

# DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE

DIRECTORATE OF RESEARCH

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## EXAMINATION OF THE PSYCHOMETRIC PROPERTIES OF THE SENIOR LEADER EQUAL OPPORTUNITY SURVEY: EQUAL OPPORTUNITY PERCEPTIONS

by

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13. ABSTRACT (Maximum 200 words)  The "Equal Opportunity Perceptions" (EOP) portion of the Senior Leader Equal Opportunity Survey was examined for its psychometric properties. In a data set of 346 senior leaders from a variety of Services and DoD agencies, the following actions were taken: factor analyses were carried out to identify potential subscales; scores on the tentative subscales were computed and corresponding internal consistency indices (Coefficient Alpha) were computed; correlational analyses were applied to discover convergent validity evidence for the scales; the Spearman-Brown prophecy formula was applied to the scales to estimate the number of items necessary to bring the internal consistency of the tentative subscales to a sufficiently high and practical level of reliability. A set of additional EOP items was created to support the tentative scales. (These items were preliminarily tested through a reallocation task to determine their clarity and the tentative dimensions' meaningfulness.) Recommendations were made for further research on the measurement of EOP, future use of the tentative scales, and future use of the data that emerge from the scales.			
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## Introduction

The general goal of this research was to continue DEOMI's efforts to develop methods of assessing, communicating to, and training general and flag officers and civilian senior leaders in the Senior Executive Service as mandated by the Secretary of Defense in March, 1994. In particular, the perception-based items ("Equal Opportunity Perceptions" or EOP) constituting one part of the Senior Leader Equal Opportunity Survey (SLEOS, Appendix D) were examined for their underlying dimensionality and their possible use in new scales. Ultimately, the point of this effort is to develop a sound measurement instrument, capable of providing valid and precise information, appropriate to senior leaders as defined above.

Appendix A presents the 25 items comprising the EOP section of the SLEOS. They are expressed as beliefs or perceptions to which the respondent must indicate his or her degree of agreement on a five-point scale. The following are three examples of the items that appear in Appendix A:

28. I have received sufficient EO training in my career.
29. Most leaders in my Service or agency place too much emphasis on EO issues.
30. EO training in my Service or agency is generally helpful in improving intergroup relations.

A cursory review of these items indicates that they are designed to tap into senior leaders' beliefs, opinions, and perceptions regarding many different issues pertinent to equal opportunity climate within the Department of Defense (DoD) and federal government. In order for the items to be investigated as to their capability to provide information over and above the other measures that are presented on the SLEOS, a series of analyses were carried out. These are described in the following sections.

## Method

### Research Participants

A total of 346 senior leaders served as respondents to the SLEOS. Appendix B presents a demographic breakdown of the sample.

**The opinions expressed in this report are those of the author and should not be construed to represent the official position of DEOMI, the military services, or the Department of Defense.**

## Analyses

Factor analyses. Factor analysis served as the primary statistical tool to identify the constructs that underlie the EOP items. Results of the factor analyses, therefore, provided an initial estimate of the potential subscales comprising the EOP items. The approach that was taken in the factor analysis was to allow as many potentially meaningful factors to emerge as possible. The assumption was that it was important initially to capture as much variance in the current EOP items through common factors as possible. Early decisions to trim back could lead to premature loss of currently underrepresented dimensions among the current items.

The set of EOP data was factor analyzed by means of several factor extraction methods and several factor rotation methods to determine a set of reasonably stable scale factors. The following extraction procedures were used: principal components, principal axis, alpha, generalized least squares, and unweighted least squares. The PC+ DOS version of the Statistical Package for Social Sciences (SPSS) (19xx) provided the software for all analyses. For similar reasons, a variety of factor rotations were carried out: Varimax, Equamax, Quartimax, and Quartimin. The standard heuristics were used to decide on a solution including the eigenvalues, the scree criterion, and simple structure.

Scale Scores. Prospective scales were created by examining the items with the highest loadings. The initial rule of thumb for including an item in a subscale was a loading greater than .5. However, there were cases where items with lower loadings were included because of interpretability. Interpretation of each of the scales was carried out again in a somewhat traditional manner by searching for "themes" among the highest-loading items for each factor. Composite or scale scores were computed as a simple sum of the highest loading items for each factor.

Internal consistency of scales. Coefficient alpha was computed for each subscale to provide an estimate of the degree to which the items "hang together" as a meaningful and interpretable scale.

Spearman-Brown prophecy formula. The number of items required to bring the prospective scales to a level of .8 was estimated by use of the Spearman-Brown prophecy formula.

Intercorrelation of prospective scale scores. The intercorrelation of the prospective scales was examined.

Convergent validity of prospective scales. Preliminary estimates of convergent validity were made by examining the correlation between scores on the prospective scales and demographic and other data. Some investigation into the discriminant validity was made as well by examining the degree of relationship with variables which might imply response bias.

## Developing Improved Subscales

It was anticipated that the factor analyses would only provide a means of suggesting prospective scales. As was indicated above, I anticipated that each of the prospective scales would require additional items in order to bring their internal consistency to minimally useful levels. Therefore, items were constructed in such a way as to "complete" the construct that appeared to be suggested by each factor in the factor solution.

## Initial Test of the Construct Validity of the Scales

The final phase in this project was to test the meaningfulness of the subscales that emerged and to test the clarity and relevance of the additional items that were created. This test was carried out by what I refer to as a reallocation task. This task involves that someone with reasonable expertise in the attitudinal area (in this case, equal opportunity) examine each of the items presented in random order and assign them or "reallocate them" to one of the emerging factors. The assumption is that if the respondent accurately assigns items to dimensions, then the items and the factors are meaningful. If respondents inaccurately assign items, then items or factors may lack in some meaningfulness.

## **Results**

### Factor Analysis

As noted above, several different factor extraction and rotation methods were used to "triangulate" on a reasonable solution. Ultimately, the Principal Axis Factor solution with Equamax rotation was selected because of its interpretability. (Once again, I emphasize that this research was inclusive rather than exclusive in nature; in other words, I consciously chose to seek as many possible factors as possible from the beginning with the intention of testing their usefulness and validity over time. Given this approach, it is reasonable to proffer the subjective criterion of "interpretability" as the primary criterion for factor solution.) Appendix B contains the SPSS listing describing all details of the seven-factor solution. Correlations among the factors are shown at the end of the listing.

The seven factors are summarized in Table 1. Internal consistency indices are reported on Table 1 for each of the factors. (Complete reliability analysis results from SPSS are reported in the Appendix C.) Table 2 shows the means and standard deviations for the seven subscales and Table 3 contains the intercorrelations among the seven dimensions.

Table 1 shows that only the first of the seven subscales has what might be referred to as a sufficiently high internal consistency index (exceeding .80). The remaining subscales have internal consistency indices that range from .59 through .68 (approximately). The Spearman-Brown prophecy formula (Nunnally, 1978) was applied to the latter seven subscales in order to estimate the number of items needed to reach an internal consistency index value of .80. Based on this formula, it was estimated that approximately 10 - 12 items were needed for these seven scales.

As a consequence, 47 additional EOP items were created in order to supplement the subscales with low internal consistency indices. The result then is a revised set of EOP items designed to cover the seven different dimensions. These revised EOP scale items appear in Table 4. Note that these items had not been administered as of the end of this study.

<b>Table 1</b>	
Description of Prospective EOP Subscales Emerging from the Seven-Factor Solution	
<b>Fairness:</b>	<p><b>"How fair, in general, is the respondent's organization"</b>            ALPHA = .8160</p> <p>The discipline system in my Service or agency is fair to all groups.            The promotion system in my Service or agency is fair to all groups.            The assignment system in my Service or agency is fair to all groups.</p>
<b>Helpful:</b>	<p><b>"How helpful is the EO program perceived to be."</b>            ALPHA = .6285</p> <p>EO training in my Service or agency is generally helpful in improving intergroup relations.            EO education or training is an important element in an EO program.            The EO program in my Service or agency is highly effective.            EO climate assessment is an important tool in resolving EO issues or improving the EO climate.</p>
<b>Import:</b>	<p><b>"How important are EO issues perceived to be."</b>            ALPHA = .6512</p> <p>The EO program in my Service or agency has served its purpose and should be eliminated.            Affirmative action is an important element of an EO program.            My Service or agency should expand its EO programs.            There is a need for a "safety valve" outside the chain-of-command to resolve some EO complaints.            Most leaders in my Service or agency place too much emphasis on EO issues.            I have received sufficient EO training in my career.</p>
<b>Leader:</b>	<p><b>"How important is leadership in EO matters."</b>            ALPHA = .5941</p> <p>The most important element in a good EO climate is the commander's or agency head's leadership.            It is extremely important for the organizational commander or head to model appropriate EO behaviors.            Everyone should be involved in promoting EO within my Service or agency.</p>
<b>Climate:</b>	<p><b>"How good is the organization's EO climate in comparison to others."</b>            ALPHA = .6763</p> <p>The EO climate in my Service or agency is much better than it is in the private sector.            The EO climate in my Service or agency is much better than it is in other (non-federal) government agencies.</p>
<b>Mission:</b>	<p><b>"How relevant are EO issues to the mission of the organization."</b>            ALPHA = .6230</p> <p>EO plays a critical part in readiness.            There is a strong link between EO in an organization and getting the job done.</p>
<b>Support:</b>	<p><b>"Degree of respondent's personal support for EO programs."</b>            ALPHA = .6384</p> <p>Overall, my Service or agency does an excellent job of providing EO to all members.            EO issues are generally handled equitably in my Service or agency.            I fully support the EO program in my Service or agency.            EO issues should be handled through the chain-of-command.            I fully understand the goals of the EO programs within my Service or agency.</p>



Variable	Cases	Mean	Std Dev
FAIRNESS	344	4.2936	.7560
HELPFUL	345	4.1536	.5306
IMPORT	344	3.4307	.6381
LEADEREO	345	4.6879	.4709
CLIMATE	342	3.9605	.7518
MISSION	344	4.3474	.7773
SUPPORT	345	4.3913	.4728

	FAIRNESS	HELPFUL	IMPORT	LEADEREO	CLIMATE	MISSION	SUPPORT
FAIRNESS	1.0000 ( 344) P= .000	.2446 ( 344) P= .000	-.1496 ( 343) P= .006	.1278 ( 344) P= .018	.2086 ( 341) P= .000	.1007 ( 343) P= .062	.4693 ( 344) P= .000
HELPFUL	.2446 ( 344) P= .000	1.0000 ( 345)	.3689 ( 344) P= .000	.3795 ( 345) P= .000	.1933 ( 342) P= .000	.3815 ( 344) P= .000	.4248 ( 344) P= .000
IMPORT	-.1496 ( 343) P= .006	.3689 ( 344) P= .000	1.0000 ( 344)	.3009 ( 344) P= .000	-.1072 ( 341) P= .048	.3493 ( 343) P= .000	-.0391 ( 344) P= .000
LEADEREO	.1278 ( 344) P= .018	.3795 ( 345) P= .000	.3009 ( 344) P= .000	1.0000 ( 345)	.1280 ( 342) P= .018	.4185 ( 344) P= .000	.3412 ( 345) p= .000
CLIMATE	.2086 ( 341) P= .000	.1933 ( 342) P= .000	-.1072 ( 341) P= .048	.1280 ( 342) P= .018	1.0000 ( 342)	.1245 ( 341) P= .022	.3509 ( 342) p= .000
MISSION	.1007 ( 343) P= .062	.3815 ( 344) P= .000	.3493 ( 343) P= .000	.4185 ( 344) P= .000	.1245 ( 341) P= .022	1.0000 ( 344)	.2079 ( 344) p= .000
SUPPORT	.4693 ( 344) P= .000	.4248 ( 345) P= .000	-.0391 ( 344) P= .469	.3412 ( 345) P= .000	.3509 ( 342) P= .000	.2079 ( 344) P= .000	1.0000 ( 345)

(Coefficient/(Cases)/2-tailed Significance)

**Table 4**

Revised EOP Scale  
(Newly created items are printed in bold face.)

1. The discipline system in my Service or agency is fair to all groups.
2. The promotion system in my Service or agency is fair to all groups.
3. The assignment system in my Service or agency is fair to all groups.
4. **My Service or agency provides fair feedback to all people regardless of their ethnicity or gender.**
5. **Performance assessment in my Service or agency is fair paying no attention to ethnicity or gender.**
6. **Reward systems in my Service or agency are fair to people regardless of their ethnicity or gender.**
7. EO training in my Service or agency is generally helpful in improving intergroup relations.
8. EO education or training is an important element in an EO program.
9. The EO program in my Service or agency is highly effective.
10. Climate assessment is an important tool in resolving EO issues or improving the EO climate.
11. **The EO program helps in reducing conflict.**
12. **The EO program helps in improving interpersonal relations.**
13. **The EO program helps in improving productivity.**
14. **The EO program helps in improving morale and *esprit de corps*.**
15. **The EO program helps in avoiding conflict.**
16. **The EO program helps in reducing infighting.**
17. **The EO program helps in producing mutual respect.**
18. **The EO program helps in producing opportunities for all.**
19. **The EO program helps in producing a climate of mutual respect.**
20. **The EO program helps in reducing feelings of animosity toward women and minorities.**
21. The EO program in my Service or agency has served its purpose and should be eliminated.
22. Affirmative action is an important element of an EO program.
23. My Service or agency should expand its EO programs.
24. There is a need for a "safety valve" outside the chain-of-command to resolve some EO complaints.
25. Most leaders in my Service or agency place too much emphasis on EO issues.
26. I have received sufficient EO training in my career.
27. **The EO program remains a necessary aspect of the supervising and leading within my organization.**
28. **The EO program places emphasis on important issues for the organization.**
29. **The EO program is important because it deals with basic issues of dignity and social responsibility.**
30. **The EO program contributes to the effectiveness of my Service or agency.**
31. **Training in EO should be a part of all members' preparation for service.**
32. **Treating people with respect and dignity is an important element in the success of my Service or agency.**
33. **EO training should be an important element in leading my agency or organization.**
34. **A career in my agency or Service should require EO training.**
35. The most important element in a good EO climate is the commander's or agency head's leadership.
36. It is extremely important for the organizational commander or head to model appropriate EO behaviors.
37. Everyone should be involved in promoting EO within my Service or agency.
38. **If a commander, leader, or supervisor in my organization is not well versed in EO matters, then the organization could very well find itself in difficult times.**
39. **Leadership in my agency or organization involves EO knowledge.**
40. **Units in my agency or organization that have not experienced EO issues are likely led by commanders or managers with a high level of EO knowledge.**
41. **EO issues and problems will arise in my agency or Service related to management if leaders are not cognizant of possible EO-relevant problems.**
42. **All leaders, formal and informal, should develop a deep awareness of EO issues.**
43. **Unfair discrimination to ethnic or gender groups can be kept in check through strong and informed leadership.**
44. The EO climate in my Service or agency is much better than it is in the private sector.

**Table 4 (Continued)**

45. The EO climate in my Service or agency is much better than it is in other (non-federal) government agencies.
46. The atmosphere in my Service or agency is one of mutual respect.
47. There is an *esprit de corps* in my Service or agency that promotes opportunity among all groups.
48. Diversity is valued by all in my Service or agency.
49. Individuals from underrepresented segments of society feel comfortable within my Service or agency.
50. EO plays a critical part in readiness.
51. There is a strong link between EO in an organization and getting the job done.
52. Conflict among different ethnic groups contributes to failed missions.
53. In my Service, when men cannot work well with women the goals of the organization are ignored.
54. If EO-related problems are not addressed, the performance of the organization suffers.
55. Denying equal opportunity to anyone can lead to ineffectiveness in performance.
56. The readiness in my Service or organization suffers when EO issues are ignored.
57. All groups must equally participate if the organization's mission is to be accomplished.
58. The goals of my Service or agency imply mutual respect and support among all members.
59. Overall, my Service or agency does an excellent job of providing EO to all members.
60. EO issues are generally handled equitably in my Service or agency.
61. I fully support the EO program in my Service or agency.
62. EO issues should be handled through the chain-of-command.
63. I fully understand the goals of the EO programs within my Service or agency.
64. I support a positive EO climate.
65. I believe that my Service or organization should continue to support EO training among its members.
66. EO issues are usually handled appropriately through the chain-of-command.
67. The EO program will resolve many of the climate problems within my Service or agency.
68. More should be done to promote affirmative action.
69. The EO program should be more widely advertised and better promoted within my Service or agency.
70. Part of the problem with the EO program and training is that it has not been adequately explained within my Service or agency.
71. The government should continue to invest in the EO and EEO programs.
72. The EO program will have long term consequences for the success of my Service or agency.

Convergent Validity of Prospective Scales.

Tables 5 presents a summary of correlational analyses that explore the relationship between the new scales and other variables for which there are expected relationships. Item numbers are listed in the cells indicating a significant relationship between the scale scores and the other covariates. All analyses were carried out to aid in the interpretation of the subscales.

<p align="center"><b>Table 5</b>  Correlates of New Scales: Evidence for Convergent Validity. Note: Items 2, 7, and 8  Are Polychotomous and Required ANOVA to Establish Relationships</p>					
	Demographic Items	EO Issues	EO Climate Perceptions	MEOCS Items	LPC Scale
Fairness of Organization	1, 10, 13, 16, 3, 8, 2,	44, 45, 47, 48, 50, 52, 53, 54, 55, 56, 57, 58, 59	60, 61	62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 78,79	
Helpfulness of EO progs	1, 6	59	61	69, 71, 74, 75	
Importance of EO	10, 18	44, 46, 47, 48, 50, 55, 58, 59	60, 61	62, 63, 64, 65, 66, 67, 68, 69, 70, 7	
Leadership Effect on EO	18, 7	46, 48, 49, 50, 51, 54, 55, 56, 57		69	
EO Climate Perception	10, 2, 8	49	60, 61	67, 73, 74, 82	
EO's Mission Relatedness	18, 7	44, 46, 47 48, 49, 51		71, 72, 73	
Support for EO Program	1, 10	55	61	62, 65, 67, 71, 72, 73,74,75	

*The Fairness Scale*

Covariates of the "Fairness" Scale: Demographic Items (Appendix D, items 1-18). There are several statistically significant demographic covariates of "fairness" that help to explain the scale. Items 1 (sex of respondent), 10 (experience of an incident of discrimination from a military source), 13 (experience of an incident of discrimination from a nonmilitary source), and 16 (education) positively covary with the fairness scale score. This suggests the following:

1. Men's perceptions of fairness are generally higher than women's;
2. Those who have experienced a military-based incident of discrimination usually perceive the organization as less fair than those who have not; and
3. Those who have experienced non-military-based incidents of discrimination usually perceive the organization as less fair than those who have not.
4. More educated tend to perceive the organization as fairer than less educated.

In addition, several of the polychotomous demographic items were examined to determine the degree of relationship between them and the "Fairness" Scale. Items 2, 3, and 8 showed significant relationships with perceived fairness. This suggests the following:

1. Blacks and Hispanics perceived their organizations as less fair than the white respondents;
2. Active military and reserve respondents perceived the organization as more fair than the DoD federal employees;
3. Officers perceived their organizations as more fair than the federal civilian employees.

For the most part, the relationships between the demographic items and the "Fairness" Scale are as expected.

#### Covariates of the "Fairness" Scale: EO Issues Items (Appendix D, items 44-59).

Significant correlations were found between the "Fairness" Scale and 13 of the 16 issues items. The EO issues items are scored in such a way that a higher number implies a more positive perception. Positive correlations between these items suggest that higher levels of perceived fairness correspond to higher levels of perceptions that there are problems with the issues. Thus the set of significant positive correlations represents convergent validity evidence. The three items that do not correlate with "fairness" concern less pervasive problems such as relationships between Asian-Pacific-Americans and whites, minority groups with other minority groups, and minority men and women. The lack of significant relationships between these variables and fairness is interpreted as discriminant validity evidence.

Covariates of the "Fairness" Scale: Climate Scale Items (Appendix D, items 60-61). The climate scale is the simple linear composite of two items. Higher values on the scale represent more positive attitude toward the EO climate. Each of these items positively correlates with the fairness score lending support for the interpretability of the fairness score.

Covariates of the "Fairness" Scale: MEOCS Items (Appendix D, items 62-83). Seventeen of 22 MEOCS items positively correlate with fairness. Because the MEOCS items are scored so that higher scores imply more positive attitudes, this set of relationships provides support for the interpretability of fairness. Positive relationships between MEOCS scales (composites of MEOCS items created in previous DEOMI research) and the "Fairness" Scale similarly and unsurprisingly lend convergent validity support for the "Fairness" Scale.

Covariates of the "Fairness" Scale: LPC Scale (Appendix D, items 84-95). No relationship between the LPC score (a measure of leadership orientation) and the fairness index was found. This may be evidence of discriminant validity because no relationship would be expected between LPC and fairness.

Summary of "Fairness" Scale Covariates: In general, the evidence seems to support the interpretability of the "Fairness" Scale.

### *The "Helpful" Scale*

Covariates of the "Helpful" Scale: Demographic Items (Appendix D, items 1-18). There are two variables that show a statistically significant relationship with this scale. The relationship with item 1 (sex) indicates that men tend to perceive the EO program as more helpful than women. The relationship with item 6 (age) indicates that older perceive the program as more helpful than younger. Both of these relationships are very weak and are not readily interpretable.

Covariates of the "Helpful" Scale: EO Issues Items (Appendix D, items 44-59). One of the EO issue items--Item 59--had a significant correlation with the "Helpful" Scale. Item 59 concerns the issue of preferential treatment for minority members. This is a weak relationship and not readily interpretable.

Covariates of the "Helpful" Scale: Climate Scale Items (Appendix D, items 60-61). One of the two climate scale items significantly but weakly correlated with the "Helpful" Scale.

Covariates of the "Helpful" Scale: MEOCS Items (Appendix D, items 62-83) Four of the 22 MEOCS items significantly but weakly correlated with the "Helpful" Scale.

Covariates of the "Helpful" Scale: LPC Scale (Appendix D, items 84-95). The LPC Scale did not covary with the "Helpful" Scale.

Summary of the Helpful Scale Covariates: Convergent validity evidence is not very strong for the "Helpful" Scale.

### *The "Import" Scale*

Covariates of the "Import" Scale: Demographic Items (Appendix D, items 1-18). Two variables showed a statistically significant but weak relationship with the "Import" Scale: items 10 and 18. This suggests that those who have experienced sexual harassment in the military perceive that EO programs are more important than those who have not. In addition, those who have at least one close personal minority friend tend to view the EO program as more important.

Covariates of the "Import" Scale: EO Issues Items (Appendix D, items 44-59). Eight EO issues items significantly but weakly correlated with the "Import" Scale in a way that is interpretable. In general, these relationships suggest that those who believe that there are problems pertinent to African-Americans, Asians, Native Americans, minorities, men and women, racism, preferential treatment for women and minorities also perceive the EO program to be of higher import.

Covariates of the "Import" Scale: Climate Scale Items (Appendix D, items 60-61). Both climate scale items significantly and negatively correlated with the "Import" Scale suggesting that as climate is perceived to be poorer, the import of the EO program is perceived to be greater.

Covariates of the "Import" Scale: MEOCS Items (Appendix D, items 62-83). Ten of the 22 MEOCS items significantly but weakly correlated with the "Import" Scale. All of these are in the direction that one would expect.

Covariates of the "Import" Scale: LPC Scale (Appendix D, items 84-95). The LPC scale did not covary with the "Import" Scale.

Summary of "Import" Scale Covariates. Convergent validity evidence is moderate for the "Import" Scale.

### *The "Leader EO" Scale*

Covariates of the "Leader EO" Scale: Demographic Items (Appendix D, items 1-18). One of the demographic questions pertaining to having a minority friend correlated with the "Leader EO" Scale. It is not clear why this is the case.

Covariates of the "Leader EO" Scale: EO Issues Items (Appendix D, items 44-59). Nine of the EO issues variables correlated significantly. This suggests that there is a tendency for several EO issues (problems) to be associated with leadership.

Covariates of the "Leader EO" Scale: Climate Scale Items (Appendix D, items 60-61). The two climate scale items did not significantly covary with the "Leader EO" Scale.

Covariates of the "Leader EO" Scale: MEOCS Items (Appendix D, items 62-83). One of the MEOCS items correlated with the "Leader EO" Scale.

Covariates of the "Leader EO" Scale: LPC Scale (Appendix D, items 84-95). The LPC scale did not covary with the "Leader EO" Scale.

Summary of "Leader EO" Scale Covariates. In all, the convergent validity evidence for the "Leader EO" Scale was not very convincing.

### *The "Climate" Scale*

Covariates of the "Climate" Scale: Demographic Items (Appendix D, items 1-18). Two demographic items covaried with the "Climate" Scale, offering a level of support for the scale. One of the two was the racial/ethnic group variable, where the minority groups tended to view the climate as less favorable. The other is the variable pertaining to the occurrence of an incident of discrimination or harassment. Those individuals who reported having had such an experience tended to view the climate as less positive. This again provides convergent validity support for the scale.

Covariates of the "Climate" Scale: EO Issues Items (Appendix D, items 44-59). One of the EO issue items--Item 49--covaried with the "Climate" Scale, suggesting that those who believe that there are minority group problems also perceive the climate to be less positive.

Covariates of the "Climate" Scale: Climate Scale Items (Appendix D, items 60-61). Both climate scale items significantly correlated with the new "Climate" Scale.

Covariates of the "Climate" Scale: MEOCS Items (Appendix D, items 62-83). Four of the 22 MEOCS items significantly but weakly correlated with the "Climate" Scale. Once again this provides some convergent validity evidence.

Covariates of the "Climate" Scale: LPC Scale (Appendix D, items 84-95). The LPC Scale did not covary with the "Climate" Scale.

Summary of "Climate" Scale Covariates. The "Climate" Scale appears to have convergent validity evidence, particularly in terms of the two-item climate scale that has been used in recent MEOCS data analyses.

### *The "Mission" Scale*

Covariates of the "Mission" Scale: Demographic Items (Appendix D, items 1-18). Although there are two items that weakly covary with the "Mission" Scale, they are not readily interpretable.

Covariates of the "Mission" Scale: EO Issues Items (Appendix D, items 44-59). Six EO issues variables covaried with the "Mission" Scale. However, it is not clear how these provide convergent validity evidence in and of themselves for the "Mission" Scale.

Covariates of the "Mission" Scale: Climate Scale Items (Appendix D, items 60-61). Neither of the climate scale items covaried with the "Mission" Scale.

Covariates of the "Mission" Scale: MEOCS Items (Appendix D, items 62-83). Three of the MEOCS items covaried with the "Mission" Scale. Once again, it is difficult to use this as evidence of convergent validity.

Covariates of the "Mission" Scale: LPC Scale (Appendix D, items 84-95). The LPC scale did not covary with the "Mission" Scale.

Summary of "Mission" Scale covariates. The "Mission" Scale was not provided much convergent validity support from the relationships that were found. This is not necessarily to criticize the measure. It may be that the data available are not sufficient to provide convergent evidence.



### The "Support" Scale

Covariates of the "Support" Scale: Demographic Items (Appendix D, items 1-18). Two variables significantly covary with the "Support" Scale.

Covariates of the "Support" Scale: EO Issues Items (Appendix D, items 44-59). One of the EO issues variables significantly covaries with the "Support" Scale.

Covariates of the "Support" Scale: Climate Scale Items (Appendix D, items 60-61). The climate measures did not covary with the "Support" Scale.

Covariates of the "Support" Scale: MEOCS Items (Appendix D, items 62-83). Three MEOCS items covaried with the "Support" Scale.

Covariates of the "Support" Scale: LPC Scale (Appendix D, items 84-95). The LPC Scale did not covary with the "Support" Scale.

Summary of "Support" Scale Covariates. There was not convincing evidence for the convergent validity of the "Support" Scale.

Table 6 summarizes the relationship between scales that have been used in the MEOCS data base and the new subscales. An asterisk in the cell of the table indicates that a relationship does indeed exist.

### Reallocation Task

It was evident from the reallocation task that the items, though constructed to fit into the dimensions (new subscales) conformed only moderately well. For the most part, no more than three of the five experts agreed upon the assignment of items to dimensions. This suggests that a more detailed study of the items and dimensions is required.

## **Discussion**

The present research suggests there are several areas of Equal Opportunity Perceptions of senior leaders that may be worth measuring. Precisely which of these areas should be further pursued depends on the value added by EOP items. For example, the "Fairness" dimension seems as though it might be worth further investment. It has relatively high internal consistency, and seems to be a dimension somewhat unique from the others already assessed through MEOCS-based measurement. It would seem that assessing senior leaders' perception of fairness of their organizations would provide a useful backdrop of information for providing feedback to them regarding their other responses on the SLEOS.

Table 6 Previously Constructed Scale-Based Correlates of New Scales						
	Scale 1: Sexual Harassment & Discrimin	Scale 2: Differential command behavior toward minorities	Scale 3: Positive EO behaviors	Scale 4: Racism and Sexism	Scale 5: Reverse Discrimin.	Scale 12: Overall EO Climate
Fairness of Organization	*	*	*	*		*
Helpfulness of EO progs			*			*
Importance of EO	*	*		*		*
Leadership Effect on EO						
EO Climate Perception						*
EO's Mission Relatedness			*			
Support for EO Program	*	*	*			*

On the other hand, the perceived “EO Climate” dimension is probably already well represented by the MEOCS-based items. It would seem unnecessary to develop this scale further provided that the other measure (the composite of two items) is sufficiently internally consistent. Perhaps some attention should be paid to the developing of the current two-item MEOCS-based measure into a measure with more items.

Ultimately, I recommend that decisions about the usefulness of the seven dimensions be made through further data collection. The following research program might help to provide data apropos of the issue:

1. Administer the full 72-item survey to multiple samples of middle managers in public and private sector organizations.

Rationale: Middle managers are assumed here to be very similar in their perceptions to senior leaders. Large samples of senior leaders, necessary for psychometric analysis, are unavailable.

2. Investigate the relationship between the MEOCS measures and the new scales. This evidence could be collected in a sample of middle managers and would provide very important construct validity evidence.
3. Carry out a confirmatory factor analysis to test the stability and invariance of the prospective factor solution.
4. Judge the value-added of the emerging dimensions. Aim toward parsimony to keep the survey length manageable.

These five "steps" will provide a firm statistical and logical basis for making a final decision with regard to the usefulness of the EOP-based scales. It seems likely from a practical perspective that the seven scales consisting of 72 items ultimately will be reduced to a much smaller set of items. Perhaps the most interesting of the scales from the evidence collected to date is the first scale referred to as the "Fairness" Scale. It has ample evidence of convergent validity, strong internal consistency, and appears to tap something that has not been directly tapped in previous measures. I recommend that this particular dimension be seriously considered in future EO assessment of senior leaders. Finally, I recommend that the evolving scales be considered for assessing in other EO environments. In particular, I recommend that the EOP-based scales after development be considered for use in the small unit research in which DEOMI is currently involved. (See Albright & McIntyre, 1995).

## References

Albright, R., & McIntyre, R. M. (1995). The development of the small unit MEOCS. Technical report in press, DEOMI.

Nunnally, J. C. (1978). Psychometric theory. New York: McGraw-Hill.

## **Appendix A**

**Original Equal Opportunity Perception Items**



**Items Appearing as Equal Opportunity Perceptions  
On the Senior Leader Equal Opportunity Survey**  
(Note: the numbers for each item are those used in the survey)

19. EO plays a critical part in readiness.
20. The EO program in my Service or agency has served its purpose and should be eliminated.
21. Overall, my Service or agency does an excellent job of providing EO to all members.
22. The EO climate in my Service or agency is much better than it is in the private sector.
23. The EO climate in my Service or agency is much better than it is in other (non-federal) government agencies.
24. I fully understand the goals of the EO programs within my Service or agency.
25. I fully support the EO program in my Service or agency.
26. There is a strong link between EO in an organization and getting the job done.
27. The EO program in my Service or agency is highly effective.
28. I have received sufficient EO training in my career.
29. Most leaders in my Service or agency place too much emphasis on EO issues.
30. EO training in my Service or agency is generally helpful in improving intergroup relations.
31. The most important element in a good EO climate is the commander's or agency head's leadership.
32. EO issues should be handled through the chain-of-command.
33. There is a need for a "safety valve" outside the chain-of-command to resolve some EO complaints.
34. EO climate assessment is an important tool in resolving EO issues or improving the EO climate.
35. Affirmative action is an important element of an EO program.

36. EO education or training is an important element in an EO program.
37. It is extremely important for the organizational commander or head to model appropriate EO behaviors.
38. Everyone should be involved in promoting EO within my Service or agency.
39. My Service or agency should expand its EO programs.
40. EO issues are generally handled equitably in my Service or agency.
41. The discipline system in my Service or agency is fair to all groups.
42. The promotion system in my Service or agency is fair to all groups.
43. The assignment system in my Service or agency is fair to all groups.



## **Appendix B**

**Results of the Factor Analysis of the Equal Opportunity Perception Items:  
Principal Components Analysis and Equamax Rotation**



---- FACTOR ANALYSIS ----

Analysis Number 1 Matrix input

Extraction 1 for Analysis 1, Principal Axis Factoring (PAF)

Initial Statistics:

Variable	Communality *	Factor	Eigenvalue	Pct of Var	Cum Pct
EOP19	.32547 *	1	5.07574	20.3	20.3
EOP20	.36892 *	2	3.66471	14.7	35.0
EOP21	.53139 *	3	1.50154	6.0	41.0
EOP22	.37896 *	4	1.32677	5.3	46.3
EOP23	.31926 *	5	1.12550	4.5	50.8
EOP24	.30244 *	6	1.05961	4.2	55.0
EOP25	.36960 *	7	1.04718	4.2	59.2
EOP26	.40618 *	8	.94583	3.8	63.0
EOP27	.49639 *	9	.86172	3.4	66.4
EOP28	.18178 *	10	.81597	3.3	69.7
EOP29	.25213 *	11	.74902	3.0	72.7
EOP30	.37887 *	12	.73214	2.9	75.6
EOP31	.23662 *	13	.69283	2.8	78.4
EOP32	.17445 *	14	.65369	2.6	81.0
EOP33	.27267 *	15	.60311	2.4	83.4
EOP34	.27319 *	16	.55415	2.2	85.6
EOP35	.35306 *	17	.53257	2.1	87.8
EOP36	.37981 *	18	.49628	2.0	89.8
EOP37	.37492 *	19	.46290	1.9	91.6
EOP38	.42781 *	20	.42840	1.7	93.3
EOP39	.28537 *	21	.37616	1.5	94.8
EOP40	.49691 *	22	.36910	1.5	96.3
EOP41	.48454 *	23	.34105	1.4	97.7
EOP42	.55190 *	24	.32044	1.3	98.9
EOP43	.58033 *	25	.26359	1.1	100.0

PAF Extracted 7 factors. 40 iterations required.

## ---- FACTOR ANALYSIS ----

Factor Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
EOP27	.64262	.20579	.10739	-.20872	.05946
EOP40	.59088	.37023	-.04318	.10358	.15875
EOP25	.57186	-.15085	-.00591	.04647	.10037
EOP30	.55556	-.10961	.03958	-.37470	.09637
EOP26	.53699	-.27818	.09279	.05953	-.23865
EOP24	.50194	-.01428	.12540	-.01036	.12284
EOP41	.48946	.46735	-.23042	.07882	-.01436
EOP38	.48391	-.38122	.00678	.25868	.02885
EOP42	.48162	.43961	-.43314	-.06988	-.18931
EOP36	.41015	-.39321	.00637	-.13742	.18416
EOP29	-.35180	.32350	.07087	.04110	.04718
EOP31	.31888	-.13673	.14040	.27322	.10759
EOP32	.21219	.11296	.14952	.19440	.16084
EOP21	.48484	.57159	.10458	-.09519	.15428
EOP35	.30038	-.52276	-.03035	-.11114	.03206
EOP39	.08415	-.51210	-.02699	-.08462	-.10235
EOP43	.47210	.51131	-.39495	-.04260	-.17482
EOP20	-.33684	.47133	.12688	.17981	.05542
EOP33	.20958	-.39626	-.14048	-.05759	.02107
EOP34	.34389	-.34991	-.07587	-.09960	.16950
EOP28	.19712	.31355	.06891	.10272	.04381
EOP23	.27855	.24645	.52920	-.06543	-.27397
EOP22	.39486	.26864	.46548	-.11953	-.11981
EOP37	.49703	-.16105	-.02911	.50874	.02653
EOP19	.36400	-.33329	.01141	.12658	-.42609
	FACTOR 6	FACTOR 7			
EOP27	-.10614	-.00103			
EOP40	.11639	-.15276			
EOP25	.11817	-.30148			
EOP30	-.28545	.22540			
EOP26	-.17661	-.09052			
EOP24	-.03434	-.05257			
EOP41	-.00371	.07563			
EOP38	.02467	.14769			
EOP42	.15730	.05812			
EOP36	.05319	.15811			
EOP29	-.02922	.11847			
EOP31	.08231	.06883			
EOP32	-.07390	-.15991			
EOP21	-.12312	-.10805			

## ----- FACTOR ANALYSIS -----

## FACTOR 6    FACTOR 7

EOP35	.08212	-.08624
EOP39	.14620	-.03243
EOP43	.07664	.03391
EOP20	-.08038	.18524
EOP33	.20379	.17656
EOP34	-.00921	.08450
EOP28	-.14193	.06816
EOP23	.27271	.07404
EOP22	.15937	.07491
EOP37	-.00218	.16940
EOP19	-.31851	-.05786

## Final Statistics:

Variable	Communality *	Factor	Eigenvalue	Pct of Var	Cum Pct
EOP19	.54608 *	1	4.56527	18.3	18.3
EOP20	.42789 *	2	3.13303	12.5	30.8
EOP21	.63242 *	3	1.03983	4.2	35.0
EOP22	.50441 *	4	.79144	3.2	38.1
EOP23	.57757 *	5	.60230	2.4	40.5
EOP24	.28702 *	6	.51250	2.1	42.6
EOP25	.46690 *	7	.41796	1.7	44.2
EOP26	.47424 *				
EOP27	.52521 *				
EOP28	.17918 *				
EOP29	.25224 *				
EOP30	.60420 *				
EOP31	.23783 *				
EOP32	.17484 *				
EOP33	.29714 *				
EOP34	.29233 *				
EOP35	.39199 *				
EOP36	.40351 *				
EOP37	.56204 *				
EOP38	.46971 *				
EOP39	.31012 *				
EOP40	.56088 *				
EOP41	.52323 *				
EOP42	.68167 *				
EOP43	.67970 *				

## ---- FACTOR ANALYSIS ----

Varimax Rotation 1, Extraction 1, Analysis 1 - Kaiser Normalization.

Varimax converged in 9 iterations.

Rotated Factor Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
EOP42	.82119	.04064	.00474	.06496	-.02231
EOP43	.81650	-.05448	-.00738	.05984	.04096
EOP41	.66068	-.11799	.14984	.06910	.16848
EOP40	.52953	.04849	.17156	.17259	.45900
EOP21	.47527	-.20564	-.05030	.24207	.46831
EOP20	-.00962	-.62454	.01571	.03797	-.04807
EOP35	-.10849	.58875	.10247	-.01968	.03807
EOP36	-.01671	.48898	.23470	.03675	.01966
EOP39	-.18441	.48770	.05358	-.00227	-.14443
EOP33	.00919	.45546	.21044	-.02342	-.19426
EOP25	.20955	.44916	.15411	.09305	.42162
EOP29	-.05574	-.44034	-.09483	.00301	-.09260
EOP34	.00652	.42556	.18123	-.06908	.04232
EOP28	.21074	-.24761	.11140	.08982	.17213
EOP37	.16997	.14208	.67367	-.00676	.14322
EOP38	.03284	.37680	.52254	.02317	.06668
EOP31	-.00282	.14296	.41564	.11426	.17363
EOP23	.08618	-.05961	.05292	.74684	.05738
EOP22	.15399	-.03366	.05865	.64925	.16794
EOP32	.03409	-.06631	.15243	.05264	.37677
EOP24	.15946	.20707	.17366	.16924	.31459
EOP30	.17762	.27417	.03365	.10840	.06169
EOP27	.38144	.13653	.03313	.28060	.31309
EOP19	.01522	.23048	.16394	.01764	-.00972
EOP26	.08389	.33659	.19903	.14223	.16042
	FACTOR 6	FACTOR 7			
EOP42	.01713	.02505			
EOP43	.04127	.05514			
EOP41	.12885	.02438			
EOP40	.06602	-.06217			
EOP21	.28843	-.02491			
EOP20	-.04678	-.17763			
EOP35	.09004	.11469			
EOP36	.32672	-.02368			

## ---- FACTOR ANALYSIS ----

	FACTOR 6	FACTOR 7
EOP39	-.05360	.10797
EOP33	.07067	-.04529
EOP25	.00925	.10481
EOP29	-.05175	-.18704
EOP34	.26759	.01314
EOP28	.14676	.04262
EOP37	.01824	.19555
EOP38	.11861	.18591
EOP31	.02604	.02736
EOP23	-.01144	.05091
EOP22	.16098	.02196
EOP32	.01801	.03153
EOP24	.23362	.07975
EOP30	.67486	.15921
EOP27	.41362	.11014
EOP19	.07089	.67854
EOP26	.14655	.49685

## Factor Transformation Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
FACTOR 1	.53601	.42973	.35254	.27999	.37048
FACTOR 2	.56621	-.70819	-.20952	.22222	.19634
FACTOR 3	-.57304	-.19249	.07378	.73187	.27244
FACTOR 4	-.04860	-.30705	.75233	-.19388	.19800
FACTOR 5	-.17952	.03360	.16683	-.33871	.47072
FACTOR 6	.16415	.37223	.10017	.41324	-.16951
FACTOR 7	.04669	-.20683	.47171	.11624	-.67857

	FACTOR 6	FACTOR 7
FACTOR 1	.35106	.25464
FACTOR 2	-.01646	-.21394
FACTOR 3	.13008	.04851
FACTOR 4	-.48188	.16838
FACTOR 5	.34365	-.69600
FACTOR 6	-.53624	-.58087
FACTOR 7	.47086	-.19197

## ---- FACTOR ANALYSIS ----

Equamax Rotation 2, Extraction 1, Analysis 1 - Kaiser Normalization.

Equamax converged in 16 iterations.

Rotated Factor Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
EOP42	.81479	.04657	.03385	.10748	.03885
EOP43	.80590	.03294	-.05971	.10992	.05279
EOP41	.63736	.09210	-.16179	.12416	.02381
EOP30	.14399	.70520	.00817	.14527	.24182
EOP36	-.03656	.47072	.30396	.03519	.09317
EOP27	.32795	.41288	.00247	.32928	.16380
EOP34	-.00715	.39354	.26508	-.06874	.11333
EOP20	.00048	-.23027	-.53086	.05803	-.29271
EOP35	-.11998	.26410	.47262	-.04219	.23045
EOP39	-.17679	.09848	.42673	-.03998	.19126
EOP33	.01650	.23021	.34912	-.04419	.04807
EOP29	-.04103	-.17394	-.34558	.01010	-.27437
EOP28	.18941	.05115	-.28324	.12676	.01326
EOP23	.04455	-.06090	-.02231	.75295	.04149
EOP22	.10328	.11468	-.05039	.67173	.02945
EOP19	.00742	.07289	.05644	.01717	.71831
EOP26	.05334	.19126	.16720	.15052	.56943
EOP37	.14969	.05465	-.01351	.00979	.25402
EOP38	.01369	.22179	.19121	.02340	.28285
EOP31	-.02805	.06630	.06238	.11947	.07726
EOP21	.41962	.19587	-.22541	.30831	-.03684
EOP40	.47937	.08259	.04274	.22106	-.02605
EOP25	.16481	.13852	.39611	.10425	.20530
EOP32	.00108	-.01682	-.07145	.07426	.03576
EOP24	.11551	.27100	.09904	.19509	.14373

	FACTOR 6	FACTOR 7
EOP42	.01460	.03452
EOP43	-.01584	.10226
EOP41	.12266	.22653
EOP30	.01210	.07982
EOP36	.27965	.00899
EOP27	.01500	.33422
EOP34	.21945	.03762



## ---- FACTOR ANALYSIS ----

## FACTOR 6    FACTOR 7

EOP20	-.06085	-.01721
EOP35	.17197	.00408
EOP39	-.12108	-.18502
EOP33	.27352	-.20716
EOP29	-.14137	-.07425
EOP28	.05936	.20172
EOP23	.04257	.03027
EOP22	.04039	.15599
EOP19	.14305	-.02832
EOP26	.19977	.14157
EOP37	.66899	.15586
EOP38	.54758	.05807
EOP31	.42511	.16673
EOP21	-.09914	.51080
EOP40	.17673	.49158
EOP25	.20919	.40850
EOP32	.13434	.38027
EOP24	.17753	.31653

## Factor Transformation Matrix:

## FACTOR 1    FACTOR 2    FACTOR 3    FACTOR 4    FACTOR 5

FACTOR 1	.47271	.44288	.21761	.32722	.37397
FACTOR 2	.54791	-.22710	-.54405	.28518	-.34234
FACTOR 3	-.63011	.00623	-.18497	.72411	.02203
FACTOR 4	-.04453	-.55783	-.27574	-.19332	.12485
FACTOR 5	-.20795	.40437	.00232	-.31391	-.64207
FACTOR 6	.16742	-.32308	.59993	.36747	-.52382
FACTOR 7	.07771	.41613	-.43184	.12773	-.20057

## FACTOR 6    FACTOR 7

FACTOR 1	.36822	.38798
FACTOR 2	-.29113	.26257
FACTOR 3	.02583	.20790
FACTOR 4	.71751	.20741
FACTOR 5	.18555	.49801
FACTOR 6	.23866	-.20319
FACTOR 7	.41567	-.63639

## ---- FACTOR ANALYSIS ----

Quartimax Rotation 3, Extraction 1, Analysis 1 - Kaiser Normalization.

Quartimax converged in 8 iterations.

Rotated Factor Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
EOP20	-.62347	.02250	.04756	.14529	.01174
EOP35	.61272	-.12146	-.01718	-.02114	.01200
EOP36	.57501	.01639	.03600	.10844	-.01747
EOP38	.52321	.06442	.02003	.42155	.03764
EOP25	.51144	.27919	.06784	.02936	.31409
EOP34	.49837	.02864	-.07126	.07208	.00686
EOP29	-.48094	-.05501	.01275	.00562	-.04044
EOP26	.47978	.14244	.13644	.10376	.11988
EOP33	.46287	-.05392	-.03066	.12000	-.23024
EOP39	.46039	-.25223	.00587	-.02666	-.13901
EOP24	.32224	.26911	.15634	.08781	.24895
EOP43	-.02516	.80251	-.01233	-.03224	-.15441
EOP42	.05175	.78137	-.01010	-.03457	-.22733
EOP41	-.02807	.71047	.01441	.12670	.01670
EOP21	-.10033	.64092	.20653	-.07285	.35153
EOP40	.13216	.63780	.12478	.10757	.30569
EOP27	.27118	.51803	.25098	-.05698	.19801
EOP28	-.15440	.29676	.07854	.12996	.14307
EOP23	-.02521	.16239	.73737	.04970	.02357
EOP22	.04082	.27035	.63645	.03107	.11522
EOP37	.32275	.21926	-.01870	.61377	.10437
EOP31	.24797	.05892	.11457	.36490	.16134
EOP32	.01207	.13954	.05233	.13896	.36459
EOP19	.36769	.02477	.02065	.10861	-.00908
EOP30	.43675	.28425	.10038	-.07914	.00230
	FACTOR 6	FACTOR 7			
EOP20	-.08654	.08757			
EOP35	.02428	-.01843			
EOP36	-.11395	.21508			
EOP38	.10566	.03348			
EOP25	.01376	-.15194			
EOP34	-.06450	.16927			
EOP29	-.11429	.05495			
EOP26	.42164	.04719			
EOP33	-.10746	-.00939			

## ---- FACTOR ANALYSIS ----

	FACTOR 6	FACTOR 7
EOP39	.04862	-.11003
EOP24	.01607	.12796
EOP43	.05340	-.08459
EOP42	.01436	-.12356
EOP41	.01699	.02913
EOP21	-.03583	.19685
EOP40	-.10391	-.07237
EOP27	.05006	.27452
EOP28	.05513	.14389
EOP23	.04533	-.04212
EOP22	.00067	.10168
EOP37	.14258	-.03883
EOP31	-.01738	-.01597
EOP32	.01509	-.00388
EOP19	.63027	.02687
EOP30	.08339	.55619

## Factor Transformation Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
FACTOR 1	.62898	.66151	.23311	.19177	.19698
FACTOR 2	-.72088	.64278	.17937	-.09604	.10371
FACTOR 3	-.10319	-.38157	.78751	.10000	.40869
FACTOR 4	-.18945	-.03407	-.18548	.82146	.25375
FACTOR 5	.06872	-.03930	-.32082	.11849	.48849
FACTOR 6	.16293	.02957	.37511	.05904	-.27751
FACTOR 7	-.08306	.00783	.12359	.50167	-.63513

	FACTOR 6	FACTOR 7
FACTOR 1	.14121	.13010
FACTOR 2	-.12187	.01230
FACTOR 3	.04717	.21053
FACTOR 4	.19740	-.38780
FACTOR 5	-.73117	.32176
FACTOR 6	-.60141	-.62425
FACTOR 7	-.16647	.54313

## ---- FACTOR ANALYSIS ----

Oblimin Rotation 4, Extraction 1, Analysis 1 - Kaiser Normalization.

Oblimin converged in 17 iterations.

Pattern Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
EOP30	.76896	.08627	.03800	-.08093	-.14289
EOP27	.42313	-.02010	.21743	-.08695	-.07534
EOP36	.42313	-.21628	.01033	.23005	.06839
EOP34	.35226	-.19976	-.10478	.16938	.01963
EOP20	-.10550	.56769	.05275	.05935	.15323
EOP25	.00775	-.48376	.04998	.09003	-.05184
EOP35	.15851	-.46370	-.02766	.08286	-.08517
EOP39	-.00930	-.41081	.02432	.07090	-.09583
EOP29	-.07230	.35990	.02458	-.05455	.16685
EOP28	.10106	.29862	.05311	.07079	-.04177
EOP23	-.10473	-.01272	.80866	.01826	-.02450
EOP22	.10521	.02653	.67374	-.00260	.01224
EOP37	-.05530	.12463	-.04939	.70049	-.16903
EOP38	.11027	-.08556	-.00575	.53268	-.15463
EOP31	-.00092	-.00909	.10249	.43336	.00680
EOP19	-.01034	-.02423	-.01110	.05378	-.71994
EOP26	.09776	-.15920	.10695	.08969	-.49897
EOP42	-.03627	-.07472	.01414	-.01040	-.00182
EOP43	-.02408	.01267	.00047	-.04128	-.03876
EOP41	.06960	.15339	.00165	.11541	-.00132
EOP40	.02208	-.12181	.11050	.12086	.11838
EOP21	.25770	.14825	.17159	-.16500	.05484
EOP32	-.01767	.03219	.02031	.10884	-.01330
EOP33	.13433	-.26940	-.01722	.26712	.07748
EOP24	.24034	-.10548	.12508	.10387	-.04243
	FACTOR 6	FACTOR 7			
EOP30	.02166	.05602			
EOP27	.22300	-.19610			
EOP36	-.07401	.07195			
EOP34	-.02864	.01186			
EOP20	-.03578	.01684			
EOP25	.15767	-.37714			
EOP35	-.10595	-.00070			
EOP39	-.12891	.17225			

## ---- FACTOR ANALYSIS ----

	FACTOR 6	FACTOR 7
EOP29	-.05472	.05262
EOP28	.12644	-.13867
EOP23	-.02659	.10284
EOP22	.00214	-.01506
EOP37	.13858	-.05177
EOP38	-.00100	.03027
EOP31	-.05906	-.11002
EOP19	-.00768	.05652
EOP26	.01161	-.08115
EOP42	.87432	.14024
EOP43	.84572	.06256
EOP41	.62557	-.07423
EOP40	.44572	-.38375
EOP21	.31183	-.40910
EOP32	-.05325	-.38977
EOP33	.05939	.27328
EOP24	.04364	-.24202

## ---- FACTOR ANALYSIS ----

## Structure Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
EOP30	.75853	-.19955	.20886	.18246	-.32246
EOP27	.56424	-.07815	.44347	.16338	-.24378
EOP36	.52555	-.45129	.05075	.40926	-.18130
EOP34	.44057	-.39701	-.04428	.33763	-.18139
EOP24	.40554	-.18361	.28163	.29965	-.21875
EOP20	-.33310	.62498	.05716	-.23521	.32739
EOP35	.34145	-.59049	-.05134	.32302	-.27884
EOP39	.12936	-.50313	-.09873	.20974	-.20819
EOP25	.34207	-.44823	.20039	.37881	-.27783
EOP29	-.28551	.44048	-.01609	-.27713	.31658
EOP33	.25915	-.43273	-.07282	.33609	-.10444
EOP23	.06479	.06922	.74508	.06075	-.08347
EOP22	.24163	.06227	.70358	.09360	-.08952
EOP37	.21735	-.14244	.10501	.70623	-.35514
EOP38	.35597	-.37150	.07374	.64407	-.38022
EOP31	.16955	-.14620	.16794	.46184	-.15148
EOP19	.21627	-.25836	.05037	.27870	-.73391
EOP26	.37293	-.34486	.21165	.36978	-.62359
EOP43	.18118	.11955	.22933	.01285	-.09058
EOP42	.19609	.02775	.21214	.04877	-.08217
EOP41	.23188	.17540	.25899	.14576	-.08273
EOP40	.27808	-.01132	.37228	.25605	-.05334
EOP21	.32512	.25645	.45644	-.03030	-.01386
EOP32	.06915	.05394	.15398	.16879	-.06714
EOP28	.10034	.26836	.20362	.04971	-.04016
	FACTOR 6	FACTOR 7			
EOP30	.23427	-.11043			
EOP27	.46570	-.41027			
EOP36	.00032	.01769			
EOP34	.01511	-.00071			
EOP24	.22751	-.34965			
EOP20	.00652	-.06174			
EOP35	-.11488	.07050			
EOP39	-.21955	.25491			
EOP25	.25750	-.39321			
EOP29	-.06047	.04223			
EOP33	-.02476	.23525			

## ---- FACTOR ANALYSIS ----

	FACTOR 6	FACTOR 7
EOP23	.15621	-.15824
EOP22	.23999	-.27412
EOP37	.21370	-.24436
EOP38	.06196	-.08983
EOP31	.04185	-.20725
EOP19	.03745	-.00816
EOP26	.13319	-.17717
EOP43	.81995	-.22359
EOP42	.81066	-.14667
EOP41	.69820	-.35098
EOP40	.60056	-.57305
EOP21	.57294	-.60962
EOP32	.09681	-.40302
EOP28	.26349	-.28540

## Factor Correlation Matrix:

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
FACTOR 1	1.00000				
FACTOR 2	-.35359	1.00000			
FACTOR 3	.21837	.09756	1.00000		
FACTOR 4	.33069	-.36966	.10698	1.00000	
FACTOR 5	-.29800	.28693	-.11467	-.32240	1.00000
FACTOR 6	.26324	.12355	.30138	.07843	-.09657
FACTOR 7	-.17402	-.16458	-.35218	-.19348	.09254

	FACTOR 6	FACTOR 7
FACTOR 6	1.00000	
FACTOR 7	-.34585	1.00000





## **Appendix C**

**Results of the Reliability Analysis of the Prospective Subscales  
Emerging from the Factor Analysis**



RELIABILITY ANALYSIS - SCALE (FAIRNESS)

1. EOP41 DISCIPLN SYSTM FAIR T ALL GRUPS IN MY ORG
2. EOP42 PROMOTION SYSTEM FAIR TO ALL IN MY ORG
3. EOP43 ASSIGNMNT SYSTEM IS FAIR T ALL IN MY ORG

	MEAN	STD DEV	CASES
1. EOP41	4.3156	.8518	339.0
2. EOP42	4.2684	.9367	339.0
3. EOP43	4.3009	.8554	339.0

CORRELATION MATRIX

	EOP41	EOP42	EOP43
EOP41	1.0000		
EOP42	.5202	1.0000	
EOP43	.5799	.6928	1.0000

# OF CASES = 339.0

# OF  
STATISTICS FOR MEAN VARIANCE STD DEV VARIABLES  
SCALE 12.8850 5.1199 2.2627 3

ITEM MEANS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
4.2950 4.2684 4.3156 .0472 1.0111 .0006

ITEM VARIANCES MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
.7782 .7255 .8774 .1519 1.2094 .0074

INTER-ITEM  
CORRELATIONS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
.5976 .5202 .6928 .1726 1.3318 .0061

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM- TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
EOP41	8.5693	2.7193	.5963	.3632	.8165
EOP42	8.6165	2.3022	.6826	.5011	.7341
EOP43	8.5841	2.4330	.7327	.5460	.6823

RELIABILITY ANALYSIS - SCALE (FAIRNESS)

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .8160      STANDARDIZED ITEM ALPHA = .8167

RELIABILITY ANALYSIS - SCALE (HELPFUL)

- 1. EOP30 EO TRAINING HELPS INTERGROUP RELATIONS
- 2. EOP36 EO TRAINNG IS IMPRTNT ASPCT OF EO PROG
- 3. EOP27 EO PROGRAM IN MY ORG IS EFFECTIVE
- 4. EOP34 EO CLIMATE ASSESSMENT IS A USEFUL TOOL

	MEAN	STD DEV	CASES
1. EOP30	3.9115	.8485	339.0
2. EOP36	4.5428	.6346	339.0
3. EOP27	4.0472	.7754	339.0
4. EOP34	4.1209	.8214	339.0

CORRELATION MATRIX

	EOP30	EOP36	EOP27	EOP34
EOP30	1.0000			
EOP36	.3697	1.0000		
EOP27	.4695	.1943	1.0000	
EOP34	.3168	.3334	.1118	1.0000

# OF CASES = 339.0

# OF  
 STATISTICS FOR MEAN VARIANCE STD DEV VARIABLES  
 SCALE 16.6224 4.5375 2.1301 4

ITEM MEANS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 4.1556 3.9115 4.5428 .6313 1.1614 .0741

ITEM VARIANCES MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .5997 .4028 .7200 .3172 1.7876 .0196

INTER-ITEM  
 CORRELATIONS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .2992 .1118 .4695 .3577 4.2003 .0148

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM- TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
EOP30	12.7109	2.3600	.5591	.3352	.4330
EOP36	12.0796	3.1978	.4128	.1898	.5637
EOP27	12.5752	2.9847	.3551	.2230	.5967
EOP34	12.5015	2.9312	.3312	.1568	.6178

RELIABILITY ANALYSIS - SCALE (HELPFUL)

RELIABILITY COEFFICIENTS 4 ITEMS

ALPHA = .6285      STANDARDIZED ITEM ALPHA = .6307

RELIABILITY ANALYSIS - SCALE (IMPORT)

- 1. EOP20 EO PROGRAM HAS SERVED PURPOSE-ELIMINATE
- 2. EOP35 AFFIRM ACTION IS IMPORTNT ASPECT OF EO
- 3. EOP39 MY ORG SHOULD EXPAND ITS EO PROGRAM
- 4. EOP33 NEED SAFETY VALV OUTSIDE CHAIN OF COMND
- 5. EOP29 MOST ORG LEADERS EMPHASIZE EO TOO MUCH
- 6. EOP28 I HAVE RECEIVED SUFFICIENT EO TRAINING

	MEAN	STD DEV	CASES
1. EOP20	4.2625	1.0083	339.0
2. EOP35	3.3953	1.2028	339.0
3. EOP39	2.8643	1.0431	339.0
4. EOP33	4.0855	1.0299	339.0
5. EOP29	3.8584	.9565	339.0
6. EOP28	2.1062	1.1096	339.0

CORRELATION MATRIX

	EOP20	EOP35	EOP39	EOP33	EOP29
EOP20	1.0000				
EOP35	.3947	1.0000			
EOP39	.2393	.3848	1.0000		
EOP33	.3088	.2759	.2256	1.0000	
EOP29	.3362	.2931	.1853	.2466	1.0000
EOP28	.1495	.1347	.2400	.0956	.0644

EOP28

EOP28	1.0000
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RELIABILITY ANALYSIS - SCALE (IMPORT)

# OF CASES = 339.0

# OF  
 STATISTICS FOR MEAN VARIANCE STD DEV VARIABLES  
 SCALE 20.5723 14.7780 3.8442 6

ITEM MEANS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 3.4287 2.1062 4.2625 2.1563 2.0238 .6760

ITEM VARIANCES MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 1.1264 .9148 1.4468 .5320 1.5816 .0353

INTER-ITEM  
 CORRELATIONS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .2383 .0644 .3947 .3304 6.1308 .0095

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	SCALE CORRECTED ITEM- TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
EOP20	16.3097	10.6760	.4683	.2459	.5777
EOP35	17.1770	9.6905	.4862	.2733	.5649
EOP39	17.7080	10.8109	.4197	.2012	.5944
EOP33	16.4867	11.2032	.3647	.1489	.6143
EOP29	16.7139	11.5481	.3562	.1600	.6175
EOP28	18.4661	11.9419	.2093	.0672	.6715

RELIABILITY COEFFICIENTS 6 ITEMS

ALPHA = .6512 STANDARDIZED ITEM ALPHA = .6524



RELIABILITY ANALYSIS - SCALE (LEADEREQ)

- 1. EOP31 CMDRS LEADERSHIP IS MOST IMPORTANT IN EO
- 2. EOP37 DIFFICULT FOR CMNDR TO MODL EO BEHAVIORS
- 3. EOP38 EVERYONE IN ORG SHOULD PROMOTE EO

	MEAN	STD DEV	CASES
1. EOP31	4.5870	.6927	339.0
2. EOP37	4.8230	.5256	339.0
3. EOP38	4.6519	.6770	339.0

CORRELATION MATRIX

	EOP31	EOP37	EOP38
EOP31	1.0000		
EOP37	.3268	1.0000	
EOP38	.2288	.4832	1.0000

# OF CASES = 339.0

# OF  
 STATISTICS FOR MEAN VARIANCE STD DEV VARIABLES  
 SCALE 14.0619 2.0109 1.4181 3

ITEM MEANS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 4.6873 4.5870 4.8230 .2360 1.0514 .0149

ITEM VARIANCES MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .4048 .2763 .4798 .2036 1.7368 .0125

INTER-ITEM  
 CORRELATIONS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .3463 .2288 .4832 .2544 2.1117 .0132

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM- TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
EOP31	9.4749	1.0785	.3146	.1134	.6377
EOP37	9.2389	1.1528	.5155	.2828	.3723
EOP38	9.4100	.9941	.4137	.2391	.4788

RELIABILITY ANALYSIS - SCALE (LEADEREO)

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .5941      STANDARDIZED ITEM ALPHA = .6138

RELIABILITY ANALYSIS - SCALE (CLIMATE)

- 1. EOP22 EO CLIMAT IN MY ORG > THAN PRIVAT SECTOR
- 2. EOP23 EO CLIMAT IN MY ORG > THAN OTH GOV AGENS

	MEAN	STD DEV	CASES
1. EOP22	4.2360	.8446	339.0
2. EOP23	3.6932	.8806	339.0

CORRELATION MATRIX

	EOP22	EOP23
EOP22	1.0000	
EOP23	.5113	1.0000

# OF CASES = 339.0

	# OF			
STATISTICS FOR	MEAN	VARIANCE	STD DEV	VARIABLES
SCALE	7.9292	2.2494	1.4998	2

ITEM MEANS	MEAN	MINIMUM	MAXIMUM	RANGE	MAX/MIN	VARIANCE
	3.9646	3.6932	4.2360	.5428	1.1470	.1473

ITEM VARIANCES	MEAN	MINIMUM	MAXIMUM	RANGE	MAX/MIN	VARIANCE
	.7444	.7134	.7754	.0621	1.0870	.0019

INTER-ITEM	MEAN	MINIMUM	MAXIMUM	RANGE	MAX/MIN	VARIANCE
CORRELATIONS	.5113	.5113	.5113	.0000	1.0000	.0000

ITEM-TOTAL STATISTICS

	SCALE	SCALE	CORRECTED			
	MEAN	VARIANCE	ITEM-	SQUARED	ALPHA	
	IF ITEM	IF ITEM	TOTAL	MULTIPLE	IF ITEM	
	DELETED	DELETED	CORRELATION	CORRELATION	DELETED	
EOP22	3.6932	.7754	.5113	.2615	.	
EOP23	4.2360	.7134	.5113	.2615	.	

RELIABILITY ANALYSIS - SCALE (CLIMATE)

RELIABILITY COEFFICIENTS 2 ITEMS

STANDARDIZED ITEM ALPHA = .6767

RELIABILITY ANALYSIS - SCALE (MISSION)

- 1. EOP19 EO CRITICAL FOR READINESS
- 2. EOP26 STRONG LNK BETWN EO AND GETTING JOB DONE

	MEAN	STD DEV	CASES
1. EOP19	4.4307	.9185	339.0
2. EOP26	4.2596	.9120	339.0

CORRELATION MATRIX

	EOP19	EOP26
EOP19	1.0000	
EOP26	.4524	1.0000

# OF CASES = 339.0

# OF  
 STATISTICS FOR MEAN VARIANCE STD DEV VARIABLES  
 SCALE 8.6903 2.4334 1.5599 2

ITEM MEANS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 4.3451 4.2596 4.4307 .1711 1.0402 .0146

ITEM VARIANCES MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .8377 .8318 .8436 .0117 1.0141 .0001

INTER-ITEM  
 CORRELATIONS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .4524 .4524 .4524 .0000 1.0000 .0000

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM- TOTAL CORRELATION	SQUARED MULTIPLE	ALPHA IF ITEM DELETED
EOP19	4.2596	.8318	.4524	.2047	.
EOP26	4.4307	.8436	.4524	.2047	.

RELIABILITY ANALYSIS - SCALE (MISSION)

RELIABILITY COEFFICIENTS 2 ITEMS

ALPHA = .6230      STANDARDIZED ITEM ALPHA = .6230

RELIABILITY ANALYSIS - SCALE (SUPPORT)

1. EOP21 MY ORG DOES AND EXCELLENT EO JOB
2. EOP40 EO ISSUES ARE HANDLED EQUITBLY IN MY ORG
3. EOP25 I SUPPORT EO PROGRAM IN MY ORG
4. EOP32 HANDLE EO ISSUES THRU CHAIN OF COMMAND
5. EOP42 PROMOTION SYSTEM FAIR TO ALL IN MY ORG

	MEAN	STD DEV	CASES
1. EOP21	4.2389	.7913	339.0
2. EOP40	4.2743	.7328	339.0
3. EOP25	4.7817	.5098	339.0
4. EOP32	4.2448	.9048	339.0
5. EOP42	4.2684	.9367	339.0

CORRELATION MATRIX

	EOP21	EOP40	EOP25	EOP32	EOP42
EOP21	1.0000				
EOP40	.5295	1.0000			
EOP25	.1883	.3825	1.0000		
EOP32	.2693	.1885	.1483	1.0000	
EOP42	.4042	.4096	.2222	.0339	1.0000

# OF CASES = 339.0

STATISTICS FOR MEAN VARIANCE STD DEV VARIABLES  
 SCALE 21.8083 6.3744 2.5248 5

ITEM MEANS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 4.3617 4.2389 4.7817 .5428 1.1280 .0554

ITEM VARIANCES MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .6238 .2599 .8774 .6175 3.3760 .0606

INTER-ITEM CORRELATIONS MEAN MINIMUM MAXIMUM RANGE MAX/MIN VARIANCE  
 .2776 .0339 .5295 .4956 15.6055 .0214

RELIABILITY ANALYSIS - SCALE (SUPPORT)

ITEM-TOTAL STATISTICS

	SCALE	SCALE	CORRECTED		ALPHA	
	MEAN	VARIANCE	ITEM-	SQUARED	IF ITEM	
	IF ITEM	IF ITEM	TOTAL	MULTIPLE	IF ITEM	
	DELETED	DELETED	CORRELATION	CORRELATION	DELETED	
EOP21	17.5693	3.9974	.5533	.3582	.5018	
EOP40	17.5339	4.1253	.5752	.3933	.4988	
EOP25	17.0265	5.3277	.3343	.1610	.6178	
EOP32	17.5634	4.7260	.2109	.0942	.6843	
EOP42	17.5398	4.0657	.3789	.2317	.5982	

RELIABILITY COEFFICIENTS 5 ITEMS

ALPHA = .6384      STANDARDIZED ITEM ALPHA = .6577



## **Appendix D**

### **Senior Leader Equal Opportunity Survey**



# SENIOR LEADER EQUAL OPPORTUNITY SURVEY

VERSION 1.0

## PRIVACY ACT STATEMENT

In accordance with DoD Directive 5400.11, the following information about this survey is provided:

- a. Authority: 10 USC, 131.
- b. Principal Purpose: The survey is being conducted to gain insight into equal opportunity and human relations from a senior leader perspective.
- c. Routine Uses: Information provided by respondents will be treated confidentially. The averaged data will be provided to participants in senior leader equal opportunity education and training to help participants understand peer and personal views of equal opportunity in the military. Individual results will be provided confidentially to the respondent. Responses will be added to a database of results from all senior leaders surveyed. Averaged results from the database will be used to inform senior leaders about equal opportunity issues.
- d. Participation: Response to this survey is voluntary. Failure to participate will lessen your ability to participate fully in your equal opportunity course, reduce reliability of the feedback provided to other participants in your course, and may hamper efforts by DoD to track trends in equal opportunity and organizational issues. Your response is needed to help ensure the validity of the survey and enhance your training. We appreciate your participation.

This survey was constructed by the Defense Equal Opportunity Management Institute, 740 O'Malley Road, Patrick Air Force Base, FL. 32925-3399. For further information, contact the Directorate of Research, Defense Equal Opportunity Management Institute

## SENIOR LEADER EQUAL OPPORTUNITY SURVEY

### **General Instructions** **(Please read before beginning the survey)**

This survey is administered as part your equal opportunity (EO) course. It measures your views of equal opportunity climate in your Service or agency. We will use the information to provide confidential feedback to you regarding how your views and those of your peers compare. The survey results will be discussed in your course to help you understand EO issues in the military.

You will be asked for your opinion on a number of issues. Your individual responses will be held confidential, though your class averages will be presented as part of your training. The individual items of the survey are used to construct scales measuring various aspects of EO and human relations. The scales were developed using a standard measurement technique called factor analysis, and the scales are much more reliable than individual items as a measurement device. To maintain the integrity of the scales, it is important that you respond to as many items as possible. If you absolutely cannot respond to an item, just leave it blank.

For the purposes of this survey, we follow standard DoD definitions (based on Census categories)

"**Minority**" includes males or females of the following racial/ethnic groups:

- BLACK/AFRICAN-AMERICAN (NOT OF HISPANIC ORIGIN)
- HISPANIC
- ASIAN-AMERICAN OR PACIFIC ISLANDERS
- NATIVE AMERICAN/ALASKAN NATIVE
- OTHER MINORITY (includes racial/ethnic groups not listed above, yet not considered part of the white or Caucasian majority in the United States)

"**Majority**" includes white (or Caucasian) males and females not in the groups listed above.

"**Unit**" or "**organization**" refers to the command, directorate, division, branch, or organizational unit you identify as being "your unit." This will usually be an organization of 100 people or more. You might think of it as your answer to the question, "What outfit are you with?" (e.g., "I'm with the Third Brigade," or "I'm in the Transportation Division"). For purposes of this survey, if what you think of as your "unit" is much smaller than 100 people, consider the next higher organizational level (with 100 people or more) as your unit.

**Please . . .**

- WRITE YOUR ADMIN NUMBER IN THE SPACE PROVIDED AT THE TOP OF THE RESPONSE SHEET

- USE A #2 PENCIL TO ANSWER EACH ITEM ON THE RESPONSE SHEET

- TRY TO BE AS ACCURATE AS YOU CAN, BUT FOR MOST OF THE ITEMS WE ARE ASKING FOR YOUR OPINIONS AND THERE ARE NO RIGHT OR WRONG ANSWERS

- AFTER COMPLETING THE QUESTIONNAIRE, SEAL IT AND YOUR ANSWER SHEET IN THE ENVELOPE PROVIDED. PLEASE DO NOT FOLD THE RESPONSE SHEET. RETURN THE SEALED ENVELOPE TO:

DEOMI/DR  
DIRECTORATE OF RESEARCH  
ATTN: DR. DANSBY  
740 O'MALLEY ROAD  
PATRICK AFB FL 32925-3399

**PART I**  
**Demographics**

In this section, please tell us some things about yourself. This information will be used for statistical analysis. *Your responses will be held confidential.*

1. I am

1 = female    2 = male

2. My racial/ethnic group is

1 = American Indian or Alaskan Native  
2 = Asian or Pacific Islander  
3 = African-American (not of Hispanic origin)  
4 = Hispanic  
5 = White (not of Hispanic origin)  
6 = Other

3. I am a(n):

1 = officer  
2 = Federal civilian (DoD affiliated)  
3 = Federal civilian (not DoD affiliated)  
4 = other

4. If commissioned officer, what pay grade?

1 = O6 (O7 Selectee)  
2 = O7  
3 = O8  
4 = O9  
5 = O10  
6 = not a military officer

5. If SES civilian employee, what grade?

1 = SES 1  
2 = SES 2  
3 = SES 3  
4 = SES 4  
5 = SES 5 or higher  
6 = not an SES civilian

6. My age is

1 = under 40 years  
2 = 41 - 45  
3 = 46 - 50

4 = 51 - 55

5 = 56 - 60

6 = 61 or over

7. My military or civilian appointment is with

1 = Air Force  
2 = Army  
3 = Navy  
4 = Marine Corps  
5 = Coast Guard  
6 = Other Federal Civil Service

8. My organization is best described as:

1 = active duty military  
2 = Reserve  
3 = National Guard  
4 = DoD Federal Civilian  
5 = Non-DoD Federal Civilian  
6 = other

9. If you are a member of the National Guard or Reserve, how would you classify your duty?

1 = Primarily weekends and annual training  
2 = Individual Mobilization Augmentee  
3 = Technician  
4 = Active Guard/Reserve  
5 = Other Guard or Reserve employee  
6 = I am not a Guard or Reserve member

10. I have personally experienced an incident of discrimination (racial, sexual, or sexual harassment) directed at me from *military* sources (including civilians employed by the military).

1 = YES    2 = NO (mark 6 - "N/A" - on items 11-12 and go to item 13)

11. I filed a complaint on the incident.

1 = YES    2 = NO    6 = N/A

12. I was satisfied with the disposition of the complaint that I filed.

1 = YES    2 = NO    6 = N/A

13. I have personally experienced an incident of discrimination (racial, sexual, or sexual harassment) from *non-military* sources.

1 = YES      2 = NO (mark 6 - "N/A" - on items 14-15 and go to item 16)

14. I filed a complaint on the incident.

1 = YES      2 = NO      6 = N/A

15. I was satisfied with the disposition of the complaint that I filed.

1 = YES      2 = NO      6 = N/A

16. The highest level of education I have completed is:

- 1 = high school graduate or G.E.D.
- 2 = some college
- 3 = associate's degree or equivalent
- 4 = bachelor's degree or equivalent
- 5 = master's degree or equivalent
- 6 = doctor's degree or equivalent

17. Before I joined the military (or started working for the government), the approximate percentage of my close personal friends who were of my same racial/ethnic group was

- 1 = 25 percent or less
- 2 = more than 25 but less than 50 percent
- 3 = at least 50 but less than 75 percent
- 4 = at least 75 but less than 100 percent
- 5 = 100 percent

18. Currently, I have at least one close personal friend (a person with whom I would feel comfortable discussing very personal problems) who is of a different racial/ethnic group than myself.

1 = YES      2 = NO

## PART II General EO Perceptions

Use the scale below to indicate your degree of agreement with the following statements.

- 1 = *totally disagree* with the statement
- 2 = *moderately disagree* with the statement
- 3 = *neither agree nor disagree* with the statement
- 4 = *moderately agree* with the statement
- 5 = *totally agree* with the statement

19. EO plays a critical part in readiness.

20. The EO program in my Service or agency has served its purpose and should be eliminated.

21. Overall, my Service or agency does an excellent job of providing EO to all members.

22. The EO climate in my Service or agency is much better than it is in the private sector.

23. The EO climate in my Service or agency is much better than it is in other (non-federal) government agencies.

24. I fully understand the goals of the EO programs within my Service or agency.

25. I fully support the EO program in my Service or agency.

26. There is a strong link between EO in an organization and getting the job done.

27. The EO program in my Service or Agency is highly effective.

28. I have received sufficient EO training in my career.

29. Most leaders in my Service or agency place too much emphasis on EO issues.

30. EO training in my Service or agency is generally helpful in improving intergroup relations.

- 1 = *totally disagree* with the statement  
2 = *moderately disagree* with the statement  
3 = *neither agree nor disagree* with the statement  
4 = *moderately agree* with the statement  
5 = *totally agree* with the statement

31. The most important element in a good EO climate is the commander's or agency head's leadership.
32. EO issues should be handled through the chain-of-command.
33. There is a need for a "safety valve" outside the chain-of-command to resolve some EO complaints.
34. EO climate assessment is an important tool in resolving EO issues or improving the EO climate.
35. Affirmative action is an important element of an EO program.
36. EO education or training is an important element in an EO program.
37. It is extremely important for the organizational commander or head to model appropriate EO behaviors.
38. Everyone should be involved in promoting EO within my Service or agency.
39. My Service or agency should expand its EO programs.
40. EO issues are generally handled equitably in my Service or agency.
41. The discipline system in my Service or agency is fair to all groups.
42. The promotion system in my Service or agency is fair to all groups.
43. The assignment system in my Service or agency is fair to all groups.

### **PART III EO Issues**

For each of the following, indicate the degree to which you believe it is a problem within your Service or agency. Use the scale below.

- 1 = *a very serious problem*  
2 = *a serious problem*  
3 = *a moderate problem*  
4 = *a minor problem*  
5 = *no problem at all*

#### **The relationship between . . .**

44. Black (African-American) and white members
45. Hispanic and white members
46. Asian-Pacific and white members
47. Native American and white members
48. Minority and majority members in general
49. Minority groups and other minority groups (e.g., black and Hispanic or Asian-Pacific and Native American)
50. Women and men
51. Minority women and minority men
52. Minority women and majority men
53. Majority women and minority men
54. Majority women and majority men

#### **Concerns with . . .**

55. Racism or race discrimination
56. Sexism or gender discrimination
57. Sexual harassment
58. Preferential treatment for women
59. Preferential treatment for minority members



**PART IV**  
**Unit EO Climate**

For Part IV of the survey, think about the unit you are currently assigned to. If your current unit is not part of your Service or agency, or if you haven't been with the unit for two months, think about the last unit to which you were assigned in your Service or agency. Rate each item based on your perception of conditions in that unit.

60. Most people would rate the equal opportunity climate in my unit as

- 1 = very poor
- 2 = poor
- 3 = about average
- 4 = good
- 5 = very good

61. I personally would rate the equal opportunity climate in my unit as

- 1 = very poor
- 2 = poor
- 3 = about average
- 4 = good
- 5 = very good

For the next series of items, use the scale below to indicate your opinion of the *likelihood* that the listed actions occurred in your unit *in the last 30 days* for which you were part of the unit. *We are not asking whether you have actually observed the actions; rather, we would like your opinion as to how likely such actions are* to have taken place. To make these judgments, we will ask you to use the following scale:

- 1 = There is a *very high chance* that the action occurred.
- 2 = There is a *reasonably high chance* that the action occurred.
- 3 = There is a *moderate chance* that the action occurred.
- 4 = There is a *small chance* that the action occurred.
- 5 = There is *almost no chance* that the action occurred.

**EXAMPLE: IF, IN YOUR OPINION, THERE IS A VERY HIGH CHANCE THAT "A MALE GAVE A 'WOLF WHISTLE' TO A FEMALE," YOU WOULD ASSIGN A "1" TO THAT ACTION.**

62. A male supervisor touched a female peer in friendly manner, but never touched male peers.

63. When a woman complained of sexual harassment to her superior, he told her, "You're being too sensitive."

64. A supervisor referred to women subordinates by their first names in public while using titles for the male subordinates.

65. The person in charge assigned an attractive female to escort visiting male officials because, "We need someone nice looking to show them around."

66. A majority supervisor frequently reprimanded a minority employee but rarely reprimanded a majority employee who had the same level of performance.

67. A majority supervisor did not select a qualified minority subordinate for promotion but did select qualified majority members.

68. A minority person was assigned less desirable office space than a majority person.

69. The person in charge changed the duty assignments when it was discovered that two persons of the same minority were assigned to the same sensitive area on the same shift.

70. While giving a lecture, the person in charge of the organization took more time to answer questions from majority members than from minority members.

71. Majority and minority supervisors were seen having lunch together.

72. Majority and minority personnel were seen having lunch together.

73. A new minority person joined the organization and quickly developed close majority friends within the organization.

1 = There is a *very high chance* that the action occurred.  
 2 = There is a *reasonably high chance* that the action occurred.  
 3 = There is a *moderate chance* that the action occurred.  
 4 = There is a *small chance* that the action occurred.  
 5 = There is *almost no chance* that the action occurred.

**PART V  
LPC Scale**

In this part, we are interested in your personal experiences in the work environment. We would like you to **think of the person**, regardless of race or gender, **with whom you worked least well** during your years with your Service or agency. This person may be someone you work with now or someone you knew in the past. Use the following scales to indicate the degree to which you would describe that person as...

74. Majority and minority members were seen socializing together.
75. Majority personnel joined minority friends at the same table in the cafeteria or designated eating area.
76. A majority person told several jokes about minorities.
77. Graffiti written on the organization's rest room or latrine walls "put down" minorities or women.
78. Offensive racial/ethnic names were frequently heard.
79. Racial/ethnic jokes were frequently heard.
80. The person in charge did not appoint a qualified majority person to a key position, but instead appointed a less qualified minority person.
81. A minority man was selected for a prestigious assignment over a majority man who was equally, if not slightly better, qualified.
82. A minority woman was selected to receive an award for an outstanding act, even though she was not perceived by her peers as being as qualified as her nearest competitor, a majority man.
83. A majority and a minority person each turned in similar pieces of equipment with similar problems. The minority person was given a new issue; the majority person's equipment was sent to maintenance for repairs.

- |                    | 1 | 2 | 3 | 4 | 5 | 6 |               |
|--------------------|---|---|---|---|---|---|---------------|
| 84. Rejecting      | _ | _ | _ | _ | _ | _ | Accepting     |
| 85. Pleasant       | _ | _ | _ | _ | _ | _ | Unpleasant    |
| 86. Unenthusiastic | _ | _ | _ | _ | _ | _ | Enthusiastic  |
| 87. Friendly       | _ | _ | _ | _ | _ | _ | Unfriendly    |
| 88. Distant        | _ | _ | _ | _ | _ | _ | Close         |
| 89. Cold           | _ | _ | _ | _ | _ | _ | Warm          |
| 90. Cooperative    | _ | _ | _ | _ | _ | _ | Uncooperative |
| 91. Self-assured   | _ | _ | _ | _ | _ | _ | Hesitant      |
| 92. Efficient      | _ | _ | _ | _ | _ | _ | Inefficient   |
| 93. Open           | _ | _ | _ | _ | _ | _ | Guarded       |
| 94. Boring         | _ | _ | _ | _ | _ | _ | Interesting   |
| 95. Gloomy         | _ | _ | _ | _ | _ | _ | Cheerful      |

**PART VI**  
**Open-ended Questions**

In this part, we'd like your opinions on a variety of EO issues. Please write your responses in the space provided.

96. What do you believe to be the three most significant EO issues facing your Service or agency today? (Please list them in order of significance, with 1 as the most significant.)

1.

2.

3.

97. What do you believe to be the three most significant EO issues facing your Service or agency within the next 10 years? (Please list them in order of significance, with 1 as the most significant.)

1.

2.

3.

98. What are the three greatest strengths of your Service's or agency's EO programs? (Please list them in order of strength, with 1 as the greatest strength.)

1.

2.

3.

99. What are the three greatest weaknesses of your Service's or agency's EO programs? (Please list them in order of weakness, with 1 as the greatest weakest.)

1.

2.

3.

100. What are the three most important elements of an effective EO program? (Please list them in order of importance, with 1 as the most important.)

1.

2.

3.

*Senior Leader Equal Opportunity Survey (Version 1.0)*

101. Please make any other comments you would like about EO issues.



