

Testing New Survey Questions of Sexual Harassment and Sexual Assault

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14. ABSTRACT This report compares the sample distributions for those completing the DEOCS sexual harassment/sexual assault (SHSA) beta test questions between March 17 and March 24, 2011, to results from previous implementations of the core DEOCS. We tested whether those completing the additional questions related to SHSA were different demographically than those previously completing only the main DEOCS questions. In effect, we are testing the reliability and validity of the overall findings.						
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Abstract

This report compares the sample distributions for those completing the DEOCS sexual harassment/sexual assault (SHSA) beta test questions between March 17 and March 24, 2011, to results from previous implementations of the core DEOCS. We tested whether those completing the additional questions related to SHSA were different demographically than those previously completing only the main DEOCS questions. In effect, we are testing the reliability and validity of the overall findings.

Opinions expressed in this report are those of the authors and should not be construed to represent the official position of the U.S. military services, or the Department of Defense, or DEOMI.

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The Defense Equal Opportunity Management Institute (DEOMI) Organizational Climate Survey (DEOCS) is a confidential, command-requested organization development survey focusing on issues of equal opportunity and organizational effectiveness. The DEOCS measures 14 climate factors: eight EO/EEO and six OE factors. These are all measured on a 5-point scale. Commanders can also elect to add up to 10 locally developed questions (LDQs). The survey is available to Department of Defense agencies, and is administered online by DEOMI with results provided to the requesting commander.

The DEOCS survey requires further refinement to be the best possible product. In 2010, new test questions related to sexual harassment and sexual assault (SHSA) were developed and included in the DEOCS. To assess the validity of these new test questions, we compared the demographics of those who completed the core DEOCS questions in the past to those who completed the DEOCS with the SHSA.

Methods

Validity refers to the extent which an empirical measurement corresponds correctly to the real world. We are primarily concerned with internal validity and whether any sample mortality occurred between the original DEOCS and the DEOCS with follow-up questions. Reliability of scales is most typically measured using Cronbach's Alpha.

Statistics

Cronbach's Alpha (reliability coefficient) is the most common estimate of internal consistency. Alpha measures the extent to which item responses obtained at the same time correlate highly with each other which is a measure of level of mean intercorrelation weighted by variances. Thus, a set of items can have a high alpha and still be multidimensional. This happens when there are separate clusters of items (separate dimensions) which intercorrelate

highly, even though the items in the different clusters themselves do not. Also, a set of items can have a low alpha, even when unidimensional, if there is high random error.

Results

The detailed results are shown in Appendix A, however, 7.1% reported experiencing sexual harassment while 92.9% had not experienced any sexual harassment in the last 12 months. Distribution of the respondents by sex over-represents women with 17.6% identified as female versus about 14.3% DOD-wide in 2010. This percent is lower than the 2008 DEOCS (19.3%). This sample over-represents the Army at 60.8% compared to 38.5% DOD-wide and 34.1% in the 2008 DEOCS. Officers are under-represented in the SHSA sample at 11.5% compared to 16.7% DOD-wide in 2010 and 13.7% in the 2008 DEOCS.

The race or ethnic distribution resembles that of the full force, with the exception of the Black population. At 15.8%, Black respondents are under-represented. DOD-wide, the percentage is 17.5% and 21.4% in the Army in 2010, and 17.1% in the 2008 DEOCS. The low percentage of respondents claiming to be Black coupled with the high percentage of those in the Army could lead to a sampling concern.

Distributions by branch, pay grade, and rank are very similar for male and female respondents. White females have a smaller percent representation (47.8%) while Black female participation is higher (26.4%) than expected. The latter figure stands out in contrast to the lower Black male participation (13.5%). Personal experiences of sexual harassment are more than twice as prevalent among the females (13.4%) than among males (5.8%).

Cronbach's Alpha coefficients were calculated for each of the 13 standard scales included on the DEOCS. Differences for the standardized alphas illustrate very small magnitudes which are positive in value suggesting slightly higher reliability in the 2011 volunteer SHSA DEOCS

subset. This subset displays somewhat lower mean scores on all of the scales except for the measure of Age Discrimination. Organizational Commitment shows the greatest decline of 5 percent. Work Group Effectiveness, Job Satisfaction, Trust in the Organization, Work Group Cohesion, Racist Behaviors, and Positive EO Behavior show 2 percent declines. Disability Discrimination, Leadership Cohesion, Differential Command Behavior, Religious Discrimination, and Sexual Harassment/Discrimination show smaller declines. Given the large sample sizes, these differences are not likely due to chance.

Men are more likely to strongly agree than women regarding sense of freedom to report issues and whether complaints are taken seriously. Men are also more likely to strongly disagree than women regarding getting away with harassment or assault. There is little difference between genders on questions about complaint and reporting procedures. Women report two to three times more than men on questions pertaining to sexist and sexually harassing behaviors in the last 12 months. However, there were only small differences tied to bribes, threats, bad treatment, or promised promotions linked to sexual behavior.

Factor analyses from questions 1 to 15 (general context of work group and supervisors) show three factors: Policy Clarity/Freedom to Report Issues, Sexist Behavior/Get Away with Harassment, and Supervisor Clarity/Communication. The two factors that emerge from questions 16 to 28 (experiences in last 12 months) are Individualistic Harassment (e.g., touch, bribe, threaten) and Broader Sexist Behavior (e.g., sexist treatment, offensive remarks about women in general and, in particular, appearance).

Item-to-item correlations and the Cronbach's Alpha coefficients for each of the five scales vary from a low of 0.82 for the Sexist Behavior/Get Away with It dimension to a high of 0.937 for the Policy Clarity/Freedom to Report dimension. Removal of the "personnel are kept

well informed” item from the Supervisor Clarity/Communication dimension raises the alpha from 0.883 to 0.906.

Univariate distributions of the new SHSA scales are skewed, with concentrations of cases in the most favorable response categories (agreeing with policy clarity and disagreeing with sexist behavior and harassment experiences). The two SHSA factors that focus on experiences in the last 12 months both show a major concentration of cases in the code indicating “no, none of these things happened to me.”

On the three SHSA scales based on variables with 5-point distributions, the concentrations of cases are 1, 2, and 3 on the scales for “policy clarity” and “supervisor clarity,” and are 3, 4, and 5 for the “sexist behavior/ likely get away with it” scale.

Discussion

This survey suffers from the typical flaws of a voluntary questionnaire. First, the sample consists of voluntary respondents with no controls to insure matching to a population of interest. This is seen in the substantial over-representation of Army and Black female voluntary respondents and the under-representation of Air Force, Marines, and Black males. More attention must be paid to drawing in Air Force, Marine, and Black male participants so that the DOD is better represented. Additionally, these results are dominated by a larger numbers of male respondents, which may cause the results to appear more positive than they are.

Lastly, concentrations may represent response set patterns (answering all the same code for all questions). If so, this further raises concerns about reliability and validity of the data. Seventy-two respondents answered Code 1 (strongly agree) to all 15 of the first set of questions even though four of the items were conceptually opposites compared to the others.

Implementing strategies to ensure participants are paying attention to the questions would reduce this confound.

Conclusion

These findings display both good and bad news about the EO training, policies, and practices in military units. Overall, scores indicate that respondents have a positive view of the equal opportunity climate and about the organizational effectiveness of their units. However, the results may indicate that respondents have a less positive view of the equal opportunity climate and about the organizational effectiveness of their units than was true earlier (2008). The sample compositions may make legitimate comparisons difficult to establish. Finally, very small levels of variation in response patterns may mean that important differences are not being detected due to response set and social desirability issues.

References

- Blalock, H.M. Jr. (1970). Estimating measurement error using multiple indicators and several points in time. *American Sociological Review*, 35(1), 101–111.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- Defense Equal Opportunity Management Institute (2011). *The DEOCS*. Patrick AFB: DEOMI. Retrieved from http://www.deocs.net/DocDownloads/DEOCS_Description.pdf.
- Firestone, J.M., & Harris, R.J. (2009). Sexual harassment in the U.S. military reserve component: A preliminary analysis. *Armed Forces & Society*, 36(1), 86–109. doi:10.1177/0095327X09332152
- Harris, R. J., & Firestone, J.M. (2010). Victimization in the U.S. military: The impact of labeling events on officially reporting sexual harassment. *Journal of Sociological Research*, 2(1), 1–20.
- Harris, R.J., Hackett, J.D., & Firestone, J.M. (2011). Double jeopardy: Race/ethnicity and sexual harassment in the U.S. military. *Journal of Public Administration and Governance*, 1(1), 138–156.
- Guttman, L. (1945). A basis for analyzing test-retest reliability. *Psychometrika*, 10(4), 255–282.
- McIver, J.P., & Carmines, E.G. (1981). *Unidimensional scaling*. Thousand Oaks, CA: Sage.
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Spector, P. (1992). *Summated rating scale construction*. Thousand Oaks, CA: Sage.
- Revelle, W. (1979). Hierarchical cluster analysis and the internal structure of tests. *Multivariate Behavioral Research*, 14, 57–74.

Appendix A

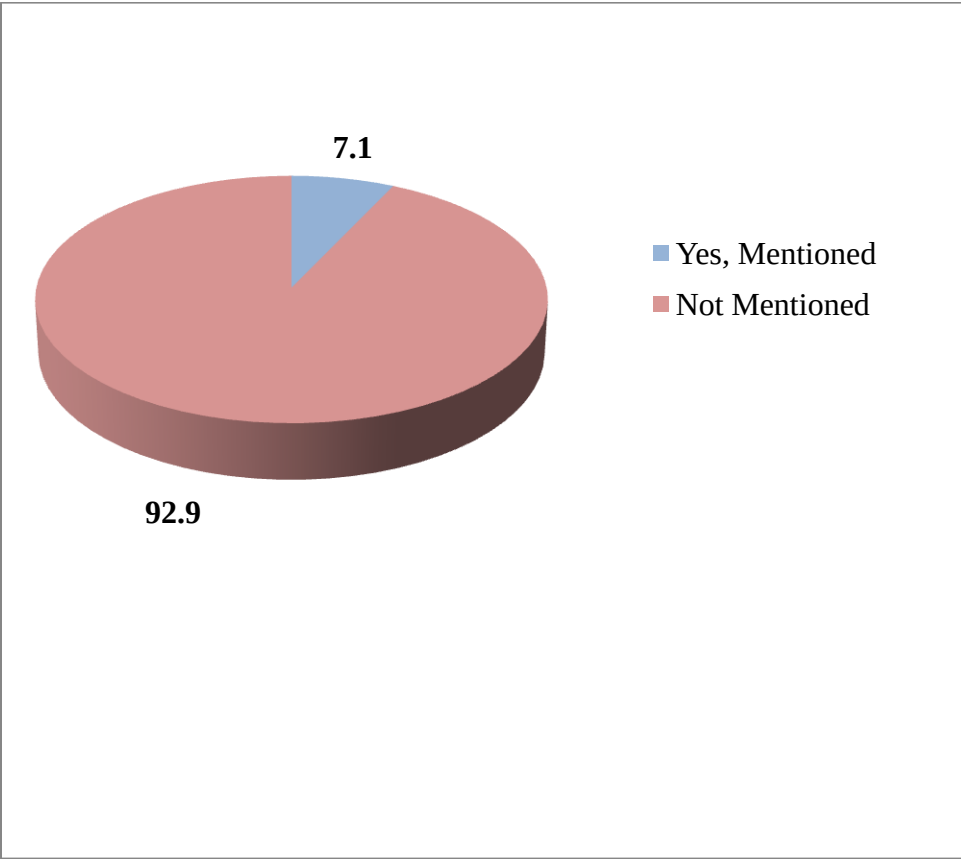


Figure 1. Valid percent responding voluntarily to questions on sexual harassment.

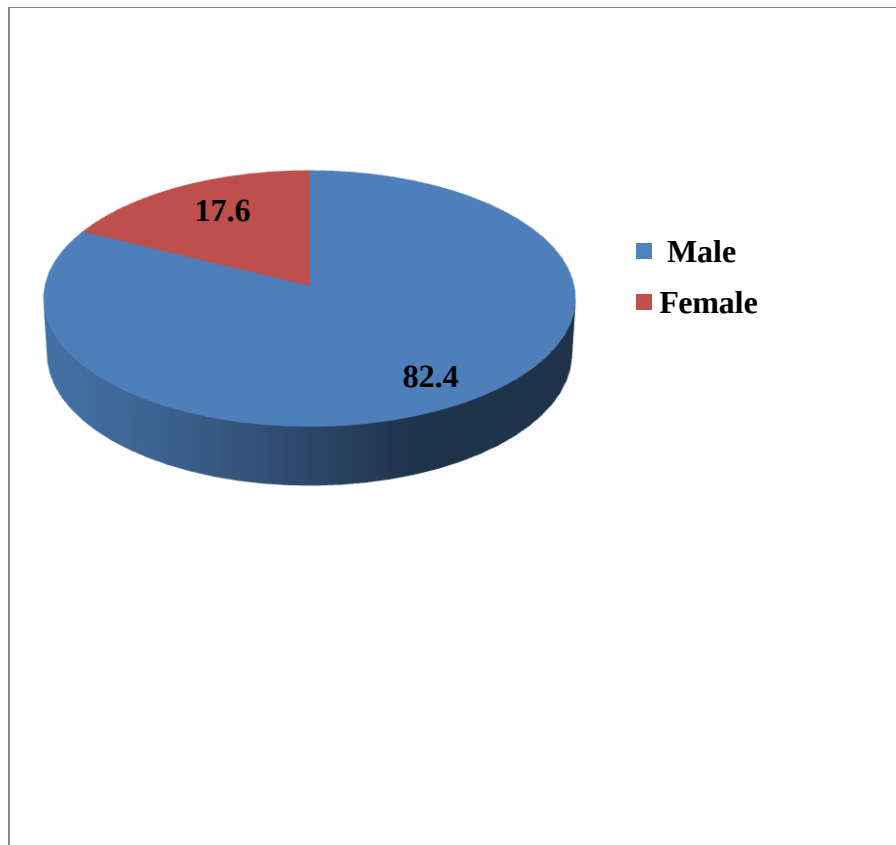


Figure 2. Valid percent of those voluntarily completing questions on sexual harassment and sexual assault by sex of respondent.

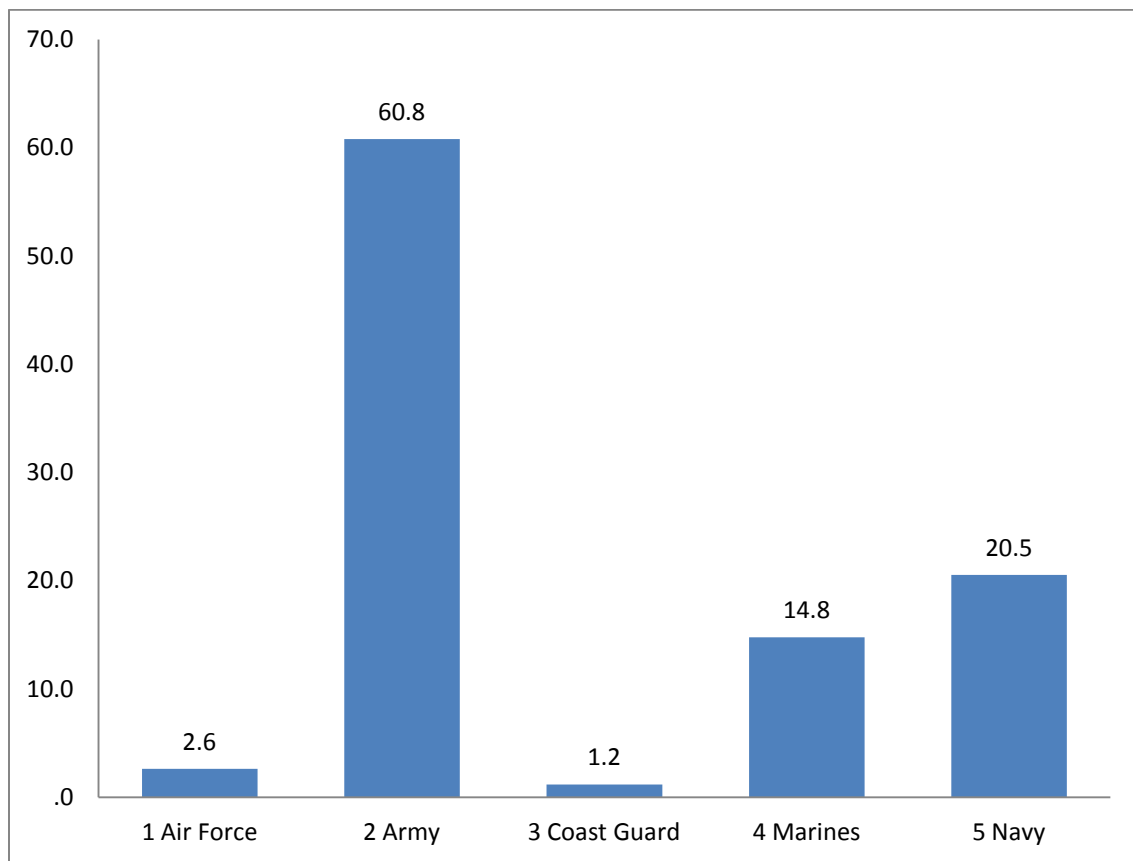


Figure 3. Valid percent of those voluntarily completing questions on sexual harassment and sexual assault by service branch.

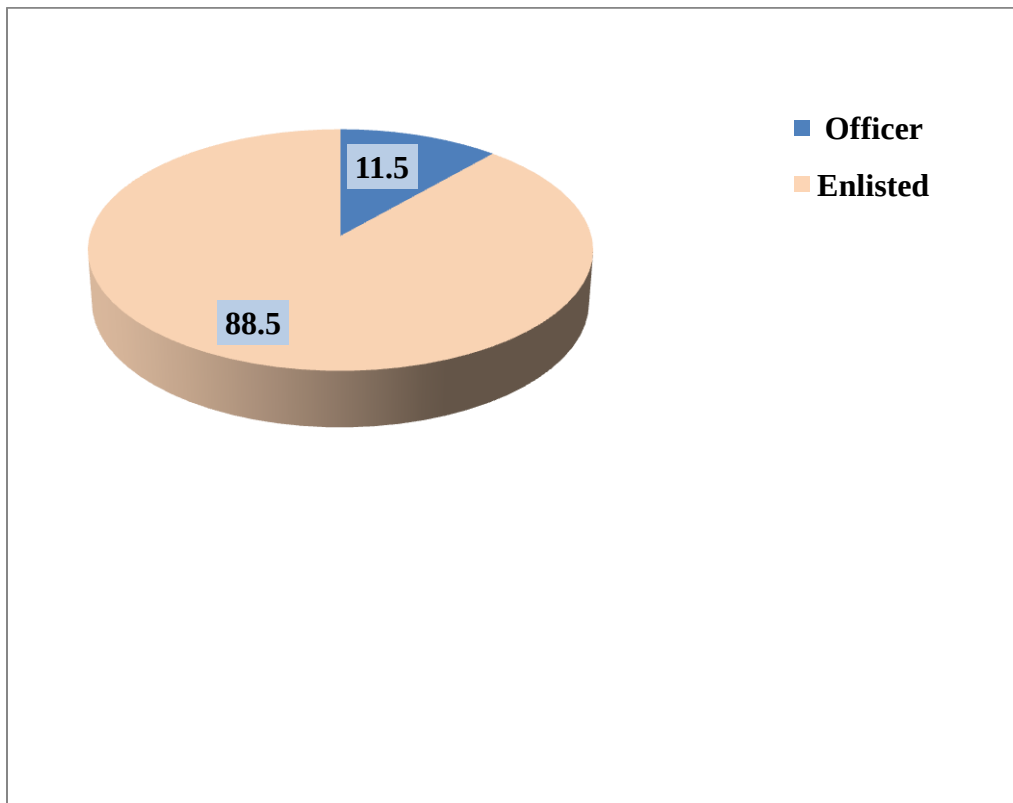


Figure 4. Valid percent of those voluntarily completing questions on sexual harassment and sexual assault by whether respondent is officer or enlisted.

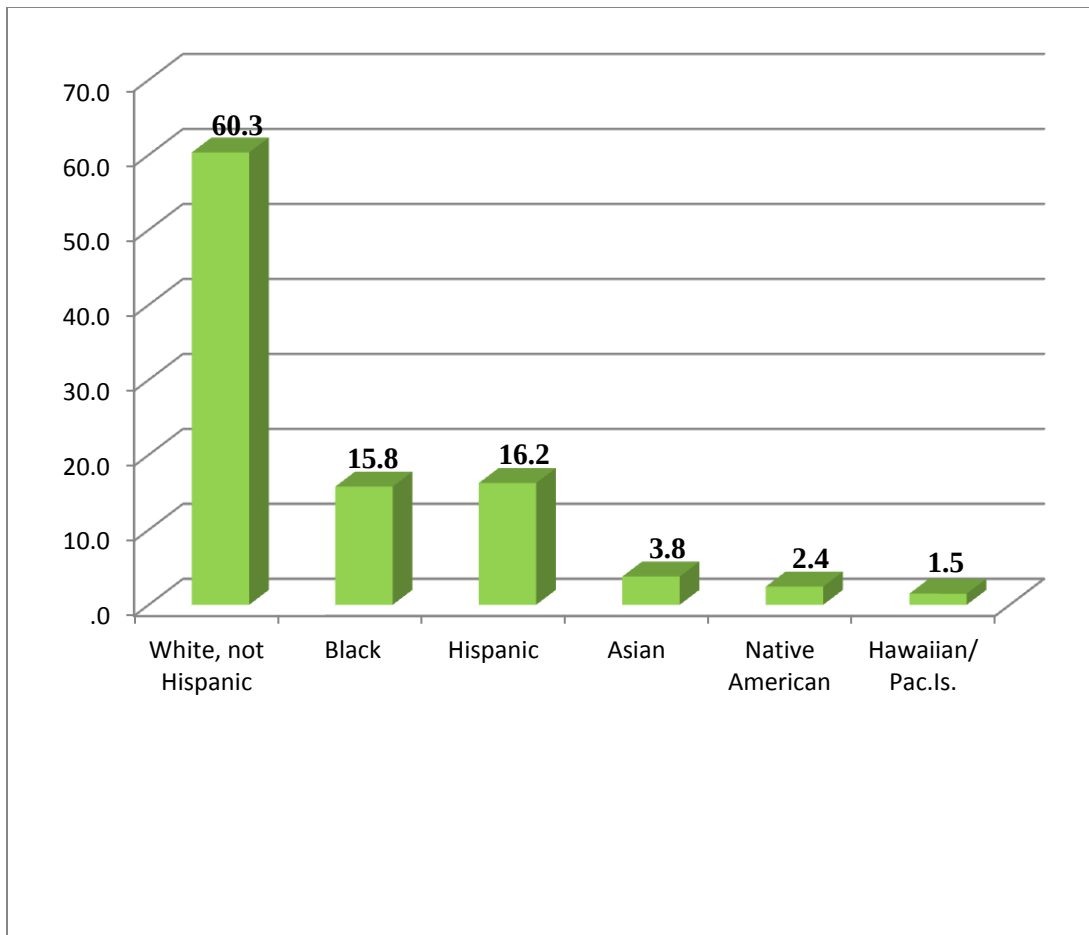


Figure 5. Valid percent of those voluntarily completing questions on sexual harassment and sexual assault by race.

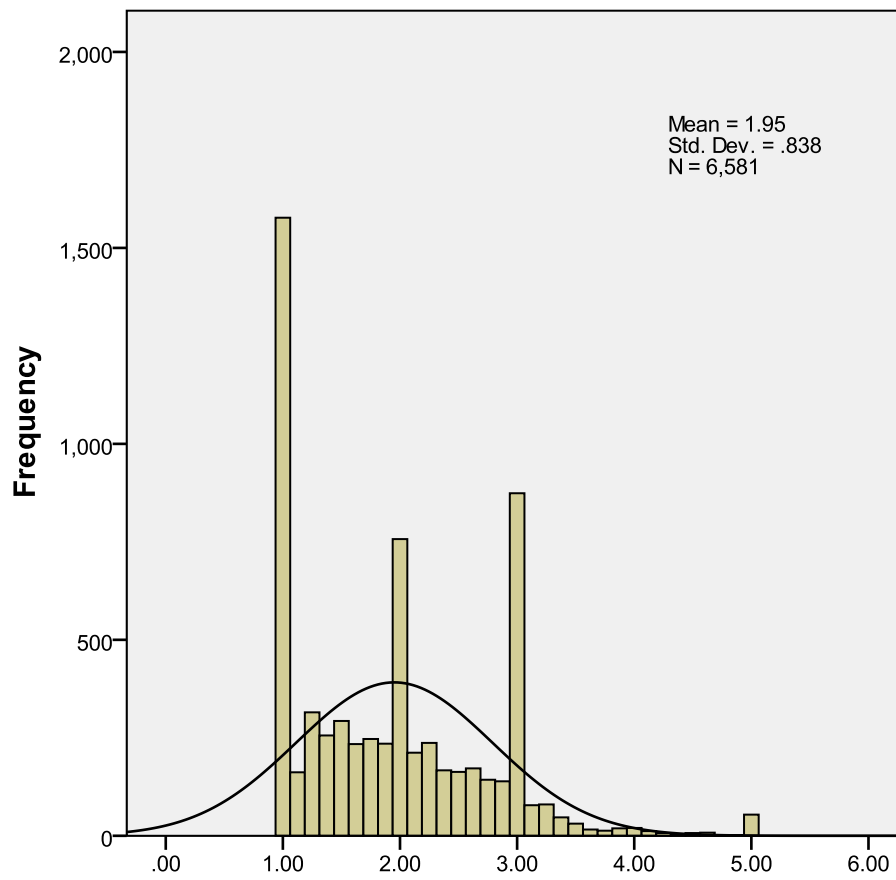


Figure 6. Policy clarity/freedom to report (Higher Score = Disagree)

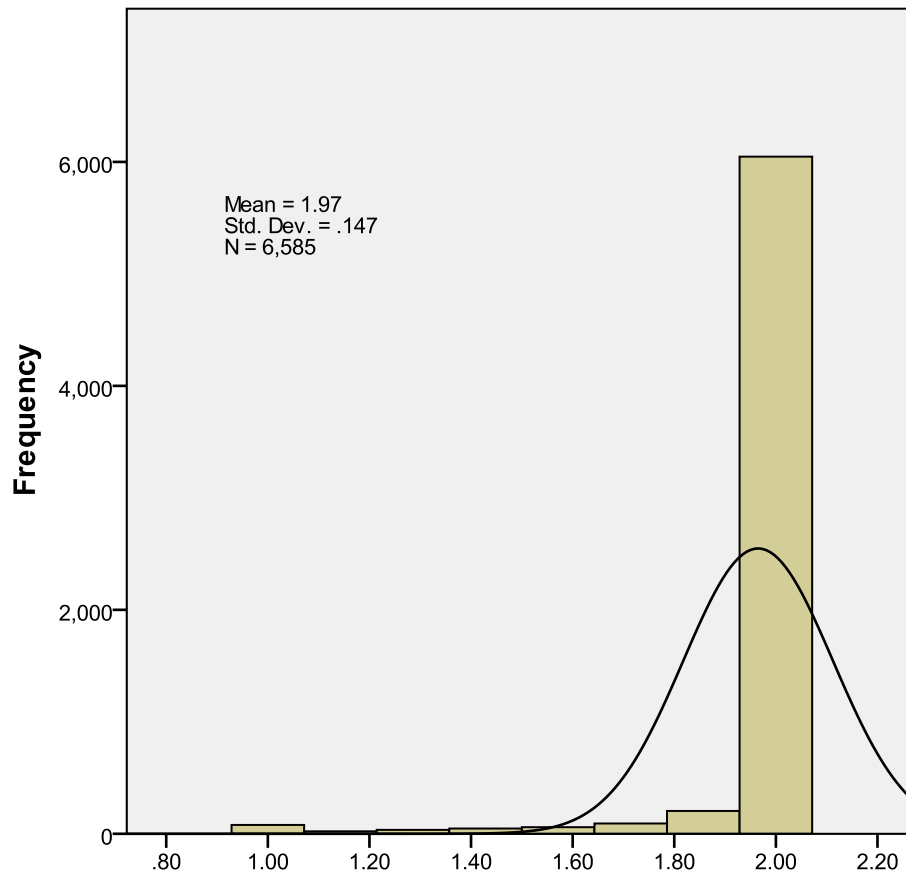


Figure 7. Individualistic harassment—touch, bribe, threaten, etc.—in last 12 months (Higher Score = No, Did Not Happen)

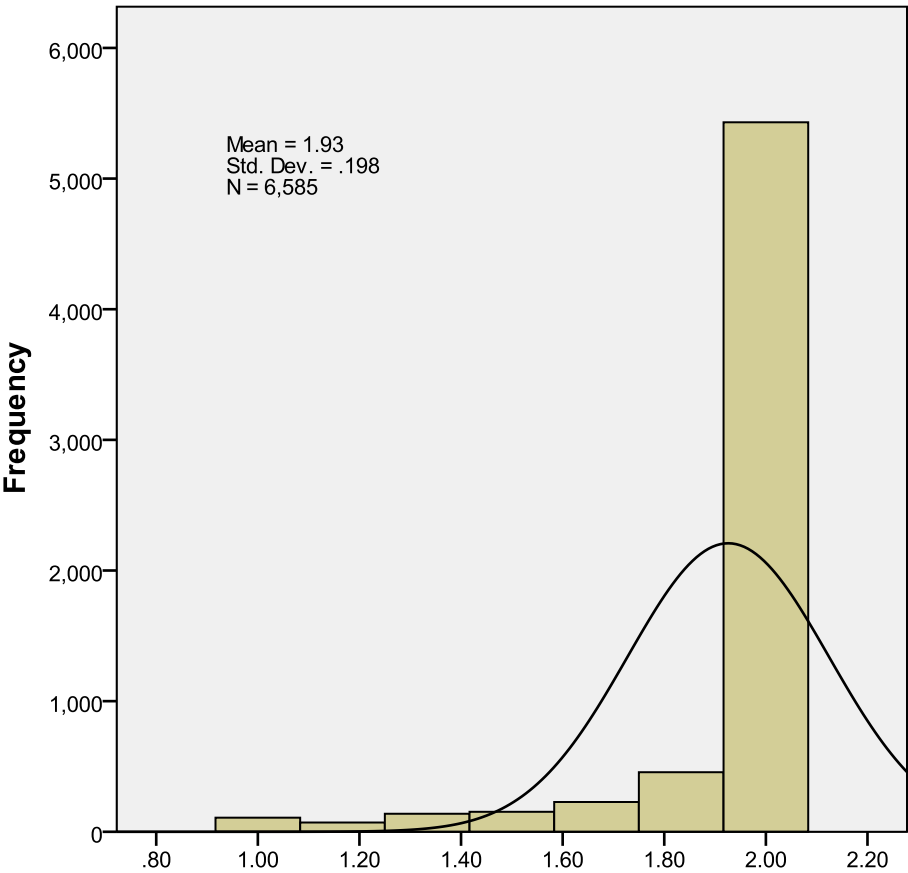


Figure 8. Sexist treatment, remarks, gestures in last 12 months (High Score = No, Did Not Happen)

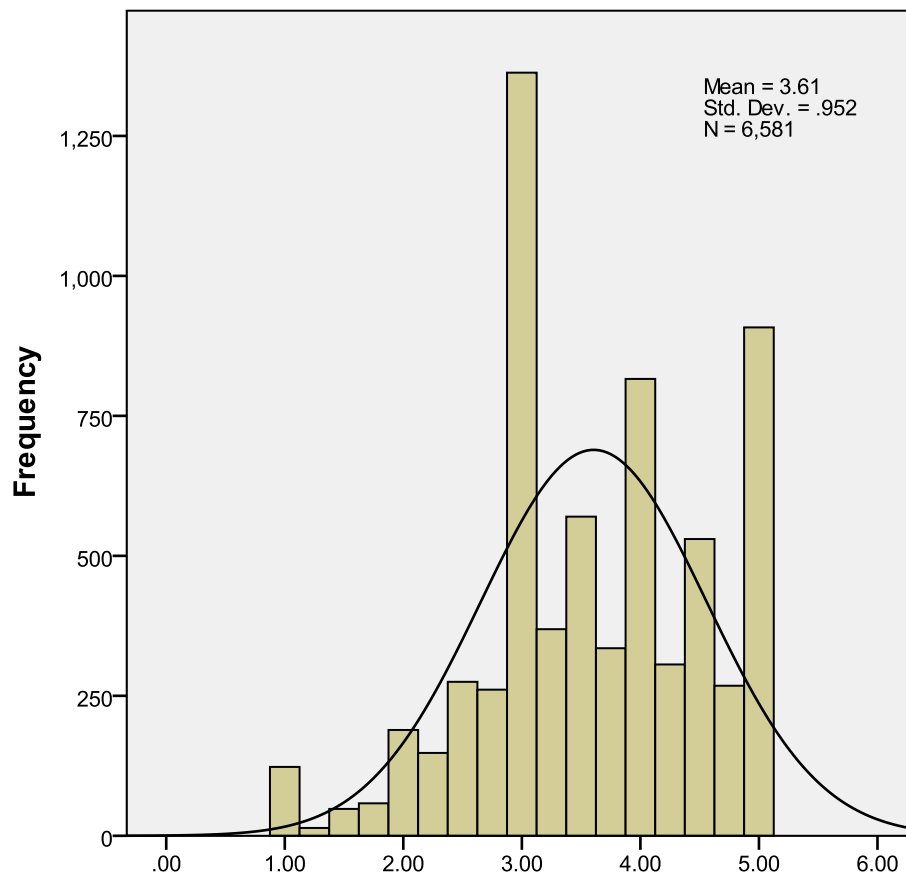


Figure 9. Sexist behavior/likely to get away with it (High Score = Disagree)

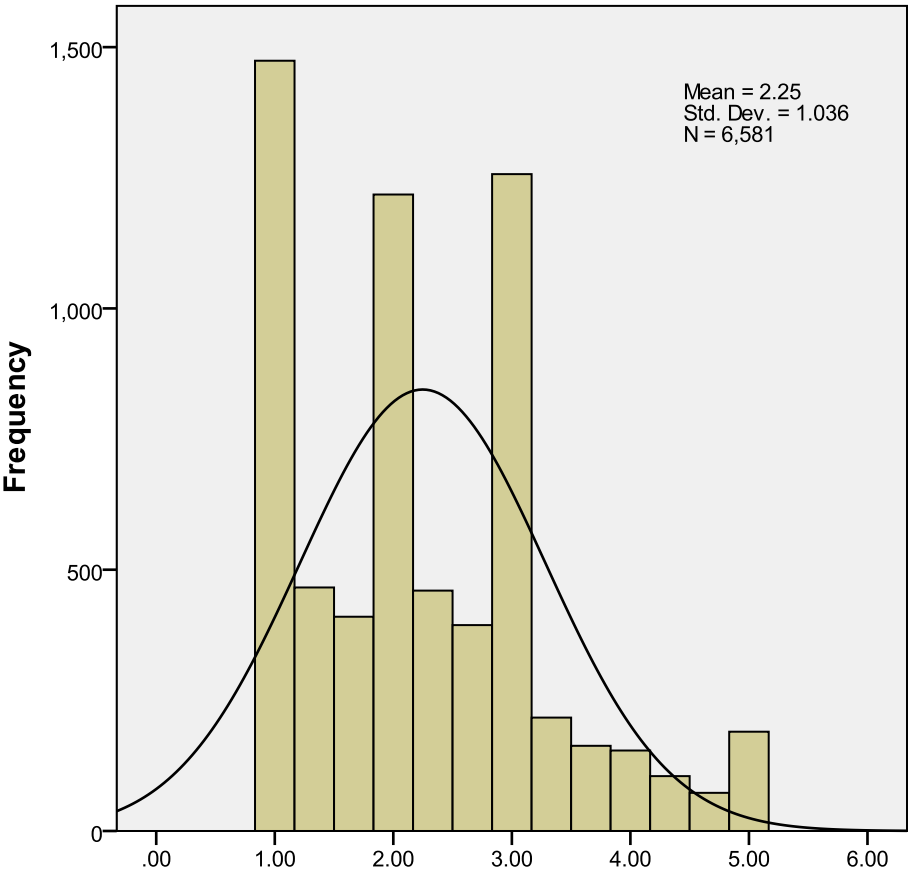


Figure 10. Supervisor inclusive, fair, informative (Higher Score = Disagree)

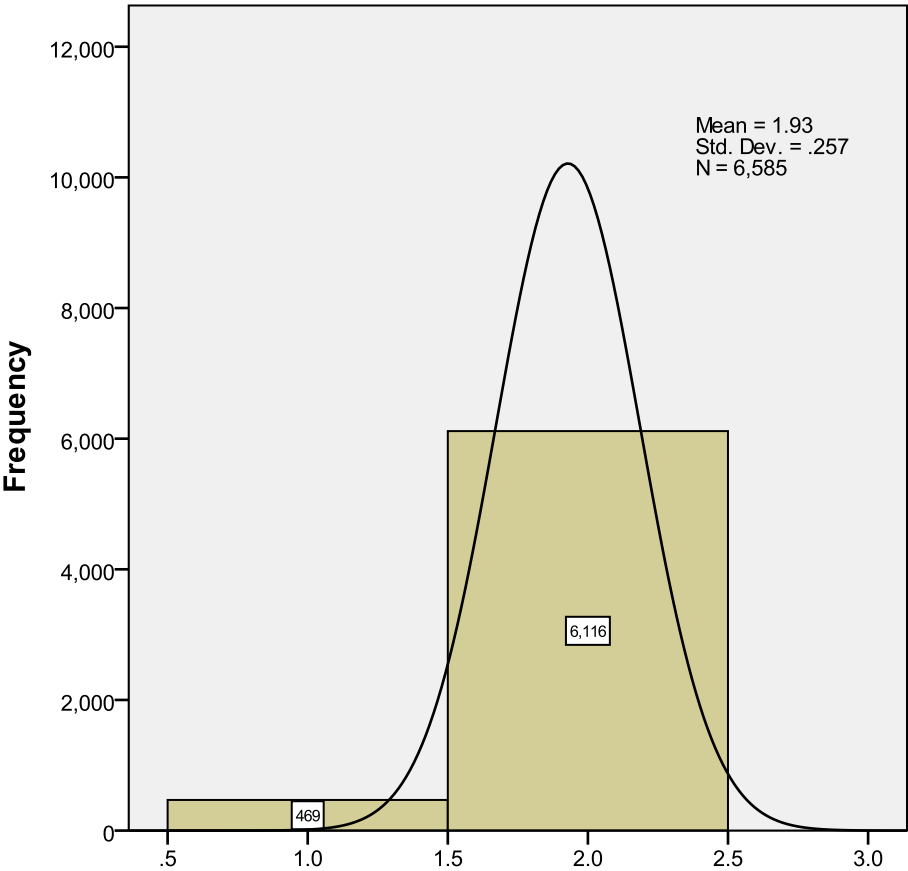


Figure 11. Reported experience of sexual harassment in last 12 months (a Core DEOCS item)

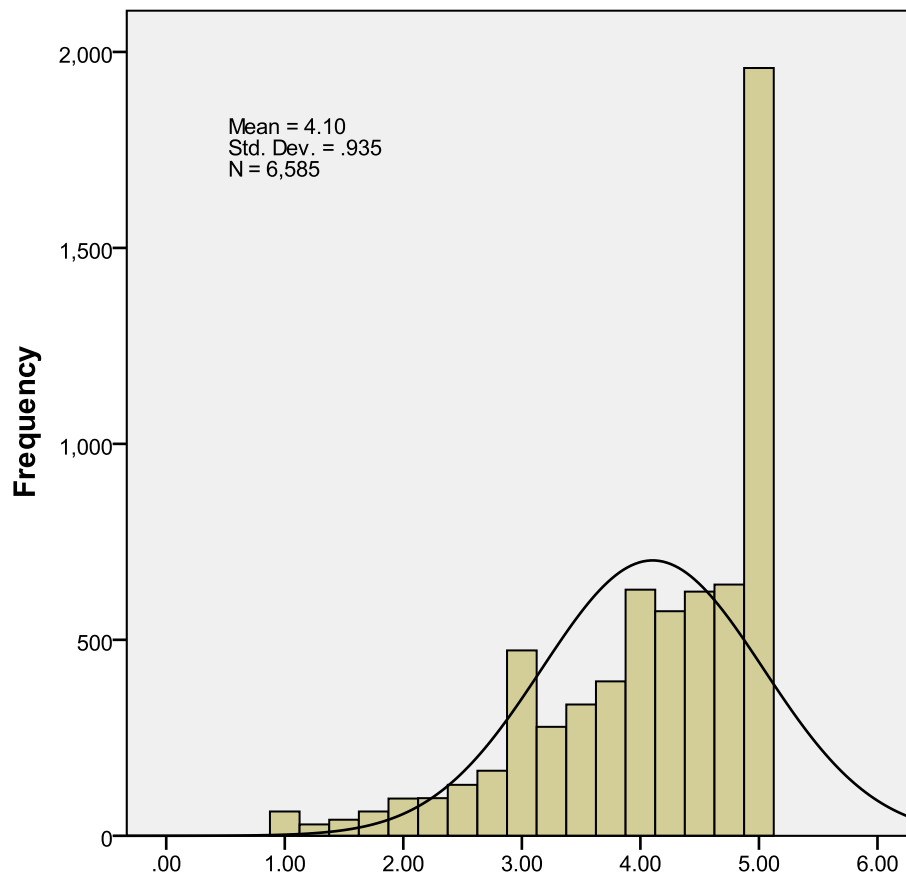


Figure 12. Sexual harassment and discrimination scale (from Core DEOCS questions)

Appendix B

Table 1

*Univariate Profile of Volunteer Respondents on Sexual Harassment Questions,
Mar. 17 - 25, 2011, Compared to DEOCS Respondents from Oct. - Dec. 2008*

	2011		2008	
Sexual Harassment				
	Frequency	Percent	Frequency	Percent
1 Yes, SH Mentioned	469	7.1	8612	7.1
2 No	6116	92.9	111951	92.9
Total	6585	100.0	120563	100.0
Sex of Respondent				
1 Male	5423	82.4	100407	80.7
2 Female	1162	17.6	24049	19.3
Total	6585	100.0	124456	100.0
My branch of service is:				
1 Air Force	174	2.6	1847	1.7
2 Army	4004	60.8	36262	34.1
3 Coast Guard	78	1.2	1716	1.6
4 Marines	973	14.8	20117	18.9
5 Navy	1353	20.5	46331	43.5
6 other (e.g., joint, combined military, or civilian)	3	.0	150	.1
Total	6585	100.0	106423	100.0
What is your pay grade (for all enlisted, officer, and civilian grades)?				
1 1-3	1961	29.8	27233	23.1
2 4-6	3822	58.0	66868	56.7
3 7-8	732	11.1	13475	11.4
4 9-10	63	1.0	3179	2.7
5 11-13	3	.0	4151	3.5
6 14-15	4	.1	3073	2.6
Total	6585	100.0	117979	100.0
Officer vs. Enlisted				
1 Officer	756	11.5	14658	13.7
2 Enlisted	5829	88.5	92606	86.3
Total	6585	100.0	107264	100.0
Race or Hispanic Ethnicity				
1 White	3827	60.3	70385	58.4
2 Black	1000	15.8	20568	17.1
3 Hispanic	1030	16.2	18036	15.0
4 Asian	239	3.8	7079	5.9
5 Native American	154	2.4	2716	2.3
6 Hawaiian/ Pac.Is.	94	1.5	1815	1.5
Total	6344	100.0	120599	100.0
Missing	241	[3.7]	4216	[3.4]
Total	6585		124815	

Table 2

Profile of Volunteer Respondent on Sexual Harassment Questions by Respondent, March 17–25, 2011, Compared to DEOCS Respondents from October–December 2008

		2011			2008		
		Male	Female	Total	Male	Female	Total
Sexual Harassment	1 Yes, Mentioned	5.8%	13.4%	7.1%	5.9%	12.3%	7.1%
	2 No	94.2%	86.6%	92.9%	94.1%	87.7%	92.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N		5420	1161	6581	100407	24049	124456
My branch of service is:	1 Air Force	2.7%	2.5%	2.6%	1.7%	1.7%	1.7%
	2 Army	60.6%	61.6%	60.8%	33.5%	37.4%	34.1%
	3 Coast Guard	1.2%	1.1%	1.2%	1.7%	1.3%	1.6%
	4 Marines	16.1%	8.7%	14.8%	20.6%	9.8%	18.9%
	5 Navy	19.4%	26.1%	20.5%	42.4%	49.8%	43.5%
	6 other	.1%		.0%	0.2%	0.1%	0.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
What is your pay grade (for all enlisted, officer, and civilian grades)?	1 1-3	29.3%	32.0%	29.8%	22.5%	25.8%	23.1%
	2 4-6	58.4%	56.5%	58.0%	57.7%	52.1%	56.7%
	3 7-8	11.1%	11.0%	11.1%	11.9%	9.2%	11.4%
	4 9-10	1.1%	.3%	1.0%	2.7%	2.7%	2.7%
	5 11-13	.1%		.0%	3.1%	5.4%	3.5%
	6 14-15	.0%	.2%	.1%	2.1%	4.8%	2.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Officer vs. Enlisted	1 Officer	11.3%	12.4%	11.5%	13.3%	15.4%	13.7%
	2 Enlisted	88.7%	87.6%	88.5%	86.7%	84.6%	86.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Race or Hispanic Ethnicity	1 White	63.0%	47.8%	60.3%	60.4%	50.1%	58.4%
	2 Black	13.5%	26.4%	15.8%	15.1%	25.2%	17.0%
	3 Hispanic	16.0%	17.3%	16.2%	15.0%	14.7%	15.0%
	4 Asian	3.8%	3.7%	3.8%	5.8%	6.1%	5.9%
	5 Native American	2.4%	2.4%	2.4%	2.2%	2.3%	2.2%
	6 Hawaiian/Pac.Is.	1.3%	2.5%	1.5%	1.5%	1.6%	1.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3
DEOCS Indicators for Two Time Intervals

	A: Mar. 17 - 25, 2011 (N=6585)					B: Oct. - Dec. 2008 (N=124,815*)					Differences	
	Alpha (α)	Std. α	# Items	M	SD	Alpha (α)	Std. α	# Items	M	SD	Std. α (A-B)	M (% Chg.)
Sexual Har. & Discrimination	0.851	0.852	4	16.41	3.74	0.840	0.839	4	16.47	3.67	0.013	-0.36
Differential Cmd. Behavior	0.893	0.895	4	17.84	3.24	0.877	0.879	4	17.99	3.09	0.016	-0.83
Positive EO Behavior	0.890	0.891	4	15.92	4.08	0.887	0.888	4	16.25	3.99	0.003	-2.03
Racist Behaviors	0.898	0.899	3	11.34	3.34	0.889	0.891	3	11.62	3.31	0.008	-2.41
Age Discrimination	0.905	0.906	3	12.93	2.77	0.894	0.895	3	12.91	2.80	0.011	0.15
Religious Discrimination	0.821	0.834	3	13.26	2.44	0.821	0.834	3	13.34	2.39	0.000	-0.60
Disability Discrimination	0.882	0.884	3	13.10	2.65	0.869	0.872	3	13.34	2.50	0.012	-1.80
Organizational Commitment	0.807	0.809	5	16.56	4.97	0.804	0.807	5	17.40	4.93	0.002	-4.83
Trust in the Organization	0.862	0.861	3	10.06	3.23	0.849	0.848	3	10.35	3.12	0.013	-2.80
Work Group Effectiveness	0.885	0.886	4	15.99	3.63	0.880	0.881	4	16.58	3.41	0.005	-3.56
Work Group Cohesion	0.918	0.918	4	15.37	4.00	0.906	0.907	4	15.80	3.79	0.011	-2.72
Leadership Cohesion	0.944	0.944	4	13.85	4.38	0.940	0.934	4	14.04	4.33	0.010	-1.35
Job Satisfaction	0.859	0.859	5	18.75	4.55	0.841	0.840	5	19.33	4.27	0.019	-3.00

* Including 17,616 civilians. Missing values vary from about one to two percent of cases in period B. No civilians were included and no missing cases were found for period A.

Note: the maximum score for each scale is the number of items times 5. E.g., a four item scale could have a maximum score of 20.

Table 4

Responses to Sexual Harassment Questions by Sex of Respondent

		1 Male	2 Female	Total
Q1 Members of my work group feel free to report sexual harassment without fear of reprisal.	1 Strongly Agree	41.2%	33.2%	39.8%
	2 Agree	29.1%	31.3%	29.5%
	3 Undecided	23.3%	23.3%	23.3%
	4 Disagree	3.2%	7.6%	4.0%
	5 Strongly Disagree	3.2%	4.7%	3.4%
	Total	100.0%	100.0%	100.0%
Q2 Members of my work group feel free to report sexual assault without fear of reprisal.	1 Strongly Agree	42.4%	35.6%	41.2%
	2 Agree	28.5%	30.2%	28.8%
	3 Undecided	23.6%	23.9%	23.6%
	4 Disagree	2.7%	6.1%	3.3%
	5 Strongly Disagree	2.7%	4.2%	3.0%
	Total	100.0%	100.0%	100.0%
Q3 Complaints about sexual harassment would be taken seriously, no matter who makes them.	1 Strongly Agree	47.8%	41.2%	46.6%
	2 Agree	25.2%	28.6%	25.8%
	3 Undecided	21.5%	20.9%	21.4%
	4 Disagree	2.9%	5.7%	3.4%
	5 Strongly Disagree	2.6%	3.6%	2.8%
	Total	100.0%	100.0%	100.0%
Q4 People would likely get away with committing sexual harassment if it was reported.	1 Strongly Agree	5.2%	6.2%	5.4%
	2 Agree	7.0%	9.4%	7.4%
	3 Undecided	24.1%	26.3%	24.5%
	4 Disagree	26.3%	27.6%	26.6%
	5 Strongly Disagree	37.4%	30.6%	36.2%
	Total	100.0%	100.0%	100.0%
Q5 People would likely get away with committing sexual assault if it was reported.	1 Strongly Agree	4.2%	4.4%	4.3%
	2 Agree	4.8%	6.5%	5.1%
	3 Undecided	23.3%	23.2%	23.2%
	4 Disagree	24.0%	27.7%	24.7%
	5 Strongly Disagree	43.7%	38.2%	42.7%
	Total	100.0%	100.0%	100.0%
Q6 Policies forbidding sexual harassment are well publicized.	1 Strongly Agree	43.2%	42.4%	43.0%
	2 Agree	30.9%	31.2%	30.9%
	3 Undecided	20.5%	19.5%	20.3%
	4 Disagree	3.1%	5.0%	3.4%
	5 Strongly Disagree	2.4%	2.0%	2.3%
	Total	100.0%	100.0%	100.0%

Table 4 (Continued)

Q7 Complaint procedures related to sexual harassment are well publicized.	1 Strongly Agree	37.7%	35.8%	37.4%
	2 Agree	31.6%	32.3%	31.7%
	3 Undecided	24.1%	22.0%	23.8%
	4 Disagree	4.1%	6.9%	4.6%
	5 Strongly Disagree	2.5%	2.9%	2.6%
	Total	100.0%	100.0%	100.0%
Q8 Reports of sexual harassment are taken seriously.	1 Strongly Agree	45.9%	39.6%	44.8%
	2 Agree	26.4%	29.0%	26.9%
	3 Undecided	23.5%	25.7%	23.9%
	4 Disagree	2.1%	3.5%	2.3%
	5 Strongly Disagree	2.0%	2.2%	2.1%
	Total	100.0%	100.0%	100.0%
Q9 Sexual assault reporting procedures are well publicized.	1 Strongly Agree	40.2%	36.5%	39.5%
	2 Agree	30.0%	32.4%	30.4%
	3 Undecided	23.9%	22.8%	23.7%
	4 Disagree	3.7%	6.0%	4.1%
	5 Strongly Disagree	2.2%	2.2%	2.2%
	Total	100.0%	100.0%	100.0%
Q10 Sexist jokes are frequently heard.	1 Strongly Agree	8.9%	9.9%	9.1%
	2 Agree	14.9%	18.5%	15.6%
	3 Undecided	29.1%	25.3%	28.4%
	4 Disagree	26.1%	27.5%	26.4%
	5 Strongly Disagree	21.0%	18.8%	20.6%
	Total	100.0%	100.0%	100.0%
Q11 Reports of sexual assault are taken seriously.	1 Strongly Agree	46.7%	42.0%	45.9%
	2 Agree	26.0%	30.0%	26.7%
	3 Undecided	23.2%	23.8%	23.3%
	4 Disagree	2.0%	2.1%	2.0%
	5 Strongly Disagree	2.1%	2.2%	2.1%
	Total	100.0%	100.0%	100.0%
Q12 Some people here make sexually suggestive remarks about other people.	1 Strongly Agree	8.0%	9.0%	8.2%
	2 Agree	16.9%	23.5%	18.1%
	3 Undecided	29.8%	25.8%	29.1%
	4 Disagree	23.4%	23.7%	23.4%
	5 Strongly Disagree	21.9%	18.0%	21.2%
	Total	100.0%	100.0%	100.0%

Table 4 (Continued)

Q13 My supervisor helps everyone in my workgroup feel included.	1 Strongly Agree	33.0%	29.4%	32.4%
	2 Agree	31.9%	29.9%	31.6%
	3 Undecided	25.4%	23.9%	25.1%
	4 Disagree	5.5%	9.1%	6.1%
	5 Strongly Disagree	4.1%	7.7%	4.8%
Total		100.0%	100.0%	100.0%
Q14 I trust my supervisor to deal fairly with issues of equal treatment in the workplace.	1 Strongly Agree	37.3%	32.2%	36.4%
	2 Agree	29.5%	27.8%	29.2%
	3 Undecided	24.1%	22.7%	23.9%
	4 Disagree	4.7%	7.4%	5.2%
	5 Strongly Disagree	4.4%	9.8%	5.3%
Total		100.0%	100.0%	100.0%
Q15 All personnel are kept well informed about issues and decisions that affect them.	1 Strongly Agree	28.7%	25.3%	28.1%
	2 Agree	28.9%	28.3%	28.8%
	3 Undecided	25.7%	21.8%	25.0%
	4 Disagree	9.2%	13.9%	10.0%
	5 Strongly Disagree	7.5%	10.8%	8.1%
Total		100.0%	100.0%	100.0%
Q16 In the last 12 months, someone here has treated me as an inferior because of my sex.	1 Yes	3.9%	21.2%	7.0%
	2 No	96.1%	78.8%	93.0%
Total		100.0%	100.0%	100.0%
Q17 In the last 12 months, someone here has made offensive sexist remarks to me.	1 Yes	5.6%	17.7%	7.7%
	2 No	94.4%	82.3%	92.3%
Total		100.0%	100.0%	100.0%
Q18 In the last 12 months, someone here has put me down or was condescending to me because of my sex.	1 Yes	4.0%	17.9%	6.4%
	2 No	96.0%	82.1%	93.6%
Total		100.0%	100.0%	100.0%
Q19 In the last 12 months, someone here has made unwelcome attempts to draw me into a discussion of sexual matters.	1 Yes	6.2%	11.0%	7.0%
	2 No	93.8%	89.0%	93.0%
Total		100.0%	100.0%	100.0%
Q20 In the last 12 months, someone here has made offensive remarks about my appearance, body, or sexual activities.	1 Yes	9.0%	16.8%	10.4%
	2 No	91.0%	83.2%	89.6%
Total		100.0%	100.0%	100.0%

Table 4 (Continued)

Q21 In the last 12 months, someone here has made unwanted attempts to establish a romantic sexual relationship with me, despite my efforts to discourage it.	1 Yes	3.4%	9.3%	4.4%
	2 No	96.6%	90.7%	95.6%
	Total	100.0%	100.0%	100.0%
Q22 In the last 12 months, someone here has made gestures or used body language of a sexual nature that embarrassed or offended me.	1 Yes	5.1%	9.5%	5.9%
	2 No	94.9%	90.5%	94.1%
	Total	100.0%	100.0%	100.0%
Q23 In the last 12 months, someone here has continued to ask me for dates, drinks, dinner, etc., even though I said “no.”	1 Yes	3.2%	8.1%	4.1%
	2 No	96.8%	91.9%	95.9%
	Total	100.0%	100.0%	100.0%
Q24 In the last 12 months, someone here has touched me in a way that made me feel uncomfortable.	1 Yes	3.8%	5.9%	4.2%
	2 No	96.2%	94.1%	95.8%
	Total	100.0%	100.0%	100.0%
Q25 In the last 12 months, someone here has made me feel like I was being bribed with a reward to engage in sexual behavior.	1 Yes	3.0%	2.6%	2.9%
	2 No	97.0%	97.4%	97.1%
	Total	100.0%	100.0%	100.0%
Q26 In the last 12 months, someone here made me feel threatened with some sort of retaliation for not being sexually cooperative.	1 Yes	2.9%	2.9%	2.9%
	2 No	97.1%	97.1%	97.1%
	Total	100.0%	100.0%	100.0%
Q27 In the last 12 months, someone here has treated me badly for refusing to have sex.	1 Yes	2.8%	3.4%	2.9%
	2 No	97.2%	96.6%	97.1%
	Total	100.0%	100.0%	100.0%
Q28 In the last 12 months, someone here has implied faster promotions or better treatment if I were sexually cooperative.	1 Yes	3.3%	2.5%	3.2%
	2 No	96.7%	97.5%	96.8%
	Total	100.0%	100.0%	100.0%

Table 5

Comparison of Means on SHSA Items by Sex of Respondent

	Male			Female			Total			Eta
	Mean	N	SD	Mean	N	SD	Mean	N	SD	
Questions with five response options: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree										
Members of my work group feel free to report sexual harassment without fear of reprisal.	1.98	5420	1.028	2.19	1161	1.121	2.02	6581	1.049	.078
Members of my work group feel free to report sexual assault without fear of reprisal.	1.95	5420	1.007	2.13	1161	1.097	1.98	6581	1.026	.068
Complaints about sexual harassment would be taken seriously, no matter who makes them.	1.87	5420	1.012	2.02	1161	1.084	1.90	6581	1.027	.055
People would likely get away with committing sexual harassment if it was reported.	3.84	5420	1.156	3.67	1161	1.181	3.81	6581	1.162	.055
People would likely get away with committing sexual assault if it was reported.	3.98	5420	1.115	3.89	1161	1.122	3.96	6581	1.116	.032
Policies forbidding sexual harassment are well publicized.	1.91	5420	.984	1.93	1161	.996	1.91	6581	.986	.009
Complaint procedures related to sexual harassment are well publicized.	2.02	5420	1.004	2.09	1161	1.054	2.03	6581	1.013	.025
Reports of sexual harassment are taken seriously.	1.88	5420	.973	2.00	1161	.994	1.90	6581	.978	.045
Sexual assault reporting procedures are well publicized.	1.98	5420	.995	2.05	1161	1.017	1.99	6581	.999	.028

Table 5 (Continued)										
	Male			Female			Total			Eta
	Mean	N	SD	Mean	N	SD	Mean	N	SD	
Questions with five response options: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree										
Sexist jokes are frequently heard.	3.35	5420	1.217	3.27	1161	1.240	3.34	6581	1.221	.027
Reports of sexual assault are taken seriously.	1.87	5420	.975	1.92	1161	.964	1.88	6581	.974	.022
Some people here make sexually suggestive remarks about other people.	3.34	5420	1.217	3.18	1161	1.234	3.32	6581	1.222	.051
My supervisor helps everyone in my workgroup feel included.	2.16	5420	1.073	2.36	1161	1.209	2.19	6581	1.101	.069
I trust my supervisor to deal fairly with issues of equal treatment in the workplace.	2.09	5420	1.089	2.35	1161	1.269	2.14	6581	1.127	.086
All personnel are kept well informed about issues and decisions that affect them.	2.38	5420	1.202	2.57	1161	1.295	2.41	6581	1.221	.058
Questions with two response options: 1 = Yes, 2 = No										
In the last 12 months, someone here has treated me as an inferior because of my sex.	1.96	5423	.195	1.79	1162	.409	1.93	6585	.255	.258
In the last 12 months, someone here has made offensive sexist remarks to me.	1.94	5423	.230	1.82	1162	.382	1.92	6585	.267	.173
In the last 12 months, someone here has put me down or was condescending to me because of my sex.	1.96	5423	.195	1.82	1162	.384	1.94	6585	.245	.217
Table 5 (Continued)										

	Male			Female			Total			Eta
	Mean	N	SD	Mean	N	SD	Mean	N	SD	
Questions with two response options: 1 = Yes, 2 = No										
In the last 12 months, someone here has made unwelcome attempts to draw me into a discussion of sexual matters.	1.94	5423	.241	1.89	1162	.313	1.93	6585	.256	.072
In the last 12 months, someone here has made offensive remarks about my appearance, body, or sexual activities.	1.91	5423	.286	1.83	1162	.374	1.90	6585	.305	.097
In the last 12 months, someone here has made unwanted attempts to establish a romantic sexual relationship with me, despite my efforts to discourage it.	1.97	5423	.181	1.91	1162	.290	1.96	6585	.206	.110
In the last 12 months, someone here has made gestures or used body language of a sexual nature that embarrassed or offended me.	1.95	5423	.221	1.91	1162	.293	1.94	6585	.235	.070
In the last 12 months, someone here has continued to ask me for dates, drinks, dinner, etc., even though I said “no.”	1.97	5423	.176	1.92	1162	.273	1.96	6585	.198	.094
In the last 12 months, someone here has touched me in a way that made me feel uncomfortable.	1.96	5423	.191	1.94	1162	.236	1.96	6585	.200	.041

Table 5 (Continued)										
	Male			Female			Total			Eta
	Mean	N	SD	Mean	N	SD	Mean	N	SD	
Questions with two response options: 1 = Yes, 2 = No										
In the last 12 months, someone here has made me feel like I was being bribed with a reward to engage in sexual behavior.	1.97	5423	.170	1.97	1162	.159	1.97	6585	.168	.009
In the last 12 months, someone here made me feel threatened with some sort of retaliation for not being sexually cooperative.	1.97	5423	.167	1.97	1162	.169	1.97	6585	.167	.001
In the last 12 months, someone here has treated me badly for refusing to have sex.	1.97	5423	.165	1.97	1162	.182	1.97	6585	.168	.015
In the last 12 months, someone here has implied faster promotions or better treatment if I were sexually cooperative.	1.97	5423	.179	1.98	1162	.156	1.97	6585	.175	.018

Table 6

Factor Analyses: Question Set 1 (1-15), Question Set 2 (16-28) and Both Sets Combined (Rotated Component Matrices)

Question Set 1 (1-15)	Component			Question Set 2 (16-28)	Combined -- Component				
	1	2	3		1	2	3	4	5
Q1 Members of my work group feel free to report sexual harassment without fear of reprisal.	.655	-.267	.379		.719	.000	-.204	-.200	.250
Q2 Members of my work group feel free to report sexual assault without fear of reprisal.	.678	-.274	.368		.737	-.026	-.163	-.212	.250
Q3 Complaints about sexual harassment would be taken seriously, no matter who makes them.	.697	-.290	.366		.749	-.048	-.166	-.229	.259
Q4 People would likely get away with committing sexual harassment if it was reported.	-.327	.773	-.012		-.313	.201	-.010	.771	-.069
Q5 People would likely get away with committing sexual assault if it was reported.	-.356	.756	.048		-.330	.240	-.086	.762	-.023
Q6 Policies forbidding sexual harassment are well publicized.	.830	-.098	.166		.847	-.073	.001	-.062	.067
Q7 Complaint procedures related to sexual harassment are well publicized.	.826	-.085	.174		.849	-.045	-.034	-.045	.062
Q8 Reports of sexual harassment are taken seriously.	.774	-.272	.315		.812	-.063	-.090	-.225	.222
Q9 Sexual assault reporting procedures are well publicized.	.824	-.088	.194		.846	-.056	-.020	-.050	.091
Q10 Sexist jokes are frequently heard.	-.054	.767	-.262		-.156	-.022	.324	.711	-.139
Q11 Reports of sexual assault are taken seriously.	.743	-.240	.287		.767	-.105	-.021	-.205	.223
Q12 Some people here make sexually suggestive remarks about other people.	-.040	.778	-.280		-.142	-.029	.340	.723	-.161
Q13 My supervisor helps everyone in my workgroup feel included.	.349	-.139	.809		.426	-.059	-.058	-.121	.796
Q14 I trust my supervisor to deal fairly with issues of equal treatment in the workplace.	.347	-.166	.818		.428	-.040	-.081	-.146	.800
Q15 All personnel are kept well informed about issues and decisions that affect them.	.279	-.127	.793		.370	.030	-.122	-.108	.751

Table 6 (Continued)

Question Set 2 (16-28)	Comp.		Component				
	1	2	1	2	3	4	5
Q16 In the last 12 months, someone here has treated me as an inferior because of my sex.	.216	.728	-.086	.298	.655	.047	-.072
Q17 In the last 12 months, someone here has made offensive sexist remarks to me.	.209	.778	-.095	.256	.736	.131	-.030
Q18 In the last 12 months, someone here has put me down or was condescending to me because of my sex.	.268	.746	-.094	.347	.673	.040	-.073
Q19 In the last 12 months, someone here has made unwelcome attempts to draw me into a discussion of sexual matters.	.374	.653	-.093	.398	.627	.108	-.017
Q20 In the last 12 months, someone here has made offensive remarks about my appearance, body, or sexual activities.	.197	.721	-.058	.234	.691	.125	-.110
Q21 In the last 12 months, someone here has made unwanted attempts to establish a romantic sexual relationship with me, despite my efforts to discourage it.	.623	.424	-.045	.637	.394	.071	-.010
Q22 In the last 12 months, someone here has made gestures or used body language of a sexual nature that embarrassed or offended me.	.435	.585	-.072	.453	.565	.091	-.009
Q23 In the last 12 months, someone here has continued to ask me for dates, drinks, dinner, etc., even though I said "no."	.680	.362	-.058	.688	.327	.075	.002
Q24 In the last 12 months, someone here has touched me in a way that made me feel uncomfortable.	.616	.413	-.070	.630	.379	.052	-.042
Q25 In the last 12 months, someone here has made me feel like I was being bribed with a reward to engage in sexual behavior.	.815	.227	-.045	.820	.179	.068	.010
Q26 In the last 12 months, someone here made me feel threatened with some sort of retaliation for not being sexually cooperative.	.840	.234	-.047	.845	.187	.041	-.034
Q27 In the last 12 months, someone here has treated me badly for refusing to have sex.	.830	.215	-.041	.828	.178	.048	-.015
Q28 In the last 12 months, someone here has implied faster promotions or better treatment if I were sexually cooperative.	.814	.251	-.045	.821	.205	.054	-.015

Table 7

Correlations among Scale Items and Reliability Assessment for the Five New SHSA Scales

F1. Policy Clarity/Freedom to Report Issues

	Q1	Q2	Q3	Q6	Q7	Q8	Q9	Q11	Cronbach's Alpha if Item Deleted
Q1 Members of my work group feel free to report sexual harassment without fear of reprisal.	1.000	.869	.730	.532	.522	.664	.530	.607	.930
Q2 Members of my work group feel free to report sexual assault without fear of reprisal.	.869	1.000	.735	.550	.536	.677	.554	.634	.928
Q3 Complaints about sexual harassment would be taken seriously, no matter who makes them.	.730	.735	1.000	.586	.560	.757	.575	.696	.927
Q6 Policies forbidding sexual harassment are well publicized.	.532	.550	.586	1.000	.780	.664	.738	.612	.930
Q7 Complaint procedures related to sexual harassment are well publicized.	.522	.536	.560	.780	1.000	.652	.796	.596	.930
Q8 Reports of sexual harassment are taken seriously.	.664	.677	.757	.664	.652	1.000	.667	.776	.924
Q9 Sexual assault reporting procedures are well publicized.	.530	.554	.575	.738	.796	.667	1.000	.616	.930
Q11 Reports of sexual assault are taken seriously.	.607	.634	.696	.612	.596	.776	.616	1.000	.929
Cronbach's Alpha	Standardized								
.937	.937								

Table 7 (Continued)

F2. Individualistic Sexual Harassment

	Q21	Q23	Q24	Q25	Q26	Q27	Q28	Cronbach's Alpha if Item Deleted
Q21 In the last 12 months, someone here has made unwanted attempts to establish a romantic sexual relationship with me, despite my efforts to discourage it.	1.000	.670	.499	.509	.559	.562	.523	.900
Q23 In the last 12 months, someone here has continued to ask me for dates, drinks, dinner, etc., even though I said "no."	.670	1.000	.492	.546	.589	.583	.560	.896
Q24 In the last 12 months, someone here has touched me in a way that made me feel uncomfortable.	.499	.492	1.000	.558	.559	.544	.562	.903
Q25 In the last 12 months, someone here has made me feel like I was being bribed with a reward to engage in sexual behavior.	.509	.546	.558	1.000	.700	.676	.693	.891
Q26 In the last 12 months, someone here made me feel threatened with some sort of retaliation for not being sexually cooperative.	.559	.589	.559	.700	1.000	.705	.716	.887
Q27 In the last 12 months, someone here has treated me badly for refusing to have sex.	.562	.583	.544	.676	.705	1.000	.678	.889
Q28 In the last 12 months, someone here has implied faster promotions or better treatment if I were sexually cooperative.	.523	.560	.562	.693	.716	.678	1.000	.889
Cronbach's Alpha	Standardized							
.907	.911							

Table 7 (Continued)

F3: Broader Sexist Behavior/Environment

	Q16	Q17	Q18	Q19	Q20	Q22	Cronbach's Alpha if Item Deleted
Q16 In the last 12 months, someone here has treated me as an inferior because of my sex.	1.000	.492	.696	.423	.401	.382	.832
Q17 In the last 12 months, someone here has made offensive sexist remarks to me.	.492	1.000	.530	.539	.534	.514	.819
Q18 In the last 12 months, someone here has put me down or was condescending to me because of my sex.	.696	.530	1.000	.471	.445	.439	.822
Q19 In the last 12 months, someone here has made unwelcome attempts to draw me into a discussion of sexual matters.	.423	.539	.471	1.000	.524	.542	.825
Q20 In the last 12 months, someone here has made offensive remarks about my appearance, body, or sexual activities.	.401	.534	.445	.524	1.000	.484	.835
Q22 In the last 12 months, someone here has made gestures or used body language of a sexual nature that embarrassed or offended me.	.382	.514	.439	.542	.484	1.000	.833
Cronbach's Alpha	Standardized						
.852	.854						

Table 7 (Continued)

F4. Sexist Behavior/Get Away With It

	Q4	Q5	Q10	Q12	Cronbach's Alpha if Item Deleted
Q4 People would likely get away with committing sexual harassment if it was reported.	1.000	.799	.421	.444	.765
Q5 People would likely get away with committing sexual assault if it was reported.	.799	1.000	.401	.405	.777
Q10 Sexist jokes are frequently heard.	.421	.401	1.000	.737	.781
Q12 Some people here make sexually suggestive remarks about other people.	.444	.405	.737	1.000	.774
Cronbach's Alpha	Standardized				
.820	.821				

F5. Supervisor Clarity/Communication

	Q13	Q14	Q15	Cronbach's Alpha if Item Deleted
Q13 My supervisor helps everyone in my workgroup feel included.	1.000	.829	.654	.808
Q14 I trust my supervisor to deal fairly with issues of equal treatment in the workplace.	.829	1.000	.681	.788
Q15 All personnel are kept well informed about issues and decisions that affect them.	.654	.681	1.000	.906
Cronbach's Alpha	Standardized			
.883	.886			

Table 8

Correlations among New SHSA Variables and Core DEOCS SH Questions

		F1	F2	F3	F4	F5	DEOCS: SH	DEOCS: Scale 1
F1POLICY Policy Clarity/ Freedom to Report (Higher Score=Disagree)	Pearson Correlation	1	-.175**	-.251**	-.493**	.644**	-.207**	-.424**
F2INDIVHAR Individualist - touch, bribe, threaten, etc. (Higher Score=No)	Pearson Correlation		1	.683**	.259**	-.105**	.306**	.272**
F3SEXIST Sexist treatment, remarks, gestures (High Score=No)	Pearson Correlation			1	.357**	-.230**	.444**	.417**
F4GETAWAY Likely get away with harassment, assault (Higher Score=Disagree)	Pearson Correlation				1	-.392**	.251**	.553**
F5SUPERVISOR Supervisor inclusive, fair, informative (Higher Score=Disagree)	Pearson Correlation					1	-.174**	-.378**
SexualHarassment	Pearson Correlation						1	.355**
Scale1 Sexual Harassment & Discrimination	Pearson Correlation							1
Mean		1.951	1.965	1.926	3.606	2.248	1.929	4.103
Std. Deviation		0.838	0.147	0.198	0.952	1.036	0.257	0.935
N		6581	6585	6585	6581	6581	6585	6585
Skewness		.716	-5.064	-3.110	-.320	.652	-3.335	-1.073
Kurtosis		.239	26.634	9.425	-.312	-.074	9.125	.614
Minimum		1.00	1.00	1.00	1.00	1.00	1	1.00
Maximum		5.00	2.00	2.00	5.00	5.00	2	5.00