RAND | RESEARCH BRIEF
Defense Manpower Research Center

ATTRITION OF NON-PRIOR-SERVICE PERSONNEL FROM THE ARMY SELECTED RESERVE

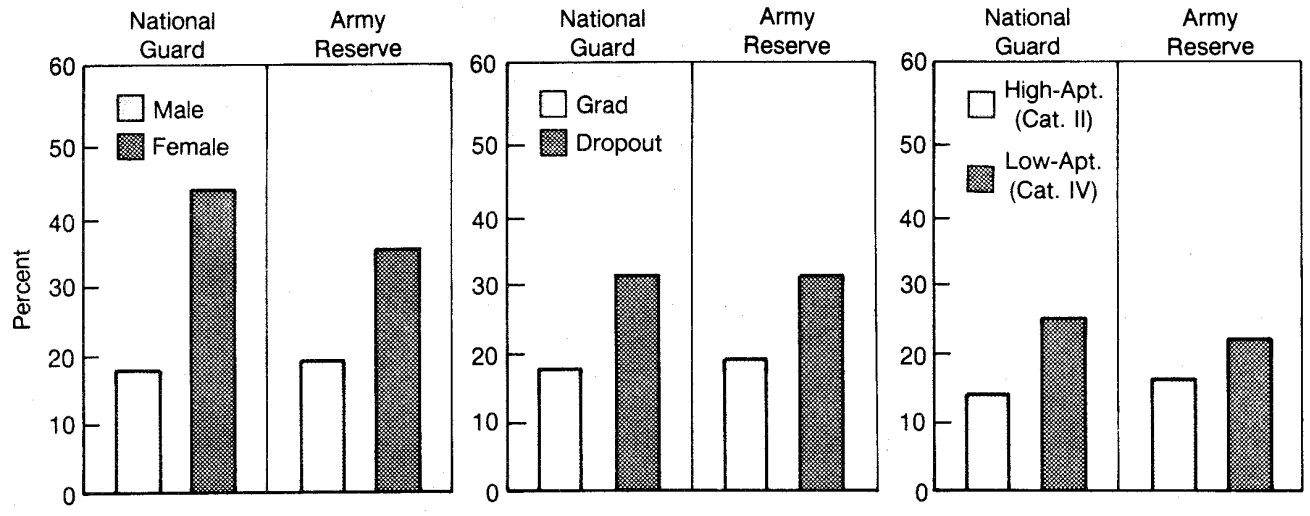
The two components of the Army Selected Reserve—the Reserve and the National Guard—annually enlist approximately 70,000 persons who have not had military experience. It costs between $4000 and $20,000 or more (at the margin) to train each person. The return from the training investment to the reserve comes as the individual serves out the full term of enlistment, usually six years. That return is substantially reduced if the reservist leaves early. It has been estimated that 60 percent of the Army guardsmen and 75 percent of the Army reservists from the FY 1980 non-prior-service cohort would leave before completing their terms.

High separation rates significantly increase the accession and training costs of maintaining a given reserve force size. It will thus be important to reduce attrition rates if the scheduled growth in the Selected Reserve is to be economically achieved. But before effective attrition-dampening policies can be devised, it is necessary to know more about what sorts of persons are separating, when in their terms they are leaving, and where they are going.

RESEARCH FINDINGS

A recent RAND study provides a great deal of the needed information. RAND tracked the FY 1980 non-prior-service cohort through FY 1982. Probabilities of separation were determined for enlistees of differing sex, race, age, marital status, education, and mental aptitude (the latter determined by the Armed Forces Qualification Test). Principal findings are as follows.

Other things equal, **females, high-school dropouts, and those with low aptitude scores were more likely to separate early** than were males, high-school graduates,



Each set of bars compares reservists who are typical except for the differences specified. Typical reservists are single, nonblack, 18-to-20-year-old male high-school graduates with Category III AFQT scores.

Probability of Leaving the Army Selected Reserve for Civilian Life During the First Two Years

and those with high aptitude scores, respectively (see the graph). The effects of race, age, and marital status were smaller and varied according to sex. For instance, black males were more likely to leave early than were white males, but black females were less likely to do so than white females.

Over the two-year period, the National Guard lost about 31 percent of the tracked cohort and the Reserve about 40 percent. However, 28 percent of those who left the Reserve reenlisted in the Reserve or in the active force, whereas only 17 percent of those who separated from the Guard reenlisted. The net loss from the armed forces was thus not much greater for the Reserve than for the Guard.

The timing of attrition differed markedly between the Guard and the Reserve. Seventy percent of the two-year attrition from the Guard to civilian life occurred during training; the corresponding figure for the Reserve was 28 percent. It thus appears that Guard training is more strongly selective.

SOME POSSIBLE CAUSES

Family and employer conflicts have been shown to be the leading causes of separation at the end of the first term. They are probably also important in early attrition. Reservists are usually young adults, so reserve duty has to compete with demands arising from entry into the full-time labor force, building a career, marrying and starting a family, and perhaps further education. Generally, young adults change jobs and residences frequently. Moves away from the local reserve unit often cause separation. Linkup with a new unit may be difficult because of skill mismatches or lack of vacancies. These explanations are consistent with the high attrition rates for white females, who move more often than black females and marry earlier than males.

AVENUES FOR FURTHER INQUIRY

The RAND results confirm the importance of targeting recruiting resources on higher-aptitude and better-educated persons. The results also have a bearing on several important policy questions, all of which require further research:

- Would it be cost-effective to commit more resources to recruiting to obtain higher quality recruits?
- Should we substitute more prior-service personnel for non-prior-service personnel?
- Can the Selected Reserve better manage geographical moves by providing information on Reserve opportunities to those who plan to move?

Further research could also inform decisionmaking with respect to two general approaches often suggested for addressing attrition: raising the penalties of leaving the reserve and increasing the benefits of staying. The effectiveness of the former can at least partially be addressed by examining state-to-state differences in National Guard attrition, since penalties vary by state. Those differences are currently being analyzed. The benefits of staying could be increased by reversing the currently training-heavy distribution of rewards. An experiment to test a term completion bonus would be fairly easy to design and would provide useful insights regarding incentives to stay.

The Defense Manpower Research Center, now housed within RAND's National Defense Research Institute, was established in 1976 to conduct interdisciplinary research into the manpower problems facing the armed services. The research reported in this brief was sponsored by the Office of the Assistant Secretary of Defense (Reserve Affairs). For further information, see R-3267-RA, *Attrition of Nonprior-Service Reservists in the Army National Guard and Army Reserve*, David W. Grissmer and Sheila Nataraj Kirby, The RAND Corporation, October 1985, or contact Dr. Grissmer at The RAND Corporation, 2100 M Street, N.W., Washington, D.C. 20037-1270, (202) 296-5000.