

**Study
Report
2005-05**



A Comparison of the FY03 and FY99 First Term Attrition Study Cohorts

Daniel J. Putka and William J. Strickland
Human Resources Research Organization

20051110 018



**United States Army Research Institute
for the Behavioral and Social Sciences**

September 2005

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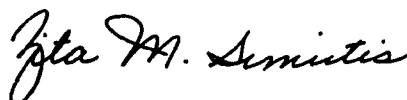
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.REPORT DOCUMENTATION PAGE

1. REPORT DATE (dd-mm-yy) September 2005		2. REPORT TYPE Final		3. DATES COVERED (from . . . to) February 2003 – May 2004	
4. TITLE AND SUBTITLE A Comparison of the FY03 and FY99 First Term Attrition Study Cohorts				5a. CONTRACT OR GRANT NUMBER DASW01-98-D-0047/0046	
				5b. PROGRAM ELEMENT NUMBER 665803	
6. AUTHOR(S) Daniel J. Putka and William J. Strickland (Human Resources Research Organization)				5c. PROJECT NUMBER D730	
				5d. TASK NUMBER 286	
				5e. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Human Resources Research Organization 66 Canal Center Plaza, Ste 400 Alexandria, VA 22314				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U. S. Army Research Institute for the Behavioral & Social Sciences ATTN: DAPR-ARI-RS 2511 Jefferson Davis Highway Arlington, VA 22102				10. MONITOR ACRONYM ARI	
				11. MONITOR REPORT NUMBER Study Report 2005-05	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES Contracting Officer's Representative and Subject Matter POC: Peter Legree					
14. ABSTRACT (<i>Maximum 200 words</i>): Retention of enlisted members is among the Army's formidable personnel challenges. First term attrition is of particular concern. To better understand the causes and identify strategies to manage first-term attrition, the United States Army Research Institute for the Behavioral and Social Sciences (ARI) initiated the "First Term Soldier Attrition and Management Research Project." Under this effort, numerous surveys were administered to a substantial proportion of the FY99 enlistment cohort, and longitudinal models explaining attrition were developed. Given changes in the recruiting environment since 1999, questions arose about the relevance of results from the FY99 cohort for application with current cohorts. The current study represents a limited replication of the First Term Project using FY03 accessions. The results presented in this report suggest that the FY03 and FY99 cohorts are quite similar. Though some differences were found, they did little to diminish the predictive validity and utility of variables and models identified as salient predictors of BCT attrition in the FY99 longitudinal study. In light of these findings, recommendations made based on the FY99 cohort's longitudinal study with regard to how the Army can use these results to manage BCT attrition still hold.					
15. SUBJECT TERMS Manpower, Personnel, Training					
SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT Unlimited	20. NUMBER OF PAGES 93	21. RESPONSIBLE PERSON Ellen Kinzer Technical Publication Specialist 703/602-8047
16. REPORT Unclassified	17. ABSTRACT Unclassified	18. THIS PAGE Unclassified			

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September 2005

Army Project Number
665803D730

Personnel and Training
Analysis Activities

Approved for public release; distribution is unlimited.

FOREWORD

Attrition of substantial numbers of Army enlisted personnel during training and beyond has been and continues to be a significant Army problem. It is both expensive and a challenge to readiness. Key to addressing the problem is a better understanding of its causes. To this end, the United States Army Research Institute for the Behavioral and Social Sciences (ARI) initiated the "First Term Soldier Attrition and Management Research Project." In this project, the FY99 enlisted Army cohort was examined from entry through completion of their first term to explore causes, correlates, and strategies to manage attrition. One problem with longitudinal research is that one can never be sure by the time it has been completed that the environment is the same as when it was initiated. In between the time the First Term project started and the end of FY03, 9/11 happened, the Army initiated major deployments to Afghanistan and Iraq, and the Army increased its emphasis on recruiting from the college-age population. To what extent did any of these circumstances call into question the applicability of findings from the First Term project? The study reported here was conducted to answer this question. A new cohort, the FY03 cohort, was followed from entry to completion of training. Many of the same instruments and same procedures used in the First Term project were used here to allow a reasonable comparison.

This effort was conducted as part of ARI's FY03 Studies and Analyses Program, Project 665803D730, Work Package 286. It was sponsored by the Army Accessions Command (AAC), U. S. Army Training and Doctrine Command (TRADOC). Results were briefed to an Army External Review Panel consisting of representatives from AAC, TRADOC; the Office of the Deputy Chief of Staff for Operations and Training, TRADOC; and the Enlisted Division, Office of the Deputy Chief of Staff for Personnel, Army G-1.



MICHELLE SAMS
Technical Director

ACKNOWLEDGEMENTS

This report reflects the efforts of many individuals and agencies without whom this project could not have been completed. We owe special thanks to the Soldiers in the Fiscal Year 2003 cohort for taking the time to complete these surveys and to give us reasoned, honest answers. The U.S. Army Training and Doctrine Command (TRADOC) provided critical support that allowed the timely and staggered collection of data from Soldiers at Reception Battalions and at the end of training. Those data provide the foundation for the analyses and conclusions reported here.

Within HumRRO, numerous staff members participated in the project. A team from HumRRO's Fort Knox office, under the direction of Ms. Charlotte Campbell, managed the on-site data collection at Fort Knox and Fort Jackson. Ms. Jessica Turner Durk, Mr. Jeff Barnes, Ms. Shonna Waters, and Ms. Sonia Kim worked wonders under tight time restrictions to get survey responses opened, logged, scanned, checked, and cleaned, and to deliver a quality product. Ms. Winnie Young's support in providing extracts from Army administrative files has been outstanding. Dr. Peter Ramsberger and Dr. W. S. Sellman provided valuable feedback in technical reviews of draft reports for the project.

We owe special thanks to our Delivery Order Contracting Officer's Representative (DOCOR), Dr. Peter Legree, for guidance and support in all aspects of the project.

EXECUTIVE SUMMARY

Retention of enlisted members is among the Army's formidable personnel challenges. First term attrition is of particular concern. Over one-third of entering recruits fail to complete obligated enlistment terms; over one-tenth fail to complete initial entry training. Such personnel turnover has been a persistent problem for the volunteer force that compounds recruiting pressures and detracts from force readiness.

To better understand the causes and identify strategies to manage first-term attrition, the United States Army Research Institute for the Behavioral and Social Sciences (ARI) initiated the "First Term Soldier Attrition and Management Research Project." Under this effort, numerous surveys were administered to a substantial proportion of the FY99 enlistment cohort. These survey data were merged with Army personnel and training files to create an integrated database to explore causes, correlates, and strategies to manage attrition. Findings from the FY99 study have been briefed to the Army Accessions Command, TRADOC, and have been reported in ARI technical reports.

After being briefed on the interim results of the FY99 cohort study, Accessions Command requested that ARI collect additional data and analyze a newer enlisted cohort. There have been substantial changes in the recruiting environment since the FY99 cohort arrived at Basic Combat Training. The economy has changed, and the world has changed. Recruits now face the certainty of deployments to combat zones. Based on analyses of the potential recruiting market, Accessions Command targeted college-bound and college-enrolled youth for increased attention. Thus, there was concern that results based on the FY99 cohort might not generalize to cohorts recruited in more recent years. In light of this concern, the current study (i.e., the FY03 attrition study) was conducted. This study was undertaken in recognition of (a) the potential utility of replicating and extending the FY99 study results using a recent enlistment cohort, and (b) the possibility that differences between the FY99 enlistment cohort and more recent cohorts may limit the generality of conclusions based on the FY99 study.

This report answered the following questions:

1. How demographically similar are Soldiers in the FY99 and FY03 cohorts?
 - The FY99 and FY03 cohorts are very similar in terms of their demographic composition.
2. How similar are Soldiers in the FY99 and FY03 cohorts with regard to their standing on survey variables reflecting their experiences, attitudes, and beliefs?
 - As was the case with the demographic composition of the FY99 and FY03 cohorts, survey responses at Reception and End of Training were quite similar across cohorts. The largest differences were associated with survey composites that reflect Soldiers' desire to serve their country, core Army values, and favorable reactions toward the Army (e.g., favorable military vs. civilian comparisons, affective commitment, satisfaction with the Army). Mean scores on such variables were generally about .20 to .40 standard deviations higher for FY03 Soldiers than for FY99 Soldiers. At the same time, the top three reasons Soldiers cited for joining the Army remained the same both cohorts: #1- Educational benefits, #2- Training in job skills, and #3- Security and stability of a job.

3. Do the survey composites formed in the FY99 cohort maintain their level of reliability (internal consistency) in the FY03 cohort?
 - Nearly all survey composites formed as part of the FY99 longitudinal study maintained their level of internal consistency in the FY03 cohort.
4. How similar are the base rates and composition of Basic Combat Training (BCT) attrition in the FY99 and FY03 cohorts?
 - The base rates and composition of BCT attrition in the FY99 and FY03 cohorts were quite similar, as was the distribution of attrition across the first 9 months of service.
5. Do pre-training administrative and survey variables have similar levels of validity for predicting BCT attrition in the FY99 and FY03 cohorts?
 - The majority of relationships between pre-training survey variables and BCT attrition were highly similar in the FY99 and FY03 cohorts. However, there were some exceptions. Most notably, survey variables that reflected medical and physical factors had stronger relationships with BCT attrition in the FY03 cohort (relative to the FY99 cohort). With regard to administrative variables, similarly small differences in validities were observed. Lastly, it is worth noting that the variables that were most predictive of BCT attrition in the FY99 cohort (i.e., Attrition Cognitions, Generalized Self-Efficacy, Potential Reasons for Leaving the Army: All) were also among the strongest predictors of BCT attrition in the FY03 cohort.
6. Are relationships among variables in the FY99 structural model of BCT attrition maintained in the FY03 cohort?
 - The FY99 model provided a very good fit to the FY03 data. Results suggest that similar levels of prediction could be obtained in the FY03 cohort with fewer of the variables used in the FY99 model.
7. Does a model of BCT attrition optimized in the FY99 cohort maintain its validity and utility for predicting BCT attrition in the FY03 cohort?
 - The FY99 model composite retained its high level of validity and utility for identifying Soldiers at high risk of BCT attrition across cohorts.

The results presented in this report suggest that the FY03 and FY99 cohorts are quite similar. Though some differences were found, they did little to diminish the predictive validity and utility of variables and models identified as salient predictors of BCT attrition in the FY99 longitudinal study. In light of these findings, recommendations made based on the FY99 cohort's longitudinal study with regard to how the Army can use these results to manage BCT attrition still hold.

A COMPARISON OF THE FY03 AND FY99 FIRST TERM ATTRITION STUDY COHORTS

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BACKGROUND

Retention of enlisted members is among the Army's formidable personnel challenges. First term attrition is of particular concern. Over one-third of entering recruits fail to complete obligated enlistment terms; over one-tenth fail to complete initial entry training. Such personnel turnover has been a persistent problem for the volunteer force that compounds recruiting pressures and detracts from force readiness. Early separation may be associated with pejorative or non-pejorative circumstances including inaptitude, behavior disorders, drug usage, other misconduct, or medical problems (Laurence, 1993; Laurence, Naughton, & Harris, 1996).

To better understand the causes and identify strategies to manage first-term attrition, the United States Army Research Institute for the Behavioral and Social Sciences (ARI) initiated the "First Term Soldier Attrition and Management Research Project." Under this effort, a substantial proportion of the FY99 enlistment cohort were administered:

- Entrance surveys, as the new recruits accessed into their initial training battalion;
- End of course surveys, completed after finishing basic combat training (BCT), advanced individual training (AIT) and/or One Station Unit Training (OSUT);
- Exit surveys, completed by Soldiers leaving military service before completion of their initial entry training; and
- Duty station surveys, completed by Soldiers on an annual basis.

These survey data were merged with Army personnel and training files to create an integrated database to explore causes, correlates, and strategies to manage attrition. Findings from the FY99 study have been briefed to the Army Accessions Command, TRADOC, and have been reported in ARI technical reports.¹

The Current Study

After being briefed on the interim results of the FY99 attrition study, Accessions Command requested that ARI collect additional data and analyze a newer enlisted cohort. There have been substantial changes in the recruiting environment since the FY99 cohort arrived at Basic Combat Training. The economy has changed, and the world has changed. Recruits now face the certainty of deployments to combat zones. Based on analyses of the potential recruiting market, Accessions Command targeted college-bound and college-enrolled youth for increased attention. Thus, there was concern that results based on the FY99 cohort might not generalize to cohorts recruited in more recent years. In light of this concern, the current study (i.e., the FY03 attrition study) was conducted. This study was undertaken in recognition of (a) the potential utility of replicating and extending the FY99 study results using a recent enlistment cohort, and (b) the possibility that differences between the FY99 enlistment cohort and more recent cohorts may limit the generality of conclusions based on the FY99 study.

¹ For the most recent documentation of results from the FY99 study, the reader should refer to the FY99 longitudinal report (Strickland, 2004). However, please note that the aforementioned report is still under review by ARI and is in the process of being finalized.

Although the FY03 attrition study had several objectives, this report only summarizes results of analyses designed to assess the similarity of the FY03 cohort to the FY99 cohort.² Specifically, this report provides answers to the following questions:

1. How demographically similar are Soldiers in the FY99 and FY03 cohorts?
2. How similar are Soldiers in the FY99 and FY03 cohorts with regard to their standing on survey variables reflecting their experiences, attitudes, and beliefs?
3. Do the survey composites formed in the FY99 cohort maintain their level of reliability (internal consistency) in the FY03 cohort?
4. How similar are the base rates and composition of BCT attrition in the FY99 and FY03 cohorts?³
5. Do pre-training administrative and survey variables have similar levels of validity for predicting BCT attrition in the FY99 and FY03 cohorts?
6. Are relationships among variables in the FY99 structural model of BCT attrition maintained in the FY03 cohort?
7. Does a model of BCT attrition optimized in the FY99 cohort maintain its validity and utility for predicting BCT attrition in the FY03 cohort?

Answering these questions should help provide the Army with an understanding of the degree to which findings from the FY99 cohort may be generalized to the FY03 cohort, as well as further inform its understanding of what factors impact BCT attrition and the paths by which they do so.

METHOD

Sample

Two cohorts of Soldiers were studied in this report. The FY99 cohort consisted of all active duty, non-prior service (NPS) Soldiers who shipped to BCT or OSUT between October 1, 1998 and September 30, 1999 ($N = 63,938$). The FY03 cohort consisted of all active duty, NPS Soldiers who shipped to BCT or OSUT between October 1, 2002 and September 30, 2003 ($N = 67,940$). As documented below, not all of these Soldiers completed the surveys that were administered as part of the FY99 and FY03 studies; thus, sample sizes for many of the analyses in this report are smaller than these figures.

² Separate FY03 study reports will address other objectives of this study (e.g., comparing self, peer-, and supervisor-reported exit survey responses to each other and official administrative separation codes).

³ It is important to note that the attrition analyses conducted in this report were primarily limited to examinations of BCT attrition. Although complete loss data was available through 48 months of service for the majority of FY99 cohort members, at the time this report's analyses were originally conducted, loss data for all FY03 cohort members were only complete through 3 months of service.

Data

As part of the FY99 study, several surveys were developed and administered to members of the FY99 cohort at several points throughout their first term of service (see Strickland, 2004 for an overview of administration periods and a description of surveys). As part of the FY03 study, similar survey data were gathered through the end of Soldiers' initial entry training (IET). Updated versions of the FY99 Soldier Reception Survey (SRS) and End of Training Survey (EOTS) were administered to a subset of the FY03 cohort as they processed through their reception battalions and finished various phases of training (e.g., BCT, AIT, and OSUT). Copies of the SRS and EOTS surveys administered in the FY99 and FY03 studies are provided in the appendix of this report.

In addition to survey data, the Army provided official administrative data from the Enlisted Master File (EMF) for Soldiers in the FY99 and FY03 cohorts.⁴ Data extracted from the EMF included variables such as Armed Services Vocational Aptitude Battery (ASVAB) scores, race, marital status, education tier, and military occupational specialty (MOS). Lastly, loss data (i.e., dates of separation, and separation program designator codes) for the FY03 cohort were provided by the Defense Manpower Data Center (DMDC), whereas for the FY99 cohort, such data were extracted from the EMF.⁵ The loss data obtained for the FY99 cohort were current through March 31, 2003, whereas loss data for the FY03 cohort were current through March 31, 2004.

Survey Sample Sizes

Unlike the FY99 study, a much smaller set of Soldiers was targeted for survey administration in the FY03 study. In the FY03 study, not only were Soldiers from fewer installations targeted for survey administration than in the FY99 study; the time frame during which surveys were administered was shorter as well. For example, Soldiers entering reception battalions at Ft. Knox between 5 May 2003 and 8 July 2003 and at Ft. Jackson between 1 May 2003 and 30 June 2003 were administered the FY03 SRS. In the FY99 study, the administration window for the SRS was 16 January 1999 to 31 August 1999, and its administration was not limited to only two installations. Table 1 summarizes details on the administration and completion of the FY99 and FY03 SRS and EOTS surveys.

As shown in Table 1, many more surveys were administered than were used in this report. The primary reason why many surveys were not used is that they were completed by National Guard or Reserve Soldiers. For example, 49.7% of the FY03 EOTS, and 51.9% of FY03 SRS, were completed by National Guard or Reserve Soldiers. Exclusion of such Soldiers from this report was consistent with how they were handled throughout the FY99 study.⁶ Other reasons why survey data were excluded from final analyses include: (a) the survey was linked to

⁴ For the FY99 cohort, administrative data was also provided by the Defense Manpower Data Center (DMDC).

⁵ Originally, loss data for the FY03 cohort were extracted from the EMF. However, in the course of conducting this study, errors were found in the EMF loss data (errors were isolated to the extract for the FY03 cohort) and a decision was made to obtain loss data from DMDC for this cohort.

⁶ One reason for historical exclusion of National Guard and Reserve Soldiers is that additional administrative records and loss data were not obtained for them. Data on such Soldiers are not recorded in the Army's EMF.

duplicate social security numbers (SSNs), (b) the survey was not linked to an SSN, or (c) the survey was linked to the SSN of a Soldier who was not part of the FY99 or FY03 cohort.

Table 1. Administration and Sample Size Information for the SRS and EOTS

Survey	Administration Timeframe	Installations	Surveys Administered	Final Analysis Sample
FY99 SRS	16 Jan. 1999 - 31 Aug. 1999	All reception battalions	52,309	29,004
FY03 SRS	5 May 2003 - 8 Jul. 2003	Ft. Knox and Ft. Jackson reception battalions	6,425	2,844
FY99 EOTS	Apr. 1999 - Dec. 1999	All BCT and OSUT installations; a sample of AIT installations	70,000+	
BCT				22,015
IET				17,250
FY03 EOTS	Jun. 2003 - Dec. 2003	Ft. Knox and Ft. Jackson	6,107	
BCT				2,125
IET				783

Data Coding

Survey Composite Development

Given the plethora of items presented on the SRS and EOTS, we focused comparisons of survey responses in this report on composite variables created from survey items. These composites capture key psychological constructs that underlie items on these surveys, and provide a parsimonious means to assess the similarity of survey responses from Soldiers in the FY99 and FY03 cohorts. The survey composites examined in this report were originally developed as part of the FY99 longitudinal study (Strickland, 2004). Full details on how these composites were formed, as well as the survey items that comprise them, are discussed in Chapter 3 of the FY99 longitudinal report (Van Iddekinge, 2004). Because the primary goal of this report was to assess how well findings from the FY99 cohort generalize to the FY03 cohort, we focused on composites constructed based on the FY99 data and assessed their functioning (e.g., variability, internal consistency, criterion-related validity) in the FY03 cohort. Although new items were included in the FY03 surveys, they are not discussed in this report.

Coding of Attrition

As alluded to earlier, the primary attrition criterion of interest in this report was BCT attrition. BCT attrition was defined as attrition occurring in the first two months of a Soldier's service. We used the first two months of service as an estimate for the time Soldiers were in BCT because EMF and DMDC databases did not contain the dates Soldiers completed basic and transferred to AIT. Although Soldiers accessing into OSUT MOS do not go through the formal nine weeks of BCT that non-OSUT Soldiers do, they were included in the BCT sample to provide a comprehensive look at attrition in the first few months of service. For all analyses

involving BCT attrition, we classified Soldiers into one of four categories. The four categories were as follows:

- Attritee
- Left Service- Omitted from Analyses
- Left Service- Not Considered Attrition
- Stayer

Soldiers were classified into the *attritee* category for BCT attrition analyses if they had (a) an interservice separation code (ISC) indicating they left service for a reason considered to be attrition (see Table 2), and (b) a valid separation date within their first 60 days of service.

Soldiers were classified into the *left service-omitted from analyses* category if they had (a) an ISC indicating they left service for a reason considered beyond control of the individual Soldier (e.g., Disability- Severance Pay, Death; see Table 2) and (b) a valid separation date within their first 60 days of service. Soldiers in this category were omitted from all BCT attrition analyses.

Soldiers were classified into the *left service-not considered attrition* category if they had (a) an ISC indicating they left service for a reason not considered to be attrition (e.g., Expiration of Term of Service, Entry into Officer Commissioning Program; see Table 2) and (b) a valid separation date within their first 60 days of service. Soldiers in this category were treated as if they were still-in-service for all BCT attrition analyses.

Table 2. Coding of Interservice Separation Codes (ISC) for Attrition Analyses

ISC	Description	Coding
1	Expiration of term of service	Not Attrition
2	Early release, insufficient retainability	Not Attrition
3	Early release, to attend school	Not Attrition
5	Early release, in the national interest	Not Attrition
8	Early release, other, including RIF, VSI, and SSB	Not Attrition
10	Condition existing prior to service	Attrition
11	Disability, severance pay	Omitted
12	Permanent disability retirement	Omitted
13	Temporary disability retirement	Omitted
14	Disability, no condition prior to service, no severance pay	Attrition
16	Unqualified for active duty, other	Attrition
17	Failure to meet weight or body fat standards	Attrition
22	Dependency or hardship	Attrition
31	Death, non-battle, disease	Omitted
32	Death, non-battle, other	Omitted
40	Entry into officer commissioning program	Not Attrition
50	Retirement, 20 to 30 years of service	Not Attrition
52	Retirement, other	Not Attrition
60	Character or behavior disorder	Attrition
64	Alcoholism	Attrition
65	Discreditable incidents, civilian or military	Attrition

Table 2. continued

ISC	Description	Coding
67	Drugs	Attrition
71	Civil court conviction	Attrition
72	Security	Attrition
73	Court-martial	Attrition
74	Fraudulent entry	Attrition
75	AWOL or desertion	Attrition
76	Homosexuality	Attrition
78	Good of the service (discharge in lieu of court-martial)	Attrition
80	Misconduct, reason unknown	Attrition
83	Pattern of minor disciplinary infractions	Attrition
84	Commission of a serious offense	Attrition
85	Failure to meet minimum qualifications for retention	Attrition
86	Unsatisfactory performance/Expeditious Discharge Program	Attrition
87	Entry level performance & conduct/Trainee Discharge Program	Attrition
90	Secretarial authority	Attrition
91	Erroneous enlistment or induction	Attrition
92	Sole surviving family member	Attrition
94	Pregnancy	Attrition
96	Conscientious objector	Attrition
97	Parenthood	Attrition
98	Breach of contract	Attrition
99	Other	Attrition
100	Immediate reenlistment	Not Attrition
101	Dropped from strength, desertion	Attrition
102	Dropped from strength, imprisonment	Attrition
103	Record correction	Attrition
105	Dropped from strength, other	Attrition
998	Invalid SPD	Attrition
999	Valid SPD with No ISC	Attrition

Soldiers were classified into the *stayer* category for BCT attrition analyses if they were still in service 60 days after they entered service.

In addition to examining overall BCT attrition in the FY99 and FY03 cohorts, we also examined the composition of BCT attrition by ISC. Using ISC codes we differentiated between five different types of attrition: Moral Character, Performance, Medical/Physical, Pregnancy/Parenthood, and Other. The classification of ISCs into these categories was based on rational judgment, informed by past research, and reflects the classification scheme used in the FY99 longitudinal study (Van Iddekinge, 2004). Later sections of this report provide a mapping of ISCs into the aforementioned categories and indicate the frequency with which they account for BCT attrition in the FY99 and FY03 cohorts.

Analyses

The analyses conducted in this report were driven by the research questions outlined earlier. In the sections below, we provide descriptions of the analyses performed to help facilitate interpretation of subsequent results.

Demographic Composition of Cohorts

To assess the demographic composition of the FY99 and FY03 cohorts, we report frequencies and percentages of Soldiers who fell into various demographic groups (e.g., by gender, race, AFQT category, education tier). Depending on the demographic variable examined, these comparisons were either based on EMF, SRS, or DMDC data. As noted later, in some cases comparisons were based on a combination of these data sources. In making demographic comparisons, emphasis was put on the demographic similarity of the full FY99 and FY03 cohorts, rather than simply the demographic similarity of responders to a particular survey.

Comparison of Survey Responses

For each survey, we provide a table summarizing descriptive statistics for scores on survey composites in each cohort. These tables include the number of items in the composite, the scale on which its items were rated (e.g., "5" indicates a 5-point scale that ranged from 1 to 5), and a side-by-side comparison of FY99 and FY03 mean (M), standard deviation (SD), and reliability estimates (α) for each composite. Also provided are Cohen's effect size statistics (d), which reflect the standardized mean difference between FY99 and FY03 responders on each survey composite.

Base Rate and Composition of BCT Attrition

We calculated the base rate of BCT attrition for the full FY99 and full FY03 cohort. Additionally, we calculated the base rate of BCT attrition for the Soldiers in the FY99 cohort and FY03 cohort who completed the SRS. The latter base rates are useful for (a) assessing whether there are differences between the full cohort and SRS samples in terms of BCT attrition rates (indicating a potential response bias), and (b) adjusting correlations between SRS variables and BCT attrition in each cohort to make them more comparable. To examine the composition of BCT attrition in each cohort, we calculated the percentage of BCT attrition attributable to each "Attrition" ISC listed in Table 2.

Bivariate Relationships between Pre-Training Variables and BCT Attrition

Several analyses were conducted to assess bivariate relationships between the pre-training variables and BCT attrition in the FY99 and FY03 cohorts. Given the large number of variables available, analyses were limited to: (a) SRS composite variables, (b) SRS single items that were most predictive of BCT attrition in the FY99 cohort, and (c) administrative variables that were either historically predictive of first-term attrition or salient predictors of BCT attrition in the FY99 study (e.g., gender, education tier, race, ASVAB scores, MOS, and marital status).

First, we calculated a raw, zero-order correlation between BCT attrition and each variable. Because these correlations involved a dichotomous variable (i.e., attrition), they were either point-

Because these correlations involved a dichotomous variable (i.e., attrition), they were either point-biserial correlations (for continuous predictor variables), or phi-coefficients (for dichotomous predictor variables). Because many administrative variables were categorical in nature, calculating the correlation between their observed values and attrition would not be meaningful (e.g., correlating race with attrition). As such we regressed BCT attrition on each administrative variable using logistic regression and saved the resulting predicted probabilities of attrition. We calculated correlations between these probabilities and attrition to index each administrative variable's predictive validity. It is important to note that unlike correlations reported for the SRS variables, these correlations only index *magnitude* of relationship, not its *direction*. Specifically, such predicted probabilities will always be positively correlated with attrition. Thus, for categorical administrative variables, we also provide base rates of BCT attrition for Soldiers in each category of the predictor (e.g. for gender, base rates of attrition for males and females are provided).

Adjusted Correlations

In addition to calculating raw correlations, we also calculated *adjusted* correlations to estimate what the correlation between each predictor and the attrition criterion would be if the base rate of attrition had been 50% (Kemery, Dunlap, & Griffeth, 1988). When base rates of attrition diverge from 50%, correlations that index its relationship with other variables are attenuated. The greater the base rate diverges from 50%, the more the correlation is attenuated. To the extent that BCT attrition base rates are different across cohorts, making comparisons among raw, unadjusted correlations between attrition and other variables is not very meaningful. Thus, Kemery et al.'s (1988) method was used to adjust correlations for base rate differences so we could meaningfully compare correlations for a given predictor across cohorts.

c-Statistics

We also calculated a *c*-statistic for each predictor as an alternative index of its bivariate relationship with attrition (Hanley & McNeil, 1982; Putka & McCloy, 2001). Arising from research on signal detection theory, the *c*-statistic ranges from 0 to 1 and indexes a predictor's ability to discriminate between attritees and stayers. Two characteristics of the *c*-statistic that make it beneficial in the present study are that (a) unlike the correlation coefficient it is invariant to base rate differences, and (b) it has a very simple interpretation. The *c*-statistic reflects the probability that an attritee will have a higher predicted probability of attrition than a stayer (based on use of the given predictor). Thus, a *c*-statistic of .50 indicates that an attritee is no more likely than a stayer to have a higher predicted probability of attrition (i.e., by using the given predictor, you are no better off than flipping a coin in terms of differentiating between attritees and stayers). On the other hand, a *c*-statistic of .70 indicates that attritees will have a higher predicted probability of attrition than stayers 70% of the time (again, based on use of the given predictor). Alternatively, one can interpret *c* as the proportion of times an attritee would have a higher predicted probability of attrition than a stayer if attritee/stayer pairs were repeatedly sampled from the population. In this study, the *c*-statistic was obtained by: (a) regressing each predictor (separately) on BCT attrition (using logistic regression), (b) saving the predicted probability of attrition based on using that predictor alone, and (c) calculating the *c*-statistic based on the predicted probability and BCT attrition using SPSS software.

Structural Models of BCT Attrition

Another goal of this study was to assess how well models of BCT attrition optimized on FY99 data performed in the FY03 cohort. Given the high performance and theoretical meaningfulness of the structural models of BCT attrition presented in the FY99 longitudinal report, we focused the cross-validation effort on those models, rather than the more empirically-driven raw prediction models we previously constructed (Putka 2004b).

A primary goal of building and fitting structural models of BCT attrition in the FY99 study was to help the Army understand the mechanisms by which the most salient predictors of early attrition (and their antecedents) function. A secondary goal of that modeling effort was to gain a better understanding of how and where traditionally important demographic variables fall in structural models of BCT attrition. A number of structural models of BCT attrition were built and assessed as part of the FY99 study (Putka, 2004b). A separate model was constructed for three different types of attrition (overall, performance, and medical) in each of the first 2 months of BCT. Due to sample size limitations in the FY03 study, we were unable to cross-validate these targeted models. As such, we went back to the FY99 data and re-fit a model where overall BCT attrition (across the first 2 months of service) served as the criterion.

Prior to fitting an overall model of BCT attrition in the FY99 sample, we needed to determine which BCT structural model used in the FY99 longitudinal report should initially be fitted as the overall model of BCT attrition. The model we chose to fit was identical in structure to the final structural model of second month BCT attrition described in the FY99 longitudinal report, with the exception that ASVAB GT scores were substituted for ASVAB AFQT scores everywhere they appeared in the model (Putka, 2004b).⁷ We used the second month model as a starting point because it (a) contained more direct effects on attrition, and (b) most BCT attrition in the FY99 cohort occurred in the second month of service. A graphical depiction of the FY99 structural model of BCT attrition is shown in Figure 1.⁸

⁷ This substitution was made because we did not obtain AFQT for the FY03 sample. Both samples, however, had GT scores, which are highly correlated with AFQT scores. Thus, using GT scores allowed us to cross-validate the resulting FY99 model in the FY03 sample.

⁸ Several new variables are introduced in Figure 1 (e.g. Past Withdrawal Propensity, Perceived Utility/Ease of Withdrawal, Positive Army Affect). These variables are higher-order composites that were formed from combinations of SRS single items, SRS composites, and administrative variables as part of the structural modeling effort in the FY99 longitudinal study. For discussion of the formation and composition of these composites, see Appendix F of the FY99 longitudinal report (Strickland, 2004).

Cross-Validating the FY99 Structural Model in the FY03 Cohort

Two different, yet complementary approaches were taken to cross-validate the FY99 BCT attrition model in the FY03 sample.⁹ First, we fitted a series of nested structural equation models to the FY03 data. Using the structure of the FY99 model to set up the equations, the first model we fitted allowed all parameters to be freely estimated. This first model provided a baseline for subsequent nested models, and allowed us to assess whether paths that were statistically significant based on FY99 data remained significant when estimated based on FY03 data. Next, we refitted the model to the data, this time setting the path coefficients linking the predictors to BCT attrition to be equal to what they were in the FY99 sample (path coefficients to other endogenous variables remained free to vary). Lastly, we refitted a final model to the FY03 data that set all path coefficients in the models equal to what they were in the FY99 sample. At each step, we examined the impact that imposing more constraints on the FY03 model had on model fit (i.e., what effect does constraining the FY03 model to be more similar to the FY99 model have on model fit). Substantial decrements in fit at each step would be indicative that the FY99 model does not generalize to the FY03 sample well.

Next, we took a relatively simpler approach to cross-validating the FY99 model using logistic regression. First, in the FY99 sample, we regressed BCT attrition on all variables having direct effects on attrition (as revealed by the FY99 structural model). Next, we took the resulting regression weights and intercept from this analysis and applied them to the FY03 data. This allowed us to generate FY99 model composite scores for FY03 Soldiers. To assess the extent to which the FY99 model composite retained its validity in the FY03 sample, we calculated correlations (raw and adjusted) and *c*-statistics between BCT attrition and the FY99 model composite in each cohort. Similar correlations and *c*-statistics across cohorts would provide evidence that predictiveness of the FY99 model composite is maintained in the FY03 sample. To assess the extent to which the utility of the FY99 model composite generalized to the FY03 cohort, we calculated observed BCT attrition rates among the highest scoring 5, 10, and 15 percent of respondents on the FY99 model composite score in each cohort. We compared these numbers to base rates of BCT attrition within each cohort to assess the extent to which the FY99 composite offers similar utility for identifying recruits at high-risk of BCT attrition in the FY99 and FY03 cohorts.

⁹ In preliminary analysis work, we evaluated a third strategy for cross-validating the FY99 structural model. Specifically, we conducted a nested series of multi-group SEM analyses where the FY99 and FY03 samples served as the two groups. In the first model, we allowed all parameters (i.e., path coefficients, intercepts, and residual variances) from the FY99 model to vary across both groups (i.e., we estimated group-specific parameters). In the second model, we constrained the path coefficients in both groups to equal those estimated based on the FY99 data alone. These preliminary analyses indicated that the constrained model provided nearly as good fit to the data as the group-specific model. We do not report the analyses of this approach here because it suffered from a large drawback, namely it arguably positively skewed the estimate of the constrained model's fit. Specifically, we felt that because (a) the FY99 model fit the FY99 data very well, and (b) the FY99 data constituted a large proportion of the multi-group sample, the overall model fit statistics would be driven by the FY99 portion of the data. This could potentially lead to a conclusion that the FY99 model fits well in the FY03 sample, when in reality, it might not. Our first cross-validation strategy alleviates this potential drawback.

Parameter Estimation and Model Testing

We used *Mplus* analysis software to fit all of the structural models we examined (Muthen & Muthen, 2001). One distinct benefit of this software over other available structural modeling software packages (e.g., LISREL) is that it allows one to assess structural models that have dichotomous outcome variables (e.g., attrition). Model fit was assessed by three criteria commonly used in the literature. Namely, we examined the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean square error of approximation (RMSEA). CFI and TLI values greater than or equal to .95 indicate good fit, while RMSEA values less than or equal to .05 indicate good fit (Hu & Bentler, 1999). The significance of model path coefficients was assessed with Wald's statistic (i.e., the path coefficient divided by its standard error), which can be tested against a standard normal distribution (i.e., it can be interpreted as a standard normal deviate—or z-statistic).

RESULTS

Demographic Composition of Cohorts

Table 3 shows the demographic composition of the FY99 and FY03 cohorts.

Table 3. Comparison of the Demographic Composition of the FY99 and FY03 Cohorts

	FY99		FY03		$\Delta\%$
	<i>N</i>	%	<i>N</i>	%	
Education Tier at Entry (Tier I)	53,921	86.8	55,485	86.6	-0.2
Tier II	7,929	12.8	8,132	12.7	-0.1
Tier III	276	0.4	472	0.7	0.3
Marital Status at Entry (Married)	7,968	12.8	11,436	16.9	4.1
Single	54,393	87.2	56,302	83.1	-4.1
Medical Enlistment Waiver (Yes)*	2,753	9.7	280	10.7	1.0
No	25,568	90.3	2,339	89.3	-1.0
Moral Character Enlistment Waiver (Yes)*	1,873	6.6	225	8.4	1.8
No	26,468	93.4	2,443	91.6	-1.8
MOS Classification (Combat Arms)	17,979	28.8	19,406	28.6	-0.2
Combat Support	16,463	26.4	17,384	25.6	-0.8
Combat Service Support	27,338	43.8	30,067	44.3	0.5
Race/Ethnicity (White)	37,329	59.9	45,977	67.7	7.8
Black	15,011	24.1	10,720	15.8	-8.3
Hispanic	6,739	10.8	7,239	10.7	-0.1
Other	3,282	5.3	4,004	5.9	0.6
Gender (Male)**	50,108	80.4	752	71.9	-8.5
Female	12,253	19.6	1,926	28.1	8.5
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>d</i>
ASVAB GT Score	104.67	11.37	107.42	11.38	0.24

Note. Unless noted otherwise, comparisons were based on full cohort data obtained from the EMF and DMDC. % = Percentage of FY cohort in the given group. $\Delta\%$ = Percentage of FY03 cohort in given group - percentage of FY99 cohort in given group. *d* = Standardized mean difference (Cohen's effect size statistic) = $(M_{FY03} - M_{FY99}) / \text{Pooled } SD$. *FY99 and FY03 values were based on SRS responses of cohort members. **FY03 values were based on SRS responses because gender was not pulled from the EMF for the FY03 cohort.

Across all of the demographic variables examined, the FY99 and FY03 cohorts appear to be quite similar. The largest differences between the cohorts were with regard to gender and race. Specifically, 19.6% of the FY99 cohort was female, whereas 28.1% of *responders* to the FY03 SRS were female.¹⁰ With regard to race, a greater percentage of the FY03 cohort was

¹⁰ Gender data were not available for the entire FY03 cohort because they were not extracted from the EMF.

white (67.7%) compared to the FY99 cohort (59.9%), and a smaller percentage of the FY03 cohort was black (15.8%) compared to the FY99 cohort (24.1%). Differences between cohorts on mean ASVAB GT were small ($d = 0.24$, FY03 > FY99) based on Cohen's conventions for judging the magnitude of effect sizes (Cohen, 1992).

Comparison of Survey Responses

Soldier Reception Survey

Table 4 shows descriptive statistics for SRS composites by cohort. Like the demographic comparisons made above, mostly small differences emerged between members of the FY99 and FY03 cohorts. The SRS composites for which scores were most elevated for FY03 Soldiers (relative to FY99 Soldiers) were: Affective Commitment, Importance of Core Army Values: Loyalty and Selfless Service, and Participation in DEP Activities. The SRS composites for which scores were most elevated for FY99 Soldiers (relative to FY03 Soldiers) were: Attrition Cognitions, Possible Reasons for Leaving the Army: All, and Trouble in High School. Although these variables showed the largest differences, in an absolute sense, their effect sizes were all in the small to moderate range based on Cohen's conventions (Cohen, 1992).

The findings presented above are consistent with those briefed earlier by ARI that indicated an elevated importance of serving one's country among FY03 SRS responders (Legree, 2004, May). Following up on the results above and those that were briefed earlier, Table 5 shows responses to the SRS question (#1) that asked Soldiers to indicate how important each of several reasons was in their decision to join the Army. Examination of these results reveals that the largest difference between cohorts occurs for the reason "desire to serve my country". Specifically, the mean importance rating for this reason in the FY03 sample was 0.47 standard deviations higher than its mean rating in the FY99 sample. Also of note in Table 5 is that the top three reasons for joining the Army remained the same across cohorts: #1- Educational benefits, #2- Training in job skills, and #3- Security and stability of a job.

Taken together, these findings suggest that the FY03 and FY99 cohorts are quite similar in terms of their *pre-training* experiences, attitudes, and beliefs. One potential exception is that, on average, members of the FY03 cohort may be slightly more altruistically driven to serve than members of the FY99 cohort. Given differences in the state of world affairs between FY99 and FY03, such findings are not surprising.

End-of-Training Survey

For analyses of the EOTS data, we provide separate results for Soldiers who completed surveys at the end of BCT, and those who completed surveys at the end of IET (i.e., at the end of AIT or OSUT, depending on a Soldier's MOS). Tables 6 and 7 show descriptive statistics for EOTS-BCT composites and EOTS-IET composites by cohort, respectively.

Table 4. Comparison of FY99 and FY03 Samples on SRS Composite Descriptive Statistics

Composite	Items	Scale	FY99				FY03				<i>d</i>
			<i>N</i>	<i>M</i>	<i>SD</i>	α	<i>N</i>	<i>M</i>	<i>SD</i>	α	
Affective Commitment	3	5	28,445	3.40	0.92	0.83	2,775	3.69	0.86	0.80	0.31
Attrition Cognitions	3	5	28,471	2.07	0.84	0.74	2,829	1.89	0.78	0.70	-0.22
Continuance Commitment	5	5	28,471	3.22	0.95	0.78	2,814	3.37	0.92	0.76	0.16
Continuance Intentions ^a	2	Varies	28,471	6.30	4.45	0.86	2,764	3.59	1.46	-	-
Generalized Self Efficacy	4	5	28,443	4.09	0.88	0.89	2,770	4.15	0.86	0.88	0.06
Importance of Core Army Values											
Duty, Integrity, and Personal Courage	10	7	28,438	6.07	1.00	0.92	2,824	6.24	0.89	0.93	0.17
Loyalty and Selfless Service	4	7	28,435	5.46	1.36	0.85	2,825	5.92	1.14	0.85	0.34
Military versus Civilian Life											
Pay	2	5	27,888	3.54	1.19	0.82	2,735	3.44	1.34	0.71	-0.09
Quality of Work Life	8	5	28,342	4.25	0.67	0.84	2,780	4.20	0.83	0.85	-0.07
Time for Personal Life	4	5	28,045	2.73	1.08	0.82	2,734	2.87	1.23	0.82	0.12
Overall	14	5	28,363	3.73	0.70	0.88	2,793	3.71	0.86	0.89	-0.02
Participation in DEP Activities	3	Varies	28,293	0.62	0.46	0.86	2,833	0.79	0.50	0.34	0.36
Participation in High School Activities*	4	3	28,321	2.42	1.71	0.50	2,756	2.27	1.68	0.55	-0.09
Possible Reasons for Leaving Army											
Deviance	4	2	28,223	0.08	0.19	0.66	2,786	0.05	0.15	0.61	-0.15
Discrimination	3	2	28,191	0.06	0.20	0.74	2,786	0.04	0.16	0.68	-0.08
Problems Adjusting	3	2	28,288	0.23	0.32	0.64	2,786	0.16	0.28	0.61	-0.21
All Reasons*	18	2	28,408	2.83	2.84	0.77	2,786	2.14	2.54	0.76	-0.24
Reasons for Joining Army											
Escape Problems	3	5	28,347	1.62	0.85	0.65	2,787	1.67	0.90	0.68	0.06
Family/Friends Influence	2	5	28,338	2.12	1.09	0.69	2,745	2.10	1.13	0.76	-0.02
Job Benefits	6	5	28,412	3.43	0.86	0.79	2,816	3.46	0.89	0.81	0.03
Opportunity to Travel	2	5	28,377	3.59	1.13	0.72	2,772	3.65	1.10	0.72	0.05
Personal Growth	5	5	28,389	3.34	0.95	0.74	2,806	3.36	0.95	0.73	0.02
Training and Experience	2	5	28,373	3.94	1.07	0.81	2,757	3.85	1.07	0.77	-0.09
Reasons for Quitting Previous Jobs*	12	2	28,235	2.68	1.80	0.48	2,706	2.45	1.71	0.45	-0.13
Thoughts of Quitting High School*	11	2	27,907	0.60	1.20	0.68	2,668	0.54	1.11	0.64	-0.05
Trouble in High School*	8	2	27,932	1.88	2.07	0.77	2,589	1.30	1.74	0.73	-0.28
Unsure about Army Career*	6	2	28,295	0.96	1.07	0.44	2,726	0.90	0.98	0.35	-0.05

Note. ^aOne of the Continuance Intentions items on the FY99 SRS was not included on the FY03 SRS, thus no *d*-statistic or alpha is reported for this variable. *These composites were calculated by summing the number of items endorsed by each respondent. As noted in the FY99 longitudinal report, these composites are quite heterogeneous, and as such, coefficient alpha underestimates their reliability (Van Iddekinge, 2004). Thus, caution should be taken not to over-interpret the low alphas for some of these composites. *d* = Standardized mean difference (Cohen's effect size statistic) = $(M_{FY03} - M_{FY99}) / \text{Pooled } SD$.

Table 5. Comparison of FY99 and FY03 Samples on Importance of Reasons for Joining the Army

Important in decision to join Army...	FY99			€	FY03			<i>d</i>
	<i>N</i>	<i>M</i>	<i>SD</i>		<i>N</i>	<i>M</i>	<i>SD</i>	
Army advertising	28,280	2.36	1.18	2,743	2.35	1.20	-0.01	
Army recruiter	28,302	3.39	1.27	2,735	3.21	1.34	-0.13	
Desire to serve my country	28,244	3.33	1.25	2,701	3.91	1.11	0.47	
Develop self-discipline	28,194	3.81	1.16	2,694	3.86	1.13	0.04	
Earn more than previous job(s)	28,281	3.57	1.35	2,712	3.45	1.37	-0.09	
Educational benefits	28,308	4.28	1.00	2,715	4.22	1.03	-0.07	
Family social support services	28,173	2.79	1.46	2,672	2.90	1.44	0.07	
Get away from a personal problem	28,242	1.77	1.19	2,705	1.81	1.19	0.03	
Influence of family	28,292	2.33	1.33	2,689	2.28	1.33	-0.03	
Influence of friends	28,245	1.91	1.17	2,672	1.91	1.18	0.00	
Lack of civilian job opportunities	28,268	2.34	1.42	2,698	2.50	1.44	0.11	
Medical care, coverage & benefits	28,272	3.66	1.30	2,684	3.75	1.25	0.06	
Military tradition in family	28,252	2.27	1.39	2,696	2.45	1.44	0.13	
Need to be on my own	28,284	3.09	1.46	2,699	3.07	1.48	-0.01	
Pay and allowances	28,258	3.58	1.25	2,675	3.48	1.25	-0.08	
Security and stability of a job	28,287	3.84	1.22	2,663	3.92	1.16	0.07	
Training in job skills	28,301	4.07	1.11	2,654	4.01	1.11	-0.05	
Chance to travel	28,294	3.55	1.26	2,689	3.66	1.22	0.09	
Repayment of loans	28,207	2.03	1.37	2,695	2.17	1.41	0.10	
Prove that I could do it	28,245	3.49	1.42	2,695	3.63	1.38	0.09	
Make Army a career	28,198	2.98	1.39	2,686	3.37	1.33	0.28	
Become more mature	27,809	3.29	1.37	2,636	3.29	1.35	-0.01	
Take time out to decide life plans	28,234	3.04	1.39	2,672	2.93	1.39	-0.08	
Gain job experience	28,166	3.82	1.22	2,653	3.68	1.24	-0.11	
Escape from a bad neighborhood	28,069	1.60	1.12	2,675	1.58	1.10	-0.01	
Needed a place to live	28,107	1.48	1.01	2,662	1.59	1.10	0.10	
Chance for adventure	28,194	3.63	1.29	2,668	3.63	1.24	0.01	

Note. Reasons were rated on a 5-point scale ranging from 1 = Not at all important to 5 = Extremely important. *d* = Standardized mean difference (Cohen's effect size statistic) = $(M_{FY03} - M_{FY99}) / \text{Pooled } SD$.

As was the case with comparisons on SRS variables, no large differences were found between the FY99 and FY03 cohort on the EOT surveys. Also similar to the examination of SRS responses, the EOTS-BCT and EOTS-IET composites for which scores were most elevated for FY03 Soldiers (relative to FY99 Soldiers) tapped content similar to the SRS composites that were most elevated for FY03 Soldiers. Namely, scores on EOTS Affective Commitment, Importance of Core Army Values: Loyalty and Selfless Service, Military vs. Civilian Life: Pay, Time for Personal Life, Overall (higher scores on these composites are associated with more positive evaluations of the Army relative to civilian life), Satisfaction: Army Life and Work- Family Balance were higher among FY03 respondents than FY99 respondents. Conversely, EOTS-BCT and EOT-IET composites for which scores were most elevated for FY99 Soldiers (relative to FY03 Soldiers) were: Possible Reasons for Leaving the Army: Medical, and All. Like the SRS data, although these variables showed the largest differences, in an absolute sense, their effect sizes were all in the small to moderate range based on Cohen's conventions (Cohen, 1992).

Table 6. Comparison of FY99 and FY03 Samples on EOTS (BCT) Composite Descriptive Statistics

Composite	Items	Scale	FY99				FY03				<i>d</i>
			<i>N</i>	<i>M</i>	<i>SD</i>	α	<i>N</i>	<i>M</i>	<i>SD</i>	α	
Affective Commitment	6	5	21,817	3.81	0.72	0.83	2,072	3.97	0.68	0.82	0.21
Continuance Intentions ^a	2	Varies	21,628	3.29	1.50	-	2,046	3.68	1.49	-	-
General Self Efficacy	5	5	21,682	4.22	0.76	0.88	2,055	4.31	0.70	0.88	0.13
Importance of Core Army Values											
Duty, Integrity, and Personal Courage	12	7	21,701	6.33	0.85	0.95	2,060	6.39	0.73	0.95	0.07
Loyalty and Selfless Service	4	7	21,700	5.98	1.16	0.91	2,060	6.22	0.95	0.91	0.20
Job Performance (self-rated)	3	5	21,748	3.66	0.86	0.80	2,046	3.74	0.86	0.83	0.09
Military vs. Civilian Life											
Benefits	2	5	21,038	4.30	0.82	0.72	2,005	4.35	0.80	0.79	0.06
Job Characteristics	7	5	21,668	3.90	0.73	0.81	2,052	4.01	0.70	0.83	0.15
Pay	2	5	21,336	2.78	1.19	0.77	2,018	3.01	1.18	0.80	0.19
Time for Personal Life	3	5	21,212	2.26	1.02	0.78	1,998	2.48	1.07	0.81	0.22
Overall	14	5	21,721	3.45	0.68	0.87	2,056	3.60	0.67	0.87	0.22
Perceived Fit with Army	2	5	21,735	4.04	0.65	0.63	2,047	4.15	0.62	0.67	0.17
Physical Fitness	2	5	21,816	3.85	0.89	0.61	2,066	3.89	0.85	0.57	0.05
Possible Reasons for Leaving Army											
Discrimination	3	2	21,637	0.06	0.19	0.75	2,015	0.04	0.15	0.75	-0.12
Medical Issues	2	2	21,651	0.25	0.38	0.68	2,027	0.16	0.32	0.69	-0.23
Problems Adjusting	5	2	21,679	0.12	0.22	0.69	2,022	0.09	0.20	0.70	-0.15
All Reasons	23	2	21,716	3.05	3.34	0.82	2,043	2.07	2.95	0.83	-0.30
Satisfaction											
Army Life	8	5	21,837	3.63	0.60	0.77	2,078	3.71	0.59	0.79	0.14
Officers	2	5	21,813	3.57	0.76	0.74	2,058	3.64	0.73	0.74	0.10
Supervision - Leader Self-Promotion	3	5	21,442	2.29	0.93	0.71	2,027	2.37	0.94	0.75	0.08
Supervision - Leader Support	6	5	21,772	3.52	0.77	0.79	2,053	3.55	0.75	0.80	0.03
Training	8	5	21,836	3.64	0.66	0.81	2,078	3.65	0.67	0.84	0.01
Work-Family Balance	2	5	21,816	3.61	0.85	0.70	2,070	3.75	0.80	0.70	0.16
Unsure about Army Career*	6	2	21,377	0.86	1.09	0.49	2,027	0.84	1.03	0.41	-0.02

Note. ^aOne of the Continuance Intentions items on the FY99 SRS was not included on the FY03 SRS, thus no *d*-statistic or alpha is reported for this variable. *These composites were calculated by summing the number of items endorsed by each respondent. *d* = Standardized mean difference (Cohen's effect size statistic) = $(M_{FY03} - M_{FY99}) / \text{Pooled } SD$.

Table 7. Comparison of FY99 and FY03 Samples on EOTS (AIT/OSUT) Composite Descriptive Statistics

Composite	Items	Scale	FY99				FY03				<i>d</i>
			<i>N</i>	<i>M</i>	<i>SD</i>	α	<i>N</i>	<i>M</i>	<i>SD</i>	α	
Affective Commitment	6	5	17,103	3.59	0.77	0.84	781	3.84	0.68	0.79	0.32
Continuance Intentions ^a	2	Varies	17,001	2.99	1.51	-	773	3.42	1.51	-	-
General Self Efficacy	5	5	16,991	4.11	0.79	0.87	779	4.25	0.74	0.88	0.17
Importance of Core Army Values											
Duty, Integrity, and Personal Courage	12	7	16,996	6.20	0.90	0.95	778	6.26	0.87	0.96	0.06
Loyalty and Selfless Service	4	7	16,994	5.83	1.25	0.82	779	6.17	1.06	0.92	0.27
Job Performance (self-rated)	3	5	17,052	3.73	0.87	0.82	775	3.74	0.89	0.84	0.01
Military vs. Civilian Life											
Benefits	2	5	16,477	4.08	0.93	0.74	748	4.23	0.90	0.80	0.16
Job Characteristics	7	5	16,998	3.65	0.78	0.82	774	3.81	0.77	0.84	0.20
Pay	2	5	16,828	2.38	1.15	0.78	766	2.67	1.19	0.79	0.25
Time for Personal Life	3	5	16,850	2.05	0.97	0.78	765	2.40	1.12	0.83	0.36
Overall	14	5	17,029	3.19	0.70	0.88	776	3.41	0.74	0.89	0.31
Perceived Fit with Army	2	5	17,067	3.99	0.70	0.65	776	4.06	0.64	0.66	0.10
Physical Fitness	2	5	17,105	3.93	0.87	0.61	779	3.94	0.88	0.61	0.01
Possible Reasons for Leaving Army											
Discrimination	3	2	17,020	0.06	0.19	0.75	759	0.03	0.15	0.73	-0.13
Medical Issues	2	2	17,027	0.25	0.38	0.68	760	0.18	0.33	0.64	-0.18
Problems Adjusting	5	2	17,044	0.15	0.24	0.71	763	0.13	0.22	0.66	-0.11
All Reasons	23	2	17,074	3.31	3.45	0.82	771	2.34	3.11	0.83	-0.28
Satisfaction											
Army Life	8	5	17,109	3.42	0.69	0.82	783	3.64	0.63	0.81	0.32
Officers	2	5	17,101	3.48	0.78	0.72	772	3.59	0.78	0.74	0.14
Supervision - Leader Self-Promotion	3	5	16,848	2.45	0.93	0.72	772	2.63	1.00	0.74	0.19
Supervision - Leader Support	6	5	17,066	3.44	0.79	0.82	778	3.52	0.78	0.82	0.10
Training	8	5	17,111	3.50	0.70	0.82	783	3.60	0.67	0.84	0.13
Work-Family Balance	2	5	17,099	3.33	0.93	0.73	781	3.62	0.87	0.73	0.31
Unsure about Army Career*	6	2	16,828	0.89	1.10	0.48	759	0.91	1.09	0.48	0.02

Note. ^aOne of the Continuance Intentions items on the FY99 SRS was not included on the FY03 SRS, thus no *d*-statistic or alpha is reported for this variable. *These composites were calculated by summing the number of items endorsed by each respondent. *d* = Standardized mean difference (Cohen's effect size statistic) = $(M_{FY03} - M_{FY99}) / \text{Pooled } SD$.

Base Rate and Composition of BCT Attrition

Table 8 shows BCT attrition rates for the full FY99 and FY03 cohorts, as well as BCT attrition rates for Soldiers who responded to the SRS in these cohorts. The BCT attrition rate in FY99 (6.6%) was slightly higher than the rate in FY03 (5.1%). Exploring these differences further, we examined rates of attrition by month of service. In the FY99 cohort, the attrition rate in the first month of service was 2.3%; in the second month of service, the conditional rate of attrition was 4.4%.¹¹ In the FY03 cohort, the overall attrition rate in the first month of service was 1.4%; in the second month of service, the conditional rate of attrition was 3.7%.

Table 8. Comparison of BCT Attrition Rates for FY99 and FY03 Samples

Sample/Status	N	Attrition Rate
Full FY99 Cohort		
Attritee	4,103	6.6
Still-in-Service	58,257	
FY99 SRS Sample		
Attritee	1,673	5.9
Still-in-Service	26,798	
Full FY03 Cohort		
Attritee	3,398	5.1
Still-in-Service	64,086	
FY03 SRS Sample		
Attritee	139	4.9
Still-in-Service	2,705	

Note. Still-in-service reflects the number of Soldiers still in service (or Soldiers treated as such, recall the discussion following Table 2) at the end of BCT.

Given the slightly lower base rate of BCT attrition in the FY03 cohort, we followed up on the above analyses to explore the possibility that either (a) BCT attrition was “pushed” to later periods in time, or (b) the trend of lower rates of attrition in the FY03 cohort extended across later months of service. To assess these possibilities, we generated life tables depicting attrition rates for two sets of FY03 Soldiers: (1) the full FY03 cohort, and (2) Soldiers who entered service prior to July 1, 2003 ($n = 48,966$), and compared them to a life table for FY99 Soldiers.¹² Limiting the FY03 cohort to Soldiers who entered prior to July 1 allowed us to examine attrition rates across a greater number of months of service. For example, because the DMDC attrition data we obtained were current through March 31, 2004, it enabled us to examine attrition through 9 months of service for that segment of the FY03 cohort that accessed prior to July of 2003. For the full FY03 cohort, we were only able to examine attrition through 6 months of service.

¹¹ By “conditional” we mean the attrition rate in the second month of service among those Soldiers who survived their first month of service. Soldiers who attrited in their first month of service were excluded from the calculation of this conditional rate.

¹² Life tables depict the conditional rate of attrition for each month of service (i.e., the hazard). Hazards are calculated only among Soldiers who are still-in-service at the start of the given month of service. They are very useful for examining patterns in attrition across time (Putka, 2004a).

Table 9 shows the life tables for (a) the FY99 cohort, (b) the full FY03 cohort, and (c) the pre-July FY03 cohort. Figure 2 shows the hazard profiles for these groups, which are simply plots of the hazards (i.e., conditional attrition rates) by month of service. Examination of these results clearly reveals that the hazard profiles for Soldiers in the FY99 and FY03 cohorts are similarly shaped (e.g., an early peak at 2 months of service that drops off through later months). Although the hazard profiles are essentially parallel, it is also apparent that the FY03 hazards tend to be slightly lower than the FY99 hazards consistently across months of service. These results suggest that the trend in attrition rates over time in the FY99 and FY03 cohorts across time are quite similar (at least through 9 months of service), yet across the board, the FY03 attrition rates appear to be slightly lower than those found in the FY99 cohort.

In addition to comparing base rates of BCT attrition, the composition of BCT attrition across cohorts was also assessed. Table 10 shows the composition of BCT attrition (by ISC and month of service) for Soldiers in the FY99 and FY03 cohorts. Examination of Table 10 reveals that the vast majority of BCT attrition in both cohorts (FY99: 86.4%, FY03: 78.3%) was attributed to two ISCs: 87 (Entry Level Performance and Character/ Trainee Discharge Program) and 16 (Medically Unqualified for Active Duty). With regard to the distribution of these two ISCs across cohorts, ISC 16 accounted for a greater percentage of BCT attrition in FY03 (relative to FY99), whereas ISC 87 accounted for a greater percentage of BCT attrition in FY99 (relative to FY03). Another difference with regard to the composition of BCT attrition across cohorts was that ISC 17 (Failure to Meet Weight or Body Fat Standards) accounted for more attrition in the FY03 cohort (12.6% of BCT attrition) than it did in the FY99 cohort (1.0% of attrition). Taken together, these findings indicate the composition of BCT attrition in the FY99 and FY03 were generally quite similar, however a greater percentage of BCT attrition in the FY03 cohort was linked to Medical/Physical ISCs (62.8%) than in the FY99 cohort (45.0%).

Bivariate Relationships between Pre-Training Variables and BCT Attrition

Table 11 shows correlations and *c*-statistics for SRS variables. The majority of SRS variables had relationships with BCT attrition that were highly similar across cohorts. Indeed, the variables that were among the most predictive of BCT attrition in the FY99 cohort (e.g. Attrition Cognitions, Generalized Self-Efficacy, Possible Reasons for Leaving Army: Problems Adjusting and All, SRS Item 58: Level of Stress/Strain) were also among the most predictive variables in the FY03 cohort, and maintained similar levels of predictive validity. Nevertheless, a few differences did emerge between cohorts.¹³ For example, Affective Commitment, Importance of Core Army Values: Loyalty and Selfless Service, Military vs. Civilian Life, and Advising Others to Join the Army were more predictive of FY99 BCT attrition than FY03 BCT attrition. However, it is important to note that these variables were not generally among the strongest predictors of FY99 BCT attrition to begin with; thus, their slight drop in validity in the FY03 cohort is not of large concern. Perhaps a more interesting difference that emerged was that SRS variables reflecting medical and physical factors (i.e., SRS Item 37: Medical advice against exercise, SRS Item 36: # of serious injuries before Army, and SRS Item: 35: Average fitness level before Army) were more predictive of FY03 BCT attrition than FY99 BCT attrition. This finding is consistent with results presented earlier that showed a greater proportion of FY03 BCT attrition (relative to FY99) was attributed to Medical/Physical ISCs.

¹³ When SRS item numbers are cited in this report, they refer to item numbers on the FY99 SRS.

Table 9. Life Tables for FY99 Cohort and Subsets of the FY03 Cohort

Month of Service	Full FY99 Cohort				Full FY03 Cohort				Pre-July FY03 Cohort (N= 48,966)			
	Total Entering	In-Service	Attrit Hazard	Cumulative Attrition Rate	Total Entering	In-Service	Attrit Hazard	Cumulative Attrition Rate	Total Entering	In-Service	Attrit Hazard	Cumulative Attrition Rate
1	62,361	60,957	1,404	0.023	67,567	66,638	929	0.014	48,966	48,175	791	0.016
2	60,956	58,257	2,699	0.044	66,555	64,086	2,469	0.037	48,164	46,063	2,101	0.044
3	58,255	56,417	1,838	0.032	63,741	62,073	1,668	0.026	46,047	44,662	1,385	0.030
4	56,412	55,181	1,231	0.022	61,930	60,894	1,036	0.017	44,615	43,753	862	0.019
5	55,168	54,183	985	0.018	60,758	59,977	781	0.013	43,658	42,971	687	0.016
6	54,141	53,413	728	0.013	59,792	59,257	535	0.009	42,813	42,331	482	0.011
7	53,347	52,857	490	0.009					42,019	41,683	336	0.008
8	52,806	52,432	374	0.007					41,552	41,304	248	0.006
9	52,388	52,032	356	0.007					41,170	40,950	220	0.005

Note. Total Entering = Total number of Soldiers still-in-service at the beginning of the given month of service (i.e., the Soldiers "entering" the given month of service). In-service = Total number of Soldiers still-in-service at the end of the given month of service. Attrit = Total number of Soldiers who attrited during the given month of service. Hazard = Conditional attrition rate for the given month of service among Soldiers who entered that month of service. Cumulative Attrition Rate = Cumulative attrition rate through the given month of service.

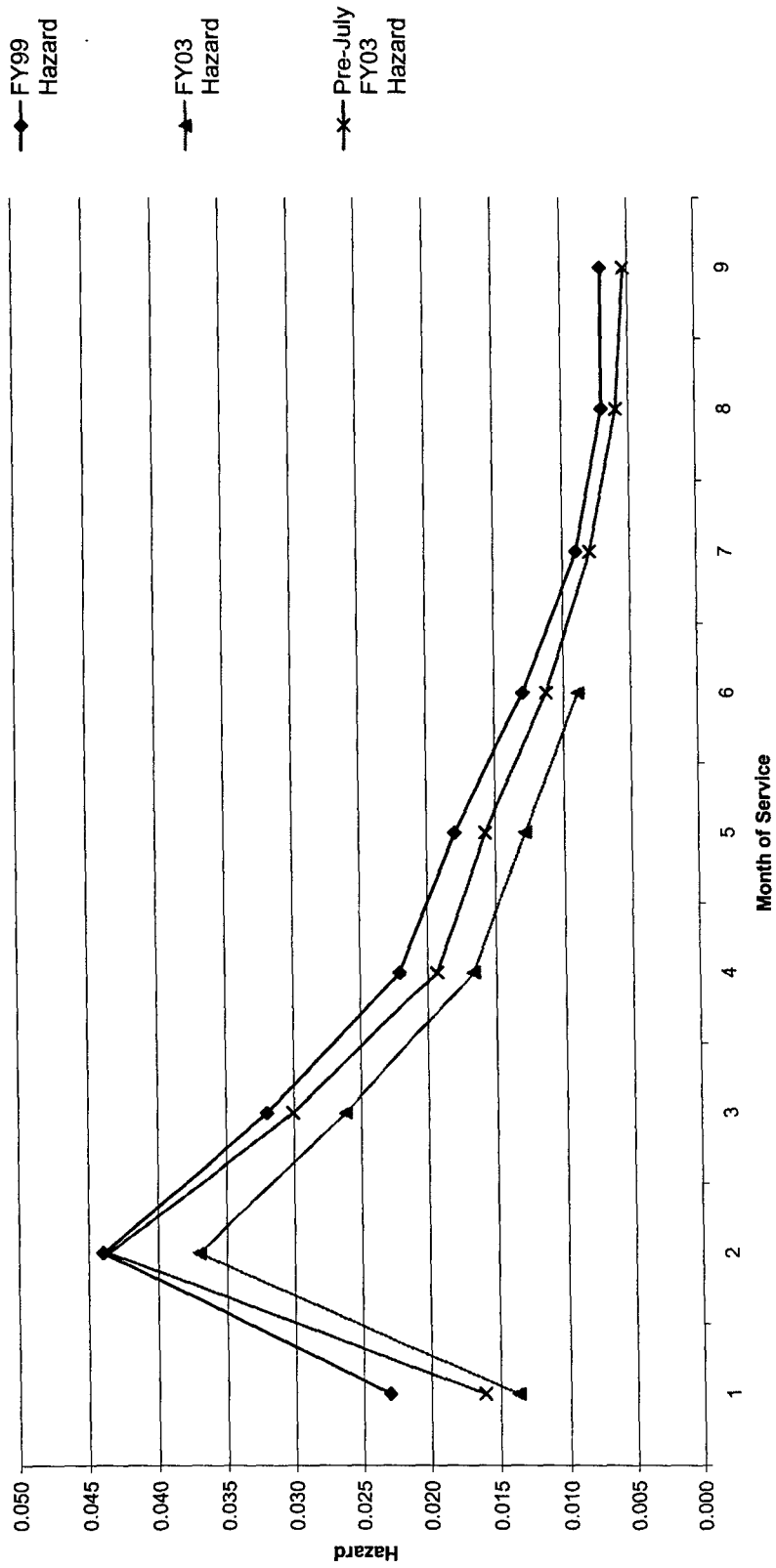


Figure 2. Hazard Profiles for the FY99 Cohort and FY03 Cohort

Table 10. Composition of BCT Attrition by Cohort

Category of Attrition/ISC	FY99 Cohort						FY03 Cohort					
	1st Month		2nd Month		Total BCT		1st Month		2nd Month		Total BCT	
	f	%	f	%	f	%	f	%	f	%	f	%
All Attrition	1,404	100.0	2,699	100.0	4,103	100.0	929	100.0	2,469	100.0	3,398	100.0
Moral Character	0	0.0	4	0.1	4	0.1	3	0.3	4	0.2	7	0.2
78 Good of the service (discharge in lieu of court-martial)							1	0.1	2	0.1	3	0.1
65 Discreditable incidents, civilian or military							1	0.1			1	0.0
67 Drugs												
84 Commission of a serious offense							1	0.1			1	0.0
80 Misconduct, reason unknown			1	0.0	1	0.0						
102 Dropped from strength, imprisonment			1	0.0	1	0.0						
75 AWOL or desertion			1	0.0	1	0.0			1	0.0	1	0.0
64 Alcoholism												
73 Court-martial												
83 Pattern of minor disciplinary infractions			1	0.0	1	0.0			1	0.0	1	0.0
71 Civil court conviction												
Performance	653	46.5	1,333	49.4	1,986	48.4	238	25.6	795	32.2	1,033	30.4
87 Entry level performance-conduct/Trainee Discharge Pgm	652	46.4	1,333	49.4	1,985	48.4	238	25.6	795	32.2	1,033	30.4
86 Unsatisfactory performance/Expeditious Discharge Pgm	1	0.1			1	0.0						
85 Failure to meet minimum qualifications for retention												
Medical/Physical	615	43.8	1,232	45.6	1,847	45.0	585	63.0	1,548	62.7	2,133	62.8
16 Medically unqualified for active duty, other	471	33.5	1,090	40.4	1,561	38.0	377	40.6	1,249	50.6	1,626	47.9
17 Failure to meet weight or body fat standards	12	0.9	31	1.1	43	1.0	191	20.6	236	9.6	427	12.6
10 Condition existing prior to service	132	9.4	111	4.1	243	5.9	17	1.8	62	2.5	79	2.3
14 Disability, no condition existing prior to SVC, no sev pay									1	0.0	1	0.0
Pregnancy/Parenthood	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
94 Pregnancy												
97 Parenthood												
Other	136	9.7	130	4.8	266	6.5	103	11.1	122	4.9	225	6.6
101 Dropped from strength, desertion	5	0.4	11	0.4	16	0.4	34	3.7	13	0.5	47	1.4
60 Character or behavior disorder	13	0.9	32	1.2	45	1.1	6	0.6	17	0.7	23	0.7
76 Homosexuality	7	0.5	28	1.0	35	0.9	7	0.8	49	2.0	56	1.6
22 Dependency or hardship	16	1.1	20	0.7	36	0.9	7	0.8	8	0.3	15	0.4
74 Fraudulent entry	59	4.2	28	1.0	87	2.1	21	2.3	10	0.4	31	0.9
99 Other	4	0.3	4	0.1	8	0.2			1	0.0	1	0.0
91 Erroneous enlistment or induction	26	1.9	2	0.1	28	0.7	22	2.4	20	0.8	42	1.2
98 Breach of contract	3	0.2			3	0.1	6	0.6	1	0.0	7	0.2
998 Invalid SPD			1	0.0	1	0.0						
103 Record correction	3	0.2	3	0.1	6	0.1						
90 Secretarial authority									1	0.0	1	0.0
105 Dropped from strength, other									2	0.1	2	0.1
96 Conscientious objector												
72 Security												
92 Sole surviving family member			1	0.0	1	0.0						

Note. f = Frequency of ISC in time period. % = Percentage of all attrition in the given time period that was linked to each ISC.

Table 11. Correlations between SRS Variables and BCT Attrition by Cohort

SRS Variable	FY99					FY03				
	<i>N</i>	<i>r</i>	<i>r*</i>	<i>c</i>	<i>SE_c</i>	<i>N</i>	<i>r</i>	<i>r*</i>	<i>c</i>	<i>SE_c</i>
<i>Composites</i>										
Affective Commitment	28,445	-.11	-.17	.608	.008	2,775	-.06	-.10	.561	.028
Attrition Cognitions	28,471	.19	.30	.660	.008	2,829	.16	.27	.640	.028
Continuance Commitment	28,471	-.06	-.10	.561	.008	2,814	-.04	-.08	.545	.026
Continuance Intentions ^a	28,471	-.06	-.09	.579	.008	2,764	-.03	-.06	.544	.029
Generalized Self Efficacy	28,443	-.15	-.25	.640	.008	2,770	-.15	-.25	.648	.027
<i>Importance of Core Army Values</i>										
Duty, Integrity, and Personal Courage	28,438	-.06	-.10	.545	.008	2,824	-.05	-.09	.519	.028
Loyalty and Selfless Service	28,435	-.07	-.12	.565	.008	2,825	-.04	-.06	.506	.027
<i>Military versus Civilian Life</i>										
Pay	27,888	-.01	-.02	.509	.008	2,735	.03	.05	.547	.027
Quality of Work Life	28,342	-.05	-.07	.539	.008	2,780	.00	.00	.515	.028
Time for Personal Life	28,045	-.04	-.06	.546	.008	2,734	.00	-.01	.510	.027
Overall	28,363	-.05	-.07	.540	.008	2,793	.01	.01	.512	.027
Participation in DEP Activities	28,293	-.05	-.08	.553	.008	2,833	-.05	-.09	.565	.025
Participation in High School Activities	28,321	-.01	-.02	.517	.007	2,756	.01	.02	.514	.026
<i>Possible Reasons for Leaving Army</i>										
Deviance	28,223	.05	.08	.543	.008	2,786	.05	.09	.530	.026
Discrimination	28,191	.01	.02	.509	.007	2,786	.03	.04	.516	.026
Problems Adjusting	28,288	.12	.20	.624	.008	2,786	.12	.20	.619	.026
All Reasons	28,408	.10	.16	.625	.007	2,786	.12	.20	.632	.025
<i>Reasons for Joining Army</i>										
Escape Problems	28,347	.01	.02	.512	.007	2,787	.01	.02	.518	.026
Family/Friends Influence	28,338	.01	.02	.507	.008	2,745	.04	.06	.539	.027
Job Benefits	28,412	.01	.01	.517	.008	2,816	.01	.02	.522	.025
Opportunity to Travel	28,377	-.05	-.08	.554	.008	2,772	-.04	-.07	.541	.028
Personal Growth	28,389	-.05	-.08	.549	.008	2,806	-.03	-.04	.534	.026
Training and Experience	28,373	-.02	-.04	.518	.008	2,757	-.01	-.02	.509	.026
Reasons for Quitting Previous Jobs	28,235	.05	.09	.559	.008	2,706	.03	.05	.532	.026
Thoughts of Quitting High School	27,907	.08	.13	.576	.008	2,668	.08	.14	.570	.027
Trouble in High School	27,932	.05	.08	.543	.008	2,589	.03	.05	.509	.028
Unsure about Army Career	28,295	.02	.04	.521	.007	2,726	.05	.08	.555	.025
<i>SRS Single Items</i>										
58. Level of stress/strain	28,386	.11	.18	.641	.007	2,586	.09	.15	.615	.027
37. Medical advise against exercise	28,419	.07	.10	.532	.008	2,667	.10	.16	.547	.028
36. # serious injuries before Army	28,442	.05	.08	.543	.008	2,678	.08	.13	.563	.027
35. Average fitness level before Army	28,427	-.07	-.10	.574	.007	2,770	-.09	-.15	.609	.026
25a. Never thought about quitting HS	27,907	-.07	-.12	.570	.008	2,668	-.06	-.10	.561	.027
05. How long in DEP?	28,165	-.07	-.12	.588	.007	2,738	-.09	-.15	.603	.026
53. Advise female about joining Army	28,276	-.06	-.10	.558	.008	2,701	.00	.00	.502	.026

Table 11. Continued.

SRS Variable	FY99					FY03				
	<i>N</i>	<i>r</i>	<i>r*</i>	<i>c</i>	<i>SE_c</i>	<i>N</i>	<i>r</i>	<i>r*</i>	<i>c</i>	<i>SE_c</i>
<i>SRS Single Items (continued)</i>										
47. Work I enjoy most is available	28,360	-.07	-.11	.573	.008	2,711	-.05	-.08	.546	.027
59. Current level of morale	28,394	-.09	-.14	.587	.008	2,566	-.11	-.19	.620	.027
52. Advise male about joining Army	28,272	-.10	-.16	.571	.008	2,706	-.04	-.06	.522	.026

Note. *r* = Point-biserial correlation or phi coefficient. *r** = Adjusted correlations between the given predictor and BCT attrition (Kemery et al., 1988). Adjusted correlations provide an estimate of what the correlation would be if the base rate of BCT attrition were .50. *c* = *c*-statistic. *SE_c* = standard error of *c*-statistic. All *r* are significant (*p* < .05, one-tailed), except those that are bolded.

Table 12 shows correlations and *c*-statistics for administrative variables. Like the SRS variables, the validities of the administrative variables for predicting BCT attrition in the FY99 and FY03 cohorts were generally quite similar. In both the FY99 and FY03 cohorts, the administrative variable with the strongest relationship to BCT attrition was gender. In the FY99 cohort, the odds of females attriting in BCT were about 2.3 times greater than the odds of males attriting in BCT, whereas in the FY03 cohort, the odds of females attriting in BCT were about 2.4 times greater than such odds for males (see Table 13). Other notable similarities across cohorts include: (a) Tier II Soldiers (i.e., alternative credential holders) more likely to attrit in BCT than high school graduates, (b) whites were more likely to attrit in BCT than minorities, (c) Soldiers who required a medical enlistment waiver for entry into service were more likely to attrit than Soldiers without such a waiver, (d) married Soldiers were more likely to attrit than single Soldiers, and (e) Combat Arms Soldiers were less likely to attrit in BCT than non-Combat Arms Soldiers (see Table 13).

Table 12. Correlations between Demographic Variables and BCT Attrition by Cohort

Administrative Variable	FY99					FY03				
	<i>N</i>	<i>r</i>	<i>r*</i>	<i>c</i>	<i>SE_c</i>	<i>N</i>	<i>r</i>	<i>r*</i>	<i>c</i>	<i>SE_c</i>
ASVAB GT Score	62,248	.00	-.01	.502	.004	58,588	-.02	-.04	.530	.005
Education Tier at Entry	62,126	.05	.08	.536	.005	63,634	.04	.06	.529	.005
Marital Status at Entry (Married)	62,361	.05	.08	.536	.005	67,283	.02	.04	.520	.005
Medical Enlistment Waiver*	28,321	.03	.04	.517	.007	2,619	.06	.09	.540	.028
Moral Character Enlistment Waiver*	28,341	.00	.00	.502	.007	2,668	-.04	-.06	.524	.025
MOS Classification	61,780	.06	.09	.562	.004	67,484	.04	.07	.545	.005
Race/Ethnicity	62,361	.05	.08	.551	.004	67,484	.03	.05	.533	.005
Gender (Female)**	62,361	.12	.18	.595	.005	2,678	.11	.18	.613	.027

Note. *r* = Point-biserial correlation or phi coefficient. *r** = Adjusted correlations between the given predictor and BCT attrition (Kemery et al., 1988). Adjusted correlations provide an estimate of what the correlation would be if the base rate of BCT attrition were .50. *c* = *c*-statistic. *SE_c* = standard error of *c*-statistic. All *r* are significant (*p* < .05, one-tailed), except those that are bolded. *FY99 and FY03 values were based on SRS responses of cohort members. **FY03 values were based on SRS responses because gender was not pulled from the EMF for the FY03 cohort.

Table 13. BCT Attrition Rates by Demographic Group and Cohort

Administrative Variable	FY99		FY03	
	Rate	OR	Rate	OR
Education Tier at Entry (Tier I)	6.1		4.8	
Tier II	10.0	1.58	7.2	1.46
Tier III	7.6	1.23	4.3	0.90
Marital Status at Entry (Married)	10.1		6.1	
Single	6.1	0.63	4.7	0.78
Medical Enlistment Waiver (Yes)*	7.8		8.2	
No	5.7	0.75	4.4	0.56
Moral Character Enlistment Waiver (Yes)*	5.6		2.2	
No	5.9	1.05	5.1	2.25
MOS Classification (Combat Arms)	4.2		3.6	
Combat Support	7.0	1.61	5.6	1.52
Combat Service Support	7.8	1.76	5.5	1.50
Race/Ethnicity (White)	7.5		5.5	
Black	5.9	0.80	4.5	0.83
Hispanic	3.9	0.54	3.4	0.63
Other	4.4	0.61	4.4	0.81
Gender (Female)**	12.5		8.4	
Male	5.1	0.44	3.3	0.41

Note. Rate = BCT attrition rate for Soldiers in the given group. OR = Odds ratio = Odds of attrition for given group / Odds of attrition for referent group. The referent group for each administrative variable is noted in parentheses. *FY99 and FY03 values were based on SRS responses of cohort members. **FY03 values were based on SRS responses because gender was not pulled from the EMF for the FY03 cohort.

Although findings with regard to the predictiveness of administrative variables were generally similar, a few differences warrant highlighting. For example, both waiver variables (Medical and Moral Character) appeared to have stronger relationships with BCT attrition in the FY03 cohort. In the FY03 cohort, Soldiers with medical enlistment waivers were 1.79 times more likely to attrit in BCT than Soldiers without such waivers, whereas in the FY99 cohort Soldiers with medical enlistment waivers were only 1.33 times more likely to attrit in BCT than Soldiers without such waivers. Like the pattern of validities observed for medical/physical SRS variables, this finding is consistent with the fact that Medical/Physical ISCs accounted for a greater proportion of BCT attrition in the FY03 cohort (relative to FY99). With regard to moral character waivers, Soldiers with such waivers in the FY03 cohort were 2.25 times *less* likely to attrit in BCT than Soldiers without such waivers, whereas in the FY99 cohort, Soldiers with moral character waivers were only 1.05 times less likely to attrit in BCT than Soldiers without such waivers.

Structural Models of BCT Attrition

Recall that prior to fitting an overall model of BCT attrition in the FY99 sample, we needed to determine which BCT structural model from the FY99 longitudinal report should initially be fitted as the overall model of BCT attrition in the FY99 sample. As noted earlier, we chose to fit a model that was identical in structure to the final structural model of second month

BCT attrition (Putka, 2004b). Upon fitting this model to the FY99 data, we found that the MOS dummy variables (Combat Support and Combat Service Support) failed to have significant direct effects on attrition. This finding was not surprising because results presented in the FY99 longitudinal report indicated the direction of the relationship between MOS and BCT attrition reversed itself across the first 2 months of service (Putka, 2004b). In light of these findings, we eliminated the direct paths from the MOS dummies to attrition and refit the model to the FY99 data. The fit of the new model was very good (see Table 14) and all of the remaining path coefficients in the model were statistically significant (see Table 15).

Table 14. Model Fit Statistics for Structural Models of BCT Attrition

Cohort/Model	N	df	Fit Statistics				
			χ^2	$\Delta\chi^2$	CFI	TLI	RMSEA
FY99 Cohort							
FY99 Model	25,543	43	627.3	-	.990	.979	.023
FY03 Cohort							
Unconstrained FY99 Model	1,704	43	106.5	-	.984	.966	.029
Constrained FY99 Model 1 (Attrition Paths Fixed)	1,704	51	125.7	19.2*	.981	.966	.029
Constrained FY99 Model 2 (All Paths Fixed)	1,704	90	271.6	145.9*	.953	.953	.034

Note. CFI = Comparative Fit Index. TLI = Tucker-Lewis Index. RMSEA = Root Mean Square Error of Approximation. *Change in chi-squared from previous (less constrained) model is statistically significant ($p < .05$), indicating the given model fits the data worse than the previous model.

Cross-Validating the FY99 Structural Model in the FY03 Cohort

As described earlier, we conducted a series of nested SEM analyses in the FY03 sample to assess the degree to which the FY99 structural model of BCT attrition generalized to the FY03 cohort. Model fit statistics, path coefficients, and multiple correlations associated with these nested models are shown in Tables 14, 15, and 16 respectively.

The first model we fitted to the FY03 data allowed all parameters in the FY99 model to be freely estimated. This model is referred to as the Unconstrained FY99 Model in Tables 14 through 16. Although this first model provided a very good fit to the FY03 data based on CFI, TLI, and RMSEA statistics, a few of the path coefficients that were statistically significant in the FY99 cohort failed to reach significance in the FY03 cohort. Nevertheless, the paths that failed to reach significance in the FY03 cohort were generally among the weaker paths from the FY99 cohort. Furthermore, those variables that were the strongest predictors of the endogenous variables in the FY99 cohort remained statistically significant and were again among the strongest predictors of such variables in the FY03 cohort. Also of note, the multiple correlation statistics (which index the degree to which each endogenous variable in the model was predicted by variables with paths leading to it; see Table 16) for the Unconstrained FY99 model in the FY03 cohort were nearly identical to those found in the FY99 cohort. Taken together, such findings suggest that similar levels of prediction could be obtained in the FY03 cohort with fewer of the variables contained in the FY99 model. Lastly, it is worth noting that the direct effects of Fitness and Medical II: Medical History Concerns on BCT attrition were stronger in

Table 15. Model Parameter Estimates and Wald Statistics for Structural Models of BCT Attrition

Outcome/Predictor	FY99 Cohort		FY03 Cohort					
	FY99 Model		Unconstrained FY99 Model		Constrained FY99 Model 1		Constrained FY99 Model 2	
	<i>b</i>	<i>Wald</i>	<i>B</i>	<i>Wald</i>	<i>b</i>	<i>Wald</i>	<i>b</i>	<i>Wald</i>
<i>Attrition</i>								
Attrition Cognitions	0.36	19.73	0.31	3.40	0.36	- ^a	0.36	-
Female	0.51	15.73	0.33	2.59	0.51	-	0.51	-
Past Withdrawal Propensity	0.19	15.51	0.21	4.25	0.19	-	0.19	-
Married	0.26	6.64	0.17	1.08	0.26	-	0.26	-
Medical II: Medical History Concerns	0.08	6.22	0.24	4.16	0.08	-	0.08	-
Medical I: Medical Waiver/Failure	0.05	3.83	0.00	0.01	0.06	-	0.06	-
Fitness	-0.05	-3.58	-0.24	-3.57	-0.05	-	-0.05	-
ASVAB GT Score	0.00	-1.73	0.00	-0.44	0.00	-	0.00	-
<i>Attrition Cognitions</i>								
Positive Army Affect	-0.41	-72.53	-0.36	-19.00	-0.37	-19.22	-0.41	-
Generalized Self-Efficacy	-0.30	-49.97	-0.36	-15.79	-0.35	-15.66	-0.30	-
57h. Homesickness	0.21	31.23	0.15	6.06	0.15	6.27	0.21	-
58. Stress/Strain	0.06	29.98	0.06	7.82	0.06	7.81	0.06	-
Utility/Ease of Withdrawal	0.12	26.74	0.08	5.53	0.07	5.45	0.12	-
Medical II: Medical History Concerns	0.04	15.73	0.02	2.58	0.02	2.60	0.04	-
Reasons for Joining Army- Personal Growth	-0.05	-14.21	-0.06	-5.39	-0.06	-5.35	-0.05	-
Core Army Values	-0.05	-12.52	-0.03	-2.20	-0.03	-2.29	-0.05	-
Reasons for Potentially Leaving Army- All	0.01	12.38	0.01	2.91	0.01	2.83	0.01	-
ASVAB GT Score	0.00	-11.76	0.00	-2.33	0.00	-2.43	0.00	-
Reasons for Joining Army- Travel	-0.02	-5.75	-0.02	-1.71	-0.02	-1.68	-0.02	-
MOS: Combat Service Support	-0.04	-5.30	-0.02	-0.85	-0.03	-1.02	-0.04	-
MOS: Combat Support	-0.02	-2.43	0.00	-0.09	0.00	-0.01	-0.02	-
<i>Generalized Self-Efficacy</i>								
Attrition Cognitions	-0.66	-100.67	-0.72	-27.85	-0.72	-27.87	-0.66	-
Fitness	0.22	65.45	0.18	16.07	0.18	16.06	0.22	-
4. Perceived Familiarity with Army	0.08	25.88	0.06	4.88	0.06	4.76	0.08	-
Unsure About Army Career	-0.05	-16.69	-0.07	-6.44	-0.07	-6.57	0.00	-
Core Army Values	0.07	15.29	0.09	5.68	0.09	5.58	0.07	-
Female	-0.10	-11.32	-0.10	-3.59	-0.10	-3.55	-0.10	-
ASVAB GT Score	0.00	6.57	0.00	1.26	0.00	1.28	0.00	-
MOS: Combat Support	-0.04	-3.76	0.05	1.12	0.06	1.31	-0.04	-
Married	0.03	2.71	0.03	1.02	0.03	1.18	0.03	-
MOS: Combat Service Support	-0.01	-1.48	0.02	0.66	0.02	0.53	-0.01	-
<i>Stress/Strain</i>								
Positive Army Affect	-0.60	-40.46	-0.58	-9.69	-0.59	-9.76	-0.60	-
Race: Black	-0.50	-25.93	-0.44	-5.61	-0.44	-5.67	-0.50	-
57h. Homesickness	0.49	21.46	0.35	3.59	0.35	3.55	0.49	-
Unsure About Army Career	0.14	17.72	0.17	4.96	0.17	5.12	0.14	-

Table 15. continued

Outcome/Predictor	FY99 Cohort		FY03 Cohort					
	FY99 Model		Unconstrained FY99 Model		Constrained FY99 Model 1		Constrained FY99 Model 2	
	<i>b</i>	<i>Wald</i>	<i>b</i>	<i>Wald</i>	<i>b</i>	<i>Wald</i>	<i>b</i>	<i>Wald</i>
<i>Stress/Strain (continued)</i>								
Reasons for Potentially Leaving Army- All	0.04	13.50	0.06	4.10	0.06	4.17	0.04	-
Race: Hispanic	-0.33	-12.85	-0.26	-2.43	-0.25	-2.39	-0.33	-
Female	0.24	10.36	0.10	1.28	0.10	1.27	0.24	-
Race: Other	-0.33	-9.65	0.09	0.66	0.09	0.68	-0.33	-
4. Perceived Familiarity with Army	-0.07	-8.08	-0.08	-2.55	-0.08	-2.55	-0.07	-
Fitness	-0.07	-7.96	-0.04	-1.32	-0.04	-1.20	-0.07	-
Reasons for Joining Army- Personal Growth	0.07	7.93	0.01	0.19	0.01	0.15	0.07	-
Medical II: Medical History Concerns	0.07	7.51	0.15	3.63	0.15	3.56	0.07	-
Reasons for Joining Army- Travel	-0.05	-6.35	0.00	0.03	0.01	0.16	-0.05	-
Married	0.14	5.45	0.10	1.24	0.09	1.14	0.14	-
MOS: Combat Support	-0.06	-2.92	-0.08	-0.89	-0.08	-0.85	-0.06	-
MOS: Combat Service Support	-0.04	-2.26	-0.17	-2.21	-0.17	-2.18	-0.04	-

Note. ^aNo Wald statistics are listed for path coefficients that were constrained to equal the FY99 path coefficient estimates. For each outcome, predictors are sorted in descending order by magnitude of their Wald statistic in the FY99 cohort. Paths with statistics that exceed 1.65 in magnitude are statistically significant ($p < .05$, two-tailed). Significant paths appear in bold type.

the FY03 cohort than the FY99 cohort. Again, such findings are consistent with differences found in the ISC composition of BCT attrition in the two cohorts noted earlier. To help illustrate the portions of the FY99 model that remained statistically significant (i.e., cross-validated) in the FY03 cohort, Figure 3 depicts a revised structural model of BCT attrition that shows only those paths that were significant in both the FY99 and FY03 data sets.

The second structural model we fitted to the FY03 data was identical to the Unconstrained FY99 Model described above with the exception that the path coefficients linking predictors to BCT attrition were constrained to equal the path coefficients for those predictors as estimated in the FY99 cohort. Note that the path coefficients to the other endogenous variables in the model remained free to vary. This model is referred to as Constrained FY99 Model 1 (Attrition Paths Fixed) in Tables 14 through 16. Although this model provided a very good fit to the FY03 data based on CFI, TLI, and RMSEA statistics (essentially identical to the unconstrained model), it resulted in significantly worse fit (statistically) than the Unconstrained FY99 Model ($\chi^2(8) = 19.2, p < .05$). Such findings may lead one to conclude that constraining the path coefficients that link predictors directly to attrition to be equal to those estimated in the FY99 sample resulted in a poorer fitting model. However, caution should be taken in drawing such a conclusion because the magnitude of this decrement in fit appeared to be quite small, based on (a) other model fit statistics (i.e., CFI, TLI, and RMSEA) and (b) the multiple correlations associated with prediction of the endogenous variables—all of which were nearly identical to those found for the unconstrained model.

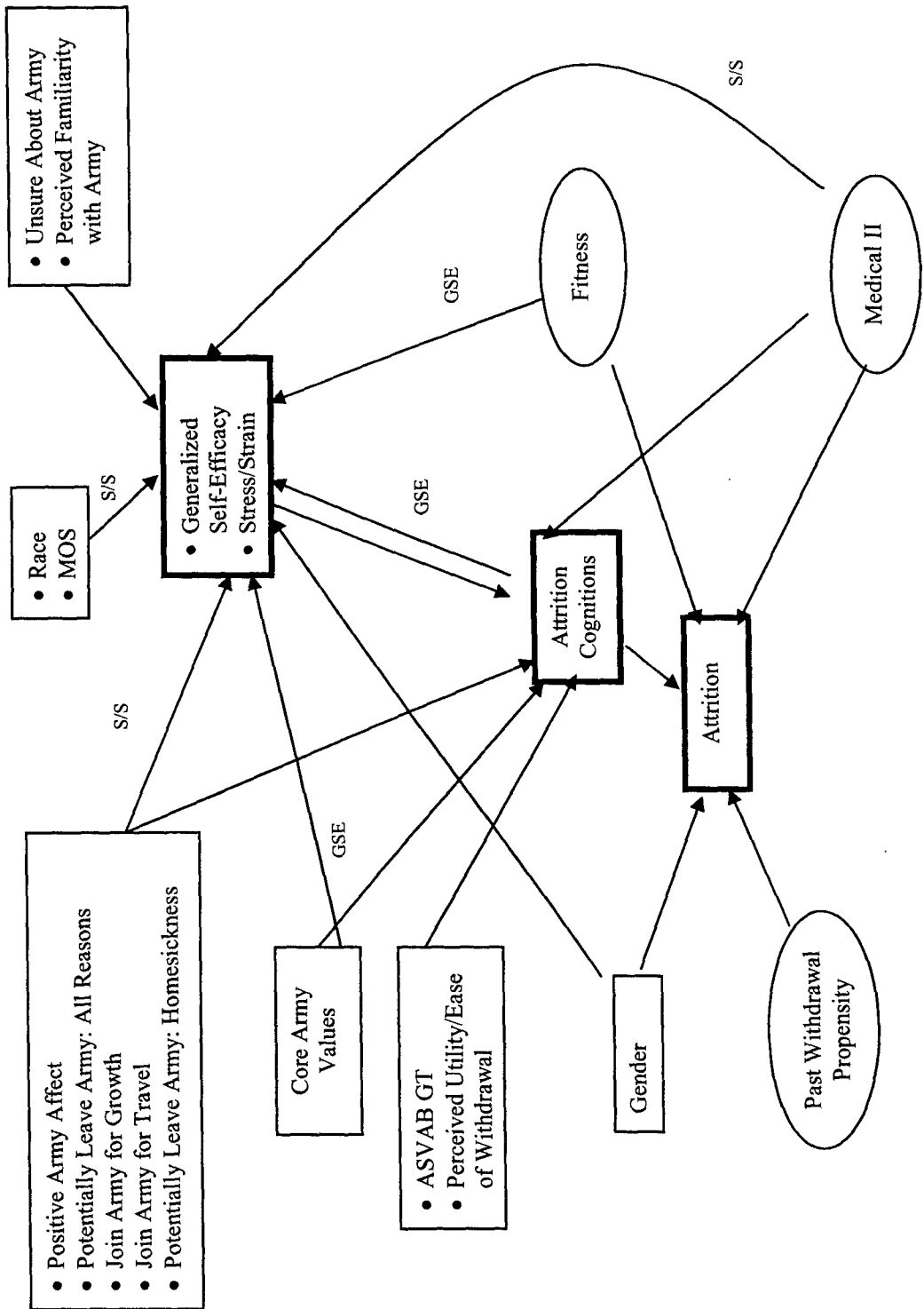


Figure 3. Revised Structural Model of BCT Attrition

Note. Only paths that were statistically significant in the FY99 and FY03 data are shown in this model. Variables in bolded boxes were modeled as outcomes (endogenous variables). Variables in ovals are component scores (detailed in Appendix F of the FY99 longitudinal report, Strickland, 2004). Variables bulleted within the same box lead to the same endogenous variable(s). GSE = Path to Generalized Self-Efficacy only. S/S = Path to Stress/Strain only.

Table 16. Multiple R^2 and R Statistics for Endogenous Variables in Structural Models of BCT Attrition

Cohort/Model	R^2	R
FY99 Cohort		
<i>FY99 Model</i>		
BCT Attrition	.15	.39
Attrition Cognitions	.74	.86
Generalized Self-Efficacy	.89	.94
Stress/Strain	.26	.51
FY03 Cohort		
<i>Unconstrained FY99 Model</i>		
BCT Attrition	.22	.46
Attrition Cognitions	.68	.82
Generalized Self-Efficacy	.88	.94
Stress/Strain	.24	.49
<i>Constrained FY99 Model 1 (Attrition Paths Fixed)</i>		
BCT Attrition	.16	.39
Attrition Cognitions	.67	.82
Generalized Self-Efficacy	.88	.94
Stress/Strain	.24	.49
<i>Constrained FY99 Model 2 (All Paths Fixed)</i>		
BCT Attrition	.16	.40
Attrition Cognitions	.70	.83
Generalized Self-Efficacy	.87	.93
Stress/Strain	.24	.49

The third structural model we fitted to the FY03 data was identical to the previous model with the exception that the path coefficients linking predictors to *all* endogenous variables were constrained to equal the coefficients estimated in the FY99 cohort. This model is referred to as Constrained FY99 Model 2 (All Paths Fixed) in Tables 14 through 16. Again this model provided a good fit to the FY03 data based on CFI, TLI, and RMSEA statistics, but it resulted in significantly worse fit than the model where only attrition paths were constrained ($\chi^2(39) = 145.9, p < .05$). Once again, although the differences in model fit were statistically significant, based on the other fit indexes and multiple correlations associated with the endogenous variables, this decrement in fit appeared to be small.

In addition to the SEM work described above, we also took a second approach to cross-validating the FY99 model using logistic regression. As noted earlier, we used logistic regression weights obtained from regressing BCT attrition on all variables having direct effects on attrition (as revealed by the FY99 structural model, and estimated based on FY99 data), and applied those weights to the FY03 data to form an FY99 model composite score for each Soldier. We then compared the validity and utility of this composite for predicting BCT attrition in each cohort. Results of these analyses are shown in Table 17.

Table 17. Cross-Validation of the FY99 Logistic Regression Model Composite

Cohort	Model Validity					Model Utility			
	<i>N</i>	<i>r</i>	<i>r*</i>	<i>c</i>	<i>SE_c</i>	Attrition Rate Top 5%	Attrition Rate Top 10%	Attrition Rate Top 15%	Base Rate
FY99 Composite in FY99 Cohort	26,118	.29	.47	.749	.007	.290	.216	.180	.057
FY99 Composite in FY03 Cohort	1,845	.28	.49	.748	.027	.228	.173	.137	.045

Note. *r* = Correlation between FY99 model composite and BCT attrition in the given cohort. *r** = Adjusted correlation. *c* = *c*-statistic indexing the relationship between probabilities resulting from the FY99 composite and BCT attrition in the given cohort. *SE_c* = Standard error of the *c*-statistic. Lower = lower bound of CI. Upper = upper bound of CI. Attrit Rate Top 5% = BCT attrition rate among Soldiers scoring in the top 5% of the FY99 model composite (i.e., the predicted probabilities of attrition resulting from the model) in the given cohort. Attrit Rate Top 10% = BCT attrition rate among Soldiers scoring in the top 10% of the FY99 model composite in the given cohort. Attrit Rate Top 15% = BCT attrition rate among Soldiers scoring in the top 15% of the FY99 model composite in the given cohort. Base rate = BCT attrition rate in the sample on which validity was estimated. All *r* and *c* statistics are significant ($p < .05$, one-tailed).

Examination of Table 17 reveals several noteworthy findings. First, the validity of the FY99 composite for predicting BCT attrition in the FY03 cohort was nearly identical to its validity for predicting BCT attrition in the FY99 cohort. The *c*-statistics indicate that the FY99 composite discriminated between attritees and stayers at levels that were roughly 49.8% greater than chance in both cohorts. Such findings demonstrate that the FY99 composite maintained its high level of validity for predicting BCT attrition in the FY03 cohort.

A similar pattern of findings emerged with regard to the utility of the FY99 composite for identifying Soldiers at high risk of BCT attrition. For example, FY99 Soldiers scoring in the top 5% of the FY99 composite were 5.1 times more likely to attrit in BCT than the average FY99 Soldier.¹⁴ Similarly, FY03 Soldiers scoring in the top 5% of the FY99 composite were also 5.1 times more likely to attrit in BCT than the average FY03 Soldier. Such findings indicate that the FY99 composite maintained its high level of utility for identifying Soldiers at high risk for BCT attrition across cohorts.

¹⁴ The value of "5.1" was obtained by dividing the attrition rate of FY99 Soldiers scoring in the top in the top 5% of the FY99 composite by the attrition rate among all FY99 Soldiers with a composite score. Thus, were the Army to have used this composite as a screen for Soldiers entering BCT in FY99, it is predicted that they would have identified a group of Soldiers who were at five times greater risk for BCT attrition than the average Soldier.

DISCUSSION

Summary of Key Findings

Below is a summary of the results associated with the seven research questions examined in this report. A discussion of conclusions drawn from these results and suggestions for future research on the FY03 cohort are provided.

1. How demographically similar are Soldiers in the FY99 and FY03 cohorts?

The FY99 and FY03 cohorts are very similar in terms of their demographic composition. Demographic variables that showed the largest differences across cohorts were gender and race. Compared to the FY99 cohort, the FY03 *SRS sample* had proportionally more female Soldiers (FY03: 28.1% vs. FY99: 19.6%) and the FY03 entire cohort had proportionally more white Soldiers (FY03: 67.7% vs. FY99: 59.9%).

2. How similar are Soldiers in the FY99 and FY03 cohorts with regard to their standing on survey variables reflecting their experiences, attitudes, and beliefs?

As was the case with the demographic composition of the FY99 and FY03 cohorts, mean SRS and EOTS responses among Soldiers were quite similar across cohorts. The largest differences were associated with survey composites that reflect Soldiers' desire to serve their country, core Army values, and favorable reactions toward the Army (e.g., favorable military vs. civilian comparisons, affective commitment, and satisfaction with the Army). Mean scores on such variables were generally about .20 to .40 standard deviations higher for FY03 Soldiers than for FY99 Soldiers. Also of note, the top three reasons Soldiers cited for joining the Army remained the same for both cohorts: #1- Educational benefits, #2- Training in job skills, and #3- Security and stability of a job.

3. Do the survey composites formed in the FY99 cohort maintain their level of reliability (internal consistency) in the FY03 cohort?

Nearly all SRS and EOTS survey composites formed as part of the FY99 longitudinal study maintained their level of internal consistency in the FY03 cohort.

4. How similar are the base rates and composition of BCT attrition in the FY99 and FY03 cohorts?

The base rates and composition of BCT attrition in the FY99 and FY03 cohorts were quite similar, as was the distribution of attrition across the first 9 months of service. The base rate of BCT attrition in the FY03 cohort (5.1%) was slightly lower than the rate in the FY99 cohort (6.6%). The pattern in hazards (i.e., conditional monthly attrition rates) across the first 9 months of service was essentially parallel in the FY99 and FY03 cohorts. In both cohorts, the majority of BCT attrition could be attributed to two ISCs: 87 (Entry Level Performance and Character/ Trainee Discharge Program) and 16 (Medically Unqualified for Active Duty)—

(86.4% in FY99; 78.3% in FY03). Lastly, a greater percentage of BCT attrition in the FY03 cohort was linked to Medical/Physical ISCs (62.8%) than in the FY99 cohort (45.0%).

5. Do pre-training administrative and survey variables have similar levels of validity for predicting BCT attrition in the FY99 and FY03 cohorts?

The majority of relationships between SRS variables and BCT attrition were highly similar in the FY99 and FY03 cohorts. However, there were some exceptions. Most notably, SRS variables that reflected medical and physical factors (i.e., SRS Item 37: Medical advice against exercise, SRS Item 36: # of serious injuries before Army, and SRS Item: 35: Average fitness level before Army) had stronger relationships with BCT attrition in the FY03 cohort (relative to the FY99 cohort). With regard to administrative variables, similarly small differences in validities were observed. Lastly, it is worth noting that the variables that were most predictive of BCT attrition in the FY99 cohort (i.e., Attrition Cognitions, Generalized Self-Efficacy, Potential Reasons for Leaving the Army: All) were also among the strongest predictors of BCT attrition in the FY03 cohort.

6. Are relationships among variables in the FY99 structural model of BCT attrition maintained in the FY03 cohort?

Based on commonly used fit statistics (e.g., CFI, TLI, and RMSEA), the FY99 model provided a very good fit to the FY03 data. Nevertheless, a few of the path coefficients that were statistically significant in the FY99 cohort failed to reach significance in the FY03 cohort. However, the paths that failed to reach significance in the FY03 cohort were generally among the weaker paths from the FY99 cohort. Indeed, those variables that were the strongest predictors of the endogenous variables in the FY99 cohort remained among the strongest predictors of such variables in the FY03 cohort. Furthermore, multiple correlations between endogenous variables and predictors in the structural models examined were nearly identical across cohorts. Such findings suggest that similar levels of prediction could be obtained in the FY03 cohort with fewer of the variables used in the FY99 model.

7. Does a model of BCT attrition optimized in the FY99 cohort maintain its validity and utility for predicting BCT attrition in the FY03 cohort?

The FY99 model composite retained its high level of validity and utility for identifying Soldiers at high risk of BCT attrition across cohorts. Specifically, the FY99 model composite was able to distinguish between BCT attritees and stayers at levels that were roughly 50% greater than chance in both cohorts. Furthermore, Soldiers scoring in the top 5% of the FY99 model composite were roughly five times more likely to attrit in BCT than the average Soldier in both the FY99 and FY03 cohorts.

Conclusions

The results presented in this report suggest that the FY03 and FY99 cohorts are quite similar. Though some differences were found, they did little to diminish the predictive validity and utility of variables and models identified as salient predictors of BCT attrition in the FY99

longitudinal study. In light of these findings, recommendations made based on the FY99 cohort's longitudinal study with regard to how the Army can use these results to manage BCT attrition still hold (McCloy & Strickland, 2004).

Recommendations for Future Research on the FY03 Cohort

Although this report provided answers to many questions regarding the similarity of the FY99 and FY03 cohorts, several important questions remain to be answered. For example, in this report we focused on only one type of attrition—BCT attrition. At the time this report was written, the FY03 cohort had yet to mature enough for examination of attrition in and through later time periods (e.g. AIT, OSUT, and in-unit). As the FY99 longitudinal report revealed, different variables tend to be predictive of attrition at different points in time. As such, future research efforts on the FY03 cohort should assess whether variables and models identified as salient predictors of these later types of attrition by the FY99 study retain their predictive validity and utility in the FY03 cohort. Furthermore, such research should continue to examine EOTS variables as well, which were collected after Soldiers exited BCT (thus, their validity was not examined in the present report). Such research efforts would also allow one to ascertain whether the FY99 structural models of AIT and in-unit attrition generalize to the FY03 cohort.

Examining later attrition in the FY03 cohort would also be important in light of potential differences between cohorts that may emerge once Soldiers join their unit. For example, whereas the typical FY99 Soldier would have likely been assigned to a unit at a base in the United States, the typical FY03 Soldier might be deployed to a war zone in Iraq. Assessing how such differences might affect the degree to which administrative and survey variables predict in-unit attrition would shed further light on how results from the FY99 study generalize to cohorts that function during times of war. As the FY03 cohort ages, it will be possible to draw more complete comparisons to the FY99 cohort in this regard.

Lastly, future research should compare self-reported exit survey responses from the FY99 and FY03 cohorts to assess their similarity for attrition during various time periods (e.g., BCT, AIT, in-unit). In this report, we focused our comparison of the composition of BCT attrition based on ISC only. It would be interesting to assess whether the same findings regarding differences in the composition of BCT attrition (e.g., Medical/Physical attrition was more prevalent in FY03) are found when using self-reported reasons for attrition as opposed to ISCs.

REFERENCES

- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Hanley, J. A., & McNeil, B. J. (1982). The meaning and use of the area under a Receiver Operating Characteristic (ROC) curve. *Radiology*, 143, 29-36.
- Hu, L.T. & Bentler, P.M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Kemery, E.R., Dunlap, W.P., & Griffeth, R.W. (1988). Correction for variance restriction in point-biserial correlations. *Journal of Applied Psychology*, 73, 688-691.
- Laurence, J.H. (1993). Education standards and military selection: From the beginning. In T. Trent & J.H. Laurence (Eds.), *Adaptability screening for the Armed Forces* (pp. 1-40). Washington, DC: Office of the Assistant Secretary of Defense.
- Laurence, J. H., Naughton, J., & Harris, D. A. (1996). *Attrition revisited: Identifying the problem and its solutions* (Research Note 96-20). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- Legree, P. (2004, May). *FY03 cohort study: Trends in influences on attrition in initial entry training*. Presented at the External Review Panel of ARI Projects: Attrition Determinants and Management, Arlington, VA.
- McCloy, R.A. & Strickland, W. J. (2004). Recommendations. In W.J. Strickland (Ed.), *A longitudinal study of first term attrition and reenlistment among FY1999 enlisted accessions*. Alexandria, VA: Human Resources Research Organization.
- Muthen, L.K. & Muthen, B.O. (2001). *Mplus user's guide*. 2nd Edition. Los Angeles: Muthen & Muthen.
- Putka, D.J. (2004a). Composition and prediction of attrition through 48 months of service. In W.J. Strickland (Ed.), *A longitudinal study of first term attrition and reenlistment among FY1999 enlisted accessions*. Alexandria, VA: Human Resources Research Organization.
- Putka, D.J. (2004b). Modeling basic combat training attrition. In W.J. Strickland (Ed.), *A longitudinal study of first term attrition and reenlistment among FY1999 enlisted accessions*. Alexandria, VA: Human Resources Research Organization.
- Putka, D.J., & McCloy, R.A. (2001, October). *A primer on signal detection theory: Applications to the prediction of attrition in the U.S. Army*. Presentation to the U. S. Army Research Institute for the Behavioral and Social Sciences at the Human Resource Research Organization, Alexandria, VA.
- Strickland, W.J. (Ed.) (2004). *A longitudinal study of first term attrition and reenlistment among FY1999 enlisted accessions*. Alexandria, VA: Human Resources Research Organization.
- Van Iddekinge, C.H. (2004). Survey composite development and coding of criteria. In W.J. Strickland (Ed.), *A longitudinal study of first term attrition and reenlistment among FY1999 enlisted accessions*. Alexandria, VA: Human Resources Research Organization.

APPENDIX

SOLDIER RECEPTION SURVEY



**SURVEY APPROVAL AUTHORITY: U.S. ARMY RESEARCH
INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
SURVEY CONTROL NUMBER: PT 60-18A**

The **Soldier Reception Survey** is part of a research project to evaluate the attitudes and experiences of enlisted personnel during their careers in the United States Army. In this project, the U.S. Army Research Institute (ARI) will assess the expectations and impressions of new recruits, soldiers completing training, and personnel exiting the Army. The project covers a wide range of issues related to soldiers' jobs, careers, and the Army as a whole. The overall purpose is to provide senior Army leaders information for recruiting, training, and retaining a high quality force of soldiers.

Thank you for your support for this survey program.

PRIVACY ACT STATEMENT

1. The Department of the Army may collect the information requested in this survey under the authority of 10 United States Code 2358. Providing information in this questionnaire is voluntary. Failure to respond to any specific question will not result in any penalty.
2. Public Law 93-573 (Privacy Act of 1974) requires that you be informed of the purpose and uses to be made of the information collected. The information collected in the survey will be used solely for research purposes. Your Social Security Number (SSN) is requested only for linking data files. Use of SSNs is authorized by Executive Order 9397. In accordance with federal regulations, the survey data will be safeguarded to protect your privacy. After we have used your SSN to create the data files, a new identification code will be created to replace your SSN. The file linking your SSN to the new ID code will be properly secured to preserve confidentiality. Only survey statisticians involved in collecting or preparing the information for analysis will have access to completed questionnaires. Only group statistics will be reported.

How to fill out this survey.

Read each question carefully and mark your answers directly on this form.

MARKING INSTRUCTIONS

- Please use a No. 2 pencil.
- Please completely fill in the response as shown in the examples:

Some questions ask you to mark **ONLY ONE** answer.

What component of the Army did you join? Mark the option that best describes you.

- Active Army
- Reserve
- National Guard

Other questions ask you to mark **MORE THAN ONE** answer.

Which of the following strongly influenced you to join the Army? **MARK ALL THAT APPLY.**

- Parent(s)/Guardian(s)
- Friend(s)
- Wife/Husband/Girlfriend/Boyfriend
- Athletic Coach
- Teacher

1. Listed below are some reasons why people join the Army. How important was each of these reasons in your decision to join the Army?

Extremely important
Very important
Moderately important
Slightly important
Not at all important

- a. Army advertising 1 2 3 4 5
- b. Army recruiter 1 2 3 4 5
- c. Desire to serve my country 1 2 3 4 5
- d. Develop self-discipline 1 2 3 4 5
- e. Earn more money than previous job(s) 1 2 3 4 5
- f. Educational benefits 1 2 3 4 5
- g. Family social support services 1 2 3 4 5
- h. Get away from a personal problem 1 2 3 4 5
- i. Influence of family 1 2 3 4 5
- j. Influence of friends 1 2 3 4 5
- k. Lack of civilian job opportunities 1 2 3 4 5
- l. Medical care, coverage and benefits 1 2 3 4 5
- m. Military tradition in family 1 2 3 4 5
- n. Need to be on my own 1 2 3 4 5
- o. Pay and allowances 1 2 3 4 5
- p. Security and stability of a job 1 2 3 4 5
- q. Training in job skills 1 2 3 4 5
- r. Chance to travel 1 2 3 4 5
- s. Repayment of loans 1 2 3 4 5
- t. Prove that I could do it 1 2 3 4 5
- u. Make Army a career 1 2 3 4 5
- v. Become more mature 1 2 3 4 5
- w. Take time out to decide about my life plans 1 2 3 4 5
- x. Gain job experience 1 2 3 4 5
- y. Escape from a bad neighborhood 1 2 3 4 5
- z. Needed a place to live 1 2 3 4 5
- aa. Chance for adventure 1 2 3 4 5

2. Which of the following strongly influenced you to join the Army? **MARK ALL THAT APPLY.**

- Parent(s)/Guardian(s)
- Brother/Sister
- Friend(s)
- Wife/Husband/Girlfriend/Boyfriend
- Athletic Coach
- Teacher
- School Guidance Counselor
- ROTC student
- ROTC cadre member
- Service member
- Recruiter
- Radio advertisement
- Television advertisement
- Printed advertisement

3. What component of the Army did you join? **Mark that option that best describes you.**

- Active Army
- Reserve
- National Guard

4. How familiar are you with what will be expected of you in the Army?

- Extremely familiar
- Very familiar
- Moderately familiar
- A little familiar
- Not at all familiar

5. How long did you participate in the Delayed Entry Program (DEP)?

- Less than 1 month
- 1 month
- 2 months
- 3 months
- 4 months
- 5 months
- 6 months
- 7 months
- 8 months
- 9 months
- 10 months
- 11 months
- 12 months

6. How often did your recruiter hold DEP activities?

- More than once a month
- About once a month
- Less than once a month
- Never
- Don't know

7. How often did you attend DEP activities?

- More than once a month
- About once a month
- Less than once a month
- Never (Why not? Please list below)

8. In which of the following activities did you participate while in the DEP? **MARK ALL THAT APPLY.**

- None
- Social functions with other people in the DEP
- Films, speakers, or question and answer sessions to get more information about Army
- Training sessions; for example, drill and ceremonies or first aid training
- Field trips to Army posts
- Physical training/exercise sessions
- Other types of DEP activities (please list below)

9. How important is each of the following TO YOU PERSONALLY?

	Extremely important	Very Important	Quite Important	Moderately Important	Somewhat important	Slightly important	Not at all important
a. Loyalty to the United States Army	1	2	3	4	5	6	7
b. Taking responsibility for your actions and decisions	1	2	3	4	5	6	7
c. Putting what is good for others above your own welfare	1	2	3	4	5	6	7
d. Dedication to serving the United States, even to risking your life in its defense	1	2	3	4	5	6	7
e. Commitment to working as a member of a team	1	2	3	4	5	6	7
f. Dedication to learning your job and doing it well	1	2	3	4	5	6	7
g. Personal drive to succeed in your work and advance	1	2	3	4	5	6	7
h. Being honest, open and truthful	1	2	3	4	5	6	7
i. Being courageous	1	2	3	4	5	6	7
j. Standing up for what you firmly believe is right	1	2	3	4	5	6	7
k. Working with others tactfully	1	2	3	4	5	6	7
l. Exhibiting excellent appearance	1	2	3	4	5	6	7
m. High moral standards	1	2	3	4	5	6	7
n. Building and maintaining physical fitness and stamina	1	2	3	4	5	6	7

BACKGROUND INFORMATION

10. In what year were you born?

19		
	0	
	1	
	2	
	3	
	4	
5	5	
6	6	
7	7	
8	8	
9	9	

11. When you were growing up, did you have a parent/guardian who was career active duty military?

Yes No

12. Are you:

Male Female

13. How many dependent children do you have (for whom you provide financial support)?

None 1 2 3 4 or more

14. Are you of Hispanic/Spanish origin or ancestry (of any race)?

No
 Yes, Mexican, Mexican-American, Chicano
 Yes, Puerto Rican
 Yes, other Hispanic/Spanish

15. What is your racial background?

American Indian, Eskimo or Aleut
 Asian or Pacific Islander
 Black
 White

ABOUT YOUR EDUCATION

16. Fill in the circles for each grade you finished. It's OK to choose more than one type of school. Fill a circle for EACH grade you finished.

	PUBLIC school	PRIVATE school	Classes mostly at HOME	GED equivalency
Grade 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grade 12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IMPORTANT: Make sure you filled a circle above for EVERY GRADE you finished.

17. Did you finish high school?

No Yes. If yes, choose the credential(s) you earned when you finished high school. Fill in at least one circle:

Diploma – earned from a public or private **traditional day school**

Diploma – earned from an **adult (continuation) school**

Diploma – issued by parents or tutors for **home schooling**

Diploma – issued by an association, school, or state for **home schooling**

Diploma – issued by a **vocational or technical school**

Diploma – issued by a **correspondence school**

GED **equivalency diploma**

Certificate – for high school **attendance or completion**

18. Did you finish one semester/quarter of college (at least 4 courses)? Do not include advanced placement courses you took in high school.

- No Yes. If yes, fill in your highest level:
 - One or more semesters/quarters of college
 - One or more semesters/quarters of vocational college
 - An associate degree
 - A bachelor's or higher degree

19. Did you participate in the National Guard ChalleNGe program?

- No Yes. If yes, did you graduate from ChalleNGe?
 - No Yes

20. What was your average grade during the time you were in high school?

- A or A-
- B+ or B
- B- or C+
- C or C-
- D or lower

21. Are you planning to go to college?

- Yes, while on active duty during this enlistment
- Yes, after I complete this term of active duty
- No
- Undecided

22. Did you ever get into trouble at school for doing any of the things below? Mark all things for which you were sent to the principal's office. MARK ALL THAT APPLY.

- I was never sent to the principal's office
- Missing class
- Skipping school
- Fighting
- Being disorderly
- Bad language
- Smoking
- Talking back to teachers
- Other reasons

23. Were you ever expelled from high school or junior high (Intermediate school)?

- Yes
- No

24. Were you ever suspended from high school or junior high (Intermediate school)?

- Yes
- No

25. If you ever thought about quitting high school, show why. MARK ALL THAT APPLY.

- I never thought about quitting high school
- My family needed money or needed me at home
- I was expelled or suspended
- I was bored, wasn't learning anything useful
- I got married or became a parent
- I was getting bad grades
- I didn't get along with the other students
- The rules were too strict
- I wasn't going to graduate on time
- I didn't get along with the teachers, counselors, or the principal
- I wanted to work full time
- Other reasons

26. During high school, did you participate in any of the following activities? MARK ONE RESPONSE FOR EACH ACTIVITY.

	Participated as a Leader or Officer	Participated	Did Not Participate
a. Athletic teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Drama, music, art, chorus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. School clubs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Other clubs (Scouts, "Y", 4-H, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. During your high school years, what size city or area did you live in?

- Large city (over 300,000 people)
- Suburb of a large city
- Medium-sized city (50,000-300,000)
- Small city or town (under 50,000)
- Rural area

28. What is your current marital status?

- Married
- Legally separated or filing for divorce
- Single, never married
- Single, engaged to be married
- Divorced
- Widowed

29. Is there an important girlfriend/boyfriend in your life right now?

- Does not apply; I am currently married
- Yes
- No

30. Is your spouse/girlfriend/boyfriend currently working in a civilian job (including a job with the U.S. Army/Department of Defense)? **MARK ONE.**

- Does not apply; I do not have a spouse/girlfriend/boyfriend
- Does not apply; my spouse/girlfriend/boyfriend is on active duty
- Yes, full-time
- Yes, part-time
- No, but is currently looking for work
- No, not looking for work but would like to work
- No, does not want to work now

31. How supportive is your spouse/girlfriend/boyfriend of your making a career of the Army?

- Does not apply; I do not have a spouse/girlfriend/boyfriend
- Very supportive
- Fairly supportive
- Mixed or neutral
- Fairly unsupportive
- Very unsupportive

32. When your spouse/girlfriend/boyfriend was growing up, did he/she have a parent/guardian who was career active duty military?

- Does not apply; I do not have a spouse/girlfriend/boyfriend
- Yes
- No
- Don't know

33. Is your spouse/girlfriend currently pregnant?

- Does not apply; I do not have a female spouse/girlfriend
- Yes
- No, but plans to be within one year
- No, but maybe in the future
- No, and does not plan to be
- Don't know

34. During the last 12 months, have you (or your spouse/girlfriend) given birth to a child?

- Does not apply
- Yes
- No

35. During the two years before entering the Army, what was your average level of fitness?

- Very high
- High
- Moderate
- Low
- Very low

36. During the two years before entering the Army, how many fairly serious physical injuries did you receive?

- None
- 1-2
- 3-5
- 6-9
- 10 or more

37. During the two years before entering the Army, were you ever advised by a medical practitioner not to participate in any exercise or sport programs?

- Yes
- No

38. Have you ever left a job for any of the following reasons? **MARK ALL THAT APPLY.**

- I haven't had a job outside the home
- I went back to school
- The pay was not good
- I was laid off
- I was fired
- I found a better job
- I moved to another location
- I didn't get along with my supervisor
- I was arrested
- There was no chance to get ahead
- The working conditions were bad (dangerous, hot, dusty, etc.)
- To join the military
- Other reasons

39. Did you need to get a moral waiver in order to be accepted by the Army?

- Yes
- No

40. Did you need to get a medical waiver in order to be accepted by the Army?

- Yes
- No

41. What is the length of your enlistment term?

- 2 years
- 3 years
- 4 years
- More than 4 years

42. During the last 6 months before entering the DEP, how often did you smoke cigarettes?

- Never
- Rarely
- Once a week or so
- 2-3 times a week
- 4-5 times a week
- Daily

43. During the last 6 months before entering the DEP, how often did you drink alcoholic beverages?

- Never
- Rarely
- Once a week or so
- 2-3 times a week
- 4-5 times a week
- Daily

44. How strongly do you agree or disagree with the following statements about your military life? MARK A RESPONSE FOR EACH.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
a. The Army has a great deal of personal meaning to me	1	2	3	4	5
b. It would be too costly for me to leave the Army in the near future	1	2	3	4	5
c. I am afraid of what might happen if I quit the Army without having another job lined up	1	2	3	4	5
d. Too much in my life would be disrupted if I decided I wanted to leave the Army now	1	2	3	4	5
e. I feel a strong sense of belonging to the Army	1	2	3	4	5
f. I feel "emotionally attached" to the Army	1	2	3	4	5
g. One of the problems of leaving the Army would be the lack of good alternatives	1	2	3	4	5

45. From what you know and have heard about the Army and civilian life, please indicate how you believe conditions in the military are compared with conditions in a civilian job you could realistically expect to get. MARK A RESPONSE FOR EACH.

	Much Better in Army	Somewhat Better in Army	About the Same	Somewhat Better in Civilian Life	Much Better in Civilian Life	Don't Know
a. Pay	1	2	3	4	5	6
b. Retirement benefits	1	2	3	4	5	6
c. Benefits other than retirement	1	2	3	4	5	6
d. Assistance for civilian education	1	2	3	4	5	6
e. Opportunities to advance in your chosen field	1	2	3	4	5	6
f. Opportunities for job satisfaction	1	2	3	4	5	6
g. Quality of co-workers	1	2	3	4	5	6
h. Working hours/schedule	1	2	3	4	5	6
i. Time for personal/family life	1	2	3	4	5	6
j. Overall quality of life	1	2	3	4	5	6
k. Level of professionalism in the organization	1	2	3	4	5	6
l. Personal freedom	1	2	3	4	5	6
m. Job security	1	2	3	4	5	6
n. Total family income	1	2	3	4	5	6

46. How confident are you that you will: MARK A RESPONSE FOR EACH.

	Extremely Confident	Very Confident	Moderately Confident	Slightly Confident	Not Confident At All
a. Adapt to Army life	1	2	3	4	5
b. Complete your term of obligation	1	2	3	4	5
c. Meet the Army's physical requirements	1	2	3	4	5
d. Be successful in basic training	1	2	3	4	5
e. Earn promotions in the Army	1	2	3	4	5

47. The kind of work I enjoy most is available:

- only in the military.
- primarily in the military.
- equally in the military and civilian world.
- primarily in the civilian world.
- only in the civilian world.

48. Considering both your own qualifications and current labor market conditions, how difficult do you think it would be for you to find a good civilian job right now?

- Very difficult
- Difficult
- Not particularly difficult or easy
- Easy
- Very easy

49. My personal or family situation would make it difficult for me to leave the Army in the next year or so.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

50. Which ONE of the following best describes your current Army career intentions? MARK ONE.

- PROBABLY stay in until retirement
- DEFINITELY stay in until retirement
- PROBABLY stay in beyond my present obligation, but not necessarily to retirement
- DEFINITELY stay in beyond my present obligation, but not necessarily to retirement
- PROBABLY leave upon completion of my present obligation
- DEFINITELY leave upon completion of my present obligation

SOLDIER END-OF-TRAINING SURVEY



**SURVEY APPROVAL AUTHORITY: U.S. ARMY RESEARCH
INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
SURVEY CONTROL NUMBER: PT 60-18C**



The **Soldier End-of-Training Survey** is part of a research project to evaluate the attitudes and experiences of enlisted personnel during their careers in the United States Army. The U.S. Army Research Institute (ARI) will assess the expectations and impressions of new recruits as well as enlisted personnel who have recently completed training and personnel exiting the Army. The project covers a wide range of issues related to soldiers' jobs, careers, and the Army as a whole. The overall purpose is to provide senior Army leaders information for recruiting, training, and retaining a high quality force of soldiers.

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How to fill out this survey.

Read each question carefully, and mark your answers directly on this form.

MARKING INSTRUCTIONS

- Please use a No. 2 pencil.
- Please completely fill in the response as shown in the examples:

CORRECT **INCORRECT**
 ● ○ ○

Some questions ask you to mark **ONLY ONE** answer.

What stage of training are you currently completing? **MARK ONE.**

- Basic Training (BT)
- Advanced Individual Training (AIT)
- One Station Unit Training (OSUT)

Other questions ask you to mark **MORE THAN ONE** answer.

Since you joined the Army, was the most severe punishment for the same type of offense usually given to: **MARK ALL THAT APPLY.**

- Does not apply; all are treated the same
- Men
- Women
- Whites
- Blacks
- Hispanics
- Some other race/ethnic group (PLEASE LIST)

1. What component of the Army did you join? Mark the option that best describes you.

- Active Army
- Reserve
- National Guard

2. Enter your Social Security Number below.

			-			-			
0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

3. What stage of training are you currently completing? MARK ONE.

- Basic Combat Training (BCT)
- Advanced Individual Training (AIT)
- One Station Unit Training (OSUT)

4. How satisfied are you with the training you have received since you entered the Army?

- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

5. How realistic were the expectations you had about Army life before you joined the Army?

- Very realistic
- Mostly realistic
- Mostly unrealistic
- Very unrealistic

6. Have you participated in Values Training since entering the Army?

- Yes
- No

7. How has Army life compared with your expectations before you joined the Army?

- Much better than I expected
- Somewhat better than I expected
- About the same as I expected
- Somewhat worse than I expected
- Much worse than I expected

8. To what extent has your most recent training MARK A RESPONSE FOR EACH.

- Very great extent
- Great extent
- Moderate extent
- Slight extent
- Not at all
- No basis to judge

- a. contributed toward your professional development? 1 2 3 4 5 6
- b. instilled Army values? 1 2 3 4 5 6
- c. prepared you to perform your Army duties? 1 2 3 4 5 6
- d. prepared you for your future Army assignments? 1 2 3 4 5 6

9. How has your commitment to an Army career changed during this training?

- Much greater now
- Somewhat greater now
- About the same as it was when I started training
- Somewhat less now
- Much less now

10. What effect, if any, have your Army experiences had on the development of specific job knowledge, skills, and abilities that will help you perform a civilian job?

- Extremely positive effect
- Very positive effect
- Little effect
- No effect
- Don't know

11. What effect, if any, have your Army experiences had on the development of personal characteristics and attitudes that will help you perform a civilian job?

- Strong positive effect
- Postive effect
- No effect
- Negative effect
- Strong negative effect
- No basis to judge

12. How does your physical health compare now to what it was when you first entered the Army?

- Much better now
- Somewhat better now
- About the same as it was
- Somewhat worse now
- Much worse now

13. During your recent training, did you have any medical problems/injuries for which you visited a Doctor or the Troop Medical Command (TMC)?

- Yes
- No

14. Before you enlisted, were you ever advised by a medical practitioner not to participate in any physical exercise or sports program because of a problem/injury similar to the one you had during your recent training?

- Yes
- No
- Does not apply; I had no medical problem/injury during training

15. Please indicate your level of agreement with the following statements. MARK A RESPONSE FOR EACH.

Strongly agree
Agree
Neither agree nor disagree
Disagree
Strongly disagree

- a. The Army will allow me to maintain the standard of living I want for myself/my family..... ① ② ③ ④ ⑤
- b. The Army will allow me to maintain the kind of balance I want between my work and personal life ① ② ③ ④ ⑤
- c. Even if I had an offer of a bit more pay from a civilian organization, I would be reluctant to leave the Army .. ① ② ③ ④ ⑤
- d. I would discourage a close friend from joining the Army ① ② ③ ④ ⑤
- e. The demands of the Army make it difficult to have the kind of family life I would like ① ② ③ ④ ⑤
- f. I can count on Army people to help out when needed ① ② ③ ④ ⑤
- g. I frequently feel like leaving the Army .. ① ② ③ ④ ⑤
- h. I am quite proud to tell people that I am in the Army ① ② ③ ④ ⑤
- i. For me, a rewarding career can compensate for limited personal/family time ① ② ③ ④ ⑤
- j. I can get ahead in the Army doing the kinds of work I like best ① ② ③ ④ ⑤
- k. The Army has a great deal of positive meaning to me ① ② ③ ④ ⑤
- l. I feel a strong sense of belonging to the Army ① ② ③ ④ ⑤
- m. I feel "emotionally attached" to the Army ① ② ③ ④ ⑤
- n. One of the problems of leaving the Army would be the lack of good alternatives..... ① ② ③ ④ ⑤

16. Since arriving at your present Army post, did you get into any serious trouble (UCMJ offenses)?

- No
- Yes, just once
- Yes, two or three times
- Yes, four or more times

17. Since arriving at your present Army post, have YOU been sexually harassed? MARK ONE.

- No → GO TO Q. 21
- Yes, 1 time
- Yes, 2 times
- Yes, 3 times
- Yes, 4 or more times

THE NEXT THREE QUESTIONS ARE ABOUT THE SEXUAL HARASSMENT SITUATION WHICH HAD THE GREATEST EFFECT ON YOU.

18. Who sexually harassed YOU? MARK ONE.

- An officer
- An NCO
- An enlisted person (not an NCO)
- A civilian employee of the Army
- Someone else

19. Was this person in your unit? No Yes

20. Did you report the sexual harassment incident to your chain of command or other military authority? MARK ONE.

- Yes, but I am not aware of the results.
- Yes, and something was done.
- Yes, and nothing was done about it.
- No, I handled it myself.
- No, I didn't think anyone would do anything about it.
- No, it was a minor incident and it didn't really bother me.
- No, I was afraid of reprisals from the chain of command.

21. Since arriving at your present Army post, have you been subjected to discrimination? MARK ALL THAT APPLY.

- No
 - Yes, racial
 - Yes, religious
 - Yes, gender (sex)
 - Yes, national origin
 - Yes, other (age, weight, etc.)
- PLEASE LIST BELOW.

THE NEXT QUESTION IS ABOUT THE DISCRIMINATION SITUATION WHICH HAD THE GREATEST EFFECT ON YOU.

22. Did you report the discrimination incident to your chain of command or other military authority? MARK ONE.

- Does not apply; I have not been subjected to discrimination.
- Yes, but I am not aware of the results.
- Yes, and something was done.
- Yes, and nothing was done about it.
- No, I handled it myself.
- No, I didn't think anyone would do anything about it.
- No, it was a minor incident and it didn't really bother me.
- No, I was afraid of reprisals from the chain of command.

23. Since arriving at your present Army post, has military justice been administered fairly to you and your peers?

- Yes
- No
- Don't know

24. Since arriving at your present Army post, was the most severe punishment for the same type of offense usually given to: MARK ALL THAT APPLY.

- Does not apply; all are treated the same.
- Men
- Women
- Whites
- Blacks
- Hispanics
- Some other race/ethnic group (PLEASE LIST)

25. Please indicate your level of satisfaction with the following aspects of Army life at the present time. MARK A RESPONSE FOR EACH.

Very satisfied
Satisfied
Neither satisfied nor dissatisfied
Dissatisfied
Very dissatisfied

How satisfied are you with ...

- a. your relationships with peers? ① ② ③ ④ ⑤
- b. your relationships with non-commissioned officers? ① ② ③ ④ ⑤
- c. your relationships with commissioned officers? ① ② ③ ④ ⑤
- d. the Army's gender mix? ① ② ③ ④ ⑤
- e. discipline? ① ② ③ ④ ⑤
- f. barracks living? ① ② ③ ④ ⑤
- g. physical fitness training? ① ② ③ ④ ⑤
- h. your amount of personal freedom? ① ② ③ ④ ⑤
- i. the Army's structured, ordered lifestyle? ① ② ③ ④ ⑤
- j. the length of your enlistment contract? ① ② ③ ④ ⑤
- k. your MOS? ① ② ③ ④ ⑤
- l. the time available to pursue your personal life goals? ① ② ③ ④ ⑤
- m. your life as an enlisted soldier? ① ② ③ ④ ⑤
- n. being away from family and friends? ① ② ③ ④ ⑤
- o. your personal and family life? ① ② ③ ④ ⑤

26. How much do you agree or disagree with the following statements about your most recent training unit?

Strongly agree
Agree
Neither agree nor disagree
Disagree
Strongly disagree
Not applicable

- a. The leaders in the unit set high standards for soldiers in terms of good behavior and discipline ① ② ③ ④ ⑤ ⑥
- b. The leaders in the unit were more interested in looking good than being good ① ② ③ ④ ⑤ ⑥
- c. I was impressed with the quality of leadership in the unit ① ② ③ ④ ⑤ ⑥
- d. I would go for help with a personal problem to people in my chain of command ① ② ③ ④ ⑤ ⑥
- e. The leaders in the unit were not concerned with the way soldiers treat each other as long as the job/training gets done ① ② ③ ④ ⑤ ⑥
- f. The leaders in the unit were more interested in furthering their careers than in the well-being of their soldiers . ① ② ③ ④ ⑤ ⑥
- g. Leaders in the unit treated soldiers with respect ① ② ③ ④ ⑤ ⑥
- h. The leaders most always got willing and whole-hearted cooperation from the soldiers in the unit ① ② ③ ④ ⑤ ⑥
- i. The NCOs in my chain of command were a good source of support for soldiers ① ② ③ ④ ⑤ ⑥

27. Suppose your drill sergeants were to compare your performance to other soldiers in your training company. How would they rate your ...

Truly exceptional (top 5%)
Outstanding (upper 15%)
Above average (upper 30%)
Average (middle 40%)
Below average (bottom 30%)

- a. EFFORT (such as willingness to give your best effort and assist others to make sure the job gets done) ① ② ③ ④ ⑤
- b. PERSONAL DISCIPLINE (such as willingness to follow Army regulations, orders, and Standard Operating Procedure, and display respect for superiors) ① ② ③ ④ ⑤
- b. PHYSICAL FITNESS (effectiveness in maintaining military standards of physical fitness) ① ② ③ ④ ⑤
- c. OVERALL EFFECTIVENESS IN MOST RECENT TRAINING ① ② ③ ④ ⑤

28. From what you know and have heard about the Army and civilian life, please indicate how you believe conditions in the military are compared with conditions in a civilian job you could realistically expect to get. MARK A RESPONSE FOR EACH.

Much better in Army
 Somewhat better in Army
 About the same
 Somewhat better in civilian life
 Much better in civilian life
 Don't know

- a. Pay ① ② ③ ④ ⑤ ⑥
- b. Retirement benefits ① ② ③ ④ ⑤ ⑥
- c. Benefits other than retirement ① ② ③ ④ ⑤ ⑥
- d. Assistance for civilian education ... ① ② ③ ④ ⑤ ⑥
- e. Opportunities to advance in your chosen field ① ② ③ ④ ⑤ ⑥
- f. Opportunities for job satisfaction ... ① ② ③ ④ ⑤ ⑥
- g. Quality of co-workers ① ② ③ ④ ⑤ ⑥
- h. Working hours/schedule ① ② ③ ④ ⑤ ⑥
- i. Time for personal/family life ① ② ③ ④ ⑤ ⑥
- j. Overall quality of life ① ② ③ ④ ⑤ ⑥
- k. Level of professionalism in the organization ① ② ③ ④ ⑤ ⑥
- l. Personal freedom ① ② ③ ④ ⑤ ⑥
- m. Job security ① ② ③ ④ ⑤ ⑥
- n. Total family income ① ② ③ ④ ⑤ ⑥

29. The kind of work I enjoy most is available:

- only in the military.
- primarily in the military.
- equally in the military and civilian world.
- primarily in the civilian world.
- only in the civilian world.
- Don't know

30. Please indicate your level of agreement with using the Army for the following types of missions. MARK A RESPONSE FOR EACH.

Strongly agree
 Agree
 Neither agree nor disagree
 Disagree
 Strongly disagree

- a. Combat the flow of illegal drugs into the U.S. ① ② ③ ④ ⑤
- b. Provide humanitarian relief in the U.S. in areas hit by a major disaster ... ① ② ③ ④ ⑤
- c. Provide humanitarian relief outside the U.S. (such as Bosnia, Somalia, Rwanda, Haiti) ① ② ③ ④ ⑤
- d. Be part of a United Nations peace-keeping force wherever needed ① ② ③ ④ ⑤
- e. Combat terrorism which threatens U.S. citizens ① ② ③ ④ ⑤
- f. Maintain a military presence in overseas areas of vital interest to the U.S. in order to prevent problems ① ② ③ ④ ⑤
- g. Provide training to federal, state, and other public employees ① ② ③ ④ ⑤

31. How confident are you that you will: MARK A RESPONSE FOR EACH.

Extremely Confident
 Very Confident
 Moderately Confident
 Slightly Confident
 Not Confident At All

- a. Adapt to Army life ① ② ③ ④ ⑤
- b. Complete your term of obligation ① ② ③ ④ ⑤
- c. Meet the Army's physical requirements. ① ② ③ ④ ⑤
- d. Have the skills to perform well in your next assignment ① ② ③ ④ ⑤
- e. Earn promotions in the Army ① ② ③ ④ ⑤

32. How important is each of the following TO YOU PERSONALLY?

Extremely important
 Very important
 Quite important
 Moderately important
 Somewhat important
 Slightly important
 Not at all important

- a. Loyalty to the United States Army ① ② ③ ④ ⑤ ⑥ ⑦
- b. Loyalty to your unit or organization ① ② ③ ④ ⑤ ⑥ ⑦
- c. Taking responsibility for your actions and decisions ① ② ③ ④ ⑤ ⑥ ⑦
- d. Putting what is good for your fellow soldiers, unit, and the nation before your own welfare .. ① ② ③ ④ ⑤ ⑥ ⑦
- e. Dedication to serving the United States, even to risking your own life in its defense ① ② ③ ④ ⑤ ⑥ ⑦
- f. Commitment to working as a member of a team ① ② ③ ④ ⑤ ⑥ ⑦
- g. Dedication to learning your job and doing it well ① ② ③ ④ ⑤ ⑥ ⑦
- h. Personal drive to succeed in your work and advance ① ② ③ ④ ⑤ ⑥ ⑦
- i. Being honest, open, and truthful. ① ② ③ ④ ⑤ ⑥ ⑦
- j. Being disciplined and courageous in battle ① ② ③ ④ ⑤ ⑥ ⑦
- k. Standing up for what you firmly believe is right ① ② ③ ④ ⑤ ⑥ ⑦
- l. Working with others tactfully and with military courtesy ① ② ③ ④ ⑤ ⑥ ⑦
- m. Exhibiting excellent military bearing and appearance ① ② ③ ④ ⑤ ⑥ ⑦
- n. Equal opportunity regardless of gender ① ② ③ ④ ⑤ ⑥ ⑦
- o. High moral standards both on-duty and off-duty ① ② ③ ④ ⑤ ⑥ ⑦
- p. Building and maintaining physical fitness and stamina ① ② ③ ④ ⑤ ⑥ ⑦

33. As you see it now, how well do your personal values match the values of the Army?

- Extremely well
- Very well
- Neither well nor poorly
- Poorly
- Not at all

34. As you see it now, to what extent are you the type of individual that the Army wants as a soldier?

- Very great extent
- Great extent
- Moderate extent
- Slight extent
- Not at all

35. Assume you were to leave the Army in the next six months. Which of the following reasons would likely apply in your case? RESPOND TO EACH ITEM.

Not Likely to Apply

Likely to Apply

- a. Failure to meet physical requirements
- b. Problems adjusting to Army life
- c. Family problems at home
- d. Pregnancy
- e. One or more serious (UCMJ) offenses
- f. Minor offenses or disciplinary problems
- g. Poor academic performance
- h. Illness/medical condition
- i. Homesickness
- j. Lack of motivation, boredom
- k. Problems with supervisors
- l. Racial discrimination
- m. Sexual or gender discrimination
- n. Better job opportunities outside the Army ...
- o. Injuries sustained during training
- p. Not getting desired military job
- q. Sexual harassment
- r. Not getting along with others
- s. Maintaining weight standards
- t. Drug/alcohol abuse
- u. Mental health problems
- v. Unfair punishment
- w. Verbal abuse from training staff members ...

36. At the present time, what level of strain, conflict or stress -- if any -- are you experiencing?

- Very high
- High
- Moderate
- Low
- Very low
- None

37. How would you rate your current level of morale?

- Very high
- High
- Moderate
- Low
- Very low

38. Considering both your own qualifications and current labor market conditions, how difficult do you think it would be for you to find a good civilian job right now?

- Very difficult
- Difficult
- Not particularly difficult or easy
- Easy
- Very easy
- Does not apply; I already have a good civilian job

39. My personal or family situation would make it difficult for me to leave the Army in the next year or so.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

40. A male friend who you think is qualified asks your advice about joining the Army. Would you recommend that he ...

- join the Army?
- join another military service?
- not join a military service?

41. A female friend who you think is qualified asks your advice about joining the Army. Would you recommend that she ...

- join the Army?
- join another military service?
- not join a military service?

42. Are you:

- Male
- Female

43. Are you of Hispanic/Spanish origin or ancestry (of any race)?

- No
- Yes, Mexican, Mexican-American, Chicano
- Yes, Puerto Rican
- Yes, other Hispanic/Spanish

44. What is your racial background?

- American Indian, Eskimo or Aleut
- Asian or Pacific Islander
- Black
- White

45. What is your current marital status?

- Married
- Legally separated or filing for divorce
- Single, never married
- Single, engaged to be married
- Divorced
- Widowed

FY 2003 SOLDIER RECEPTION SURVEY

**SURVEY APPROVAL AUTHORITY: U.S. ARMY RESEARCH
INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
SURVEY CONTROL NUMBER: PT 60-51A**

The **Soldier Reception Survey** is part of a research project to evaluate the attitudes and experiences of enlisted personnel during their careers in the United States Army. In this project, the U.S. Army Research Institute (ARI) will assess the expectations and impressions of new recruits, soldiers completing training, and personnel exiting the Army. The project covers a wide range of issues related to soldiers' jobs, careers, and the Army as a whole. The overall purpose is to provide senior Army leaders information for recruiting, training, and retaining a high quality force of soliders.

Thank you for your support for this survey program.

PRIVACY ACT STATEMENT

1. The Department of the Army may collect the information requested in this survey under the authority of 10 United States Code 2358. Providing information in this questionnaire is voluntary. Failure to respond to any specific question will not result in any penalty.
2. Public Law 93-573 (Privacy Act of 1974) requires that you be informed of the purpose and uses to be made of the information collected. The information collected in the survey will be used solely for research purposes. Your Social Security Number (SSN) is requested only for linking data files, and possibly extracting information from other sources (e.g., questionnaires, personnel files, etc.). Use of SSNs is authorized by Executive Order 9397. In accordance with federal regulations, the survey data will be safeguarded to protect your privacy. After we have used your SSN to create the data files, a new identification code will be created to replace your SSN. The file linking your SSN to the new ID code will be properly secured to preserve confidentiality. Only survey statisticians involved in collecting or preparing the information for analysis will have access to completed questionnaires. Only group statistics will be reported.

How to fill out this survey.

Read each question carefully and mark your answers directly on this form.

MARKING INSTRUCTIONS

- Please use a No. 2 pencil.
- Please completely fill in the response as shown in the examples:

Some questions ask you to mark **ONLY ONE** answer.

What component of the Army did you join? Mark the option that best describes you.

- Active Army
- Reserve
- National Guard

Other questions ask you to mark **MORE THAN ONE** answer.

Which of the following strongly influenced you to join the Army? **MARK ALL THAT APPLY.**

- Parent(s)/Guardian(s)
- Friend(s)
- Wife/Husband/Girlfriend/Boyfriend
- Athletic Coach
- Teacher

1. Listed below are some reasons why people join the Army. How important was each of these reasons in your decision to join the Army?

Extremely important
Very important
Moderately important
Slightly important
Not at all important

- | | | | | | |
|---|---|---|---|---|---|
| a. Army advertising | 1 | 2 | 3 | 4 | 5 |
| b. Army recruiter | 1 | 2 | 3 | 4 | 5 |
| c. Desire to serve my country | 1 | 2 | 3 | 4 | 5 |
| d. Develop self-discipline | 1 | 2 | 3 | 4 | 5 |
| e. Earn more money than previous job(s) | 1 | 2 | 3 | 4 | 5 |
| f. Educational benefits | 1 | 2 | 3 | 4 | 5 |
| g. Family social support services | 1 | 2 | 3 | 4 | 5 |
| h. Get away from a personal problem | 1 | 2 | 3 | 4 | 5 |
| i. Influence of family | 1 | 2 | 3 | 4 | 5 |
| j. Influence of friends | 1 | 2 | 3 | 4 | 5 |
| k. Lack of civilian job opportunities | 1 | 2 | 3 | 4 | 5 |
| l. Medical care, coverage and benefits | 1 | 2 | 3 | 4 | 5 |
| m. Military tradition in family | 1 | 2 | 3 | 4 | 5 |
| n. Need to be on my own | 1 | 2 | 3 | 4 | 5 |
| o. Pay and allowances | 1 | 2 | 3 | 4 | 5 |
| p. Security and stability of a job | 1 | 2 | 3 | 4 | 5 |
| q. Training in job skills | 1 | 2 | 3 | 4 | 5 |
| r. Chance to travel | 1 | 2 | 3 | 4 | 5 |
| s. Repayment of loans | 1 | 2 | 3 | 4 | 5 |
| t. Prove that I could do it | 1 | 2 | 3 | 4 | 5 |
| u. Make Army a career | 1 | 2 | 3 | 4 | 5 |
| v. Become more mature | 1 | 2 | 3 | 4 | 5 |
| w. Take time out to decide about my
life plans | 1 | 2 | 3 | 4 | 5 |
| x. Gain job experience | 1 | 2 | 3 | 4 | 5 |
| y. Escape from a bad neighborhood | 1 | 2 | 3 | 4 | 5 |
| z. Needed a place to live | 1 | 2 | 3 | 4 | 5 |
| aa. Chance for adventure | 1 | 2 | 3 | 4 | 5 |
| bb. To fight the global war on terrorism | 1 | 2 | 3 | 4 | 5 |

2. Which of the following strongly influenced you to join the Army? MARK ALL THAT APPLY.

- Parent(s)/Guardian(s)
- Brother/Sister
- Friend(s)
- Wife/Husband/Girlfriend/Boyfriend
- Athletic Coach
- Teacher
- School Guidance Counselor
- ROTC student
- ROTC cadre member
- Service member
- Recruiter
- Radio advertisement
- Television advertisement
- Printed advertisement
- World events
- Something I've always wanted to do

3. With whom were you living on your 16th birthday? MARK ALL THAT APPLY.

- Mother
- Father
- Stepmother
- Stepfather
- Grandparent(s)
- Other individuals
- Lived alone

4. On your 16th birthday, how likely did you think it was that you would enter military service?

- Definitely
- Probably
- Probably not
- Definitely not
- I did not think about it

5. What component of the Army did you join? Mark that option that best describes you. MARK ONE.

- Active Army
- Reserve
- National Guard

6. How familiar are you with what will be expected of you in the Army?

- Extremely familiar
- Very familiar
- Moderately familiar
- A little familiar
- Not at all familiar

7. How long did you participate in the Delayed Entry Program (DEP)?

- Less than 1 month
- 1 month
- 2 months
- 3 months
- 4 months
- 5 months
- 6 months
- 7 months
- 8 months
- 9 months
- 10 months
- 11 months
- 12 months

8. How often did your recruiter hold DEP activities?

- More than once a month
- About once a month
- Less than once a month
- Never
- Don't know

9. How often did you attend DEP activities?

- More than once a month
 - About once a month
 - Less than once a month
 - Never (Why not? Please list below)
-

10. In which of the following activities did you participate while in the DEP? MARK ALL THAT APPLY.

- None
 - Social functions with other people in the DEP
 - Films, speakers, or question and answer sessions to get more information about Army
 - Training sessions; for example, drill and ceremonies or first aid training
 - Field trips to Army posts
 - Physical training/exercise sessions
 - Other types of DEP activities (please list below)
-

11. How important is each of the following TO YOU PERSONALLY?

Extremely important
Very important
Quite important
Moderately important
Somewhat important
Slightly important
Not at all important

- a. Loyalty to the United States Army ① ② ③ ④ ⑤ ⑥ ⑦
- b. Taking responsibility for your actions and decisions ① ② ③ ④ ⑤ ⑥ ⑦
- c. Putting what is good for others above your own welfare ① ② ③ ④ ⑤ ⑥ ⑦
- d. Dedication to serving the United States, even to risking your life in its defense ① ② ③ ④ ⑤ ⑥ ⑦
- e. Commitment to working as a member of a team ① ② ③ ④ ⑤ ⑥ ⑦
- f. Dedication to learning your job and doing it well ① ② ③ ④ ⑤ ⑥ ⑦
- g. Personal drive to succeed in your work and advance ① ② ③ ④ ⑤ ⑥ ⑦
- h. Being honest, open and truthful ① ② ③ ④ ⑤ ⑥ ⑦
- i. Being courageous ① ② ③ ④ ⑤ ⑥ ⑦
- j. Standing up for what you firmly believe is right ① ② ③ ④ ⑤ ⑥ ⑦
- k. Working with others tactfully ① ② ③ ④ ⑤ ⑥ ⑦
- l. Exhibiting excellent appearance ① ② ③ ④ ⑤ ⑥ ⑦
- m. High moral standards ① ② ③ ④ ⑤ ⑥ ⑦
- n. Building and maintaining physical fitness and stamina ① ② ③ ④ ⑤ ⑥ ⑦

BACKGROUND INFORMATION

12. When you were growing up, did you have a parent/guardian who was career active duty military?

- Yes No

13. Are you:

- Male Female

14. How many dependent children do you have (for whom you provide financial support)?

- None 1 2 3 4 or more

15. Are you of Hispanic/Spanish origin or ancestry (of any race)?

- No
- Yes, Mexican, Mexican-American, Chicano
- Yes, Puerto Rican
- Yes, other Hispanic/Spanish

16. What is your racial background?

- American Indian, Eskimo or Aleut
- Asian or Pacific Islander
- Black
- White

ABOUT YOUR EDUCATION

17. Did you finish high school?

- No Yes. If yes, choose the credential(s) you earned when you finished high school.
Fill in at least one circle:
 - Diploma – earned from a public or private **traditional day school**
 - Diploma – earned from an **adult (continuation) school**
 - Diploma – issued by parents or tutors for **home schooling**
 - Diploma – issued by an association, school, or state for **home schooling**
 - Diploma – issued by a **vocational or technical school**
 - Diploma – issued by a **correspondence school**
 - GED **equivalency** diploma
 - Certificate – for high school **attendance or completion**

18. Did you finish one semester/quarter of college (at least 4 courses)? Do not include advanced placement courses you took in high school.

- No Yes. If yes, fill in your highest level:
- One or more semesters/quarters of college
 - One or more semesters/quarters of vocational college
 - An associate degree
 - A bachelor's or higher degree

19. Did you participate in the National Guard ChalleNGe program?

- No Yes. If yes, did you graduate from ChalleNGe?
- No Yes

20. What was your average grade during the time you were in high school?

- A or A-
- B+ or B
- B- or C+
- C or C-
- D or lower

21. Are you planning to go to college?

- Yes, while on active duty during this enlistment
- Yes, after I complete this term of active duty
- No
- Undecided

22. Did you ever get into trouble at school for doing any of the things below? Mark all things for which you were sent to the principal's office.

MARK ALL THAT APPLY.

- I was never sent to the principal's office
- Missing class
- Skipping school
- Fighting
- Being disorderly
- Bad language
- Smoking
- Talking back to teachers
- Other reasons

23. Were you ever expelled from high school or junior high (intermediate school)?

- Yes
- No

24. Were you ever suspended from high school or junior high (intermediate school)?

- Yes
- No

25. If you ever thought about quitting high school, show why. MARK ALL THAT APPLY.

- I never thought about quitting high school
- My family needed money or needed me at home
- I was expelled or suspended
- I was bored, wasn't learning anything useful
- I got married or became a parent
- I was getting bad grades
- I didn't get along with the other students
- The rules were too strict
- I wasn't going to graduate on time
- I didn't get along with the teachers, counselors, or the principal
- I wanted to work full time
- Other reasons

26. During high school, did you participate in any of the following activities? MARK ONE RESPONSE FOR EACH ACTIVITY.

Participated as a Leader or Officer

Participated

Did Not Participate

- a. Athletic teams
- b. Drama, music, art, chorus
- c. School clubs
- d. Other clubs (Scouts, "Y", 4-H, etc.)

27. During your high school years, what size city or area did you live in?

- Large city (over 300,000 people)
- Suburb of a large city
- Medium-sized city (50,000-300,000)
- Small city or town (under 50,000)
- Rural area

28. What is your current marital status?

- Married
- Legally separated or filing for divorce
- Single, never married
- Single, engaged to be married
- Divorced
- Widowed

29. Is there an important girlfriend/boyfriend in your life right now?

- Does not apply; I am currently married
- Yes
- No

30. Is your spouse/girlfriend/boyfriend currently working in a civilian job (including a job with the U.S. Army/Department of Defense)? MARK ONE.

- Does not apply; I do not have a spouse/girlfriend/boyfriend
- Does not apply; my spouse/girlfriend/boyfriend is on active duty
- Yes, full-time
- Yes, part-time
- No, but is currently looking for work
- No, not looking for work but would like to work
- No, does not want to work now

31. How supportive is your spouse/girlfriend/boyfriend of your joining of the Army?

- Does not apply; I do not have a spouse/girlfriend/boyfriend
- Very supportive
- Fairly supportive
- Mixed or neutral
- Fairly unsupportive
- Very unsupportive

32. When your spouse/girlfriend/boyfriend was growing up, did he/she have a parent/guardian who was career active duty military?

- Does not apply; I do not have a spouse/girlfriend/boyfriend
- Yes
- No
- Don't know

33. Is your spouse/girlfriend currently pregnant?

- Does not apply; I do not have a female spouse/girlfriend
- Yes
- No, but plans to be within one year
- No, but maybe in the future
- No, and does not plan to be
- Don't know

34. During the last 12 months, have you (or your spouse/girlfriend) given birth to a child?

- Does not apply
- Yes
- No

35. During the two years before entering the Army, what was your average level of fitness?

- Very high
- High
- Moderate
- Low
- Very low

36. During the two years before entering the Army, how many fairly serious physical injuries did you receive?

- None
- 1-2
- 3-5
- 6-9
- 10 or more

37. During the two years before entering the Army, were you ever advised by a medical practitioner not to participate in any exercise or sport programs?

- Yes
- No

38. Have you ever left a job for any of the following reasons? MARK ALL THAT APPLY.

- I haven't had a job outside the home
- I went back to school
- The pay was not good
- I was laid off
- I was fired
- I found a better job
- I moved to another location
- I didn't get along with my supervisor
- I was arrested
- There was no chance to get ahead
- The working conditions were bad (dangerous, hot, dusty, etc.)
- To join the military
- Other reasons

39. Did you need to get a moral waiver in order to be accepted by the Army?

- Yes
- No

40. Did you need to get a medical waiver in order to be accepted by the Army?

- Yes
- No

41. What is the length of your enlistment term?

- 2 years
- 3 years
- 4 years
- More than 4 years

42. During the last 6 months before entering the DEP, how often did you smoke cigarettes?

- Never
- Rarely
- Once a week or so
- 2-3 times a week
- 4-5 times a week
- Daily

43. During the last 6 months before entering the DEP, how often did you drink alcoholic beverages?

- Never
- Rarely
- Once a week or so
- 2-3 times a week
- 4-5 times a week
- Daily

44. How strongly do you agree or disagree with the following statements about your military life? MARK A RESPONSE FOR EACH.

Strongly Agree
Agree
Neither Agree nor Disagree
Disagree
Strongly Disagree

- a. The Army has a great deal of personal meaning to me ① ② ③ ④ ⑤
- b. It would be too costly for me to leave the Army in the near future ① ② ③ ④ ⑤
- c. I am afraid of what might happen if I quit the Army without having another job lined up ① ② ③ ④ ⑤
- d. Too much in my life would be disrupted if I decided I wanted to leave the Army now ① ② ③ ④ ⑤
- e. I feel a strong sense of belonging to the Army ① ② ③ ④ ⑤
- f. I feel "emotionally attached" to the Army ① ② ③ ④ ⑤
- g. One of the problems of leaving the Army would be the lack of good alternatives ① ② ③ ④ ⑤

45. From what you know and have heard about the Army and civilian life, please indicate how you believe conditions in the military are compared with conditions in a civilian job you could realistically expect to get. MARK A RESPONSE FOR EACH.

Much Better in Army
Somewhat Better in Army
About the Same
Somewhat Better in Civilian Life
Much Better in Civilian Life
Don't Know

- a. Pay ① ② ③ ④ ⑤ ⑥
- b. Retirement benefits ① ② ③ ④ ⑤ ⑥
- c. Benefits other than retirement ① ② ③ ④ ⑤ ⑥
- d. Assistance for civilian education ... ① ② ③ ④ ⑤ ⑥
- e. Opportunities to advance in your chosen field ① ② ③ ④ ⑤ ⑥
- f. Opportunities for job satisfaction... ① ② ③ ④ ⑤ ⑥
- g. Quality of co-workers ① ② ③ ④ ⑤ ⑥
- h. Working hours/schedule ① ② ③ ④ ⑤ ⑥
- i. Time for personal/family life ① ② ③ ④ ⑤ ⑥
- j. Overall quality of life ① ② ③ ④ ⑤ ⑥
- k. Level of professionalism in the organization ① ② ③ ④ ⑤ ⑥
- l. Personal freedom ① ② ③ ④ ⑤ ⑥
- m. Job security ① ② ③ ④ ⑤ ⑥
- n. Total family income ① ② ③ ④ ⑤ ⑥

46. How confident are you that you will: MARK A RESPONSE FOR EACH.

Extremely Confident
Very Confident
Moderately Confident
Slightly Confident
Not Confident At All

- a. Adapt to Army life ① ② ③ ④ ⑤
- b. Complete your term of obligation ① ② ③ ④ ⑤
- c. Meet the Army's physical requirements ① ② ③ ④ ⑤
- d. Be successful in basic training ① ② ③ ④ ⑤
- e. Earn promotions in the Army ① ② ③ ④ ⑤

47. The kind of work I enjoy most is available:

- only in the military.
- primarily in the military.
- equally in the military and civilian world.
- primarily in the civilian world.
- only in the civilian world.

48. Considering both your own qualifications and current labor market conditions, how difficult do you think it would be for you to find a good civilian job right now?

- Very difficult
- Difficult
- Not particularly difficult or easy
- Easy
- Very easy

49. My personal or family situation would make it difficult for me to leave the Army in the next year or so.

- Strongly agree
- Agree
- Neither agree nor disagree
- Strongly agree
- Agree

50. The people most important to me would be extremely disappointed if I dropped out of the Army before completing my enlistment obligation.

- Strongly agree
- Agree
- Neither agree nor disagree
- Strongly agree
- Agree

51. Which ONE of the following best describes your current Army career intentions? MARK ONE.
- PROBABLY stay in until retirement
 - DEFINITELY stay in until retirement
 - PROBABLY stay in beyond my present obligation, but not necessarily to retirement
 - DEFINITELY stay in beyond my present obligation, but not necessarily to retirement
 - PROBABLY leave upon completion of my present obligation
 - DEFINITELY leave upon completion of my present obligation

52. How IMPORTANT TO YOU is it that you complete your enlistment obligation?
- Extremely important
 - Very important
 - Moderately important
 - Slightly important
 - Not at all important

53. A male friend who you think is qualified asks your advice about joining the Army. Would you recommend that he ... (MARK ONE)
- join the Army?
 - join another military service?
 - not join a military service?

54. A female friend who you think is qualified asks your advice about joining the Army. Would you recommend that she ... (MARK ONE)
- join the Army?
 - join another military service?
 - not join a military service?

55. Do any of the following cause you to be unsure about an Army career? MARK ALL THAT APPLY.
- My lack of experience in the Army
 - My career goals are unclear
 - Unsure of chances for promotion
 - Changes in Army job opportunities
 - Increased chances of fighting in a war
 - Possibility of being subjected to sexual or racial discrimination
 - None of the above

56. How has your commitment to an Army career changed since you signed your Army contract?
- Much greater now
 - Somewhat greater now
 - About the same as it was when I signed
 - Somewhat less now
 - Much less now

57. At the present time, how do you feel about your decision to enlist in the Army?
- Definitely made the right decision
 - Probably made the right decision
 - Not sure
 - Probably made the wrong decision
 - Definitely made the wrong decision

58. Assume you were to leave the Army in the next six months. Which of the following reasons for leaving would likely apply in your case? RESPOND TO EACH ITEM.

Not Likely to Apply

Likely to Apply

- a. Failure to meet physical requirements
- b. Problems adjusting to Army life
- c. Family problems at home
- d. Pregnancy
- e. Disciplinary problems; minor offense
- f. Poor academic performance
- g. Illness/medical condition
- h. Homesickness
- i. Lack of motivation; boredom
- j. Problems with supervisors
- k. Racial discrimination
- l. Sexual or gender discrimination
- m. Better job opportunities outside the Army ...
- n. Injuries sustained during training
- o. Not getting desired military job
- p. Sexual harassment
- q. One or more serious offenses
- r. Not getting along with others
- s. Maintaining weight standards
- t. Drug/alcohol abuse
- u. Mental health problems
- v. Unfair punishment
- w. Verbal abuse from training staff members ..

59. At the present time, what level of strain, conflict or stress – if any – are you experiencing about your stay in the Army?
- Very high Low
 - High Very low
 - Moderate None

60. How would you rate your current level of morale?
- Very high Low
 - High Very low
 - Moderate

61. Enter your Social Security Number below.

			-			-				
0	0	0		0	0		0	0	0	0
1	1	1		1	1		1	1	1	1
2	2	2		2	2		2	2	2	2
3	3	3		3	3		3	3	3	3
4	4	4		4	4		4	4	4	4
5	5	5		5	5		5	5	5	5
6	6	6		6	6		6	6	6	6
7	7	7		7	7		7	7	7	7
8	8	8		8	8		8	8	8	8
9	9	9		9	9		9	9	9	9

***FY 2003 SOLDIER
END-OF-TRAINING SURVEY***



**SURVEY APPROVAL AUTHORITY: U.S. ARMY RESEARCH
INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
SURVEY CONTROL NUMBER: PT 60-51C**

The **Soldier End-of-Training Survey** is part of a research project to evaluate the attitudes and experiences of enlisted personnel during their careers in the United States Army. The U.S. Army Research Institute (ARI) will assess the expectations and impressions of new recruits as well as enlisted personnel who have recently completed training and personnel exiting the Army. The project covers a wide range of issues related to soldiers' jobs, careers, and the Army as a whole. The overall purpose is to provide senior Army leaders information for recruiting, training, and retaining a high quality force of soliders.

Thank you for your support for this survey program.

PRIVACY ACT STATEMENT

1. The Department of the Army may collect the information requested in this survey under the authority of 10 United States Code 2358. Providing information in this questionnaire is voluntary. Failure to respond to any specific question will not result in any penalty.
2. Public Law 93-573 (Privacy Act of 1974) requires that you be informed of the purpose and uses to be made of the information collected. The information collected in the survey will be used solely for research purposes. Your Social Security Number (SSN) is requested only for linking data files, and possibly extracting information from other sources (e.g., questionnaires, personnel files, etc.). Use of SSNs is authorized by Executive Order 9397. In accordance with federal regulations, the survey data will be safeguarded to protect your privacy. After we have used your SSN to create the data files, a new identification code will be created to replace your SSN. The file linking your SSN to the new ID code will be properly secured to preserve confidentiality. Only survey statisticians involved in collecting or preparing the information for analysis will have access to completed questionnaires. Only group statistics will be reported.

How to fill out this survey.

Read each question carefully, and mark your answers directly on this form.

MARKING INSTRUCTIONS

- Please use a No. 2 pencil.
- Please completely fill in the response as shown in the examples:

CORRECT **INCORRECT**

Some questions ask you to mark **ONLY ONE** answer.

What stage of training are you currently completing? **MARK ONE.**

- Basic Training (BT)
- Advanced Individual Training (AIT)
- One Station Unit Training (OSUT)

Other questions ask you to mark **MORE THAN ONE** answer.

Since you joined the Army, was the most severe punishment for the same type of offense usually given to: **MARK ALL THAT APPLY.**

- Does not apply; all are treated the same
- Men
- Women
- Whites
- Blacks
- Hispanics
- Some other race/ethnic group (PLEASE LIST)

1. What component of the Army did you join? Mark the option that best describes you.

- Active Army
- Reserve
- National Guard

2. What stage of training are you currently completing? MARK ONE.

- Basic Combat Training (BCT)
- Advanced Individual Training (AIT)
- One Station Unit Training (OSUT)

3. How satisfied are you with the training you have received since you entered the Army?

- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

4. How realistic were the expectations you had about Army life before you joined the Army?

- Very realistic
- Mostly realistic
- Mostly unrealistic
- Very unrealistic

5. How has Army life compared with your expectations before you joined the Army?

- Much better than I expected
- Somewhat better than I expected
- About the same as I expected
- Somewhat worse than I expected
- Much worse than I expected

6. To what extent has your most recent training MARK A RESPONSE FOR EACH.

	Very great extent
	Great extent
	Moderate extent
	Slight extent
	Not at all
	No basis to judge

- a. contributed toward your professional development? 1 2 3 4 5 6
- b. instilled Army values? 1 2 3 4 5 6
- c. prepared you to perform your Army duties? 1 2 3 4 5 6
- d. prepared you for your future Army assignments? 1 2 3 4 5 6

7. How has your commitment to an Army career changed during this training?

- Much greater now
- Somewhat greater now
- About the same as it was when I started training
- Somewhat less now
- Much less now

8. What effect, if any, have your Army experiences had on the development of specific job knowledge, skills, and abilities that will help you perform a civilian job?

- Extremely positive effect
- Very positive effect
- Little effect
- No effect
- Don't know

9. What effect, if any, have your Army experiences had on the development of personal characteristics and attitudes that will help you perform a civilian job?

- Strong positive effect
- Postive effect
- No effect
- Negative effect
- Strong negative effect
- No basis to judge

10. How does your physical health compare now to what it was when you first entered the Army?

- Much better now
- Somewhat better now
- About the same as it was
- Somewhat worse now
- Much worse now

11. During your recent training, did you have any medical problems/injuries for which you visited a Doctor or the Troop Medical Command (TMC)?

- Yes
- No

12. Before you enlisted, were you ever advised by a medical practitioner not to participate in any physical exercise or sports program because of a problem/injury similar to the one you had during your recent training?

- Yes
- No
- Does not apply; I had no medical problem/injury during training

13. Please indicate your level of agreement with the following statements. MARK A RESPONSE FOR EACH.

Strongly agree
Agree
Neither agree nor disagree
Disagree
Strongly disagree

- a. The Army will allow me to maintain the standard of living I want for myself/my family ① ② ③ ④ ⑤
- b. The Army will allow me to maintain the kind of balance I want between my work and personal life ① ② ③ ④ ⑤
- c. Even if I had an offer of a bit more pay from a civilian organization, I would be reluctant to leave the Army .. ① ② ③ ④ ⑤
- d. I would discourage a close friend from joining the Army ① ② ③ ④ ⑤
- e. The demands of the Army make it difficult to have the kind of family life I would like ① ② ③ ④ ⑤
- f. I can count on Army people to help out when needed ① ② ③ ④ ⑤
- g. I frequently feel like leaving the Army .. ① ② ③ ④ ⑤
- h. I am quite proud to tell people that I am in the Army ① ② ③ ④ ⑤
- i. For me, a rewarding career can compensate for limited personal/family time ① ② ③ ④ ⑤
- j. I can get ahead in the Army doing the kinds of work I like best ① ② ③ ④ ⑤
- k. The Army has a great deal of positive meaning to me ① ② ③ ④ ⑤
- l. I feel a strong sense of belonging to the Army ① ② ③ ④ ⑤
- m. I feel "emotionally attached" to the Army ① ② ③ ④ ⑤
- n. One of the problems of leaving the Army would be the lack of good alternatives ① ② ③ ④ ⑤

14. Since arriving at your present Army post, did you get into any serious trouble (UCMJ offenses)?

- No
- Yes, just once
- Yes, two or three times
- Yes, four or more times

15. Please indicate your level of satisfaction with the following aspects of Army life at the present time. MARK A RESPONSE FOR EACH.

Very satisfied
Satisfied
Neither satisfied nor dissatisfied
Dissatisfied
Very dissatisfied

How satisfied are you with ...

- a. your relationships with peers? ① ② ③ ④ ⑤
- b. your relationships with non-commissioned officers? ① ② ③ ④ ⑤
- c. your relationships with commissioned officers? ① ② ③ ④ ⑤
- d. the Army's gender mix? ① ② ③ ④ ⑤
- e. discipline? ① ② ③ ④ ⑤
- f. barracks living? ① ② ③ ④ ⑤
- g. physical fitness training? ① ② ③ ④ ⑤
- h. your amount of personal freedom? ① ② ③ ④ ⑤
- i. the Army's structured, ordered lifestyle? ① ② ③ ④ ⑤
- j. the length of your enlistment contract? ① ② ③ ④ ⑤
- k. your MOS? ① ② ③ ④ ⑤
- l. the time available to pursue your personal life goals? ① ② ③ ④ ⑤
- m. your life as an enlisted soldier? ① ② ③ ④ ⑤
- n. being away from family and friends? ① ② ③ ④ ⑤
- o. your personal and family life? ① ② ③ ④ ⑤

16. How much do you agree or disagree with the following statements about your most recent training unit?

Strongly agree
Agree
Neither agree nor disagree
Disagree
Strongly disagree
Not applicable

- a. The leaders in the unit set high standards for soldiers in terms of good behavior and discipline ① ② ③ ④ ⑤ ⑥
- b. The leaders in the unit were more interested in looking good than being good ① ② ③ ④ ⑤ ⑥
- c. I was impressed with the quality of leadership in the unit ① ② ③ ④ ⑤ ⑥
- d. I would go for help with a personal problem to people in my chain of command ① ② ③ ④ ⑤ ⑥
- e. The leaders in the unit were not concerned with the way soldiers treat each other as long as the job/training gets done ① ② ③ ④ ⑤ ⑥
- f. The leaders in the unit were more interested in furthering their careers than in the well-being of their soldiers . ① ② ③ ④ ⑤ ⑥
- g. Leaders in the unit treated soldiers with respect ① ② ③ ④ ⑤ ⑥
- h. The leaders most always got willing and whole-hearted cooperation from the soldiers in the unit ① ② ③ ④ ⑤ ⑥
- i. The NCOs in my chain of command were a good source of support for soldiers ① ② ③ ④ ⑤ ⑥

17. Suppose your drill sergeants were to compare your performance to other soldiers in your training company. How would they rate your ...

Truly exceptional (top 5%)
Outstanding (upper 15%)
Above average (upper 30%)
Average (middle 40%)
Below average (bottom 30%)

- a. EFFORT (such as willingness to give your best effort and assist others to make sure the job gets done) ① ② ③ ④ ⑤
- b. PERSONAL DISCIPLINE (such as willingness to follow Army regulations, orders, and Standard Operating Procedure, and display respect for superiors) ① ② ③ ④ ⑤
- b. PHYSICAL FITNESS (effectiveness in maintaining military standards of physical fitness) ① ② ③ ④ ⑤
- c. OVERALL EFFECTIVENESS IN MOST RECENT TRAINING ① ② ③ ④ ⑤

18. From what you know and have heard about the Army and civilian life, please indicate how you believe conditions in the military are compared with conditions in a civilian job you could realistically expect to get. MARK A RESPONSE FOR EACH.

Much better in Army
Somewhat better in Army
About the same
Somewhat better in civilian life
Much better in civilian life
Don't know

- a. Pay ① ② ③ ④ ⑤ ⑥
- b. Retirement benefits ① ② ③ ④ ⑤ ⑥
- c. Benefits other than retirement ① ② ③ ④ ⑤ ⑥
- d. Assistance for civilian education ... ① ② ③ ④ ⑤ ⑥
- e. Opportunities to advance in your chosen field ① ② ③ ④ ⑤ ⑥
- f. Opportunities for job satisfaction ... ① ② ③ ④ ⑤ ⑥
- g. Quality of co-workers ① ② ③ ④ ⑤ ⑥
- h. Working hours/schedule ① ② ③ ④ ⑤ ⑥
- i. Time for personal/family life ① ② ③ ④ ⑤ ⑥
- j. Overall quality of life ① ② ③ ④ ⑤ ⑥
- k. Level of professionalism in the organization ① ② ③ ④ ⑤ ⑥
- l. Personal freedom ① ② ③ ④ ⑤ ⑥
- m. Job security ① ② ③ ④ ⑤ ⑥
- n. Total family income ① ② ③ ④ ⑤ ⑥

19. The kind of work I enjoy most is available:

- only in the military.
- primarily in the military.
- equally in the military
- and civilian world.
- primarily in the civilian world.
- only in the civilian world.
- Don't know

20. How confident are you that you will: MARK A RESPONSE FOR EACH.

Extremely Confident
Very Confident
Moderately Confident
Slightly Confident
Not Confident At All

- a. Adapt to Army life ① ② ③ ④ ⑤
- b. Complete your term of obligation ① ② ③ ④ ⑤
- c. Meet the Army's physical requirements. ① ② ③ ④ ⑤
- d. Have the skills to perform well in your next assignment ① ② ③ ④ ⑤
- e. Earn promotions in the Army ① ② ③ ④ ⑤

28. Assume you were to leave the Army in the next six months. Which of the following reasons would likely apply in your case? RESPOND TO EACH ITEM.

Not Likely to Apply

Likely to Apply

- a. Failure to meet physical requirements
- b. Problems adjusting to Army life
- c. Family problems at home
- d. Pregnancy
- e. One or more serious (UCMJ) offenses
- f. Minor offenses or disciplinary problems
- g. Poor academic performance
- h. Illness/medical condition
- i. Homesickness
- j. Lack of motivation, boredom
- k. Problems with supervisors
- l. Racial discrimination
- m. Sexual or gender discrimination
- n. Better job opportunities outside the Army
- o. Injuries sustained during training
- p. Not getting desired military job
- q. Sexual harassment
- r. Not getting along with others
- s. Maintaining weight standards
- t. Drug/alcohol abuse
- u. Mental health problems
- v. Unfair punishment
- w. Verbal abuse from supervisors

29. At the present time, what level of strain, conflict or stress -- if any -- are you experiencing?

- Very high Low
- High Very low
- Moderate None

30. How would you rate your current level of morale?

- Very high Low
- High Very low
- Moderate

31. Considering both your own qualifications and current labor market conditions, how difficult do you think it would be for you to find a good civilian job right now?

- Very difficult
- Difficult
- Not particularly difficult or easy
- Easy
- Very easy
- Does not apply; I already have a good civilian job

32. My personal or family situation would make it difficult for me to leave the Army in the next year or so.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

33. The people most important to me would be extremely disappointed if I dropped out of the Army before completing my enlistment obligation.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

34. A male friend who you think is qualified asks your advice about joining the Army. Would you recommend that he . . .

- join the Army?
- join another military service?
- not join a military service?

35. A female friend who you think is qualified asks your advice about joining the Army. Would you recommend that she . . .

- join the Army?
- join another military service?
- not join a military service?

36. Are you:

- Male Female

37. Are you of Hispanic/Spanish origin or ancestry (of any race)?

- No
- Yes, Mexican, Mexican-American, Chicano
- Yes, Puerto Rican
- Yes, other Hispanic/Spanish

38. What is your racial background?

- American Indian, Eskimo or Aleut
- Asian or Pacific Islander
- Black
- White

39. What is your current marital status?

- Married
- Legally separated or filing for divorce
- Single, never married
- Single, engaged to be married
- Divorced
- Widowed

40. How many dependent children do you have (for whom you provide financial support)?

- None
- 1
- 2
- 3
- 4 or more

41. Is there an important girlfriend/boyfriend in your life right now?

- Does not apply; I am currently married
- Yes
- No

42. How supportive/unsupportive is your spouse/girlfriend/boyfriend of your being in the Army?

- Does not apply; I do not have a spouse/girlfriend/boyfriend
- Very supportive
- Fairly supportive
- Mixed or neutral
- Fairly unsupportive
- Very unsupportive

43. Are you planning to go to college?

- Yes, while on active duty during this enlistment
- Yes, after I complete this term of duty
- No
- Undecided

44. How IMPORTANT TO YOU is it that you complete your enlistment obligation?

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

45. Which ONE of the following best describes your current active duty Army career intentions? MARK ONE.

- PROBABLY stay until retirement
- DEFINITELY stay until retirement
- PROBABLY stay in beyond my present obligation, but not necessarily to retirement
- DEFINITELY stay in beyond my present obligation, but not necessarily to retirement
- PROBABLY leave upon completion of my present obligation
- DEFINITELY leave upon completion of my present obligation
- Does not apply; I am not active duty Army

46. Do any of the following cause you to be unsure about an Army career? MARK ALL THAT APPLY.

- My lack of experience in the Army
- My career goals are unclear
- Unsure of chances for promotion
- Changes in Army job opportunities
- Increased chances of fighting in the war
- Possibility of being subjected to sexual or racial discrimination
- None of the above

47. Enter your Social Security Number below.

				-																
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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