

Abstract

The purpose of our research is to identify gender disparities in retention amongst Navy Supply Corps Officers. Our goal is to provide a clear assessment of retention of gender diversity across time and rank in the Supply Corps community. We will also identify factors leading to female retention among Navy Supply Corps Officers compared to female officers Navy-wide.

Methods

- Descriptive statistics and formal tests of significance (T-test) on data of 31,771 individuals in communities of Supply Corps, Aviation, Human Resources, Medical Corps, and Surface Warfare
- Descriptive statistics and formal tests of significance (T-test) on survey of 1,940 active duty Navy Supply Corps officers in the paygrades of O5 and junior. Survey response rate of 36.8%.
- Qualitative sentiment analysis and word cloud of survey short-answer responses

Results & Their Impact

- Gender differences (data) for Supply Corps officers are statistically significant for separations (90% confidence level), retained married, and retained with children (both at the 99% confidence level).
- Retention patterns for Supply Corps women align most closely to SWO. Separation patterns for Supply Corps women align most closely to Medical Corps.
- Retention and separation patterns for married women align most closely to SWO. Retention and separation patterns for women with children align most closely to Medical Corps.
- Gender differences (survey) are statistically significant for reasons officers joined the Navy (95% confidence level), intention to remain on active duty beyond 20 years (90% confidence level), expectations to be primary financial provider when joined (90% confidence level), feeling supported in their career by their significant other (99% confidence level), pre-retirement eligibility separation drivers (95% confidence level), and retention incentives/drivers (99% confidence level)

DATA ANALYSIS

Supply Corps T-test results, 2006-2014

2006-2014	Male	Total observations	Female	Total observations	P-value
Separation	0.4347	1,157	0.4947	281	0.0722*
Married, retained	0.4223	1,558	0.3507	402	0.0080***
Children, retained	0.2760	1,558	0.1841	402	0.0000***

SURVEY ANALYSIS

Supply Corps Survey T-test results, Separation Drivers

Active duty Supply Corps officers, as of Nov 2021	Male mean value	Total observations	Female mean value	Total observations	P-value
Separation drivers, significant other's career	4.13	226	4.51	63	0.0119**
Separation drivers, undesired billet assignment/location	4.00	223	4.23	62	0.0876*
Separation drivers, lack of job flexibility	3.88	222	4.18	61	0.0211**

Supply Corps Survey T-test results, Retention Incentives

Active duty Supply Corps officers, as of Nov 2021	Male mean value	Total observations	Female mean value	Total observations	P-value
Retention incentives, needs of family assignment	4.00	467	4.23	119	0.0495**
Retention incentives, location preference	4.29	474	4.43	122	0.0651**
Retention incentives, mil to mil co-location assignment	2.41	441	3.34	117	0.0000***
Retention incentives, better work-life balance	4.13	465	4.41	119	0.0008***
Retention incentives, job assignment/hours to support family planning	3.91	462	4.39	118	0.0000***

Supply Corps Survey T-test results, Miscellaneous

Active duty Supply Corps officers, as of Nov 2021	Male mean value	Total observations	Female mean value	Total observations	P-value
Join, serve	4.28	541	4.06	132	0.0254***
Join, benefits	4.21	527	4.39	132	0.016**
Intent to remain on active duty beyond 20 years	3.44	537	3.16	127	0.0889*
Family's primary financial provider when joined service	1.53	544	1.68	133	0.0569*
Supported in career by spouse or significant other	4.31	514	3.98	126	0.0059***

*significant at the 90% confidence level

***significant at the 99% confidence level



Recommendations

- Continue analyzing yearly gender data to track progress.
- Answer survey responses with capabilities and intent to support recommendations (or lack thereof)
- Expand research to compare to other Staff Corps communities
- Expand research to analyze gender percentages for transgender officers and marital status percentages for dual military and divorced officers. Analyze age at marriage and age at first child to track future predictions.