



NATIONAL DEFENSE RESEARCH INSTITUTE

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Purchase this document](#)

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore the [RAND National Defense Research Institute](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation monograph series. RAND monographs present major research findings that address the challenges facing the public and private sectors. All RAND monographs undergo rigorous peer review to ensure high standards for research quality and objectivity.

Military Enlistment of Hispanic Youth

Obstacles and Opportunities

Beth J. Asch, Christopher Buck, Jacob Alex Klerman,
Meredith Kleykamp, David S. Loughran

Prepared for the Office of the Secretary of Defense
Approved for public release; distribution unlimited



RAND

NATIONAL DEFENSE RESEARCH INSTITUTE

The research described in this report was prepared for the Office of the Secretary of Defense (OSD). The research was conducted in the RAND National Defense Research Institute, a federally funded research and development center sponsored by the OSD, the Joint Staff, the Unified Combatant Commands, the Department of the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community under Contract W74V8H-06-C-0002.

Library of Congress Cataloging-in-Publication Data

Military enlistment of Hispanic youth : obstacles and opportunities / Beth J. Asch ... [et al.].

p. cm.

Includes bibliographical references.

ISBN 978-0-8330-4572-0 (pbk. : alk. paper)

1. United States—Armed Forces—Hispanic Americans. 2. Recruiting and enlistment. I. Asch, Beth J.

UB418.H57M55 2009

355.2'236208968073—dc22

2009050790

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2009 RAND Corporation

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from RAND.

Published 2009 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665

RAND URL: <http://www.rand.org>

To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

Summary

Hispanics are underrepresented among military recruits. In 2007, Hispanics made up 17.0 percent of the general population (ages 18 to 40) but only 11.4 percent of Army enlistment contracts and 15 percent of Navy enlistment contracts. While the trend is upward (in 1994, 6.6 percent of Army contracts and 8.9 percent of Navy contracts were Hispanic),¹ Hispanics are still underrepresented.

Social representation within the armed forces is an ongoing concern of policymakers. Indeed, each year, the Department of Defense is required by Congress to publish statistics on the social representation of the armed forces in terms of such characteristics as race, ethnicity, marital status, and age. An implicit goal is that diversity in the armed forces should approximate diversity in the general population. Furthermore, recruiting challenges in meeting enlistment goals mean that the services need to understand the factors affecting the supply of key demographic groups, including Hispanics.

The underrepresentation of Hispanics is puzzling, considering that survey data on young people's attitudes toward the military consistently indicate that Hispanic youth are more likely than other groups to express a positive attitude toward the military. For example, in the December 2007 poll of American youth ages 18 to 24 conducted by the Department of Defense, 12.6 percent of Hispanic respondents stated they were probably or definitely going to join the military, compared with 10.1 percent of black respondents and 6.6 percent of white respondents (Defense Human Resources Activity, 2008).

The more positive attitude of Hispanics toward the military would suggest that, all else being equal, Hispanics should be overrepresented, not underrepresented. However, other factors may be at play. Hispanic youth may face greater challenges in meeting one or more of the military's enlistment standards. The services screen applicants in terms of education, aptitude, health, moral character, and other factors. Insofar as Hispanic youth differ from other groups in terms of these factors, they will be disqualified at different rates.

¹ The figures on enlistments are based on the authors' computations using Army and Navy enlistment contract data; data on civilian representation are based on the authors' computations using the Current Population Survey. An important caveat when comparing social representation over time is that the definition of racial and ethnic representation changed because of a government-wide change in the standard definitions of race and ethnicity in federal data collections as of January 1, 2003. As a result of this change, agencies—including the Department of Defense—must offer individuals the opportunity to select one or more races when reporting race, and the categories for ethnicity must include “Hispanic or “Latino” and “Not Hispanic or Latino.” In this report, the term “Hispanic” is used broadly to encompass those of Hispanic and Latino descent.

The research summarized in this report analyzes the role of the services' entry standards in disqualifying Hispanic youth for military service. For comparison's sake, we also examine qualification rates for white and black youth. The study is designed to answer three key questions:

- Which entry standards are the most likely to disqualify Hispanics from military service, and how does this compare with other groups?
- If recruiting standards were relaxed somewhat, what would be the effect on military performance, using retention and promotion as metrics of performance?
- What actions could be taken to increase Hispanic enlistments? Specifically, to the extent the services recruit more intensively among Hispanics, blacks, and whites who qualify for service, which segments of the qualified market are most likely to find military service attractive—those with higher aptitude, better education, or fewer qualifications?

Data Sources and Limitations of the Analysis

To study disqualification with respect to entry standards, we analyzed the characteristics of the general population with respect to the services' major entry standards. We used two nationally representative datasets: the National Longitudinal Survey of Youth (NLSY) from 1997 to 2003 and the National Health Interview Survey (NHIS) from 1998 to 2001. Both data sources provide information on demographic and other individual characteristics pertinent to entry standards used by the services.

To examine the effects of relaxing standards on military performance, we consider the downstream performance of military entrants who vary in terms of their quality and other characteristics. Some of these entrants received waivers of the enlistment standards (e.g., the service may permit the enlistment of individuals who have disqualifying characteristics). Performance is measured in terms of the retention and promotion outcomes of recruits. For our analyses, we created a longitudinal data file of military careers by merging annual master file and transaction records for all enlisted personnel with enlistment records for individuals entering service between fiscal years 1988 to 2003.

However, our analyses have four limitations. First, the information in the two national datasets differs in some areas, and the reasons for these differences are unclear. For example, comparison with other data sources suggests that the NLSY overstates high school graduation among Hispanics. Second, the services' standards are, in some cases, highly detailed. For example, in the case of health standards, the standards specify a degree of severity or a time component (e.g., the standards require that the most recent instance of a disqualifying condition such as asthma have occurred in childhood). Large, nationally representative datasets do not provide information at this level of detail. Third, the datasets may not provide information on the specific disqualifying factor. For example, some of the military's health and moral fitness standards are not captured in the national datasets. Finally, at the discretion of the individual service, some standards may be waived, and the waiver process is not always clearly defined. Thus, the estimates of the percentage of the population who are disqualified does not account for the waiver process and the percentage who might qualify after receiving a waiver.

We also note that the term “Hispanic” encompasses a highly diverse population in terms of country of origin, geographic region, and immigrant status, to name a few characteristics (Tienda and Mitchell, 2006). However, most of our data sources do not provide enough detail to allow analyses of subgroups. Thus, for the most part, the analysis considers all individuals of Hispanic and Latino descent as “Hispanic,” recognizing that this is a broad categorization.

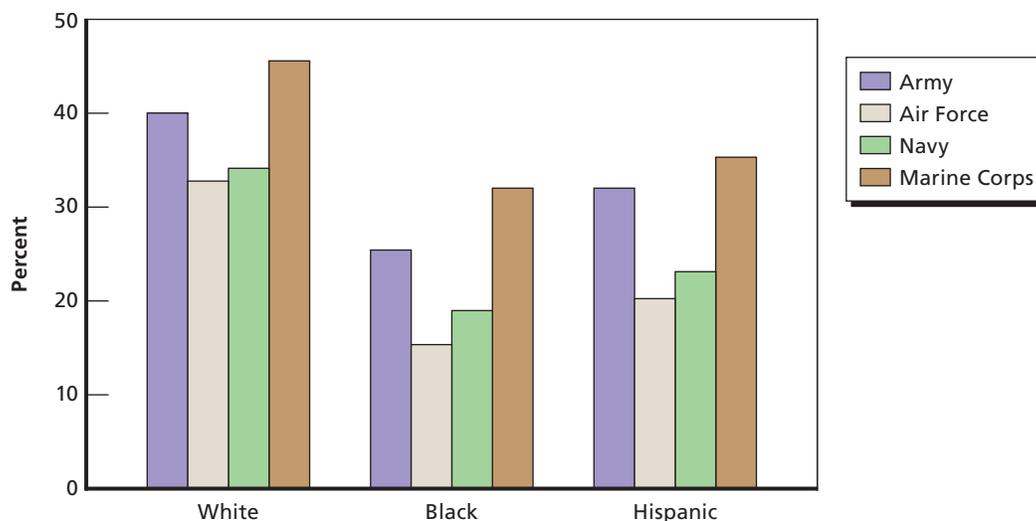
Factors That Disqualify Potential Hispanic Recruits

Analysis of the NLSY data reveals that a relatively small percentage of youth, regardless of race or ethnicity, would qualify for military enlistment. Figures S.1 and S.2 show the cumulative effect of key enlistment standards in the areas of education (high school diploma or General Education Degree), aptitude (Armed Forces Qualification Test score, [AFQT]), weight, number of dependents, convictions, and drug-related offenses. Results are shown by race/ethnicity for males and females, respectively, by service. Only 46 percent of white males, 32 percent of black males, and 35 percent of Hispanic males would be eligible to enlist in the Marine Corps, the service with the cumulatively least stringent enlistment standards. For females, the corresponding figures are even lower: 35 percent for white females, 22 percent for black females, and 24 percent for Hispanic females.

Major Disqualifying Factors

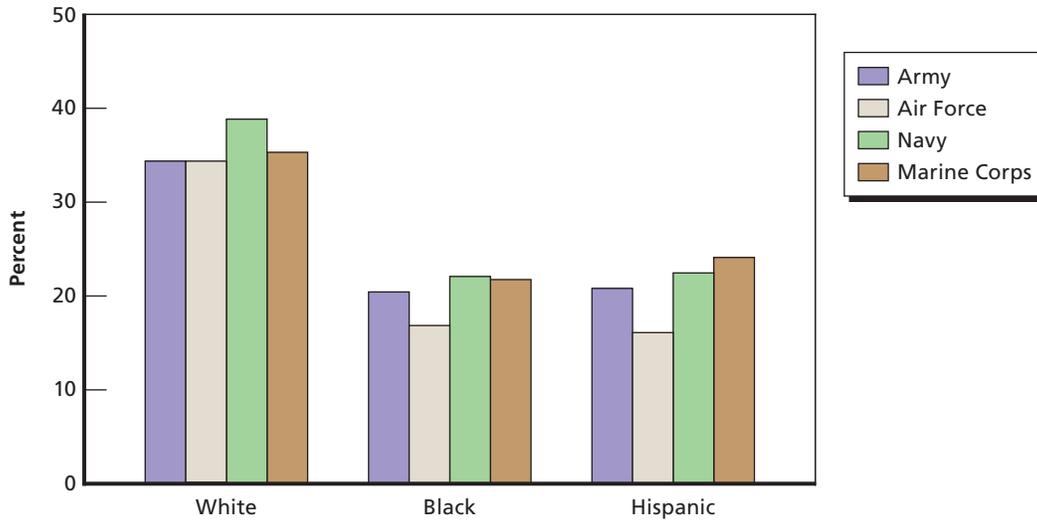
We found that the major characteristics that disproportionately disqualify Hispanic youth are lack of a high school diploma, lower AFQT scores, and being overweight. Each is briefly discussed below.

Figure S.1
Cumulative Percentage of Males Passing Standards for Education, AFQT, Weight, Dependents, Convictions, and Drugs, by Service



RAND MG773-S.1

Figure S.2
Cumulative Percentage of Females Passing Standards for Education, AFQT, Weight, Dependents, Convictions, and Drugs, by Service



SOURCES: NLSY 1997; authors' computation.

RAND MG773-S.2

Since the services prefer high school graduates, Hispanics' lower high school graduation rate goes a long way toward explaining why they are underrepresented among enlistments. In the NLSY sample, 74 percent of Hispanic males are high school graduates, compared with 85 percent of white males. (As noted above, the NLSY may overstate high school graduation among Hispanics; the actual graduation rate may be lower.)

Though important, education is not the only major disqualifying characteristic of Hispanic youth. Hispanics who are high school graduates often fail to meet other enlistment standards. The services require that potential recruits take the AFQT. Based on their test results, potential recruits are placed in one of five categories (Category I is the highest). The services strongly prefer recruits whose score places them in Category IIIB or higher. The Department of Defense (DoD) restricts the annual accession of those in Category IV (the next-to-lowest category) to 4 percent of the total, and prohibits all recruiting from Category V (the lowest category). Only 36 percent of young Hispanic high school graduates would score in AFQT Category IIIB or above, compared with 68 percent of white high school graduates. A key implication of this result is that increasing the high school graduation rate among Hispanic youth may not lead to comparable increases in enlistment eligibility.

As is well known, childhood and adult obesity has increased among the U.S. population. This trend has important implications for military recruitment: fewer youth are likely to meet the services' weight standard. Comparing Hispanics with other groups, we see that weight is another important disqualifying characteristic. Hispanics are considerably heavier than others: on average, Hispanic males weigh almost ten pounds more than white males. Seventy-nine to 91 percent of white males meet the service weight standards (weight standards vary by service), compared with only 71 to 88 percent of Hispanic males. Among females, the percentage who meet the weight standards is even lower; 63 to 82 percent of white females meet the standards, compared with only 49 to 71 percent of Hispanic females.

Other Disqualifying Factors

In addition to education, AFQT score, and weight, the military also evaluates recruits in terms of other factors, including major and minor medical conditions, number of dependents, and moral character (recent drug or alcohol use or engaging in illegal activities). These factors have a less important effect on Hispanic recruitment, as described below.

We evaluated health in terms of three factors: weight (discussed above), and “major” and “minor” disqualifying conditions. We termed as major health conditions those that are non-waiverable; they include blindness, hearing problems, and organ failures, such as stroke and hypertension. Minor conditions are those that might be waived at the discretion of the individual service; they include such conditions as hay fever and attention deficit disorder.

Our research shows that Hispanics have a lower prevalence of disqualifying major and minor conditions than whites. That is, except for weight, Hispanics tend to be healthier than whites. Research suggests that better-than-expected health in the Hispanic population may be due to the large proportion of immigrants; immigrants in general, regardless of ethnicity, tend to be healthier than the native-born U.S. population.

However, Hispanics are more likely to be disqualified because of weight. On balance, taking all three health standards together (weight, major conditions, and minor conditions) Hispanic males are disqualified at about the same rate as whites. Hispanic females are substantially more likely to be overweight than white females, and more likely to be disqualified.

Our analysis indicated that number of dependents is another disqualifying characteristic for Hispanics. Though not as important as weight, education, or AFQT, it is a significant factor, especially for females. Twenty percent of young Hispanics (ages 17 to 21) have children, compared with only 9 percent of whites.

The final set of qualification characteristics considered are those related to moral character. The NLSY queries respondents about drug and alcohol use and engagement in past illegal activities, but problems with these data mean that these questions are unlikely to provide an accurate picture of the extent to which Hispanics will be disqualified relative to other groups due to moral character. Since misdemeanors can be waived and individuals would presumably curtail their drug use in advance of taking a drug test, it is unclear how misdemeanors and drug use would affect eligibility rates.

Actions That Could Improve Hispanic Enlistments

The military could increase Hispanic representation by increasing the pool of qualified individuals, by relaxing recruiting standards, or by recruiting more intensively from among those who are already qualified. Our analysis evaluated some of the implications of these potential courses of action.

Increasing the Pool of Qualified Individuals

One approach to increasing the pool of qualified individuals is to implement policies that encourage high school graduation and improved educational achievement (resulting in improved AFQT scores). However, the practicality of such policies is questionable. An important factor explaining Hispanics’ relatively low graduation rates and AFQT scores is family background, such as mother’s education and family income. Thus, without addressing underlying family and economic circumstances, the role of the services may be limited. Yet, even at

the margin, the services may be able to encourage some students to graduate who otherwise might not. Summarizing the academic literature, Heckman (1995) notes that motivation plays an important role in economic achievement. Since many Hispanic youth are favorably inclined toward military service, it is possible that appropriate motivating factors could increase young Hispanics' graduation rate and educational achievement.

Relaxing Recruiting Standards

Recruiting more intensively from the pool of qualified Hispanics will be challenging. Most likely, increasing representation among the Hispanic population will involve enlisting more marginal recruits. The services already have programs that seek to identify the best of these marginal recruits or to improve the AFQT, weight, or educational outcomes of those recruits. These programs are not specifically targeted to improve Hispanic representation, but insofar as Hispanics are more likely to be disqualified because of AFQT, weight, and lack of a high school diploma, these programs are more likely to increase Hispanic enlistment.

A key question is whether the programs that increase the enlistment of somewhat lower quality Hispanics will have a large adverse effect on subsequent military performance. Our study provides some information on this question using five metrics of performance: retention at three months (roughly corresponding to completion of boot camp and initial skill training); retention at four years of service (approximately the end of the first term of service); retention at six years of service (approximately the end of the first term of service in technical skills in the Air Force and Navy); achievement of promotion to pay grade E-5 by four years of service (corresponding to early promotion and perhaps being on the fast track); achievement of promotion to pay grade E-5 by six years of service. The analysis focuses on how varying weight, AFQT, and education affects outcomes, because these are the three main characteristics that disqualify Hispanic youth from service.

Hispanics consistently have higher retention and faster promotion speeds than their white counterparts. For example, the predicted four-year retention rate for Hispanic recruits in the Army is 54 percent—6 percentage points higher than the 48 percent rate predicted for white recruits. (An exception is the Navy, where white recruits are promoted faster.) Blacks also tend to have higher retention and faster promotion, but adjusting for observed characteristics (such as AFQT scores) shrinks the effects of race on outcomes.

As found in past studies, our analysis indicates that higher-quality recruits tend to stay longer and be promoted faster. In the case of AFQT, the positive relationship between AFQT and retention is strongest for white recruits. Those who fail to complete high school have lower retention relative to high school graduates, regardless of race or ethnicity. Those who are overweight, especially 20 pounds overweight relative to the service standard, have lower retention than those within five pounds of the standard. Overweight recruits have poorer outcomes, regardless of race and ethnicity. For example, Hispanics in the Navy who are more than 20 pounds overweight have a promotion rate of 19 percent to E-5 within six years, compared with a promotion rate of 23 percent for Hispanics who are within five pounds of the Navy's weight standard.

While the effect of standards on military career outcomes is significant, the effects of race and ethnicity are even larger. Lower-quality Hispanics compare well with higher-quality white recruits who have similar observed characteristics. For example, the four-year retention rate of white recruits in AFQT Categories I and II, adjusted for observable characteristics, is predicted to be 42 percent, while the adjusted four-year retention rate for similar Hispanic

recruits in AFQT Categories IIIB and IV is predicted to be 50 percent. For blacks, the four-year predicted retention rate in AFQT Categories IIIB and IV is predicted to be 45 percent. Consequently, lower-quality minorities are more likely to remain in service and be promoted than higher-quality white recruits. Presumably the better outcomes are attributable to minorities being better matched to the military in terms of factors unobserved to the analysts (such as higher motivation or better opportunities in the military).

The implication of this analysis is that targeting the recruitment of more marginal Hispanic recruits is not likely to have adverse effects on retention or promotion speed. In fact, the analysis suggests that, at the margin, faced with the decision to recruit minorities over identical white recruits, the services would gain more person-years, via greater retention, by favoring minorities because of greater retention. In the case of Hispanics, greater retention is an additional way to improve Hispanic representation. As Hispanics stay longer, their relative representation in the enlisted force increases. The implication discussed above is based on analytical results only and does not take into account the DoD's obligation to avoid racial discrimination. Furthermore, we note that untargeted recruitment of marginal recruits would hurt retention and promotion rates.

Recruiting More Intensively from Among Qualified Individuals

To understand better how the military might meet the career aspirations of qualified Hispanics and improve the supply, our study described the career and schooling choices of young people, by race/ethnicity, as they transition from adolescence to young adulthood. These choices represent the competition; in other words, they are the external opportunities that the military must overcome to compete successfully for qualified youth.

To analyze education and career choices, we divided potential recruits into three groups: (1) the *least qualified*, defined as those without a high school diploma or who scored in AFQT Category IV or V; (2) the *next-most qualified*, defined as those who are high school graduates in AFQT Categories IIIA and IIIB; and (3) the *most qualified*, defined as those who are high school graduates in AFQT Categories I and II.

The analysis suggests that improving Hispanic enlistments within each group will be challenging. A large percentage of Hispanic youth (55 percent) are in the least qualified group. In addition to having less education, this group tends to have much poorer labor market outcomes relative to high school graduates. For example, at age 22, the median civilian wages of Hispanics in this group are about 20 percent less than the wages of Hispanic high school graduates. Not only are their employment rates and wages lower than high school graduates, they also tend to fail other enlistment criteria, such as weight standards and recent drug use. It is unlikely that this group would perform well in the military.

The military already disproportionately recruits those in Group 2, relative to their representation in the population. Specifically, 73 percent of young Hispanic recruits are in Category IIIA and IIIB (this group represents only 33 percent of the general Hispanic population). Increasing Hispanic representation by recruiting more intensively from this group will mean pulling from a population that is already heavily recruited.

However, it may be possible to make additional recruiting inroads with this group by recognizing that they have strong interest in college. Over 60 percent of the total people in this group are enrolled in either two- or four-year college. Hispanic enrollment patterns differ only somewhat from that of other groups in that Hispanics are much more likely to attend two-year college and more likely than either white or black youth to receive a training certificate or voca-

tional license. Strong interest in two-year college may reflect lack of resources for education. To the extent that even two-year college involves considerable expense in terms of forgone earnings for those who do not work full-time, the high college attendance rates among this group suggest individuals might be responsive to the suite of educational benefits the military offers.

Group 2 youth are also strongly attached to the labor market, with around 80 percent of 20-year-olds employed. Working while in school is common, especially among Hispanics and whites.

The final group is high school graduates in AFQT Categories I and II. For Hispanics, this group is quite small. These individuals also have excellent college and career opportunities. College attendance, especially at four-year colleges, is relatively high. Specifically, 52 percent of Hispanics in the NLSY sample in this group attended four-year colleges compared with 67 percent of white youth and 63 percent of black youth.

This group also has excellent employment opportunities. Employment rates increase with age, and by age 23, about 80 percent of youth in AFQT Categories I and II are employed. Their average earnings are higher than the earnings offered by the military.

Educational and career outcomes for white, black, and Hispanic youth in this group are similar. However, military application rates are lower among Hispanics in this group when compared with white and black youth. Attracting recruits from this group into the military will require focusing on the availability of educational benefits, the leadership opportunities and scope of responsibilities offered by the military, the opportunities to serve one's country, and other nonpecuniary benefits of service.

Policy Implications

The analyses yield several policy insights and implications, for both the current recruiting environment and for social representation of the military in the long term. With respect to the current environment, the Army did not meet its recruiting mission in 2005, and has struggled to meet its mission in 2006 and 2007.

A major disqualifying factor for Hispanics is weight. Other services might consider adopting the Marine Corps approach to weight. This service has the most relaxed weight standard in the armed forces, but simultaneously requires applicants to pass a strength test. Adopting this approach throughout the armed services might increase the pool of potential recruits and Hispanic supply, with only minimal effects on attrition, retention, and promotion.

As part of its effort to increase enlistments, the Army has recruited more lower-quality enlistees, relaxed its enlistment standards, and begun several experimental programs to allow applicants who failed to meet standards to qualify for enlistment.

A disproportionate percentage of the lower-aptitude Army recruits are black or Hispanic. We found that lower-aptitude minorities have better retention than higher-aptitude white recruits, all else being equal. An implication of our analysis is that the armed services, while avoiding overt discrimination, should develop recruiting incentives attractive to Hispanics and blacks.

In the longer term, the analysis suggests that identifying and targeting the most motivated of the least-qualified group of Hispanics is a good approach, and is consistent with current efforts like the Army's Tier Two Attrition Screen program. For the most-qualified group, the military must find ways to compete with excellent civilian opportunities. This will include

emphasizing the nonpecuniary benefits of service, such as leadership opportunities, higher span of responsibility, and opportunities to serve one's country. Finally, for applicants in the middle range, college seems quite important, especially two-year college for Hispanic youth. Since many do not complete college, and many work while in college, more exploration is needed as to whether these individuals lack resources or have lower educational expectations. In either case, military service as part of one's educational path, along with the suite of educational benefits available to those who serve, could be marketed more heavily to this group.

Educational benefits are only one of many recruiting resources. Little is known about how the supply of Hispanics and black recruits responds to other recruiting resources, such as enlistment bonuses, as well as to external factors including the Iraq war, the civilian economy, and college opportunities. Such information would be useful for developing policy options to increase the supply of Hispanic and black recruits.