



2014 Status of Forces Survey of Active Duty Members: Leading Indicators

Introduction

The purpose of this paper is to summarize a briefing on leading indicators in the *2014 Status of Forces Survey of Active Duty Members*. This briefing begins with a short introduction, followed by coverage of each of five topics: retention, satisfaction, tempo, stress, and readiness. The 2014 results are presented for each question for an additional 40 demographic subgroups. Trend comparisons are made for Service members overall, by Service, paygrade, and deployment status.¹

Summary of Topics Covered in Briefing

Retention

- 63% of members indicated they intend to stay on active duty—3 to 4 percentage points lower than the highs of January 2011, June 2012, and 2013² but 5 to 8 percentage points higher than July 2002 and July 2003 to August 2008.³
- 55% of members who were married or separated or had a significant other reported their spouse/significant other supports their staying on active duty—5 to 10 percentage points higher than March 2003 to November 2008.
- 48% reported their family supports their staying on active duty—3 to 4 percentage points lower than January 2011 and June 2012 but 3 to 10 percentage points higher than March 2003 to August 2004 and March 2005 to November 2008.

Satisfaction

- 64% of members reported being satisfied with the military way of life—3 percentage points higher than April 2007, but 2 to 3 percentage points lower than March 2003 and December 2009.
- Members were most satisfied with the type of work they do in their military job (67%)—4 percentage points lower than March 2003.
- Members were least satisfied with their opportunities for promotion (51%)—4 percentage points higher than the low of July 2002, but 3 to 4 percentage points lower than the highs of August 2004, December 2005, December 2006, and December 2007 to August 2009.

¹ Deployment status comparisons are based on Service members' self-reports of whether they had been deployed in the preceding 24 months.

² Red font indicates a negative difference from the referenced survey.

³ Green font indicates a positive difference from the referenced survey.

Tempo

- Members reported working longer than normal an average of 95 days in the past 12 months—**8 days higher than July 2002**, but **10 to 22 days lower than November 2003 and December 2004 to February 2012**.
- Members reported being away from their permanent duty station (homeport) an average of 46 nights in the past 12 months—11 to 31 nights lower than July 2003 to June 2012.⁴
- 6% reported that their desire to stay in the military decreased as a result of being away more than expected—**3 to 9 percentage points lower than March 2003 to January 2011**.

Stress

- 36% reported more stress than usual in their personal lives—**3 to 7 percentage points lower than March 2003 to June 2010**.
- 47% reported more stress than usual in their work lives—**4 percentage points higher than 2013**, but **3 to 6 percentage points lower than March 2003 to August 2004, March/August 2005, April/August 2006, April/August 2007, and April/August 2008**.

Readiness

- 81% reported they were well prepared for their wartime jobs—**2 to 3 percentage points lower than June 2010, February 2012, and June 2012**.
- 72% reported their training prepared them well for their wartime jobs—**4 percentage points lower than June 2012**.
- 68% reported their training prepared them well to perform their wartime job in support of joint operations—**2 to 5 percentage points higher than August 2006 to April 2008**.
- 65% indicated their units were well prepared to perform their wartime mission—**3 to 7 percentage points lower than March 2003 to August 2004, December 2005, December 2007, April 2009, June 2012, and 2013**.

Survey Methodology

Data Sources

The Status of Forces Survey (SOFS) program is a series of web-based surveys of the total force that allows the Department of Defense to (1) evaluate existing programs/policies, (2) establish baselines before implementing new programs/policies, and (3) monitor progress of programs/policies and their effects on the total force. By design, each SOFS includes a series of leading indicators to track changes over time.

⁴ Underline indicates a difference from the referenced survey that is considered neither negative nor positive.

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The first web-based SOFS for active duty members was conducted in July 2002. Regular administrations began in March 2003. Table 1 provides detailed information (e.g., administration dates, sample size, and response rate) on active duty survey administrations.

Table 1.
Details on Survey Administrations

Survey	Administration Dates	Sample Size	Response Rate	Margin of Error ^a
2014	24 Sep – 12 Nov 14	65,097	21%	±1.3%
2013	17 Oct – 13 Dec 13	69,759	25%	±1.2%
June 2012	28 Jun – 10 Sep 12	72,486	26%	±1.0%
February 2012	29 Feb – 5 Apr 12	65,000	20%	±1.3%
January 2011	31 Jan – 17 Mar 11	64,998	23%	±1.2%
June 2010	1 Jun – 22 Jul 10	68,540	25%	±1.3%
December 2009	7 Dec 09 – 22 Jan 10	38,604	31%	±1.2%
August 2009	7 Aug – 17 Sep 09	34,719	29%	±1.3%
April 2009	30 Mar – 8 May 09	37,292	32%	±1.2%
November 2008	4 Nov – 19 Dec 08	37,494	31%	±1.2%
August 2008	11 Aug – 18 Sep 08	53,534	31%	±1.2%
April 2008	24 Mar – 1 May 08	37,198	31%	±1.3%
December 2007	19 Nov 07 – 10 Jan 08	63,076	33%	±1.2%
August 2007	6 Aug – 23 Sep 07	37,652	32%	±1.6%
April 2007	26 Mar – 3 May 07	65,965	32%	±1.1%
December 2006	20 Nov 06 – 5 Jan 07	37,061	32%	±1.4%
August 2006	24 Jul – 31 Aug 06	39,389	28%	±1.5%
April 2006	27 Feb – 6 Apr 06	39,313	33%	±1.3%
December 2005	28 Nov 05 – 5 Jan 06	36,567	36%	±1.3%
August 2005	22 Aug – 27 Sep 05	35,461	35%	±1.4%
March 2005	25 Feb – 11 Apr 05	30,939	37%	±1.4%
December 2004	22 Nov 04 – 6 Jan 05	35,044	39%	±2.6%
August 2004	26 Jul – 2 Sep 04	38,112	40%	±1.4%
April 2004	5 Apr – 13 May 04	33,414	39%	±1.3%
November 2003	3 Nov – 11 Dec 03	33,607	38%	±1.4%
July 2003	21 Jul – 28 Aug 03	32,844	35%	±1.5%
March 2003	10 Mar – 17 Apr 03	34,929	35%	±1.4%
July 2002	8 Jul – 13 Aug 02	37,918	32%	±1.5%

^aThis is the full sample margin of error for estimates of 50% and represents the overall margin of error for the study.

The target population for active duty SOFS consists of active duty members of the Army, Navy, Marine Corps, and Air Force (1) who have approximately six months of service at the time the questionnaire is first fielded, (2) who are below flag rank when the sample is drawn six months before the survey, and (3) excludes National Guard and Reserve members in active duty programs. Weights are used so that estimates from the survey respondents represent the population.

Survey Methodology

The complex sample designs used in SOFS require weighting to produce population estimates such as percentages.⁵ Data were weighted using an industry standard process.⁶ This form of weighting reduces bias and produces survey estimates of population totals, proportions, and means (as well as other statistics) that are representative of their respective populations. Unweighted survey data, in contrast, are likely to produce biased estimates of population statistics. For this report, variance estimates were calculated using SUDAAN[®] PROC DESCRIPT (Research Triangle Institute, 2013).

Margins of Error

By definition, sample surveys are subject to error from nonresponse (eligibility and completion). Standard errors are estimates of the variance around population parameters, such as percentages or means, and are used to construct margins of error (i.e., confidence interval half-widths). Estimated percentages and means are reported with margins of error based on 95% confidence intervals.⁷ The margin of error represents the precision and accuracy of the estimate, and the confidence interval coincides with how confident one is that the interval contains the true population value being estimated.

Tests of Significance for Subgroups

Only statistically significant group comparisons are discussed in this survey note. Comparisons are generally made along a single dimension (e.g., Service) at a time. When reporting current survey results, the mean (or proportion) of each subgroup is compared⁸ to its respective “all other” group (total population minus the group being assessed). For example, Army’s “all other” group consists of Navy, Marine Corps, and Air Force members. In this type of comparison, the responses for one group are compared to the weighted average of the responses of all other groups in that dimension. Excluding the subject group from the total enables an accurate test of whether the group differs from those not in the group.

⁵ As a result of differential weighting, only certain statistical software procedures, such as SUDAAN PROC DESCRIPT, correctly calculate standard errors, variances, or tests of statistical significance for stratified samples. [®]Registered 2013 by Research Triangle Institute, P.O. Box 12194, Research Triangle Park, NC 27709-2194.

⁶ Details on survey methodology are reported in DMDC (2015a).

⁷ The margin of error represents the degree of certainty that the percentage or mean would fall within the interval in repeated samples of the population. In repeated sampling in which a 95-percent confidence interval is constructed, you would expect 95 percent of the intervals to contain the “true” population parameter being estimated. For an individual sample, if 55% of individuals selected an answer and the margin of error was $\pm 3\%$, you would conclude, based on the sample, that the “true” value being estimated is between 52% and 58%.

⁸ DMDC used *t*-tests in this survey note to test the difference between two means or proportions. This survey note highlights only differences significant at the $\alpha = .01$ level.

Tests of Significance for Trends

Trend analyses on leading indicator items from SOFS administered between July 2002 and 2014 are presented with Service and paygrade group comparisons. Limited comparisons of deployment status are also presented. When comparing results across survey administrations, statistical tests are used to compare current estimates with previous results based on unrounded estimates. When a result is annotated as higher or lower than another result, this reveals a statistically significant difference at the .001 level of significance. Statistically significant changes of more than one percentage point for proportions and five percent for means are noted. Previous proportions and means that are statistically significant from the current results are highlighted in their respective tables; absolute differences between previous and current results are also shown in the summary of findings.

Reference

DMDC. (2015a). *2014 Status of Forces Survey of Active Duty Members: Statistical methodology report* (Report No. 2014-044). Alexandria, VA: DMDC.

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For further information, see <http://www.dmdc.osd.mil/surveys>.

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