

Quality of enlisted accessions

Military active and reserve components need to attract not only new recruits, but also high quality new recruits. However, measuring qualifications for military service, or for any other profession, can be a challenge because many attributes that drive success are also very difficult to objectively measure. DOD currently uses two basic measures of enlisted accession quality, each of which is reported in the technical appendices.

Measures of accession quality

Armed Forces Qualifying Test (AFQT). All applicants for the enlisted ranks must take the Armed Services Vocational Aptitude Battery (ASVAB), which is a series of tests used both to determine if an individual qualifies for military service and to provide an indication of the person's aptitude for specific job assignments. ASVAB scores on tests that measure word knowledge, paragraph comprehension, arithmetic reasoning, and mathematics knowledge are used to compute the AFQT score. Based on this score, applicants are sorted into six categories, which correspond to the following percentile ranges.

- Category I: 93rd to 99th percentile
- Category II: 65th to 92nd percentile
- Category IIIA: 50th to 64th percentile
- Category IIIB: 31st to 49th percentile
- Category IV: 10th to 30th percentile
- Category V: Below the 10th percentile

Generally, applicants placed in categories I–IIIA are considered to be the best candidates for enlistment. The goal set by DOD is that at least 60 percent of all recruits in each component be in categories I–IIIA.

Educational credentials. In addition to AFQT scores, educational credentials represent an important component of applicant and accession quality as measured by DOD. Educational credentials are used to group individuals into one of three tiers.

- Tier 1: High school diploma graduate, adult education, or some college credit
- Tier 2: Alternate credentials, such as the General Education Certificate (GED)
- Tier 3: Non-high school graduate

The goal set by DOD is that at least 60 percent of all recruits in each component be tier 1.

High quality accessions. These two measures of quality – aptitude and education – are combined to determine which accessions are of high quality. A high quality accession has an AFQT score in any of categories I, II, and IIIA and also has a high school diploma (education tier 1).

Quality of NPS enlisted active duty accessions in FY 2008

Table 2 documents the quality of NPS active duty enlisted accessions for each of the four active components compared to the quality of civilians in their late teens and early twenties. The civilian control group for the AFQT scores is made up of 18 to 23 year-olds who were tested in 1997. The civilian control group for educational tier is made up of 18 to 24 year-olds and reflects their levels of education as of FY 2008. The final “high quality” measure discussed above cannot be generated for the civilian comparison group.

Table 2: Quality of NPS accessions for all active duty components compared to civilian comparison group, FY 2008

Measure	Army	Navy	Marine Corps	Air Force	Civilians ¹
AFQT category					
I	5.16%	6.76%	4.48%	7.07%	7.86%
II	31.58%	39.36%	35.24%	44.48%	27.66%
IIIA	25.31%	27.39%	26.05%	27.78%	15.54%
IIIB	34.40%	26.49%	30.81%	20.68%	18.78%
IV	3.55%	0.01%	3.42%	0.00%	20.75%
Unknown	0.00%	0.00%	0.00%	0.00%	9.41%
Educational tier ²					
1 or 2	99.47%	98.65%	99.88%	99.99%	82.18%
3	0.53%	1.35%	0.12%	0.01%	17.82%
High quality?					
Yes	45.60%	67.90%	62.07%	77.81%	N/A
No	54.40%	32.10%	37.93%	22.19%	N/A
<p>1. The comparison group for AFQT category consists of civilians between 18 and 23 years of age who took the test in 1997. The comparison group for educational tier consists of civilians between 18 and 24 years of age.</p> <p>2. We combine tiers 1 and 2 for the active components in order to make comparisons to the civilian data, which combine tiers 1 and 2.</p>					

The accessions to all four components compared favorably with their civilian counterparts across both measures of quality. For instance, roughly 68 percent of all accessions scored above the 50th percentile on the AFQT, while only 51 percent of the civilians were able to do so (see table B-4 in appendix B). Air Force and Navy accessions did particularly well, while the Army and Marine Corps accessions still did better than the civilian comparison group.

The accessions were also more likely to have a high school degree (or its equivalent) than the typical civilian in their age group. Overall, more than 99 percent of all active duty enlisted accessions had a high school degree or equivalent as compared to 82 percent among the civilian comparison group. Among the components, Air Force accessions

were the most likely to have a traditional high school diploma, while the Army accessions were most likely to have non-traditional high school credentials.

Putting quality of current accessions into historical perspective

As we have seen, NPS active duty enlisted accessions in FY 2008 compared favorably with their civilian counterparts. We now look at how they compared to accessions from previous years.

Figure 10 compares the AFQT scores of FY 2008 accessions and those accessions who joined the active enlisted ranks in the late 1980s and 1990s. The numbers for the 1988 comparison group represent the averages for the cohorts that joined between FYs 1986 and 1990. The numbers for the 1998 comparison group represent the averages for the cohorts that joined between FYs 1996 and 2000. The FY 2008 cohort had a slightly higher percentage of accessions in categories I–IIIA, and among those in the top three categories, more of them were in the top two categories (at the 65th percentile or above) than in the previous periods.

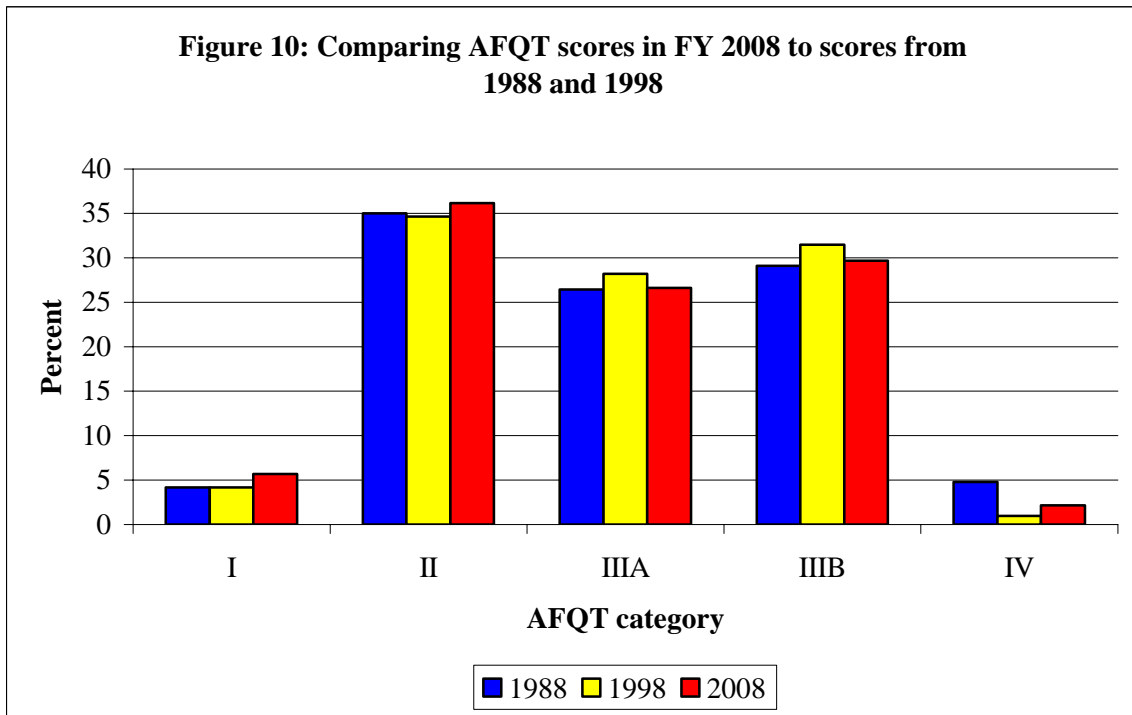
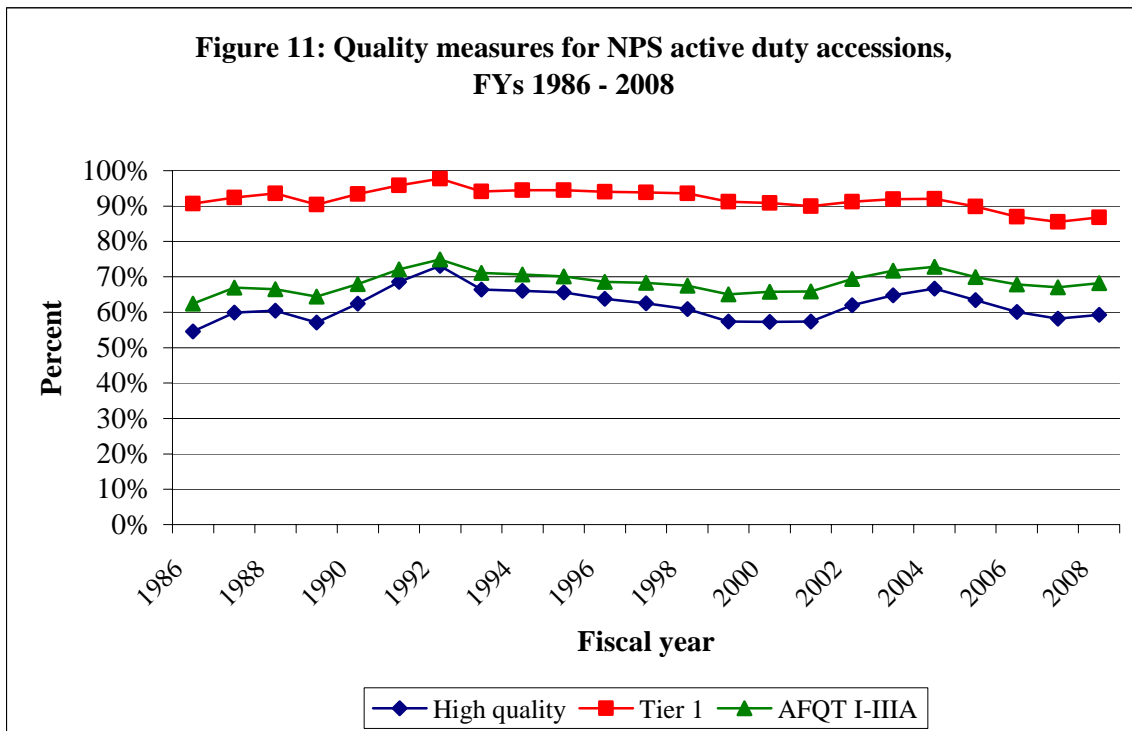


Figure 11 illustrates the historical quality of NPS active duty accessions from FY 1986 through FY 2008, based on all three definitions of quality described above. For each fiscal year, it shows (1) the percentage of all accessions that had traditional high school diplomas when they accessed; (2) the percentage of all accessions with AFQT scores in categories I–IIIA; and (3) the percentage of accessions that were considered high quality based on these first two criteria. A few topics merit discussion. First, the percentage of all accessions rated as high quality has fallen over the past 4 years. While this is partly due to a decrease in the number of accessions with AFQT scores above the 50th percentile, it

appears to be driven more by a decreasing percentage of new recruits with a traditional high school diploma. The current cohort is comparable with the cohorts accessed between FYs 1997 and 2002, but does not compare favorably with any of the other cohorts who have accessed between FYs 1990 and 1996. One explanation for this is the difficulty of recruiting members during wartime. Also, FY 2008 did see a slight increase in quality after 3 straight years of decline. Despite this drop, the reader should remember that the FY 2008 cohort still compared favorably with its civilian counterpart.



Quality of NPS enlisted reserve accessions in FY 2008

Table 3 compares the quality of NPS reserve enlisted accessions to the quality of civilians in their late teens and early twenties. All six of the reserve components are included. Note that we do not include data for the USAFR, because the AFQT scores for many of the accessions are unknown or unavailable, thus it is difficult to determine the exact quality of these recruits. As was the case for active duty accessions, the civilian control group for the AFQT scores is made up of 18 to 23 year-olds who were tested in 1997. The civilian control group for educational tier is made up of 18 to 24 year-olds and reflects their levels of education as of FY 2008.

Overall, the quality of NPS reserve accessions compares favorably with that of their civilian counterparts. A greater percentage of NPS accessions, when compared with the civilian control group, scored in the top three AFQT categories (I-III A); 61 percent as compared to 51 percent. The USMCR and ANG had the highest quality accessions based

on this measure. Roughly three-quarters of all NPS accessions in these two components scored in one of the top three AFQT categories.

As far as level of education is concerned, the NPS reserve accessions again compared favorably with members of the civilian comparison group. More than 93 percent of all reserve accessions had a high school diploma or some equivalent credential, compared to 82 percent among the civilian control group.

Table 3: Quality of NPS accessions for all select reserve components compared to civilian comparison group, FY 2008

Measure	ARNG	USAR	USNR	USMCR	ANR	Civilians ¹
AFQT category						
I	4.4%	4.5%	4.4%	9.3%	8.0%	7.9%
II	30.1%	29.7%	31.6%	43.8%	42.7%	27.7%
IIIA	24.6%	23.9%	31.0%	22.2%	24.8%	15.5%
IIIB	39.3%	37.7%	25.9%	22.2%	23.4%	18.8%
IV	1.3%	3.4%	0.2%	2.5%	0.2%	20.8%
Unknown	0.4%	0.9%	6.9%	0.0%	1.0%	9.4%
Educational tier ²						
1 or 2	89.6%	97.7%	98.5%	99.9%	99.5%	82.2%
3	10.6%	2.3%	1.5%	0.1%	0.5%	17.8%
<p>1. The comparison group for AFQT category consists of civilians between 18 and 23 years of age who took the test in 1997. The comparison group for educational tier consists of civilians between 18 and 24 years of age.</p> <p>2. We combine tiers 1 and 2 for the active components in order to make comparisons to the civilian data, which combine tiers 1 and 2.</p>						