedures to enhance efficiency were utilized. Beginning with Wave 5 (Fall 1977) and continuing through Wave 12 (Fall 1981), the dialing procedures were modified to introduce the use of "seed" numbers to enhance efficiency. By identifying residential telephone exchanges in advance of the actual survey screening process, fewer calls were needed since businesses and non-working numbers were eliminated ahead of time. These seed numbers were obtained from a 1977 national sample of 40,000 households selected from a panel of 100,000 in the contiguous United States. Each of these 40,000 households was asked to select "n" telephone numbers from their local telephone directories. These numbers served as the basis for telephone dialing in Waves 5 through 12 (Fall 1977 through Fall 1981).

Beginning with Wave 13 (Fall 1982), the random digit dialing procedures were further modified to employ the techniques developed by Waksburg. Instead of the seed number approach, the Waksburg method is a two-stage process in which calls are made to randomly selected telephone exchanges to

TABLE 2

YOUTH ATTITUDE TRACKING STUDY

Summary of Survey Methodology

Wave	Date	Sampling Method	Sampling Strata	Weighting Scheme
1	Fall 1975	Random Digit Dial (RDD) Telephone	200 respondents in each of 13 Tracking areas plus 400 from the balance of the country.	Individual weight = Percentage of total Estimated Military Available in each of 156 cells (13 Tracking Areas X 6 Ages X 2 Races) $\frac{1}{2}$ Percentage of total respondents in each cell.
2	Spring 1976	Same as Wave 1	Same as Wave 1	Same as Wave 1
3	Fall 1976	Same as Wave 1	200 respondent in each of 26 Tracking Areas	Individual weight = Tracking Area Weight (Percentage of total Estimated Military Available in each Tracking Area) $\frac{1}{2}$ Percentage of total respondents in each Tracking Area X Age/Race Weight (Percentage of total Estimated Military Available for each of 12 Age/Race cells) $\frac{1}{2}$ Percentage of total respondents in each Age/Race cell).
4	Spring 1977	Same as Wave 1	Same as Wave 3	Same as Wave 3
5	Fall 1977	RDD with telephone numbers generated from seed numbers	Same as Wave 3	Same as Wave 3
6	Spring 1978	Same as Wave 5	Same as Wave 3	Same as Wave 3
7	Fall 1978	Same as Wave 5	Same as Wave 3	Same as Wave 3
8	Spring 1979	Same as Wave 5	Same as Wave 3	Same as Wave 3
9	Fall 1979	Same as Wave 5	Same as Wave 3	Same as Wave 3
10	Spring 1980	Same as Wave 5	Same as Wave 3	Same as Wave 3
11	Fall 1980	Same as Wave 5	Same as Wave 3	Household population estimates projected from the 1970 Census substituted for Estimated Military Available in the formulae first used in Wave 3.
12	Fall 1981	Same as Wave 5	Same as Wave 3	Same as Wave 11
13	Fall 1982	RDD-Waksburg	90 males from each of 66 MEPS. National sample of females by State in proportion to State population.	For males, total population in each MEPS based on estimates projected from the 1980 Census and 12 national Age/Race populations were substituted for Estimated Military Available in the formulae first used in Wave 3. For females, total population in each State and 12 Age/Race categories were used.
14	Fall 1983	Same as Wave 13	Households within each MEPS	Individual weight based on the number of households per county projected from the 1980 Census and probabilities of selection of eligible respondents.
15	Fall 1984	Same as Wave 13	Same as Wave 14	Same as Wave 14

identify those which contain primarily residential households as opposed to businesses, institutions, or non-working numbers. Those exchanges which are identified as residential are designated as "clusters" which, in the second stage of the process, are used to generate telephone numbers to be called to find additional households and respondents.

Sampling Strata and Weighting Schemes. In the first two Waves (Fall 1975 and Spring 1976) approximately 200 respondents in each of 13 special geographic areas defined for YATS, called "Tracking Areas," were interviewed. These Tracking Areas cumulatively accounted for 65% of the U.S. "Estimated Military Available" (EMA) population.* The Tracking Areas were selected by using criteria that included 1) maximizing the percentage of the potential applicant pool covered; 2) providing sufficient geographical dispersion; and 3) limiting the number of military recruiting units in each Tracking Area to three or less per Service. Also interviewed were 400 respondents from the balance of the country not included in the 13 Tracking Areas.

Weighting of respondents was accomplished by first assigning each respondent to a cell of a 13 x 6 x 2 matrix. This matrix consisted of 13

*The Estimated Military Available (EMA) population was based on estimates generated by the method developed by Huck, D. F., Crews, A., and Siea, G. P. (Sept. 1978) The Qualified Military Available Projection System, General Research Corporation, McLean, VA, Report CR-224.

Tracking Areas, 6 age categories (single years of age, 16-21), and 2 racial categories (white and non-white). The weight for each individual within each cell was calculated by dividing the percentage of total EMA in that cell by the percentage of total respondents falling in that cell. (The report does not discuss how weights were calculated for the 400 respondents from the balance of the country.)

Beginning with Wave 3 (Fall 1976) and continuing through Wave 12 (Fall 1981) the sampling strata were revised so that 200 respondents from each of 26 Tracking Areas were interviewed. These 26 Tracking Areas encompassed the entire contiguous United States, and therefore, 100% of the EMA population. Each Tracking Area roughly coincided with the major recruiting areas used by the Services at that time.

The weighting method employed in Waves 1 and 2 (Fall 1975 and Spring 1976) produced considerable variation among the weights calculated for each of the 156 cells and, thus, reduced statistical precision. Accordingly, it was revised in Wave 3 (Fall 1976) both to increase statistical precision and to account for the change in sampling strata. The revised scheme, employed in Waves 3 through 11 (Fall 1976 through Spring 1980), was one in which fewer weights were calculated and in which the individual weight was the product of a Tracking Area weight and an age/race weight.

The Tracking Area weight was calculated by dividing the percentage of total EMA population in each Tracking Area by the percentage of total respondents in each Tracking Area. The age/race weight was calculated by

dividing the percentage of total national EMA population for each of twelve age/race cells (6 age cells x 2 race cells) by the percentage of total respondents in each age/race cell.

With Wave 11 (Fall 1980) the weighting scheme was again revised. Household population estimates of military available youths, projected from the 1970 Census were substituted for the EMA estimates in the two weighting components introduced in Wave 3 (Fall 1976).

In Wave 13 (Fall 1982) the 66 Military Entrance Processing Stations (MEPS) covering the contiguous United States were used as the sampling strata for the males, instead of the 26 Tracking Areas first used in Wave 3 (Fall 1976). The overall sample size was increased by approximately 800 males with 90 from each of the 66 MEPS being interviewed. The size of the female sample was reduced from approximately 5,200 to 1,250, and the sample was selected on a state-by-state basis with the number of respondents in each state drawn in proportion to each state's population.

For the males, the weighting formulae used in Waves 11 and 12 (Fall 1980 and Fall 1981) were used in Wave 13 (Fall 1982) with modifications for the MEPS-based sampling and the availability of 1980 Census data. Accordingly, the Wave 13 individual weight was the product of the MEPS weight (percentage of total male population, aged 16-21, in the MEPS divided by the percentage of total respondents in that MEPS) and the age/race weight (percentage of total male population in each of 12 age/race

cells divided by the percentage of total respondents in each age/race cell). Population estimates for these calculations were based on the 1980 Census rather than projections from the 1970 Census as were used in Waves 11 and 12 (Fall 1980 and Fall 1981). The weights for females were calculated in a similar manner, but used state population estimates instead of MEPS population estimates.

At the time the Wave 13 (Fall 1982) data were being analyzed and the report prepared, it was recognized that these changes, particularly the change from 1970 to 1980 Census estimates, might result in differences between the Wave 13 (Fall 1982) and Wave 12 (Fall 1981) data that were more an artifact of weighting than actual differences between the two samples. Accordingly, a thorough examination of demographic comparisons was performed as well as a restatement of the Wave 12 (Fall 1981) data using Wave 13 (Fall 1982) weights. This examination did not yield any significant findings indicating that the data for the two waves were not comparable. Thus, reweighting and restatement of the Wave 12 (Fall 1981) data were not necessary.

With the change in the contractor executing the YATS survey, Wave 14 (Fall 1983) saw changes in both the sampling strata and weighting scheme. The sampling strata for all target groups, the young males, young females, and older males, were households within each MEPS. Individual weights were based on these sampling strata, using the number of households per county having eligible respondents, and included consideration of the probabilities of selection of eligible respondents.

Since the Wave 14 (Fall 1983) sampling strata and weighting scheme were different than those used in the prior years, comparability with prior waves again became an issue. Thus, this historical reconstruction and related analyses were undertaken. The next section of this paper discusses the comparability of the YATS data over successive waves and the methodology employed in the restatement of the data for Waves 2 through 13.

Restatement of Waves 2 through 13 Propensity Data

The Issue. As has been described earlier in this paper, the Wave 13 (Fall 1982) data were weighted using population estimates projected from the 1980 Census. The estimates were for all males and females, aged 16-21, regardless of whether or not they met the other eligibility criteria for participation in the survey (i.e., not beyond the second year of college and no prior or current military service). In contrast, the weighting scheme employed by RTI for Wave 14 (Fall 1983) YATS used MEPS household counts (by county) and the probabilities of selection of eligible respondents generated from the screening interviews. These estimates were not for all males and females, aged 16-21, but only for those also meeting the other eligibility criteria.

As a result of these differences, the two sets of data are not strictly comparable. The Market Facts Inc. approach gives higher weights to older respondents than does the military-eligible weighting scheme used by RTI, thereby producing lower estimates of positive propensity. When all eligibility criteria are applied, the rate of study eligibility decreases with age, beginning at age 18. Thus weighting in such a way that gives older individuals equal weight to that of the younger individuals biases the final positive propensity rate downward.

DMDC is fully satisfied that the procedures employed by RTI in weighting the Wave 14 (Fall 1983) YATS data are both methodologically sound and provide the most accurate measure of propensity for the target population. Accordingly, it was necessary to evaluate the propensity data pre-



sented in previous YATS reports and develop procedures that would enable restatement of all waves of the previously reported data to be directly comparable to those reported by RTI.

Both RTI and the Rand Corporation have closely studied the propensity series comparability issue and proposed similar solutions. RTI's efforts were concentrated on comparing the Wave 13 (Fall 1982) and Wave 14 (Fall 1983) data for young (16-21 year old) males. This work is reported in detail in Appendix D of the Fall 1983 YATS Final Report, and will be summarized here. Rand corroborated RTI's findings for Wave 13 (Fall 1982), and extended the analysis to Waves 2 through 12 (Spring 1976 through Fall 1981) for the males and Waves 11 through 13 (Fall 1980 through Fall 1982) for the females. Their analysis is also summarized below.

The RTI analysis. RTI first performed a series of analyses in which the 1982 propensity data were initially weighted by the MEPS x age/race weight calculated by Market Facts. These weighted data were further adjusted for the age, race and MEPS distributions for the 1983 sample. The 1983 adjustment factors were applied both individually and in combination with each other to identify the importance of each factor. This analysis confirmed that age was the key variable for establishing comparable estimates of propensity for Wave 13 (Fall 1982) and Wave 14 (Fall 1983).

Further evaluation of the weights calculated by Market Facts revealed that the MEPS national weights, when applied to the 1982 propensity data without any age/race adjustment, produced a reasonable approximation of the 1983 age distribution. The effect of this approach is shown in Table 3.

AD-A161 857

YOUTH ATTITUDE TRACKING STUDY II WAVE 15 - FALL 1984
(U) RESEARCH TRIANGLE INST RESEARCH TRIANGLE PARK NC
R M BRAY ET AL. APR 85 RTI/2927/85-02FR
ADA903-83-C-1072

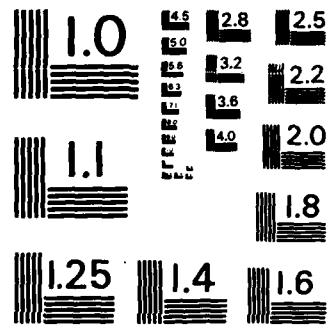
4/4

UNCLASSIFIED

F/G 5/9

NL

END
FBI
100



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

Table 3
YOUTH ATTITUDE TRACKING STUDY
Comparison of Wave 13 (Fall 1982) Young Male Positive Propensity^a
As Originally Reported and as Reweighted

Service	Wave 13 (Fall 1982)	
	Originally Reported	Reweighted
Army	14.5	16.0
Navy	13.0	14.4
Marine Corps	10.5	11.7
Air Force	17.4	18.7
Any Active Duty Service	32.7	35.8

^aPositive propensity respondents are those who stated they either "definitely" or "probably" will be serving in one or more of the four Active Duty Services in the next few years.

As can be seen, the level of positive propensity for each Service and for any Active Duty Service is higher than that previously reported. These results are not unexpected, given the age bias in the originally reported figures.

The Rand Corporation analysis. The Rand Corporation studied the propensity series comparability issue somewhat differently than RTI, and extended the restatement of propensity to Waves 2 through 12 (Spring 1976 through Fall 1981) for the males and Waves 11 through 13 (Fall 1980 through Fall 1982) for the females.

Rand worked with three weighting schemes in studying the issue. Like RTI, it began with an analysis of Wave 13 (Fall 1982) and Wave 14 (Fall 1983) propensity data. The first approach divided the 1982 and 1983 young male (16-21) samples into 60 cells based on age (4 categories), race (white and non-white), and geographical region (9 for whites, 6 for non-whites). The 1982 propensity results were then weighted by the MEPS national weighting factor provided by Market Facts and means calculated for each cell. Next, each cell was weighted in proportion to the 1983 sample of 16-21 year old males that fell in that cell and the weighted cell means summed. The second approach was similar but used only 16 cells based on 4 geographical regions for all respondents, 2 age groups and 2 race groups. The third approach, following RTI's lead, weighted the 1982 data by the MEPS national weight alone.

All three procedures yielded similar results, with the more complex procedures providing marginally more precise results. The "MEPS national weights only" procedure produced the same results as obtained by RTI. The

propensity data for Waves 2 through 12 (Spring 1976 through Fall 1981) were evaluated in a similar manner as above, but the analyses were based on Tracking Area weights rather than MEPS national weights. As was the case before, all three methods yielded similar results. Table 4 summarizes the results of the Rand reweighting using the Tracking Area or MEPS national weights as adjustment factors, as discussed above.

The data for females for Waves 11 through 13 (Fall 1980 through Fall 1982) were also evaluated by Rand using the same 16-cell and geographic weight only procedure (Tracking Area weights for Waves 11 and 12 and state weights for Wave 13 as provided by Market Facts) as were employed in the analysis of the data for males. Due to the relatively small size of the female samples, the 60-cell approach was not tested. Unlike the results obtained for the males, these two weighting procedures produced results that were systematically different from each other. Accordingly, Rand showed that it would be desirable to use adjustment factors, in addition to the geographical weights, in order to make Waves 11 through 13 data comparable to the Wave 14 (Fall 1983) data.

Two additional procedures were evaluated. The first was a modified 16-cell region/age/race adjustment that used the 1980-1982 average sample proportions in each of the 16-cells so that one set of weights would be used for all three waves. The second approach initially weighted the results using the Market Facts, Inc. geographical region by age/race formula and then adjusted the result to reflect the Wave 14 (Fall 1983) age distribution. Compared to the original 16-cell weighting procedure the modified 16-cell weighting procedure produced similar and satisfactory

Table 4

YOUTH ATTITUDE TRACKING STUDY

Comparison of Young Male Positive Propensity^aAs Originally Reported and as Reweighted^b

Service	Survey Wave														
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Army	n/c 18.4	10.8 13.1	11.4 14.5	13.8 11.8	14.8 12.7	14.0 12.4	13.9 11.8	13.0 11.1	12.9 11.8	15.1 14.5	14.6 13.0	15.0 13.2	16.0 14.5	17.5 n/a	14.3 n/a
Navy	n/c 19.6	13.4 16.4	13.8 16.5	17.5 15.2	17.5 15.5	17.0 15.2	16.2 14.4	15.1 13.5	14.5 13.4	16.6 15.8	14.4 13.1	15.4 14.0	14.4 13.0	13.0 n/a	10.9 n/a
Marine Corps	n/c 14.9	8.9 11.8	9.3 12.4	12.7 10.7	12.7 11.0	12.9 11.4	11.8 10.0	11.1 9.5	10.8 10.0	12.7 12.1	12.3 10.8	12.4 11.0	11.7 10.5	12.1 n/a	9.6 n/a
Air Force	n/c 20.4	14.7 17.5	15.4 17.9	18.1 15.7	18.3 15.7	19.2 17.0	17.7 15.6	16.4 14.0	16.6 15.3	19.4 18.3	20.6 18.6	20.9 18.5	18.7 17.4	18.8 n/a	15.3 n/a
Any Active Duty Service	n/c 31.2	29.4 24.8	30.5 26.4	33.8 29.6	34.1 29.9	34.6 31.1	32.4 28.2	30.8 27.0	30.0 27.6	34.7 32.8	33.7 30.0	34.3 30.5	35.8 32.7	35.4 n/a	29.9 n/a

^aPositive propensity respondents are those who stated they either "definitely" or "probably" will be serving in one or more of the four active duty services in the next few years.

^bThe percentage in bold-faced type (upper value of each pair of percentages) is the reweighted positive propensity rate. The percentages in light-faced type (lower value of each pair of percentages) is the positive propensity rate originally reported by Market Facts, Inc.

n/c - not calculated

n/a - not applicable

results, while the age adjustment procedure produced positive propensity estimates that were systematically lower than the original 16-cell and the modified 16-cell weighting procedures. Based on these findings Rand concluded that the modified 16-cell weighting procedure produced the optimum solution for restating Waves 11 through 13 propensity data for females. Table 5 presents the reweighted data.

Tables 6, 7, and 8 provide the technical information that will permit YATS data file users to apply the weighting schemes developed by RTI and Rand in their own analyses. Presented in Table 6 is a summary of the geographical weight (Tracking Area, MEPS, or state weight) to be used, and its location (card/column numbers or variable name) in the data file. The Tracking Area weights for the males in Waves 2 through 5 (Spring 1976 through Fall 1977) were not included in the original data files. Accordingly, Table 7 lists these weights as a supplement to Table 6. The weighting factors developed by Rand and used in their modified 16-cell weighting procedure for females in Waves 11 through 13 (Fall 1980 through Fall 1982) are presented in Table 8.

Table 5
 YOUTH ATTITUDE TRACKING STUDY
 Comparison of Female Positive Propensity^a
 As Originally Reported and as Reweighted^b

Service	Survey Wave				
	(11)	(12)	(13)	(14)	(15)
	Fall 1980	Fall 1981	Fall 1982	Fall 1983	Fall 1984
Army	6.3 5.3	7.0 6.4	6.1 5.5	4.4 n/a	5.6 n/a
Navy	6.6 5.9	7.1 6.3	5.6 5.3	4.7 n/a	4.3 n/a
Marine Corps	5.2 4.6	5.0 4.4	3.8 3.8	2.6 n/a	3.3 n/a
Air Force	9.5 8.7	9.4 8.8	8.8 8.6	6.8 n/a	9.0 n/a
Any Active Duty Service	14.8 13.3	15.7 14.3	14.5 13.7	11.7 n/a	13.2 n/a

^aPositive propensity respondents are those who stated they either "definitely" or "probably" will be serving in one or more of the four active duty services in the next few years.

^bThe percentage in bold-faced type (upper value of each pair of percentages) is the reweighted positive propensity rate. The percentages in light-faced type (lower value of each pair of percentages) is the positive propensity rate originally reported by Market Facts, Inc.

TABLE 6

YOUTH ATTITUDE TRACKING STUDY
Summary of Geographic Weight and Data File Location
for Proper Weighting of YATS Data

Wave	Date	Males		Females	
		Geographic Weight	File Location Card/Column ^a	Geographic Weight	File Location Card/Column
2	Spring 1976	Tracking Area	See Table 7	-	-
3	Fall 1976	Tracking Area	See Table 7	-	-
4	Spring 1977	Tracking Area	See Table 7	-	-
5	Fall 1977	Tracking Area	See Table 7	-	-
6	Spring 1978	Tracking Area	10/11-14	-	-
7	Fall 1978	Tracking Area	11/37-40	-	-
8	Spring 1979	Tracking Area	7/41-44	-	-
9	Fall 1979	Tracking Area	7/35-38	-	-
10	Spring 1980	Tracking Area	7/21-24	-	-
11	Fall 1980	Tracking Area	7/56-59	Tracking Area ^b	7/71-74b
12	Fall 1981	Tracking Area	8/11-14	Tracking Area ^b	8/26-29b
13	Fall 1982	MEPS	10/32-35	State ^b	10/47-50b
14	Fall 1983	MEPS	WINTIC	MEPS	WINTIC
15	Fall 1984	MEPS	WINTIC	MEPS	WINTIC

^aThe Tracking Area weights for males in Waves 2-5 (Spring 1976 - Fall 1977) were not included in the original data file. These weights are presented in Table 7 of this Technical Note.

^bIn addition to weighting each female case by the Tracking Area/State weight, each case must be further weighted using the appropriate factor presented in Table 8 of this Technical Note.

^cWaves 14 and 15 (Fall 1983 and Fall 1984) data files are in SAS (Statistical Analysis System) format. Accordingly, the variable name should be used.

Table 7
 YOUTH ATTITUDE TRACKING STUDY
 Tracking Area Weights
 for Waves 2-5 (Spring 1976 - Fall 1977)

Number	Tracking Area Name	Survey Wave			
		(2) Spring ^a 1976	(3) Fall 1976	(4) Spring 1977	(5) Fall 1977
01	Chicago	.72	.76	.97	1.38
02	Harrisburg	.65	.74	.91	1.04
03	New York City	.75	1.07	1.23	1.40
04	Philadelphia	-	.62	.67	.79
05	Boston	-	.52	.62	.75
06	Albany/Buffalo	.88	.89	1.05	1.40
08	Pittsburgh	-	.70	.59	.90
09	Washington, D.C.	.44	.50	.59	.74
10	Richmond/North Carolina	-	1.03	1.10	1.24
12	South Carolina/Georgia	-	.71	.74	.94
13	Florida	.53	.70	.70	.90
14	Alabama/Mississippi/Tennessee	1.01	1.17	1.40	1.56
15	New Orleans	-	.34	.40	.44
16	Texas	.94	1.11	1.28	1.55
17	Arkansas	-	.79	.90	.98
19	Kentucky	-	.45	.53	.62
20	Des Moines	-	.35	.38	.44
21	Ohio	.78	.97	.95	1.27
22	Michigan/Indiana	1.18	1.47	1.38	1.67
23	Wisconsin	-	.40	.41	.45
24	Minnesota/North Dakota/ South Dakota/Nebraska	.51	.68	.50	.88
25	Southern California/Arizona	.96	1.12	1.25	1.36
26	Northern California	.63	.77	.86	.96
27	New Mexico/Colorado/Wyoming	-	.51	.58	.76
28	Washington/Oregon	-	.53	.60	.78
29	Kansas City/Oklahoma	-	.75	.81	.92

^aThese weights apply only to the 200 respondents in each of the 13 Tracking Areas. Weights are unavailable for those 400 respondents from the balance of the country.

Table 8
 YOUTH ATTITUDE TRACKING STUDY
 Adjustment Factors Used in Reweighting
 Female Propensity Data
 for Waves 11-13 (Fall 1980-Fall 1982)

<u>Census Region</u>	<u>Age</u>			
	<u>16-17</u>		<u>18-21</u>	
	<u>White^a</u>	<u>Non-white^a</u>	<u>White^a</u>	<u>Non-white^a</u>
Northeast	.6970	.3953	.9002	1.3711
North Central	1.1474	.5163	1.2445	.9042
South	.9272	.9224	1.0774	.8496
West	1.3485	1.6051	1.0107	.7529

^aFor Waves 11 and 12 (Fall 1980 and Fall 1981) only those respondents who, in response to Question 23 of the YATS questionnaire stated their race as white, were so classified. All other respondents were classified as non-white. Those respondents who did not answer Question 23 were excluded from the analysis. For Wave 13 (Fall 1982) the same classification was used based on Question 30 of the YATS questionnaire.

Summary

The increased utilization of YATS as a data source for policy and program deliberations has led to an increased focus on its methodology in the past two to three years. Consequently, a common misconception has been that the changes that have occurred in the study have resulted principally from a change in contractors. This technical note suggests the contrary. More often than not, each successive wave of YATS has seen methodological changes in order to enhance its reliability or to meet the changing needs of its users.

This technical note summarizes these changes, describes the weighting schemes employed in the various waves of YATS, and presents a methodology that allows all data across all waves of the YATS to be compared.

Appendix F

Questionnaire Cross References

F-1: 1984 and 1983 YATS Questionnaires

F-2: 1983 and 1984 YATS Questionnaires

PREVIOUS PAGE
IS BLANK

Appendix F-1

Cross Reference

1984 and 1983 YATS Questionnaires

<u>Question Number</u>		<u>Comments</u>
<u>1984</u>	<u>1983</u>	
401	A1	Same
402	A2	Same
403	A3	Same
404	A4	Reworded
405	A7	Same
406	--	New
407	A11	Same
408	A12	Same
409	A14	Same
410A	--	New
410B	A8	Reworded
411	A9	Same
412-415	--	New
416	A17	Same
417	A18	Reworded
418	--	New
419	A19	Same
420	A20	Same
421	A21	Same
422	A22	Reworded
423	--	New
424	A23	Same
425	A24	Same
426/427	A26	Reworded
428	A25	Same
429	A27	Same
430	A30	Same
431	A35	Same
432	A36	Same
433	A37	Same



Cross Reference - 1984 and 1983 YATS Questionnaires (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1984</u>	<u>1983</u>	
434	A38	Reworded
435	A39	Probe added
436	A40	Same
437	A41	Same
438	A42	Same
439	A43	Same
440	A44	Same
441	A45	Same
442	A46	Same
443	A47	Same
444-500	--	Not used
501	B1	Same
502	B2	Same
503	B3	Same
504	B4	Same
505	B5	Same
506	B6	Same
507	B7	Same
508	B8	Same
509	B9	Same
510	B10	Same
511	B11	Same
512	B12	Same
513	B13	Same
514	B14	Same
515	B15	Same
516/517	--	New
518/519	--	Not used
520	B16	Same
521	B17	Same
522	B19	Same
523/524	--	New
525-550	--	Not used

Cross Reference - 1984 and 1983 YATS Questionnaires (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1984</u>	<u>1983</u>	
551	B35	Same
552	B36	Same
553	B37	Same
554	B38	Same
555	B39	Split sample with 559-562
556	B40	Split sample with 559-562
557	B41	Split sample with 559-562
558	B42	Split sample with 559-562
559-562	--	New - Split sample with 555-558
563-570	--	Not used
571	C33	Same
572	C34	Same
573	C35	Same
574	C37	Same
575	C38	Same
576	C39	Same
577	C40	Same
578	C41	Same
579	C43	Updated amount
580	C44	Updated amount
581	C45	Updated amount
582	C49	Same
583	C50	Same
584	C51	Same
585	C46	Updated amount
586	C47	Updated amount
587	C48	Updated amount
588	C52	Split sample to test 6/8yrs
589	C53	Same
590-599	--	Not used
601	D1	Same
602-608	D2	Same
609	D3	Same

Cross Reference - 1984 and 1983 YATS Questionnaires (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1984</u>	<u>1983</u>	
610	D4	Same
611	D5	Same
612	D6	Same
613	--	New
614	D7	Same
615	D8	Same
616	D9	Same
617	D10	Same
618	D11	Same
619	D12	Same
620	D13	Same
621	D14	Same
622	D15	Same
623	D16	Same
624	D17	Same
625	D18	Same
626	D19	Same
627	D20	Same
628	D21	Same
629	D22	Same
630	D23	Same
631	D24	Same
632	D25	Reworded
633	D28	Same
634	D29	Same
635	D30	Reworded
636	D33	Same
637	D34	Same
638	D35	Same
639	D38	Reworded
640	D39	Same
641	D40	Reworded
642	D43	Same

Cross Reference - 1984 and 1983 YATS Questionnaire (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1984</u>	<u>1983</u>	
643	--	New
644	D45	Same
645	D46	Reworded
646	D48	Reworded
647-678	--	New
679	D49	Same
680	D50	Reworded/Split Sample
681	D51	Reworded/Split Sample
682	--	New
683	D59	Same
684	D60	Same
685-687	D61	Same
688/689	D62	Same
690	D63	Same
691/692	--	New
693	D64	Same
694	D68	Same
695	D69	Same
696	--	New
697	D79	Reworded
698	D70	Same
699	D71	Same
700	D72	Same
701	D73	Same
702-709	D74	Same
710-712	--	New
713	D77	Same
714	D80	Same
715	D81	Same
716	D82	Same
717	D83	Same

Appendix F-2
 Cross Reference
 1983 and 1984 YATS Questionnaires

<u>Question Number</u>		<u>Comments</u>
<u>1983</u>	<u>1984</u>	
A1	401	Same
A2	402	Same
A3	403	Same
A4	404	Reworded
A5	--	Dropped
A6	--	Dropped
A7	405	Same
A8	410B	Reworded
A9	411	Same
A10	--	Dropped
A11	407	Same
A12	408	Same
A13	--	Dropped
A14	409	Same
A15/A16	--	Dropped
A17	416	Same
A18	417	Reworded
A19	419	Same
A20	420	Same
A21	421	Same
A22	422	Reworded
A23	424	Same
A24	425	Same
A25	428	Same
A26	426/427	Reworded
A27	429	Same
A28/A29	--	Dropped
A30	430	Same
A31-A34	--	Dropped
A35	431	Same

PREVIOUS PAGE
IS BLANK

Cross Reference - 1983 and 1984 YATS Questionnaires (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1983</u>	<u>1984</u>	
A36	432	Same
A37	433	Same
A38	434	Reworded
A39	435	Probe added
A40	436	Same
A41	437	Same
A42	438	Same
A43	439	Same
A44	440	Same
A45	441	Same
A46	442	Same
A47	443	Same
B1	501	Same
B2	502	Same
B3	503	Same
B4	504	Same
B5	505	Same
B6	506	Same
B7	507	Same
B8	508	Same
B9	509	Same
B10	510	Same
B11	511	Same
B12	512	Same
B13	513	Same
B14	514	Same
B15	515	Same
B16	520	Same
B17	521	Same
B18	--	Dropped
B19	522	Same
B20-B34	--	Dropped
B35	551	Same

Cross Reference - 1983 and 1984 YATS Questionnaires (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1983</u>	<u>1984</u>	
B36	552	Same
B37	553	Same
B38	554	Same
B39	555	Split sample w/559-562
B40	556	Split sample w/559-562
B41	557	Split sample w/559-562
B42	558	Split sample w/559-562
C1-C32	--	Dropped
C33	571	Same
C34	572	Same
C35	573	Same
C36	--	Dropped
C37	574	Same
C38	575	Same
C39	576	Same
C40	577	Same
C41	578	Same
C42	--	Dropped
C43	579	Updated amount
C44	580	Updated amount
C45	581	Updated amount
C46	585	Updated amount
C47	586	Updated amount
C48	587	Updated amount
C49	582	Same
C50	583	Same
C51	584	Same
C52	588	Split sample to test 6/8 yrs.
C53	589	Same
D1	601	Same
D2	602-608	Same
D3	609	Same
D4	610	Same
D5	611	Same
D6	612	Same
D7	614	Same

Cross Reference - 1983 and 1984 YATS Questionnaires (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1983</u>	<u>1984</u>	
D8	615	Same Same Same
D9	616	
D10	617	
D11	618	Same Same Same
D12	619	
D13	620	
D14	621	Same Same Same
D15	622	
D16	623	
D17	624	Same
D18	625	
D19	626	
D20	627	Same Same Same
D21	628	
D22	629	
D23	630	Same Same Reworded
D24	631	
D25	632	
D26/D27	--	Dropped Same Same
D28	633	
D29	634	
D30	635	Reworded Dropped Same
D31/D32	--	
D33	636	
D34	637	Same Same Dropped
D35	638	
D36/D37	--	
D38	639	Reworded Same Reworded
D39	640	
D40	641	
D41/D42	--	Dropped Same Dropped
D43	642	
D44	--	

Cross Reference - 1983 and 1984 YATS Questionnaire (continued)

<u>Question Number</u>		<u>Comments</u>
<u>1983</u>	<u>1984</u>	
D45	644	Same
D46	645	Reworded
D47	--	Dropped
D48	646	Reworded
D49	679	Same
D50	680	Reworded/Split Sample
D51	681	Reworded/Split Sample
D52-D58	--	Dropped
D59	683	Same
D60	684	Same
D61	685-687	Same
D62	688/689	Same
D63	690	Same
D64	693	Same
D65-D67	--	Dropped
D68	694	Same
D69	695	Same
D70	698	Same
D71	699	Same
D72	700	Same
D73	701	Same
D74	702-709	Same
D75/D76	--	Dropped
D77	713	Same
D78	--	Dropped
D79	697	Reworded
D80	714	Same
D81	715	Same
D81A1/A2	--	Dropped
D82	716	Same
D83	717	Same

Appendix G
Survey Screener and Questionnaire

Survey Screener

PREVIOUS PAGE
IS BLANK 

Questionnaire Section SC--Screening Households for Eligibles

SC_1 Hello, my name is _____. I'm calling from the Research Triangle Institute 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 RECORD OF CALLS SCREEN-TERMINATION]
- 8 = DISCONNECTION (NOT A REFUSAL) [SKIP TO CONTROL SCREEN]
- RE = REFUSAL (INCLUDING HANGUPS) → [SKIP TO REFUSAL REASONS SCREEN]

SC_1B We are conducting an important study for the Federal Government. We are calling a random sample of telephone numbers in connection with this study, and I need to know what type of number this is. Does this number serve a residence, a business, or something else?

- 1 = RESIDENCE [SKIP TO SC-2]
- 2 = BUSINESS/INSTITUTION
- 3 = OTHER
- 4 = LANGUAGE BARRIER [SKIP TO RECORD OF CALLS SCREEN-TERMINATION]
- 8 = BREAKOFF OR DISCONNECTION (NOT A REFUSAL) [SKIP TO COMMENT SCREEN]
- DK = DON'T KNOW OR OTHER UNABLE TO COMPLETE [SKIP TO COMMENT SCREEN]
- RE = REFUSAL (INCLUDING HANGUPS) [SKIP TO REFUSAL REASONS SCREEN]

SC_1C1 Does anyone live there on the premises?

- 1 = Yes
- 2 = No [SKIP TO RECORD OF CALLS SCREEN-TERMINATION]
- 3 = LANGUAGE BARRIER [SKIP TO RECORD OF CALLS SCREEN-TERMINATION]
- 8 = BREAKOFF OR DISCONNECTION (NOT A REFUSAL) [SKIP TO COMMENT SCREEN]
- DK = DON'T KNOW OR OTHER UNABLE TO COMPLETE [SKIP TO COMMENT SCREEN]
- RE = REFUSAL (INCLUDING HANG-UPS) [SKIP TO REFUSAL REASONS SCREEN]

SC_1C2 Is this the number they use as their home phone?

- 1 = Yes
- 2 = No [SKIP TO RECORD OF CALLS SCREEN-TERMINATION]
- 3 = LANGUAGE BARRIER [SKIP TO RECORD OF CALLS SCREEN-TERMINATION]
- 8 = BREAKOFF OR DISCONNECTION (NOT A REFUSAL) [SKIP TO COMMENT SCREEN]
- DK = DON'T KNOW OR OTHER UNABLE TO COMPLETE [SKIP TO COMMENT SCREEN]
- RE = REFUSAL (INCLUDING HANG-UPS) [SKIP TO REFUSAL REASONS SCREEN]

SC_2 (First/Next), I need to verify the general location of this number. Is this residence located in (COUNTY) County, (STATE)?

- 1 = Yes
- 2 = No → [SKIP TO COUNTY/STATE CORRECTION SCREEN]

SC_4 I need to verify the general location of this number. What is the ZIP Code for this residence?

ENTER ZIP CODE



SC_5 Is this telephone number just for (your/one) household or does it also serve as the home telephone number for other households as well?

- 1 = Serves one household
- 2 = Serves more than one household → [SKIP TO MULTIPLE HOUSEHOLD SCREEN]

SC_6 Do ten or more persons currently live in this household?

- 1 = Yes
- 2 = No → [SKIP TO SC_7]

SC_6A Are any of these persons related to each other?

- 1 = Yes
- 2 = No → [SKIP TO RECORD OF CALLS SCREEN-TERMINATION]

SC_7 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_7B]

SC_7A How many different residential numbers, including this number, are there for (your home/this structure)?

ENTER NUMBER OF TELEPHONE NUMBERS

SC_7B If we had called this number in October, 1983, could we have contacted you or any other current resident of the household served by this telephone number?

- 1 = Yes
- 2 = No [SKIP TO TERMINATION]

SC_8 How many persons 15 years old 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 persons away at school or traveling or in the hospital.

ENTER NUMBER

SC_8A And how many are between the ages of 15 and 30?

ENTER NUMBER

[IF "NONE" SKIP TO TERMINATION.]

SC_8B And how many are 31 years old or older?

ENTER NUMBER

Now, I would like to ask you a couple of questions about each person in your household between 15 and 30 (starting with the youngest).

SC_9 (First, is the youngest person (between 15 and 30) male or female?/
Now, for the next person between 15 and 30 years of age. Is this person male or female?)

- 1 = Male
- 2 = Female
- 3 = No person (REPORTED BY MISTAKE) [SKIP TO NEXT PERSON]

SC_10 How old was (he/she) on (his/her) last birthday?

ENTER AGE

ASK ONLY	(IF SC_9 = 1 AND SC_10 = 16)
----------	------------------------------

SC_10A Was he 16 years old on October 1st of last year (1983)?

- 1 = Yes
- 2 = No → [WAVE-DEPENDENT SKIP TO NEXT PERSON]

SKIP	(IF SC 9 = 1 AND (SC_10 <16 OR SC_10 >29)) OR (IF SC 9 = 2 AND (SC_10 <16 OR SC_10 >21)), SKIP TO THE NEXT PERSON BETWEEN 15 and 30.
------	--

SC_11 Is (he/she) currently a Junior or Senior in college, a college graduate, or attending graduate school?

- 1 = Yes → [SKIP TO NEXT PERSON BETWEEN 15 and 30]
- 2 = No

SC_12 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 30]
- 2 = No

SC_13 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 30]
- 2 = No

SC_13A Could we have contacted (him/her) at this telephone number last October (1983)? That is, was (he/she) living or staying at this number then, or did (he/she) usually live there but was away at school or travelling or in the hospital at that time?

- 1 = Yes
- 2 = No → [WAVE-DEPENDENT SKIP TO NEXT PERSON BETWEEN 15 AND 30]

SC_14 Is (he/she) currently living here (at this telephone number)?

- 1 = Yes → [SKIP TO SC_16]
- 2 = No

SC_15 Does (he/she) have a telephone?

- 1 = Yes
- 2 = No → [SKIP TO NEXT PERSON BETWEEN 15 and 30]

SC_15A 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 30]

SC_15B What is (his/her) telephone number?

ENTER TELEPHONE NUMBER

SC_16 What is (his/her) first and last name?

ENTER FIRST AND LAST NAME

REPEAT SC_9 THROUGH SC_16 FOR EACH PERSON IN HOUSEHOLD BETWEEN 15 and 30.

SC_17 Are there any other people between the ages of 15 and 30 other than those we have already discussed?

- 1 = Yes
- 2 = No → [SKIP TO SC_17B]

SC_17A How many others?

ENTER NUMBER [ASK SC_9 THROUGH SC_16 FOR EACH ADDITIONAL PERSON]

IF NO ELIGIBLE PERSONS ARE IDENTIFIED, SKIP TO TERMINATION.

SC_17B The person(s) we need to interview for this study (is/are): LIST OF NAMES). I'd like to speak with (him/her/one of them).

- 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]

Survey Questionnaire

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/Amrigon), 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 youth and young adults. While 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.

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: 16-29

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?

- 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. COL./VOC., BUS., OR TRADE SCHOOL (FR)
- 14 = 2nd YEAR COLLEGE/JR. OR COMM. COL./VOC., BUS., OR TRADE SCHOOL (SO)
- 15 = 3rd YEAR OF 4-YEAR COLLEGE (JR)
- 16 = 4th YEAR OF 4-YEAR COLLEGE (SR)
- 17 = 5th YEAR COLLEGE/1st YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 18 = 2nd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 19 = 3rd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 20 = MORE THAN 3 YEARS GRADUATE/PROFESSIONAL SCHOOL
- 99 = RE

RESOLVE

PREVIOUS PAGE
IS BLANK

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 (NIGHT SCHOOL)
- 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).
- 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

RESOLVE

SKIP	IF Q.404 ≤11, SKIP to Q.407.
------	------------------------------

406 (Is that/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
- 8 = DK
- 9 = RE

407 In October, will you be enrolled in any school, college, vocational or technical program, apprenticeship, or job training course?

- 1 = YES
- 2 = NO
- 8 = DK → [SKIP TO Q.410.]
- 9 = RE

408 What kind of school or training program will you be enrolled in?
[IF MULTIPLE RESPONSES, ENTER HIGHEST CODE.]

01 = NO SCHOOLS OR TRAINING PROGRAM → [1st ENTRY ONLY, SKIP TO Q.410.]

IF Q.404
=>12,
RESOLVE { 02 = ADULT BASIC EDUCATION (ABE) (H.S. COURSES IN NIGHT SCHOOL
OR BY CORRESPONDENCE)
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, CETA)

06 = ON-THE-JOB TRAINING PROGRAM

07 = APPRENTICESHIP PROGRAM

IF Q.404
<12,
RESOLVE { 08 = VOCATIONAL, BUSINESS, OR TRADE SCHOOL
09 = 2-YEAR JUNIOR OR COMMUNITY COLLEGE
10 = 4-YEAR COLLEGE OR UNIVERSITY

409 Will you be enrolled ...

1 = full-time or

2 = part-time?

410A Think about the 1985-1986 school year--that's 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
'85-'86 school year?

1 = YES → [SKIP TO Q.411]

2 = NO

8 = DK

9 = RE

410B How about sometime further into the future--would you like to get
more schooling?

1 = YES

IF Q.404
<11 &
Q.408
= 03,
RESOLVE 2 = NO
8 = DK
9 = RE

SKIP	IF Q.410B =>2, SKIP TO Q.415.
------	-------------------------------

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
- 8 = DK

413 Approximately how much, considering all school and living expenses, 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 don't expect to be attending school in 1985-1986, what/What) is the highest grade or year of school or college that you would eventually like to complete?

- 08 = 8th GRADE
- 09 = 9th GRADE
- 10 = 10th GRADE
- 11 = 11th GRADE
- 12 = 12th GRADE
- 13 = 1st YEAR COLLEGE/JR. OR COMM. COL./VOC., BUS., OR TRADE SCHOOL (FR)
- 14 = 2nd YEAR COLLEGE/JR. OR COMM. COL./VOC., BUS., OR TRADE SCHOOL (SO)
- 15 = 3rd YEAR OF 4-YEAR COLLEGE (JR)
- 16 = 4th YEAR OF 4-YEAR COLLEGE (SR)
- 17 = 5th YEAR COLLEGE/1st YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 18 = 2nd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 19 = 3rd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 20 = MORE THAN 3 YEARS GRADUATE/PROFESSIONAL SCHOOL

416 Are you currently employed, either full-time or part-time?

1 = YES → [SKIP TO Q.421.]

2 = NO

417 Are you looking for work now?

1 = YES

2 = NO → [SKIP TO Q.419]

418 How many months have you been looking for work?

ENTER NUMBER OF MONTHS
(LESS THAN 1 MONTH = 001)

FORMAT: 123

RANGE: 001 - 995

998 = DK

999 = RE

419 Have you ever had a job for pay?

1 = YES

2 = NO
9 = RE } → [SKIP TO Q.434.]

420 When did you last work for pay at a regular job or business, either full-time or part-time -- what month and year did you last work?

ENTER MONTH
98 = DK

FORMAT: 12 [USE LEADING ZERO]

RANGE: 01-12

ENTER YEAR
98 = DK

} → [SKIP TO Q.424.]

FORMAT: 12

RANGE: 71-84

421 How many different jobs do you have right now?

ENTER NUMBER OF JOBS

FORMAT: 1

RANGE: 1-7

422 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. → [SKIP TO INTRO BEFORE Q.424.]

423 How many months have you been looking?

ENTER NUMBER OF MONTHS

FORMAT: 123

RANGE: 001-995

998 = DK

999 = RE

(Now, I have some questions about your (present/last) employment. (Since you have more than one job, I want you to answer for your main job. Usually, that's the job you work the most hours at, but you should answer for the job that you consider to be your main job.))

424 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

425 How often (do/did) you work on the weekend as a regularly scheduled part of your (main/last) job -- that is, weekend work that's not considered overtime? Would you say it (is/was) ...

- 1 = every week,
- 2 = two or three times a month,
- 3 = once a month,
- 4 = less than once a month, or
- 5 = never?

426 How (are/were) you paid? (Are/Were) you paid ...

- 1 = by the hour,
 - 2 = by the day,
 - 3 = by the week,
 - 4 = every two weeks,
 - 5 = twice a month, or
 - 6 = by the month,
 - 7 = NONE OF THE ABOVE
- } →[SKIP TO Q.428.]

427 I have to be able to record your pay per one of these time periods. Please try to think of your earnings in terms like pieces per hour or jobs per day or total commissions per week. In terms like that, (are/were) you paid...

- 1 = by the hour,
- 2 = by the day,
- 3 = by the week
- 4 = every two weeks
- 5 = twice a month, or
- 6 = by the month.

428 What (is/was) your gross wage, salary, or rate of pay [FILL FROM Q.426/Q.427], before any deductions, at this (main/last) job?

ENTER AMOUNT OF PAY FORMAT: VARIABLE (DEPENDING ON
RANGE: FILL FROM Q.426/Q.427)

429 When did you start working at this (main/last) job -- what month and year did you start?

ENTER MONTH WHEN STARTED JOB FORMAT: 12 [USE LEADING ZERO]
RANGE: 01-12

ENTER YEAR WHEN STARTED JOB FORMAT: 12
RANGE: 71-84

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?
- 8 = DK
- 9 = RE

SKIP	IF Q.424 =>35, SKIP TO Q.433.
------	-------------------------------

432 Have you ever had a job where you usually worked 35 hours or more each week?

- 1 = YES
- 2 = NO
- 9 = RE } → [SKIP TO Q.434.]

433 How many different, full-time jobs have you had (including your current job)?

ENTER NUMBER OF JOBS FORMAT: 12 [USE LEADING ZERO]
RANGE: 01-30

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: } VARIABLE
RANGE: }

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,
- 2 = per day,
- 3 = per week,
- 4 = every two weeks,
- 5 = twice a month,
- 6 = per month, or
- 7 = per year?

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
- 2 = WORKING
- 3 = DOING NOTHING
- 4 = OTHER
- 5 = JOINING THE (MILITARY/SERVICE)

SKIP	IF Q.438 ≠ 2 AND Q.438 = 5, SKIP TO Q.440. IF Q.438 ≠ 2 AND Q.438 ≠ 5, SKIP TO Q.501. IF Q.438 = 2 AND Q.416 ≠ 1 AND Q.438 = 5, SKIP TO Q.440. IF Q.438 = 2 AND Q.416 ≠ 1 AND Q.438 ≠ 5, SKIP TO Q.501.
------	--

439 Do you think that you will be working in...

- 1 = the same job or occupation you now have, or
- 2 = a different job or occupation?

SKIP

IF Q.438 ≠ 5, SKIP TO Q.501.

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
- 9 = RE } [SKIP TO Q.501.]

443 Which type of service would that be? Would it be...

- 1 = active duty,
- 2 = the Reserves, or
- 3 = the National Guard?
- 8 = DK
- 9 = RE

Questionnaire Sections B and C -- Active Duty & Reserve Component Items

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 is it 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,

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 fulltime 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 1985--that is, a year from this fall/after you finish high school)? What will you most likely be doing?

- | | |
|---------------------------------|-----------------------|
| 1 = GOING TO SCHOOL FULL-TIME | [IF "GOING TO SCHOOL" |
| 2 = GOING TO SCHOOL PART-TIME | OR "WORKING," PROBE: |
| 3 = WORKING FULL-TIME | Will that be full- |
| 4 = WORKING PART-TIME | time or part-time?] |
| 5 = SERVING IN THE MILITARY | |
| 6 = BEING A FULL-TIME HOMEMAKER | |
| 7 = OTHER | |

NOTE: Question numbers 518 and 519 were not used.

SKIP	IF ONLY 1 OF Q.510-Q.513 <=2, SKIP TO Q.521. IF ALL OF Q.510-Q.513 =>4, 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)

SKIP	IF Q.438 = 5, SKIP TO Q.524.
------	------------------------------

523 Before we talked today, had you ever even thought about joining the military?

1 = YES
2 = NO

SKIP	IF Q.523 = >2 AND ACTIVE SUBSAMPLE, SKIP TO Q.551 IF Q.523 = >2 AND RESERVE SUBSAMPLE, SKIP TO Q.571
------	---

524 How seriously did you consider the possibility of joining the military? Would you say you considered joining the military...

1 = very seriously,
2 = somewhat seriously,
3 = only slightly seriously, or
4 = not really seriously at all?

NOTE: Question numbers 525 through 550 were not used.

SKIP	IF RESERVE SUBSAMPLE, SKIP TO Q.571.
------	--------------------------------------

551 As far as you know, what is the starting monthly pay for an enlisted person in the military -- before taxes are deducted?

ENTER PAY PER MONTH FORMAT: 1234
RANGE: 0100 - 9995 → [SKIP TO Q.553.]
9998 = DK
9999 = RE

552 Could you please give me your best guess? (PROBE: Just an estimate will do.)

ENTER PAY PER MONTH FORMAT: 1234
RANGE: 0100-9995
9998 = DK
9999 = RE } [SKIP TO Q.554]

553 When you thought of starting monthly pay, did you include any military benefits such as food, housing, and medical benefits?

1 = YES
2 = NO

559 As far as you know, does any service have a program that helps pay for college or vocational training after you leave the military?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } [SKIP TO Q.601.]

560 Which service or services offer a program that helps pay for college or vocational training after you leave the military? [ENTER CODE FOR EACH MENTION. PROBE: Any others?]

- 1 = AIR FORCE
 - 2 = ARMY
 - 3 = MARINE CORPS
 - 4 = NAVY
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.601.]

561 Which service offers the largest educational benefits after service, 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.

562 If someone enlists for 4 years, what is the maximum amount of money they can receive under this educational benefits program? [PROBE: Please give me your best estimate.]

ENTER AMOUNT FORMAT: 12345
RANGE: 00001 - 55555

SKIP	SKIP TO Q.601.
------	----------------

NOTE: Question numbers 563 through 570 were not used.

Now, I'm going to ask you a few questions about the National Guard and the Reserves.

571 How many days do you think members of the National Guard and Reserve have to participate in drills each month, once their basic training is completed? Do not include summer training. [PROBE: Just your best guess will do.]

ENTER NUMBER OF DRILL DAYS PER MONTH FORMAT: 12 [USE LEAD ZERO]
RANGE: 01-30

572 How many days do you think members of the National Guard and Reserves spend at summer training camp each year? [PROBE: Just your best guess will do.]

ENTER NUMBER OF DAYS FOR SUMMER CAMP FORMAT: 12 [USE LEAD ZERO]
RANGE: 01-90

573 How much money do you think someone beginning service in the Guard or Reserve earns for each eight-hour drill day? [PROBE: Just your best guess will do.]

ENTER AMOUNT OF PAY PER DAY FORMAT: 123 [USE LEAD 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 most National Guard or Reserve units requires 3 to 6 months, full-time. Do you think an employer would hold a job for you if you were away for active duty training with the National Guard or the Reserves for 3 to 6 months?

1 = YES
2 = NO

575 If an employer did hold a position open, do you think you would lose your job seniority during the 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?

578 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

579 How likely would you be to enlist in the National Guard or Reserves for six years if you were to receive 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 were to receive a 4,000 dollar bonus for six years in the National Guard or Reserves? Would you...

IF Q.580
>Q.579,
RESOLVE { 1 = definitely enlist, → [SKIP TO Q.582.]
2 = probably enlist,
3 = probably not enlist, or
4 = definitely not enlist?

581 How about a 6,000 dollar bonus for six years? (Would you...

IF Q.581
>Q.580,
RESOLVE { 1 = definitely enlist,
2 = probably enlist,
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

583 Suppose you joined a National Guard or Reserve unit and then moved to another geographic area. Do you think the military would allow you to transfer to another unit or go inactive?

- 1 = YES, MILITARY WOULD ALLOW R TO TRANSFER OR GO INACTIVE
- 2 = NO

584 If it were possible to transfer or go inactive if you moved to another geographic area, how much would that increase your interest in joining the National Guard or Reserves? Would you become...

- 1 = very much more interested,
- 2 = somewhat more interested,
- 3 = only slightly more interested, or
- 4 = not at all more interested?

585 How likely would you be to enlist in the National Guard or Reserves for six years if you were to receive tuition assistance of 1,000 dollars per year for up to 4 years of schooling, for a total of 4,000 dollars? Would you...

- 1 = definitely enlist, → [SKIP TO Q.588.]
- 2 = probably enlist,
- 3 = probably not enlist, or
- 4 = definitely not enlist?

586 What if you were to receive tuition assistance of 1,500 dollars per year for up to 4 years of schooling, for a total of 6,000 dollars for six years in the National Guard or Reserves? Would you...

- IF Q.586
>Q.585,
RESOLVE
- 1 = definitely enlist, → [SKIP TO Q.588.]
 - 2 = probably enlist,
 - 3 = probably not enlist, or
 - 4 = definitely not enlist?

587 How about tuition assistance of 2,000 dollars per year for up to 4 years of schooling, for a total of 8,000 dollars? Would you...

- IF Q.587
>Q.586,
RESOLVE
- 1 = definitely enlist,
 - 2 = probably enlist,
 - 3 = probably not enlist, or
 - 4 = definitely not enlist?

[FOR Q.588, FILL-IN = "6" or "8", BASED ON RANDOM HALF-SAMPLES.]

588 A new program is being developed by the Armed Forces. Volunteers for this program would join the Individual Ready Reserve for a period of (6/8) years and be called to active duty only in case of a national emergency. Normally, the only obligation would be 12 weeks of basic combat training. During the training, volunteers would earn about 575 dollars per month and receive full benefits. There would be no obligation to attend regular meetings or drills during the remainder of the (6/8)-year term. If such a program were available to you, how likely would you be to join? Would you be...

- 1 = very likely to join, → [SKIP TO Q.601.]
- 2 = somewhat likely to join,
- 3 = only slightly likely to join, or
- 4 = not at all likely to join?

589 If you were to receive a 1,000 dollar bonus for enlisting in the program I just described, how likely would you be to join? Would you be...

- IF Q.589
>Q.588,
RESOLVE
- 1 = very likely to join,
 - 2 = somewhat likely to join,
 - 3 = only slightly likely to join, or
 - 4 = not at all likely to join?

NOTE: Question numbers 590 through 600 were not used.

Questionnaire Section D -- Advertising, Recruiter Contact, and
Demographic Items

601 For what military service or services do you recall seeing or hearing advertising that encouraged people to enlist in one of the active duty 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.]

Do you recall seeing or hearing any advertising for [EACH SERVICE NOT MENTIONED IN Q.601] recently?

602 the Air Force?

- 1 = Yes
- 2 = No
- 3 = MENTIONED IN Q.601.

603 the Army?

- 1 = Yes
- 2 = No
- 3 = MENTIONED IN Q.601.

604 the Coast Guard?

- 1 = Yes
- 2 = No
- 3 = MENTIONED IN Q.601

605 the Marine Corps?

- 1 = Yes
- 2 = No
- 3 = MENTIONED IN Q.601.

606 the Navy?

- 1 = Yes
- 2 = No
- 3 = MENTIONED IN Q.601

607 the National Guard/Reserves?

- 1 = Yes
- 2 = No
- 3 = MENTIONED IN Q.601

608 all the services in one ad?

- 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 the (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.

SERIES Q.610-Q.615 ASKED IN RANDOM ORDER.

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 the...

Army,
Air Force,
Marine Corps,
Navy, } → [SERVICES LISTED IN RANDOM ORDER]

or, by all four active duty services together in the same ad or commercial?

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

613 Who in the military uses the advertising slogan, "Blank, a great way of life"?

- 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

615 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

SKIP	IF OLDER MALE, SKIP TO Q.628.
------	-------------------------------

616 Within the last twelve 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 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
- 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 twelve months, do you recall seeing advertising on
television or hearing any advertising on the radio for the military?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.620.]

619 For which 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
- 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

620 Have you ever received any military recruiting literature in the
mail without asking for it?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.622.]

621 Which 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 Have you ever made a toll-free call for information about the military?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.624]

623 Which 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

SKIP	SKIP TO Q.625
------	---------------

624 Do you think you might make a toll-free call for information about the military in the future?

- 1 = YES
- 2 = NO

625 Have you ever sent a post card or coupon for information about the military?

- 1 = YES
 - 2 = NO
 - 8 = DK
 - 9 = RE
- } → [SKIP TO Q.627.]

626 Which 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

SKIP	SKIP TO Q. 628.
------	-----------------

627 Do you think you might mail a post card or coupon for information about the military in the future?

- 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 military service or services 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. 643.]

SKIP	IF V629AIRF = 1, SKIP TO Q. 631. IF V629AIRF ≠ 1 AND V629ARMY = 1, SKIP TO Q. 634. IF V629AIRF AND V629ARMY ≠ 1 AND V629MARN = 1, SKIP TO Q. 637. IF ALL V629AIRF - V629MARN ≠ 1 AND V629NAVY = 1, SKIP TO Q. 640.
------	---

644 What enlistment options or advantages of joining the service do you remember? [DO NOT READ ITEMS. ENTER CODE FOR EACH MENTION FOR FIRST 8 MENTIONS.]

- 01 = CASH BONUS
- 02 = MONEY FOR EDUCATION AFTER SERVICE
- 03 = GUARANTEED TYPE OF TRAINING
- 04 = TWO-YEAR ENLISTMENT
- 05 = GUARANTEED LOCATION FOR TRAINING
- 06 = GUARANTEED JOB ASSIGNMENT AT END OF TRAINING
- 07 = ADVANCE PAY GRADE
- 08 = GOOD PAY
- 09 = TRAVEL
- 10 = ADVENTURE
- 11 = JOB SATISFACTION
- 12 = GOOD PEOPLE TO WORK WITH
- 13 = TRAINING FOR LEADERSHIP
- 14 = EQUAL OPPORTUNITY
- 15 = SKILLS TRAINING
- 16 = OTHER

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?

648 Have you ever taken a physical examination for the military?

1 = YES

2 = NO

8 = DK

9 = RE

SERIES Q. 649 - Q. 678 ASKED IN RANDOM ORDER IN SETS OF 2.

Now, I'd like for you to give me your opinions on several topics. First, I'd like to read several job characteristics. After I read each characteristic, please tell me how important you feel it would be in choosing a job.

649 (In choosing a job,) is being able to stay in the area near family and friends...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

650 Is being able to stay in the area near family and friends more likely to occur in a...

- 1 = military job,
- 2 = in a civilian job, or
- 3 = could it occur in either one?

651 (In choosing a job,) is being able to do something for your country...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

652 Is being able to do something for your country more likely to occur in a...

- 1 = military job,
- 2 = in a civilian job, or
- 3 = could it occur in either one?

653 (In choosing a job,) is being able to get money for education...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

- 654 Is being able to get money for education more likely to occur in a...
- 1 = military job,
 - 2 = in a civilian job, or
 - 3 = could it occur in either one?
- 655 (In choosing a job,) is personal freedom...
- 1 = extremely important,
 - 2 = very important,
 - 3 = somewhat important, or
 - 4 = not at all important to you?
 - 8 = DK
- 656 Is personal freedom more likely to occur in a...
- 1 = military job,
 - 2 = in a civilian job, or
 - 3 = could it occur in either one?
- 657 (In choosing a job,) is a good income ...
- 1 = extremely important,
 - 2 = very important,
 - 3 = somewhat important, or
 - 4 = not at all important to you?
 - 8 = DK
- 658 Is good income more likely to occur in a...
- 1 = military job,
 - 2 = in a civilian job, or
 - 3 = could it occur in either one?
- 659 (In choosing a job,) is high status and prestige...
- 1 = extremely important,
 - 2 = very important,
 - 3 = somewhat important, or
 - 4 = not at all important to you?
 - 8 = DK
- 660 Is high status and prestige more likely to occur in a...
- 1 = military job,
 - 2 = in a civilian job, or
 - 3 = could it occur in either one?
- 661 (In choosing a job,) is your parents' approval...
- 1 = extremely important,
 - 2 = very important,
 - 3 = somewhat important, or
 - 4 = not at all important to you?
 - 8 = DK

- 662 Is your parents' approval more likely to occur in a...
1 = military job,
2 = in a civilian job, or
3 = could it occur in either one?
- 663 (In choosing a job,) is being able to learn a valuable trade or skill...
1 = extremely important,
2 = very important,
3 = somewhat important, or
4 = not at all important to you?
8 = DK
- 664 Is being able to learn a valuable trade or skill more likely to occur in a...
1 = military job,
2 = in a civilian job, or
3 = could it occur in either one?
- 665 (In choosing a job,) is having a lot in common with your co-workers...
1 = extremely important,
2 = very important,
3 = somewhat important, or
4 = not at all important to you?
8 = DK
- 666 Is having a lot in common with your co-workers more likely to occur in a...
1 = military job,
2 = in a civilian job, or
3 = could it occur in either one?
- 667 (In choosing a job,) is enjoying your work...
1 = extremely important,
2 = very important,
3 = somewhat important, or
4 = not at all important to you?
8 = DK
- 668 Is enjoying your work more likely to occur in a...
1 = military job,
2 = in a civilian job, or
3 = could it occur in either one?

669 (In choosing a job,) are promotion opportunities...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

670 Are promotion opportunities more likely to occur in a...

- 1 = military job,
- 2 = in a civilian job, or
- 3 = could it occur in either one?

671 (In choosing a job,) are adequate retirement benefits...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

672 Are adequate retirement benefits more likely to occur in a...

- 1 = military job,
- 2 = in a civilian job, or
- 3 = could it occur in either one?

673 (In choosing a job,) is getting trained for leadership...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

674 Is getting trained for leadership more likely to occur in a...

- 1 = military job,
- 2 = in a civilian job, or
- 3 = could it occur in either one?

675 (In choosing a job,) is equal pay and opportunity for men and women...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

676 Are equal pay and opportunity for men and women more likely to occur in a...

- 1 = military job,
- 2 = in a civilian job, or
- 3 = could it occur in either one?

677 (In choosing a job,) is job security--that is, having a steady job ...

- 1 = extremely important,
- 2 = very important,
- 3 = somewhat important, or
- 4 = not at all important to you?
- 8 = DK

678 Is job security--that is, a steady job--more likely to occur in a...

- 1 = military job,
- 2 = in a civilian job, or
- 3 = could it occur in either one?

679 Now I'd like to get your opinions about some other issues. All 18-year-old males are now required to register for the draft. How do you personally feel about the draft registration requirement? Are you...

- 1 = strongly in favor of it,
- 2 = somewhat in favor of it,
- 3 = neither in favor nor against it,
- 4 = somewhat against it, or
- 5 = strongly against it?

[FOR Q.680 - Q.681, FILL IN = "men-women" OR "women-men," BASED ON RANDOM HALF-SAMPLES.] Note: This was the planned algorithm. An error resulted in missing data for the random half sample selection. Thus, responses to Q680 and Q681 apply to men and women collectively rather than separately.

680 How would you feel about a program that required all young (men/women) to give one year of service to the nation--either in the military forces or in non-military work such as in hospitals or with elderly people? Would you...

- 1 = strongly favor it,
- 2 = probably favor it,
- 3 = probably oppose it, or
- 4 = strongly oppose it?

681 And how would you feel about such a program for all young (women/men)? (Would you...

- 1 = strongly favor it,
- 2 = probably favor it,
- 3 = probably oppose it, or
- 4 = strongly oppose it?)

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
- 8 = DK
- 9 = RE

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.]

684 With whom did you discuss serving in the military? [DO NOT READ LIST. PROBE: Any one else?] [ENTER CODE FOR EACH MENTION.]

- 1 = FRIENDS
- 2 = MOTHER
- 3 = FATHER
- 4 = A BROTHER OR SISTER
- 5 = SOME OTHER RELATIVE
- 6 = (BOY/GIRL)FRIEND OR SPOUSE
- 7 = A TEACHER
- 8 = A COUNSELOR AT SCHOOL

SKIP	IF V684FRND ≠ 1 AND OLDER MALE, SKIP Q.688. IF V684FRND ≠ 1 AND NOT OLDER MALE, SKIP TO Q.690.
------	---

(Was this a friend.../Were these friends...)

685 ...from school?

- 1 = YES
- 2 = NO

686 ...at work?

- 1 = YES
- 2 = NO

687 ...in the service?

- 1 = YES
- 2 = NO

SKIP

IF NOT OLDER MALE, SKIP TO Q.690.

Have you ever discussed the possibility of serving in the military with...

688 any co-workers?

- 1 = YES
- 2 = NO

689 any employer?

- 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?

693 To help me ask the next few questions correctly, I need to know whether you are currently...

- 1 = married,
- 2 = widowed,
- 3 = separated,
- 4 = divorced, or
- 5 = have you never been married?
- 9 = RE

694 Not counting yourself, (but counting your spouse,) how many dependents do you have?

ENTER NUMBER OF DEPENDENTS

FORMAT: 12 [USE LEADING ZERO.]

RANGE: 00 → [SKIP TO Q.696.]

01 → [IF D.64 = 1, SKIP TO Q.696.]

02-10

695 Do you have any children below the age of six?

1 = YES

2 = NO

696 During the last 12 months, did anyone (other than your spouse) pay at least half of your living expenses?

1 = YES

2 = NO

697 Do you (and your spouse or do you or your spouse) personally own your own home?

1 = YES

2 = NO

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 → [IF OLDER MALE, SKIP TO Q.700.]

SKIP

IF Q.404 <9 AND Q.407 => 2, SKIP TO Q.713F.

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.713F.

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 = or 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

- 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

- 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.713.
------	-------------------------------

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.713.]

711 In using this system, did you get any information about the military?

- 1 = YES
- 2 = NO → [SKIP TO Q.713.]
- 3 = DID NOT USE SYSTEM

712 Did the information about the military that you got from the system increase your interest in the military?

- 1 = YES
- 2 = NO

713F 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. COL./VOC., BUS., OR TRADE SCHOOL (FR)
- 14 = 2nd YEAR COLLEGE/JR. OR COMM. COL./VOC., BUS., OR TRADE SCHOOL (SO)
- 15 = 3rd YEAR OF 4-YEAR COLLEGE (JR)
- 16 = 4th YEAR OF 4-YEAR COLLEGE (SR)
- 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

- 713M 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. COL./VOC., BUS., OR TRADE SCHOOL (FR)
 - 14 = 2nd YEAR COLLEGE/JR. OR COMM. COL./VOC., BUS., OR TRADE SCHOOL (SO)
 - 15 = 3rd YEAR OF 4-YEAR COLLEGE (JR)
 - 16 = 4th YEAR OF 4-YEAR COLLEGE (SR)
 - 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

- 714 Just to be sure we are representing all groups in our survey, please tell me whether 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

- C = Can't remember and can't find readily (DK)
- DK = Doesn't know
- N = No SSN
- R = Refusal
- RE = Refusal
- X = Asked questions

SKIP

IF Q. 716 ≠ R, RE, or X, SKIP TO Q. 718

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

C = Can't remember and can't find readily (DK)

DK = Doesn't know

N = No SSN

R = Refusal

RE = Refusal

718

Finally, do you (personally) recall participating in a similar interview late last year at about this time?

1 = YES

2 = NO

END

FILMED

1-86

DTIC