Army Reserve Leadership Diversity in the 21st Century

by

Colonel Lee P. Gearhart
United States Army

United States Army War College
Class of 2015

DISTRIBUTION STATEMENT: A
Approved for Public Release
Distribution is Unlimited

This manuscript is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.
The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.
1. REPORT DATE (DD-MM-YYYY) 01-04-2015
2. REPORT TYPE STRATEGY RESEARCH PROJECT
3. DATES COVERED (From - To)

4. TITLE AND SUBTITLE
Army Reserve Leadership Diversity in the 21st Century

5a. CONTRACT NUMBER
5b. GRANT NUMBER
5c. PROGRAM ELEMENT NUMBER
5d. PROJECT NUMBER
5e. TASK NUMBER
5f. WORK UNIT NUMBER

6. AUTHOR(S)
Colonel Lee P. Gearhart
United States Army

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Commander Kimberly Miller
Department of Command, Leadership, and Management

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army War College, 122 Forbes Avenue, Carlisle, PA 17013

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Distribution A: Approved for Public Release. Distribution is Unlimited.

13. SUPPLEMENTARY NOTES
Word Count: 6,570

14. ABSTRACT
Diversity is key to The U.S. Army Operating Concept: Win in a Complex World, the Army Vision--Force 2025 and Beyond, and the U.S. Army Human Dimension Operating Concept. The Army Reserve (AR) is a diverse force that represents and serves the American people well. This study examined AR Gender and Race/Ethnic Group representation within the force by leadership opportunity. A leadership diversity gap was found with regard to female and minority opportunities. While Gender and Race/Ethnic Group trends were encouraging, more work remains regarding opportunities and advancement to senior rank. Females were significantly less likely to advance to senior officer rank and serve in key officer or Non-Commissioned Officer positions. Further, Blacks and Hispanics were significantly underrepresented overall in the officer ranks and their numbers contracted as they progressed to more senior ranks, as did their representation in key leadership positions. The inverse is true for Whites who were overrepresented in the officer ranks and their representation strengthened as they progressed to more senior ranks, where their percentages in key leadership positions remained robust.

15. SUBJECT TERMS
Gender, Race, Ethnic Group, Opportunity, Force 2025, Glass Ceiling

16. SECURITY CLASSIFICATION OF:
a. REPORT UU
b. ABSTRACT UU
c. THIS PAGE UU

17. LIMITATION OF ABSTRACT UU

18. NUMBER OF PAGES 39

19a. NAME OF RESPONSIBLE PERSON UU
19b. TELEPHONE NUMBER (w/ area code) UU
Army Reserve Leadership Diversity in the 21st Century

by

Colonel Lee P. Gearhart
United States Army

Commander Kimberly Miller
Department of Command, Leadership, and Management
Project Adviser

This manuscript is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the United States Government.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013
Abstract

Title: Army Reserve Leadership Diversity in the 21st Century

Report Date: 01 April 2015

Page Count: 39

Word Count: 6,570

Key Terms: Gender, Race, Ethnic Group, Opportunity, Force 2025, Glass Ceiling

Classification: Unclassified

Diversity is key to The U.S. Army Operating Concept: Win in a Complex World, the Army Vision--Force 2025 and Beyond, and the U.S. Army Human Dimension Operating Concept. The Army Reserve (AR) is a diverse force that represents and serves the American people well. This study examined AR Gender and Race/Ethnic Group representation within the force by leadership opportunity. A leadership diversity gap was found with regard to female and minority opportunities. While Gender and Race/Ethnic Group trends were encouraging, more work remains regarding opportunities and advancement to senior rank. Females were significantly less likely to advance to senior officer rank and serve in key officer or Non-Commissioned Officer positions. Further, Blacks and Hispanics were significantly underrepresented overall in the officer ranks and their numbers contracted as they progressed to more senior ranks, as did their representation in key leadership positions. The inverse is true for Whites who were overrepresented in the officer ranks and their representation strengthened as they progressed to more senior ranks, where their percentages in key leadership positions remained robust.
Army Reserve Leadership Diversity in the 21st Century

It is said to be necessary that all classes of citizens should have some of their own number in the representative body in order that their feelings and interests may be the better understood and attended to.

—Alexander Hamilton

The Army Reserve (AR) is a diverse and representative force that has strongly supported diversity measures across its force; however, to meet the requirements of Army Vision-Force 2025 and Beyond, it is necessary to have a force that is not only representative, but also diverse in its leadership. A recent headline in the Washington Times stated the “Army is worried too many white men lead combat units; racial diversity lacking.” This should cause Army leaders from all components to examine their force composition and diversity initiatives. While the Washington Times article focuses on the Regular Army (RA), is the underlying theme also true for the Army Reserve (AR)?

This research examined leadership diversity by looking through the race/ethnic group and gender lenses. The underlying thesis for this research is that the AR, while having a demographically representative population, will realize a similar fate mentioned earlier regarding the RA: leadership diversity lacking in its formations, and specifically, in mid- to senior-level non-commissioned officer (NCO) and officer leadership positions. While the AR is a representative force that has a history of integration that includes females in all but two percent of its positions and has larger minority representation than the US population, this does not mean it is diverse in leadership opportunity. To advance this thesis, the research will examine: initiatives aimed at implementing diversity, Army doctrine; barriers to diversity, gender- and race/ethnic group-based
diversity analysis on key AR demographics, AR organizational culture, and
recommendations for improving on any shortfalls.

Implementing Diversity

On July 28, 1948, President Harry Truman signed Executive Order 9981, establishing the President’s Committee on Equality and Opportunity in the Armed Forces. The Order’s preamble begins with words that forever changed the Armed Forces, “WHEREAS it is essential that there be maintained in the armed services of the United States the highest standards of democracy, with equality of treatment and opportunity for all those who serve in our country’s defense.” Since 1948, many efforts have focused on integrating the armed forces. Simply signing an executive order does not change an organization; studies, commissions, and policies are continually updated to address shortcomings.

The Military Leadership Diversity Commission (MLDC) was established by the National Defense Authorization Act for Fiscal Year 2009. Its purpose was to “conduct a comprehensive evaluation and assessment of policies and practices that shape diversity among military leaders.” The MLDC developed 20 recommendations after interviews across the country were conducted with service members, senior military leaders, and diversity experts. The MLDC arrived at two overarching themes that summarized their 20 recommendations,

(1) That the Armed Forces systematically develop a demographically diverse leadership that reflects the public it serves and the forces it leads and (2) that the Services pursue a broader approach to diversity that includes the range of backgrounds, skill sets, and personal attributes that are necessary to enhancing military performance.
Whether or not we can ever reach MLDC’s first theme is debatable. In many respects this is reminiscent of the “mirror model” representation trap or “politics of presence,” whereby demographic representation in elected government should replicate that found in society; this very rarely, if ever, happens. One author even suggested, “Making the assembly mirror the identities and images of people in larger society is typically one good way to help ensure representation of their ideas, interest and opinions, as well.”

The fact the military has an all-volunteer force, makes it nearly impossible to attain a “politics of presence” or “mirror representation” in the AR. Taken to the extreme, a broad-based diversity definition could include many factors: political affiliation, socio-economic background, or region of the country. Perhaps, issue acknowledgment and efforts aimed at more representative diversity should have been the MLDC’s overarching theme.

In addition to the MLDC report, the Department of Defense (DoD) released a strategic plan in 2012 subsequent to the MLDC recommendations. *The DoD Diversity and Inclusion Strategic Plan* incorporated many of the themes found in the MLDC’s recommendations and summarized three main goals:

1. **Ensure Leadership Commitment to an Accountable and Sustained Diversity Effort.**
2. **Employ an Aligned Strategic Outreach Effort to Identify, Attract, and Recruit from a Broad Talent Pool Reflective of the best of the Nation We Serve.**
3. **Develop, Mentor, and Retain Top Talent from Across the Total Force.**
A 2013 RAND report, *Implementation of the DoD Diversity and Inclusion Strategic Plan: A Framework for Change through Accountability*, combined elements from the 2011 MLDC recommendations and the *2012 DoD Diversity and Inclusion Strategic Plan* to provide two overarching recommendations. In summary, the recommendations were, “Develop the accountability structure for diversity and inclusion based on the framework we proposed” and “Establish a clear timeline of implementation milestones and publish annual status of progress toward these milestones for greatest transparency and accountability progress.”

---

**Army Doctrine**

In October 2014, the Army introduced *The U.S. Army Operating Concept: Win in a Complex World.* One of the five critical objectives addressed in the *Army Operating Concept* (AOC) is “developing the future force.” Dovetailing into the AOC is the *Army Vision—Force 2025 and Beyond*, which emphasizes human performance optimization. Human performance optimization is further articulated in the *U.S. Army Human Dimension Operating Concept*. The *Human Dimension Operating Concept* stated purpose is,

The U.S. Army Human Dimension Concept provides a framework for how the future Army must select, develop, sustain, and transition Soldiers and Army Civilians to prevent, shape, and win in the 21st Century. This concept redefines the parameters of the human dimension as encompassing the cognitive, physical, and social components. It includes all aspects of Soldier, Civilian, leader, and organizational development and performance essential to raise, prepare, and employ the Army in unified land operations.

Diversity is one of the social components that supports the *Human Operating Concept, Win in a Complex World, and Force 2025 and Beyond*. How well the AR arrives at more diverse formations and leadership is critical to implementing the Army Vision.
To better understand the nature of the problem and implement MLDC recommendations, DoD’s strategic plan, and support the future Army, it is necessary to define the nature of the problem. Fleshing out barriers to diversity will likely assist in understanding why leadership diversity may be lacking in the AR.

Barriers to Diversity

The term “glass ceiling” was used to describe barriers that precluded women from attaining higher levels in an organization due to their gender. Women were held back in corporate America by the dominant group, mainly white males. A modern day glass ceiling interpretation follows,

Women dedicated themselves to breaking down the barriers that were believed to be blocking their entrance into the executive suite. As women progressed within the workforce the term glass ceiling began to take on a much larger meaning. After decades of only referring only to women, the glass ceiling has now come to represent the barriers that all minorities face in a quest for executive leadership positions.

An article containing an excerpt from a René Redwood (former Special Assistant to the Secretary of Labor, Robert Reich) speech given at the "Working Women's Summit" held by Women in Technology International in Philadelphia, Pennsylvania in September 1996, further expands on glass ceiling barriers. According to the article,

Research suggests that the underlying cause for the existence of the glass ceiling is the perception of many white males that they as a group are losing—losing competitive advantage, losing control, and losing opportunity as a direct consequence of inclusion of women and minorities.

The article further identified three barriers cited in The Findings and Recommendations of the Federal Glass Ceiling Commission: societal barriers, difference barriers, and government barriers. Each of these barriers will be examined as potential contributors to a glass ceiling in the AR.
Societal barriers are essentially barriers to “educational opportunities and the level of job attainment.”

If one thinks of the military as its own society, it is a little easier to see how this barrier may apply. Institutionally, the Army limited opportunities for females serving in the RA and AR. Military Personnel Message 14-200, FY 14 Army Directive 2014-16 Expanding Positions in Open Occupations for the Assignment of Female Soldiers and Army Reserve Guidance for the Assignment of Female Soldiers into Previously Closed Units served to open opportunities for females. These policy changes focused on removing institutional barriers for females, but did little to remove barriers for male minorities.

Difference barriers are those “manifested through conscious and unconscious stereotyping and bias.” Difference barriers are best associated with the “unwritten rules” that may apply when trying to advance in a career. These unwritten rules could be as simple as a hiring authority employing someone who looks like them. A theory, such as the Leader-Member Exchange Theory (LMX), may help explain how the difference barrier manifests.

The basic premise of LMX theory is that leaders usually establish a special exchange relationship with a small number of trusted subordinates (labeled the in-group). Interactions between the in-group and leaders tend to be substantive and based on meaningful relationships that transcend the bare minimum requirements. The exchange relationship established with the remaining subordinates is substantially different (labeled the out-group).

While the LMX theory emphasizes functional relationships (in- and out-group) rather than gender or race/ethnic group, existing stereotype/biases could contribute to in- and out-group formation. I would also offer that subtle racism fuels the glass ceiling specifically for minorities.
Less overt cultural biases, held by the minority candidates as well as by their managers, can also influence behavior. For example, studies have shown that white managers are often reluctant to offer constructive criticism to minority employees for fear that it will be seen as a racial attack. As a result, minority employees miss the opportunity to get the feedback necessary for their growth and development in the organization.24

Finally, government barriers are “the collection and disaggregation of employment related data which make it difficult to ascertain the status of various groups at the managerial level.”25 This type of barrier is probably best described as reporting bias. The Army is likely less prone to this type of barrier due to stringent reporting requirements which are part of the Equal Opportunity Reporting System; one such report is the detailed Quarterly Narrative and Statistical Report.26 What the Army does with this data is the larger question, since diversity integration seems to be in question today. Even though this article was written nearly 20 years ago, it is plausible that these three barriers continue to hinder progress for women and minorities.

The detractors claim that the glass ceiling theory is a myth. The typical argument is that women make choices as they advance in their careers. In many instances, those choices avert them from advanced education toward raising a family. As one author stated, “These arguments, however, did not hold true in regards to the male minority population.”27 The US Department Labor, which formed the Glass Ceiling Commission, issued the Report on the Glass Ceiling Initiative in 1991; this report presented strong evidence that validated the glass ceiling’s existence.

Thanks to the leadership and vision of Secretary Elizabeth Dole--and that of her able successor, Secretary Lynn Martin--the Department of Labor became closely involved in identifying and publicizing the glass ceiling problem, issuing a Report on the Glass Ceiling Initiative in 1991. Senator Robert Dole, who introduced the Glass Ceiling Act in 1991, praised Martin’s report, noting that it ‘confirm(s) what many of us have suspected
all along—the existence of invisible, artificial barriers blocking women and minorities from advancing up the corporate ladder to management and executive level positions.’ He added: ‘For this Senator, the issue boils down to ensuring equal access and equal opportunity.’

AR Demographic Data

Data analyzed in this research was a one-time extract supplied by the AR G1. The electronic data set contained roughly 195,000 individual records with corresponding demographic variables. The demographic data file used was from the AR personnel database (commonly referred to as the “G18” file) and represents a “snapshot” in time. Variables used, included: Race/Ethnic Group, Gender, Rank, Opportunity and AR Major Command (ARMACOM).

Operational Definitions

This research used the following operational DoD definitions for the variables. For Race, DoD recognizes the following categories: White, Asian/Pacific Islander, Black, American Indian, and other. For Ethnic Group, 22 values were included in the data set; the data include the following variants: Hispanic (Puerto Rican, Cuban, Mexican, Latin American, and other Hispanic descent), Asian (Other Asian descent, Filipino, Chinese, Japanese, Korean, and Vietnamese), American Indian and Alaskan Native (United States, Canadian/Indian Tribe, Eskimo, and Aleut), Pacific Islander (Melanesian, Guamanian, Polynesian, other Pacific Island descent, and Micronesian), other, unknown, and none. A final hybrid variable was created that adhered to DoD and Service reporting norms. The final Race/Ethnic Group variable included the following values: Hispanic, American Indian/Alaskan Native, Asian, Pacific Islander, Black, White, and other. It is important to note that the 22 individual values were recoded into their constituent populations (i.e., American Indian/Alaskan Native equals United States
Canadian/Indian Tribe plus Eskimo plus Aleut) in an effort to create representative Race/Ethnic Group clusters.

Gender classification is reported as either male or female. Values that included none or unknown were recoded as missing values.

Rank values are depicted interchangeably as rank or grade (E1 through O8/private through major general). This variable will be portrayed by individual rank, broad bands (E1-E4, E5-E7, E8-E9, WO1-CW3, CW4-CW5, O1-O3, O4-O6, and O7-O8), or narrowly by category (enlisted, officer and warrant officer). Rank coded as “Cadet” was removed from the overall data set. (Cadets in the AR are simultaneous members in the Reserve Officer Training Corps and an AR unit. Their numbers are small, thus making statistical analysis inappropriate for this research.)

A variable, “Opportunity,” was created to reflect officers and NCOs who served in key leadership positions. These key leadership positions were identified in the data file as free text and later converted into the new “Opportunity” variable that contained the following values: officer command (commander, deputy commander), officer staff (executive officer, primary staff officer, chief of staff, command chief warrant officer), NCO command (command sergeant major, first sergeant), and NCO staff (primary staff positions, NCO In Charge). Due to missing data, varying naming conventions, and misspellings in the provided data set, not all positions for the Opportunity variable were captured (in these instances, the data was recorded as missing). Also, ranks E1 to E6 were removed from the data set only for Opportunity analyses, since they did not meet the criteria to be in command or staff positions. (They were included in overall...
demographics, however.) The Opportunity variable data is generally representative of the AR population, but is likely underreported in the results.

The ARMACOM variable reflects AR combat support and combat service support force composition. The AR has 34 major commands that are broadly distinguished into four categories by the functions they perform,

(1) Operational Commands (theater-level capabilities, operational command headquarters are deployable units which can deploy individual subordinate units); (2) Functional Commands (maintain and generate specific kinds of capabilities and deploy their subordinate units; the headquarters are not deployable); (3) Training Commands (provide routine training of Army, Army Reserve, and Army National Guard Soldiers); and (4) Supporting Commands (Regional Support Commands that provide base, logistics, and personnel support).29

Methodology

Data was analyzed using the Statistical Package for the Social Sciences.30 The subsequent data analysis is not longitudinal in nature, nor does it track a cohort; it represents discrete data at one moment in time. Variables with string values were recoded into numeric values for ease of analysis. Contingency tables were generated and Chi-Square ($\chi^2$) statistical tests were applied to variables specified in this study. The $\chi^2$ was chosen since it suggests what expected frequencies should be in a given scenario; it is illustrated below.

The logic underlying the chi-square test focuses on the concept of expected frequencies. This concept can be illustrated using the coin flipping example...Suppose you are given a coin and asked to determine whether it is fair. If you assume that the coin is fair, your best guess about the outcome of 100 flips would be 50 heads and 50 tails (since the probability of each is .50). These expected frequencies can then be compared with the observed frequencies when you actually flip the coin. Suppose that, after 100 flips, you had observed 53 heads and 47 tails. Although the observed frequencies are not exactly 50/50, you would be hesitant to conclude that the coin is biased based on your knowledge of
sampling error. But suppose that the observed frequencies had been 65/35. These are much more discrepant from the expected frequencies. The null hypothesis ($H_0$) for this research is: Gender and Race/Ethnic Group are unrelated to Rank, Opportunity, and ARMACOM in the AR population. Tests for significance were set at the .05 level and results with a value of $p < .05$ were statistically significant and rejected the $H_0$. Any test meeting this threshold indicated the variables Gender and Race/Ethnic Group were related to Rank, Opportunity, and ARMACOM in the AR population. Chi-Square statistical tests were applied to either confirm or reject $H_0$ with results reported in the following format: $X^2(8, N = 195741) = 6034, p < .001$. In the previous Chi-Square example, 8 represents degrees of freedom, $N$ or $n$ represent the population or sample size, 6034 represents the Chi-Square value, and $p < .001$ is a measure of significance. Specific analyses conducted in this research is outlined below.

Gender-based analyses included the following descriptive statistics: frequencies, contingency tables, and $X^2$ statistical tests. Analysis areas included: overall gender representation in the AR compared to the RA and the US population; overall gender representation in the Opportunity variable (and how this compares to gender composition in the AR); overall gender representation by rank; and overall gender by ARMACOM.

Race/Ethnic Group analyses included the following descriptive statistics: frequencies, contingency tables, and $X^2$ statistical tests. Analysis areas included: overall race representation in the AR compared to the RA and the US population; overall race representation in previously defined Opportunity variable (and how this compared to racial composition in the AR); and overall race representation by rank.
Gender by Race/Ethnic Group analyses included the following descriptive statistics: frequencies, contingency tables, and $X^2$ statistical tests. Analysis areas included: overall Gender by Race/Ethnic Group representation in the AR compared to the RA and the US population; overall Gender by Race/Ethnic Group representation in previously defined Opportunity variable (and how this compared to Gender by Race/Ethnic Group composition in the AR); and overall Gender by Race/Ethnic Group representation by rank.

**Findings**

Overall Gender percentages for the AR, RA, and the US population follow. September 2014 figures revealed the AR breakout for Gender is 77% male and 23% female; the RA is 86% male and 14% female; the Army National Guard (ARNG) is 84% male and 16% female (as of September 2013); and the US population breakout is 49% male and 51% female. While neither the AR, RA nor ARNG represent the US population as a whole, the AR fared significantly better with regard to gender representation. This difference may be attributable to the fact AR formations include females in most enlisted Military Occupational Specialties and officer Areas of Concentration (AOC).

Table 1 depicts overall Race/Ethnic Group percentages for the AR, RA, and the US population.
Table 1. Race/Ethnic Group Breakouts (by author)

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>American Indian/Alaskan Native</th>
<th>Asian</th>
<th>Pacific Islander</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Pop&lt;sup&gt;35&lt;/sup&gt;</td>
<td>63%</td>
<td>13%</td>
<td>1%</td>
<td>5%</td>
<td>.2%</td>
<td>17%</td>
<td>2%</td>
</tr>
<tr>
<td>RA&lt;sup&gt;36&lt;/sup&gt;</td>
<td>69%</td>
<td>21%</td>
<td>1%</td>
<td>4%</td>
<td>1%</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>AR</td>
<td>55%</td>
<td>22%</td>
<td>1%</td>
<td>5%</td>
<td>1%</td>
<td>15%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Table 1 depicts Black population overrepresentation in the AR and RA when compared to the US population. Additionally, the Hispanic population was slightly underrepresented at 12% (RA) and 15% (AR) when compared to the US population, 17%. Finally, the White population was less represented in the AR (55%) when compared to the US population (63%) and RA (69%). (As a note, the AR and US population figures represent those individuals who claimed to be White, without Hispanic or Latino descent. The RA figure is not White alone, but included Hispanic or Latino descent ethnic groups; in all likelihood, the RA has a similar figure to the AR if multiple ethnicities were removed.)

**Gender-based Findings**

The four contingency tables created include: Gender by Rank, Gender by Ethnic Group, Gender by Opportunity, and Gender by ARMACOM. First, Gender by Rank was examined. Significant differences were found between Gender and Rank, $X^2 (2, N = 195873) = 259, p < .001$. In large part, this significant finding resided in the Warrant Officer and Officer categories. Females accounted for 16% of the Warrant Officers (n=498) when close to 730 (assumed value if 23% female force composition was proportional to rank) was expected in the analysis. When examined further, females equaled 16% of the WO1 to CW3 ranks and 14% of the CW4 to CW5 ranks. In the
officer category, females were overrepresented at 26%, but further analysis revealed they were clustered at the O1 to O3 ranks, decreased at O4 to O7, and had a representative population at O8. An officer rank breakdown by gender is shown in Figure 1 (a reference line was added at 23% to indicate overall female force composition in the AR).

![Gender rank distribution](image)

**Figure 1. Gender as a Percentage of Officer Rank (by author)**

Next, significant differences were found within the NCO ranks. Depicted in Figure 2, females remain relatively consistent in NCO composition from E5 to E8 and E9 (Sergeant Major), but fall off dramatically in unit leadership positions (E8/1SG and E9/Command Sergeant Major).
Figure 2. Gender as a Percentage of NCO Rank (by author)

Second, Gender by Race/Ethnic Group contingency tables yielded statistically significant results. Significant differences were found between Gender and Race/Ethnic Group, $X^2 (8, N = 195741) = 6034, p < .001$. Two areas that highlighted significance were noted as Black and White females. Black females were overrepresented in race at 36%, while White females were underrepresented at 17%. These were the two outliers in this analysis.

Third, Gender by Opportunity contingency tables yielded statistically significant results. Significant differences were found between Gender and Opportunity, $X^2 (3, N = 9877) = 99.19, p < .001$. Two areas that highlight the significance (See Figure 3) were female underrepresentation in both officer command positions (18%) and NCO command positions (12%).
Fourth, Gender by ARMACOM contingency tables yielded one statistically significant result. The significant difference was found when Gender and ARMACOM were examined, $X^2 (3, N = 192530) = 81.57, p < .001$. Females were overrepresented in Supporting Commands (27%), but proportionally represented in Operational Commands (23%), Functional Commands (23%), and Training Commands (23%).

Finally, Gender by ARMACOM by Opportunity contingency tables yielded one significant result, $X^2 (3, N = 1955) = 46.14, p < .001$. Specifically, females were underrepresented in NCO Command positions at the following ARMACOMs: Operational Commands (11%), Functional Commands (9%), and Training Commands (11%). Females did, however, have strong NCO Command representation in Supporting Commands (26%). All other Opportunity values (Officer Command, Officer
Race/Ethnic Group-based Findings. The two contingency tables with Chi-Square tests, included: Race/Ethnic Group by Rank and Race/Ethnic Group by Opportunity. All Race/Ethnic Group-based tests were highly significant at the .001 level, where $p=.000$.

Several areas of interest appeared. As noted above in Table 1, the White population should approximate its overall force composition (55%). A significant difference was found between Race/Ethnic Group and Rank, $X^2 (16, N=195739) = 3108, p < .001$. In this analysis, Whites were overrepresented in both warrant officer (67%) and officer (65%) ranks. Whites were also overrepresented in all officer rank clusters: WO1 to CW3 (65%), CW4 to CW5 (75%), O1 to O3 (61%), O4 to O6 (70%), and O7 to O8 (87%).

Blacks, who should be at 22%, were overrepresented in the E8 to E9 rank cluster at 29%, but were underrepresented in both warrant officer (17%) and officer (18%) ranks. Specifically, Blacks were underrepresented in all officer rank clusters: WO1 to CW3 (18%), CW4 to CW5 (12%), O1 to O3 (19%), O4 to O6 (16%), and O7 to O8 (5%). The Hispanic population should be roughly 15% in each respective rank category, but they were also underrepresented in both warrant officer (10%) and officer (8%) ranks. Specifically, the Hispanic population was underrepresented in all officer rank clusters: WO1 to CW3 (11%), CW4 to CW5 (8%), O1 to O3 (10%), O4 to O6 (7%), and O7 to O8 (4%).

Next, Ethnic Group by Opportunity yielded significant results. A significant difference was found between Race/Ethnic Group and Opportunity, $X^2 (21, N=9877) = 296, p < .001$. First, Whites were overrepresented in the Officer Command variable at
72%, which is consistent with the findings in Ethnic Group by Rank. Whites were also slightly overrepresented in Officer Staff (61%) and NCO Command (63%). Second, Blacks were underrepresented in Officer Command (14%) and Officer Staff (19%), also consistent with the Ethnic Group by Rank findings. Blacks were overrepresented on the NCO Staff value at 31%. Finally, consistent with the above Ethnic Group by Rank findings, Hispanics were underrepresented in all Opportunity areas: Officer Command (8%), Officer Staff (10%), NCO Command (10%), and NCO Staff (11%).

Interpretation

This research suggests the AR has a leadership diversity gap (LDG). The LDG is based on the statistically significant results found in the above data analyses. A LDG score is a directional percentage: a positive LDG indicates the population is overrepresented compared to the expected outcome; a negative LDG indicates the population is underrepresented compared to the expected outcome; and a zero LDG indicates the population was represented as expected. This LDG is reflected in the percentage of minorities and females found in mid- to senior-grade officer and NCO leadership positions. The results will be discussed below.

The LDG values for Gender-based analyses can be seen in Figure 4. As a reminder AR Gender-based population breakout (expected value) is 23% female and 77% male; LDGs are reflected as percentage deviation from the expected value. First, females were underrepresented in warrant officer categories and their numbers tapered off even more as they progressed through rank (from -7% to -9%). Starker contrasts were noted in the officer ranks, where females were strongly represented in the junior officer ranks, but dissipated as they progressed to more senior ranks (+7 to -7). Second,
when Opportunity was examined, females served proportionally in Officer Staff and NCO Staff positions, but were underrepresented in Officer Command (-5%) and NCO Command (-11%) positions. The assumption to the above is females who do not attain senior officer rank, will not achieve Officer Command or NCO Command opportunities. However, the opposite was true in the NCO Corps. While female representation trended down slightly from junior to senior ranks, their population size remained consistent with overall force representation. Finally, female officers and NCOs were less likely to serve in Officer or NCO Command positions and more likely to serve in Officer or NCO Staff positions.

![Figure 4](image)

**Figure 4. Gender-Based Leadership Diversity Gap (by author)**

The LDG values for Ethnic Group/Race-based analyses can be seen in Figure 5. As a reminder, AR Ethnic Group/Race-based population breakout (expected value) is 15% Hispanic, 22% Black, and 55% White.
Two interesting trends are depicted: Hispanics and Blacks were underrepresented overall in officer ranks and their numbers further contracted as they progressed to more senior ranks. The inverse was true for Whites who were overrepresented in the officer ranks and their representation expanded as they progressed to more senior ranks. Next, Race/Ethnic Group by Opportunity LDG values found Black NCOs were overrepresented in NCO Staff positions, but proportional in NCO Command. Black officers were underrepresented in Officer Command (-8%) and Officer Staff positions (-3%). Hispanic officers and NCOs were underrepresented in all Opportunity values. White officers were overrepresented in Officer Command (+17%) and Officer Staff (+6%) positions, but White NCOs were overrepresented in only NCO Command positions (+8%). In summary, Black and Hispanic officer numbers contracted as they progressed to more senior ranks, as did their representation in Opportunity
White officer percentages in Opportunity positions remained consistently robust.

Recommendations

The “why” behind this LDG trend is difficult to ascertain, although it is quite likely the AR has its own legacy glass ceiling. As discussed earlier, societal, difference, and government functions provide barriers to diversity, resulting in a glass ceiling. Intuitively, it would seem that the unknown difference barriers (i.e., unwritten rules, personal biases, hiring preferences) explain LDG, since the known societal and governmental barriers have mostly been eliminated through law or policy (i.e., affirmative action plans, diversity reporting requirements, female inclusion in once closed specialties). Approaches to overcoming the LDG could be applied in any number of areas: organizational culture, training and leader development, strategic communication, and follow-up. Mechanisms for change will be examined further in the recommendations.

Organizational Culture

On an organizational level, the AR could inadvertently perpetuate an environment conducive to gender or Race/Ethnic Group separation resulting in limited advancement opportunities for Females, Blacks, and Hispanics. Formations that are primarily gender exclusive come to mind (combat arms, special operations, etc.). While the AR has been gender inclusive for approximately 20 years, artifacts could remain that perpetuate limitations. These artifacts appear to be limited in ARMACOMs, where gender was consistently represented. Perhaps, the artifacts reside in how Soldiers are recognized (evaluations, awards, board results, etc.).
The same could be true for Blacks and Hispanics; while they have substantial representation in the AR, their numbers dissipated at more senior ranks. For whatever reason, Blacks and Hispanics leave AR formations at greater rates before reaching senior rank. It is possible that a larger White population (in-group) only sees Blacks and Hispanics who make it through the "gates" in smaller numbers, thus limiting exposure to the out-group. The result would be a subconscious bias when promotion and selection boards were held, not to mention how the out-group was recognized (e.g., awards, evaluations, internal organizations advancement). Put another way, “If one does not see the out-group in leadership positions and senior ranks, they may cognitively forget them.” Lingering items that could foster an out-group mentality toward females and minorities, could be: personnel processes, recognition systems, training, doctrine, and the fact that gender inclusion is a relatively new phenomena.

Changing or adapting an organizational culture to address the LDG and meet the needs of the future force is no easy task. A sketch depicting how the AR could approach the issue is detailed in Figure 6. First, it is my belief the AR has the resources necessary to build the change foundation; it simply needs to “Refresh” its perspective with the LDG in mind. Second, leader actions in the areas of training and development, strategic communication, and follow-up is necessary to “Implement” the change. Finally, as leaders refresh and implement change, they will be better able to “Integrate” into the Army Operating Concept and Human Dimension Concept.
Training and Leader Development

Army Reserve Soldiers train together a minimum of 39 days a year on weekends and two weeks for annual training; it is critical that training and leadership development opportunities be optimized for the limited amount of time they are together. First, the AR should evaluate its pre-command course curriculum and ensure the LDG is discussed and woven throughout the instruction.

Second, military service organizations could be leveraged to highlight leadership diversity. Organizations, such as the Reserve Officer Association and Association of the United States Army play key roles as change agents within the regular and reserve components. Further, the Army Reserve Forces Policy Committee and Reserve Forces Policy Board could sponsor more extensive diversity research within the AR and RC.
Third, formalized mentoring programs are necessary. Mentoring programs must begin early for both officers and NCOs. While the typical mentor-protégé relationship relies on the protégé to seek assistance, the paradigm must change. Senior leaders must engage junior officers and NCOs early and guide them to actively engage potential mentors. As part of a formal mentoring program, 360 assessments, such as the Multi-Source Assessment Feedback and evaluation-based feedback must be used to ensure officers and NCOs are properly progressing along career paths. Perhaps professional social media could be used to link mentors and protégés.

Finally, on January 16, 2015, the CAR released, *Army Reserve Command Training Guidance (CTG) – Fiscal Year 2015 (FY15), Supplement 1*. Part of the Supplement includes leadership development guidance. Specifically, the following is worth noting.

Leader Development (LD). Leader Development, along with unit readiness, is the essential endstate of our training and operational activities. The connected actions of Training, Education, and Experience across our formations lead to the continuous growth of our Army Reserve Team. I expect Commanders and leaders to be energetic and focused on integrating Leader Development into everything they do. This increased leader emphasis builds the foundation to effectively exercise Mission Command across training and operational missions.

To support this effort, I realigned USARC staff positions to provide an integrated Leader Development focus. This team will develop a specific AR Leader Development Guidance by the end of 2nd Qtr FY 15 to further strengthen and synchronize programs and efforts. 37

It is my recommendation that the AR Leader Development Guidance consider the findings in this research and use them as further guidance in preparing for the larger AR. If LD guidance is developed with an ear toward the leadership diversity gap, perhaps this will be a starting point to place the AR on a self-correcting course.
Strategic Communication

Opportunities to communicate the diversity message and LDG to the AR are unlimited, but the message must be consistent and predictable. First, the CAR promulgates his vision for the AR via a “Rally Point” publication,

Rally Point 32.1 (RP 32.1) is the Army Reserve’s response to the uncertain fiscal and complex security environment that confronts the Nation. RP 32.1 builds upon my initial Rally Point 32 (RP 32) released in June 2012. We revised the Army Reserve’s Strategic (Component) and Operational (Command) priorities to better achieve our new strategic objective of Force 2025 & Beyond (F2025B). It is recommended that diversity integration be included in the CAR’s Rally Point publication. Second, the Army Reserve Campaign Plan (ARCP) is a key document published annually that is nested within the Army’s Force 2025 and Beyond. In summary,

The Army Reserve Campaign Plan (ARCP) organizes and communicates how the Army Reserve (AR) supports the Army in achieving the Army end state: “a Globally Responsive, Regionally Engaged, Mission Tailored Army that can Prevent, Shape, and Win.” Key references for the ARCP 2015 are the Army Campaign Plan (ACP) 2014 and the U.S. Army Reserve 2020 Vision & Strategy (AR 2020).

This key synchronizing document lacks language pertaining to diversity. Two areas where diversity could be injected into this critical document include: “Campaign Objective 1.0, Man the AR & Enhance the All- Volunteer Force” and “Campaign Objective 3.0, Train & Develop Leaders.” Finally, AR publications, whether social media or traditional venues, must be better utilized to leverage AR diversity messaging.

Follow-Up

No course of action should be implemented without measures in place to ensure effectiveness. This follow-up could be designed as specific ad hoc analyses or limited
studies. The focus here should be on retaining and developing targeted populations based on gender and race/ethnic group; examples are detailed below.

Civilian Population. This study has been entirely focused on the military population. There is an equally important civilian population that supports Soldiers and families. Diversity within the civilian workforce should be considered for another study area.

Recognition Systems. An examination on how the AR incentivizes and recognizes individual workplace performance with regards to board selections, awards, and evaluations should be completed to ensure diversity efforts are yielding desired results. A 2008 RAND Report entitled Planning for Diversity: Options and Recommendations for DoD Leaders, echoes this sentiment: “Design and apply a comprehensive accountability system with real rewards and consequences for individuals and groups.”

Longitudinal Study. A longitudinal study capturing Gender and Race/Ethnic Group trends by Rank and Opportunity over time would be appropriate. This would be a large undertaking since it would change/modify the way some data is collected. As the reader may recall, the AR database used to capture the data for this research contained manually inputted values as free text, within limited parameters (i.e., executive officer could appear as XO, EX Off, Ex Off, or any number of variations). A structured way to identify the Opportunity variable in the AR database could lend credence to a longitudinal study. A key component to this recommendation, as stated in the earlier referenced 2008 RAND report is to, “Invest in and develop rigorous metrics on all dimensions that support the strategic vision.” Such a study could support modeling
that provides targeted diversity retention rates for race, rank, gender and race/ethnic group. The AR has Operations Research and Systems Analysts who could prove invaluable in obtaining the data and interpret the findings with the help of a diversity integrator.

Cohort Study. A thorough, long term study could look at cohort groups by Gender and Race/Ethnic Group. If these groups are identified at initial entry into the AR, they could be tracked throughout their careers. When cohort members decide to leave service, interviews should be conducted, as well as deep-dive data analysis that focuses on demographic variables and missed opportunities (e.g., board selections, awards, evaluations). This type of study would involve a real investment in time and may not be practical.

Strategic Committee. Strategic committees such as working groups, councils of colonels, general officer steering committees, or tiger teams could be formed to target particularly difficult issues. This group could assist the CAR with reworking the “diversity roadmap.” As a start point the top three recommendations from the 2008 RAND report should be considered:

1. Have the Secretary of Defense spearhead the strategic diversity effort.
2. Create an oversight committee with top DoD leaders from a wide range of professional/functional and personal backgrounds.
3. Adopt a vision that combines attention to traditionally protected groups with aims for creating an inclusive environment.43

While the RAND report focuses on DoD leaders and initiatives, it may be possible to scale down its recommendations to the AR.
Conclusion

Diversity is a key component found in *The U.S. Army Operating Concept: Win in a Complex World*, the *Army Vision-Force 2025 and Beyond*, and the *U.S. Army Human Dimension Operating Concept*. Overall, the AR is a diverse force that represents US population demographics well. This research, however, suggests the AR has a leadership diversity gap. This LDG is reflected in the percentage of minorities and females found in mid- to senior-grade officer and NCO leadership positions.

Females were significantly less likely to advance to senior officer rank and serve in Officer Command or NCO Command positions. Further, Blacks and Hispanics were significantly underrepresented overall in the officer ranks and their numbers further contracted as they progressed to more senior ranks and, as expected, so did their representation in Opportunity positions. The inverse was true for Whites who were overrepresented in the officer ranks and their representation grew larger as they progressed to more senior ranks. White officer percentages in Opportunity positions remained consistently robust.

Finally, recommendations were made to help shrink the LDG. The areas examined included organizational culture (refresh, implement, integrate), training and leader development, strategic communication, and follow-up actions. While change in a fiscally constrained environment will be challenging, new resources are not required--merely a new way to look at the problem. Army Reserve diversity can play a key role in human performance optimization, thus making it a partner of choice for *Force 2025 and Beyond*.
Endnotes


4 Army Reserve G-1, various e-mail messages to author, December 10, 2014.


7 Ibid., 7.


9 Ibid., 455.


13 Ibid., iv-v.


15 Ibid., 5.


18 Ibid.

19 Ibid.

20 Ibid.


25 Ibid.

26 Deputy Chief of Staff, Army G-1, Equal Opportunity Reporting System (EORS) Online, http://www.armyg1.army.mil/eo/database.asp (accessed January 30, 2015). EORS as described by the web-site: “The Equal Opportunity Reporting System (EORS) database is used to collect, record, and maintain racial, ethnic group, and gender data and statistics needed to support the Army EO Program, to include AAP reporting requirements. In Accordance with (IAW) AR 600-20, ch 6-16, all MACOMs will submit a Quarterly Narrative and Statistical Report (QNSR) on equal opportunity progress to Headquarters Department of the Army (HQDA) no later than 30 days following the end of each quarter. Reports will be submitted to the Human Resources Directorate, Office of the Deputy Chief of Staff (ODCS), G-1 utilizing the automated Equal Opportunity Reporting System (EORS).”

27 Wilson, “Diversity, Culture and the Glass Ceiling,” 86.


30 Statistical Package for the Social Sciences (IBM SPSS Statistics Version 22), IBM, Armonk.


35 Ibid.

36 Defense Manpower Data Center, “DoD Data Reports Online”.


40 Ibid., 16, 59.


42 Ibid.

43 Ibid.