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# Recruiting Minorities

What Explains Recent Trends in the  
Army and Navy?

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Beth J. Asch, Paul Heaton, Bogdan Savych

Prepared for the Office of the Secretary of Defense

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## Summary

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Since 2000, black enlistments into the Army have fallen precipitously. The number of black high-quality enlistments fell from 80 per 100,000 individuals in the U.S. population in July 2000 to 32 per 100,000 in July 2005. Although black high-quality enlistments have increased since 2005, they are still well below the 2000 level. Not only the number but also the percentage of recruits that are black has fallen in the Army. Black representation among high-quality Army recruits fell from 18.9 percent in 2000 to 10.6 percent in 2004, increasing to 11.8 percent in 2007. In contrast, black representation among high-quality Navy recruits over the same period has been generally stable.

The decline in black representation among high-quality Army enlistments is of concern because black youth are a key market segment for the Army, and the success of Army recruiting in the past is partially due to the ability of the Army to attract black youth into the military. Army recruiting has been challenging in recent years, and understanding why black enlistments have declined among high-quality Army enlistments is likely to be a component of the Army's strategy to meet its recruiting challenges. In addition, diversity of enlistments has been an area of concern among policymakers since the end of conscription in the United States in 1973: In that year, Congress mandated that the Department of Defense report the diversity of the armed forces annually.

In contrast to black enlistments, Hispanic representation among high-quality enlistments has increased since 2000 in both the Army and

the Navy.<sup>1</sup> The Hispanic share of high-quality enlistments increased from 7.0 to 9.7 percent in the Army between 1999 and 2007, and from 9.6 to 15.4 percent in the Navy. For the Army, the key period of increase was between 2000 and 2003, when the Hispanic share increased by 3.3 percentage points, from 8.0 to 11.3. From 2003 to 2007, the Hispanic share fell to 9.7 percent. For the Navy, the key period of increase was between 2002 and 2005, when the Hispanic share rose from 10.9 to 16.2, or 5.3 percentage points. The disparate trends for Hispanic compared with black enlistments in the Army and Navy suggest that these market segments' enlistment decisions respond to different factors. That is, different market segments vary in their responses to resources, external opportunities, and other factors.

The research presented in this report was sponsored by the Office of the Under Secretary of Defense for Personnel and Readiness and was motivated by four research questions:

- What factors affect the enlistment supply of different market segments to the Army and Navy, and how do these effects differ by market segment and service?
- What factors explain changes in black and Hispanic representation among recruits? What explains the drop in black representation in the Army and the increase in Hispanic representation in the Army and Navy?
- How might policy changes affect the diversity of high-quality enlistments in terms of minority representation?
- Which policies are the most cost-effective?

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<sup>1</sup> Beginning January 1, 2003, the Office of Management and Budget implemented new guidance on the federal reporting of race and ethnicity. Prior to that date, Defense Manpower Data Center personnel data permitted categorization of race and ethnicity by first selection of all Hispanic records, and then sorting the balance of personnel records based on race category, thereby mixing up the race and ethnicity categorization. Beginning in January 2003, federal agencies, including DoD, collected and presented data that allowed identification of ethnicity ("Hispanic or Latino" and "Not Hispanic or Latino") separate from the identification of race.

For tabulations after January 2003, the definitions used in this report conform to the new guidance, but prior to that date they conform to the older guidance. This change does not affect our results, for reasons explained in Chapter Two.

Because the trends in representation differ for the Army and the Navy, these services offer benchmarks against which to compare the factors affecting the trends.

## Approach

To address these questions, we estimate enlistment supply models for black, Hispanic, and white youth for the Army and for the Navy. The models show the relationship between, on the one hand, the number of high-quality enlistments in a quarter and in a state and, on the other hand, factors thought to affect supply (recruiting resources, military pay, and civilian opportunities, including civilian pay and college); factors related to enlistment eligibility, such as obesity rates; and political factors (specifically, the Iraq war). We use enlistment data obtained from the Army and the Navy, covering the period 1998 through 2007 for the Army and 1999 through 2007 for the Navy. We merge these data with data on recruiters from the services, data on demographic and economic factors from the Current Population Survey (CPS) and other nonmilitary data, and data on casualties and presidential polls. We estimate enlistment models by state and quarter. While we estimate models for both the Army and the Navy, we do not estimate cross-service effects. That is, we do not estimate joint Army and Navy enlistment models by race and ethnicity. Also, our models capture associations between the factors and enlistments rather than causal relationships. Some of the associations may reflect factors that are unmeasured within the models.

After estimating each model for each service, we use the models to decompose the underlying factors associated with the change in black representation in the Army and the change in Hispanic representation in the Army and in the Navy. These changes can be due to differences in the responsiveness of different market segments to the factors associated with enlistment supply and to variation in how these factors changed over time.

## Responsiveness to Resources

We find that the market segments differ in their responsiveness to some recruiting resources in the Army. More specifically, we estimate that black Army high-quality enlistments increase more with recruiters than they do with enlistment bonuses, military pay relative to civilian pay, and educational benefits. For example, we find that a 10 percent increase in Army recruiters is associated with a 6.2 percent increase in Army black high-quality enlistments, whereas a 10 percent increase in enlistment bonuses is associated with a 2.0 percent increase in black high-quality Army enlistments. The estimated effects of military pay and educational benefits on black Army enlistments are not statistically significantly different from zero.

We estimate that Hispanic high-quality Army enlistments are highly responsive to military pay as well as to Army educational benefits and recruiters, but are less responsive to Army enlistment bonuses. According to our estimates, a 10 percent increase in relative military pay is associated with a 23.5 percent increase in Hispanic Army high-quality enlistments, whereas a 10 percent increase in enlistment bonuses is associated with a 1.3 percent increase in Hispanic high-quality enlistments.

In the case of the Navy, we estimate that both black and Hispanic high-quality enlistments are responsive to Navy recruiters. The estimated effects of bonuses, military pay, and educational benefits were not statistically different from zero. For recruiters, we estimate that a 10 percent increase in Navy recruiters is associated with a 5.4 percent increase in black enlistments and a 5.7 percent increase in Hispanic enlistments.

We also find that enlistments respond differently to resources in the Army versus the Navy. In general, Navy responsiveness to resources is lower, in percentage terms, than Army responsiveness. For example, a 10 percent increase in recruiters is estimated to increase Army high-quality enlistments by 6.2 percent for blacks and 7.9 percent for Hispanics, whereas for the Navy these figures are both below 6 percent.

## Accounting for Recent Changes in Minority Representation

When we decompose the changes in the representation of blacks and Hispanics among high-quality recruits over time using our estimated models, we estimate that the 8.3 percentage point drop in black Army representation between the fourth quarters of 2000 and 2004 can be attributed to a large negative effect of the Iraq war on black enlistments and the success of the Army in recruiting high-quality youth among the Hispanic and white populations. The Iraq war was associated with a negative effect for all market segments, but the effect was largest for blacks—45 percent versus 21 percent for whites and Hispanics—over our data period. On the other hand, black enlistments were more insensitive to the large increases in regular military compensation relative to civilian pay that occurred over this period, compared with white and Hispanic enlistments. Consequently, part of the decline in black representation appears to be due to the success of the Army in increasing Hispanic and white enlistments, and therefore their market share, via increases in military pay.

When we decompose the 3.3 percentage point increase in Army Hispanic high-quality enlistments between 2000 and 2003, we find that increases in the Montgomery GI Bill explain about a third of the increase, or 1.4 percentage points. Increases in military pay, and the stronger responsiveness of Hispanic than black youth to increases in relative military pay, explain almost a quarter of the increase in Hispanic representation over this period. Since white Army enlistments are also highly responsive to increases in relative military pay, the increase in white enlistments had an offsetting effect on Hispanic representation. Thus, resource changes have been important in explaining improvements in Hispanic representation in the Army in recent years.

Hispanic representation among high-quality Navy recruits has also increased, rising by 5.3 percentage points between 2002 and 2005. The majority of this increase—5 percentage points—is attributable to the positive estimated effect of the Iraq war on Hispanic enlistments in our Navy model. We estimate that the Iraq war has a larger positive effect on Hispanic than black enlistments, and a negative effect on

white enlistments. Thus, as the Iraq war progressed over this period, the Hispanic share rose dramatically in response. The underlying cause of the Iraq war's positive effects for black and Hispanic Navy recruiting is unclear. One possibility is that minority youth who would like to serve in the military are choosing the Navy over the Army.

## Policy Implications

Our analysis suggests that the key factors explaining the changes in black high-quality enlistment in the Army are the Iraq war and the rise in Hispanic representation among high-quality Army enlistments due to the greater responsiveness of Hispanics to military pay, relative to civilian pay, and to educational benefits. In the case of the Navy, we estimate that most of the rise in Hispanic representation among Navy high-quality enlistments is attributable to the positive effect of the Iraq war on Navy Hispanic enlistments that exceeded the positive effect of the Iraq war on black enlistments and the negative effect of the Iraq war on white enlistments.

Our model suggests that high-quality black enlistments will not continue to decline going forward due to effects of the Iraq war. Whether black high-quality enlistments will recover following a draw-down depends on whether the war had temporary or permanent effects on attitudes toward enlistment among high-quality youth. Similarly, whether the positive effect on Navy enlistments during the Iraq war on Hispanic and black high-quality enlistments will continue or reverse depends on whether these are permanent or temporary effects. These are open questions.

Our estimates indicate that recruiters best increase black high-quality enlistments into the Army when compared with bonuses and relative military pay. We also estimate recruiters to be more effective than other resources in increasing black Navy high-quality enlistments. With respect to Hispanic high-quality enlistments, we find that this segment is more responsive to military pay in the Army, as well as to recruiters and educational benefits, than it is to enlistment bonuses. For the Navy, we find that Hispanic high-quality enlistments are respon-

sive to recruiters. Finally, the estimates indicate that white enlistments in both the Navy and Army are more responsive to military pay and recruiters than to educational benefits and bonuses.

Given the differential responsiveness of different market segments to recruiting resources, the analysis suggests the opportunity to target resources to specific market segments in each service, and even across services. However, such an approach to recruiting resource policy may run counter to notions of equity and fairness. That is, the services might be reluctant to target resources based on race and ethnicity. Still, as decisions are made about the allocation of resources to different policies, it could be useful for the services to recognize that such allocation decisions will have an effect not only on the quantity of high-quality enlistments but also on their distribution across market segments, and these effects could alter the representation of different segments. The analysis also suggests the possibility of targeting resources across services by market segment, given the differential responses of different market segments across services. Because we do not estimate a joint model of Army and Navy enlistments, we do not address the question of resource allocation across services; such analysis should be explored in future research. Still, the analysis indicates that increasing minority representation in the overall military could involve a cross-service strategy.