Recent Enlisted Promotion Rates by Race, Ethnicity, and Gender

Abstract

The MLDC has been tasked with assessing promotion opportunities by race, ethnicity, and gender. To that end, this issue paper presents recent raw promotion rates to the grades of E-7, E-8, and E-9 for female and minority personnel in the Navy, the Air Force, the Army, and the Marine Corps. Comparing minority rates with average rates for each Service and each pay grade, the data show the following instances of minority groups having substantially below-average rates: black marines at all grades, female marines at promotion to E-9, and “other” airman at promotion to E-9. Because the promotion data presented here do not control for factors other than race/ethnicity or gender, these large differences call for further investigation rather than an immediate policy response.

One of the charter tasks of the MLDC is to evaluate the establishment and maintenance of fair promotion and command opportunities with respect to gender and race/ethnicity. During the December 2009 meeting, the Services presented raw promotion rates for different race, ethnicity, and gender groups for enlisted personnel. This issue paper (IP) summarizes these rates and presents the key findings from these briefings.

It is important to acknowledge what the data presented here can and cannot tell us about racial/ethnic and gender differences in promotion outcomes and about the overall fairness of the promotion process. Demographic differences in promotion outcomes do not, on their own, indicate that there is bias in the promotion process. Instead, the enlisted promotion rates reported in this IP show whether there are average, aggregate differences in promotion outcomes between men and women and between minorities and whites; they also show whether the differences are large enough to merit investigation into their underlying causes. Such additional attention would include controlling for other factors that could potentially help explain differences in promotion rates for majority/minority groups. Time and resource constraints did not allow us to conduct a more in-depth analysis of the demographic differences in recent promotion rates.

Data

The promotion rates presented in this IP are the recent promotion rates of senior noncommissioned officers (NCOs) from all military specialties in the Navy, the Air Force, the Army, and the Marine Corps. They are “raw” promotion rates because they do not control for other factors (such as occupation, education level, or entrance exam score) that have been shown to affect enlisted promotion rates.

The data in this IP come from the Service briefings presented at the December 2009 MLDC meeting. The promotion rates for the Air Force, the Army, and the Marine Corps span three fiscal years (FYs) (FY07 through FY09), and the Navy data span four (FY07 through FY10). Therefore, this IP discusses average promotion rates (calculated from all the data provided, not just the common years) rather than how promotion rates have trended over time.

Data on enlisted promotion in the Coast Guard were not presented at the December meeting for two reasons: (1) the Coast Guard’s senior enlisted personnel do not promote via a board process and (2) data limitations.

Race/Ethnicity Categories

The race/ethnicity categories used in the Services’ presentations differed from those used in other IPs and those defined in the MLDC’s first IP (Military Leadership Diversity Commission, 2009). The most substantive

Overall Promotion Rates to E-7 Through E-9
Table 1 shows overall average promotion rates for all four Services. An average promotion rate is the average of promotion rates observed in consecutive years of data for a given Service. The data show that, for FY07–FY09/FY10, the likelihood of advancement varied by Service. Marine Corps NCOs were more likely to advance than NCOs in the other Services. Advancement also varied by pay grade. In the Navy, the Air Force, and the Army, enlisted servicemembers were more likely to be promoted to E-7 than to either E-8 or E-9.

Black Promotion Rates to E-7 Through E-9
Table 2 compares the average promotion rates of black NCOs with the pay grade–specific averages for each Service. In the Navy, the Air Force, and the Army, the promotion rates of black NCOs were equal to or within a couple of percentage points of the average rates for E-7 through E-9. In the Marine Corps, however, the promotion rates of black NCOs were substantially below average for all three pay grades.

Hispanic Promotion Rates to E-7 Through E-9
Table 3 compares the average promotion rates of Hispanic NCOs with the pay grade–specific averages for each Service. In all the Services, Hispanics’ promotion rates to E-7 through E-9 were generally equal to or within a couple of percentage points of the overall Service average. There were exceptions: In the Army, Hispanic NCOs had higher-than-average promotion rates to E-7; in the Marine Corps, they had lower-than-average promotion rates to E-8. Comparing Table 3 with Table 2 shows that Hispanic NCOs had higher promotion rates than black NCOs in the Marine Corps and, to some extent, the Army.

Promotion Rates to E-7 Through E-9 for Other Race/Ethnicity Groups
Table 4 shows average promotion rates for other minorities. Only in the Marine Corps were “other” NCOs’ promotion rates to E-7 more than 2 percentage points below the overall promotion rate to E-7 between FY07 and FY10. Only in the Navy was “other” NCOs’ promotion rate to E-8 more than a couple percentage points below the overall average. “Other” NCOs in all four Services had below-average promotion rates to E-9; the difference was only greater than a few percentage points in the Air Force.

Female Promotion Rates to E-7 Through E-9
Table 5 compares the average promotion rates of women with the pay grade–specific averages for each Service. In the Navy and the Air Force, women’s promotion rates were equal to or greater than the average rates for all three pay grades. In the Army and the Marine Corps, female NCOs promoted to E-7 at higher-than-average rates, but they promoted to E-8 and E-9 at lower-than-average rates. In the

Table 1. Overall Promotion Rates to E-7 Through E-9, by Service

<table>
<thead>
<tr>
<th></th>
<th>Navy</th>
<th>Air Force</th>
<th>Army</th>
<th>Marine Corps</th>
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<tbody>
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<td>E-7</td>
<td>21</td>
<td>23</td>
<td>28</td>
<td>35</td>
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<tr>
<td>E-8</td>
<td>11</td>
<td>9</td>
<td>14</td>
<td>48</td>
</tr>
<tr>
<td>E-9</td>
<td>11</td>
<td>19</td>
<td>22</td>
<td>43</td>
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</tbody>
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Table 2. Black Promotion Rates to E-7 Through E-9, by Service

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Overall</th>
<th>Black</th>
<th>Overall</th>
<th>Black</th>
<th>Overall</th>
<th>Black</th>
<th>Overall</th>
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<td>Navy</td>
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</tr>
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<tr>
<td>E-8</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>18</td>
<td>14</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>E-9</td>
<td>11</td>
<td>11</td>
<td>17</td>
<td>19</td>
<td>19</td>
<td>22</td>
<td>38</td>
<td>43</td>
</tr>
</tbody>
</table>

NOTE: Promotion rates do not distinguish between male and female officers. They also do not distinguish between Hispanic and non-Hispanic blacks.

The difference is that race and ethnicity are defined separately such that the race and ethnicity groups are not mutually exclusive. Thus, the race/ethnicity categories in this IP are

- black, Hispanic and non-Hispanic
- Hispanic, all races
- “other,” Hispanic and non-Hispanic (includes Asians, Pacific Islanders, American Indians, Alaska natives, and individuals reporting more than one race).

For readability, we refer to Hispanic and non-Hispanic blacks as “blacks” and members of the Hispanic and non-Hispanic “other” group as “others.”

Table 3 compares the average promotion rates of black NCOs to E-7 through E-9. Comparing Table 3 with Table 2 shows that Hispanic NCOs had higher promotion rates than black NCOs in the Marine Corps and, to some extent, the Army.

The data show that, for FY07–FY09/FY10, the likelihood of advancement varied by Service. Marine Corps NCOs were more likely to advance than NCOs in the other Services. Advancement also varied by pay grade. In the Navy, the Air Force, and the Army, enlisted servicemembers were more likely to be promoted to E-7 than to either E-8 or E-9.

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Table 5 compares the average promotion rates of women with the pay grade–specific averages for each Service. In the Navy and the Air Force, women’s promotion rates were equal to or greater than the average rates for all three pay grades. In the Army and the Marine Corps, female NCOs promoted to E-7 at higher-than-average rates, but they promoted to E-8 and E-9 at lower-than-average rates. In the

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Marine Corps, the differences between the female and average rates were substantial: The female promotion rate to E-7 was 6 percentage points greater than the average, and the female promotion rate to E-9 was 12 percentage points below the average.

**Key Findings**

The raw promotion rates presented by the Services and summarized here indicate that, in many cases, advancement differed by race/ethnicity and gender. Here are the key findings:

- Black marines had substantially lower-than-average promotion rates to E-7, E-8, and E-9 between FY07 and FY10.
- Hispanic marines had promotion rates to E-7 and E-8 that were somewhat lower than average.
- “Other” airmen had a substantially lower-than-average promotion rate to E-9. “Other” marines had a promotion rate to E-7 that was somewhat below average.
- Female marines had a substantially lower-than-average promotion rate to E-9 but a higher-than-average promotion rate to E-7. Female soldiers had a slightly below-average promotion rate.

**Table 3. Hispanic Promotion Rates to E-7 Through E-9, by Service**

<table>
<thead>
<tr>
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<th>Navy</th>
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<th>Army</th>
<th>Marine Corps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
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<td>22</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Overall</td>
<td>21</td>
<td>23</td>
<td>28</td>
<td>35</td>
</tr>
</tbody>
</table>

**Table 4. “Other” Promotion Rates to E-7 Through E-9, by Service**

<table>
<thead>
<tr>
<th></th>
<th>Navy</th>
<th>Air Force</th>
<th>Army</th>
<th>Marine Corps</th>
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<tbody>
<tr>
<td>“Other”</td>
<td>21</td>
<td>24</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Overall</td>
<td>21</td>
<td>23</td>
<td>28</td>
<td>35</td>
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</tbody>
</table>

**Table 5. Female Promotion Rates to E-7 Through E-9, by Service**

<table>
<thead>
<tr>
<th></th>
<th>Navy</th>
<th>Air Force</th>
<th>Army</th>
<th>Marine Corps</th>
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<tr>
<td>Female</td>
<td>20</td>
<td>22</td>
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<td>41</td>
</tr>
<tr>
<td>Overall</td>
<td>21</td>
<td>23</td>
<td>28</td>
<td>35</td>
</tr>
</tbody>
</table>

**NOTE:** Promotion rates do not distinguish between male and female officers. They also do not distinguish between white and nonwhite Hispanics.

**NOTE:** Promotion rates do not distinguish between male and female officers. Promotion rates do not distinguish between Asians, Pacific Islanders, and Native Americans.

**NOTE:** Promotion rates do not distinguish female officers by race/ethnicity.
Conclusion
This paper identifies several demographic differences in promotion rates that are large in magnitude; most were among NCOs in the Marine Corps. Although differences in raw rates alone should not drive policy changes, these differences are sufficiently large to merit further investigation.

Notes
1 A separate IP (Military Leadership Diversity Commission, 2010) provides a more general discussion of the methodological limitations of using raw rates to inform policy decisions. For example, although differences across groups may be statistically significant, they may not be meaningful from a policy perspective. Furthermore, important characteristics that raw rates are not able to address may be influencing outcomes for race/ethnicity and gender groups.
2 The Marine Corps did not provide enlisted promotion rates for FY07–FY10 at the December 2009 briefings. Instead, data for FY99, FY04, and FY07 were provided. Major Ryan W. Reilly provided enlisted promotion data from the Marine Corps to the Center for Naval Analysis on February 18, 2010.
3 Advancement rates for enlisted Coast Guard are unavailable because the number of enlisted members of the Coast Guard who are eligible to advance is not recorded.
4 The Services are not consistent in defining race/ethnicity groups beyond white, black, and Hispanic. The Navy allows respondents to pick Asian/Pacific Islander/Native American (A/PI/NA), the Air Force and the Marine Corps refer to a fourth group as “other” (which therefore includes A/PI/NA), the Coast Guard has two additional groups (A/PI/NA and “other”), and the Army has three additional groups (A/PI, NA, and “other”). Where rates are available for multiple groups, we present a rate that has been averaged across groups.

References


