

AD-A285 487

ARI Research Note 94-31



①

First-Level Supervisors Job Analysis Follow-up: Identification of KSAO-Task Linkages

John P. Ziemak and Beverly A. Dugan

Human Resources Research Organization

Carlos K. Rigby

U.S. Army Research Institute

**Strategic Leadership Technical Area
Thomas O. Jacobs, Chief**

**Manpower and Personnel Research Division
Zita M. Simutis, Director**

DTIC
SELECTED
OCT 07 1994
S B D

August 1994

DTIC QUALITY INSPECTED 2



289A

94-31852



9410

**United States Army
Research Institute for the Behavioral and Social Sciences**

Approved for public release; distribution is unlimited.

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

**A Field Operating Agency Under the Jurisdiction
of the Deputy Chief of Staff for Personnel**

**EDGAR M. JOHNSON
Director**

Research accomplished under contract
for the Department of the Army

Human Resources Research Organization

Technical review by

Thomas O. Jacobs
Diane M. Ungvarsky

NOTICES

DISTRIBUTION: This report has been cleared for release to the Defense Technical Information Center (DTIC) to comply with regulatory requirements. It has been given no primary distribution other than to DTIC and will be available only through DTIC or the National Technical Information Service (NTIS).

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The views, opinions, and findings in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other authorized documents.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 1994, August		3. REPORT TYPE AND DATES COVERED Final Sep 87 - May 93	
4. TITLE AND SUBTITLE First-Level Supervisors Job Analysis Follow-up: Identification of KSAO-Task Linkages				5. FUNDING NUMBERS MDA903-87-C-0846 63007A 792 2403	
6. AUTHOR(S) Ziemak, John P.; Dugan, Beverly A. (HumRRO); and Rigby, Carlos K. (ARI)					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Human Resources Research Organization 66 Canal Center Plaza, Suite 400 Alexandria, VA 22314				8. PERFORMING ORGANIZATION REPORT NUMBER FR-PRD-93-14	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences ATTN: PERI-RO 5001 Eisenhower Avenue Alexandria, VA 22333-5600				10. SPONSORING / MONITORING AGENCY REPORT NUMBER ARI Research Note 94-31	
11. SUPPLEMENTARY NOTES Contracting Officer's Representative, Carlos K. Rigby.					
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.				12b. DISTRIBUTION CODE --	
13. ABSTRACT (Maximum 200 words) In 1986 the U.S. Army began the Professional Development of Supervisors Study (PDS ²) to determine the best approaches for selecting and developing civilian first-level supervisors. An extensive job analysis, the foundation for the construction of selection instruments, was part of PDS ² . This report describes the linkage of important tasks and knowledge, skills, abilities, and other characteristics (KSAOs) identified in that job analysis and the development of a test plan based on the linkages identified. The job analysis identified 226 tasks and 93 KSAOs. Because of the large number of judgments required to link all tasks with all KSAOs, the linkage was accomplished in two phases. In preparation for Phase I, the 226 tasks were sorted into 22 task categories. Phase I judges linked KSAOs with the 22 task categories. In Phase II, judges linked the 58 KSAOs that survived Phase I with the remaining tasks. Sixteen knowledges and 30 ASOs remained after the Phase II data analysis. The ASOs were rationally grouped into twelve supervisory dimensions. A decision was made that the selection components that were best able to fulfill both technical and practical (Continued)					
14. SUBJECT TERMS Job analysis Army supervisor Linkage Civilian leadership KSAO First-level supervisor				15. NUMBER OF PAGES 289	
				16. PRICE CODE --	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited		

13. ABSTRACT (Continued)

considerations for this testing environment were the in-basket exercise and structured interview.

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability	
Dist	Special
A-1	

FOREWORD

Nearly 40 percent of the Army's personnel are civilians employed in support roles throughout the world. The 485,000 members of the civilian personnel workforce are an essential component of the total Army team and contribute significantly to the accomplishment of the Army mission. The management of a workforce as complex, heterogeneous, and geographically dispersed as that of Army civilian personnel requires more than an ordinary personnel management system.

An integrated comprehensive civilian personnel management research program is required to help improve the Army's civilian workforce. The Civilian Leadership Research program was established in 1987 to determine how the leadership of Army civilians could be improved. The current report focuses on the development of a set of baseline measures derived from responses to the FY 1988 Army-wide biennial survey of civilian personnel. The results of analysis of the different response patterns made by various types or groups of employees are also presented. The results, in conjunction with results from later biennial surveys, will facilitate the identification and measurement of civilian personnel problem areas and the evaluation of the effectiveness of personnel initiatives over time.

FIRST-LEVEL SUPERVISORS JOB ANALYSIS FOLLOW-UP: IDENTIFICATION OF KSAO-TASK LINKAGES

CONTENTS

	Page
INTRODUCTION	1
FIRST-LEVEL SUPERVISOR JOB ANALYSIS	2
LINKAGE OF IMPORTANT KSAOS AND TASKS	3
Phase I Linkage	4
Phase II Linkage	9
TEST PLAN DEVELOPMENT	12
REFERENCES	21
APPENDIX A. JOB ANALYSIS SURVEY	A-0
B. BACKGROUND INFORMATION SHEET	B-0
C. KSAO-TASK CLUSTER RATING WORKSHOP ADMINISTRATOR'S MANUAL	C-0
D. KSAO-TASK CLUSTER IMPORTANCE RATING FORMS	D-0
E. KSAO DEFINITIONS AND TASK CLUSTERS	E-0
F. PHASE I RELIABILITY ESTIMATES	F-0
G. KSAO IMPORTANCE RATINGS BY TASK CLUSTER	G-0
H. KSAO-TASK CLUSTER LINKAGES	H-0
I. KSAO-TASK RATING WORKSHOP ADMINISTRATOR'S MANUAL	I-0

CONTENTS (Continued)

	Page
APPENDIX J. KSAO-TASK IMPORTANCE RATING FORMS	J-0
K. PHASE II RELIABILITY ESTIMATES	K-0
L. KSAO IMPORTANCE RATINGS BY TASK	L-0
M. KSAO TASK LINKAGES	M-0
N. SUMMARY OF LINKAGE WORKSHOP RESULTS	N-0

LIST OF TABLES

Table	1. Location, Principle, MACOM, and Number of of SMEs Requested in Phase I Linkage Workshops	5
	2. Phase I Workshop Participants by Gender	5
	3. Phase I Workshop Participants by Race	6
	4. Phase I Workshop Participants by Grade Level	6
	5. PDS ² Initial and Revised Task Categories	7
	6. Location, Principle, MACOM, and Number of SMEs Requested in Phase II Linkage Workshops	10
	7. Phase II Workshop Participants by Gender	10
	8. Phase II Workshop Participants by Race	11
	9. Phase II Workshop Participants by Grade Level	11
	10. Revised First-Line Supervisor Dimensions	14
	11. First-Line Supervisor Test Plan	18

FIRST-LEVEL SUPERVISORS JOB ANALYSIS FOLLOW-UP: IDENTIFICATION OF KSAO-TASK LINKAGES

Introduction

Civilians are a large and increasingly important part of the total Army workforce. Civilian employees constitute almost 40% of the Army and perform a large proportion of the support functions required to sustain operations. Civilians often work side by side with their uniformed counterparts in base operations, logistics, engineering, electronics and a wide variety of other areas. At times civilians supervise military personnel in these capacities, and often military commanders oversee large operations composed primarily of civilians.

The importance of the Army's civilian workforce to the Army mission is increasingly recognized; at the same time, the management of that workforce within a military structure has grown more complex. Civilian personnel management is governed by an intricate set of civil service laws and regulations developed outside of the Department of Defense to govern the total federal workforce of approximately 2.7 million. This system does not always efficiently serve the Army, and the differences between the military and civilian systems can create inefficiencies and gaps between two personnel systems that must rely upon each other to accomplish common missions.

As the Army's civilian workforce has grown in size and importance, the Army has increased its efforts to bring its civilian personnel planning and management procedures closer into line with state-of-the-art methods to meet the future needs of the total Army. Over the past several years, the Directorate of Civilian Personnel (DCP), in partnership with the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), has undertaken several far-reaching efforts designed to upgrade the Army's civilian personnel systems. These upgrades are necessary to prepare for the future mission needs of the Army, which is increasingly dependent on its civilian workforce. To improve a workforce as large and complex as the Army's civilian workforce requires an integrated and comprehensive civilian personnel management research program.

The Directorate for Civilian Personnel identified three priority areas of research: (a) personnel selection, (b) management training, and (c) personnel measures. According to several reports (Clark, Sweeney, & Savell, 1988; Woolley, Croan, & Cohart, 1986; Thompson, 1986), a question of particular interest is how to assure that the Army will have capable leaders (i.e., supervisors and managers) for its civilian workforce. There are currently some 35,000 civilians serving in supervisory positions; approximately 75% of these are first-level supervisors. At the present time, however, procedures for identifying and selecting these civilian leaders are neither standardized nor systematic; and (unlike the situation in the Active Army) there is no sequential and progressive program for training and developing these leaders. In 1986 the Army began the Professional Development of Supervisors Study (PDS²) to determine the best approaches for selecting and developing civilian first-level supervisors. The present research, conducted by the Human Resources Research Organization (HumRRO) under contract with the U.S. Army Research Institute, is designed to develop civilian first-level supervisor selection tools.

Job analysis provides the foundation for the construction of selection instruments. An extensive job analysis of first-level supervisors was performed as part of PDS² (Riegelhaupt, Rosenthal, Ziemak, & Kuhn, 1987; Rosenthal, Riegelhaupt, & Ziemak, 1988). This report describes the linkage of important tasks and knowledge, skills, abilities, and other characteristics (KSAOs) identified in that job analysis, and the development of a test plan based on the linkages identified.

First-Level Supervisor Job Analysis

Professional guidelines require a sound job analysis to support the development of selection procedures (Standards for Educational and Psychological Testing, 1985; Uniform Guidelines on Employee Selection Procedures, 1978). A job analysis of Army civilian first-level supervisor positions was conducted as part of Army's PDS² (Riegelhaupt, Rosenthal, Ziemak, and Kuhn, 1987; Rosenthal, Riegelhaupt, & Ziemak, 1988) in anticipation of the development of content-valid selection procedures.

The job analysis focused on the non-technical aspects of the first-level supervisor job at all grade levels and across all job families. Incumbents in these jobs perform tasks which require both technical (i.e., job series specific) and non-technical (i.e., supervisory) knowledge, skills, abilities, and other characteristics (KSAOs). Since there are literally hundreds of different job series that first-level supervisors occupy, it was impossible to study the technical, job series specific aspects of the first-level supervisor jobs.

Preliminary lists of supervisory job tasks and KSAOs were developed based on a review of the research literature, Army documents, and interviews with first-level supervisors. The two lists were revised by 427 job incumbents in a series of workshops at 18 Army installations. The job analysis identified 226 different tasks, 42 knowledges, and 51 abilities, skills and other characteristics. The 226 tasks were rationally grouped into 11 homogeneous categories by project staff to help organize the tasks for survey respondents. The final lists of tasks and KSAOs were incorporated into a survey (see Appendix A) which was mailed to 4,400 Army civilian first-level supervisors in both CONUS and OCONUS locations. The first part of the survey contained questions about the respondents' background and work environment. In the next part of the survey, respondents rated each task's importance to their job and the relative amount of time they spent performing each task. Following this, for each knowledge respondents rated the depth of understanding required and how long it took to learn each knowledge. Lastly, respondents rated the importance of each skill, ability and other characteristic for effectively performing the tasks required by the job.

The relative time-spent ratings for each task were analyzed to determine if there were different "types" of first-level supervisors (see Rosenthal, Ziemak, and Riegelhaupt, 1988 for details). To the extent different types of supervisors were identified, the possibility existed that different selection procedures would have to have been developed for the various types. This analysis was conducted by using the hierarchical cluster analysis (HCA) procedures of the Comprehensive Occupational Data Analysis Package (CODAP). The CODAP HCA data suggested that regardless of grade level, job series, organization, or geographic location, Army civilian first-level supervisors performed the same core (non-technical) functions. Additional

analyses showed similar KSAO requirements across the relevant background variables. These results made sense given that all first-level supervisors are given the same training (i.e., the Basic Supervisory Development [BSD] course) and are responsible for the same Army-wide systems (e.g., performance appraisal, disciplinary actions, individual development plans).

The CODAP HCA results suggested that the supervisory aspects of the job of first-level supervisor are relatively homogeneous across relevant background variables (i.e., grade level, job series, etc.). Thus, it is possible and defensible to develop one common promotion system designed to assess the supervisory potential of job candidates.

Another major outcome from the first-level supervisor job analysis was the detailed task and KSAO job descriptions. The job descriptions contained information that allowed identification of prerequisite knowledges, abilities, skills and other characteristics for selection purposes. In general, the job descriptions showed that the most frequently performed tasks were also the most important tasks. Supervisors spent relatively high amounts of time performing those tasks that had a direct impact on their subordinates' completion of work (e.g., assign work priorities and deadlines to subordinates). Supervisors spent less time on tasks that were more peripheral to the immediate work (e.g., enforce smoking/non-smoking regulations).

For only one of the knowledges, Position Management and Classification, did the majority of respondents (54%) indicate it was learned prior to entry. The vast majority of respondents indicated that all other required knowledges were learned within the first 12 months of the job.

These results did not support the inclusion of the supervisory knowledges in the selection measures without prior training of applicants on those knowledges (Uniform Guidelines on Employee Selection Procedures, 1978). At the time the present study began, Army policy makers had not yet ruled out the training option. Therefore, the knowledges were included in the linkage task. Although the Army later decided not to pursue the applicant training option, the knowledge-task linkage data are reported here. These data may be of use for other purposes, particularly for training design and development.

Linkage of Important KSAOs and Tasks

The PDS² job analysis provided a great deal of detailed information on tasks and KSAO requirements of first-level supervisor jobs. As the next step the relationships between tasks and KSAOs needed to be established to develop content valid selection systems. The Uniform Guidelines on Employee Selection Procedures (1978) require that KSAOs be defined in terms of specific work behaviors or tasks. Linking tasks and KSAOs clarifies the KSAOs by defining the context in which they are required. Operationally, KSAOs are linked to tasks by having subject matter experts (SMEs) rate the importance of each KSAO required for effectively performing each task or work behavior.

The linkage process also served as a data reduction process. The job analysis indicated that many of the tasks and KSAOs were important, but it did not clearly

differentiate the most critical KSAOs which would become the basis of the selection procedures. Obviously no efficient test could assess all 93 KSAOs reliably. Therefore, the linkage process was also used to identify the most critical KSAOs for selection purposes. Specifically, critical selection KSAOs were identified as those which were most important for task performance.

The most direct procedure for linking KSAOs and tasks is to have SMEs rate the importance of each KSAO for effectively performing each task. In this project, such a linkage process would have required SMEs to make over 21,000 ratings. Because it is unlikely that SMEs could have reliably made that many ratings, a two-phase linkage process was used to reduce the workload on SMEs and presumably increase the reliability of the linkage ratings. The first phase involved linking KSAOs to homogeneous categories of tasks. The second phase involved linking specific tasks from the tasks categories that were retained from Phase I with KSAOs that were also identified as important in Phase I. These linkage ratings are described in more detail in the Phase I linkage procedures section.

Phase I Linkage

Phase I Linkage Participants

Locations for the linkage workshops were chosen based on three factors; proximity, diversity of job series, and number of supervisors. First, project funding did not allow travel beyond driving distance from the Washington, D.C. area. Since a wide variety of functions are performed in the Washington area this did not present a significant sampling problem. Furthermore, the PDS² job analysis (Rosenthal et. al., 1988) suggested that there were no significant differences in supervisory task performance or in KSAO requirements based on location. Second, these eight locations were selected to represent the major commands that employ civilians. In addition, the number of job analysis participants that were requested roughly reflected the proportion of supervisors in each MACOM. For example, AMC employs the most supervisors, so more workshops were conducted at AMC installations than at other MACOM installations. Finally, only locations that had a sizeable number of supervisors (i.e., 75) were included so that it would be realistic to obtain the participation of at least six supervisors for each workshop. Points of contact at each location were requested to select first-level supervisor participants with as much variety in gender, race, grade level, and job series as possible. It was not possible to identify participants more specifically and maintain anonymity of the participants. A Background Information Survey (see Appendix B) was administered to document demographic and employment characteristics of the sample.

Table 1 shows the locations of job analysis linkage workshops, the principle MACOM at that location, and the number of participants requested at each site.

Of the 64 SMEs who were requested, 59 participated in the workshops. Tables 2 through 4 describe the characteristics of the sample in terms of gender, race, and grade level, respectively. There was an acceptable distribution of participants across these characteristics, given the lack of strict control over choosing participants. Unfortunately, population demographic statistics for first-level supervisors were not available, so it was not possible to test for the proportional representativeness of the sample.

Table 1

Location, Principle MACOM, and Number of SMEs Requested in Phase I Linkage Workshops

Location	MACOM	Number of First-Level Supervisors		Total
		GS	WG	
Walter Reed	HSC	5	3	8
Ft. Myer	MDW	6	-	6
Ft. Monroe	TRADOC	8	2	10
Ft. Meade	FORSCOM	7	3	10
Balt. Engin. District	COE	6	-	6
Aberdeen Proving Ground	AMC	5	5	10
Harry Diamond Labs	AMC	6	-	6
Letterkenny Army Depot	AMC	4	4	8
Total		47	17	64

Table 2

Phase I Workshop Participants by Gender

Gender	Number	Percent
Male	30	50.85
Female	26	44.07
Missing	3	5.08
Total	59	100.00

Table 3

Phase I Workshop Participants by Race

Race	Number	Percent
White	41	69.49
Black	15	25.42
Hispanic	1	1.69
Am.Indian	0	0.00
Asian/Pacific	0	0.00
Other	0	0.00
Missing	2	3.39
Total	59	100.00

Table 4

Phase I Workshop Participants by Grade Level

Grade Level	Number	Percent
5	1	1.69
6	1	1.69
7	5	8.47
8	4	6.78
9	9	15.25
10	2	3.39
11	9	15.25
12	11	18.64
13	10	16.95
14	2	3.39
15	5	8.47
Total	59	100.00

Phase I Workshop Procedures

As noted previously, the 226 tasks in the PDS² job analysis questionnaire were organized into 11 functional task categories to help organize them for respondents. To prepare for the Phase I workshops, the tasks were sorted into 22 new task categories by HumRRO researchers. The new task categories were more clearly labeled and contained more homogeneous groups of tasks than the original PDS² task categories. The PDS² and the revised task categories are listed in Table 5. The primary differences between the PDS² task categories and the revised categories are that several of the PDS² categories were broken into multiple categories. The revised task categories were reviewed and approved by the COR. The KSAOs were also reviewed at this time and only minor grammatical corrections were made to the KSAO lists.

Table 5

PDS² Initial and Revised Task Categories

PDS ² Initial Task Categories	Revised Task Categories
Personnel Staffing	Staff Positions
Position Management	Manage Position Requirements
Equal Employment Opportunity (EEO)	Enforce EEO Policies
the Workforce	Provide Recognition and Rewards
	Motivate Employees
	Manage Employees with Personal Manage
	Problems
	Evaluate Performance
Training and Development	Discipline Employees
	Train and Develop Employees
Employee-Management Communications	Conduct Meetings and Briefings
	Provide Orientation
Administrative Duties	Communicate
	Conduct Administrative Duties
Safety	Manage Work Schedules
	Conduct Travel Related Activities
Managing Work and Operations	Manage Safety Requirements
	Manage Employee's Work
Planning/Budgeting/Executing	Oversee Operations
	Manage Materials and Supplies
Security Concerns	Plan
	Budget
	Practice Security Procedures

Workshops were conducted by researchers on the HumRRO team. Participants were given an overview of the project, the previous activities, and the purpose of their participation. SMEs were also informed that participation was voluntary, and that they would remain anonymous. The administration manual used at each workshop is presented in Appendix C.

SMEs participating in the Phase I linkage process rated the importance of each KSAO (42 knowledges and 51 abilities, skills and other characteristics) for effective performance of each task category on a five-point rating scale, ranging from 1=unimportant to 5=extremely important. There were 2,046 task category by KSAO combinations to be rated. To decrease the workload, each SME only made ratings for half of the knowledges and half of the ASOs which reduced the number of combinations to be rated to approximately 1,000 per SME. See Appendix D for a copy of the Phase I linkage rating forms. SMEs were also provided with lists of individual tasks comprising each task category and full definitions of the KSAOs (See Appendix E). To reduce order and fatigue effects, the specific sets of ratings made were randomly assigned to participants and the orders of presentation (e.g., knowledges first and ASOs second) were counterbalanced. The workshops lasted from 2 1/2 to 3 1/2 hours.

Phase I Linkage Results

Two sets of analyses were conducted on the linkage rating data. The first set of analyses concerned the degree of rater agreement for the task category-KSAO importance ratings. The appropriate index of reliability (agreement) for the linkage rating data was an intraclass correlation coefficient (ICC). An ICC can be viewed as the ratio of the variance of interest (i.e., the variance due to raters) over the sum of the variance of interest plus measurement error.

Intraclass correlations were calculated for each of the 93 KSAOs across task categories. Appendix F presents the reliability estimates for each KSAO. The ICCs represent the reliability of the ratings made by a single rater on the task category-KSAO combinations. Since the ratings were made by more than one rater, the ICCs underestimate the reliability of the ratings made by multiple raters. Because of the reliability underestimation, the ICCs were statistically "corrected" using the Spearman-Brown prophecy formula to estimate the multiple rater reliability (R_{rm}) for each KSAO, based on the actual number of raters. The ICCs and R_{rm} s are reliability coefficients which range from 0 to 1.0, where 0 represents no agreement and 1.0 represents total agreement among raters. The R_{rm} s were all very high (ranging from .918 to .983) suggesting that there was a very high degree of agreement among raters on the linkage importance ratings and that it was appropriate to make decisions based on the linkage data.

Appendix F also presents the standard errors of measurement (SEMs) for the rating scale for both the single and multiple rater reliability estimates. SEMs can be interpreted as variability around the reliability index. The SEM's scale ranges from 0 to 1.0, with lower error terms indicating better reliability estimates. The multiple rater SEMs were generally very small, ranging from .014 to .192.

The second set of analyses concerned the average importance of each KSAO for each task category. Descriptive statistics were calculated on the importance of each KSAO for effective performance of each task category (see Appendix G for the linkage rating descriptive statistics).

Since one important purpose of the linkage ratings was data reduction, the data in Appendix G were examined to eliminate the less important KSAO-task category linkages. To identify the less important linkages, project staff and the COR developed a decision rule for eliminating them. That is, a high cut score (i.e., a mean rating of 4.0 or higher) was established to eliminate less important linkages. A mean linkage rating of 4.0 corresponded to a rating of "very important" on the five-point rating scale. Appendix H presents summary tables that show the task category-KSAO combinations which were retained using the 4.0 cut scores. Thirty-five of the KSAOs were not linked to any task category and were dropped from further consideration in selection procedure development. One of the task categories (i.e., O. Conduct Travel Related Activities) was not linked to any KSAO and was eliminated from subsequent phases of the project. Two linkages that did not meet the statistical decision rule were retained based on the suggestion of the COR because of their relatively high importance ratings (i.e., 3.9) and their apparent relevance to the task categories. These two linkages were: ASO-3 (Delegation) with task category Q (Manage Employee's Work) and ASO-19 (Coordination) with task category E (Motivate Employees).

Phase II Linkage

Phase II Linkage Participants

Table 6 shows the locations of workshops, the principle MACOM at each location, and the number of participants requested at each site. As with the Phase I workshops, locations were chosen based on proximity, diversity of job series, and number of supervisors. Points of contact followed the same procedures in identifying participants as in the Phase I workshops. The Background Information Survey (Appendix B) was administered to document demographic and employment characteristics of the sample.

Fifty-eight supervisors participated in the Phase II workshops. Tables 7 through 9 show the background characteristics of the Phase II workshop participants. As with Phase I, there was an acceptable distribution of participants across these characteristics for Phase II.

Table 6

Location, Principle MACOM, and Number of SMEs Requested in Phase II Linkage Workshops

Location	MACOM	Number of First-Level Supervisors		
		GS	WG	Total
Ft. Ritchie	ISC	6	-	6
Ft. Detrick	HSC	5	3	8
HQMTMC	MTMC	6	-	6
Ft. Belvoir	TRASOC	7	3	10
Ft. Meade	FORSCOM	5	3	8
Pulaski Bldg.	COE	6	-	6
Aberdeen Proving Ground	AMC	5	5	10
HQAMC	AMC	6	-	6
New Cumberland Army Dep.	AMC	4	4	8
Total		50	18	68

Table 7

Phase II Workshop Participants by Gender

Gender	Number	Percent
Male	38	65.52
Female	18	31.03
Missing	2	3.45
Total	58	100.00

Table 8

Phase II Workshop Participants by Race

Race	Number	Percent
White	40	68.97
Black	10	17.24
Hispanic	2	3.45
Am. Indian	1	1.72
Asian/Pacific	1	1.72
Other	0	0.00
Missing	4	6.90
Total	58	100.00

Table 9

Phase II Workshop Participants by Grade Level

Grade Level	Number	Percent
3	1	1.72
4	2	3.45
5	3	5.17
6	4	6.90
7	3	5.17
8	2	3.45
9	5	8.62
10	5	8.62
11	4	6.90
12	8	13.79
13	11	18.97
14	9	15.52
15	1	1.72
Total	58	100.00

Phase II Workshop Procedures

Workshops were conducted by researchers on the HumRRO team. Participants were given an overview of the project, the previous activities, and the purpose of their participation. SMEs were also informed that participation was voluntary, and that they would remain anonymous. The administration manual used at each workshop is presented in Appendix I.

SMEs participating in the Phase II linkage process rated the importance of the remaining 58 KSAOs for effective performance of specific tasks within the remaining 21 task categories. The ratings were made on 21 different rating forms (one for each task category). A total of 1,535 task-KSAO importance ratings were required in Phase II. As was done in Phase I, the workload was decreased by having each SME make approximately half of the total possible ratings. See Appendix J for a copy of the Phase II rating forms and full definitions of the KSAOs being rated. To reduce order and fatigue effects, the specific sets of ratings made were randomly assigned to participants and the orders of presentation of forms were counterbalanced. The linkage rating sessions lasted from one to three hours.

Phase II Linkage Results

Two sets of analyses were conducted on the linkage rating data. The first set of analyses concerned the reliability of the task-KSAO ratings. Intraclass correlations were calculated for each of the 58 KSAOs across tasks. Appendix K presents the reliability estimates for each KSAO. The R_{mm} s were all very high, ranging from .887 to .992 and the multiple rater SEMs were acceptable, ranging from .001 to .252. These results suggested that the linkage ratings were reliable and that it was appropriate to make decisions based on that data.

The second set of analyses concerned the importance of each KSAO for each task. Descriptive statistics were calculated on the importance of each KSAO for effective performance of each task. See Appendix L for the linkage rating descriptive statistics. The data in Appendix L were examined to identify the most important tasks for each KSAO. Since an objective of the linkage process was data reduction, a high cut score (i.e., a mean rating of 4.0 or higher) was selected as the decision rule for retention of the task-KSAO linkages. Sixteen knowledges and 30 ASOs were linked to at least one task by an importance rating of 4.0 or higher. Appendix M presents summary tables that show the task-KSAO combinations which were retained using the 4.0 cut score. The data presented in Appendix M played a critical role in developing the selection procedure test plan described in the next section of this report.

Test Plan Development

Project staff began analyzing the KSAOs to plan the selection procedure development, concurrent with the Phase II linkage activities. Appendix N shows the number of task categories linked to each KSAO in Phase II and the number of task-KSAO linkages retained in Phase I. Appendix N also presents the staff's judgments (based on experience and the

professional literature) about whether the 46 KSAOs retained after Phase II were possible to measure in a selection procedure. Forty-four of the KSAOs were judged to be potentially measurable. (Note that this does not imply that all 44 could be practically or cost-effectively measured.)

As discussed earlier, Army policy makers decided against pre-applicant training and testing for knowledges. As a result of this decision, knowledges were no longer considered in test plan development. However, 30 ASOs survived Phase II, making test plan development extremely complex. Because of the large number and complexity of the potential selection elements, project staff and the COR decided that further data reduction was required.

Two general approaches for further reduction of the selection KSAOs were considered - empirical versus rational. The empirical approach would have involved factor analyzing the importance ratings on the 30 remaining ASOs. Recent research (Cranny et al., 1988) demonstrated problems with such an approach so it was dropped from further consideration. Another empirical approach would have involved collecting similarity judgments on the 30 ASOs. That similarity data could have been analyzed using factor analysis, multidimensional scaling, or cluster analysis to identify a smaller number of ASO dimensions. Unfortunately, this approach was very expensive and time consuming, and there was no guarantee that the statistical analyses would have produced practical ASO dimensions.

Based on the issues of practicality and effectiveness the rational approach was chosen as the method for combination. This method involved having job analysts independently sort the remaining 30 ASOs into homogeneous dimensions. Four HumRRO job analysts/researchers rationally sorted the 30 ASOs into supervisory dimensions. There was a high degree of agreement among the analysts, and resolving differences was very straightforward. Table 10 presents the twelve new supervisor dimensions and the ASOs that made up each dimension. The twelve first-level supervisor ASO dimensions were reviewed and approved by the COR. The twelve ASO dimensions served as the basis of further test development planning.

Project staff then reviewed the dimensions in conjunction with relevant professional literature (e.g., Hough, Keyes, and Dunnette, 1983). Initially, four selection components were identified as potentially effective for first-level supervisory selection: an in-basket exercise, a structured interview, an applicant evaluation system and a probation period. The applicant evaluation system was envisioned to be modeled after current Army practice (i.e., training and experience [T&E] evaluation and the Army Civilian Career Evaluation System [ACCES]) and to be based on the behavioral consistency approach to evaluation (Hough, 1984; Hough, Keys, & Dunnette, 1983; Schmidt, Caplan, Bemis, Decuir, Dunn, & Antone, 1979). A series of meetings were held between representatives of ARI, DCP, PERSCOM and HumRRO project staff to discuss practical issues involved in the proposed first-line supervisor selection process. Based on these meetings it was decided that the applicant evaluation guide would be impractical given the constraints in the Army's personnel system. This option would have placed a very large burden on the personnel staff as well as candidates for the supervisory positions. Therefore, it was dropped from the proposed selection process. A probation period was already in place and therefore no further work was required. After much consideration, it was determined by ARI and the contractor staff that the selection

Table 10

Revised First-Line Supervisor Dimensions

1. Written Communication

6. **Written Communication:** The ability to write memos, letters, instructions, and other materials in a clear and organized fashion.

2. Reading Ability

7. **Reading Ability:** The ability to read and comprehend written material.

3. Oral Communication

8. **Oral Communication:** The ability to express oneself clearly in a one-on-one or small group situation.
10. **Teaching Ability:** The ability to impart new skills and knowledges.
11. **Persuasion:** The ability to obtain acceptance or agreement to an idea, plan, or course of action.

4. Character

29. **Self-confident:** Believes in own abilities to get the job done. Acts with sureness and certainty.
30. **Thorough:** Concerned for the completeness, accuracy, and overall quality of the work.
31. **Honest:** Values the truth and refrains from making misleading statements.
33. **Responsible:** Accepts responsibility for own actions.
34. **Dependable:** Reliably completes assignments, meets deadlines, follows up on requests, and pursues important matters until they are resolved.
50. **Emotionally Stable:** Reacts appropriately and predictably to everyday events. Is neither moody nor suspicious around others.
51. **Trustworthy:** Handles confidential, classified, and/or personal information appropriately.

Table 10 (Continued)

Revised First-Line Supervisor Dimensions

5. Interpersonal Relations

- 16. **Non-discriminatory:** The ability to relate without prejudice to individuals whose backgrounds, appearances, values, or physical condition are different from yours.
- 17. **Human Relations:** The ability to develop and maintain cooperative and productive working relationships with peers, subordinates, and superiors.
- 39. **Fair:** Treats subordinates without favoritism. Evaluates work and administers rewards based on subordinate's true ability and accomplishments.
- 41. **Tact and Diplomacy:** Presents negative information clearly, yet without raising the listener's defenses or forcing the listener to lose face.

6. Counseling

- 18. **Courage to Confront:** The ability to confront one's subordinates about performance or conduct problems.
- 24. **Developmental Counseling:** Skill in helping subordinates identify their developmental needs and means for meeting them.
- 25. **Performance/Conduct Counseling:** Skill in counseling employees about work-related problems (e.g., performance deficiencies, attitude problems, conduct problems).

7. Decision Making

- 12. **Decision Making:** The ability to make timely decisions based on factual information, personal experience, and knowledge of the mission of one's unit, specific organization, and the Army in general.

8. Planning and Organizing

- 20. **Planning:** The ability to set goals, establish plans, anticipate obstacles, and identify means to overcome them.
- 21. **Organizing:** The ability to prioritize tasks, schedule people, and arrange resources so as to achieve objective most effectively.

Table 10 (Continued)

Revised First-Line Supervisor Dimensions

9. Problem Analysis and Resolution

- 4. **Conflict Resolution:** the ability to listen to all sides of a dispute, objectively evaluate the situation, and respond appropriately.
- 22. **Problem Identification:** The ability to assess the overall effectiveness of the work unit and identify any issues or problems.
- 40. **Gets Facts:** Seeks complete information from all available sources before making judgments or decisions about important work matters.

10. Employee Management

- 3. **Delegation:** The ability to assign work, establish controls, and ensure that subordinates have the necessary authority and resources.
- 5. **Motivate Others:** The ability to motivate subordinates to perform to the best of their abilities.
- 27. **Monitor Work:** Skill in monitoring the progress of subordinate's work (e.g., seeing that orders are carried out, correcting and assisting subordinates, making sure that work is up to standard, and knowing early when something goes wrong).

11. Leadership

- 1. **Leadership:** The ability to take charge of a situation, to install confidence, and promote action among subordinates.

12. Technical Skills

- 38. **Technically Competent:** Knows the work to be supervised. Has sufficient technical knowledge to be respected by other workers. Can make sound technical decisions.

able to fulfill both technical and practical considerations for this testing environment were the in-basket exercise and structured interview.

The scoreable in-basket is both an innovative and practical method for assessing first-line supervisory potential. The multiple-choice format of this exercise allows for efficient and standardized assessment of Army Civilian first-level supervisory candidates. Although relatively new to the testing arena, the scoreable in-basket exercise holds great promise for personnel selection.

The interview is already a key component of virtually every selection decision currently made in the Army. Unfortunately, those interviews are typically unstructured, resulting in a highly unreliable and possibly invalid selection process. Therefore, the second component of the first-level supervisor selection process would be a structured interview conducted by hiring officials. Since the structured interview would be conducted by hundreds and perhaps thousands of hiring officials, there was a concern about the "security" of any scoring guide that accompanied the interview questions. To resolve this issue, the planning group decided that the interview component would not be considered a test with correct and incorrect answers. Instead, the hiring officials would be provided with a sample set of structured interview questions, guidance on how to develop job-related questions, and guidance on how to evaluate the answers.

With the scoreable in-basket and structured interview components in mind, project staff then developed a "test plan" that showed the dimensions on which development of test and interview materials would be based. The test plan is presented in Table 11. This plan was used as a general guide for identifying the dimensions measured by each selection procedure.

Table 11**First-Line Supervisor Test Plan**

DIMENSIONS	INTERVIEW	IN-BASKET
<u>1. Written Communication</u> 6. Written Communication	No	Yes
<u>2. Reading Ability</u> 7. Reading Ability	No	Required for training Materials
<u>3. Oral Communication</u> 8. Oral Communication 10. Teaching Ability 11. Persuasion	Yes	No
<u>4. Character</u> 29. Self-confident 30. Thorough 31. Honest 33. Responsible 34. Dependable 50. Emotionally Stable 51. Trustworthy	Yes	Yes (33, 34)
<u>5. Interpersonal Relations</u> 16. Non-discriminatory 17. Human Relations 39. Fair 41. Tact and Diplomacy	Yes	Yes
<u>6. Counseling</u> 18. Courage to Confront 24. Developmental Counseling 25. Performance/Conduct Counseling	Yes	Yes
<u>7. Decision Making</u> 12. Decision Making	Yes	Yes
<u>8. Planning and Organizing</u> 20. Planning 21. Organizing	No	Yes

(Continued)

Table 11 (Continued)**First-Line Supervisor Test Plan**

DIMENSIONS	INTERVIEW	IN-BASKET
<u>9. Problem Analysis and Resolution</u> 4. Conflict Resolution 22. Problem Identification 40. Gets Facts	Yes	Yes
<u>10. Employee Management</u> 3. Delegation 5. Motivate Others 27. Monitor Work	No	Yes
<u>11. Leadership</u> 1. Leadership	Redundant with other dimensions, not specifically measured	
<u>12. Technical Skills</u> 38. Technically Competent	No	No

Of the 12 dimensions that emerged from the linkage exercise, it was determined that three are not appropriately measured in a scoreable in-basket. One, oral communication, cannot be measured by a multiple-choice in-basket. Another, the technical skill dimension, is specific to job types and therefore is not measurable in a selection instrument geared toward all civilian supervisory jobs. Finally, the leadership dimension was not specifically measured by the scoreable in-basket for two reasons. First, there is a lack of agreement in the literature regarding the definition of the leadership construct and how it is expressed in behavior (Clark & Clark, 1990). The job analysis was not designed as a study of the construct, and as a result shed little light on the definitional problem. Second, several of the performance dimensions that did emerge from the job analysis do overlap facets of the construct that have emerged from leadership research. For example, planning and organizing, and problem analysis and solution, are among the scales included in Yukl's Managerial Practices Survey (Clark & Clark, 1990; Yukl, Wall, & Lepsinger, 1990). Motivating subordinates, another component of leadership, fell under the dimension titled "Employee Management." Given issues of definition and overlap with other dimensions, it was felt that supervisors would be unable to consistently describe behavioral incidents reflecting leadership. Finally, since the in-basket was to be scoreable, written communication per se could not be assessed. However, items were planned that would require the test taker to recognize the quality of written material.

Eight dimensions were chosen for use in constructing the interview guide. Written communication and reading ability were not included as the interview does not elicit behavior relevant to these dimensions. Since most candidates for supervisory positions have not managed employees, the employee management dimension was judged to be better measured within the hypothetical scenario developed for the in-basket. Similarly, the in-basket, which is a strong measure of administrative skills, was deemed to be a better assessment of planning and organizing than the interview. Finally, leadership and technical skills were excluded from the interview guide test plan for the same reasons they were excluded from the in-basket test plan.

These dimensions guided the development of both instruments. In constructing the in-basket, workshops were conducted to obtain descriptive information about the critical experiences, within the supervisory performance dimensions, which first-level supervisors face. Workshop participants wrote critical incidents representing effective and ineffective incidents for each dimension. These critical incidents formed the basis for in-basket materials. In constructing the interview guide, the Phase I and II linkage results summarized in Appendices H and M guided the development of the initial set of draft questions. Draft questions, rating guidelines, and interviewer instructions were refined based on multiple reviews by prospective users. Detailed information concerning the development of the selection procedures is provided in separate reports on instrument development (Felber, Sandlund, Dugan, & Rigby, 1993; Stawarski, Sadacca, Dugan, & Rigby, 1992).

REFERENCES

- American Psychological Association (1985). Standards for educational and psychological testing. Washington, DC.
- Clark, K. E., & Clark, M. B. (1990). Measures of leadership. West Orange, NJ: Leadership Library of America.
- Clark, S. B., Sweeney, D. H., & Savell, J. M. (1988). Establishing priorities for civilian personnel management research in the Army (ARI Research Report 1474). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A197 397)
- Cranny, C. J., & Doherty, M. E. (1988). Importance ratings in job analysis: Note on the misinterpretation of factor analyses. Journal of Applied Psychology, 73, 320-322.
- Department of the Army Pamphlet 690-10 (1979). A candidate evaluation system. Washington, DC: Headquarters, Department of the Army.
- Felber, H. R., Sandlund, S. M. H., Dugan, B. A., & Rigby, C. K. (1993). Selecting first-level supervisors: The development of two scoreable in-basket exercises. (HumRRO Final Report FR-PRD-93-03). Alexandria, VA: Human Resources Research Organization.
- Hough, L. M. (1984). Development and evaluation of the "accomplishment record" method of selecting and promoting professionals. Journal of Applied Psychology, 69, 135-146.
- Hough, L. M., Keyes, M. A., & Dunnette, M. D. (1983). An evaluation of three "alternative" selection procedures. Personnel Psychology, 36, 261-276.
- Riegelhaupt, B. J., Rosenthal, D., Ziemak, J. P., & Kuhn, D. B. (1987). Job requirements for civilian supervisors: Research plan (ARI Working Paper 87-06). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Rosenthal, D. B., Riegelhaupt, B. J., & Ziemak, J. P. (1988). Job analysis of U.S. Army civilian first-level supervisors (Final Report 88-02). Alexandria, VA: HumRRO International, Incorporated.
- Schmidt, F. L., Caplan, J. R., Bemis, S. E., Decuir, R., Dunn, L., & Antone, L. (1979). The behavioral consistency method of unassembled examining (TM-79-21). Washington, DC: U.S. Office of Personnel Management, Personnel Research and Development Center.

Starwaski, C. A., Sadacca, R., Dugan, B. A., & Rigby, C. K. (1992). Selecting first-level supervisors: The development of a structured interview guide (HumRRO Final Report FR-PRD-92-18). Alexandria, VA: Human Resources Research Organization.

Uniform guidelines on employee selection procedures (1978). Federal Register, 43, 38290-38315.

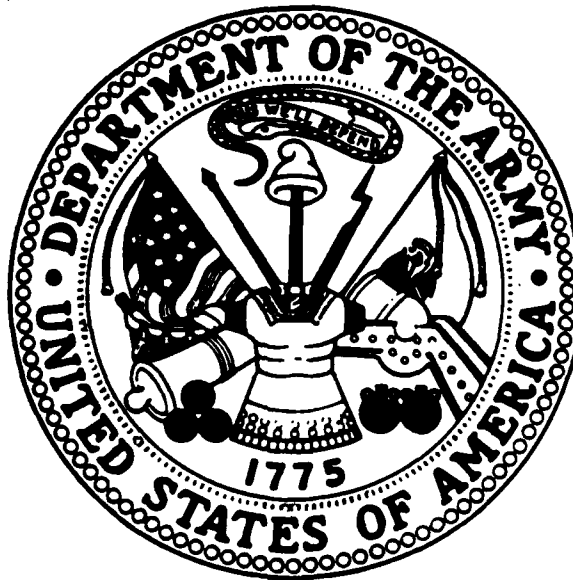
Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the managerial practices survey. In K. E. Clark & M. B. Clark (Eds.), Measures of leadership (pp. 223-238). West Orange, NJ: Leadership Library of America.

Appendix A

Job Analysis Survey

JOB ANALYSIS SURVEY

ARMY CIVILIAN FIRST-LINE SUPERVISORS



**U.S. Army Research Institute for the
Behavioral and Social Sciences
5001 Eisenhower Avenue
Alexandria, VA 22333-5600**

September 1987



DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR PERSONNEL
WASHINGTON, DC 20310-0300

REPLY TO
ATTENTION OF

Dear Colleague:

There have been a number of efforts in recent years to identify leader development requirements for commissioned and non-commissioned officers. The idea behind these efforts has been that if the Army knew what officers and NCOs actually did in their roles as leaders, it would be in a better position to select and/or train individuals who have the required capabilities. Until recently however there has been no comparable effort to identify these tasks and capabilities for DA civilians.

The attached survey is a critical step in the analysis of civilian first-line supervisor jobs in the Army. The job analysis is being done to systematically identify the important supervisory (non-technical) tasks that are performed by Army civilian first-line supervisors, and the knowledges, skills, abilities, and other characteristics (KSAOs) required for effective performance of critical first-line supervisory tasks. The information obtained will form the basis for recommended improvements to the procedures currently being used to select first-line supervisors.

The survey is being sent to a random sample of 4,000 first-line supervisors representing every Wage Grade (WG) and General Schedule (GS) job series in the Army. Responses to it will allow us to determine the major work activities of first-line supervisors and the KSAOs required for the effective performance of the tasks and activities.

This survey will take most people on the average approximately two hours to complete. It will be a worthwhile investment of your time since the information you provide will form the basis for any recommended improvements to the procedures being used to select first-line supervisors. You may be assured that no information of an individual nature will be provided to any Army supervisor or manager. Also, your responses will not influence your grade or job classification. The purpose of the analysis is to obtain accurate data on the type of work activities presently being performed by first-line supervisors. I urge you to give this survey your best effort and sincere professional support.

Please complete this survey as soon as possible at your workplace during regular work hours. After you have completed the survey, place the survey in the enclosed return envelope. It would help speed up the analysis of the results if you would complete your survey within 5 days. If you have been on leave or travel, please complete and return the survey as soon after your return as possible.

FOR THE DEPUTY CHIEF OF STAFF FOR PERSONNEL

Sincerely,

Charles E. Thomas
RAYMOND J. SUMSER
Director of Civilian Personnel

PRIVACY ACT STATEMENT

Authority: 10 USC Sec 4503

Principal Purpose: The data collected with this form are to be used for research purposes only.

Routine Uses: This is an experimental personnel data collection form developed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR 70-1. When identifiers (name) are requested they are to be used for administrative and statistical control purposes only. Full confidentiality of the responses will be maintained in the processing of these data.

Disclosure: Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no affect on individuals for not providing all or any part of the information.

WHAT'S IN THIS SURVEY?

First, this is a survey for FIRST-LINE SUPERVISORS only.

- If you are a first-line supervisor, continue reading the instructions below.
- If you are not a first-line supervisor, return this survey to the survey administrator.
- If you are not sure whether you are a first-line supervisor, ask your own supervisor. (He/she should be able to tell you.)

Second, the survey has 5 sections:

SECTION I: General background information—to help us understand the results better.

SECTION II: List of supervisory tasks—some will be part of your job, and some won't. We'll ask you to indicate those supervisory tasks that are part of your job so we can ask you some questions about them.

SECTION III: List of "knowledges" needed in some kinds of jobs. We'll ask you some questions about those things you need to know in your job.

SECTION IV: List of abilities, skills and other characteristics (ASOs) needed in some kinds of jobs. We'll ask you some questions about the ASOs you need in your job.

SECTION V: Some general questions about the kind of job you have and the environment in which you work.

Third, there is some general information that relates to all five sections:

1. This is **NOT** a test. It is simply an effort to get a better handle on the kinds of tasks first-line supervisors are and are not called on to perform.
2. Your responses to this survey will **NOT** affect your classification, grade, promotion opportunities, etc., in any way. We came to you because you are the one who knows the most about the job you perform.
3. The survey will take most people about 2 hours to complete. But some will need more time, and some will need less.
 - Be sure to read all the tasks and KASOs in the survey.
 - Remember that some of the tasks will not be part of your job. We'd just like you to indicate those that are so we can ask you some questions about them.
 - Do not be concerned if there are tasks or KASOs that are not relevant to your position. This survey was designed to cover all Army civilian first-line supervisors. Thus, many of the tasks may be performed in other jobs.
 - Answer the questions only in terms of your own present job—not the job your subordinates or supervisors perform or the job you held at some earlier time.
 - Respond in terms of the job as you actually perform it—which is not necessarily the same as what is described in your position description, or as you think it should be performed.
 - If you have any questions, contact the survey administrator for your location.
4. When you have finished (and checked to be sure you haven't overlooked anything), please do the following:
 - Place the survey in the envelope that came with it;
 - Seal the envelope;
 - Sign your name across the flap; and
 - Return the signed envelope to the survey administrator for your location.

INSTRUCTIONS FOR MARKING

Your responses will be read by an optical mark reader. Please observe the following rules to assure that your answers will be correctly read.

- Use only a soft lead pencil (a standard No. 2 pencil is ideal).
- Make heavy marks that fill the oval.
- Erase cleanly any answer you wish to change.
- Make no stray markings of any kind. Please write any comments on the last page of the survey.



EXAMPLE:

Will marks made with ball point pen or felt-tip pen be properly read?

☐ Yes ☒ No

SECTION I: BACKGROUND INFORMATION

Please answer the following questions as completely as possible.

1. Name:

Last First MI

2. What is your level of supervision? (Darken only one.)

- ☐ Not a supervisor
- ☐ Team Leader (not an officially designated supervisor)
- ☐ First-line supervisor (directly supervise no other supervisors)
- ☐ Second-line supervisor (directly supervise one or more first-line supervisors)
- ☐ Above second-line (directly supervise one or more second-line supervisors)

IF YOU ARE NOT A FIRST-LINE SUPERVISOR, PLEASE RETURN THIS SURVEY TO THE SURVEY ADMINISTRATOR.

3. What is your present job series? (Write in the number of your job series, and darken the appropriate ovals.) In the example, this supervisor is a 334, so he/she wrote in "0334" and darkened the appropriate ovals under each number.

EXAMPLE

0	3	3	4
☒	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐

WRITE IN YOUR JOB SERIES NUMBER HERE

☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐

4. What is your present pay system?

- ☐ WG
- ☐ WS
- ☐ GS
- ☐ GM

5. What is your present grade level?

- ☐ 01 ☐ 09
- ☐ 02 ☐ 10
- ☐ 03 ☐ 11
- ☐ 04 ☐ 12
- ☐ 05 ☐ 13
- ☐ 06 ☐ 14
- ☐ 07 ☐ 15
- ☐ 08

6. How long have you been a civilian employee of the Department of the Army?

- ☐ Less than 6 months
- ☐ 6 months to less than 1 year
- ☐ 1 year to less than 3 years
- ☐ 3 years to less than 5 years
- ☐ 5 years to less than 10 years
- ☐ 10 years or more

7. Were you ever on active duty in the military?

- ☐ YES
- ☐ NO

8. How long have you been a first-line supervisor in your present JOB SERIES and GRADE LEVEL at your PRESENT LOCATION (fort, post, or installation)?

- ☐ Less than 6 months
- ☐ 6 months to less than 1 year
- ☐ 1 year to less than 3 years
- ☐ 3 years to less than 5 years
- ☐ 5 years to less than 10 years
- ☐ 10 years or more

9. In total, how long have you been a Department of the Army first-line supervisor?

- ☐ Less than 6 months
- ☐ 6 months to less than 1 year
- ☐ 1 year to less than 3 years
- ☐ 3 years to less than 5 years
- ☐ 5 years to less than 10 years
- ☐ 10 years or more

10. Did you have to move to a different installation to take your present job as a first-line supervisor?

- ☐ YES
- ☐ NO

11. Were you previously part of the work group for which you are now the first-line supervisor?
- ☐ YES
☐ NO
12. Before you became a first-line supervisor, were you officially designated as a group/team leader?
- ☐ YES
☐ NO
13. For how many of each of the following types of employees are you officially designated as the direct first-line supervisor? Do not count seasonal or summer employees. (Write in the number and darken the appropriate oval. If you don't supervise a type of employee shown below, write in and darken "00" for that category.)

CIVILIAN

WG	GS&GM
00	00
01	01
02	02
03	03
04	04
05	05
06	06
07	07
08	08
09	09

MILITARY

ENLISTED	OFFICERS
00	00
01	01
02	02
03	03
04	04
05	05
06	06
07	07
08	08
09	09

14. Is your immediate supervisor civilian or military?
- ☐ Civilian
☐ Military
15. What is your major command or activity? (Darken only one.)
- ☐ Eighth US Army (Korea)
 - ☐ Army Materiel Command
 - ☐ Military Traffic Management Command
 - ☐ US Army Military District of Washington
 - ☐ US Army, Europe & Seventh Army
 - ☐ US Army Forces Command
 - ☐ US Army Health Services Command
 - ☐ US Army Information Systems Command
 - ☐ US Army Intelligence & Security Command
 - ☐ US Army, Japan
 - ☐ US Army Recruiting Command
 - ☐ US Army Training and Doctrine Command
 - ☐ US Army Western Command
 - ☐ US Army Military Academy
 - ☐ HQDA
 - ☐ US Army Corps of Engineers
 - ☐ Others, please specify

☐ Don't Know

16. What is the organizational level of your current assignment? (Darken only one.)
- ☐ Department of Defense
 - ☐ Joint Activity
 - ☐ Department of Army
 - ☐ Major Army Command
 - ☐ Major Sub-Command/Numbered Unit/School/Center
 - ☐ Intermediate Command
 - ☐ Activity/Facility/Office
 - ☐ Installation (Post/Camp/Station)
 - ☐ Don't Know

17. What is your sex?
- ☐ MALE
☐ FEMALE

18. Are you of Hispanic origin? (Hispanic is defined as a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.)
- ☐ YES
☐ NO

19. In which racial category are you?
- ☐ American Indian or Alaskan Native: A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
 - ☐ Asian or Pacific Islander: A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, and Samoa.
 - ☐ Black: A person having origins in any of the black racial groups of Africa.
 - ☐ White: A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
 - ☐ Other, please specify

20. What is the HIGHEST LEVEL OF EDUCATION that you have attained? (Darken only one.)
- ☐ Less than high school diploma
 - ☐ High School diploma or equivalency
 - ☐ Some college
 - ☐ Associate's degree
 - ☐ Bachelor's degree
 - ☐ Bachelor's degree plus some graduate credits
 - ☐ Master's degree
 - ☐ Master's degree plus some graduate credits
 - ☐ Doctorate
 - ☐ Other, please specify

SECTION II: JOB TASKS

This section contains a list of supervisory tasks. The range of tasks is very broad; first-line supervisors from every General Schedule (GS) and Wage Grade (WG) job series are responding to this survey. It is important that you carefully read each item. Do not be concerned if you see many tasks that you do not perform. It is unlikely that any first-line supervisor performs every task in this survey.

Step One

Read each task and decide if you have performed it within the last year. If you recently became a supervisor (i.e., for less than a year) then base your decision on the months you have been in your supervisory position. If you performed the task, darken the oval in the YES column under PART OF JOB. If not, darken the oval in the NO column under PART OF JOB. Think of your job as you actually perform it, not as a position description or as others say it should be performed.

YOU SHOULD MARK "YES" ONLY TO TASKS YOU PERSONALLY DO, NOT TASKS DONE BY YOUR SUBORDINATES OR YOUR OWN SUPERVISOR.

Go through the entire list of tasks in this way. Do not pay any attention to the columns marked **RELATIVE TIME SPENT** and **RELATIVE IMPORTANCE** until you have identified all of the tasks you have performed. If there are additional supervisory tasks that you performed as part of your job, please write them in the spaces provided at the end of this section on page 15.

Step Two

After you have indicated which of the tasks are part of your job, go back to the beginning of the list (page 9) and complete the **RELATIVE TIME SPENT** and **RELATIVE IMPORTANCE** sections according to the following directions:

1. Complete these two judgments **ONLY** for those tasks that you have indicated are a part of your job.
2. For each task you have performed, consider the amount of time you spent on it relative to the time you spent on all of the other tasks that are a part of your job. Using the scale definitions below, darken the oval in the column of the **RELATIVE TIME SPENT** section that best describes the relative time you spent on a task compared to all the other tasks that are a part of your job.
 1. **MUCH LESS** time spent on this task compared to other tasks that are a part of your job.
 2. **SOMEWHAT LESS** time spent on this task compared to other tasks that are a part of your job.
 3. **ABOUT THE SAME** amount of time spent on this task compared to other tasks that are a part of your job.
 4. **SOMEWHAT MORE** time spent on this task compared to other tasks that are a part of your job.
 5. **MUCH MORE** time spent on this task compared to other tasks that are a part of your job.
3. Next, consider how important each task is for doing your job properly. One way to think about importance is in terms of consequences of error. In general, the more serious the consequences of an error or non-performance, the more important a task is to your job. Using the scale definition on the next page, darken the oval in the column of the **RELATIVE IMPORTANCE** section that best describes the relative importance of each task compared to all the other tasks that are a part of your job.

1. **MUCH LESS** important than other tasks that are a part of your job.
2. **SOMEWHAT LESS** important than other tasks that are a part of your job.
3. **ABOUT THE SAME** importance as other tasks that are a part of your job.
4. **SOMEWHAT MORE** important than other tasks that are a part of your job.
5. **MUCH MORE** important than other tasks that are a part of your job.

Do both **RELATIVE TIME SPENT** and **RELATIVE IMPORTANCE** ratings for each item at the same time.

EXAMPLE

An example of how one first-line supervisor responded to two tasks is shown below:

TASKS	PART OF JOB?		RELATIVE TIME SPENT	RELATIVE IMPORTANCE
	YES	NO	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
1. Identify changes in position duties/requirements.	☒	☐	☒ 2 3 4 5	1 ☒ 2 3 4 5
2. Interview candidates for vacant positions.	☐	☒	1 2 3 4 5	1 2 3 4 5

Step One

Task 1 is part of this first-line supervisor's job so the oval for "YES" under **PART OF JOB?** has been darkened.

Task 2 was not performed by this first-line supervisor during the past year so the oval for "NO" under **PART OF JOB?** has been darkened.

Step Two

After reading all of the tasks, and deciding which tasks were and were not part of his/her job, this first-line supervisor returned to the beginning of the list to make **RELATIVE TIME SPENT** and **RELATIVE IMPORTANCE** ratings.

MUCH LESS TIME is spent on this task compared to other tasks performed by this supervisor; therefore, the "1" in the **RELATIVE TIME SPENT** column has been darkened. The "2" in the **RELATIVE IMPORTANCE** column has been darkened to indicate that this task is **SOMEWHAT LESS IMPORTANT** than other tasks that are a part of this first-line supervisor's job.

Since Task 2 was not performed during the past year, the **RELATIVE TIME SPENT** and **RELATIVE IMPORTANCE** columns have been left blank.

Remember, read each task carefully and darken the oval if it is something you have performed during the past year. Do this for all tasks before returning to the beginning of the list to make the **RELATIVE TIME SPENT** and **RELATIVE IMPORTANCE** ratings for those tasks you do perform.

JOB TASKS

	PART OF JOB?		RELATIVE EFFORT	RELATIVE IMPORTANCE
	YES	NO	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
PERSONAL STAFFING				
1. Identify requirements and hiring criteria for position vacancies (e.g., skills and knowledges, SKAP/ACCES elements, crediting plans).	☐	☐	1 2 3 4 5	1 2 3 4 5
2. Initiate requests (SF-52) for recruitment or other staffing actions.	☐	☐	1 2 3 4 5	1 2 3 4 5
3. Recruit/interview candidates at high schools or college campuses or conferences or job fairs, etc.	☐	☐	1 2 3 4 5	1 2 3 4 5
4. Review candidates' qualification summaries (e.g., resumes, DA 2302, SF 171, 201 files, performance ratings, SKAP/ACCES).	☐	☐	1 2 3 4 5	1 2 3 4 5
5. Interview candidates for vacant positions.	☐	☐	1 2 3 4 5	1 2 3 4 5
6. Check with references concerning candidates' background.	☐	☐	1 2 3 4 5	1 2 3 4 5
7. Participate as a member on selection boards/panels.	☐	☐	1 2 3 4 5	1 2 3 4 5
8. Recommend candidates for vacant position to the next level of supervision.	☐	☐	1 2 3 4 5	1 2 3 4 5
9. Select candidates for vacant position.	☐	☐	1 2 3 4 5	1 2 3 4 5
10. Justify in writing the selection/non-selection of candidates.	☐	☐	1 2 3 4 5	1 2 3 4 5
POSITION MANAGEMENT				
11. Justify the need for current/new positions.	☐	☐	1 2 3 4 5	1 2 3 4 5
12. Review subordinates' job descriptions for accuracy.	☐	☐	1 2 3 4 5	1 2 3 4 5
13. Identify changes in position duties/requirements.	☐	☐	1 2 3 4 5	1 2 3 4 5
14. Develop revisions to job descriptions.	☐	☐	1 2 3 4 5	1 2 3 4 5
15. Request that positions be audited or reviewed by the Civilian Personnel Office (CPO).	☐	☐	1 2 3 4 5	1 2 3 4 5
16. Establish upward mobility, intern, co-op student positions, etc.	☐	☐	1 2 3 4 5	1 2 3 4 5
17. Identify/restructure vacant positions that can be filled at lower grade levels with promotion potential to full level.	☐	☐	1 2 3 4 5	1 2 3 4 5
18. Justify retaining grade level of vacant positions.	☐	☐	1 2 3 4 5	1 2 3 4 5
19. Obtain and provide information for manpower surveys and studies (e.g., Schedule X, Efficiency Reviews, Commercial Activities Review).	☐	☐	1 2 3 4 5	1 2 3 4 5
20. Develop/provide input to Table of Distribution and Allowances (TDAs).	☐	☐	1 2 3 4 5	1 2 3 4 5
21. Adjust the composition of workforce (e.g., number of part time vs full time, low vs high grade) to satisfy TDA while maximizing work group productivity.	☐	☐	1 2 3 4 5	1 2 3 4 5
EQUAL EMPLOYMENT OPPORTUNITY (EEO)				
22. Coordinate with EEO office to determine if unit contains a representative number of minorities and women.	☐	☐	1 2 3 4 5	1 2 3 4 5
23. Review own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to identify areas requiring affirmative action.	☐	☐	1 2 3 4 5	1 2 3 4 5
24. Revise own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to achieve affirmative action.	☐	☐	1 2 3 4 5	1 2 3 4 5
25. Take appropriate actions to minimize/eliminate discriminatory attitudes/behaviors of subordinates toward each other.	☐	☐	1 2 3 4 5	1 2 3 4 5
26. Follow EEO procedures in response to EEO complaints.	☐	☐	1 2 3 4 5	1 2 3 4 5
27. Participate in EEO/Affirmative Action conferences or workshops.	☐	☐	1 2 3 4 5	1 2 3 4 5
28. Encourage subordinates to participate in Black History Month, Federal Women's Program, Hispanic Week, etc.	☐	☐	1 2 3 4 5	1 2 3 4 5

	PART OF JOB?		RELATIVE TIME SPENT					RELATIVE IMPORTANCE				
	YES	NO	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE					MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE				
MANAGING THE WORKFORCE												
29. Evaluate subordinates' suitability for promotion (e.g., local merit, SKAP/ACCES).	Y	N	1	2	3	4	5	1	2	3	4	5
30. Develop subordinates' performance standards.	Y	N	1	2	3	4	5	1	2	3	4	5
31. Review performance standards with subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
32. Formally review and evaluate job performance of subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
33. Provide informal feedback to subordinates concerning their performance.	Y	N	1	2	3	4	5	1	2	3	4	5
34. Complete written performance appraisals for civilian subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
35. Complete/provide input to Officer Efficiency Report (OER).	Y	N	1	2	3	4	5	1	2	3	4	5
36. Complete/provide input to Enlisted Evaluation Report (EER).	Y	N	1	2	3	4	5	1	2	3	4	5
37. Review subordinates' performance ratings with approving official prior to reviewing ratings with subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
38. Review performance ratings with subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
39. Evaluate probationary employees to determine suitability for permanent status.	Y	N	1	2	3	4	5	1	2	3	4	5
40. Evaluate trainees (e.g., interns, upward mobility) for target grade promotion.	Y	N	1	2	3	4	5	1	2	3	4	5
41. Confer with staff from Management Employee Relations (MER) prior to taking actions on subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
42. Counsel subordinates about how to improve performance.	Y	N	1	2	3	4	5	1	2	3	4	5
43. Counsel subordinates about absences, tardiness, behavioral problems.	Y	N	1	2	3	4	5	1	2	3	4	5
44. Document subordinates' poor performance.	Y	N	1	2	3	4	5	1	2	3	4	5
45. Document subordinates' unauthorized absences, tardiness, or behavioral problems.	Y	N	1	2	3	4	5	1	2	3	4	5
46. Provide subordinates with written guidelines on how to improve performance.	Y	N	1	2	3	4	5	1	2	3	4	5
47. Inform chain of command of performance problems with military subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
48. Inform chain of command of conduct/behavioral problems (e.g., absences, tardiness) with military subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
49. Determine if adverse actions (e.g., suspension, removal) should be taken because of poor performance.	Y	N	1	2	3	4	5	1	2	3	4	5
50. Determine if formal disciplinary steps should be taken in response to conduct/behavioral problems (e.g., absences, tardiness).	Y	N	1	2	3	4	5	1	2	3	4	5
51. Initiate adverse actions (e.g., suspension, removal) for subordinates whose performance is below acceptable levels.	Y	N	1	2	3	4	5	1	2	3	4	5
52. Deny within grade increase to subordinates whose performance is below acceptable levels.	Y	N	1	2	3	4	5	1	2	3	4	5
53. Write letters of reprimand.	Y	N	1	2	3	4	5	1	2	3	4	5
54. Detect/recognize personal problems of subordinates (e.g., drugs, alcohol, financial, family) that affect their job performance.	Y	N	1	2	3	4	5	1	2	3	4	5
55. Offer to assist subordinates with personal problems that affect their job performance.	Y	N	1	2	3	4	5	1	2	3	4	5
56. Discuss with subordinates personal problems that affect their job performance.	Y	N	1	2	3	4	5	1	2	3	4	5
57. Refer subordinates with personal problems affecting their job performance for assistance.	Y	N	1	2	3	4	5	1	2	3	4	5
58. Nominate subordinates for formal honors or awards.	Y	N	1	2	3	4	5	1	2	3	4	5
59. Present on-the-spot cash awards to subordinates from discretionary funds.	Y	N	1	2	3	4	5	1	2	3	4	5

		PART OF JOB?	RELATIVE TIME SPENT	RELATIVE IMPORTANCE
		YES NO	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
MANAGING THE WORKFORCE (Contd.)				
60. Establish rewards or incentives to motivate subordinates (e.g., certificate of achievement, employee of the month).		Y N	1 2 3 4 5	1 2 3 4 5
61. Praise subordinates for effective job performance.		Y N	1 2 3 4 5	1 2 3 4 5
62. Write letters of appreciation/commendation for subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
63. Motivate subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
64. Recognize and take steps to correct morale problems.		Y N	1 2 3 4 5	1 2 3 4 5
65. Encourage subordinates to perform their jobs to the best of their ability.		Y N	1 2 3 4 5	1 2 3 4 5
66. Foster/develop a positive work environment that will serve to motivate subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
67. Foster/develop a positive working relationship between civilian and military subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
68. Set an example for subordinates to follow.		Y N	1 2 3 4 5	1 2 3 4 5
TRAINING AND DEVELOPMENT				
69. Develop Individual Development Plans (IDPs) with subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
70. Develop training plans for subordinates in special employment programs (e.g., apprentices, co-op students, interns, upward mobility, veterans, re-adjustment employees).		Y N	1 2 3 4 5	1 2 3 4 5
71. Identify training needed by subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
72. Complete training needs survey.		Y N	1 2 3 4 5	1 2 3 4 5
73. Determine if currently available training programs meet subordinates needs.		Y N	1 2 3 4 5	1 2 3 4 5
74. Identify available training/developmental opportunities for subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
75. Inform subordinates of training/development opportunities.		Y N	1 2 3 4 5	1 2 3 4 5
76. Nominate subordinates to receive training.		Y N	1 2 3 4 5	1 2 3 4 5
77. Designate subordinates to receive cross-training.		Y N	1 2 3 4 5	1 2 3 4 5
78. Provide cross-training for subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
79. Design on-the-job training programs.		Y N	1 2 3 4 5	1 2 3 4 5
80. Provide on-the-job training.		Y N	1 2 3 4 5	1 2 3 4 5
81. Instruct subordinates on how to use new equipment.		Y N	1 2 3 4 5	1 2 3 4 5
82. Document effectiveness of training attended by subordinates (e.g., complete DD 1556).		Y N	1 2 3 4 5	1 2 3 4 5
83. Evaluate long term effectiveness of training attended by subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
84. Assign experienced employee(s) to train new workers.		Y N	1 2 3 4 5	1 2 3 4 5
85. Provide career development counseling to subordinates.		Y N	1 2 3 4 5	1 2 3 4 5
86. Justify need for non-government sources of training.		Y N	1 2 3 4 5	1 2 3 4 5
87. Ensure subordinates are free for PT, training, etc.		Y N	1 2 3 4 5	1 2 3 4 5
EMPLOYEE-MANAGEMENT COMMUNICATIONS				
88. Provide orientation to new employees.		Y N	1 2 3 4 5	1 2 3 4 5
89. Inform higher management of employees' views and concerns.		Y N	1 2 3 4 5	1 2 3 4 5
90. Inform subordinates of management objectives, decisions, and views.		Y N	1 2 3 4 5	1 2 3 4 5
91. Ask second-line supervisor or above for help or advice with work-related problems.		Y N	1 2 3 4 5	1 2 3 4 5
92. Inform second-line supervisor or above when problems arise which will delay completion of work.		Y N	1 2 3 4 5	1 2 3 4 5

EMPLOYEE-MANAGEMENT COMMUNICATIONS (Contd.)

	PART OF JOB?		RELATIVE TIME SPENT					RELATIVE IMPORTANCE				
	YES	NO	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE					MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE				
93. Encourage subordinates to participate in productivity improvement programs (e.g., suggestion, cost-reduction, quality assurance, quality circles).	Y	N	1	2	3	4	5	1	2	3	4	5
94. Explain personnel policies and procedures to subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
95. Explain administrative policies and procedures to subordinates (e.g., TDY, work hours, leave).	Y	N	1	2	3	4	5	1	2	3	4	5
96. Explain local installation policies and procedures to subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
97. Explain military policies and procedures to civilian supervisors and/or subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
98. Explain civilian policies and procedures to military supervisors and/or military subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
99. Conduct staff meetings.	Y	N	1	2	3	4	5	1	2	3	4	5
100. Conduct meetings with subordinates at beginning of their shift.	Y	N	1	2	3	4	5	1	2	3	4	5
101. Involve subordinates in decision-making or planning processes.	Y	N	1	2	3	4	5	1	2	3	4	5
102. Participate in staff meetings, conferences, etc.	Y	N	1	2	3	4	5	1	2	3	4	5
103. Inform subordinates of impending changes in policies or procedures.	Y	N	1	2	3	4	5	1	2	3	4	5
104. Communicate with union representatives/stewards.	Y	N	1	2	3	4	5	1	2	3	4	5
105. Communicate with EEO counselors.	Y	N	1	2	3	4	5	1	2	3	4	5
106. Inform second-line supervisor or above of your subordinates' accomplishments.	Y	N	1	2	3	4	5	1	2	3	4	5
107. Answer subordinates' questions concerning position vacancy announcements.	Y	N	1	2	3	4	5	1	2	3	4	5
108. Answer subordinates' questions concerning their non-selection for vacant positions.	Y	N	1	2	3	4	5	1	2	3	4	5

ADMINISTRATIVE DUTIES

109. Write or keep records/logs (e.g., suspense dates, work status sheets, project logs, work orders).	Y	N	1	2	3	4	5	1	2	3	4	5
110. Request TDY for your subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
111. Recommend/approve TDY for your subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
112. Review subordinates' travel itineraries.	Y	N	1	2	3	4	5	1	2	3	4	5
113. Review and approve subordinates' travel vouchers.	Y	N	1	2	3	4	5	1	2	3	4	5
114. Review and approve subordinates' trip reports.	Y	N	1	2	3	4	5	1	2	3	4	5
115. Complete accident reports.	Y	N	1	2	3	4	5	1	2	3	4	5
116. Complete workers' compensation forms.	Y	N	1	2	3	4	5	1	2	3	4	5
117. Follow grievance procedures in response to grievances.	Y	N	1	2	3	4	5	1	2	3	4	5
118. Request/justify comp time or overtime for subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
119. Approve comp time or overtime for subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
120. Coordinate annual leave/vacation schedules for subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5
121. Determine causes of subordinates' repeated absences/tardiness.	Y	N	1	2	3	4	5	1	2	3	4	5
122. Approve/disapprove requests for absences and leave.	Y	N	1	2	3	4	5	1	2	3	4	5
123. Write policies and procedures (e.g., SOP).	Y	N	1	2	3	4	5	1	2	3	4	5
124. Complete subordinates' time cards and overtime sheets.	Y	N	1	2	3	4	5	1	2	3	4	5
125. Certify time sheets/time cards.	Y	N	1	2	3	4	5	1	2	3	4	5
126. Read memos, newsletters, regulations, journals, etc., to keep up with developments related to supervision.	Y	N	1	2	3	4	5	1	2	3	4	5
127. Read/research regulations pertaining to personnel management and administrative procedures.	Y	N	1	2	3	4	5	1	2	3	4	5
128. Review personnel records and reports (e.g., time and attendance, sick leave, overtime) for accuracy and potential abuses (e.g., excessive tardiness, sick leave).	Y	N	1	2	3	4	5	1	2	3	4	5
129. Provide job references for subordinates.	Y	N	1	2	3	4	5	1	2	3	4	5

	PART OF JOB?		RELATIVE TIME SPENT	RELATIVE IMPORTANCE
	YES	NO	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
ADMINISTRATIVE DUTIES (Contd.)				
130. Enforce smoking/non-smoking regulations.	Y	N	1 2 3 4 5	1 2 3 4 5
131. Assign work space to subordinates.	Y	N	1 2 3 4 5	1 2 3 4 5
132. Allocate supplies or equipment to subordinates.	Y	N	1 2 3 4 5	1 2 3 4 5
133. Participate as a member on applicant evaluation boards (e.g., local merit promotion or SKAP panels).	Y	N	1 2 3 4 5	1 2 3 4 5
SAFETY				
134. Instruct personnel in the use of safety equipment.	Y	N	1 2 3 4 5	1 2 3 4 5
135. Instruct personnel in the observance of safety regulations.	Y	N	1 2 3 4 5	1 2 3 4 5
136. Investigate work-related accidents.	Y	N	1 2 3 4 5	1 2 3 4 5
137. Conduct safety tests on equipment.	Y	N	1 2 3 4 5	1 2 3 4 5
138. Request safety tests on equipment.	Y	N	1 2 3 4 5	1 2 3 4 5
139. Inspect work area for safety hazards.	Y	N	1 2 3 4 5	1 2 3 4 5
140. Ensure that safety hazards are addressed.	Y	N	1 2 3 4 5	1 2 3 4 5
141. Conduct safety meetings.	Y	N	1 2 3 4 5	1 2 3 4 5
142. Instruct personnel in the proper handling of hazardous materials.	Y	N	1 2 3 4 5	1 2 3 4 5
143. Instruct personnel how to use work equipment safely.	Y	N	1 2 3 4 5	1 2 3 4 5
144. Inspect safety equipment.	Y	N	1 2 3 4 5	1 2 3 4 5
145. Enforce safety programs and procedures.	Y	N	1 2 3 4 5	1 2 3 4 5
146. Report accidents.	Y	N	1 2 3 4 5	1 2 3 4 5
147. Document safety violations.	Y	N	1 2 3 4 5	1 2 3 4 5
MANAGING WORK AND OPERATIONS				
148. Determine the supplies, parts, equipment, or tools needed to accomplish work.	Y	N	1 2 3 4 5	1 2 3 4 5
149. Determine if supplies, parts, equipment or tools are available to accomplish work.	Y	N	1 2 3 4 5	1 2 3 4 5
150. Request/order supplies, parts, equipment or tools required to accomplish work.	Y	N	1 2 3 4 5	1 2 3 4 5
151. Receive/verify receipt of supplies, parts, equipment or tools.	Y	N	1 2 3 4 5	1 2 3 4 5
152. Schedule subordinates' work hours.	Y	N	1 2 3 4 5	1 2 3 4 5
153. Revise work schedules to adjust for subordinates' vacations, retirements, leaves of absence, attendance at training, etc.	Y	N	1 2 3 4 5	1 2 3 4 5
154. Revise work schedule to meet changes in the demands for unit's products or services.	Y	N	1 2 3 4 5	1 2 3 4 5
155. Consult with off-going supervisor about shift conditions.	Y	N	1 2 3 4 5	1 2 3 4 5
156. Check equipment to assure it is working properly.	Y	N	1 2 3 4 5	1 2 3 4 5
157. Request repairs on down equipment.	Y	N	1 2 3 4 5	1 2 3 4 5
158. Schedule preventive maintenance on equipment.	Y	N	1 2 3 4 5	1 2 3 4 5
159. Develop internal controls to minimize waste, fraud or abuse.	Y	N	1 2 3 4 5	1 2 3 4 5
160. Implement internal controls to minimize waste, fraud or abuse.	Y	N	1 2 3 4 5	1 2 3 4 5
161. Assess internal controls designed to minimize waste, fraud or abuse.	Y	N	1 2 3 4 5	1 2 3 4 5
162. Account for hand receipt equipment on the survey list.	Y	N	1 2 3 4 5	1 2 3 4 5
163. Report missing tools/equipment.	Y	N	1 2 3 4 5	1 2 3 4 5
164. Brief upper management on progress of work or project activities.	Y	N	1 2 3 4 5	1 2 3 4 5
165. Brief subordinates on progress of work or project activities.	Y	N	1 2 3 4 5	1 2 3 4 5
166. Delegate authority to work leader or other subordinates.	Y	N	1 2 3 4 5	1 2 3 4 5
167. Assess/verify accuracy of facts, statements, or complaints by others before they become part of a record or a basis for action.	Y	N	1 2 3 4 5	1 2 3 4 5
168. Resolve work-related complaints, conflicts or disputes among subordinates.	Y	N	1 2 3 4 5	1 2 3 4 5

PART OF JOB?		RELATIVE TIME SPENT	RELATIVE IMPORTANCE
		MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
YES NO			

MANAGING WORK AND OPERATIONS (Contd.)

169. Resolve work-related conflicts between your subordinates and people in other offices.
170. Monitor/evaluate work performed for the Army by outside vendors or contractors.
171. Keep up-to-date on union contracts or activities.
172. Monitor compliance with union agreements.
173. Establish work priorities and deadlines to meet milestones.
174. Develop plans to achieve goals or milestones.
175. Implement plans to achieve goals or milestones.
176. Evaluate program/project status or progress.
177. Assign work to subordinates.
178. Assign work priorities and deadlines to subordinates.
179. Explain work assignments to subordinates.
180. Review subordinates' work when in progress.
181. Review and approve subordinates' work upon completion.
182. Represent your subordinates during their absence.
183. Represent your immediate supervisor during his/her absence.
184. Evaluate work requests to determine if work can be accomplished and is within the mission of the unit.
185. Determine when work should be performed in-house and when to contract work out.
186. Participate in writing mission and function statements.
187. Monitor/update mission and function statements.
188. Communicate with other supervisors in your organization to improve operations.
189. Communicate with members of other organizations to improve operations.
190. Integrate the work of several subordinates to create a final product.

PLANNING/BUDGETING/EXECUTING

191. Project resources (e.g., personnel, equipment, training, TDY) required on an annual basis so budgets can be determined.
192. Allocate/reallocate budget resources among different work/projects.
193. Justify allocation of budget resources for work/projects.
194. Develop internal work group operating budgets from allocations received.
195. Estimate financial resources required to complete projects.
196. Monitor currently available financial resources.
197. Monitor long-term availability of financial resources.
198. Negotiate with others to obtain personnel, equipment, materials or financial resources to accomplish mission.
199. Monitor use of overtime, travel funds, training funds, incentive rewards, etc. to ensure that spending keeps within budgetary constraints.
200. Assess the impact of future workload on staffing requirements.
201. Assess the impact of mission changes on workload and staffing requirements.
202. Arrange for support from other offices or activities.
203. Survey customers/users to estimate future workload.
204. Survey customers/users to assess quality of services provided.
205. Estimate unit's short-range workload.
206. Estimate unit's long-range workload.
207. Estimate time required to complete projects.

	PART OF JOB?		RELATIVE TIME SPENT	RELATIVE IMPORTANCE
	YES	NO	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE	MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
PLANNING/BUDGETING/EXECUTING (Contd.)				
208. Assess impact of new technology on work group.	☒	☐	1 2 3 4 5	1 2 3 4 5
209. Assess efficiency of work operations.	☒	☐	1 2 3 4 5	1 2 3 4 5
210. Develop plans for improving work operations.	☒	☐	1 2 3 4 5	1 2 3 4 5
211. Implement plans for improving work operations.	☒	☐	1 2 3 4 5	1 2 3 4 5
212. Justify the need for retaining allocated supplies or equipment for subordinates.	☒	☐	1 2 3 4 5	1 2 3 4 5
213. Justify the need for retaining allocated work space for subordinates.	☒	☐	1 2 3 4 5	1 2 3 4 5
SECURITY CONCERNS				
214. Explain security policies and procedures to subordinates.	☒	☐	1 2 3 4 5	1 2 3 4 5
215. Determine sensitivity of positions for security purposes.	☒	☐	1 2 3 4 5	1 2 3 4 5
216. Request security clearances for subordinates.	☒	☐	1 2 3 4 5	1 2 3 4 5
217. Review subordinates Personal History Statement (i.e., DD 398).	☒	☐	1 2 3 4 5	1 2 3 4 5
218. Maintain privacy/security of personnel information in accordance with the Freedom of Information/Privacy Act.	☒	☐	1 2 3 4 5	1 2 3 4 5
219. Develop SOP in accordance with security regulations.	☒	☐	1 2 3 4 5	1 2 3 4 5
220. Implement SOP in accordance with security regulations.	☒	☐	1 2 3 4 5	1 2 3 4 5
221. Notify appropriate personnel (e.g., security officer, Military Intelligence) of suspected security risks or violations.	☒	☐	1 2 3 4 5	1 2 3 4 5
222. Report/document security violations.	☒	☐	1 2 3 4 5	1 2 3 4 5
223. Monitor the physical security of the work area.	☒	☐	1 2 3 4 5	1 2 3 4 5
224. Conduct security training meetings.	☒	☐	1 2 3 4 5	1 2 3 4 5
225. Maintain records of subordinates' attendance at security meetings.	☒	☐	1 2 3 4 5	1 2 3 4 5
226. Identify changes in job requirements which require that subordinates clearance be upgraded or downgraded.	☒	☐	1 2 3 4 5	1 2 3 4 5
If you perform any additional supervisory tasks, please list them below and make your ratings on the RELATIVE TIME SPENT and RELATIVE IMPORTANCE scales.				
227. _____	☒	☐	1 2 3 4 5	1 2 3 4 5
228. _____	☒	☐	1 2 3 4 5	1 2 3 4 5
229. _____	☒	☐	1 2 3 4 5	1 2 3 4 5
230. _____	☒	☐	1 2 3 4 5	1 2 3 4 5
231. _____	☒	☐	1 2 3 4 5	1 2 3 4 5
232. _____	☒	☐	1 2 3 4 5	1 2 3 4 5
233. _____	☒	☐	1 2 3 4 5	1 2 3 4 5
234. _____	☒	☐	1 2 3 4 5	1 2 3 4 5

NOTE: If you have just completed Step One, go to page 7 for the directions for Step Two. If you have just completed Step Two, you have finished the task ratings. Now, please answer questions 1 and 2 on the next page.

1. The tasks that you just rated cover the SUPERVISORY aspects of your job. We recognize that in your present position, there may be more to your job than the tasks listed in this section. Specifically, there are tasks that you may perform that are related to your job series. Think about the supervisory aspects of your job AND the non-supervisory aspects and answer the following question:

Over the past year, approximately what percentage of your time HAS BEEN SPENT performing the supervisory aspects of your job?

- ☐ 0%-10%
- ☐ 11%-20%
- ☐ 21%-30%
- ☐ 31%-40%
- ☐ 41%-50%
- ☐ 51%-60%
- ☐ 61%-70%
- ☐ 71%-80%
- ☐ 81%-90%
- ☐ 91%-100%

2. In your present position, what percentage of your time do you think you SHOULD be spending performing the supervisory aspects of your job?

- ☐ 0%-10%
- ☐ 11%-20%
- ☐ 21%-30%
- ☐ 31%-40%
- ☐ 41%-50%
- ☐ 51%-60%
- ☐ 61%-70%
- ☐ 71%-80%
- ☐ 81%-90%
- ☐ 91%-100%

Go on to Section III on the following page.

SECTION III: KNOWLEDGES

This section contains a list of knowledges that you may need to perform the supervisory part of your job. This survey is being completed by first-line supervisors who hold a broad range of jobs. Therefore, do not be concerned if some of the knowledges do not apply to your present position. It is unlikely that any first-line supervisor requires every knowledge listed in this survey.

It is possible that in a previous position you may have required a high level of some of the knowledges but do not require those knowledges to be effective in your present position. For this survey, it is important that you respond only in terms of your **PRESENT POSITION**, not previous supervisory or non-supervisory positions which you held or might know about.

Step One

Read each knowledge and decide if it is required to perform the supervisory aspect of your job. If the knowledge is required, darken the oval in the YES column under **IS KNOWLEDGE REQUIRED?** If not, darken the oval in the NO column under **IS KNOWLEDGE REQUIRED?**

MARK ONLY THOSE KNOWLEDGES THAT YOU PERSONALLY REQUIRE, NOT KNOWLEDGES REQUIRED BY YOUR SUBORDINATES, YOUR OWN SUPERVISOR, OR OTHER FIRST-LINE SUPERVISORS.

Go through the entire list of knowledges in this way. Do not pay any attention to the columns marked **AMOUNT OF UNDERSTANDING REQUIRED** and **WHEN USUALLY ACQUIRED** until you have identified all the knowledges required of your job. If there are additional supervisory (non-technical) knowledges that are important for your present position, please write them in the spaces provided at the end of this section of page 20.

Step Two

After you have indicated which knowledges are required for your job, go back to the beginning of the list (page 19) and complete the **AMOUNT OF UNDERSTANDING REQUIRED** and **WHEN USUALLY ACQUIRED** ratings for the **KNOWLEDGES**.

1. Complete these two judgments **ONLY** for those knowledges that you have indicated are required for your job.
2. For each knowledge that is required, consider how much of an understanding is required for successfully performing your supervisory responsibilities. Using the scale definitions below, darken the oval in the column of the **AMOUNT OF UNDERSTANDING REQUIRED** section that best describes the amount of each knowledge required for successfully performing your job as a first-line supervisor.
 1. SLIGHT UNDERSTANDING
 2. MODERATE UNDERSTANDING
 3. SUBSTANTIAL UNDERSTANDING
 4. COMPLETE UNDERSTANDING
3. Next, consider when each knowledge is **USUALLY ACQUIRED**. Using the scale definitions below, darken the oval that best describes when a first-line supervisor usually acquires proficiency in each knowledge.
 1. PRIOR TO JOB ENTRY.
 2. BY THE 3rd MONTH ON THE JOB.
 3. BY THE 12th MONTH ON THE JOB.
 4. AFTER THE 12th MONTH ON THE JOB.

Do both **AMOUNT OF UNDERSTANDING REQUIRED** and **WHEN USUALLY ACQUIRED** ratings for each knowledge at the same time.

EXAMPLE

An example of how one first-line supervisor responded to two knowledges is shown below:

KNOWLEDGES	Is Knowledge Required?		Amount of Understanding Required	When Usually Acquired
	YES	NO	SLIGHT MODERATE SUBSTANTIAL COMPLETE	PRIOR TO JOB ENTRY BY THE 3rd MONTH BY THE 12th MONTH AFTER THE 12th MONTH
1. Career management policies and program requirements	☒	☐	☐ 1 ☒ 2 ☐ 3 ☐ 4	☐ 1 ☒ 2 ☐ 3 ☐ 4
2. Union contracts	☐	☒	☐ 1 ☐ 2 ☐ 3 ☐ 4	☐ 1 ☐ 2 ☐ 3 ☐ 4

Step One

Knowledge 1 is required of this first-line supervisor's job so the oval for "YES" under IS KNOWLEDGE REQUIRED? has been darkened.

Knowledge 2 was not required by this first-line supervisor so the oval for "NO" under IS KNOWLEDGE REQUIRED? has been darkened.

Step Two

This supervisor requires a MODERATE UNDERSTANDING of "Career management policies and program requirements"; therefore the "2" in the AMOUNT OF UNDERSTANDING REQUIRED column has been darkened. The "3" in the WHEN USUALLY ACQUIRED column has been darkened to indicate that this knowledge is usually acquired BY THE 12th MONTH.

Since knowledge of "Union contracts" is not required for this supervisor's job, the AMOUNT OF UNDERSTANDING and WHEN USUALLY ACQUIRED columns have been left blank.

Please begin rating each knowledge.

KNOWLEDGES	Is Knowledge Required?		SLIGHT MODERATE SUBSTANTIAL COMPLETE	When Usually Acquired PRIOR TO JOB ENTRY BY THE 3rd MONTH BY THE 12th MONTH AFTER THE 12th MONTH
	YES	NO		
1. Merit promotion system. Includes vacancy announcements, competitive and noncompetitive merit promotion actions, priority placements, reinstatement eligibles, and the rating/ranking process for applicants (e.g., FPM 335 and AR 690-300 chapter 335).	Y	N	1 2 3 4	1 2 3 4
2. Employee reassignment, downgrade, and transfer procedures.	Y	N	1 2 3 4	1 2 3 4
3. Part time, summer, temporary, or term hiring procedures.	Y	N	1 2 3 4	1 2 3 4
4. Position management and classification system. Includes job descriptions, position classification standards, position review, and position management principles (e.g., AR 690-500 chapter 501).	Y	N	1 2 3 4	1 2 3 4
5. Staffing/Manpower requirements (e.g., Schedule X, AR 570-4 and TDA, staffing guides, DA PAM 570-551, DA PAM 570-558, APERS).	Y	N	1 2 3 4	1 2 3 4
6. EEO/Affirmative Action practices and procedures.	Y	N	1 2 3 4	1 2 3 4
7. Affirmative Action Programs. Includes Federal Women's, upward mobility, Hispanic Employment, and hire the handicapped.	Y	N	1 2 3 4	1 2 3 4
8. Eligibility requirements and nominating procedures for decorations, awards, and honors (e.g., career service recognition for civilian employees, quality step increases, public service award).	Y	N	1 2 3 4	1 2 3 4
9. Probation period policies and procedures.	Y	N	1 2 3 4	1 2 3 4
10. Performance appraisal system. Includes performance counselling process, feedback, guidance, review, goal setting, and development of performance standards (e.g., FPM 430, AR 690-430).	Y	N	1 2 3 4	1 2 3 4
11. Productivity improvement programs (e.g., suggestion, cost-reduction, quality assurance, quality circles).	Y	N	1 2 3 4	1 2 3 4
12. Policies for supervising local nationals which apply to the foreign country where one works.	Y	N	1 2 3 4	1 2 3 4
13. Drug and alcohol abuse, its effect on worker performance, and the supervisor's responsibilities to detect and help correct problems.	Y	N	1 2 3 4	1 2 3 4
14. Referral sources available for subordinates with personal problems (e.g., financial counselor, drug and alcohol counselor, judge advocate office).	Y	N	1 2 3 4	1 2 3 4
15. Discipline policies and procedures. Includes both formal and informal disciplinary actions (AR 690-700 chapters 751 and 752).	Y	N	1 2 3 4	1 2 3 4
16. Training policies and procedures. Includes determination of training needs, procedures to follow to try and ensure subordinates/oneself receive training, and the types of training available (e.g., on-the-job training, Army/DOD courses, non-government courses).	Y	N	1 2 3 4	1 2 3 4
17. Career management policies and program requirements (e.g., AR 690-950-1).	Y	N	1 2 3 4	1 2 3 4
18. Comp time and overtime regulations. Includes the Fair Labor Standards Act (FLSA) and Title 5 United States Code Overtime Entitlement.	Y	N	1 2 3 4	1 2 3 4
19. Salary administration. Includes pay periods and steps within grades.	Y	N	1 2 3 4	1 2 3 4
20. Leave policies and procedures (e.g., sick leave, court leave, annual leave, military leave).	Y	N	1 2 3 4	1 2 3 4
21. Workers' compensation policies and procedures.	Y	N	1 2 3 4	1 2 3 4
22. Reduction-In-Force (RIF)/Transfer of Function (TOF) policies and procedures.	Y	N	1 2 3 4	1 2 3 4
23. Commercial activities and efficiency reviews.	Y	N	1 2 3 4	1 2 3 4
24. Standards of conduct (AR 600-50).	Y	N	1 2 3 4	1 2 3 4
25. Accountability of property policies and procedures (e.g., hand receipt survey, AR 735-5).	Y	N	1 2 3 4	1 2 3 4

	Is Knowledge Required?		Amount of Understanding Required SLIGHT MODERATE SUBSTANTIAL COMPLETE	When Usually Acquired PRIOR TO JOB ENTRY BY THE 3rd MONTH BY THE 12th MONTH AFTER THE 12th MONTH
	YES	NO		
KNOWLEDGES (Contd.)				
26. Grievance and appeal procedures (AR 690-700 chapter 771).	☒	☐	1 2 3 4	1 2 3 4
27. Labor-management relations. Includes any union agreements that may apply to one's subordinates, employee union rights, and management rights.	☒	☐	1 2 3 4	1 2 3 4
28. Safety and occupational health regulations, procedures and practices (AR 40-5, AR 385-10, AR 385-32, AR 385-40).	☒	☐	1 2 3 4	1 2 3 4
29. Nonappropriated fund (NAF) personnel policies and procedures (AR 215-3).	☒	☐	1 2 3 4	1 2 3 4
30. Internal controls for Army functions (AR 11-2).	☒	☐	1 2 3 4	1 2 3 4
31. Budget policies and process.	☒	☐	1 2 3 4	1 2 3 4
32. Planning, Programing, Budgeting, and Execution System (PPBES).	☒	☐	1 2 3 4	1 2 3 4
33. Freedom of Information Act and Privacy Act of 1972.	☒	☐	1 2 3 4	1 2 3 4
34. Security policies and procedures (e.g., personnel security, classified documents security, ADP security, physical security).	☒	☐	1 2 3 4	1 2 3 4
35. Military performance evaluation. Includes Enlisted Efficiency Report (EER)/Officer Evaluation Report (OER) procedures.	☒	☐	1 2 3 4	1 2 3 4
36. Military rank structure.	☒	☐	1 2 3 4	1 2 3 4
37. Military customs (e.g., military protocol, promotion and award ceremonies).	☒	☐	1 2 3 4	1 2 3 4
38. Military/Defense structure (e.g., DOD, DA, MACOMS).	☒	☐	1 2 3 4	1 2 3 4
39. Army chain of command.	☒	☐	1 2 3 4	1 2 3 4
40. Army's general mission.	☒	☐	1 2 3 4	1 2 3 4
41. Own organization's specific mission.	☒	☐	1 2 3 4	1 2 3 4
42. Uniform Code of Military Justice (UCMJ).	☒	☐	1 2 3 4	1 2 3 4
If you require any additional knowledges to perform the supervisory (non-technical) aspects of your present position, please list them below and make your ratings on the AMOUNT OF UNDERSTANDING REQUIRED and WHEN USUALLY ACQUIRED scales.				
43. _____	☒	☐	1 2 3 4	1 2 3 4
44. _____	☒	☐	1 2 3 4	1 2 3 4
45. _____	☒	☐	1 2 3 4	1 2 3 4
46. _____	☒	☐	1 2 3 4	1 2 3 4
47. _____	☒	☐	1 2 3 4	1 2 3 4
48. _____	☒	☐	1 2 3 4	1 2 3 4
49. _____	☒	☐	1 2 3 4	1 2 3 4
50. _____	☒	☐	1 2 3 4	1 2 3 4
51. _____	☒	☐	1 2 3 4	1 2 3 4
52. _____	☒	☐	1 2 3 4	1 2 3 4

SECTION IV: ABILITIES, SKILLS, AND OTHER CHARACTERISTICS (ASOs)

This section contains a list of abilities, skills, and other characteristics that may be important for successfully performing the supervisory part of your job. Remember, in making your ratings in this survey, it is important that you respond only in terms of your **PRESENT POSITION**.

Scan through the list of ASOs and think about how important each ASO is for successfully performing the supervisory aspect of your job.

Do not pay any attention to the column marked **RELATIVE IMPORTANCE** until you have read through all of the ASOs. If there are additional ASOs that are important for your present position, please write them in the spaces provided at the end of this section on page 24.

Now, return to the beginning of the list of ASOs (page 22) and using the scale definitions below, darken the oval in the column of the **RELATIVE IMPORTANCE** section that best describes the relative importance of each ASO compared to all other ASOs that are important for performing your job as a first-line supervisor.

0. NOT AT ALL IMPORTANT

1. MUCH LESS important than other ASOs
2. SOMEWHAT LESS important than other ASOs
3. ABOUT THE SAME IMPORTANCE as other ASOs
4. SOMEWHAT MORE important than other ASOs
5. MUCH MORE important than other ASOs

EXAMPLE

An example of how one first-line supervisor responded to two ASOs is shown below:

ABILITIES, SKILLS, AND OTHER CHARACTERISTICS		RELATIVE IMPORTANCE
		NOT AT ALL IMPORTANT MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
1. Leadership: The ability to take charge of a situation, to instill confidence, and promote action among subordinates		☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5
2. Self Sufficient: Works independently with little need for supervision or help from co-workers		☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

ASO 1: This supervisor felt that "Leadership" is a **MUCH MORE** important ASO compared to other ASOs; therefore the "5" in the **RELATIVE IMPORTANCE** column has been darkened.

ASO 2: This supervisor felt that being "Self-Sufficient" is **MUCH LESS** important compared to other ASOs; therefore the "1" in the **RELATIVE IMPORTANCE** column has been darkened.

Remember, read each ability, skill, and other characteristic carefully before making your **RELATIVE IMPORTANCE** ratings.

Please begin rating each ability, skill, and other characteristic.

ABILITIES, SKILLS, AND OTHER CHARACTERISTICS (Contd.)	RELATIVE IMPORTANCE NOT AT ALL IMPORTANT MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
28. Flexible: Responds appropriately and competently when confronted with work changes, adversity, or other pressures. Adapts as needed to factors beyond personal control.	0 1 2 3 4 5
29. Self-Confident: Believes in own abilities to get the job done. Acts with sureness and certainty.	0 1 2 3 4 5
30. Thorough: Concerned for the completeness, accuracy, and overall quality of the work.	0 1 2 3 4 5
31. Honest: Values the truth and refrains from making misleading statements.	0 1 2 3 4 5
32. Self-Starter: Originates actions to obtain self-imposed or other-imposed goals rather than waiting to be told what to do next.	0 1 2 3 4 5
33. Responsible: Accepts responsibility for own actions as well as the actions of one's subordinates.	0 1 2 3 4 5
34. Dependable: Reliably completes assignments, meets deadlines, follows up on requests, and pursues important matters until they are resolved.	0 1 2 3 4 5
35. Achievement Oriented: Approaches the work situation ambitiously. Likes responsibility. Interested in getting ahead.	0 1 2 3 4 5
36. Cooperative: Can usually be counted on to provide help when requested.	0 1 2 3 4 5
37. Empathic: Aware of the impact of own behavior on the feelings and needs of others.	0 1 2 3 4 5
38. Technically Competent: Knows the work to be supervised. Has sufficient technical knowledge to be respected by other workers. Can make sound technical decisions.	0 1 2 3 4 5
39. Fair: Treats subordinates without favoritism. Evaluates work and administers rewards based on subordinate's true ability and accomplishments.	0 1 2 3 4 5
40. Gets Facts Before Acting: Seeks complete information from all available sources before making judgments or decisions about important work matters.	0 1 2 3 4 5
41. Tactful and Diplomatic: Presents negative information clearly, yet without raising the listener's defenses or forcing the listener to "lose face."	0 1 2 3 4 5
42. Realistic Self Appraisal: Knows own strengths and weaknesses and tends to see himself/herself as others do.	0 1 2 3 4 5
43. Self-Sufficient: Works independently with little need for supervision or help from co-workers.	0 1 2 3 4 5
44. Tolerant of Ambiguity: Performs effectively under sometimes unclear demands and situational factors.	0 1 2 3 4 5
45. Energetic: Sustains high level of work activity throughout the day.	0 1 2 3 4 5
46. Creative: Capable of generating and/or recognizing imaginative and original solutions that are practical in work-related situations.	0 1 2 3 4 5
47. Risk Taker: Takes action that involves a deliberate gamble in hopes of achieving a recognized benefit or advantage.	0 1 2 3 4 5
48. Aggressive: Does not let things stand in the way of achieving work goals. Demands that others comply with his/her requests. Refuses to take no for an answer.	0 1 2 3 4 5
49. Job Involved: Work is an extremely important part of the individual's life. It is as important as family, friends, and recreation.	0 1 2 3 4 5
50. Emotionally Stable: Reacts appropriately and predictably to everyday events. Is neither moody nor suspicious around others.	0 1 2 3 4 5
51. Trustworthy: Handles confidential, classified, and/or personal information appropriately.	0 1 2 3 4 5

If you require any additional abilities, skills, or other characteristics to perform the supervisory aspects of your present position, please list them on the next page and make your ratings on the RELATIVE IMPORTANCE scale.

		RELATIVE IMPORTANCE
ABILITIES, SKILLS, AND OTHER CHARACTERISTICS (Contd.)		NOT AT ALL IMPORTANT MUCH LESS SOMEWHAT LESS ABOUT THE SAME SOMEWHAT MORE MUCH MORE
52.		0 1 2 3 4 5
53.		0 1 2 3 4 5
54.		0 1 2 3 4 5
55.		0 1 2 3 4 5
56.		0 1 2 3 4 5
57.		0 1 2 3 4 5
58.		0 1 2 3 4 5
59.		0 1 2 3 4 5
60.		0 1 2 3 4 5
61.		0 1 2 3 4 5

SECTION V: WORK ENVIRONMENT

This section contains items which describe your job and the environment in which you work. Please answer each question as accurately as possible.

1. Which statement best describes the location of your subordinates?

My subordinates perform their work in:

- ☐ the same general area at just one building or location.
- ☐ several areas of just one building or location.
- ☐ several different but adjacent buildings or locations.
- ☐ several widely separated buildings or locations.

2. Do you supervise subordinates who perform shift work?

- ☐ YES
- ☐ NO

3. How frequently do you change the work assignments of your subordinates to accommodate new or revised requests for your unit's products or services?

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Often
- ☐ Very often

4. How many of your subordinates have worked in their current job for a year or longer?

- ☐ Don't know
- ☐ None
- ☐ Less than half
- ☐ About half
- ☐ More than half
- ☐ All

5. Since you have been the supervisor, how often has the size of your work group/unit changed?

- ☐ It hasn't changed
- ☐ Rarely
- ☐ Occasionally
- ☐ Often
- ☐ Very often

6. When vacancies exist in your work group/unit, how long does it typically take to fill a vacancy?

- ☐ Less than 1 month
- ☐ 1 month to less than 3 months
- ☐ 3 months to less than 6 months
- ☐ 6 months but less than 1 year
- ☐ 1 year or more

7. Do you supervise any term or temporary employees?

- ☐ YES
- ☐ NO

8. Do you supervise any employees who are members of a union?

- ☐ YES
- ☐ NO

9. Typically, how long does it take your subordinates to complete most of the tasks that you assign?

- ☐ Less than 1 day
- ☐ 1 day to less than 1 week
- ☐ 1 week to less than 1 month
- ☐ 1 month to less than 1 year
- ☐ 1 year or more

10. Taken as a whole, how would you describe the quality of your subordinates?

- ☐ Very poor
- ☐ Fairly poor
- ☐ Average
- ☐ Fairly high
- ☐ Very high

11. Think back over the past year and decide which of the following best describes the degree to which your work group has been fully staffed. For example, if you are supposed to have ten subordinates and for most of the year you have had eight, you would answer 80%.

- ☐ 100% (fully staffed)
- ☐ 90%
- ☐ 80%
- ☐ 70%
- ☐ 60%
- ☐ 50% (half-staffed)
- ☐ 40%
- ☐ 30%
- ☐ 20%
- ☐ 10%
- ☐ 0% (totally unstaffed)

12. Using the scale below, think back over the past year and describe how much time you spent in person or on the telephone with the following people in a typical week:

0. I spent **NONE OF MY TIME** with these people.
1. I spent **MUCH LESS TIME** with these people than other people.
2. I spent **SOMEWHAT LESS TIME** with these people than other people.
3. I spent **ABOUT THE SAME AMOUNT OF TIME** with these people as with other people.
4. I spent **SOMEWHAT MORE TIME** with these people than with other people.
5. I spent **MUCH MORE TIME** with these people than with other people.
6. I spent **ALL OF MY TIME** with these people.

TIME SPENT	
	NONE OF MY TIME MUCH LESS TIME SOMEWHAT LESS TIME ABOUT THE SAME AMOUNT OF TIME SOMEWHAT MORE TIME MUCH MORE TIME ALL OF MY TIME
A. My subordinates	0 1 2 3 4 5 6
B. My supervisor(s)	0 1 2 3 4 5 6
C. Army personnel other than my subordinates or supervisor(s)	0 1 2 3 4 5 6
D. Federal employees outside of Army	0 1 2 3 4 5 6
E. Non-Federal employees (e.g., contractors)	0 1 2 3 4 5 6

13. How many people (including yourself) applied for your present job?

- ☐ Less than 5
☐ 5 to less than 10
☐ 10 to less than 20
☐ 20 or more
☐ Don't know

14. How many of the applicants for your present job (including yourself, if it applies) were working in the unit you now supervise?

- ☐ Don't know
☐ None
☐ Less than half
☐ About half
☐ More than half
☐ All

15. If given a choice, would you prefer a civilian or military supervisor?

- ☐ Civilian
☐ Military
☐ It does not matter to me.

16. If given a choice, would you prefer civilian or military subordinates?

- ☐ Civilian
- ☐ Military
- ☐ It does not matter to me.

17. Below are listed some reasons for becoming an Army civilian first-line supervisor. How important were each of them in your decision to become a first-line supervisor?

	Not At All Important		Somewhat Important		Extremely Important
A. To earn more money.....	1	2	3	4	5
B. To get a promotion	1	2	3	4	5
C. For prestige	1	2	3	4	5
D. To lead people	1	2	3	4	5
E. I felt I was doing most of the work anyway, so why not take it	1	2	3	4	5
F. Nobody else would take it	1	2	3	4	5
G. To move toward management and away from the technical side of the work ...	1	2	3	4	5
H. To avoid working for others who had applied for the job	1	2	3	4	5
I. To have a chance to do things my way for a change	1	2	3	4	5
J. My current job was being eliminated.....	1	2	3	4	5
K. I was clearly the best qualified	1	2	3	4	5

18. How similar is your present job compared to what you expected?

- ☐ Not similar at all
- ☐ Slightly
- ☐ Moderately
- ☐ Extremely
- ☐ Exactly the same

19. To what degree does your supervisor involve you in decision-making that affects your work?

- ☐ Not at all
- ☐ Slightly
- ☐ Moderately
- ☐ Very much
- ☐ Totally

20. Do you feel more like a WORKER/TECHNICIAN/ACTION OFFICER or a MEMBER OF MANAGEMENT?

- ☐ Much more like a manager
- ☐ Somewhat more like a manager
- ☐ About equal
- ☐ Somewhat more like a worker/technician/action officer
- ☐ Much more like a worker/technician/action officer

21. How often had you filled in for your supervisor prior to becoming a first-line supervisor yourself?

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Often
- ☐ Very often

☐ Not at all
☐ Slightly
☐ Moderately
☐ Very
☐ Extremely

☐ YES

☐ NO

You have now completed this survey. Please make sure that all of your responses are clearly marked. If you have any comments or suggestions about this survey, please write them in the space below.

[illegible]

THANK YOU FOR YOUR PARTICIPATION.

Appendix B

Background Information Sheet

Background Information Sheet

1. Command/Location: _____
2. Grade Level (check one):
 - _____ GS/GM/WS 2
 - _____ GS/GM/WS 3
 - _____ GS/GM/WS 4
 - _____ GS/GM/WS 5
 - _____ GS/GM/WS 6
 - _____ GS/GM/WS 7
 - _____ GS/GM/WS 8
 - _____ GS/GM/WS 9
 - _____ GS/GM/WS 10
 - _____ GS/GM/WS 11
 - _____ GS/GM/WS 12
 - _____ GS/GM/WS 13
 - _____ GS/GM/WS 14
 - _____ GS/GM/WS 15
3. Time in present Grade level:
 - _____ less than 6 months
 - _____ 6 months to less than one year
 - _____ one year to less than 3 years
 - _____ 3 years to less than 5 years
 - _____ 5 years to less than 10 years
 - _____ 10 years or more
4. Job Series: _____
5. Time in present series:
 - _____ less than 6 months
 - _____ 6 months to less than one year
 - _____ one year to less than 3 years
 - _____ 3 years to less than 5 years
 - _____ 5 years to less than 10 years
 - _____ 10 years or more
6. Level of Supervisor:
 - _____ Not a supervisor
 - _____ Team Leader
 - _____ First level supervisor (Supervise no other supervisors. Do not consider team leaders as supervisors.)
 - _____ Second level supervisor (Supervise one or more first level supervisors.)
 - _____ Above second level (Supervise one or more second level supervisors.)

7. Number of employees supervised (official, direct supervisor):

- ☐ None
- ☐ 1-3
- ☐ 4-6
- ☐ 7-10
- ☐ More than 10

8. Gender:

- ☐ Male
- ☐ Female

9. Race/National Origin:

- ☐ Hispanic - A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race.
- ☐ American Indian or Alaskan Native - A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
- ☐ Asian or Pacific Islander - A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, and Samoa.
- ☐ Black - A person having origins in any of the black racial groups of Africa.
- ☐ White - A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
- ☐ Other (Please specify):

Appendix C

KSAO-Task Cluster Rating Workshop

Administrator's Manual

**ARMY CIVILIAN FIRST LINE SUPERVISOR
KNOWLEDGE - AND ASO - TASK CLUSTER IMPORTANCE RATING WORKSHOP**

Administrator Manual

Human Resources Research Organization (HumRRO)

MAY 1988

This manual is a guide for conducting Knowledge- and ASO- Task Cluster Linkage importance rating workshops. The text that is in bold capital letters is to be read aloud to workshop participants.

I. Preparatory Activities

Workshop conductors should make sure that there is an adequate supply of the following materials:

- BACKGROUND INFORMATION SHEETS
- KNOWLEDGE - TASK CLUSTER IMPORTANCE RATING FORMS I and II
- ASO - TASK CLUSTER IMPORTANCE RATING FORMS I and II
- KNOWLEDGE DEFINITIONS LIST
- ASO DEFINITIONS LIST
- TASK CLUSTER LIST

Workshop participant master lists should be completed prior to each workshop. Also prior to the workshop, ID codes need to be issued. Each administrator will issue his/her own coding scheme, beginning with his/her last name initial. For example:

John might assign Z1 - Z10 for his first workshop with 10 participants, and Z11 - Z16 for his second workshop with 5 participants. Each administrator will be responsible for keeping track of these numbers on his/her workshop participant master list. The ID codes should be entered on each Background Information Sheet (BIS) prior to the workshop.

Workshop materials will be counterbalanced by order of administration within sites and by forms across sites. This counterbalancing will be determined well in advance of the workshops and the workshop master lists will be filled out and serve to keep track of these procedures. The following 8 conditions include all possible combinations of administration:

<u>Knowledges first</u>	<u>ASOs first</u>
KI-AI	AI-KI
KI-AII	AI-KII
KII-AI	AII-KI
KII-AII	AII-KII

Based on the master lists, each administrator will be responsible for:

- writing in ID codes on all rating forms and BISs
- stapling rating forms in the order in which they will be administered

II. Provide an Overview of the Project

WAIT FOR ALL PARTICIPANTS TO ARRIVE AND THEN BEGIN

HI, I'M _____ AND I WORK FOR HUMRRO (THE HUMAN RESOURCES RESEARCH ORGANIZATION). THE ARMY RESEARCH INSTITUTE (ARI) IS SPONSORING A MULTI-YEAR CIVILIAN PERSONNEL RESEARCH EFFORT FOR THE DIRECTORATE OF CIVILIAN PERSONNEL (DCP) TO ENHANCE THE ARMY'S ABILITY TO MANAGE ITS CIVILIAN WORK FORCE. THE DIRECTORATE FOR CIVILIAN PERSONNEL HAS IDENTIFIED THREE PRIORITY AREAS OF RESEARCH: (1) PERSONNEL SELECTION, (2) MANAGEMENT TRAINING, AND (3) PERSONNEL MEASURES. HUMRRO IS WORKING ON THE PERSONNEL SELECTION PART OF

THIS RESEARCH FOR THE ARMY RESEARCH INSTITUTE. A PART OF THIS EFFORT IS TO CONDUCT RESEARCH ON CIVILIAN FIRST-LINE SUPERVISOR JOBS. THE RESULTS OF THIS RESEARCH WILL BE USED TO DEVELOP IMPROVED SELECTION PROCEDURES FOR FIRST-LINE SUPERVISORS. I'D LIKE TO GIVE YOU SOME BACKGROUND ABOUT THIS PROJECT SO THAT YOU UNDERSTAND THE REASON YOU'RE HERE AND THE ROLE THAT YOU PLAY AS AN EXPERT ON THE FIRST-LINE SUPERVISOR JOB.

IF THERE IS A BLACKBOARD AVAILABLE, IT WOULD BE USEFUL TO WRITE OUT KNOWLEDGES, ASOS, AND TASKS ON THE BOARD.

IN A PREVIOUS PROJECT, WE CONDUCTED A JOB ANALYSIS OF THE FIRST-LINE SUPERVISOR JOB. BASED ON THE RESULTS OF THAT STUDY, WE DEVELOPED LISTS OF SUPERVISOR JOB TASKS, JOB KNOWLEDGES, AND ABILITIES, SKILLS, AND OTHER CHARACTERISTICS (OR WHAT WE REFER TO AS ASOS). JOB TASKS ARE SUPERVISORY TASKS THAT ARE COMMONLY PERFORMED BY MOST FIRST-LINE SUPERVISORS. KNOWLEDGES INCLUDE THINGS SUCH AS POLICIES AND PROCEDURES THAT FIRST-LINE SUPERVISORS TYPICALLY NEED TO KNOW IN PERFORMING THEIR JOBS. ASOS ARE ABILITIES, SKILLS, AND OTHER CHARACTERISTICS THAT ARE TYPICALLY NEEDED FOR PERFORMING THE FIRST-LINE SUPERVISOR JOB.

THESE THREE LISTS HAVE BEEN REVISED BY FIRST LINE SUPERVISORS LIKE YOURSELVES IN A SERIES OF WORKSHOPS, AND THROUGH A SURVEY. BASED ON THESE WORKSHOP AND SURVEY RESULTS, WE HAVE A GREAT DEAL OF DATA ON THE FIRST LINE SUPERVISOR JOBS. AT THIS POINT IN THE STUDY, WE NEED YOUR INPUT TO SYNTHESIZE THE DATA SO THAT WE CAN DEVELOP IMPROVED SELECTION PROCEDURES. IN ORDER TO DEVELOP VALID AND USEFUL SELECTION METHODS, WE NEED TO LINK KNOWLEDGES AND ASOS TO ACTUAL TASKS PERFORMED BY FIRST LINE SUPERVISORS. THIS WILL ALLOW US TO DEVELOP A STRUCTURED INTERVIEW GUIDE AND A CANDIDATE RATING FORM THAT ARE BOTH READILY TIED TO SPECIFIC OBSERVABLE BEHAVIORS, THEREFORE MAKING THESE PROCEDURES REALISTIC, EASY TO USE, AND VALID.

BECAUSE THERE WERE OVER 200 TASKS, WE GROUPED SIMILAR TASKS INTO 22 TASK CLUSTERS TO SIMPLIFY TODAY'S RATINGS. TODAY WE ARE ASKING YOU AS INCUMBENT FIRST LINE SUPERVISORS TO INDICATE WHETHER THESE KNOWLEDGES AND ASOS ARE RELATED TO THE TASK CLUSTERS. THE LINKAGES AND RATINGS YOU PROVIDE WILL ENABLE US TO USE THE MOST IMPORTANT TASK - KNOWLEDGE AND TASK - ASO COMBINATIONS AS THE BASIS FOR THE SELECTION PROCEDURES WE DEVELOP. SO YOUR PART IN THIS PROJECT IS A VERY IMPORTANT ONE AND IS CENTRAL TO THE LEGAL DEFENSIBILITY OF THESE SELECTION PROCEDURES.

HAND OUT MATERIALS:

- BACKGROUND INFORMATION SHEET
- KNOWLEDGE - TASK CLUSTER IMPORTANCE RATING FORM (I OR II)
- ASO - TASK CLUSTER IMPORTANCE RATING FORM (I OR II)
- KNOWLEDGE DEFINITIONS
- ASO DEFINITIONS
- TASK CLUSTER LIST

III. Complete Background Information Sheet (BIS)

I'D LIKE TO REMIND YOU AT THIS POINT THAT YOUR PARTICIPATION IN THIS WORKSHOP IS STRICTLY VOLUNTARY. IF THERE IS ANYTHING DURING THIS WORKSHOP THAT YOU ARE UNCOMFORTABLE RESPONDING TO, YOU CAN CHOOSE NOT TO RESPOND. BEFORE WE GET STARTED I NEED TO HAVE YOU FILL IN A BACKGROUND INFORMATION

SHEET. THIS INFORMATION IS NEEDED TO DOCUMENT YOUR QUALIFICATIONS AS A SUBJECT MATTER EXPERT (i.e., YOU ARE, AND HAVE EXPERIENCE AS A FIRST LINE SUPERVISOR). PLEASE FILL THIS OUT NOW. DO NOT PUT YOUR NAME ON ANY OF THESE MATERIALS. YOU WILL REMAIN ANONYMOUS. THE ID CODE WE ARE USING SIMPLY ALLOWS US TO KEEP TRACK OF RATINGS BY GRADE LEVEL, JOB SERIES, AND THE OTHER DEMOGRAPHIC CHARACTERISTICS ON YOUR BACKGROUND INFORMATION SHEET. DO NOT BEGIN THE RATINGS YET.

ALLOW SEVERAL MINUTES FOR THIS

IV. Provide an Overview of Workshop Procedures

NOW, AS I MENTIONED EARLIER, THE GOALS OF THIS WORKSHOP ARE TO LINK KNOWLEDGES AND ASOS TO TASK CLUSTERS BY RATING THEIR IMPORTANCE TO PERFORMING TASKS IN THESE CLUSTERS. YOU WILL EACH BE USING TWO RATING FORMS TO DO THIS. ONE IS FOR LINKING KNOWLEDGES TO TASK CLUSTERS AND THE OTHER IS FOR LINKING ASOS TO TASK CLUSTERS. TO MAKE YOUR JOB A LITTLE EASIER, WE DIVIDED THE LIST OF KNOWLEDGES AND THE LIST OF ASOS IN HALF SO THAT EACH OF YOU WILL BE RATING HALF OF THE KNOWLEDGES AND HALF OF THE ASOS. EACH OF THESE FORMS HAS THE RATING SCALE YOU WILL BE USING AT THE TOP OF THE FORM. THIS RATING SCALE WILL BE YOUR ASSESSMENT OF HOW IMPORTANT THAT KNOWLEDGE OR ASO IS TO PERFORMING THE TASKS IN THE TASK CLUSTER; 1 BEING UNIMPORTANT, AND 5 BEING EXTREMELY IMPORTANT. FOR EACH CELL IN THE RATING FORM YOU WILL BE MAKING THIS JUDGMENT FOR THE CORRESPONDING KNOWLEDGE OR ASO AND TASK CLUSTER.

V. Explain Definition Lists

YOU SHOULD EACH HAVE THREE LISTS WITH YOUR MATERIALS, ONE SHOWING THE TASKS FOR EACH OF THE TASK CLUSTERS, ONE DEFINING THE SUPERVISORY KNOWLEDGES, AND ONE DEFINING SUPERVISORY ASOS. THESE LISTS AND DEFINITIONS ARE IMPORTANT SINCE TASK CLUSTERS, KNOWLEDGES, AND ASOS ARE ABBREVIATED ON THE RATING FORMS. YOU WILL NEED TO REFER TO THE INFORMATION ON THESE LISTS WHILE YOU ARE MAKING YOUR RATINGS. PLEASE TAKE A FEW MINUTES NOW TO READ OVER THESE LISTS AND FAMILIARIZE YOURSELF WITH THE DEFINITIONS. THERE ARE MORE KNOWLEDGES LISTED HERE THAN ANY ONE SUPERVISOR WOULD KNOW. YOU'RE NOT EXPECTED TO BE FAMILIAR WITH ALL OF THEM. SPEAK UP IF YOU HAVE ANY QUESTIONS. DO NOT BEGIN ANY RATINGS YET. WALK AROUND THE ROOM AND POINT OUT THE CORRESPONDING NUMBERS AND LETTERS OF ITEMS ON THE RATING FORMS WITH THE LISTS. ALLOW ABOUT 10 MINUTES FOR THIS AND ANSWER ANY QUESTIONS

VI. Begin the actual rating

LET ME REVIEW THE RATING INSTRUCTIONS BRIEFLY. YOU WILL RATE THE RELATIVE IMPORTANCE OF EACH KNOWLEDGE OR ABILITY, SKILL AND OTHER CHARACTERISTIC FOR EFFECTIVELY PERFORMING THE CLUSTER OF TASKS. FOR EXAMPLE, LOOK AT YOUR KNOWLEDGE-TASK CLUSTER IMPORTANCE RATING FORM. LOOK AT THE FIRST KNOWLEDGE LISTED ACROSS THE TOP OF THE FORM; FOR FORM I, THAT WOULD BE NUMBER 1. KNOWLEDGE OF THE "MERIT PROMOTION SYSTEM"; FOR FORM II, IT WOULD BE NUMBER 22. KNOWLEDGE OF "RIF/TOF POLICIES". IF YOU FEEL THAT THIS KNOWLEDGE IS EXTREMELY IMPORTANT FOR EFFECTIVE PERFORMANCE OF THE "STAFF POSITIONS" TASK

CLUSTER, YOU WOULD WRITE A FIVE IN THE CORRESPONDING BOX ON THE RATING FORM. IF YOU ARE NOT FAMILIAR WITH A PARTICULAR KNOWLEDGE, THEN FROM YOUR PERSPECTIVE, IT IS UNIMPORTANT AND YOU WOULD WRITE A 1 IN THAT BOX. NEXT, YOU WILL MAKE A JUDGMENT ABOUT THE RELATIVE IMPORTANCE OF THIS KNOWLEDGE FOR EFFECTIVE PERFORMANCE OF THE "MANAGE POSITION REQUIREMENTS" TASK CLUSTER. MAKE RATINGS OF ALL TASK CLUSTERS FOR THE "MERIT PROMOTION SYSTEM" OR "RIF/TOF POLICIES" KNOWLEDGE. THEN MOVE ON TO THE SECOND KNOWLEDGE (FOR FORM I, NUMBER 2. "EMPLOYEE REASSIGNMENT", OR FOR FORM II, NUMBER 23. "COMMERCIAL ACTIVITIES") MAKING RATINGS OF ALL TASK CLUSTERS FOR THIS KNOWLEDGE, AND SO ON. ONCE ALL OF THE KNOWLEDGES HAVE BEEN COMPLETED MOVE ON TO THE ASO-TASK CLUSTER IMPORTANCE RATING FORM AND COMPLETE IT IN THE SAME WAY, RATING EACH ASO FOR ALL TASK CLUSTERS AND THEN MOVING ON TO THE NEXT ASO. SOME OF YOU WILL BEGIN BY RATING ASOS BEFORE KNOWLEDGES. YOU WILL RATE THE IMPORTANCE OF EACH ASO FOR EFFECTIVE PERFORMANCE OF EACH TASK CLUSTER. AFTER ALL OF THE ASOS HAVE BEEN COMPLETED, MOVE ON TO THE KNOWLEDGE-TASK CLUSTER IMPORTANCE RATING FORM.

DO YOU HAVE ANY QUESTIONS SO FAR? ANSWER ANY QUESTIONS

IF THERE ARE NO FURTHER QUESTIONS, WE WILL BEGIN THE RATINGS NOW. THE RATINGS SHOULD TAKE YOU BETWEEN 3 AND 4 HOURS TO COMPLETE. YOU CAN TAKE A FIVE OR TEN MINUTE BREAK BETWEEN RATING FORMS IF YOU NEED TO. IF AT ANY TIME YOU HAVE A QUESTION, DO NOT HESITATE TO ASK FOR HELP. WHEN YOU ARE FINISHED MAKING THE RATINGS YOU ARE FREE TO GO.

WALK AROUND THE ROOM OFTEN WHILE RATINGS ARE IN PROGRESS.
SUGGESTED COMMENTS AS RATINGS ARE IN PROGRESS:

YOU SHOULD FIND THAT AS YOU GO ALONG, YOU DEVELOP A RHYTHM AND MAY NEED TO REFER TO THE TASK LIST LESS.

WE REALIZE THAT THIS TAKES A LOT OF CONCENTRATION, SO IF YOU START TO FEEL FATIGUED AT ANY POINT, PLEASE TAKE A BREAK. IT'S IMPORTANT THAT YOU CONCENTRATE ON THESE RATINGS.

REMEMBER THE QUESTION YOU ARE ASKING YOURSELF IS "HOW IMPORTANT IS THIS KNOWLEDGE OR ASO TO PERFORMING THE TASKS IN THIS TASK CLUSTER?"

VII. Debriefing

COLLECT ALL MATERIALS FROM PARTICIPANTS, MAKING SURE THAT ALL FORMS HAVE ID CODES FILLED IN. ASK EACH PERSON THE FOLLOWING:

HOW DID YOU FIND THE WORKSHOP? DO YOU HAVE ANY NEGATIVE/POSITIVE COMMENTS?

DO YOU HAVE ANY SUGGESTIONS FOR CHANGING THE WORKSHOP?

DO YOU THINK THE SELECTION PROCEDURES I DISCUSSED WOULD BE USEFUL TO YOU?

CAN YOU THINK OF ANY TRAINING THAT WOULD BE USEFUL TO NEW FIRST-LINE SUPERVISORS?

THANK YOU FOR YOUR TIME TODAY, YOU'RE INPUT IS VALUABLE.

Appendix D

KSAO-Task Cluster Importance Rating Forms

1. ASO — TASK CLUSTER IMPORTANCE RATING FORM

How important is this ability or skill for effective performance of this task?

1=Unimportant; 2=Minor Importance; 3=Important; 4=Very Important; 5=Extremely Important

ID Code _____

Abilities, Skills, and Other Characteristics

Task Cluster	1. Leadership	2. Learning Ability	3. Delegation	4. Conflict Resolution	5. Motivate Others	6. Written Commun.	7. Reading Ability	8. Oral Commun.	9. Public Speaking	10. Teaching Ability	11. Persuasion	12. Decision Making	13. Stress Tolerance	14. Teamwork	15. Response to Criticism	16. Non-Discriminatory	17. Human Relations	18. Courage to Confront	19. Coordination	20. Planning	21. Organizing	22. Problem Ident.	23. Economical	24. Develop. Counseling	25. Pers. Counseling	26. Time Management	
A. Staff Positions																											
B. Manage Position Requirements																											
C. Enforce EEO Policies																											
D. Provide Recognition & Rewards																											
E. Motivate Employees																											
F. Manage Employees W/Personal Problems																											
G. Evaluate Performance																											
H. Discipline Employees																											
I. Train & Develop Employees																											
J. Conduct Meetings & Briefings																											
K. Provide Orientation																											
L. Communicate																											
M. Conduct Admin. Duties																											
N. Manage Work Schedules																											
O. Conduct Travel Related Activities																											
P. Maintain Safety Requirements																											
Q. Manage Employee's Work																											
R. Oversee Operations																											
S. Manage Materials & Supplies																											
T. Plan																											
U. Budget																											
V. Practice Security Procedures																											

II. ASO — TASK CLUSTER IMPORTANCE RATING FORM

How important is this ability or skill for effective performance of this task?

1=Unimportant; 2=Minor Importance; 3=Important; 4=Very Important; 5=Extremely Important

ID Code _____

Abilities, Skills, and Other Characteristics

Task Cluster	27. Monitoring Work	28. Flexible	29. Self-Confident	30. Thorough	31. Honest	32. Self-Start	33. Responsible	34. Dependable	35. Achievement Orient.	36. Cooperative	37. Empathetic	38. Tech. Competent	39. Fair	40. Gets Facts Before Act.	41. Tactful & Diplomatic	42. Real. Self Appraisal	43. Self-Sufficient	44. Tolerant of Ambiguity	45. Energetic	46. Creative	47. Risk Taker	48. Aggressive	49. Job Involved	50. Emotionally Stable	51. Trustworthy
A. Staff Positions																									
B. Manage Position Requirements																									
C. Enforce EEO Policies																									
D. Provide Recognition & Rewards																									
E. Motivate Employees																									
F. Manage Employees W/Personal Problems																									
G. Evaluate Performance																									
H. Discipline Employees																									
I. Train & Develop Employees																									
J. Conduct Meetings & Briefings																									
K. Provide Orientation																									
L. Communicate																									
M. Conduct Admin. Duties																									
N. Manage Work Schedules																									
O. Conduct Travel Related Activities																									
P. Maintain Safety Requirements																									
Q. Manage Employee's Work																									
R. Oversee Operations																									
S. Manage Materials & Supplies																									
T. Plan																									
U. Budget																									
V. Practice Security Procedures																									

I. KNOWLEDGE — TASK CLUSTER IMPORTANCE RATING FORM

How important is this knowledge for effective performance of this task?

1=Unimportant; 2=Minor Importance; 3=Important; 4=Very Important; 5=Extremely Important

ID Code _____

Knowledge

Task Cluster	1. Merit Promotion System	2. Employee Reassignment	3. Part Time Hiring	4. Position Management	5. Staffing/Manpower Requirements	6. EEO/Affirmative Action	7. Affirmative Action Programs	8. Eligibility Requirements	9. Probation Policies	10. Performance Appraisal System	11. Productivity Improvement	12. Supervising Local Nationals	13. Drug and Alcohol Abuse	14. Referral Sources	15. Discipline Policies and Procedures	16. Training Policies and Procedures	17. Career Management	18. Overtime Regulations	19. Salary Administration	20. Leave Policies and Procedures	21. Workers' Compensation
A. Staff Positions																					
B. Manage Position Requirements																					
C. Enforce EEO Policies																					
D. Provide Recognition & Rewards																					
E. Motivate Employees																					
F. Manage Employees W/ Personal Problems																					
G. Evaluate Performance																					
H. Discipline Employees																					
I. Train & Develop Employees																					
J. Conduct Meetings & Briefings																					
K. Provide Orientation																					
L. Communicate																					
M. Conduct Admin. Duties																					
N. Manage Work Schedules																					
O. Conduct Travel Related Activities																					
P. Maintain Safety Requirements																					
Q. Manage Employee's Work																					
R. Oversee Operations																					
S. Manage Materials & Supplies																					
T. Plan																					
U. Budget																					
V. Practice Security Procedures																					

II. KNOWLEDGE — TASK CLUSTER IMPORTANCE RATING FORM

How important is this knowledge for effective performance of this task?

1=Unimportant; 2=Minor importance; 3=Important; 4=Very Important; 5=Extremely Important

Task Cluster	Knowledge												ID Code								
	22. RIF/TOF Policies and Procedures	23. Commercial Activities	24. Standards of Conduct	25. Accountability	26. Grievance Procedures	27. Labor-Management Relations	28. Safety and Health Regulations	29. NAF Policies	30. Internal Controls	31. Budget Policies	32. PPBS	33. Freedom of Information Act		34. Security Policies	35. Military Performance Evaluation	36. Military Rank Structure	37. Military Customs	38. Military/Defense Structure	39. Army Chain of Command	40. Army's General Mission	41. Organization's Mission
A. Staff Positions																					
B. Manage Position Requirements																					
C. Enforce EEO Policies																					
D. Provide Recognition & Rewards																					
E. Motivate Employees																					
F. Manage Employees W/Personal Problems																					
G. Evaluate Performance																					
H. Discipline Employees																					
I. Train & Develop Employees																					
J. Conduct Meetings & Briefings																					
K. Provide Orientation																					
L. Communicate																					
M. Conduct Admin. Duties																					
N. Manage Work Schedules																					
O. Conduct Travel Related Activities																					
P. Maintain Safety Requirements																					
Q. Manage Employee's Work																					
R. Oversee Operations																					
S. Manage Materials & Supplies																					
T. Plan																					
U. Budget																					
V. Practice Security Procedures																					

Appendix E

KSAO Definitions and Task Clusters

ABILITIES, SKILLS, AND OTHER CHARACTERISTICS (ASO) DEFINITIONS

- 1. Leadership:** The ability to take charge of a situation, to instill confidence, and promote action among subordinates.
- 2. Learning Ability:** The ability to grasp and apply new information, skills, methods, and procedures.
- 3. Delegation:** The ability to assign work, establish controls, and ensure that subordinates have the necessary authority and resources.
- 4. Conflict Resolution:** The ability to listen to all sides of a dispute, objectively evaluate the situation, and respond appropriately.
- 5. Motivate Others:** The ability to motivate subordinates to perform to the best of their abilities.
- 6. Written Communication:** The ability to write memos, letters, instructions, and other materials in a clear and organized fashion.
- 7. Reading Ability:** The ability to read and comprehend written material.
- 8. Oral Communication:** The ability to express oneself clearly in a one-on-one or small group situation.
- 9. Public Speaking:** The ability to communicate orally to large groups of people.
- 10. Teaching Ability:** The ability to impart new skills and knowledges.
- 11. Persuasion:** The ability to obtain acceptance or agreement to an idea, plan, or course of action.
- 12. Decision Making:** The ability to make timely decisions based on factual information, personal experience, and knowledge of the mission of one's unit, specific organization, and the Army in general.
- 13. Stress Tolerance:** The ability to maintain an acceptable level of performance and conduct under stressful conditions.
- 14. Teamwork:** The ability to function as a team member in groups, committees, or projects.
- 15. Response to Criticism:** The ability to respond positively to constructive criticism.
- 16. Non-Discriminatory:** The ability to relate without prejudice to individuals whose backgrounds, appearances, values, or physical condition are different from yours.
- 17. Human Relations:** The ability to develop and maintain cooperative and productive working relationships with peers, subordinates, and superiors.

18. **Courage to Confront:** The ability to confront one's subordinates about performance or conduct problems.
19. **Coordination:** The ability to coordinate the efforts of several people to achieve work or project goals efficiently.
20. **Planning:** The ability to set goals, establish plans, anticipate obstacles, and identify means to overcome them.
21. **Organizing:** The ability to prioritize tasks, schedule people, and arrange resources so as to achieve objectives most effectively.
22. **Problem Identification:** The ability to assess the overall effectiveness of the work unit and identify any issues or problems.
23. **Economical:** The ability to economize to keep costs down while keeping quality of work up.
24. **Developmental Counseling:** Skill in helping subordinates identify their developmental needs and means for meeting them.
25. **Performance/Conduct Counseling:** Skill in counseling employees about work-related problems (e.g., performance deficiencies, attitude problems, conduct problems).
26. **Time Management:** Skill in managing one's time efficiently.
27. **Monitoring Work:** Skill in monitoring the progress of subordinate's work (e.g., seeing that orders are carried out, correcting and assisting subordinates, making sure that work is up to standard, and knowing early when something goes wrong).
28. **Flexible:** Responds appropriately and competently when confronted with work changes, adversity, or other pressures. Adapts as needed to factors beyond personal control.
29. **Self-Confident:** Believes in own abilities to get the job done. Acts with sureness and certainty.
30. **Thorough:** Concerned for the completeness, accuracy, and overall quality of the work.
31. **Honest:** Values the truth and refrains from making misleading statements.
32. **Self-Starter:** Originates actions to obtain self-imposed or other-imposed goals rather than waiting to be told what to do next.
33. **Responsible:** Accepts responsibility for own actions.
34. **Dependable:** Reliably completes assignments, meets deadlines, follows up on requests, and pursues important matters until they are resolved.

35. **Achievement Oriented:** Approaches the work situation ambitiously. Likes responsibility. Interested in getting ahead.
36. **Cooperative:** Can usually be counted on to provide help when requested.
37. **Empathetic:** Aware of the impact of own behavior on the feelings and needs of others.
38. **Technically Competent:** Knows the work to be supervised. Has sufficient technical knowledge to be respected by other workers. Can make sound technical decisions.
39. **Fair:** Treats subordinates without favoritism. Evaluates work and administers rewards based on subordinate's true ability and accomplishments.
40. **Gets Facts Before Acting:** Seeks complete information from all available sources before making judgments or decisions about important work matters.
41. **Tactful and Diplomatic:** Presents negative information clearly, yet without raising the listener's defenses or forcing the listener to lose face.
42. **Realistic Self Appraisal:** Knows own strengths and weaknesses and tends to see himself/herself as other do.
43. **Self-Sufficient:** Works independently with little need for supervision or help from co-workers.
44. **Tolerant of Ambiguity:** Performs effectively under sometimes unclear demands and situational factors.
45. **Energetic:** Sustains high level of work activity throughout the day.
46. **Creative:** Capable of generating and/or recognizing imaginative and original solutions that are practical in work-related situations.
47. **Risk Taker:** Takes action that involves a deliberate gamble in hopes of achieving a recognized benefit or advantage.
48. **Aggressive:** Does not let things stand in the way of achieving work goals. Demands that others comply with his/her requests. Refuses to take no for an answer.
49. **Job Involved:** Work is an extremely important part of the individual's life. It is as important as family, friends, and recreation.
50. **Emotionally Stable:** Reacts appropriately and predictably to everyday events. Is neither moody nor suspicious around others.
51. **Trustworthy:** Handles confidential, classified, and/or personal information appropriately.

KNOWLEDGES

1. **Merit Promotion System:** Includes vacancy announcements, competitive and noncompetitive merit promotion actions, priority placements, reinstatement eligibles, and the rating/ranking process for applicants (e.g., FPM 335 and AR 690-300 chapter 335).
2. **Employee Reassignment:** Includes downgrade, and transfer procedures.
3. **Part Time Hiring:** Summer, temporary, or term hiring procedures.
4. **Position Management:** And classification system. Includes job descriptions, position classification standards, position review, and position management principles (e.g., AR 690-500 chapter 501).
5. **Staffing/Manpower Requirements:** Schedule X, AR 570-4 and TDA, staffing guides. (DA PAM 570-551, DA PAM 570-558, APERS).
6. **EEO/Affirmative Action:** Day to day practices and procedures.
7. **Affirmative Action Programs:** Awareness of federal programs such as Federal Women's, upward mobility, and hire the handicapped.
8. **Eligibility Requirements:** Nominating procedures for decorations, awards, and honors (e.g., career service recognition for civilian employees, quality step increases, public service award).
9. **Probation Period:** Policies and procedures.
10. **Performance Appraisal System:** Includes performance counseling process, feedback, guidance, review, goal setting, and development of performance standards (e.g., FPM 430, AR 690-430).
11. **Productivity Improvement:** Programs (e.g., suggestion, cost-reduction, quality assurance, quality circles).
12. **Supervising Local Nationals:** Policies which apply to the foreign country where one works.
13. **Drug and Alcohol Abuse:** Its effect on worker performance, and the supervisor's responsibilities to detect and help correct problems.
14. **Referral Sources:** Available for subordinates with personal problems (e.g., financial counselor, drug and alcohol counselor, judge advocate office).
15. **Discipline Policies and Procedures:** Includes both formal and informal disciplinary actions (AR 690-700 chapters 751 and 752).
16. **Training Policies and Procedures:** Includes determination of training needs, procedures to follow to try and ensure subordinates/oneself receive training, and the types of training available (e.g., on-the-job training, Army/DoD courses, non-government courses).

17. **Career Management:** Policies and program requirements (e.g., AR 690-950-1).
18. **Overtime Regulations:** Includes the Fair Labor Standards Act (FLSA) and Title 5 United States Code Overtime Entitlement.
19. **Salary Administration:** Includes pay periods and steps within grades.
20. **Leave Policies and Procedures:** Sick leave, court leave, annual leave, military leave.
21. **Workers' Compensation:** Policies and procedures.
22. **RIF/TOF Policies and Procedures:** Reduction-in-Force (RIF)/Transfer of Function (TOF).
23. **Commercial Activities:** Efficiency Reviews.
24. **Standards of Conduct:** As stated in Army Regulation 600-50.
25. **Accountability:** Property policies and procedures (e.g., hand receipt survey, AR 735-5).
26. **Grievance Procedures:** Grievance and appeal procedures as outlined in Army Regulation 690-700, chapter 771.
27. **Labor-Management Relations:** Includes any union agreements that may apply to one's subordinates, employee union rights, and management rights.
28. **Safety and Occupational Health Regulations:** Procedures and practices (AR 40-5, AR 385-10, AR 385-32, AR 385-40).
29. **NAF Policies:** Nonappropriated fund (NAF) personnel policies and procedures (AR 215-3).
30. **Internal Controls:** For Army functions (AR 11-2).
31. **Budget Policies:** And Process.
32. **PPBES:** Planning, Programming, Budgeting, and Execution System.
33. **Freedom of Information Act:** And Privacy Act of 1972.
34. **Security Policies:** Procedures (e.g., personnel security, classified documents security, ADP security, physical security).
35. **Military Performance Evaluation:** Includes Enlisted Efficiency Report (EER)/Officer Evaluation Report (OER) procedures.
36. **Military Rank Structure:**
37. **Military Customs:** Military protocol, promotion and award ceremonies.
38. **Military/Defense Structure:** DoD, DA, MACOMS.

- 39. **Army Chain of Command:** General knowledge of the Army's chain of command.
- 40. **Army's General Mission:** General knowledge of the Army's mission.
- 41. **Organization's Mission:** Own organization's specific mission.
- 42. **UCMJ:** Uniform Code of Military Justice (UCMJ).

TASK CLUSTERS

A. Staff Positions

1. Identify requirements and hiring criteria for position vacancies (e.g., skills and knowledges, SKAP/ACCES elements, crediting plans).
2. Initiate requests (SF-52) for recruitment or other staffing actions.
3. Recruit/interview candidates at high schools or college campuses or conferences or job fairs, etc.
4. Review candidates' qualification summaries (e.g., resumes, DA 2302, SF 171, 201 files, performance ratings, SKAP/ACCES).
5. Participate as a member on applicant evaluation boards (e.g., local merit promotion or SKAP panels).
6. Interview candidates for vacant positions.
7. Check with references concerning candidates' background.
8. Participate as a member on selection boards/panels.
9. Recommend candidates for vacant position to the next level of supervision.
10. Select candidates for vacant position.
11. Justify in writing the selection/non-selection of candidates.
12. Answer subordinates' questions concerning position vacancy announcements.
13. Answer subordinates' questions concerning their non-selection for vacant positions.

B. Manage Position Requirements

14. Justify the need for current/new positions.
15. Review subordinates' job descriptions for accuracy.
16. Identify changes in position duties/requirements.
17. Develop revisions to job descriptions.
18. Request that positions be audited or reviewed by the Civilian Personnel Office (CPO).
19. Establish upward mobility, intern, co-op student positions, etc.
20. Identify/restructure vacant positions that can be filled at lower grade levels with promotion potential to full level.
21. Justify retaining grade level of vacant positions.
22. Obtain and provide information for manpower surveys and studies (e.g., Schedule X, Efficiency Reviews, Commercial Activities Review).
23. Develop/provide input to Table of Distribution and Allowances (TDAs).
24. Adjust the composition of workforce (e.g., number of part time vs full time, low vs high grade) to satisfy TDA while maximizing work group productivity.

C. Enforce Equal Employment Opportunity (EEO) Policies

25. Coordinate with EEO office to determine if unit contains a representative number of minorities and women.
26. Review own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to identify areas requiring affirmative action.
27. Revise own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to achieve affirmative action.
28. Take appropriate actions to minimize/eliminate discriminatory attitudes/behaviors of subordinates toward each other.
29. Follow EEO procedures in response to EEO complaints.
30. Participate in EEO/Affirmative Action conferences or workshops.
31. Encourage subordinates to participate in Black History Month, Federal Women's Program, Hispanic Week, etc.
32. Communicate with EEO counselors.

D. Provide Recognition and Rewards

- 33. Nominate subordinates for formal honors or awards.
- 34. Present on-the-spot cash awards to subordinates from discretionary funds.
- 35. Establish rewards or incentives to motivate subordinates (e.g., certificate of achievement, employee of the month).
- 36. Praise subordinates for effective job performance.
- 37. Write letters of appreciation/commendation for subordinates.

E. Motivate Employees

38. Motivate subordinates.
39. Recognize and take steps to correct morale problems.
40. Encourage subordinates to perform their jobs to the best of their ability.
41. Foster/develop a positive work environment that will serve to motivate subordinates.
42. Foster/develop a positive working relationship between civilian and military subordinates.
43. Set an example for subordinates to follow.
44. Encourage subordinates to participate in productivity improvement programs (e.g., suggestion, cost-reduction, quality assurance, quality circles).
45. Involve subordinates in decision-making or planning processes.

F. Manage Employees with Personal Problems

46. Detect/recognize personal problems of subordinates (e.g., drugs, alcohol, financial, family) that affect their job performance.
47. Offer to assist subordinates with personal problems that affect their job performance.
48. Discuss with subordinates personal problems that affect their job performance.
49. Refer subordinates with personal problems affecting their job performance for assistance.

G. Evaluate Performance for Feedback and Promotion

50. Develop subordinates' performance standards.
51. Document subordinates' poor performance.
52. Review performance standards with subordinates.
53. Formally review and evaluate job performance of subordinates.
54. Provide informal feedback to subordinates concerning their performance.
55. Complete written performance appraisals for civilian subordinates.
56. Complete/provide input to Officer Efficiency Report (OER).
57. Complete/provide input to Enlisted Evaluation Report (EER).
58. Review subordinates' performance ratings with approving official prior to reviewing ratings with subordinates.
59. Review performance ratings with subordinates.
60. Counsel subordinates about how to improve performance.
61. Provide subordinates with written guidelines on how to improve performance.
62. Evaluate probationary employees to determine suitability for permanent status.
63. Evaluate subordinates' suitability for promotion (e.g., local merit, SKAP/ACCES).
64. Evaluate trainees (e.g., interns, upward mobility) for target grade promotion.
65. Inform chain of command of performance problems with military subordinates.
66. Deny within grade increase to subordinates whose performance is below acceptable levels.

H. Discipline Employees

67. Document subordinates' unauthorized absences, tardiness, or behavioral problems.
68. Confer with staff from Management Employee Relations (MER) prior to taking actions on subordinates.
69. Counsel subordinates about absences, tardiness, behavioral problems.
70. Inform chain of command of conduct/behavioral problems (e.g., absences, tardiness) with military subordinates.
71. Determine if adverse actions (e.g., suspension, removal) should be taken because of poor performance.
72. Determine if formal disciplinary steps should be taken in response to conduct/behavioral problems (e.g., absences, tardiness).
73. Initiate adverse actions (e.g., suspension, removal) for subordinates whose performance is below acceptable levels.
74. Write letters of reprimand.

I. Train and Develop Employees

75. Identify training needed by subordinates.
76. Complete training needs survey.
77. Determine if currently available training programs meet subordinates needs.
78. Identify available training/development opportunities for subordinates.
79. Inform subordinates of training/development opportunities.
80. Nominate subordinates to receive training.
81. Designate subordinates to receive cross-training.
82. Develop individual Development Plans (IDPs) with subordinates.
83. Develop training plans for subordinates in special employment programs (e.g., apprentices, co-op students, interns, upward mobility, veterans, re-adjustment employees).
84. Provide cross-training for subordinates.
85. Design on-the-job training programs.
86. Provide on-the-job training.
87. Instruct subordinates on how to use new equipment.
88. Assign experienced employee(s) to train new workers.
89. Provide career development counseling to subordinates.
90. Justify need for non-government sources of training.
91. Ensure subordinates are free for PT, training, etc.
92. Document effectiveness of training attended by subordinates (e.g., complete DD 1556).
93. Evaluate long term effectiveness of training attended by subordinates.

J. Conduct Meetings and Briefings

- 94. Conduct staff meetings.
- 95. Conduct meetings with subordinates at beginning of their shift.
- 96. Participate in staff meetings, conferences, etc.
- 97. Brief upper management on progress of work or project activities.
- 98. Brief subordinates on progress of work or project activities.
- 99. Conduct safety meetings.

K. Provide Orientation

- 100. Provide orientation to new employees.
- 101. Explain personnel policies and procedures to subordinates.
- 102. Explain administrative policies and procedures to subordinates (e.g., TDY, work hours, leave).
- 103. Explain local installation policies and procedures to subordinates.
- 104. Explain military policies and procedures to civilian supervisors and/or subordinates.
- 105. Explain civilian policies and procedures to military supervisors and/or military subordinates.
- 106. Inform subordinates of impending changes in policies or procedures.

L. Communicate with Subordinates, Superiors, and Others

- 107. Inform higher management of employees' views and concerns.
- 108. Inform subordinates of management objectives, decisions, and views.
- 109. Ask second-line supervisor or above for help or advice with work-related problems.
- 110. Inform second-line supervisor or above when problems arise which will delay completion of work.
- 111. Communicate with union representatives/stewards.
- 112. Inform second-line supervisor or above of your subordinates' accomplishments.
- 113. Represent your subordinates during their absence.
- 114. Represent your immediate supervisor during his/her absence.
- 115. Communicate with other supervisors in your organization to improve operations.
- 116. Communicate with members of other organizations to improve operations.

M. Conduct Administrative Duties

117. Write or keep records/logs (e.g., suspense dates, work status sheets, project logs, work orders).
118. Write policies and procedures (e.g., SOP).
119. Read memos, newsletters, regulations, journals, etc., to keep up with developments related to supervision.
120. Read, research regulations pertaining to personnel management and administrative procedures.
121. Provide job references for subordinates.
122. Enforce smoking/non-smoking regulations.
123. Assess/verify accuracy of facts, statements, or complaints by others before they become part of a record or a basis for action.
124. Resolve work-related complaints, conflicts or disputes among subordinates.
125. Resolve work-related conflicts between your subordinates and people in other offices.
126. Follow grievance procedures in response to grievances.
127. Keep up-to-date on union contracts or activities.
128. Monitor compliance with union agreements.
129. Assign work space to subordinates.
130. Allocate supplies or equipment to subordinates.
131. Arrange for support from other offices or activities.
132. Consult with off-going supervisor about shift conditions.

N. Manage Work Schedules

- 133. Request/justify comp time or overtime for subordinates.
- 134. Approve comp time or overtime for subordinates.
- 135. Coordinate annual leave/vacation schedules for subordinates.
- 136. Approve/disapprove requests for absences and leave.
- 137. Complete subordinates' time cards and overtime sheets.
- 138. Certify time sheets/time cards.
- 139. Review personnel records and reports (e.g., time and attendance, sick leave, overtime) for accuracy and potential abuses (e.g., excessive tardiness, sick leave).
- 140. Schedule subordinates' work hours.
- 141. Revise work schedules to adjust for subordinates' vacations, retirements, leaves of absence, attendance at training, etc.
- 142. Revise work schedule to meet changes in the demands for unit's products or services.
- 143. Determine causes of subordinates' repeated absences/tardiness.

O. Conduct Travel Related Activities

- 144. Request TDY for your subordinates.
- 145. Recommend/approve TDY for your subordinates.
- 146. Review subordinates' travel itineraries.
- 147. Review and approve subordinates' travel vouchers.
- 148. Review and approve subordinates' trip reports.

P. Maintain Safety Requirements

- 149. Instruct personnel in the use of safety equipment.
- 150. Instruct personnel in the observance of safety regulations.
- 151. Conduct safety tests on equipment.
- 152. Request safety tests on equipment.
- 153. Inspect work area for safety hazards.
- 154. Investigate work-related accidents.
- 155. Ensure that safety hazards are addressed.
- 156. Instruct personnel in the proper handling of hazardous materials.
- 157. Instruct personnel how to use work equipment safely.
- 158. Inspect safety equipment.
- 159. Report accidents.
- 160. Document safety violations.
- 161. Complete accident reports.
- 162. Complete workers' compensation forms.
- 163. Enforce safety programs and procedures.

Q. Manage Employee's Work

- 164. Delegate authority to work leader or other subordinates.**
- 165. Establish work priorities and deadlines to meet milestones.**
- 166. Assign work to subordinates.**
- 167. Assign work priorities and deadlines to subordinates.**
- 168. Explain work assignments to subordinates.**
- 169. Review subordinates' work when in progress.**
- 170. Review and approve subordinates' work upon completion.**
- 171. Integrate the work of several subordinates to create a final product.**

R. Oversee Operations

- 172. Monitor/evaluate work performed for the Army by outside vendors or contractors.
- 173. Evaluate program/project status or progress.
- 174. Evaluate work requests to determine if work can be accomplished and is within the mission of the unit.
- 175. Determine when work should be performed in-house and when to contract work out.

S. Manage Materials and Supplies

176. Determine the supplies, parts, equipment, or tools needed to accomplish work.
177. Determine if supplies, parts, equipment or tools are available to accomplish work.
178. Request/order supplies, parts, equipment or tools required to accomplish work.
179. Receive/verify receipt of supplies, parts, equipment or tools.
180. Check equipment to assure it is working properly.
181. Request repairs on down equipment.
182. Schedule preventive maintenance on equipment.
183. Develop internal controls to minimize waste, fraud or abuse.
184. Implement internal controls to minimize waste, fraud or abuse.
185. Assess internal controls designed to minimize waste, fraud or abuse.
186. Account for hand receipt equipment on the survey list.
187. Report missing tools/equipment.
188. Justify the need for retaining allocated supplies or equipment for subordinates.
189. Justify the need for retaining allocated work space for subordinates.

T. Plan

190. Assess the impact of future workload on staffing requirements.
191. Assess the impact of mission changes on workload and staffing requirements.
192. Survey customers/users to estimate future workload.
193. Survey customers/users to assess quality of services provided.
194. Estimate unit's short-range workload.
195. Estimate unit's long-range workload.
196. Estimate time required to complete projects.
197. Assess impact of new technology on work group.
198. Assess efficiency of work operations.
199. Develop plans for improving work operations.
200. Develop plans to achieve goals or milestones.
201. Implement plans to achieve goals or milestones.
202. Participate in writing mission and function statements.
203. Monitor update mission and function statements.
204. Implement plans for improving work operations.

U. Budget

- 205. Monitor currently available financial resources.**
- 206. Monitor long-range availability of financial resources.**
- 207. Estimate financial resources required to complete projects.**
- 208. Project resources (e.g., personnel, equipment, training, TDY) required on an annual basis so budgets can be determined.**
- 209. Allocate/reallocate budget resources among different work/projects.**
- 210. Justify allocation of budget resources for work/projects.**
- 211. Develop internal work group operating budgets from allocations received.**
- 212. Negotiate with others to obtain personnel, equipment, materials or financial resources to accomplish mission.**
- 213. Monitor use of overtime, travel funds, training funds, incentive rewards, etc. to ensure that spending keeps within budgetary constraints.**

V. Practice Security Procedures

- 214. Explain security policies and procedures to subordinates.
- 215. Determine sensitivity of positions for security purposes.
- 216. Request security clearances for subordinates.
- 217. Review subordinates Personal History Statement (i.e., DD 398).
- 218. Maintain privacy/security of personnel information in accordance with the Freedom of Information/Privacy Act.
- 219. Develop SOP in accordance with security regulations.
- 220. Implement SOP in accordance with security regulations.
- 221. Notify appropriate personnel (e.g., security officer, Military Intelligence) of suspected security risks or violations.
- 222. Report/document security violations.
- 223. Monitor the physical security of the work area.
- 224. Conduct security training meetings.
- 225. Maintain records of subordinates' attendance at security meetings.
- 226. Identify changes in job requirements which require that subordinates clearance be upgraded or downgraded.

Appendix F

Phase I Reliability Estimates

Phase I Reliability Estimates

ASO	Number of Raters	Single Rater Reliability ICC	SEM	Estimated Multiple Rater Reliability R _{mm}	SEM
1. Leadership	30	.520	.248	.970	.070
2. Learning Ability	30	.533	.130	.972	.036
3. Delegation	30	.457	.222	.962	.068
4. Conflict Resolution	30	.590	.393	.977	.103
5. Motivate Others	30	.564	.405	.975	.109
6. Written Communication	30	.521	.328	.970	.093
7. Reading Ability	30	.543	.155	.973	.043
8. Oral Communication	30	.519	.430	.970	.122
9. Public Speaking	30	.602	.395	.978	.102
10. Teaching Ability	30	.583	.335	.977	.088
11. Persuasion	30	.512	.363	.969	.104
12. Decision Making	30	.461	.260	.962	.079
13. Stress Tolerance	30	.495	.244	.967	.071
14. Teamwork	30	.572	.138	.976	.037
15. Response to Criticism	30	.538	.170	.972	.047
16. Non-discriminatory	30	.581	.681	.977	.180
17. Human Relations	30	.611	.326	.979	.083
18. Courage to Confront	30	.562	.444	.975	.120
19. Coordination	30	.478	.164	.963	.050
20. Planning	30	.454	.193	.961	.059
21. Organizing	30	.494	.211	.967	.062
22. Problem Identification	30	.480	.202	.965	.060
23. Economical	30	.489	.239	.966	.070
24. Developmental Counseling	30	.539	.432	.972	.120
25. Performance Counseling	30	.564	.563	.975	.152
26. Time Management	30	.538	.217	.972	.060
27. Monitoring Work	29	.440	.437	.958	.140
28. Flexible	29	.456	.234	.961	.073
29. Self-confident	29	.487	.287	.965	.086
30. Thorough	29	.376	.143	.946	.050
31. Honest	29	.471	.244	.963	.075
32. Self-starter	29	.536	.222	.971	.063
33. Responsible	29	.482	.156	.964	.047
34. Dependable	29	.495	.110	.966	.033
35. Achievement Oriented	29	.385	.247	.948	.085
36. Cooperative	29	.450	.210	.960	.066
37. Empathetic	29	.548	.298	.972	.083
38. Technically Competent	29	.506	.299	.967	.088
39. Fair	29	.497	.523	.966	.155
40. Get Facts Before Acting	29	.473	.229	.963	.070
41. Tactful and Diplomatic	29	.484	.498	.965	.150
42. Realistic Self-appraisal	29	.511	.213	.968	.062
43. Self-sufficient	29	.448	.175	.966	.052
44. Tolerant of Ambiguity	29	.478	.133	.964	.041
45. Energetic	29	.507	.237	.968	.069
46. Creative	29	.493	.235	.966	.070
47. Risk Taker	29	.503	.118	.967	.035
48. Aggressive	29	.388	.118	.948	.041
49. Job Involved	29	.579	.070	.976	.019
50. Emotionally Stable	29	.521	.251	.969	.072
51. Trustworthy	29	.545	.189	.972	.053

KNOWLEDGE	Number of Raters	Single Rater Reliability		Estimated Multiple Rater Reliability	
		ICC	SEM	R _{mn}	SEM
1. Merit Promotion System	28	.496	.352	.965	.106
2. Employee Reassignment	28	.562	.407	.973	.114
3. Part-time Hiring	28	.556	.203	.972	.057
4. Position Management	28	.504	.463	.966	.139
5. Staffing/Manpower Requirements	28	.539	.442	.970	.127
6. EEO/Affirmative Action	28	.587	.539	.975	.147
7. Affirmative Action Programs	28	.605	.465	.977	.124
8. Eligibility Requirements	28	.544	.391	.971	.112
9. Probation Policies	28	.576	.349	.974	.096
10. Performance Appraisal System	28	.513	.640	.967	.189
11. Productivity Improvement	27	.581	.177	.974	.049
12. Supervising Local Nationals	25	.703	.055	.983	.014
13. Drug and Alcohol Abuse	27	.530	.497	.968	.147
14. Referral Sources	27	.517	.426	.967	.128
15. Discipline Policies and Procedure	27	.540	.499	.969	.145
16. Training Policies and Procedure	27	.557	.319	.971	.091
17. Career Management	27	.647	.292	.980	.076
18. Overtime Regulations	27	.522	.407	.967	.121
19. Salary Administration	27	.593	.242	.975	.066
20. Leave Policies and Procedures	27	.526	.259	.968	.077
21. Workers' Compensation	27	.426	.091	.952	.031
22. RIF/TOF Policies and Procedures	31	.462	.260	.964	.078
23. Commercial Activities	31	.456	.153	.963	.046
24. Standards of Conduct	31	.412	.293	.956	.094
25. Accountability	31	.482	.248	.967	.073
26. Grievance Procedures	31	.500	.560	.969	.160
27. Labor-Management Relations	31	.353	.370	.944	.130
28. Safety and Health Regulations	31	.386	.247	.951	.083
29. NAF Policies	29	.510	.064	.968	.019
30. Internal Controls	31	.264	.128	.918	.053
31. Budget Policies	31	.364	.546	.944	.192
32. PPBES	30	.516	.441	.970	.126
33. Freedom of Information Act	31	.369	.274	.948	.094
34. Security Policies	31	.358	.320	.945	.112
35. Military Performance Evaluation	29	.564	.105	.974	.029
36. Military Rank Structure	30	.536	.107	.972	.030
37. Military Customs	30	.504	.100	.968	.029
38. Military/Defense Structure	30	.605	.081	.979	.021
39. Army Chain of Command	30	.517	.132	.970	.038
40. Army's General Mission	30	.635	.071	.981	.018
41. Organization's Mission	30	.489	.190	.966	.056
42. UCMJ	29	.417	.046	.954	.015

Appendix G

KSAO Importance Ratings by Task Cluster

CIVPERS - SUMMARY UNIVARIATE STATS FOR ASO's

Page: 1

variable	n	mean	std	stderr	min	max
By-> T=A. Staff Positions						
A1	30	3.3667	1.4016	0.2559	1.0000	5.0000
A2	30	3.5333	1.2794	0.2336	1.0000	5.0000
A3	30	2.9333	1.7006	0.3105	1.0000	5.0000
A4	30	2.9667	1.6291	0.2974	1.0000	5.0000
A5	30	2.7000	1.6432	0.3000	1.0000	5.0000
A6	30	3.9333	1.1121	0.2030	1.0000	5.0000
A7	30	4.0000	1.2034	0.2197	1.0000	5.0000
A8	30	4.1800	1.1250	0.2054	1.0000	5.0000
A9	30	2.9000	1.6263	0.2969	1.0000	5.0000
A10	30	2.6000	1.6733	0.3055	1.0000	5.0000
A11	30	3.2667	1.2847	0.2346	1.0000	5.0000
A12	30	4.3333	0.8023	0.1465	3.0000	5.0000
A13	30	3.1667	1.5775	0.2880	1.0000	5.0000
A14	30	3.3333	1.4933	0.2726	1.0000	5.0000
A15	30	3.2333	1.6333	0.2982	1.0000	5.0000
A16	30	4.2000	1.0635	0.1942	1.0000	5.0000
A17	30	3.7000	1.3684	0.2498	1.0000	5.0000
A18	30	2.9333	1.6174	0.2953	1.0000	5.0000
A19	30	3.3667	1.4499	0.2647	1.0000	5.0000
A20	30	3.9333	1.1121	0.2030	1.0000	5.0000
A21	30	3.7000	1.3170	0.2404	1.0000	5.0000
A22	30	3.4000	1.3544	0.2473	1.0000	5.0000
A23	30	2.9333	1.5522	0.2834	1.0000	5.0000
A24	30	2.7333	1.5960	0.2914	1.0000	5.0000
A25	30	2.5000	1.8336	0.3348	1.0000	5.0000
A26	30	3.5333	1.5253	0.2785	1.0000	5.0000
A27	29	2.7241	1.5094	0.2803	1.0000	5.0000
A28	29	2.8621	1.3289	0.2468	1.0000	5.0000
A29	29	3.8621	1.1870	0.2204	1.0000	5.0000
A30	29	3.9655	0.9814	0.1822	1.0000	5.0000
A31	29	4.2759	0.9598	0.1782	1.0000	5.0000
A32	29	3.5517	1.3252	0.2461	1.0000	5.0000
A33	29	3.8621	1.1252	0.2089	1.0000	5.0000
A34	29	3.7931	1.2923	0.2400	1.0000	5.0000
A35	29	3.2759	1.3601	0.2526	1.0000	5.0000
A36	29	3.2414	1.4055	0.2610	1.0000	5.0000
A37	29	2.9655	1.3224	0.2456	1.0000	5.0000
A38	29	3.8966	1.2348	0.2293	1.0000	5.0000
A39	29	3.7931	1.2923	0.2400	1.0000	5.0000
A40	29	3.7931	1.3196	0.2450	1.0000	5.0000
A41	29	3.4138	1.2682	0.2355	1.0000	5.0000
A42	29	2.8621	1.3816	0.2566	1.0000	5.0000
A43	29	3.3103	1.1681	0.2169	1.0000	5.0000
A44	29	2.9655	1.2387	0.2300	1.0000	5.0000
A45	29	2.9655	1.3491	0.2505	1.0000	5.0000
A46	29	3.0345	1.4512	0.2695	1.0000	5.0000
A47	29	2.4483	1.2417	0.2306	1.0000	5.0000
A48	29	2.8276	1.3905	0.2582	1.0000	5.0000
A49	29	3.0690	1.3870	0.2576	1.0000	5.0000
A50	29	3.3448	1.1425	0.2122	1.0000	5.0000
A51	29	3.8276	1.2555	0.2331	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=B. Manage Position Requirements						
A1	30	3.3667	1.3767	0.2514	1.0000	5.0000
A2	30	3.7333	1.0807	0.1973	1.0000	5.0000
A3	30	2.9333	1.5298	0.2793	1.0000	5.0000
A4	30	2.9667	1.5196	0.2774	1.0000	5.0000
A5	30	2.8667	1.4794	0.2701	1.0000	5.0000
A6	30	4.0667	0.8683	0.1585	3.0000	5.0000
A7	30	4.0667	1.0807	0.1973	1.0000	5.0000
A8	30	3.7000	1.2360	0.2257	1.0000	5.0000
A9	30	2.5333	1.5253	0.2785	1.0000	5.0000
A10	30	2.4333	1.5013	0.2741	1.0000	5.0000
A11	30	3.5667	1.1351	0.2072	1.0000	5.0000
A12	30	4.0333	1.0981	0.2005	1.0000	5.0000
A13	30	3.2000	1.5625	0.2853	1.0000	5.0000
A14	30	3.2000	1.3235	0.2416	1.0000	5.0000
A15	30	2.9333	1.5298	0.2793	1.0000	5.0000
A16	30	3.2667	1.5298	0.2793	1.0000	5.0000
A17	30	3.1667	1.4162	0.2586	1.0000	5.0000
A18	30	2.6000	1.7140	0.3129	1.0000	5.0000
A19	30	3.0000	1.4856	0.2712	1.0000	5.0000
A20	30	3.8333	1.2617	0.2404	1.0000	5.0000
A21	30	3.8333	1.2341	0.2253	1.0000	5.0000
A22	30	3.6000	1.3287	0.2426	1.0000	5.0000
A23	30	3.4667	1.4077	0.2570	1.0000	5.0000
A24	30	2.6333	1.6709	0.3051	1.0000	5.0000
A25	30	2.3667	1.7117	0.3125	1.0000	5.0000
A26	30	3.3333	1.4933	0.2726	1.0000	5.0000
A27	29	2.9310	1.5102	0.2804	1.0000	5.0000
A28	29	2.8966	1.2634	0.2346	1.0000	5.0000
A29	29	3.7241	1.1618	0.2157	1.0000	5.0000
A30	29	4.0000	0.8018	0.1489	2.0000	5.0000
A31	29	4.0690	1.0327	0.1918	1.0000	5.0000
A32	29	3.5517	1.2980	0.2410	1.0000	5.0000
A33	29	3.8621	1.0598	0.1968	2.0000	5.0000
A34	29	3.9655	0.9443	0.1753	2.0000	5.0000
A35	29	3.2069	1.2358	0.2295	1.0000	5.0000
A36	29	3.1379	1.3555	0.2517	1.0000	5.0000
A37	29	2.7586	1.2999	0.2414	1.0000	5.0000
A38	29	3.8966	1.2913	0.2398	1.0000	5.0000
A39	29	3.6207	1.3736	0.2551	1.0000	5.0000
A40	29	3.8966	1.0805	0.2006	1.0000	5.0000
A41	29	2.9310	1.2227	0.2271	1.0000	5.0000
A42	29	2.7586	1.2437	0.2309	1.0000	5.0000
A43	29	3.3103	1.3391	0.2487	1.0000	5.0000
A44	29	2.8966	1.1755	0.2183	1.0000	5.0000
A45	29	3.1034	1.3976	0.2595	1.0000	5.0000
A46	29	3.2759	1.3601	0.2526	1.0000	5.0000
A47	29	2.3103	1.1371	0.2112	1.0000	5.0000
A48	29	2.8276	1.1671	0.2167	1.0000	5.0000
A49	29	3.1379	1.2457	0.2313	1.0000	5.0000
A50	29	2.9655	1.2096	0.2246	1.0000	5.0000
A51	29	3.5862	1.3501	0.2507	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=C. Enforce EEO Policies						
A1	30	3.5333	1.1666	0.2130	1.0000	5.0000
A2	30	3.2333	1.0400	0.1899	1.0000	5.0000
A3	30	2.5000	1.4081	0.2571	1.0000	5.0000
A4	30	3.9000	1.2415	0.2267	1.0000	5.0000
A5	30	3.1667	1.3412	0.2449	1.0000	5.0000
A6	30	3.1000	1.3481	0.2461	1.0000	5.0000
A7	30	3.7667	1.1043	0.2016	2.0000	5.0000
A8	30	3.7333	1.1121	0.2030	1.0000	5.0000
A9	30	2.9333	1.3374	0.2442	1.0000	5.0000
A10	30	2.8333	1.4641	0.2673	1.0000	5.0000
A11	30	3.4333	1.0400	0.1899	1.0000	5.0000
A12	30	3.4333	1.3566	0.2477	1.0000	5.0000
A13	30	3.0667	1.3629	0.2488	1.0000	5.0000
A14	30	3.2333	1.3309	0.2430	1.0000	5.0000
A15	30	3.3333	1.4223	0.2597	1.0000	5.0000
A16	30	4.8333	0.4611	0.0842	3.0000	5.0000
A17	30	4.1333	1.0743	0.1961	2.0000	5.0000
A18	30	3.5333	1.3322	0.2432	1.0000	5.0000
A19	30	3.0333	1.4016	0.2559	1.0000	5.0000
A20	30	3.1333	1.4077	0.2570	1.0000	5.0000
A21	30	2.8000	1.3746	0.2510	1.0000	5.0000
A22	30	3.5667	1.2229	0.2233	1.0000	5.0000
A23	30	2.2000	1.3995	0.2555	1.0000	5.0000
A24	30	3.0667	1.6174	0.2953	1.0000	5.0000
A25	30	3.4667	1.4559	0.2658	1.0000	5.0000
A26	30	2.5333	1.5698	0.2866	1.0000	5.0000
A27	29	2.6207	1.5678	0.2911	1.0000	5.0000
A28	29	2.5862	1.2397	0.2302	1.0000	5.0000
A29	29	3.6207	1.2653	0.2350	1.0000	5.0000
A30	29	3.6897	1.1983	0.2225	1.0000	5.0000
A31	29	4.3448	0.7689	0.1428	3.0000	5.0000
A32	29	3.3103	1.3655	0.2536	1.0000	5.0000
A33	29	4.1034	0.7720	0.1434	2.0000	5.0000
A34	29	3.7241	1.1306	0.2100	1.0000	5.0000
A35	29	2.9310	1.2798	0.2377	1.0000	5.0000
A36	29	3.5517	1.1522	0.2140	1.0000	5.0000
A37	29	3.8966	1.1447	0.2126	1.0000	5.0000
A38	29	3.0690	1.5102	0.2804	1.0000	5.0000
A39	29	4.3448	0.8975	0.1667	1.0000	5.0000
A40	29	4.1034	1.0122	0.1880	2.0000	5.0000
A41	29	3.8966	1.0805	0.2006	2.0000	5.0000
A42	29	3.2069	1.2923	0.2400	1.0000	5.0000
A43	29	3.0690	1.0667	0.1981	1.0000	5.0000
A44	29	2.8276	1.1361	0.2110	1.0000	5.0000
A45	29	2.7241	1.2506	0.2322	1.0000	5.0000
A46	29	2.6552	1.2328	0.2289	1.0000	5.0000
A47	29	1.8966	0.9390	0.1744	1.0000	4.0000
A48	29	2.5862	1.1501	0.2136	1.0000	5.0000
A49	29	2.7586	1.2437	0.2309	1.0000	5.0000
A50	29	3.7931	1.0481	0.1946	2.0000	5.0000
A51	29	4.1034	0.9763	0.1813	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=D. Provide Recognition & Rewards						
A1	30	3.3000	1.2635	0.2307	1.0000	5.0000
A2	30	3.0000	1.1142	0.2034	1.0000	5.0000
A3	30	2.5667	1.4547	0.2656	1.0000	5.0000
A4	30	2.5000	1.4324	0.2615	1.0000	5.0000
A5	30	4.0333	1.2994	0.2372	1.0000	5.0000
A6	30	4.1000	0.8847	0.1615	2.0000	5.0000
A7	30	3.5000	1.3065	0.2385	1.0000	5.0000
A8	30	3.5667	1.0726	0.1958	2.0000	5.0000
A9	30	2.6333	1.3767	0.2514	1.0000	5.0000
A10	30	2.3667	1.2994	0.2372	1.0000	5.0000
A11	30	2.8667	1.1666	0.2130	1.0000	5.0000
A12	30	3.7000	0.9879	0.1804	2.0000	5.0000
A13	30	2.4000	1.2205	0.2228	1.0000	5.0000
A14	30	2.4333	1.1043	0.2016	1.0000	5.0000
A15	30	2.8000	1.3235	0.2416	1.0000	5.0000
A16	30	4.5667	0.6261	0.1143	3.0000	5.0000
A17	30	3.8000	0.9965	0.1819	2.0000	5.0000
A18	30	3.0667	1.6174	0.2953	1.0000	5.0000
A19	30	2.6667	1.3979	0.2552	1.0000	5.0000
A20	30	3.1333	1.1958	0.2183	1.0000	5.0000
A21	30	2.7333	1.3880	0.2534	1.0000	5.0000
A22	30	2.6000	1.2758	0.2329	1.0000	5.0000
A23	30	2.7333	1.5071	0.2752	1.0000	5.0000
A24	30	2.8333	1.4875	0.2716	1.0000	5.0000
A25	30	2.8000	1.4716	0.2687	1.0000	5.0000
A26	30	2.4667	1.4559	0.2658	1.0000	5.0000
A27	29	3.8966	1.0805	0.2006	1.0000	5.0000
A28	29	2.7931	1.2643	0.2348	1.0000	5.0000
A29	29	3.6207	1.2075	0.2242	1.0000	5.0000
A30	29	3.8966	1.0805	0.2006	1.0000	5.0000
A31	29	4.4828	0.6877	0.1277	3.0000	5.0000
A32	29	3.8966	1.2634	0.2346	1.0000	5.0000
A33	29	3.9310	0.9611	0.1785	2.0000	5.0000
A34	29	3.9310	0.9611	0.1785	2.0000	5.0000
A35	29	3.5172	1.3261	0.2463	1.0000	5.0000
A36	29	3.0345	1.2096	0.2246	1.0000	5.0000
A37	29	3.4483	1.1828	0.2196	1.0000	5.0000
A38	29	3.7586	1.0907	0.2025	1.0000	5.0000
A39	29	4.6207	0.4938	0.0917	4.0000	5.0000
A40	29	4.1034	0.8596	0.1596	2.0000	5.0000
A41	29	3.2414	1.0575	0.1964	1.0000	5.0000
A42	29	2.7241	1.1921	0.2214	1.0000	5.0000
A43	29	3.2759	1.2217	0.2269	1.0000	5.0000
A44	29	2.4828	1.0896	0.2023	1.0000	5.0000
A45	29	3.1034	1.2634	0.2346	1.0000	5.0000
A46	29	3.0000	1.1650	0.2163	1.0000	5.0000
A47	29	2.1034	1.1447	0.2126	1.0000	5.0000
A48	29	2.8276	1.3646	0.2534	1.0000	5.0000
A49	29	2.8966	1.2634	0.2346	1.0000	5.0000
A50	29	3.2069	1.2358	0.2295	1.0000	5.0000
A51	29	3.4828	1.2989	0.2412	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=E. Motivate Employees						
A1	30	4.6667	0.4795	0.0875	4.0000	5.0000
A2	30	3.6667	1.1842	0.2162	1.0000	5.0000
A3	30	3.7333	0.9803	0.1790	1.0000	5.0000
A4	30	3.5667	1.2507	0.2284	1.0000	5.0000
A5	30	4.7333	0.4498	0.0821	4.0000	5.0000
A6	30	3.0333	1.1885	0.2170	1.0000	5.0000
A7	30	2.9333	1.2576	0.2296	1.0000	5.0000
A8	30	4.4333	0.7279	0.1329	3.0000	5.0000
A9	30	3.2000	1.2972	0.2368	1.0000	5.0000
A10	30	3.6667	1.1547	0.2108	1.0000	5.0000
A11	30	4.4000	0.7701	0.1406	3.0000	5.0000
A12	30	3.5667	1.1043	0.2016	1.0000	5.0000
A13	30	3.4333	1.1943	0.2181	1.0000	5.0000
A14	30	3.6333	1.2726	0.2323	1.0000	5.0000
A15	30	3.3000	1.3933	0.2544	1.0000	5.0000
A16	30	4.3333	0.8442	0.1541	2.0000	5.0000
A17	30	4.2667	0.9072	0.1656	2.0000	5.0000
A18	30	3.7333	1.2015	0.2194	1.0000	5.0000
A19	30	3.9667	0.9279	0.1694	1.0000	5.0000
A20	30	3.8000	1.0954	0.2000	2.0000	5.0000
A21	30	3.5000	1.2798	0.2337	1.0000	5.0000
A22	30	3.5667	1.3047	0.2382	1.0000	5.0000
A23	30	2.7000	1.3684	0.2498	1.0000	5.0000
A24	30	4.0333	0.8087	0.1477	2.0000	5.0000
A25	30	4.0667	1.0483	0.1914	1.0000	5.0000
A26	30	3.1000	1.4468	0.2641	1.0000	5.0000
A27	29	3.9310	0.9975	0.1852	1.0000	5.0000
A28	29	3.6207	1.1776	0.2187	1.0000	5.0000
A29	29	4.2069	1.0135	0.1882	1.0000	5.0000
A30	29	3.7931	0.9016	0.1674	2.0000	5.0000
A31	29	4.1724	0.8048	0.1495	2.0000	5.0000
A32	29	4.3448	0.8567	0.1591	2.0000	5.0000
A33	29	3.9310	0.9232	0.1714	2.0000	5.0000
A34	29	4.1724	0.9285	0.1724	2.0000	5.0000
A35	29	3.8966	1.1447	0.2126	1.0000	5.0000
A36	29	3.6552	0.9738	0.1808	2.0000	5.0000
A37	29	4.0000	0.9258	0.1719	2.0000	5.0000
A38	29	3.6897	1.2846	0.2385	1.0000	5.0000
A39	29	4.2414	0.8305	0.1542	2.0000	5.0000
A40	29	3.7241	1.0986	0.2040	1.0000	5.0000
A41	29	4.0000	0.8018	0.1489	3.0000	5.0000
A42	29	3.7931	0.9776	0.1815	1.0000	5.0000
A43	29	3.6552	1.2034	0.2235	1.0000	5.0000
A44	29	3.1034	1.1131	0.2067	1.0000	5.0000
A45	29	3.9655	1.0171	0.1889	1.0000	5.0000
A46	29	3.7586	1.0575	0.1964	1.0000	5.0000
A47	29	2.8276	1.2268	0.2278	1.0000	5.0000
A48	29	3.3448	1.3958	0.2592	1.0000	5.0000
A49	29	3.3103	1.2278	0.2280	1.0000	5.0000
A50	29	3.8966	0.9763	0.1813	2.0000	5.0000
A51	29	3.5517	1.2980	0.2410	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=F. Manage Employees W						
A1	30	4.2000	0.8867	0.1619	2.0000	5.0000
A2	30	3.4000	1.1626	0.2123	1.0000	5.0000
A3	30	2.5333	1.3060	0.2384	1.0000	5.0000
A4	30	4.3333	0.8442	0.1541	2.0000	5.0000
A5	30	3.8667	1.0417	0.1902	1.0000	5.0000
A6	30	3.0000	1.3131	0.2397	1.0000	5.0000
A7	30	2.8000	1.1567	0.2112	1.0000	5.0000
A8	30	4.5333	0.6288	0.1148	3.0000	5.0000
A9	30	2.2333	1.3309	0.2430	1.0000	5.0000
A10	30	3.0000	1.2034	0.2197	1.0000	5.0000
A11	30	4.0667	0.9803	0.1790	1.0000	5.0000
A12	30	3.7667	1.0400	0.1899	1.0000	5.0000
A13	30	4.1333	1.0080	0.1840	2.0000	5.0000
A14	30	2.6333	1.3257	0.2420	1.0000	5.0000
A15	30	3.3333	1.2130	0.2215	1.0000	5.0000
A16	30	4.0333	1.2172	0.2222	1.0000	5.0000
A17	30	4.1000	1.0289	0.1878	2.0000	5.0000
A18	30	4.3333	1.0283	0.1877	1.0000	5.0000
A19	30	3.0333	1.2726	0.2323	1.0000	5.0000
A20	30	3.0667	1.3629	0.2488	1.0000	5.0000
A21	30	2.7667	1.3817	0.2523	1.0000	5.0000
A22	30	3.9000	1.2690	0.2317	1.0000	5.0000
A23	30	1.9667	1.0981	0.2005	1.0000	4.0000
A24	30	3.9000	1.4468	0.2641	1.0000	5.0000
A25	30	4.3000	1.0222	0.1866	1.0000	5.0000
A26	30	3.0000	1.4622	0.2670	1.0000	5.0000
A27	29	3.3448	1.3168	0.2445	1.0000	5.0000
A28	29	3.5172	1.3261	0.2463	1.0000	5.0000
A29	29	3.9655	1.1175	0.2075	1.0000	5.0000
A30	29	3.4483	1.1828	0.2196	1.0000	5.0000
A31	29	4.4138	0.9070	0.1684	1.0000	5.0000
A32	29	3.4138	1.0862	0.2017	1.0000	5.0000
A33	29	3.8276	1.1042	0.2050	1.0000	5.0000
A34	29	3.8621	1.1870	0.2204	1.0000	5.0000
A35	29	2.9655	1.2672	0.2353	1.0000	5.0000
A36	29	3.6897	1.0387	0.1929	2.0000	5.0000
A37	29	3.8621	1.0255	0.1904	2.0000	5.0000
A38	29	2.8621	1.4571	0.2706	1.0000	5.0000
A39	29	3.9655	1.2096	0.2246	1.0000	5.0000
A40	29	4.3448	0.8140	0.1512	2.0000	5.0000
A41	29	4.4138	0.6823	0.1267	3.0000	5.0000
A42	29	3.2414	1.1849	0.2200	1.0000	5.0000
A43	29	3.1379	1.1565	0.2148	1.0000	5.0000
A44	29	3.1034	1.2055	0.2239	1.0000	5.0000
A45	29	2.8621	1.2740	0.2366	1.0000	5.0000
A46	29	3.2759	1.2506	0.2322	1.0000	5.0000
A47	29	2.6207	1.4739	0.2737	1.0000	5.0000
A48	29	2.8966	1.4722	0.2734	1.0000	5.0000
A49	29	2.7586	1.2721	0.2362	1.0000	5.0000
A50	29	4.0690	0.9611	0.1785	2.0000	5.0000
A51	29	4.0345	1.1490	0.2134	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=G. Evaluate Performance						
A1	30	3.8667	1.2521	0.2286	1.0000	5.0000
A2	30	3.7333	1.1427	0.2086	1.0000	5.0000
A3	29	2.7241	1.5329	0.2847	1.0000	5.0000
A4	30	3.3667	1.4016	0.2559	1.0000	5.0000
A5	30	3.4667	1.3830	0.2525	1.0000	5.0000
A6	30	4.2667	0.9072	0.1656	2.0000	5.0000
A7	30	3.5667	0.9714	0.1774	1.0000	5.0000
A8	30	3.5667	1.2229	0.2233	1.0000	5.0000
A9	30	2.1667	1.4641	0.2673	1.0000	5.0000
A10	30	2.7333	1.3374	0.2442	1.0000	5.0000
A11	30	2.9333	1.4126	0.2579	1.0000	5.0000
A12	30	4.3000	0.7022	0.1282	3.0000	5.0000
A13	30	3.4667	1.1958	0.2183	1.0000	5.0000
A14	30	2.7333	1.5742	0.2874	1.0000	5.0000
A15	30	3.3000	1.1492	0.2098	1.0000	5.0000
A16	30	4.5000	0.8200	0.1497	2.0000	5.0000
A17	30	3.7667	1.1043	0.2016	2.0000	5.0000
A18	30	4.4000	0.7701	0.1406	3.0000	5.0000
A19	30	2.7667	1.3309	0.2430	1.0000	5.0000
A20	30	3.2333	1.3817	0.2523	1.0000	5.0000
A21	30	3.0333	1.4967	0.2733	1.0000	5.0000
A22	30	3.9667	1.1290	0.2061	1.0000	5.0000
A23	30	2.3667	1.3515	0.2467	1.0000	5.0000
A24	30	4.2667	0.9072	0.1656	2.0000	5.0000
A25	30	4.6000	0.6215	0.1135	3.0000	5.0000
A26	30	3.0667	1.5742	0.2874	1.0000	5.0000
A27	29	4.4828	0.6877	0.1277	3.0000	5.0000
A28	29	3.1034	1.2348	0.2293	1.0000	5.0000
A29	29	3.8621	1.0598	0.1968	1.0000	5.0000
A30	29	4.2414	0.7863	0.1460	3.0000	5.0000
A31	29	4.6207	0.5615	0.1043	3.0000	5.0000
A32	29	3.3448	1.3958	0.2592	1.0000	5.0000
A33	29	4.3103	0.7123	0.1323	3.0000	5.0000
A34	29	4.0690	0.9232	0.1714	2.0000	5.0000
A35	29	3.5517	1.1522	0.2140	1.0000	5.0000
A36	29	2.9655	1.2096	0.2246	1.0000	5.0000
A37	29	3.6207	1.1776	0.2187	1.0000	5.0000
A38	29	4.0690	0.9232	0.1714	2.0000	5.0000
A39	29	4.6552	0.4837	0.0898	4.0000	5.0000
A40	29	4.4483	0.5724	0.1063	3.0000	5.0000
A41	29	3.9655	0.7311	0.1358	3.0000	5.0000
A42	29	3.2759	1.1618	0.2157	1.0000	5.0000
A43	29	3.4828	1.2136	0.2254	1.0000	5.0000
A44	29	2.8621	1.1252	0.2089	1.0000	5.0000
A45	29	2.9310	1.1317	0.2102	1.0000	5.0000
A46	29	2.7931	1.2923	0.2400	1.0000	5.0000
A47	29	2.2069	1.1142	0.2069	1.0000	5.0000
A48	29	2.7586	1.3537	0.2514	1.0000	5.0000
A49	29	3.2414	1.1543	0.2144	1.0000	5.0000
A50	29	3.6897	1.1053	0.2052	1.0000	5.0000
A51	29	3.8621	1.0598	0.1968	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=H. Discipline Employees						
A1	30	4.2667	0.8277	0.1511	2.0000	5.0000
A2	30	3.4333	1.1351	0.2072	1.0000	5.0000
A3	30	2.3333	1.2954	0.2365	1.0000	5.0000
A4	30	4.2667	0.8683	0.1585	2.0000	5.0000
A5	30	3.6667	1.1842	0.2162	1.0000	5.0000
A6	30	3.9000	1.2690	0.2317	1.0000	5.0000
A7	30	3.2667	1.2299	0.2245	1.0000	5.0000
A8	30	4.4667	0.6288	0.1148	3.0000	5.0000
A9	30	2.0667	1.3113	0.2394	1.0000	5.0000
A10	30	2.8000	1.4239	0.2600	1.0000	5.0000
A11	30	3.6333	1.3515	0.2467	1.0000	5.0000
A12	30	4.2000	0.7611	0.1390	3.0000	5.0000
A13	30	4.0333	1.0662	0.1947	1.0000	5.0000
A14	30	2.7000	1.4179	0.2589	1.0000	5.0000
A15	30	3.5333	1.1059	0.2019	1.0000	5.0000
A16	30	4.4333	0.7279	0.1329	3.0000	5.0000
A17	30	3.9333	1.0807	0.1973	1.0000	5.0000
A18	30	4.5667	0.7739	0.1413	2.0000	5.0000
A19	30	2.9333	1.3113	0.2394	1.0000	5.0000
A20	30	3.2667	1.3629	0.2488	1.0000	5.0000
A21	30	2.9667	1.3515	0.2467	1.0000	5.0000
A22	30	4.1333	1.0080	0.1840	2.0000	5.0000
A23	30	2.2333	1.2780	0.2333	1.0000	5.0000
A24	30	3.6667	1.5162	0.2768	1.0000	5.0000
A25	30	4.2333	1.1943	0.2181	1.0000	5.0000
A26	30	3.0333	1.5196	0.2774	1.0000	5.0000
A27	29	3.5517	1.2126	0.2252	1.0000	5.0000
A28	29	3.1379	1.3289	0.2468	1.0000	5.0000
A29	29	3.9655	1.1490	0.2134	1.0000	5.0000
A30	29	3.9655	1.1490	0.2134	1.0000	5.0000
A31	29	4.4138	0.7328	0.1361	3.0000	5.0000
A32	29	3.4828	1.3789	0.2561	1.0000	5.0000
A33	29	4.4483	0.7361	0.1367	3.0000	5.0000
A34	29	4.0345	0.8653	0.1607	2.0000	5.0000
A35	29	3.1724	1.1671	0.2167	1.0000	5.0000
A36	29	3.2414	1.0575	0.1964	1.0000	5.0000
A37	29	3.7586	1.0907	0.2025	1.0000	5.0000
A38	29	3.1724	1.3905	0.2582	1.0000	5.0000
A39	29	4.6207	0.5615	0.1043	3.0000	5.0000
A40	29	4.6552	0.4837	0.0898	4.0000	5.0000
A41	29	4.1379	0.9533	0.1770	1.0000	5.0000
A42	29	3.3103	1.2278	0.2280	1.0000	5.0000
A43	29	3.4828	1.1219	0.2083	1.0000	5.0000
A44	29	2.8621	1.1870	0.2204	1.0000	5.0000
A45	29	2.8621	1.3018	0.2417	1.0000	5.0000
A46	29	2.7586	1.2437	0.2309	1.0000	5.0000
A47	29	2.2759	1.1921	0.2214	1.0000	5.0000
A48	29	2.9655	1.2951	0.2405	1.0000	5.0000
A49	29	3.0345	1.2951	0.2405	1.0000	5.0000
A50	29	4.1034	0.9390	0.1744	2.0000	5.0000
A51	29	4.1724	0.8892	0.1651	2.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=I. Train & Develop Employees						
A1	30	4.0000	0.9097	0.1661	1.0000	5.0000
A2	30	3.9667	0.9643	0.1761	2.0000	5.0000
A3	30	3.3333	1.1547	0.2108	1.0000	5.0000
A4	30	2.7667	1.5241	0.2783	1.0000	5.0000
A5	30	4.0333	0.8899	0.1625	2.0000	5.0000
A6	30	3.2667	1.1121	0.2030	1.0000	5.0000
A7	30	3.6333	1.0981	0.2005	2.0000	5.0000
A8	30	3.7000	1.1188	0.2043	1.0000	5.0000
A9	30	2.6667	1.3476	0.2460	1.0000	5.0000
A10	30	4.5000	0.9377	0.1712	1.0000	5.0000
A11	30	3.8333	1.0854	0.1982	1.0000	5.0000
A12	30	3.5333	0.8604	0.1571	2.0000	5.0000
A13	30	3.1000	1.0619	0.1939	1.0000	5.0000
A14	30	3.1667	1.4404	0.2630	1.0000	5.0000
A15	30	2.8333	1.2888	0.2353	1.0000	5.0000
A16	30	4.2667	0.7397	0.1350	3.0000	5.0000
A17	30	3.5333	1.1958	0.2183	1.0000	5.0000
A18	30	3.3000	1.3170	0.2404	1.0000	5.0000
A19	30	3.2000	1.0306	0.1882	1.0000	5.0000
A20	30	3.8333	0.9855	0.1799	1.0000	5.0000
A21	30	3.6000	1.2484	0.2279	1.0000	5.0000
A22	30	3.6333	1.1290	0.2061	1.0000	5.0000
A23	30	2.9333	1.1725	0.2141	1.0000	5.0000
A24	30	4.4333	0.6789	0.1240	3.0000	5.0000
A25	30	3.5333	1.3830	0.2525	1.0000	5.0000
A26	30	3.1000	1.3983	0.2553	1.0000	5.0000
A27	29	3.7931	1.1142	0.2069	1.0000	5.0000
A28	29	3.2759	1.2506	0.2322	1.0000	5.0000
A29	29	3.6207	1.2368	0.2297	1.0000	5.0000
A30	29	3.8966	0.7720	0.1434	3.0000	5.0000
A31	29	3.7241	0.9218	0.1712	2.0000	5.0000
A32	29	3.6897	1.1983	0.2225	1.0000	5.0000
A33	29	3.9310	0.9975	0.1852	2.0000	5.0000
A34	29	3.7586	0.9508	0.1766	2.0000	5.0000
A35	29	3.6207	1.2653	0.2350	1.0000	5.0000
A36	29	3.6207	1.0147	0.1884	1.0000	5.0000
A37	29	3.2069	0.9016	0.1674	2.0000	5.0000
A38	29	4.1034	0.7720	0.1434	3.0000	5.0000
A39	29	3.8966	0.9763	0.1813	1.0000	5.0000
A40	29	3.4828	1.0896	0.2023	1.0000	5.0000
A41	29	3.1724	1.0375	0.1927	1.0000	5.0000
A42	29	2.7586	1.2146	0.2256	1.0000	5.0000
A43	29	3.1379	1.1870	0.2204	1.0000	5.0000
A44	29	2.7931	1.1765	0.2185	1.0000	5.0000
A45	29	3.4483	1.2126	0.2252	1.0000	5.0000
A46	29	3.6897	1.1371	0.2112	1.0000	5.0000
A47	29	2.2759	1.1921	0.2214	1.0000	5.0000
A48	29	3.0690	1.2516	0.2324	1.0000	5.0000
A49	29	3.1724	1.2555	0.2331	1.0000	5.0000
A50	29	3.4138	0.9826	0.1825	1.0000	5.0000
A51	29	3.2759	1.1306	0.2100	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T-J. Conduct Meetings & Briefings						
A1	30	3.8667	0.9371	0.1711	2.0000	5.0000
A2	30	3.3333	0.9589	0.1751	1.0000	5.0000
A3	30	2.8333	1.3153	0.2401	1.0000	5.0000
A4	30	2.9667	1.2994	0.2372	1.0000	5.0000
A5	30	3.3667	1.1592	0.2116	1.0000	5.0000
A6	30	3.0667	1.2847	0.2346	1.0000	5.0000
A7	30	3.5000	1.3326	0.2433	1.0000	5.0000
A8	30	4.7333	0.5208	0.0951	3.0000	5.0000
A9	30	4.3333	0.8442	0.1541	2.0000	5.0000
A10	30	3.6333	1.1592	0.2116	1.0000	5.0000
A11	30	4.0667	0.7849	0.1433	3.0000	5.0000
A12	30	3.4333	0.9714	0.1774	2.0000	5.0000
A13	30	3.3000	1.0222	0.1866	1.0000	5.0000
A14	30	3.4000	1.1919	0.2176	1.0000	5.0000
A15	30	3.2667	1.1725	0.2141	1.0000	5.0000
A16	30	3.2667	1.3374	0.2442	1.0000	5.0000
A17	30	3.5667	1.2780	0.2333	1.0000	5.0000
A18	30	3.1333	1.3060	0.2384	1.0000	5.0000
A19	30	3.2667	1.2299	0.2245	1.0000	5.0000
A20	30	3.6667	1.0283	0.1877	2.0000	5.0000
A21	30	3.5667	1.2229	0.2233	1.0000	5.0000
A22	30	3.1667	1.1769	0.2149	1.0000	5.0000
A23	30	2.2333	1.1651	0.2127	1.0000	4.0000
A24	30	2.7000	1.3684	0.2498	1.0000	5.0000
A25	30	2.5000	1.4563	0.2659	1.0000	5.0000
A26	30	3.4667	1.1958	0.2183	1.0000	5.0000
A27	29	2.4828	1.2427	0.2308	1.0000	5.0000
A28	29	2.8276	1.1361	0.2110	1.0000	5.0000
A29	29	3.7931	1.1458	0.2128	1.0000	5.0000
A30	29	3.6897	1.0037	0.1864	1.0000	5.0000
A31	29	3.5862	1.3233	0.2457	1.0000	5.0000
A32	29	3.1379	1.2457	0.2313	1.0000	5.0000
A33	29	3.3103	1.1371	0.2112	1.0000	5.0000
A34	29	3.6207	1.0493	0.1948	2.0000	5.0000
A35	29	3.1034	0.9763	0.1813	1.0000	5.0000
A36	29	2.8966	1.0122	0.1880	1.0000	5.0000
A37	29	2.8276	1.0713	0.1989	1.0000	5.0000
A38	29	3.5172	0.9111	0.1692	2.0000	5.0000
A39	29	2.8621	1.1870	0.2204	1.0000	5.0000
A40	29	3.4138	1.1807	0.2193	1.0000	5.0000
A41	29	3.5517	0.9482	0.1761	1.0000	5.0000
A42	29	2.8276	1.3381	0.2485	1.0000	5.0000
A43	29	3.0345	1.2387	0.2300	1.0000	5.0000
A44	29	2.6552	1.0782	0.2002	1.0000	5.0000
A45	29	2.9655	1.2672	0.2353	1.0000	5.0000
A46	29	3.2759	1.1306	0.2100	1.0000	5.0000
A47	29	2.2069	1.2643	0.2348	1.0000	5.0000
A48	29	2.5172	0.9864	0.1832	1.0000	4.0000
A49	29	2.8621	1.2457	0.2313	1.0000	5.0000
A50	29	3.2414	1.1543	0.2144	1.0000	5.0000
A51	29	2.8966	1.2055	0.2239	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T-K. Provide Orientation						
A1	30	3.5333	1.1366	0.2075	1.0000	5.0000
A2	30	2.9000	0.9229	0.1685	1.0000	5.0000
A3	30	2.7000	1.2635	0.2307	1.0000	5.0000
A4	30	2.2667	1.3374	0.2442	1.0000	5.0000
A5	30	2.9667	1.3515	0.2467	1.0000	5.0000
A6	30	2.6667	1.1842	0.2162	1.0000	5.0000
A7	30	3.2667	1.2015	0.2194	1.0000	5.0000
A8	30	4.4000	0.6215	0.1135	3.0000	5.0000
A9	30	3.7333	1.2299	0.2245	1.0000	5.0000
A10	30	3.7333	0.9803	0.1790	1.0000	5.0000
A11	30	2.8333	1.1769	0.2149	1.0000	5.0000
A12	30	2.5333	1.1366	0.2075	1.0000	5.0000
A13	30	2.3667	1.1592	0.2116	1.0000	5.0000
A14	30	2.7667	1.3309	0.2430	1.0000	5.0000
A15	30	2.3667	1.2994	0.2372	1.0000	5.0000
A16	30	3.1333	1.3322	0.2432	1.0000	5.0000
A17	30	3.0000	1.1744	0.2144	1.0000	5.0000
A18	30	2.3667	1.4016	0.2559	1.0000	5.0000
A19	30	2.5667	1.2780	0.2333	1.0000	5.0000
A20	30	3.0333	1.3515	0.2467	1.0000	5.0000
A21	30	3.0667	1.3113	0.2394	1.0000	5.0000
A22	30	2.4667	1.2243	0.2235	1.0000	5.0000
A23	30	2.2333	1.2780	0.2333	1.0000	5.0000
A24	30	3.0333	1.4499	0.2647	1.0000	5.0000
A25	30	2.4667	1.3060	0.2384	1.0000	5.0000
A26	30	2.9000	1.4227	0.2598	1.0000	5.0000
A27	29	2.3103	1.3655	0.2536	1.0000	5.0000
A28	29	2.5517	1.1522	0.2140	1.0000	5.0000
A29	29	3.4138	1.1807	0.2193	1.0000	5.0000
A30	29	3.6207	1.0147	0.1884	1.0000	5.0000
A31	29	3.2414	1.0907	0.2025	1.0000	5.0000
A32	29	2.9310	1.2798	0.2377	1.0000	5.0000
A33	29	3.0690	1.1932	0.2216	1.0000	5.0000
A34	29	3.4138	1.0183	0.1891	2.0000	5.0000
A35	29	2.7931	1.0816	0.2009	1.0000	5.0000
A36	29	2.6207	0.9029	0.1677	1.0000	4.0000
A37	29	2.9655	1.2387	0.2300	1.0000	5.0000
A38	29	3.3793	1.0147	0.1884	1.0000	5.0000
A39	29	2.7586	1.1230	0.2085	1.0000	5.0000
A40	29	3.3103	1.3391	0.2487	1.0000	5.0000
A41	29	3.0000	1.0000	0.1857	1.0000	5.0000
A42	29	2.2414	1.0907	0.2025	1.0000	5.0000
A43	29	2.7931	1.1458	0.2128	1.0000	5.0000
A44	29	2.4828	0.9495	0.1763	1.0000	5.0000
A45	29	2.7586	1.1543	0.2144	1.0000	5.0000
A46	29	3.0690	1.2227	0.2271	1.0000	5.0000
A47	29	1.7586	1.0575	0.1964	1.0000	5.0000
A48	29	2.1724	1.1671	0.2167	1.0000	5.0000
A49	29	2.8276	1.3112	0.2435	1.0000	5.0000
A50	29	3.1724	1.0713	0.1989	1.0000	5.0000
A51	29	2.7241	1.1921	0.2214	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=L. Communicate						
A1	30	4.3000	0.7497	0.1369	3.0000	5.0000
A2	30	3.7000	0.8769	0.1601	1.0000	5.0000
A3	30	3.3667	1.4735	0.2690	1.0000	5.0000
A4	30	3.8000	1.2704	0.2319	1.0000	5.0000
A5	30	4.2000	1.1265	0.2057	1.0000	5.0000
A6	30	4.1333	1.1059	0.2019	1.0000	5.0000
A7	30	3.8000	1.2429	0.2269	1.0000	5.0000
A8	30	4.8000	0.4842	0.0884	3.0000	5.0000
A9	30	4.2000	1.2704	0.2319	1.0000	5.0000
A10	30	3.6000	1.3287	0.2426	1.0000	5.0000
A11	30	4.2000	0.9613	0.1755	1.0000	5.0000
A12	30	3.3000	1.2077	0.2205	1.0000	5.0000
A13	30	3.3333	1.1842	0.2162	1.0000	5.0000
A14	30	3.4000	1.3544	0.2473	1.0000	5.0000
A15	30	3.3667	1.2452	0.2273	1.0000	5.0000
A16	30	3.9000	1.0619	0.1939	2.0000	5.0000
A17	30	3.7667	1.0400	0.1899	1.0000	5.0000
A18	30	3.9000	1.0939	0.1997	1.0000	5.0000
A19	30	3.7333	1.1725	0.2141	1.0000	5.0000
A20	30	3.4333	1.2229	0.2233	1.0000	5.0000
A21	30	3.5333	1.0743	0.1961	1.0000	5.0000
A22	30	3.8667	1.1059	0.2019	1.0000	5.0000
A23	30	2.4000	1.4288	0.2609	1.0000	5.0000
A24	30	3.4667	1.3830	0.2525	1.0000	5.0000
A25	30	3.6000	1.3287	0.2426	1.0000	5.0000
A26	30	3.2667	1.4126	0.2579	1.0000	5.0000
A27	29	3.4828	1.4546	0.2701	1.0000	5.0000
A28	29	3.5862	1.1807	0.2193	1.0000	5.0000
A29	29	4.2414	1.0231	0.1900	1.0000	5.0000
A30	29	4.0000	1.0351	0.1922	1.0000	5.0000
A31	29	4.2414	1.0231	0.1900	1.0000	5.0000
A32	29	3.5862	1.0183	0.1891	1.0000	5.0000
A33	29	4.0000	1.0000	0.1857	1.0000	5.0000
A34	29	3.8276	1.1042	0.2050	1.0000	5.0000
A35	29	3.5862	1.1501	0.2136	1.0000	5.0000
A36	29	3.6897	1.1983	0.2225	1.0000	5.0000
A37	29	3.6897	1.2846	0.2385	1.0000	5.0000
A38	29	3.5862	1.1501	0.2136	1.0000	5.0000
A39	29	3.5862	1.2397	0.2302	1.0000	5.0000
A40	29	3.8966	0.9763	0.1813	1.0000	5.0000
A41	29	4.1724	0.8048	0.1495	3.0000	5.0000
A42	29	3.2414	1.2437	0.2309	1.0000	5.0000
A43	29	3.2414	1.1849	0.2200	1.0000	5.0000
A44	29	3.5172	1.2136	0.2254	1.0000	5.0000
A45	29	3.6552	1.2328	0.2289	1.0000	5.0000
A46	29	3.3793	1.1153	0.2071	1.0000	5.0000
A47	29	2.3793	1.3736	0.2551	1.0000	5.0000
A48	29	2.6897	1.3655	0.2536	1.0000	5.0000
A49	29	2.7931	1.2065	0.2240	1.0000	5.0000
A50	29	3.5862	1.0528	0.1955	1.0000	5.0000
A51	29	3.6897	1.1681	0.2169	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=M. Conduct Admin. Duties						
A1	30	3.4000	1.2484	0.2279	1.0000	5.0000
A2	30	3.4667	1.1366	0.2075	1.0000	5.0000
A3	30	3.2000	1.2704	0.2319	1.0000	5.0000
A4	30	3.2000	1.5177	0.2771	1.0000	5.0000
A5	30	3.1000	1.4227	0.2598	1.0000	5.0000
A6	30	3.8333	1.1769	0.2149	1.0000	5.0000
A7	30	4.0000	1.0171	0.1857	1.0000	5.0000
A8	30	3.4667	1.1059	0.2019	1.0000	5.0000
A9	30	2.3000	1.2635	0.2307	1.0000	5.0000
A10	30	2.7333	1.2847	0.2346	1.0000	5.0000
A11	30	2.9333	1.2015	0.2194	1.0000	5.0000
A12	30	3.5000	1.1064	0.2020	1.0000	5.0000
A13	30	3.0000	1.1744	0.2144	1.0000	5.0000
A14	30	3.2333	1.3309	0.2430	1.0000	5.0000
A15	30	3.1000	1.2415	0.2267	1.0000	5.0000
A16	30	3.0667	1.3113	0.2394	1.0000	5.0000
A17	30	3.2000	1.2429	0.2269	1.0000	5.0000
A18	30	3.0000	1.3131	0.2397	1.0000	5.0000
A19	30	3.1000	1.1847	0.2163	1.0000	5.0000
A20	30	3.3667	1.1592	0.2116	1.0000	5.0000
A21	30	3.3667	1.2726	0.2323	1.0000	5.0000
A22	30	3.3333	1.2411	0.2266	1.0000	5.0000
A23	30	2.7667	1.2780	0.2333	1.0000	5.0000
A24	30	2.5333	1.3578	0.2479	1.0000	5.0000
A25	30	2.6000	1.3025	0.2378	1.0000	5.0000
A26	30	3.8000	1.1861	0.2166	1.0000	5.0000
A27	29	2.8621	1.4072	0.2613	1.0000	5.0000
A28	29	3.1724	1.3112	0.2435	1.0000	5.0000
A29	29	3.3448	1.3437	0.2495	1.0000	5.0000
A30	29	3.7931	0.9776	0.1815	2.0000	5.0000
A31	29	3.3448	1.1734	0.2179	1.0000	5.0000
A32	29	3.5172	1.0563	0.1961	1.0000	5.0000
A33	29	3.8276	0.9662	0.1794	2.0000	5.0000
A34	29	3.7931	0.9403	0.1746	2.0000	5.0000
A35	29	3.4138	1.2106	0.2248	1.0000	5.0000
A36	29	3.1034	1.3187	0.2449	1.0000	5.0000
A37	29	2.6897	1.2278	0.2280	1.0000	5.0000
A38	29	2.9655	1.3491	0.2505	1.0000	5.0000
A39	29	3.0345	1.4512	0.2695	1.0000	5.0000
A40	29	3.4138	1.1501	0.2136	1.0000	5.0000
A41	29	2.8621	1.3018	0.2417	1.0000	5.0000
A42	29	2.5517	1.1828	0.2196	1.0000	5.0000
A43	29	3.3793	1.1469	0.2130	1.0000	5.0000
A44	29	2.6897	1.2846	0.2385	1.0000	5.0000
A45	29	3.2069	1.2065	0.2240	1.0000	5.0000
A46	29	2.9655	1.3224	0.2456	1.0000	5.0000
A47	29	2.0345	1.0851	0.2015	1.0000	5.0000
A48	29	2.4138	1.2106	0.2248	1.0000	5.0000
A49	29	2.9310	1.1932	0.2216	1.0000	5.0000
A50	29	3.0000	1.1952	0.2219	1.0000	5.0000
A51	29	3.1034	1.2913	0.2398	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=N. Manage Work Schedules						
A1	30	3.4667	1.1366	0.2075	1.0000	5.0000
A2	30	3.0333	1.2994	0.2372	1.0000	5.0000
A3	30	3.6667	1.0613	0.1938	1.0000	5.0000
A4	30	3.0667	1.3880	0.2534	1.0000	5.0000
A5	30	3.1667	1.4162	0.2586	1.0000	5.0000
A6	30	2.8667	1.2794	0.2336	1.0000	5.0000
A7	30	3.1000	1.2959	0.2366	1.0000	5.0000
A8	30	2.9333	1.2847	0.2346	1.0000	5.0000
A9	30	2.1000	1.2959	0.2366	1.0000	5.0000
A10	30	2.2333	1.3309	0.2430	1.0000	5.0000
A11	30	2.5667	1.3309	0.2430	1.0000	5.0000
A12	30	3.7667	0.8584	0.1567	2.0000	5.0000
A13	30	3.3000	1.0554	0.1927	1.0000	5.0000
A14	30	3.0667	1.4840	0.2709	1.0000	5.0000
A15	30	2.9333	1.2847	0.2346	1.0000	5.0000
A16	30	3.6333	1.1885	0.2170	1.0000	5.0000
A17	30	3.0333	1.2172	0.2222	1.0000	5.0000
A18	30	3.0667	1.4606	0.2667	1.0000	5.0000
A19	30	3.7000	1.0222	0.1866	1.0000	5.0000
A20	30	3.9667	1.0334	0.1887	2.0000	5.0000
A21	30	4.1667	1.0532	0.1923	1.0000	5.0000
A22	30	3.7333	1.2576	0.2296	1.0000	5.0000
A23	30	3.4333	1.0726	0.1958	1.0000	5.0000
A24	30	2.5333	1.3578	0.2479	1.0000	5.0000
A25	30	2.4667	1.3830	0.2525	1.0000	5.0000
A26	30	4.1333	0.8996	0.1642	2.0000	5.0000
A27	29	3.9655	0.8653	0.1607	2.0000	5.0000
A28	29	3.7241	0.9963	0.1850	1.0000	5.0000
A29	29	3.5172	1.1533	0.2142	1.0000	5.0000
A30	29	3.6897	0.9675	0.1797	2.0000	5.0000
A31	29	3.3448	1.3168	0.2445	1.0000	5.0000
A32	29	3.6207	1.1153	0.2071	1.0000	5.0000
A33	29	3.9310	0.9975	0.1852	2.0000	5.0000
A34	29	4.0690	0.7987	0.1483	3.0000	5.0000
A35	29	3.8276	0.9662	0.1794	2.0000	5.0000
A36	29	3.3793	1.0147	0.1884	1.0000	5.0000
A37	29	3.2414	1.0575	0.1964	1.0000	5.0000
A38	29	3.4828	1.3261	0.2463	1.0000	5.0000
A39	29	4.1379	0.8752	0.1625	2.0000	5.0000
A40	29	3.6552	1.2328	0.2289	1.0000	5.0000
A41	29	3.1724	1.3112	0.2435	1.0000	5.0000
A42	29	2.7241	1.2506	0.2322	1.0000	5.0000
A43	29	3.5862	0.9456	0.1756	1.0000	5.0000
A44	29	3.0345	1.1490	0.2134	1.0000	5.0000
A45	29	3.1724	1.0713	0.1989	1.0000	5.0000
A46	29	3.3448	1.1109	0.2063	1.0000	5.0000
A47	29	2.4828	1.1533	0.2142	1.0000	5.0000
A48	29	2.6552	1.2328	0.2289	1.0000	5.0000
A49	29	3.1724	1.2837	0.2384	1.0000	5.0000
A50	29	3.1724	1.2268	0.2278	1.0000	5.0000
A51	29	3.2069	1.1765	0.2185	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=0. Conduct Travel Related Activities						
A1	30	2.3000	1.1788	0.2152	1.0000	5.0000
A2	30	2.2000	1.1265	0.2057	1.0000	5.0000
A3	30	1.8667	1.0743	0.1961	1.0000	5.0000
A4	30	1.9000	1.0939	0.1997	1.0000	5.0000
A5	30	1.9000	0.9948	0.1816	1.0000	4.0000
A6	30	2.2667	1.1427	0.2086	1.0000	5.0000
A7	30	2.5333	1.2521	0.2286	1.0000	5.0000
A8	30	2.5333	1.4559	0.2658	1.0000	5.0000
A9	30	1.9000	1.1250	0.2054	1.0000	5.0000
A10	30	1.7667	0.9353	0.1708	1.0000	4.0000
A11	30	1.8667	0.8996	0.1642	1.0000	3.0000
A12	30	2.4333	1.1351	0.2072	1.0000	5.0000
A13	30	1.9333	1.1121	0.2030	1.0000	5.0000
A14	30	1.9667	1.0334	0.1887	1.0000	5.0000
A15	30	1.9667	1.1290	0.2061	1.0000	5.0000
A16	30	2.2000	1.3235	0.2416	1.0000	5.0000
A17	30	2.1667	1.2341	0.2253	1.0000	5.0000
A18	30	2.0667	1.2847	0.2346	1.0000	5.0000
A19	30	2.4333	1.2507	0.2284	1.0000	5.0000
A20	30	2.6000	1.3287	0.2426	1.0000	5.0000
A21	30	2.5667	1.3817	0.2523	1.0000	5.0000
A22	30	2.4667	1.1958	0.2183	1.0000	5.0000
A23	30	3.0333	1.3257	0.2420	1.0000	5.0000
A24	30	1.9000	0.9948	0.1816	1.0000	4.0000
A25	30	1.9000	1.0939	0.1997	1.0000	4.0000
A26	30	2.5000	1.2247	0.2236	1.0000	5.0000
A27	29	2.0000	1.0000	0.1857	1.0000	4.0000
A28	29	2.0345	0.9814	0.1822	1.0000	4.0000
A29	29	2.3103	1.1983	0.2225	1.0000	5.0000
A30	29	2.4138	1.1186	0.2077	1.0000	5.0000
A31	29	3.0345	1.4512	0.2695	1.0000	5.0000
A32	29	2.1034	1.0122	0.1880	1.0000	5.0000
A33	29	2.7241	1.2789	0.2375	1.0000	5.0000
A34	29	2.7931	1.2358	0.2295	1.0000	5.0000
A35	29	2.4483	1.2702	0.2359	1.0000	5.0000
A36	29	2.1724	1.0375	0.1927	1.0000	5.0000
A37	29	2.1034	1.0469	0.1944	1.0000	4.0000
A38	29	2.0690	1.2227	0.2271	1.0000	5.0000
A39	29	2.7931	1.2923	0.2400	1.0000	5.0000
A40	29	2.6552	1.2328	0.2289	1.0000	5.0000
A41	29	2.1724	1.0025	0.1862	1.0000	4.0000
A42	29	1.8276	0.9662	0.1794	1.0000	4.0000
A43	29	2.1379	1.0255	0.1904	1.0000	4.0000
A44	29	2.0345	0.9443	0.1753	1.0000	4.0000
A45	29	1.9310	0.9975	0.1852	1.0000	4.0000
A46	29	1.8276	1.0025	0.1862	1.0000	4.0000
A47	29	1.4828	0.8290	0.1539	1.0000	5.0000
A48	29	1.7586	1.0575	0.1964	1.0000	5.0000
A49	29	2.2414	1.0907	0.2025	1.0000	5.0000
A50	29	2.0690	1.2798	0.2377	1.0000	5.0000
A51	29	2.3448	1.1734	0.2179	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=P. Maintain Safety Requirements						
A1	30	3.8000	0.9248	0.1688	1.0000	5.0000
A2	30	3.2667	1.2576	0.2296	1.0000	5.0000
A3	30	2.7667	1.2229	0.2233	1.0000	5.0000
A4	30	2.3333	1.2130	0.2215	1.0000	5.0000
A5	30	3.0667	1.3629	0.2488	1.0000	5.0000
A6	30	2.7333	1.4126	0.2579	1.0000	5.0000
A7	30	3.2000	1.1265	0.2057	1.0000	5.0000
A8	30	3.2000	1.2149	0.2218	1.0000	5.0000
A9	30	2.0667	1.2015	0.2194	1.0000	5.0000
A10	30	2.8000	1.3235	0.2416	1.0000	5.0000
A11	30	3.0333	1.1592	0.2116	1.0000	5.0000
A12	30	2.7667	1.3047	0.2382	1.0000	5.0000
A13	30	2.5333	1.3060	0.2384	1.0000	5.0000
A14	30	2.9333	1.3880	0.2534	1.0000	5.0000
A15	30	2.2667	1.3113	0.2394	1.0000	5.0000
A16	30	2.5333	1.5025	0.2743	1.0000	5.0000
A17	30	2.4333	1.2229	0.2233	1.0000	5.0000
A18	30	2.7667	1.5241	0.2783	1.0000	5.0000
A19	30	2.7000	1.2360	0.2257	1.0000	5.0000
A20	30	2.7333	1.1725	0.2141	1.0000	5.0000
A21	30	2.7667	1.3047	0.2382	1.0000	5.0000
A22	30	3.2333	1.3309	0.2430	1.0000	5.0000
A23	30	2.4000	1.3544	0.2473	1.0000	5.0000
A24	30	2.5333	1.5025	0.2743	1.0000	5.0000
A25	30	2.3667	1.4967	0.2733	1.0000	5.0000
A26	30	2.4667	1.4794	0.2701	1.0000	5.0000
A27	29	2.5862	1.4272	0.2650	1.0000	5.0000
A28	29	2.4138	1.4520	0.2696	1.0000	5.0000
A29	29	2.7586	1.4055	0.2610	1.0000	5.0000
A30	29	3.5517	1.2126	0.2252	1.0000	5.0000
A31	29	3.0690	1.4375	0.2669	1.0000	5.0000
A32	29	2.9655	1.1797	0.2191	1.0000	5.0000
A33	29	3.5862	1.2961	0.2407	1.0000	5.0000
A34	29	3.2414	1.2437	0.2309	1.0000	5.0000
A35	29	2.6207	1.2932	0.2401	1.0000	5.0000
A36	29	2.5517	1.3780	0.2559	1.0000	5.0000
A37	29	2.5862	1.3501	0.2507	1.0000	5.0000
A38	29	2.9310	1.4125	0.2623	1.0000	5.0000
A39	29	2.6897	1.3391	0.2487	1.0000	5.0000
A40	29	3.0690	1.1932	0.2216	1.0000	5.0000
A41	29	2.3103	1.1681	0.2169	1.0000	5.0000
A42	29	2.1379	1.3018	0.2417	1.0000	5.0000
A43	29	2.4483	1.1522	0.2140	1.0000	5.0000
A44	29	2.1724	1.1042	0.2050	1.0000	4.0000
A45	29	2.3793	1.1469	0.2130	1.0000	5.0000
A46	29	2.0690	1.2516	0.2324	1.0000	5.0000
A47	29	1.5862	0.8667	0.1609	1.0000	4.0000
A48	29	2.7241	1.3861	0.2574	1.0000	5.0000
A49	29	2.6897	1.4418	0.2677	1.0000	5.0000
A50	29	2.6552	1.2614	0.2342	1.0000	5.0000
A51	29	2.7241	1.4613	0.2714	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T-Q. Manage Employee's Work						
A1	30	4.2667	0.9444	0.1724	1.0000	5.0000
A2	30	3.4333	1.1943	0.2181	1.0000	5.0000
A3	30	3.9667	1.1592	0.2116	1.0000	5.0000
A4	30	3.4000	1.2758	0.2329	1.0000	5.0000
A5	30	3.6333	1.3767	0.2514	1.0000	5.0000
A6	30	2.9667	1.4016	0.2559	1.0000	5.0000
A7	30	3.0000	1.2318	0.2249	1.0000	5.0000
A8	30	3.7333	1.2576	0.2296	1.0000	5.0000
A9	30	2.1667	1.2888	0.2353	1.0000	5.0000
A10	30	3.1667	1.2617	0.2304	1.0000	5.0000
A11	30	3.1333	1.3322	0.2432	1.0000	5.0000
A12	30	3.8333	1.0199	0.1862	1.0000	5.0000
A13	30	3.4333	1.1943	0.2181	1.0000	5.0000
A14	30	3.0667	1.4840	0.2709	1.0000	5.0000
A15	30	3.2333	1.2507	0.2284	1.0000	5.0000
A16	30	3.5667	1.3817	0.2523	1.0000	5.0000
A17	30	3.5667	1.1351	0.2072	1.0000	5.0000
A18	30	3.4333	1.5013	0.2741	1.0000	5.0000
A19	30	3.7000	1.1492	0.2098	1.0000	5.0000
A20	30	3.8667	0.9732	0.1777	1.0000	5.0000
A21	30	3.9667	1.1592	0.2116	1.0000	5.0000
A22	30	3.7667	1.1043	0.2016	1.0000	5.0000
A23	30	2.9667	1.2726	0.2323	1.0000	5.0000
A24	30	3.1000	1.3481	0.2461	1.0000	5.0000
A25	30	3.2333	1.3566	0.2477	1.0000	5.0000
A26	30	3.7000	1.3933	0.2544	1.0000	5.0000
A27	29	4.0345	0.9443	0.1753	2.0000	5.0000
A28	29	3.5862	1.1501	0.2136	1.0000	5.0000
A29	29	3.8966	1.0122	0.1880	1.0000	5.0000
A30	29	3.8621	0.9533	0.1770	2.0000	5.0000
A31	29	3.6897	1.2565	0.2333	1.0000	5.0000
A32	29	3.8966	1.0122	0.1880	2.0000	5.0000
A33	29	4.0000	0.9258	0.1719	2.0000	5.0000
A34	29	4.1379	0.9151	0.1699	2.0000	5.0000
A35	29	4.0345	0.8653	0.1607	2.0000	5.0000
A36	29	3.5862	1.1501	0.2136	1.0000	5.0000
A37	29	3.3448	1.2328	0.2289	1.0000	5.0000
A38	29	4.0345	0.8230	0.1528	2.0000	5.0000
A39	29	4.0000	1.1339	0.2106	1.0000	5.0000
A40	29	3.5172	1.2711	0.2360	1.0000	5.0000
A41	29	3.7241	1.0656	0.1979	1.0000	5.0000
A42	29	2.8276	1.3905	0.2582	1.0000	5.0000
A43	29	3.5172	1.1219	0.2083	1.0000	5.0000
A44	29	2.9655	1.1175	0.2075	1.0000	5.0000
A45	29	3.4828	1.0563	0.1961	1.0000	5.0000
A46	29	3.2069	1.2065	0.2240	1.0000	5.0000
A47	29	2.2414	0.9876	0.1834	1.0000	4.0000
A48	29	2.8966	1.2634	0.2346	1.0000	5.0000
A49	29	3.3103	1.0387	0.1929	1.0000	5.0000
A50	29	3.6207	1.1153	0.2071	1.0000	5.0000
A51	29	3.4483	1.2126	0.2252	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T-R. Oversee Operations						
A1	30	3.5000	1.3326	0.2433	1.0000	5.0000
A2	29	3.2759	1.3335	0.2476	1.0000	5.0000
A3	29	3.4138	1.4520	0.2696	1.0000	5.0000
A4	29	3.0345	1.5694	0.2914	1.0000	5.0000
A5	29	2.8276	1.5827	0.2939	1.0000	5.0000
A6	29	2.6897	1.3914	0.2584	1.0000	5.0000
A7	29	2.9655	1.3754	0.2554	1.0000	5.0000
A8	29	3.3448	1.4706	0.2731	1.0000	5.0000
A9	29	2.5172	1.4789	0.2746	1.0000	5.0000
A10	29	2.6552	1.3168	0.2445	1.0000	5.0000
A11	29	2.7586	1.4797	0.2748	1.0000	5.0000
A12	29	3.5172	1.3528	0.2512	1.0000	5.0000
A13	29	3.0690	1.3345	0.2478	1.0000	5.0000
A14	29	2.6897	1.4168	0.2631	1.0000	5.0000
A15	29	2.8621	1.3555	0.2517	1.0000	5.0000
A16	29	3.0345	1.5232	0.2829	1.0000	5.0000
A17	29	3.0000	1.6257	0.3019	1.0000	5.0000
A18	29	2.8966	1.6550	0.3073	1.0000	5.0000
A19	29	3.4138	1.4020	0.2603	1.0000	5.0000
A20	29	3.3793	1.3736	0.2551	1.0000	5.0000
A21	29	3.5172	1.4789	0.2746	1.0000	5.0000
A22	29	3.3793	1.4495	0.2692	1.0000	5.0000
A23	29	3.2069	1.4971	0.2780	1.0000	5.0000
A24	29	2.7586	1.5273	0.2836	1.0000	5.0000
A25	29	2.6897	1.4905	0.2768	1.0000	5.0000
A26	29	3.2759	1.6668	0.3095	1.0000	5.0000
A27	29	3.7931	0.9403	0.1746	2.0000	5.0000
A28	29	3.3448	1.0098	0.1875	1.0000	5.0000
A29	29	3.7586	0.8305	0.1542	2.0000	5.0000
A30	29	3.7931	1.0135	0.1882	1.0000	5.0000
A31	29	3.6552	1.2894	0.2394	1.0000	5.0000
A32	29	3.8276	1.0375	0.1927	2.0000	5.0000
A33	29	4.0345	0.7784	0.1445	3.0000	5.0000
A34	29	4.0345	0.8653	0.1607	2.0000	5.0000
A35	29	3.9310	0.7527	0.1398	3.0000	5.0000
A36	29	3.5517	0.9851	0.1829	2.0000	5.0000
A37	29	3.0000	1.1339	0.2106	1.0000	5.0000
A38	29	4.0000	0.8018	0.1489	2.0000	5.0000
A39	29	3.4828	1.1533	0.2142	1.0000	5.0000
A40	29	3.7241	1.1618	0.2157	1.0000	5.0000
A41	29	3.4138	1.0528	0.1955	1.0000	5.0000
A42	29	2.8621	1.3018	0.2417	1.0000	5.0000
A43	29	3.5517	0.9482	0.1761	1.0000	5.0000
A44	29	3.1379	1.1870	0.2204	1.0000	5.0000
A45	29	3.6552	0.9738	0.1808	1.0000	5.0000
A46	29	3.2414	1.0231	0.1900	1.0000	5.0000
A47	29	2.2759	1.0986	0.2040	1.0000	5.0000
A48	28	3.1071	1.2864	0.2431	1.0000	5.0000
A49	29	3.3793	1.0828	0.2011	1.0000	5.0000
A50	29	3.7586	0.7863	0.1460	2.0000	5.0000
A51	29	3.5172	1.0219	0.1898	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=S. Manage Materials & Supplies						
A1	30	2.7333	1.1427	0.2086	1.0000	5.0000
A2	30	2.8000	1.2972	0.2368	1.0000	5.0000
A3	30	2.6667	1.0613	0.1938	1.0000	5.0000
A4	30	1.8667	0.9732	0.1777	1.0000	4.0000
A5	30	2.1000	1.2959	0.2366	1.0000	5.0000
A6	30	2.4333	1.3566	0.2477	1.0000	5.0000
A7	30	2.7667	1.2780	0.2333	1.0000	5.0000
A8	30	2.3667	1.2726	0.2323	1.0000	5.0000
A9	30	1.9000	1.1847	0.2163	1.0000	5.0000
A10	30	2.1000	1.0619	0.1939	1.0000	5.0000
A11	30	2.2333	1.1351	0.2072	1.0000	5.0000
A12	30	2.9667	1.1592	0.2116	1.0000	5.0000
A13	30	2.5000	1.3326	0.2433	1.0000	5.0000
A14	30	2.2667	1.3629	0.2488	1.0000	5.0000
A15	30	2.2333	1.3309	0.2430	1.0000	5.0000
A16	30	1.8333	1.1167	0.2039	1.0000	5.0000
A17	30	2.2667	1.3374	0.2442	1.0000	5.0000
A18	30	2.2667	1.2847	0.2346	1.0000	5.0000
A19	30	2.6000	1.3797	0.2519	1.0000	5.0000
A20	30	3.1333	1.4077	0.2570	1.0000	5.0000
A21	30	3.3333	1.3979	0.2552	1.0000	5.0000
A22	30	2.8667	1.2521	0.2286	1.0000	5.0000
A23	30	3.4333	1.4547	0.2656	1.0000	5.0000
A24	30	1.9667	1.0334	0.1887	1.0000	4.0000
A25	30	1.9000	1.2415	0.2267	1.0000	5.0000
A26	30	2.5667	1.4782	0.2699	1.0000	5.0000
A27	29	2.6552	1.3700	0.2544	1.0000	5.0000
A28	29	2.3793	1.3736	0.2551	1.0000	5.0000
A29	29	2.5172	1.3528	0.2512	1.0000	5.0000
A30	29	3.1379	1.2457	0.2313	1.0000	5.0000
A31	29	3.3793	1.4739	0.2737	1.0000	5.0000
A32	29	2.7241	1.2217	0.2269	1.0000	5.0000
A33	29	3.3793	1.2653	0.2350	1.0000	5.0000
A34	29	3.5172	1.2989	0.2412	1.0000	5.0000
A35	29	2.6207	1.0828	0.2011	1.0000	5.0000
A36	29	2.4828	1.1219	0.2083	1.0000	5.0000
A37	29	2.2069	1.2358	0.2295	1.0000	5.0000
A38	29	2.7241	1.2506	0.2322	1.0000	5.0000
A39	29	2.5862	1.3501	0.2507	1.0000	5.0000
A40	29	3.1379	1.1870	0.2204	1.0000	5.0000
A41	29	2.1034	1.1131	0.2067	1.0000	4.0000
A42	29	2.0690	1.1628	0.2159	1.0000	5.0000
A43	29	2.5862	1.0183	0.1891	1.0000	5.0000
A44	29	2.3103	1.1371	0.2112	1.0000	5.0000
A45	29	2.2759	1.1618	0.2157	1.0000	5.0000
A46	29	2.6552	1.2894	0.2394	1.0000	5.0000
A47	29	2.0000	1.3093	0.2431	1.0000	5.0000
A48	29	2.1379	1.2740	0.2366	1.0000	5.0000
A49	29	2.6897	1.2846	0.2385	1.0000	5.0000
A50	29	2.5862	1.1501	0.2136	1.0000	5.0000
A51	29	3.4138	1.4020	0.2603	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=T. Plan						
A1	30	3.5333	1.3322	0.2432	1.0000	5.0000
A2	30	3.7333	1.0148	0.1853	1.0000	5.0000
A3	30	3.0667	1.4126	0.2579	1.0000	5.0000
A4	30	2.4000	1.4762	0.2695	1.0000	5.0000
A5	30	2.7000	1.5347	0.2802	1.0000	5.0000
A6	30	3.5667	1.2229	0.2233	1.0000	5.0000
A7	30	3.5000	1.1963	0.2184	1.0000	5.0000
A8	30	3.0333	1.4259	0.2603	1.0000	5.0000
A9	30	2.2000	1.3995	0.2555	1.0000	5.0000
A10	30	2.5333	1.5253	0.2785	1.0000	5.0000
A11	30	2.9333	1.3880	0.2534	1.0000	5.0000
A12	30	4.0333	1.0334	0.1887	1.0000	5.0000
A13	30	2.9000	1.1552	0.2109	1.0000	5.0000
A14	30	3.0333	1.3767	0.2514	1.0000	5.0000
A15	30	2.7667	1.4308	0.2612	1.0000	5.0000
A16	30	2.7000	1.6220	0.2961	1.0000	5.0000
A17	30	2.9000	1.4704	0.2685	1.0000	5.0000
A18	30	2.2667	1.5742	0.2874	1.0000	5.0000
A19	30	3.5000	1.2798	0.2337	1.0000	5.0000
A20	30	4.3333	1.0283	0.1877	1.0000	5.0000
A21	30	4.0333	1.1290	0.2061	1.0000	5.0000
A22	30	3.9333	1.1427	0.2086	1.0000	5.0000
A23	30	3.4333	1.3047	0.2382	1.0000	5.0000
A24	30	2.8333	1.3412	0.2449	1.0000	5.0000
A25	30	2.5000	1.3582	0.2480	1.0000	5.0000
A26	30	3.8333	1.2341	0.2253	1.0000	5.0000
A27	29	3.3448	1.3168	0.2445	1.0000	5.0000
A28	29	3.7241	1.1306	0.2100	1.0000	5.0000
A29	29	3.6552	1.2614	0.2342	1.0000	5.0000
A30	29	3.8621	0.9533	0.1770	2.0000	5.0000
A31	29	3.3103	1.4418	0.2677	1.0000	5.0000
A32	29	3.4138	1.3501	0.2507	1.0000	5.0000
A33	29	4.0000	1.0351	0.1922	1.0000	5.0000
A34	29	3.7586	1.2146	0.2256	1.0000	5.0000
A35	29	3.9655	1.0851	0.2015	1.0000	5.0000
A36	29	2.9310	1.1932	0.2216	1.0000	5.0000
A37	29	2.6897	1.4418	0.2677	1.0000	5.0000
A38	29	3.8276	1.0713	0.1989	1.0000	5.0000
A39	29	2.7931	1.4238	0.2644	1.0000	5.0000
A40	29	3.6552	1.2034	0.2235	1.0000	5.0000
A41	29	2.3793	1.4246	0.2645	1.0000	5.0000
A42	29	2.5862	1.3233	0.2457	1.0000	5.0000
A43	29	3.3103	1.2278	0.2280	1.0000	5.0000
A44	29	3.2069	1.4238	0.2644	1.0000	5.0000
A45	29	2.9655	1.1797	0.2191	1.0000	5.0000
A46	29	3.3793	1.2932	0.2401	1.0000	5.0000
A47	29	2.3793	1.1469	0.2130	1.0000	5.0000
A48	29	2.7931	1.4486	0.2690	1.0000	5.0000
A49	29	3.2414	1.1230	0.2085	1.0000	5.0000
A50	29	3.0345	1.1797	0.2191	1.0000	5.0000
A51	29	3.0690	1.2516	0.2324	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=U. Budget						
A1	30	3.2000	1.3493	0.2464	1.0000	5.0000
A2	30	3.3667	1.2452	0.2273	1.0000	5.0000
A3	30	2.5667	1.2507	0.2284	1.0000	5.0000
A4	30	2.5000	1.3326	0.2433	1.0000	5.0000
A5	30	2.4333	1.4547	0.2656	1.0000	5.0000
A6	30	3.1000	1.3983	0.2553	1.0000	5.0000
A7	30	3.4000	1.2205	0.2228	1.0000	5.0000
A8	30	2.7667	1.3047	0.2382	1.0000	5.0000
A9	30	2.0667	1.3629	0.2488	1.0000	5.0000
A10	30	2.2333	1.3047	0.2382	1.0000	5.0000
A11	30	2.8333	1.4162	0.2586	1.0000	5.0000
A12	30	3.8333	1.0532	0.1923	1.0000	5.0000
A13	30	2.8000	1.2149	0.2218	1.0000	5.0000
A14	30	2.7667	1.3566	0.2477	1.0000	5.0000
A15	30	2.7333	1.2847	0.2346	1.0000	5.0000
A16	30	1.9667	1.3257	0.2420	1.0000	5.0000
A17	30	2.4667	1.3578	0.2479	1.0000	5.0000
A18	30	2.2000	1.4948	0.2729	1.0000	5.0000
A19	30	2.9000	1.4468	0.2641	1.0000	5.0000
A20	30	3.9333	1.2576	0.2296	1.0000	5.0000
A21	30	3.9667	1.2172	0.2222	1.0000	5.0000
A22	30	3.4000	1.3287	0.2426	1.0000	5.0000
A23	30	3.8667	1.3060	0.2384	1.0000	5.0000
A24	30	2.2000	1.2704	0.2319	1.0000	5.0000
A25	30	1.8667	1.2794	0.2336	1.0000	5.0000
A26	30	2.8000	1.5403	0.2812	1.0000	5.0000
A27	29	2.4138	1.2106	0.2248	1.0000	5.0000
A28	29	2.5862	1.2961	0.2407	1.0000	5.0000
A29	29	2.7931	1.3727	0.2549	1.0000	5.0000
A30	29	3.3793	1.3205	0.2452	1.0000	5.0000
A31	29	3.0345	1.3754	0.2554	1.0000	5.0000
A32	29	2.5862	1.3233	0.2457	1.0000	5.0000
A33	29	3.1724	1.2837	0.2384	1.0000	5.0000
A34	29	3.1379	1.4072	0.2613	1.0000	5.0000
A35	29	3.0690	1.3074	0.2428	1.0000	5.0000
A36	29	2.5517	1.2980	0.2410	1.0000	5.0000
A37	29	2.2069	1.3464	0.2500	1.0000	5.0000
A38	29	2.9310	1.2798	0.2377	1.0000	5.0000
A39	29	2.5517	1.5718	0.2919	1.0000	5.0000
A40	29	3.2414	1.4055	0.2610	1.0000	5.0000
A41	29	2.0000	1.2817	0.2380	1.0000	5.0000
A42	29	2.1379	1.2457	0.2313	1.0000	5.0000
A43	29	2.4483	1.2417	0.2306	1.0000	5.0000
A44	29	2.6552	1.3700	0.2544	1.0000	5.0000
A45	29	2.3103	1.1983	0.2225	1.0000	5.0000
A46	29	2.8621	1.2457	0.2313	1.0000	5.0000
A47	29	1.8966	0.9390	0.1744	1.0000	4.0000
A48	29	2.3103	1.1681	0.2169	1.0000	5.0000
A49	29	2.7241	1.3861	0.2574	1.0000	5.0000
A50	29	2.4828	1.1219	0.2083	1.0000	5.0000
A51	29	3.0345	1.4011	0.2602	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=V. Practice Security Procedures						
A1	30	3.4333	1.3047	0.2382	1.0000	5.0000
A2	30	3.2000	1.3995	0.2555	1.0000	5.0000
A3	30	2.6667	1.3730	0.2507	1.0000	5.0000
A4	30	2.4333	1.4547	0.2656	1.0000	5.0000
A5	30	2.7333	1.5298	0.2793	1.0000	5.0000
A6	30	2.5667	1.5241	0.2783	1.0000	5.0000
A7	30	3.3667	1.2172	0.2222	1.0000	5.0000
A8	30	3.1667	1.3917	0.2541	1.0000	5.0000
A9	30	2.2667	1.3880	0.2534	1.0000	5.0000
A10	30	2.8000	1.4239	0.2600	1.0000	5.0000
A11	30	2.8333	1.2888	0.2353	1.0000	5.0000
A12	30	2.8667	1.4320	0.2614	1.0000	5.0000
A13	30	2.5667	1.4308	0.2612	1.0000	5.0000
A14	30	2.6000	1.4994	0.2738	1.0000	5.0000
A15	30	2.2333	1.4065	0.2568	1.0000	5.0000
A16	30	2.2667	1.4368	0.2623	1.0000	5.0000
A17	30	2.5000	1.4324	0.2615	1.0000	5.0000
A18	30	2.6000	1.6316	0.2979	1.0000	5.0000
A19	30	2.6667	1.5162	0.2768	1.0000	5.0000
A20	30	2.8000	1.5177	0.2771	1.0000	5.0000
A21	30	2.7333	1.5071	0.2752	1.0000	5.0000
A22	30	3.1667	1.6418	0.2997	1.0000	5.0000
A23	30	2.3333	1.4464	0.2641	1.0000	5.0000
A24	30	2.2667	1.4840	0.2709	1.0000	5.0000
A25	30	2.3333	1.6470	0.3007	1.0000	5.0000
A26	30	2.3000	1.5120	0.2761	1.0000	5.0000
A27	29	2.4483	1.5256	0.2833	1.0000	5.0000
A28	29	2.2414	1.4307	0.2657	1.0000	5.0000
A29	29	2.3793	1.6128	0.2995	1.0000	5.0000
A30	29	3.1379	1.5749	0.2925	1.0000	5.0000
A31	29	3.5172	1.5029	0.2791	1.0000	5.0000
A32	29	2.6897	1.3914	0.2584	1.0000	5.0000
A33	29	3.3448	1.4212	0.2639	1.0000	5.0000
A34	29	3.3793	1.4739	0.2737	1.0000	5.0000
A35	29	2.2759	1.3861	0.2574	1.0000	5.0000
A36	29	2.2414	1.3537	0.2514	1.0000	5.0000
A37	29	2.2069	1.3464	0.2500	1.0000	5.0000
A38	29	2.2414	1.5037	0.2792	1.0000	5.0000
A39	29	2.1379	1.4814	0.2751	1.0000	5.0000
A40	29	2.7931	1.4486	0.2690	1.0000	5.0000
A41	29	2.1724	1.5827	0.2939	1.0000	5.0000
A42	29	2.1034	1.3718	0.2547	1.0000	5.0000
A43	29	2.3103	1.2846	0.2385	1.0000	5.0000
A44	29	2.0000	1.3887	0.2579	1.0000	5.0000
A45	29	2.1034	1.4963	0.2779	1.0000	5.0000
A46	29	1.8621	1.1252	0.2089	1.0000	5.0000
A47	28	1.3571	0.9512	0.1798	1.0000	5.0000
A48	29	2.3793	1.5449	0.2869	1.0000	5.0000
A49	29	2.4828	1.5029	0.2791	1.0000	5.0000
A50	29	2.6552	1.4212	0.2639	1.0000	5.0000
A51	29	3.4828	1.5725	0.2920	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=A. Staff Positions						
K1	28	4.1071	0.9560	0.1807	2.0000	5.0000
K2	28	4.0714	0.8997	0.1700	2.0000	5.0000
K3	28	3.3214	1.2188	0.2303	1.0000	5.0000
K4	28	4.3571	0.8262	0.1561	3.0000	5.0000
K5	28	4.2500	0.7993	0.1511	3.0000	5.0000
K6	28	3.8571	0.9705	0.1834	2.0000	5.0000
K7	28	3.8929	0.9165	0.1732	2.0000	5.0000
K8	28	3.0714	1.5618	0.2951	1.0000	5.0000
K9	28	3.5000	1.4272	0.2697	1.0000	5.0000
K10	28	3.1429	1.4584	0.2756	1.0000	5.0000
K11	27	2.8148	1.2721	0.2448	1.0000	5.0000
K12	25	2.4000	1.4434	0.2887	1.0000	5.0000
K13	27	2.7407	1.4569	0.2804	1.0000	5.0000
K14	27	2.4444	1.3960	0.2687	1.0000	5.0000
K15	27	2.3333	1.3868	0.2669	1.0000	5.0000
K16	27	3.1852	1.3312	0.2562	1.0000	5.0000
K17	27	3.4444	1.2506	0.2407	1.0000	5.0000
K18	27	2.7407	1.5589	0.3000	1.0000	5.0000
K19	27	3.2963	1.5144	0.2914	1.0000	5.0000
K20	27	3.0000	1.5191	0.2924	1.0000	5.0000
K21	27	2.3333	1.4412	0.2774	1.0000	5.0000
K22	31	3.3871	1.4760	0.2651	1.0000	5.0000
K23	31	3.0000	1.5275	0.2744	1.0000	5.0000
K24	31	3.5806	1.5658	0.2812	1.0000	5.0000
K25	31	2.5806	1.7469	0.3138	1.0000	5.0000
K26	31	3.5161	1.3631	0.2448	1.0000	5.0000
K27	31	3.4839	1.3384	0.2404	1.0000	5.0000
K28	31	2.9032	1.5134	0.2718	1.0000	5.0000
K29	29	2.3793	1.5449	0.2869	1.0000	5.0000
K30	31	2.8387	1.4854	0.2668	1.0000	5.0000
K31	31	3.1290	1.5436	0.2772	1.0000	5.0000
K32	30	3.2000	1.5844	0.2893	1.0000	5.0000
K33	31	3.0000	1.4832	0.2664	1.0000	5.0000
K34	31	3.0323	1.4716	0.2643	1.0000	5.0000
K35	29	2.0345	1.4996	0.2785	1.0000	5.0000
K36	30	2.4667	1.3322	0.2432	1.0000	5.0000
K37	30	1.9333	1.2847	0.2346	1.0000	5.0000
K38	30	2.4333	1.4782	0.2699	1.0000	5.0000
K39	30	2.6333	1.5196	0.2774	1.0000	5.0000
K40	30	2.9667	1.4259	0.2603	1.0000	5.0000
K41	30	4.2000	0.9965	0.1819	1.0000	5.0000
K42	29	1.7931	1.1765	0.2185	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=B. Manage Position Requirements						
K1	28	3.8214	1.0905	0.2061	1.0000	5.0000
K2	28	4.0000	0.9813	0.1854	2.0000	5.0000
K3	28	3.3571	1.1616	0.2195	1.0000	5.0000
K4	28	4.3929	0.9560	0.1807	2.0000	5.0000
K5	28	4.1429	0.9705	0.1834	2.0000	5.0000
K6	28	3.3214	1.1880	0.2245	1.0000	5.0000
K7	28	3.3214	1.3068	0.2470	1.0000	5.0000
K8	28	3.0000	1.4657	0.2770	1.0000	5.0000
K9	28	3.1071	1.3968	0.2640	1.0000	5.0000
K10	28	3.4286	1.4254	0.2694	1.0000	5.0000
K11	27	2.8519	1.2620	0.2429	1.0000	5.0000
K12	25	2.3200	1.3760	0.2752	1.0000	5.0000
K13	27	2.4074	1.4212	0.2735	1.0000	5.0000
K14	27	2.3333	1.3868	0.2669	1.0000	5.0000
K15	27	2.3704	1.3629	0.2623	1.0000	5.0000
K16	27	3.1852	1.1779	0.2267	1.0000	5.0000
K17	27	3.5185	1.2207	0.2349	1.0000	5.0000
K18	27	2.7778	1.5021	0.2891	1.0000	5.0000
K19	27	3.3704	1.4715	0.2832	1.0000	5.0000
K20	27	2.6296	1.5726	0.3026	1.0000	5.0000
K21	27	2.2963	1.4092	0.2712	1.0000	5.0000
K22	31	3.6129	1.4066	0.2526	1.0000	5.0000
K23	31	3.0000	1.6533	0.2969	1.0000	5.0000
K24	31	2.7097	1.6369	0.2940	1.0000	5.0000
K25	31	2.0968	1.3504	0.2425	1.0000	5.0000
K26	31	3.0323	1.4488	0.2602	1.0000	5.0000
K27	31	3.3548	1.4035	0.2521	1.0000	5.0000
K28	31	2.5161	1.5678	0.2816	1.0000	5.0000
K29	29	2.4138	1.5473	0.2873	1.0000	5.0000
K30	31	2.9677	1.4716	0.2643	1.0000	5.0000
K31	31	2.9677	1.5380	0.2762	1.0000	5.0000
K32	30	3.2333	1.5241	0.2783	1.0000	5.0000
K33	31	2.5161	1.4346	0.2577	1.0000	5.0000
K34	31	2.8387	1.5726	0.2825	1.0000	5.0000
K35	29	1.8966	1.3976	0.2595	1.0000	5.0000
K36	30	2.1333	1.3322	0.2432	1.0000	4.0000
K37	30	1.6333	1.0662	0.1947	1.0000	4.0000
K38	30	2.2000	1.2704	0.2319	1.0000	5.0000
K39	30	2.2000	1.3235	0.2416	1.0000	5.0000
K40	30	2.6667	1.3476	0.2460	1.0000	5.0000
K41	30	4.2667	0.7397	0.1350	3.0000	5.0000
K42	29	1.4483	0.7831	0.1454	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T=C. Enforce EEO Policies						
K1	28	3.5000	1.2019	0.2271	1.0000	5.0000
K2	28	3.1786	1.1239	0.2124	1.0000	5.0000
K3	28	2.5714	1.1031	0.2085	1.0000	5.0000
K4	28	2.8571	1.0789	0.2039	1.0000	5.0000
K5	28	2.8214	1.2188	0.2303	1.0000	5.0000
K6	28	4.5000	0.7935	0.1500	3.0000	5.0000
K7	28	4.2857	0.7629	0.1442	3.0000	5.0000
K8	28	3.0357	1.3467	0.2545	1.0000	5.0000
K9	28	2.9643	1.5512	0.2931	1.0000	5.0000
K10	28	3.3214	1.3623	0.2574	1.0000	5.0000
K11	27	2.1481	1.1670	0.2246	1.0000	4.0000
K12	25	2.4400	1.4166	0.2833	1.0000	5.0000
K13	27	2.4815	1.5031	0.2893	1.0000	5.0000
K14	27	2.9259	1.3566	0.2611	1.0000	5.0000
K15	27	3.0370	1.4539	0.2798	1.0000	5.0000
K16	27	3.0000	1.3587	0.2615	1.0000	5.0000
K17	27	2.8889	1.3397	0.2578	1.0000	5.0000
K18	27	2.5556	1.4763	0.2841	1.0000	5.0000
K19	27	2.1111	1.0500	0.2021	1.0000	5.0000
K20	27	2.3333	1.4936	0.2874	1.0000	5.0000
K21	27	2.0741	1.2987	0.2499	1.0000	5.0000
K22	31	3.0645	1.5692	0.2818	1.0000	5.0000
K23	31	2.1935	1.3271	0.2384	1.0000	5.0000
K24	31	3.5161	1.4576	0.2618	1.0000	5.0000
K25	31	2.0323	1.4488	0.2602	1.0000	5.0000
K26	31	4.1935	1.0139	0.1821	1.0000	5.0000
K27	31	3.8065	1.2495	0.2244	1.0000	5.0000
K28	31	2.0968	1.3989	0.2513	1.0000	5.0000
K29	29	1.9655	1.4011	0.2602	1.0000	5.0000
K30	31	2.6129	1.5637	0.2808	1.0000	5.0000
K31	31	1.9032	1.2742	0.2289	1.0000	5.0000
K32	30	2.1000	1.1847	0.2163	1.0000	5.0000
K33	31	2.8065	1.5366	0.2760	1.0000	5.0000
K34	31	1.9355	1.4127	0.2537	1.0000	5.0000
K35	29	2.3448	1.5417	0.2863	1.0000	5.0000
K36	30	1.7667	1.0726	0.1958	1.0000	4.0000
K37	30	2.0000	1.3896	0.2537	1.0000	5.0000
K38	30	1.8000	1.2704	0.2319	1.0000	5.0000
K39	30	2.4667	1.4077	0.2570	1.0000	5.0000
K40	30	2.4333	1.4547	0.2656	1.0000	5.0000
K41	30	3.4000	1.4288	0.2609	1.0000	5.0000
K42	29	1.7586	1.0231	0.1900	1.0000	4.0000

CIVPERS - SUMMARY UNIVARIATE STATS FOR KNOWLEDGES

Page: 4

variable	n	mean	std	stderr	min	max
By-> T=D. Provide Recognition & Rewards						
K1	28	3.3571	1.1292	0.2134	1.0000	5.0000
K2	28	2.8214	1.1880	0.2245	1.0000	5.0000
K3	28	2.1071	1.2864	0.2431	1.0000	5.0000
K4	28	3.0357	1.3467	0.2545	1.0000	5.0000
K5	28	2.0714	1.2451	0.2353	1.0000	5.0000
K6	28	3.3929	1.0659	0.2014	1.0000	5.0000
K7	28	3.2500	1.2057	0.2279	1.0000	5.0000
K8	28	4.3214	0.9049	0.1710	2.0000	5.0000
K9	28	2.4643	1.2905	0.2439	1.0000	5.0000
K10	28	4.3214	0.7724	0.1460	3.0000	5.0000
K11	27	3.3704	1.1815	0.2274	1.0000	5.0000
K12	25	2.2000	1.2910	0.2582	1.0000	4.0000
K13	27	2.0370	1.1596	0.2232	1.0000	5.0000
K14	27	2.0000	1.0742	0.2067	1.0000	4.0000
K15	27	2.4815	1.2821	0.2467	1.0000	5.0000
K16	27	2.6667	1.0742	0.2067	1.0000	5.0000
K17	27	2.6296	1.3629	0.2623	1.0000	5.0000
K18	27	2.1481	1.2921	0.2487	1.0000	5.0000
K19	27	3.1111	1.3107	0.2522	1.0000	5.0000
K20	27	2.4815	1.5285	0.2942	1.0000	5.0000
K21	27	1.7778	0.9740	0.1875	1.0000	4.0000
K22	31	2.4194	1.6688	0.2997	1.0000	5.0000
K23	31	2.4839	1.5247	0.2738	1.0000	5.0000
K24	31	2.7097	1.5534	0.2790	1.0000	5.0000
K25	31	1.9677	1.4020	0.2518	1.0000	5.0000
K26	31	2.9355	1.4127	0.2537	1.0000	5.0000
K27	31	2.4516	1.3623	0.2447	1.0000	5.0000
K28	31	1.9355	1.2632	0.2269	1.0000	5.0000
K29	29	1.8966	1.3187	0.2449	1.0000	5.0000
K30	31	2.1613	1.3190	0.2369	1.0000	5.0000
K31	31	2.6452	1.4503	0.2605	1.0000	5.0000
K32	30	2.4667	1.3060	0.2384	1.0000	5.0000
K33	31	1.7419	0.9989	0.1794	1.0000	5.0000
K34	31	1.4516	0.9946	0.1786	1.0000	4.0000
K35	29	2.5517	1.5489	0.2876	1.0000	5.0000
K36	30	1.7000	1.1788	0.2152	1.0000	5.0000
K37	30	1.9333	1.3113	0.2394	1.0000	5.0000
K38	30	1.6667	1.1547	0.2108	1.0000	5.0000
K39	30	2.0333	1.3767	0.2514	1.0000	5.0000
K40	30	2.3667	1.4259	0.2603	1.0000	5.0000
K41	30	3.3333	1.3979	0.2552	1.0000	5.0000
K42	29	1.2069	0.5593	0.1039	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T=E. Motivate Employees						
K1	28	3.4643	1.4006	0.2647	1.0000	5.0000
K2	28	3.3214	1.2488	0.2360	1.0000	5.0000
K3	28	2.5357	1.2615	0.2384	1.0000	5.0000
K4	28	3.0357	1.2905	0.2439	1.0000	5.0000
K5	28	2.3214	1.2488	0.2360	1.0000	5.0000
K6	28	3.3929	1.2274	0.2320	1.0000	5.0000
K7	28	3.4286	1.1362	0.2147	1.0000	5.0000
K8	28	3.8929	1.1333	0.2142	1.0000	5.0000
K9	28	3.2143	1.2869	0.2432	1.0000	5.0000
K10	28	4.1429	0.9315	0.1760	1.0000	5.0000
K11	27	3.8148	1.1448	0.2203	1.0000	5.0000
K12	25	2.5200	1.4754	0.2951	1.0000	5.0000
K13	27	3.1111	1.3107	0.2522	1.0000	5.0000
K14	27	3.3704	1.2755	0.2455	1.0000	5.0000
K15	27	3.4444	1.2506	0.2407	1.0000	5.0000
K16	27	3.8148	1.0755	0.2070	1.0000	5.0000
K17	27	3.5926	1.1522	0.2217	1.0000	5.0000
K18	27	2.3704	1.3909	0.2677	1.0000	5.0000
K19	27	3.1852	1.4686	0.2826	1.0000	5.0000
K20	27	2.9259	1.2687	0.2442	1.0000	5.0000
K21	27	1.8889	1.0500	0.2021	1.0000	4.0000
K22	31	2.1290	1.4316	0.2571	1.0000	5.0000
K23	31	2.6774	1.4694	0.2639	1.0000	5.0000
K24	31	3.0968	1.4458	0.2597	1.0000	5.0000
K25	31	2.1935	1.3271	0.2384	1.0000	5.0000
K26	31	2.5806	1.4554	0.2614	1.0000	5.0000
K27	31	2.3226	1.3757	0.2471	1.0000	5.0000
K28	31	2.5484	1.3125	0.2357	1.0000	5.0000
K29	29	1.7586	1.1543	0.2144	1.0000	5.0000
K30	31	1.9355	1.1814	0.2122	1.0000	5.0000
K31	31	1.5806	0.8860	0.1591	1.0000	4.0000
K32	30	1.9000	1.0939	0.1997	1.0000	5.0000
K33	31	1.5806	1.1768	0.2114	1.0000	5.0000
K34	31	1.7742	1.2030	0.2161	1.0000	5.0000
K35	29	2.3448	1.3958	0.2592	1.0000	5.0000
K36	30	1.5667	1.0726	0.1958	1.0000	4.0000
K37	30	1.5000	0.8610	0.1572	1.0000	4.0000
K38	30	1.5000	0.9002	0.1644	1.0000	4.0000
K39	30	1.7000	1.1188	0.2043	1.0000	4.0000
K40	30	2.4667	1.2794	0.2336	1.0000	5.0000
K41	30	3.2333	1.4065	0.2568	1.0000	5.0000
K42	29	1.2414	0.5766	0.1071	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T=F. Manage Employees W						
K1	28	2.6786	1.4670	0.2772	1.0000	5.0000
K2	28	3.4643	1.2905	0.2439	1.0000	5.0000
K3	28	2.2500	1.3777	0.2604	1.0000	5.0000
K4	28	2.4643	1.2013	0.2270	1.0000	5.0000
K5	28	2.0357	1.1701	0.2211	1.0000	5.0000
K6	28	2.9643	1.5026	0.2840	1.0000	5.0000
K7	28	2.6429	1.3935	0.2633	1.0000	5.0000
K8	28	2.7500	1.4561	0.2752	1.0000	5.0000
K9	28	3.2500	1.4305	0.2703	1.0000	5.0000
K10	28	3.5357	1.3467	0.2545	1.0000	5.0000
K11	27	2.6667	1.4412	0.2774	1.0000	5.0000
K12	25	2.1200	1.3638	0.2728	1.0000	5.0000
K13	27	4.4444	0.9337	0.1797	2.0000	5.0000
K14	27	4.4815	1.0514	0.2023	1.0000	5.0000
K15	27	4.0000	1.0377	0.1997	2.0000	5.0000
K16	27	2.4444	1.4500	0.2791	1.0000	5.0000
K17	27	2.4815	1.2207	0.2349	1.0000	5.0000
K18	27	2.0741	1.2380	0.2383	1.0000	5.0000
K19	27	2.1852	1.3312	0.2562	1.0000	5.0000
K20	27	3.5926	1.2172	0.2342	1.0000	5.0000
K21	27	2.0370	1.2552	0.2416	1.0000	5.0000
K22	31	2.2903	1.5534	0.2790	1.0000	5.0000
K23	31	2.1290	1.4547	0.2613	1.0000	5.0000
K24	31	3.6452	1.2793	0.2298	1.0000	5.0000
K25	31	1.8710	1.3599	0.2443	1.0000	5.0000
K26	31	3.3548	1.4271	0.2563	1.0000	5.0000
K27	31	3.0323	1.3034	0.2341	1.0000	5.0000
K28	31	2.6774	1.4919	0.2680	1.0000	5.0000
K29	29	1.7241	1.0986	0.2040	1.0000	4.0000
K30	31	1.7419	1.0945	0.1966	1.0000	4.0000
K31	31	1.2258	0.4973	0.0893	1.0000	3.0000
K32	30	1.2333	0.5040	0.0920	1.0000	3.0000
K33	31	2.5161	1.5027	0.2699	1.0000	5.0000
K34	31	2.2258	1.1750	0.2110	1.0000	5.0000
K35	29	1.8621	1.2167	0.2259	1.0000	5.0000
K36	30	1.6667	1.0933	0.1996	1.0000	4.0000
K37	30	1.4000	0.7701	0.1406	1.0000	3.0000
K38	30	1.4667	1.0080	0.1840	1.0000	5.0000
K39	30	1.7667	1.0726	0.1958	1.0000	4.0000
K40	30	1.9000	1.1250	0.2054	1.0000	5.0000
K41	30	2.4667	1.2794	0.2336	1.0000	5.0000
K42	29	1.4828	0.8710	0.1617	1.0000	4.0000

variable	n	mean	std	stderr	min	max
By-> T=6. Evaluate Performance						
K1	28	3.5714	1.5499	0.2929	1.0000	5.0000
K2	28	3.6071	1.2274	0.2320	1.0000	5.0000
K3	28	2.5357	1.4778	0.2793	1.0000	5.0000
K4	28	3.3571	1.4198	0.2683	1.0000	5.0000
K5	28	2.6071	1.4991	0.2833	1.0000	5.0000
K6	28	3.1786	1.2188	0.2303	1.0000	5.0000
K7	28	2.9643	1.2013	0.2270	1.0000	5.0000
K8	28	3.9286	1.2150	0.2296	1.0000	5.0000
K9	28	3.8929	1.3700	0.2589	1.0000	5.0000
K10	28	4.7500	0.7005	0.1324	2.0000	5.0000
K11	27	3.4074	1.3376	0.2574	1.0000	5.0000
K12	25	2.5200	1.4754	0.2951	1.0000	5.0000
K13	27	3.5926	1.4744	0.2837	1.0000	5.0000
K14	27	3.0370	1.5562	0.2995	1.0000	5.0000
K15	27	3.6667	1.1094	0.2135	1.0000	5.0000
K16	27	3.2222	1.2506	0.2407	1.0000	5.0000
K17	27	3.3333	1.3587	0.2615	1.0000	5.0000
K18	27	2.1852	1.1107	0.2138	1.0000	4.0000
K19	27	2.7407	1.4302	0.2752	1.0000	5.0000
K20	27	2.5185	1.3970	0.2688	1.0000	5.0000
K21	27	1.9259	1.1068	0.2130	1.0000	4.0000
K22	31	2.7419	1.7695	0.3178	1.0000	5.0000
K23	31	2.5806	1.6487	0.2961	1.0000	5.0000
K24	31	3.3548	1.3552	0.2434	1.0000	5.0000
K25	31	1.9677	1.3288	0.2387	1.0000	5.0000
K26	31	3.6129	1.4984	0.2691	1.0000	5.0000
K27	31	2.6774	1.4694	0.2639	1.0000	5.0000
K28	31	2.2581	1.3408	0.2408	1.0000	5.0000
K29	29	1.6897	1.1983	0.2225	1.0000	5.0000
K30	31	2.0000	1.1832	0.2125	1.0000	5.0000
K31	31	1.6129	0.9892	0.1777	1.0000	4.0000
K32	30	1.5667	0.9714	0.1774	1.0000	5.0000
K33	31	1.8065	1.3018	0.2338	1.0000	5.0000
K34	31	2.0000	1.2111	0.2175	1.0000	5.0000
K35	29	2.7931	1.6120	0.2993	1.0000	5.0000
K36	30	1.8667	1.2794	0.2336	1.0000	5.0000
K37	30	1.4667	0.9371	0.1711	1.0000	4.0000
K38	30	1.6667	1.1547	0.2108	1.0000	5.0000
K39	30	1.7333	1.0483	0.1914	1.0000	4.0000
K40	30	2.0000	1.2865	0.2349	1.0000	5.0000
K41	30	3.4333	1.3309	0.2430	1.0000	5.0000
K42	29	1.3448	0.7689	0.1428	1.0000	4.0000

CIVPERS - SUMMARY UNIVARIATE STATS FOR KNOWLEDGES

Page: 8

variable	n	mean	std	stderr	min	max
By-> T-H. Discipline Employees						
K1	28	2.8571	1.3801	0.2608	1.0000	5.0000
K2	28	3.3571	1.2828	0.2424	1.0000	5.0000
K3	28	2.3214	1.4156	0.2675	1.0000	5.0000
K4	28	2.7857	1.3705	0.2590	1.0000	5.0000
K5	28	2.2143	1.3154	0.2486	1.0000	5.0000
K6	28	3.1429	1.5327	0.2897	1.0000	5.0000
K7	28	2.7500	1.3506	0.2552	1.0000	5.0000
K8	28	2.7857	1.4493	0.2739	1.0000	5.0000
K9	28	3.7500	1.2946	0.2447	1.0000	5.0000
K10	28	3.6429	1.3393	0.2531	1.0000	5.0000
K11	27	2.6296	1.4451	0.2781	1.0000	5.0000
K12	25	2.3200	1.4353	0.2871	1.0000	5.0000
K13	27	3.8889	1.3397	0.2578	1.0000	5.0000
K14	27	3.5185	1.5051	0.2893	1.0000	5.0000
K15	27	4.6667	0.6794	0.1307	3.0000	5.0000
K16	27	2.5185	1.6260	0.3129	1.0000	5.0000
K17	27	2.6667	1.3587	0.2615	1.0000	5.0000
K18	27	1.8148	1.0755	0.2070	1.0000	4.0000
K19	27	2.3704	1.3344	0.2568	1.0000	5.0000
K20	27	2.9259	1.6391	0.3154	1.0000	5.0000
K21	27	1.7407	0.9842	0.1894	1.0000	4.0000
K22	31	2.3226	1.6204	0.2910	1.0000	5.0000
K23	31	1.9677	1.3536	0.2431	1.0000	5.0000
K24	31	3.8387	1.2935	0.2323	1.0000	5.0000
K25	31	2.0000	1.3166	0.2365	1.0000	5.0000
K26	31	4.1935	1.0462	0.1879	1.0000	5.0000
K27	31	3.6129	1.2564	0.2257	1.0000	5.0000
K28	31	2.3226	1.3263	0.2382	1.0000	5.0000
K29	29	1.7586	1.2146	0.2256	1.0000	5.0000
K30	31	2.0323	1.2776	0.2295	1.0000	5.0000
K31	31	1.1290	0.3408	0.0612	1.0000	2.0000
K32	30	1.3000	0.5960	0.1088	1.0000	3.0000
K33	31	2.2903	1.5957	0.2866	1.0000	5.0000
K34	31	2.2903	1.2435	0.2233	1.0000	5.0000
K35	29	2.1034	1.4229	0.2642	1.0000	5.0000
K36	30	1.6000	1.0700	0.1953	1.0000	4.0000
K37	30	1.5333	1.0080	0.1840	1.0000	4.0000
K38	30	1.4667	0.8604	0.1571	1.0000	4.0000
K39	30	1.9667	1.1290	0.2061	1.0000	4.0000
K40	30	1.8667	1.2521	0.2286	1.0000	5.0000
K41	30	2.8333	1.3917	0.2541	1.0000	5.0000
K42	29	2.0345	1.2672	0.2353	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=I. Train & Develop Employees						
K1	28	3.5000	1.2620	0.2385	1.0000	5.0000
K2	28	3.4286	1.2889	0.2436	1.0000	5.0000
K3	28	2.4643	1.3467	0.2545	1.0000	5.0000
K4	28	3.1429	1.3254	0.2505	1.0000	5.0000
K5	28	2.9643	1.4006	0.2647	1.0000	5.0000
K6	28	3.5357	1.1380	0.2151	1.0000	5.0000
K7	28	3.2143	1.2578	0.2377	1.0000	5.0000
K8	28	3.1071	1.1655	0.2203	1.0000	5.0000
K9	28	3.1071	1.3427	0.2538	1.0000	5.0000
K10	28	3.9643	0.9616	0.1817	1.0000	5.0000
K11	27	3.1481	1.4332	0.2758	1.0000	5.0000
K12	25	2.3600	1.4686	0.2937	1.0000	5.0000
K13	27	2.5556	1.1875	0.2285	1.0000	5.0000
K14	27	2.6296	1.2755	0.2455	1.0000	5.0000
K15	27	2.8889	1.1209	0.2157	1.0000	5.0000
K16	27	4.6667	0.6794	0.1307	3.0000	5.0000
K17	27	4.0000	1.0377	0.1997	1.0000	5.0000
K18	27	1.7407	1.0225	0.1968	1.0000	4.0000
K19	27	2.1111	1.2506	0.2407	1.0000	5.0000
K20	27	2.1852	1.2415	0.2389	1.0000	5.0000
K21	27	1.8519	1.0635	0.2047	1.0000	4.0000
K22	31	2.5484	1.5883	0.2853	1.0000	5.0000
K23	31	2.5484	1.5457	0.2776	1.0000	5.0000
K24	31	2.8387	1.4398	0.2586	1.0000	5.0000
K25	31	2.0323	1.2243	0.2199	1.0000	5.0000
K26	31	2.8387	1.4398	0.2586	1.0000	5.0000
K27	31	2.6129	1.3584	0.2440	1.0000	5.0000
K28	31	2.9355	1.4361	0.2579	1.0000	5.0000
K29	29	1.7241	1.1306	0.2100	1.0000	5.0000
K30	31	2.2258	1.3592	0.2441	1.0000	5.0000
K31	31	2.3548	1.2530	0.2250	1.0000	5.0000
K32	30	2.0333	1.0334	0.1887	1.0000	5.0000
K33	31	1.6452	1.1416	0.2050	1.0000	5.0000
K34	31	2.6452	1.2261	0.2202	1.0000	5.0000
K35	29	2.1379	1.3816	0.2566	1.0000	5.0000
K36	30	1.9333	1.0807	0.1973	1.0000	4.0000
K37	30	1.6000	0.9685	0.1768	1.0000	4.0000
K38	30	2.0333	1.2726	0.2323	1.0000	5.0000
K39	30	1.9667	1.1592	0.2116	1.0000	5.0000
K40	30	2.3333	1.3730	0.2507	1.0000	5.0000
K41	30	3.7667	1.0063	0.1837	1.0000	5.0000
K42	29	1.2414	0.6356	0.1180	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T-J. Conduct Meetings & Briefings						
K1	28	2.3214	1.3068	0.2470	1.0000	5.0000
K2	28	2.0357	1.2317	0.2328	1.0000	5.0000
K3	28	1.7500	1.0408	0.1967	1.0000	5.0000
K4	28	1.8929	1.0659	0.2014	1.0000	4.0000
K5	28	1.8929	0.9940	0.1879	1.0000	4.0000
K6	28	2.3214	1.2488	0.2360	1.0000	5.0000
K7	28	2.2500	1.2057	0.2279	1.0000	5.0000
K8	28	2.2143	1.1661	0.2204	1.0000	5.0000
K9	28	2.1071	1.3427	0.2538	1.0000	5.0000
K10	28	2.3214	1.1239	0.2124	1.0000	5.0000
K11	27	2.6296	1.4182	0.2729	1.0000	5.0000
K12	25	2.1600	1.4048	0.2810	1.0000	5.0000
K13	27	2.5926	1.3085	0.2518	1.0000	5.0000
K14	27	2.5185	1.3970	0.2688	1.0000	5.0000
K15	27	2.7407	1.5088	0.2904	1.0000	5.0000
K16	27	2.4815	1.3408	0.2580	1.0000	5.0000
K17	27	2.4074	1.1851	0.2281	1.0000	5.0000
K18	27	1.9259	1.0715	0.2062	1.0000	4.0000
K19	27	1.9630	1.0913	0.2100	1.0000	5.0000
K20	27	2.2593	1.2586	0.2422	1.0000	5.0000
K21	27	1.8519	0.9488	0.1826	1.0000	4.0000
K22	31	2.1935	1.4005	0.2515	1.0000	5.0000
K23	31	2.3548	1.2530	0.2250	1.0000	5.0000
K24	31	2.3871	1.4301	0.2569	1.0000	5.0000
K25	31	1.7419	1.2102	0.2174	1.0000	5.0000
K26	31	2.2581	1.3897	0.2496	1.0000	5.0000
K27	31	2.2581	1.2374	0.2222	1.0000	5.0000
K28	31	2.3226	1.3010	0.2337	1.0000	5.0000
K29	29	1.5517	0.9482	0.1761	1.0000	5.0000
K30	31	2.0000	1.2649	0.2272	1.0000	5.0000
K31	31	1.9355	1.2365	0.2221	1.0000	5.0000
K32	30	2.2333	1.3566	0.2477	1.0000	5.0000
K33	31	2.0323	1.2512	0.2247	1.0000	5.0000
K34	31	2.6129	1.2296	0.2208	1.0000	5.0000
K35	29	1.6552	1.0782	0.2002	1.0000	4.0000
K36	30	2.0333	1.1885	0.2170	1.0000	5.0000
K37	30	2.2000	1.1567	0.2112	1.0000	4.0000
K38	30	2.1000	1.1250	0.2054	1.0000	4.0000
K39	30	2.3333	1.1842	0.2162	1.0000	4.0000
K40	30	2.1333	1.2521	0.2286	1.0000	5.0000
K41	30	3.1333	1.3322	0.2432	1.0000	5.0000
K42	29	1.2759	0.6490	0.1205	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T=K. Provide Orientation						
K1	28	2.6429	1.2536	0.2369	1.0000	5.0000
K2	28	2.6429	1.4198	0.2683	1.0000	5.0000
K3	28	2.4286	1.2301	0.2325	1.0000	5.0000
K4	28	2.7143	1.3012	0.2459	1.0000	5.0000
K5	28	2.1786	1.2188	0.2303	1.0000	5.0000
K6	28	2.9286	1.2745	0.2409	1.0000	5.0000
K7	28	2.8929	1.0659	0.2014	1.0000	4.0000
K8	28	2.4286	1.2889	0.2436	1.0000	5.0000
K9	28	3.0357	1.1701	0.2211	1.0000	5.0000
K10	28	3.0000	1.1863	0.2242	1.0000	5.0000
K11	27	2.5926	1.2484	0.2402	1.0000	5.0000
K12	25	2.3600	1.5242	0.3048	1.0000	5.0000
K13	27	2.6296	1.2449	0.2396	1.0000	5.0000
K14	27	2.8519	1.2921	0.2487	1.0000	5.0000
K15	27	3.0000	1.3587	0.2615	1.0000	5.0000
K16	27	2.9259	1.2380	0.2383	1.0000	5.0000
K17	27	2.9630	1.0913	0.2100	1.0000	5.0000
K18	27	2.2963	1.2954	0.2493	1.0000	5.0000
K19	27	2.4444	1.3397	0.2578	1.0000	5.0000
K20	27	3.0370	1.3440	0.2586	1.0000	5.0000
K21	27	2.4444	1.1209	0.2157	1.0000	5.0000
K22	31	2.6129	1.3584	0.2440	1.0000	5.0000
K23	31	2.1613	1.2137	0.2180	1.0000	5.0000
K24	31	3.5161	1.3631	0.2448	1.0000	5.0000
K25	31	2.3226	1.3512	0.2427	1.0000	5.0000
K26	31	2.5484	1.1500	0.2066	1.0000	5.0000
K27	31	2.4516	1.3623	0.2447	1.0000	5.0000
K28	31	3.0645	1.1814	0.2122	1.0000	5.0000
K29	29	1.8621	1.2167	0.2259	1.0000	5.0000
K30	31	2.0645	1.2093	0.2172	1.0000	5.0000
K31	31	1.6774	1.1369	0.2042	1.0000	5.0000
K32	30	2.1333	1.3060	0.2384	1.0000	5.0000
K33	31	2.1935	1.3520	0.2428	1.0000	5.0000
K34	31	3.1613	1.0984	0.1973	1.0000	5.0000
K35	29	1.8966	1.2055	0.2239	1.0000	5.0000
K36	30	2.4333	1.3047	0.2382	1.0000	5.0000
K37	30	2.4333	1.1651	0.2127	1.0000	5.0000
K38	30	2.5000	1.2247	0.2236	1.0000	5.0000
K39	30	2.6333	1.2452	0.2273	1.0000	5.0000
K40	30	2.6667	1.2130	0.2215	1.0000	5.0000
K41	30	3.8667	1.1366	0.2075	1.0000	5.0000
K42	29	1.6897	1.2278	0.2280	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=L. Communicate						
K1	28	3.2500	1.6245	0.3070	1.0000	5.0000
K2	28	3.1071	1.4742	0.2786	1.0000	5.0000
K3	28	2.7143	1.4872	0.2810	1.0000	5.0000
K4	28	3.2857	1.3840	0.2615	1.0000	5.0000
K5	28	2.8929	1.2864	0.2431	1.0000	5.0000
K6	28	3.3929	1.3968	0.2640	1.0000	5.0000
K7	28	3.1071	1.3700	0.2589	1.0000	5.0000
K8	28	3.1429	1.5084	0.2851	1.0000	5.0000
K9	28	3.3571	1.3666	0.2583	1.0000	5.0000
K10	28	4.0357	1.1380	0.2151	1.0000	5.0000
K11	27	3.2222	1.3107	0.2522	1.0000	5.0000
K12	25	2.7200	1.6961	0.3392	1.0000	5.0000
K13	27	3.7778	1.1875	0.2285	1.0000	5.0000
K14	27	3.4074	1.4212	0.2735	1.0000	5.0000
K15	27	3.7407	1.0225	0.1968	1.0000	5.0000
K16	27	3.4444	1.1875	0.2285	1.0000	5.0000
K17	27	3.2593	1.3472	0.2593	1.0000	5.0000
K18	27	2.8148	1.4421	0.2775	1.0000	5.0000
K19	27	2.5556	1.3397	0.2578	1.0000	5.0000
K20	27	3.1111	1.4763	0.2841	1.0000	5.0000
K21	27	2.4815	1.2518	0.2409	1.0000	5.0000
K22	31	3.1290	1.6277	0.2923	1.0000	5.0000
K23	31	2.8710	1.6682	0.2996	1.0000	5.0000
K24	31	3.0000	1.5275	0.2744	1.0000	5.0000
K25	31	2.4194	1.5226	0.2735	1.0000	5.0000
K26	31	3.4194	1.3607	0.2444	1.0000	5.0000
K27	31	3.0000	1.5055	0.2704	1.0000	5.0000
K28	31	2.8065	1.4005	0.2515	1.0000	5.0000
K29	29	1.8621	1.3018	0.2417	1.0000	5.0000
K30	31	2.3548	1.3796	0.2478	1.0000	5.0000
K31	31	2.2258	1.3835	0.2485	1.0000	5.0000
K32	30	2.4333	1.5466	0.2824	1.0000	5.0000
K33	31	2.5161	1.5464	0.2777	1.0000	5.0000
K34	31	2.7742	1.4540	0.2611	1.0000	5.0000
K35	29	1.9655	1.2951	0.2405	1.0000	5.0000
K36	30	2.3000	1.4420	0.2633	1.0000	5.0000
K37	30	2.3333	1.4223	0.2597	1.0000	5.0000
K38	30	2.2333	1.3309	0.2430	1.0000	5.0000
K39	30	2.5667	1.4547	0.2656	1.0000	5.0000
K40	30	2.2667	1.3880	0.2534	1.0000	5.0000
K41	30	3.4667	1.2794	0.2336	1.0000	5.0000
K42	29	1.6552	1.2894	0.2394	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T-M. Conduct Admin. Duties						
K1	28	2.7143	1.2430	0.2349	1.0000	5.0000
K2	28	2.5000	1.2323	0.2329	1.0000	5.0000
K3	28	1.9643	0.9222	0.1743	1.0000	4.0000
K4	28	2.8929	1.1969	0.2262	1.0000	5.0000
K5	28	2.6071	1.2573	0.2376	1.0000	5.0000
K6	28	2.3929	1.1655	0.2203	1.0000	5.0000
K7	28	2.6071	1.1001	0.2079	1.0000	5.0000
K8	28	2.5714	1.1996	0.2267	1.0000	5.0000
K9	28	2.5000	1.1055	0.2089	1.0000	5.0000
K10	28	3.0000	1.3053	0.2467	1.0000	5.0000
K11	27	2.4444	1.3107	0.2522	1.0000	5.0000
K12	25	1.8000	1.1902	0.2380	1.0000	5.0000
K13	27	2.5556	1.2506	0.2407	1.0000	5.0000
K14	27	2.3333	1.3301	0.2560	1.0000	5.0000
K15	27	2.9630	1.1923	0.2295	1.0000	5.0000
K16	27	2.6667	1.1767	0.2265	1.0000	5.0000
K17	27	2.4815	1.3118	0.2525	1.0000	5.0000
K18	27	2.6296	1.1145	0.2145	1.0000	5.0000
K19	27	2.5185	1.3118	0.2525	1.0000	5.0000
K20	27	2.4074	1.2172	0.2342	1.0000	5.0000
K21	27	2.1852	1.2721	0.2448	1.0000	5.0000
K22	31	2.3548	1.4035	0.2521	1.0000	5.0000
K23	31	2.3226	1.5141	0.2719	1.0000	5.0000
K24	31	3.0323	1.5808	0.2839	1.0000	5.0000
K25	31	2.8710	1.3352	0.2398	1.0000	5.0000
K26	31	3.1290	1.4774	0.2654	1.0000	5.0000
K27	31	3.2581	1.3408	0.2408	1.0000	5.0000
K28	31	2.7097	1.2435	0.2233	1.0000	5.0000
K29	29	1.9655	1.3491	0.2505	1.0000	5.0000
K30	31	2.6129	1.3084	0.2350	1.0000	5.0000
K31	31	2.3871	1.2826	0.2304	1.0000	5.0000
K32	30	2.5000	1.2526	0.2287	1.0000	5.0000
K33	31	2.7097	1.4188	0.2548	1.0000	5.0000
K34	31	2.8065	1.3520	0.2428	1.0000	5.0000
K35	29	2.0690	1.3345	0.2478	1.0000	5.0000
K36	30	2.0667	1.3113	0.2394	1.0000	5.0000
K37	30	2.1333	1.3060	0.2384	1.0000	5.0000
K38	30	2.1667	1.3153	0.2401	1.0000	5.0000
K39	30	2.6333	1.4259	0.2603	1.0000	5.0000
K40	30	2.4667	1.3322	0.2432	1.0000	5.0000
K41	30	3.4333	1.1943	0.2181	1.0000	5.0000
K42	29	1.5172	1.0896	0.2023	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=N. Manage Work Schedules						
K1	28	2.5714	1.4764	0.2790	1.0000	5.0000
K2	28	2.7500	1.3229	0.2500	1.0000	5.0000
K3	28	2.6429	1.1292	0.2134	1.0000	5.0000
K4	28	2.7857	1.3154	0.2486	1.0000	5.0000
K5	28	2.8571	1.2683	0.2397	1.0000	5.0000
K6	28	2.2143	1.2578	0.2377	1.0000	5.0000
K7	28	2.1071	1.2573	0.2376	1.0000	5.0000
K8	28	2.4286	1.4764	0.2790	1.0000	5.0000
K9	28	2.5714	1.2599	0.2381	1.0000	5.0000
K10	28	3.0357	1.2013	0.2270	1.0000	5.0000
K11	27	2.7037	1.4888	0.2865	1.0000	5.0000
K12	25	2.0400	1.2741	0.2548	1.0000	5.0000
K13	27	2.3704	1.1485	0.2210	1.0000	5.0000
K14	27	2.0370	1.1260	0.2167	1.0000	4.0000
K15	27	2.5926	1.2484	0.2402	1.0000	5.0000
K16	27	3.0741	1.2987	0.2499	1.0000	5.0000
K17	27	2.5185	1.3118	0.2525	1.0000	5.0000
K18	27	4.1481	0.7698	0.1481	3.0000	5.0000
K19	27	2.2963	1.4888	0.2865	1.0000	5.0000
K20	27	3.4444	1.3681	0.2633	1.0000	5.0000
K21	27	2.2222	1.2195	0.2347	1.0000	5.0000
K22	31	1.9677	1.3780	0.2475	1.0000	5.0000
K23	31	2.5806	1.5658	0.2812	1.0000	5.0000
K24	31	2.0968	1.3504	0.2425	1.0000	5.0000
K25	31	1.7097	1.1603	0.2084	1.0000	5.0000
K26	31	2.6452	1.1986	0.2153	1.0000	5.0000
K27	31	2.5806	1.2048	0.2164	1.0000	5.0000
K28	31	2.1290	1.1472	0.2060	1.0000	4.0000
K29	29	1.5517	1.0885	0.2021	1.0000	5.0000
K30	31	2.1290	1.2581	0.2260	1.0000	5.0000
K31	31	2.2581	1.2374	0.2222	1.0000	5.0000
K32	30	2.5000	1.3326	0.2433	1.0000	5.0000
K33	31	1.4839	0.8896	0.1598	1.0000	5.0000
K34	31	2.1613	1.4165	0.2544	1.0000	5.0000
K35	29	1.8276	1.2268	0.2278	1.0000	5.0000
K36	30	1.4667	0.9371	0.1711	1.0000	4.0000
K37	30	1.7000	1.1788	0.2152	1.0000	5.0000
K38	30	1.5000	0.9738	0.1778	1.0000	4.0000
K39	30	1.7333	1.1427	0.2086	1.0000	5.0000
K40	30	2.0000	1.1447	0.2090	1.0000	5.0000
K41	30	3.5333	1.3322	0.2432	1.0000	5.0000
K42	29	1.3103	0.8906	0.1654	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=0. Conduct Travel Related Activities						
K1	28	1.8214	1.0905	0.2061	1.0000	4.0000
K2	28	1.6786	0.9049	0.1710	1.0000	4.0000
K3	28	1.5000	0.9230	0.1744	1.0000	5.0000
K4	28	1.6429	0.9894	0.1870	1.0000	4.0000
K5	28	1.5714	0.9595	0.1813	1.0000	4.0000
K6	28	1.6071	1.0306	0.1948	1.0000	5.0000
K7	28	1.6429	0.9512	0.1798	1.0000	4.0000
K8	28	1.8214	1.1239	0.2124	1.0000	5.0000
K9	28	1.6429	0.9512	0.1798	1.0000	4.0000
K10	28	1.5714	0.9595	0.1813	1.0000	4.0000
K11	27	1.8519	1.0991	0.2115	1.0000	5.0000
K12	25	1.5200	0.8226	0.1645	1.0000	3.0000
K13	27	1.5926	0.9711	0.1869	1.0000	4.0000
K14	27	1.4074	0.7473	0.1438	1.0000	3.0000
K15	27	1.6296	1.0795	0.2077	1.0000	4.0000
K16	27	2.3704	1.3629	0.2623	1.0000	5.0000
K17	27	1.8519	0.9488	0.1826	1.0000	4.0000
K18	27	1.7778	1.0500	0.2021	1.0000	4.0000
K19	27	1.7037	1.0675	0.2054	1.0000	4.0000
K20	27	2.0741	1.1410	0.2196	1.0000	4.0000
K21	27	1.4074	0.7971	0.1534	1.0000	4.0000
K22	31	1.6452	1.0816	0.1943	1.0000	5.0000
K23	31	1.7419	0.9989	0.1794	1.0000	5.0000
K24	31	2.4516	1.4338	0.2575	1.0000	5.0000
K25	31	1.9355	1.2093	0.2172	1.0000	5.0000
K26	31	1.5806	0.8475	0.1522	1.0000	4.0000
K27	31	1.6452	1.0181	0.1829	1.0000	4.0000
K28	31	1.5484	1.0276	0.1846	1.0000	5.0000
K29	29	1.3793	0.8625	0.1602	1.0000	5.0000
K30	31	2.2258	1.4991	0.2692	1.0000	5.0000
K31	31	2.8065	1.3765	0.2472	1.0000	5.0000
K32	30	2.5667	1.4308	0.2612	1.0000	5.0000
K33	31	1.4516	0.8884	0.1596	1.0000	5.0000
K34	31	1.9355	1.3400	0.2407	1.0000	5.0000
K35	29	1.3793	0.9029	0.1677	1.0000	5.0000
K36	30	1.4667	1.0417	0.1902	1.0000	5.0000
K37	30	1.4667	1.0080	0.1840	1.0000	5.0000
K38	30	1.7000	1.1492	0.2098	1.0000	5.0000
K39	30	1.8000	1.1567	0.2112	1.0000	5.0000
K40	30	2.0667	1.3629	0.2488	1.0000	5.0000
K41	30	2.8333	1.6206	0.2959	1.0000	5.0000
K42	29	1.3793	0.9029	0.1677	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=P. Maintain Safety Requirements						
K1	28	2.2500	1.5062	0.2846	1.0000	5.0000
K2	28	2.0357	1.4268	0.2696	1.0000	5.0000
K3	28	1.8929	1.3700	0.2589	1.0000	5.0000
K4	28	1.8929	1.2274	0.2320	1.0000	5.0000
K5	28	1.8571	1.2387	0.2341	1.0000	5.0000
K6	28	1.7857	1.1339	0.2143	1.0000	5.0000
K7	28	1.7143	1.0131	0.1915	1.0000	5.0000
K8	28	1.8929	1.2573	0.2376	1.0000	5.0000
K9	28	2.0357	1.2905	0.2439	1.0000	5.0000
K10	28	2.0000	1.3333	0.2520	1.0000	5.0000
K11	27	2.4074	1.4481	0.2787	1.0000	5.0000
K12	25	1.9600	1.3064	0.2613	1.0000	5.0000
K13	27	3.3333	1.5442	0.2972	1.0000	5.0000
K14	27	2.4815	1.6022	0.3083	1.0000	5.0000
K15	27	2.2593	1.3183	0.2537	1.0000	5.0000
K16	27	2.4444	1.4500	0.2791	1.0000	5.0000
K17	27	1.7407	1.2276	0.2363	1.0000	5.0000
K18	27	2.0000	1.4142	0.2722	1.0000	5.0000
K19	27	1.6296	1.1145	0.2145	1.0000	5.0000
K20	27	1.8148	1.1448	0.2203	1.0000	5.0000
K21	27	2.7037	1.4627	0.2815	1.0000	5.0000
K22	30	1.9333	1.5071	0.2752	1.0000	5.0000
K23	30	1.9667	1.3767	0.2514	1.0000	5.0000
K24	30	2.2667	1.2299	0.2245	1.0000	5.0000
K25	30	2.0667	1.3113	0.2394	1.0000	5.0000
K26	30	2.2333	1.3047	0.2382	1.0000	5.0000
K27	30	2.5000	1.3582	0.2480	1.0000	5.0000
K28	30	4.3333	1.0613	0.1938	1.0000	5.0000
K29	28	1.5714	1.1996	0.2267	1.0000	5.0000
K30	30	2.0667	1.2299	0.2245	1.0000	5.0000
K31	30	1.8000	1.0954	0.2000	1.0000	5.0000
K32	29	1.8966	1.2634	0.2346	1.0000	5.0000
K33	30	1.3333	0.8841	0.1614	1.0000	5.0000
K34	30	1.8667	1.2794	0.2336	1.0000	5.0000
K35	28	1.5714	1.1996	0.2267	1.0000	5.0000
K36	29	1.2759	0.7510	0.1395	1.0000	4.0000
K37	29	1.2759	0.6490	0.1205	1.0000	3.0000
K38	29	1.5862	0.9070	0.1684	1.0000	4.0000
K39	29	1.6207	0.9029	0.1677	1.0000	4.0000
K40	29	2.0345	1.1490	0.2134	1.0000	5.0000
K41	29	2.7931	1.4971	0.2780	1.0000	5.0000
K42	28	1.2500	0.5853	0.1106	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T-Q. Manage Employee's Work						
K1	28	2.8571	1.2084	0.2284	1.0000	5.0000
K2	28	2.8929	1.2864	0.2431	1.0000	5.0000
K3	28	2.7143	1.1174	0.2112	1.0000	5.0000
K4	28	2.9286	1.3589	0.2568	1.0000	5.0000
K5	28	2.7143	1.2724	0.2405	1.0000	5.0000
K6	28	2.6429	1.3666	0.2583	1.0000	5.0000
K7	28	2.3929	1.3149	0.2485	1.0000	5.0000
K8	28	2.8214	1.2781	0.2415	1.0000	5.0000
K9	28	3.1071	1.3427	0.2538	1.0000	5.0000
K10	28	3.9286	0.9786	0.1849	1.0000	5.0000
K11	27	2.9259	1.5424	0.2968	1.0000	5.0000
K12	25	2.2000	1.3540	0.2708	1.0000	5.0000
K13	27	3.5185	1.3118	0.2525	1.0000	5.0000
K14	27	2.7407	1.4302	0.2752	1.0000	5.0000
K15	27	3.3333	1.3587	0.2615	1.0000	5.0000
K16	27	3.3704	1.1145	0.2145	1.0000	5.0000
K17	27	2.8889	1.2810	0.2465	1.0000	5.0000
K18	27	3.4074	1.2484	0.2402	1.0000	5.0000
K19	27	2.0741	1.4122	0.2718	1.0000	5.0000
K20	27	3.0370	1.3150	0.2531	1.0000	5.0000
K21	27	2.0741	1.0350	0.1992	1.0000	4.0000
K22	31	2.2258	1.6675	0.2995	1.0000	5.0000
K23	31	2.4839	1.5464	0.2777	1.0000	5.0000
K24	31	2.6452	1.4955	0.2686	1.0000	5.0000
K25	31	2.0968	1.4226	0.2555	1.0000	5.0000
K26	31	2.8387	1.5296	0.2747	1.0000	5.0000
K27	31	2.7419	1.1538	0.2072	1.0000	5.0000
K28	31	2.6452	1.4035	0.2521	1.0000	5.0000
K29	29	1.6897	1.2278	0.2280	1.0000	5.0000
K30	31	2.3548	1.3552	0.2434	1.0000	5.0000
K31	31	2.0000	1.2383	0.2224	1.0000	5.0000
K32	30	2.2000	1.3235	0.2416	1.0000	5.0000
K33	31	1.5484	0.9252	0.1662	1.0000	5.0000
K34	31	2.3871	1.4066	0.2526	1.0000	5.0000
K35	29	1.9310	1.1932	0.2216	1.0000	5.0000
K36	30	1.6667	1.0283	0.1877	1.0000	4.0000
K37	30	1.3667	0.8503	0.1552	1.0000	4.0000
K38	30	1.6667	1.1244	0.2053	1.0000	5.0000
K39	30	1.6000	0.9685	0.1768	1.0000	4.0000
K40	30	1.9333	1.2015	0.2194	1.0000	5.0000
K41	30	3.3000	1.3170	0.2404	1.0000	5.0000
K42	29	1.1724	0.5391	0.1001	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T=R. Oversee Operations						
K1	28	2.7857	1.4747	0.2787	1.0000	5.0000
K2	28	2.5714	1.2889	0.2436	1.0000	5.0000
K3	28	2.7500	1.3777	0.2604	1.0000	5.0000
K4	28	2.8571	1.5084	0.2851	1.0000	5.0000
K5	28	3.1071	1.3968	0.2640	1.0000	5.0000
K6	28	2.7143	1.2430	0.2349	1.0000	5.0000
K7	28	2.3214	1.3068	0.2470	1.0000	5.0000
K8	28	2.7143	1.3569	0.2564	1.0000	5.0000
K9	28	2.5000	1.3744	0.2597	1.0000	5.0000
K10	28	3.0714	1.2451	0.2353	1.0000	5.0000
K11	27	3.0741	1.3280	0.2556	1.0000	5.0000
K12	25	2.1200	1.3940	0.2788	1.0000	5.0000
K13	27	3.1852	1.3020	0.2506	1.0000	5.0000
K14	27	2.4815	1.3692	0.2635	1.0000	5.0000
K15	27	2.7778	1.2506	0.2407	1.0000	5.0000
K16	27	2.8148	1.1448	0.2203	1.0000	5.0000
K17	27	2.6296	1.5479	0.2979	1.0000	5.0000
K18	27	3.3333	1.3587	0.2615	1.0000	5.0000
K19	27	2.0000	1.3301	0.2560	1.0000	5.0000
K20	27	2.8889	1.3681	0.2633	1.0000	5.0000
K21	27	2.1111	1.1547	0.2222	1.0000	5.0000
K22	30	2.2000	1.5844	0.2893	1.0000	5.0000
K23	30	3.0333	1.5421	0.2816	1.0000	5.0000
K24	30	2.8667	1.7167	0.3134	1.0000	5.0000
K25	30	2.4000	1.3544	0.2473	1.0000	5.0000
K26	30	2.3333	1.3979	0.2552	1.0000	5.0000
K27	30	2.1000	1.1847	0.2163	1.0000	5.0000
K28	30	2.4667	1.5477	0.2826	1.0000	5.0000
K29	28	1.3929	0.9940	0.1879	1.0000	5.0000
K30	30	2.8000	1.2704	0.2319	1.0000	5.0000
K31	30	2.3000	1.4657	0.2676	1.0000	5.0000
K32	29	2.7586	1.3798	0.2562	1.0000	5.0000
K33	30	1.6333	1.1290	0.2061	1.0000	5.0000
K34	30	2.3333	1.4464	0.2641	1.0000	5.0000
K35	29	2.0000	1.4142	0.2626	1.0000	5.0000
K36	30	1.6333	1.0334	0.1887	1.0000	5.0000
K37	30	1.6333	1.0662	0.1947	1.0000	5.0000
K38	30	1.8000	1.1861	0.2166	1.0000	5.0000
K39	30	1.7000	1.0875	0.1986	1.0000	5.0000
K40	30	2.2000	1.3235	0.2416	1.0000	5.0000
K41	30	3.3333	1.3476	0.2460	1.0000	5.0000
K42	29	1.5172	1.0219	0.1898	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=S. Manage Materials & Supplies						
K1	28	1.7500	1.2057	0.2279	1.0000	5.0000
K2	28	1.5357	1.0357	0.1957	1.0000	4.0000
K3	28	1.5714	0.8357	0.1579	1.0000	4.0000
K4	28	1.6429	1.0261	0.1939	1.0000	5.0000
K5	28	1.7500	0.9670	0.1828	1.0000	4.0000
K6	28	1.3571	0.6785	0.1282	1.0000	3.0000
K7	28	1.3929	0.7373	0.1393	1.0000	3.0000
K8	28	1.7143	1.1174	0.2112	1.0000	4.0000
K9	28	1.6786	1.0560	0.1996	1.0000	5.0000
K10	28	1.8929	1.1655	0.2203	1.0000	5.0000
K11	27	2.3333	1.2403	0.2387	1.0000	5.0000
K12	25	1.8400	1.2138	0.2428	1.0000	4.0000
K13	27	1.8148	1.0755	0.2070	1.0000	4.0000
K14	27	1.6296	1.0795	0.2077	1.0000	5.0000
K15	27	1.7407	1.1298	0.2174	1.0000	5.0000
K16	27	1.8519	1.2311	0.2369	1.0000	5.0000
K17	27	1.7407	1.1959	0.2302	1.0000	5.0000
K18	27	2.0741	1.3566	0.2611	1.0000	5.0000
K19	27	1.7037	1.0309	0.1984	1.0000	4.0000
K20	27	1.5185	0.7530	0.1449	1.0000	3.0000
K21	27	1.5185	0.7530	0.1449	1.0000	3.0000
K22	31	1.7742	1.3592	0.2441	1.0000	5.0000
K23	31	2.1290	1.4774	0.2654	1.0000	5.0000
K24	31	2.1935	1.4701	0.2640	1.0000	5.0000
K25	31	4.1613	1.2409	0.2229	1.0000	5.0000
K26	31	1.5484	1.0276	0.1846	1.0000	5.0000
K27	31	1.5806	0.9583	0.1721	1.0000	5.0000
K28	31	2.0968	1.2208	0.2193	1.0000	5.0000
K29	29	1.6897	1.2565	0.2333	1.0000	5.0000
K30	31	3.0000	1.5916	0.2859	1.0000	5.0000
K31	31	3.2581	1.5268	0.2742	1.0000	5.0000
K32	30	3.1333	1.5025	0.2743	1.0000	5.0000
K33	31	1.2903	0.8244	0.1481	1.0000	5.0000
K34	31	2.1613	1.4628	0.2627	1.0000	5.0000
K35	29	1.4483	0.9482	0.1761	1.0000	5.0000
K36	30	1.2667	0.6915	0.1262	1.0000	3.0000
K37	30	1.4333	0.8584	0.1567	1.0000	4.0000
K38	30	1.5333	1.0743	0.1961	1.0000	5.0000
K39	30	1.5000	0.9002	0.1644	1.0000	4.0000
K40	30	1.8333	1.2058	0.2202	1.0000	5.0000
K41	30	3.1000	1.3481	0.2461	1.0000	5.0000
K42	29	1.2759	0.6490	0.1205	1.0000	3.0000

variable	n	mean	std	stderr	min	max
By-> T=T. Plan						
K1	28	3.0357	1.5271	0.2886	1.0000	5.0000
K2	28	3.2500	1.1426	0.2159	1.0000	5.0000
K3	28	2.8929	1.2274	0.2320	1.0000	5.0000
K4	28	3.5714	1.0690	0.2020	1.0000	5.0000
K5	28	3.4643	1.2317	0.2328	1.0000	5.0000
K6	28	2.7500	1.2360	0.2336	1.0000	5.0000
K7	28	2.7857	1.2869	0.2432	1.0000	5.0000
K8	28	2.8571	1.2683	0.2397	1.0000	5.0000
K9	28	2.4286	1.3174	0.2490	1.0000	5.0000
K10	28	2.8929	1.3427	0.2538	1.0000	5.0000
K11	27	2.8889	1.3107	0.2522	1.0000	5.0000
K12	25	2.1200	1.3013	0.2603	1.0000	5.0000
K13	27	2.0370	1.1596	0.2232	1.0000	5.0000
K14	27	1.8519	1.0991	0.2115	1.0000	5.0000
K15	27	2.2593	1.2586	0.2422	1.0000	5.0000
K16	27	3.4074	1.2172	0.2342	1.0000	5.0000
K17	27	2.9630	1.3440	0.2586	1.0000	5.0000
K18	27	3.5185	0.9755	0.1877	1.0000	5.0000
K19	27	2.5556	1.3960	0.2687	1.0000	5.0000
K20	27	3.0741	1.4122	0.2718	1.0000	5.0000
K21	27	1.9630	1.0913	0.2100	1.0000	5.0000
K22	31	3.0968	1.6604	0.2982	1.0000	5.0000
K23	31	3.1935	1.4701	0.2640	1.0000	5.0000
K24	31	2.0645	1.5041	0.2701	1.0000	5.0000
K25	31	2.1935	1.3271	0.2384	1.0000	5.0000
K26	31	1.8387	1.1283	0.2027	1.0000	5.0000
K27	31	2.3226	1.4233	0.2556	1.0000	5.0000
K28	31	2.4839	1.3873	0.2492	1.0000	5.0000
K29	29	1.7241	1.3065	0.2426	1.0000	5.0000
K30	31	2.6774	1.3263	0.2382	1.0000	5.0000
K31	31	3.5806	1.4782	0.2655	1.0000	5.0000
K32	30	3.7667	1.4547	0.2656	1.0000	5.0000
K33	31	1.4839	1.0286	0.1847	1.0000	5.0000
K34	31	2.1613	1.4628	0.2627	1.0000	5.0000
K35	29	1.6552	1.0782	0.2002	1.0000	5.0000
K36	30	1.8000	1.2972	0.2368	1.0000	5.0000
K37	30	1.5333	1.0417	0.1902	1.0000	5.0000
K38	30	1.9333	1.3374	0.2442	1.0000	5.0000
K39	30	1.8333	1.3153	0.2401	1.0000	5.0000
K40	30	2.5000	1.4324	0.2615	1.0000	5.0000
K41	30	3.9333	1.3113	0.2394	1.0000	5.0000
K42	29	1.3793	0.9416	0.1749	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=U. Budget						
K1	28	2.5714	1.3992	0.2644	1.0000	5.0000
K2	28	2.4286	1.3174	0.2490	1.0000	5.0000
K3	28	2.6429	1.2828	0.2424	1.0000	5.0000
K4	28	2.6071	1.3700	0.2589	1.0000	5.0000
K5	28	3.0357	1.3189	0.2492	1.0000	5.0000
K6	28	1.7857	1.1007	0.2080	1.0000	5.0000
K7	28	1.7143	0.9759	0.1844	1.0000	5.0000
K8	28	2.3571	1.3666	0.2583	1.0000	5.0000
K9	28	1.8214	1.1880	0.2245	1.0000	5.0000
K10	28	2.2857	1.4620	0.2763	1.0000	5.0000
K11	27	2.5556	1.2506	0.2407	1.0000	5.0000
K12	25	1.9200	1.3204	0.2641	1.0000	5.0000
K13	27	1.5556	1.0860	0.2090	1.0000	5.0000
K14	27	1.8519	1.2620	0.2429	1.0000	5.0000
K15	27	1.6667	1.1094	0.2135	1.0000	5.0000
K16	27	3.0741	1.4122	0.2718	1.0000	5.0000
K17	27	2.5926	1.3661	0.2629	1.0000	5.0000
K18	27	3.7037	1.1373	0.2189	1.0000	5.0000
K19	27	3.2222	1.3681	0.2633	1.0000	5.0000
K20	27	2.1481	1.2921	0.2487	1.0000	5.0000
K21	27	2.0741	1.1410	0.2196	1.0000	5.0000
K22	31	2.6452	1.7233	0.3095	1.0000	5.0000
K23	31	3.0000	1.6733	0.3005	1.0000	5.0000
K24	31	2.0000	1.3416	0.2410	1.0000	5.0000
K25	31	2.8710	1.5651	0.2811	1.0000	5.0000
K26	31	1.5484	1.1500	0.2066	1.0000	5.0000
K27	31	1.7419	0.9989	0.1794	1.0000	4.0000
K28	31	2.2258	1.4308	0.2570	1.0000	5.0000
K29	29	1.9655	1.4264	0.2649	1.0000	5.0000
K30	31	2.3871	1.4066	0.2526	1.0000	5.0000
K31	31	4.0968	1.3989	0.2513	1.0000	5.0000
K32	30	4.0000	1.3896	0.2537	1.0000	5.0000
K33	31	1.4516	0.8884	0.1596	1.0000	5.0000
K34	31	1.8710	1.2313	0.2212	1.0000	5.0000
K35	29	1.5517	1.0551	0.1959	1.0000	5.0000
K36	30	1.4000	1.0034	0.1832	1.0000	5.0000
K37	30	1.5000	1.0422	0.1903	1.0000	5.0000
K38	30	1.9000	1.2690	0.2317	1.0000	5.0000
K39	30	1.7000	1.0554	0.1927	1.0000	5.0000
K40	30	2.4000	1.4288	0.2609	1.0000	5.0000
K41	30	3.7333	1.3374	0.2442	1.0000	5.0000
K42	29	1.3448	0.8975	0.1667	1.0000	5.0000

variable	n	mean	std	stderr	min	max
By-> T=V Practice Security Procedures						
K1	28	2.0357	1.5512	0.2931	1.0000	5.0000
K2	28	2.1071	1.4742	0.2786	1.0000	5.0000
K3	28	2.0357	1.4006	0.2647	1.0000	5.0000
K4	28	2.1429	1.4067	0.2658	1.0000	5.0000
K5	28	1.8571	1.2683	0.2397	1.0000	5.0000
K6	28	1.5714	1.0338	0.1954	1.0000	5.0000
K7	28	1.6786	1.0905	0.2061	1.0000	5.0000
K8	28	1.8929	1.3427	0.2538	1.0000	5.0000
K9	28	2.2500	1.6015	0.3027	1.0000	5.0000
K10	28	2.0357	1.3739	0.2596	1.0000	5.0000
K11	27	2.1111	1.3681	0.2633	1.0000	5.0000
K12	25	1.9600	1.4855	0.2971	1.0000	5.0000
K13	27	2.9630	1.6048	0.3089	1.0000	5.0000
K14	27	2.2963	1.5644	0.3011	1.0000	5.0000
K15	27	2.4074	1.5257	0.2936	1.0000	5.0000
K16	27	2.0000	1.3868	0.2669	1.0000	5.0000
K17	27	1.8889	1.3107	0.2522	1.0000	5.0000
K18	27	1.9630	1.4539	0.2798	1.0000	5.0000
K19	27	1.8148	1.3312	0.2562	1.0000	5.0000
K20	27	1.7778	1.2195	0.2347	1.0000	5.0000
K21	27	1.6296	1.1145	0.2145	1.0000	5.0000
K22	31	1.7742	1.4540	0.2611	1.0000	5.0000
K23	31	1.9677	1.4716	0.2643	1.0000	5.0000
K24	31	3.1935	1.6211	0.2912	1.0000	5.0000
K25	31	2.6452	1.5609	0.2804	1.0000	5.0000
K26	31	1.7419	1.2102	0.2174	1.0000	5.0000
K27	31	2.0323	1.3288	0.2387	1.0000	5.0000
K28	31	2.4516	1.6899	0.3035	1.0000	5.0000
K29	29	1.4483	1.1522	0.2140	1.0000	5.0000
K30	31	2.7419	1.3655	0.2452	1.0000	5.0000
K31	31	1.7097	1.1013	0.1978	1.0000	5.0000
K32	30	1.9667	1.2994	0.2372	1.0000	5.0000
K33	31	2.4516	1.6091	0.2890	1.0000	5.0000
K34	31	4.0968	1.5352	0.2757	1.0000	5.0000
K35	29	1.6552	1.0782	0.2002	1.0000	4.0000
K36	30	1.3667	0.8899	0.1625	1.0000	4.0000
K37	30	1.3667	0.6687	0.1221	1.0000	3.0000
K38	30	1.6667	1.0283	0.1877	1.0000	4.0000
K39	30	1.5333	0.8996	0.1642	1.0000	4.0000
K40	30	2.0333	1.2726	0.2323	1.0000	5.0000
K41	30	2.9333	1.5522	0.2834	1.0000	5.0000
K42	29	1.3793	0.6769	0.1257	1.0000	3.0000

Appendix H

KSAO-Task Cluster Linkages

I. ASO - TASK CLUSTER IMPORTANCE RATING FORM

How important is this ability or skill for effective performance of this task?

1 = Unimportant; 2 = Minor Importance; 3 = Important; 4 = Very Important; 5 = Extremely Important

ID Code _____

Task Cluster	Abilities, Skills, and Other Characteristics																											
	1. Leadership	2. Learning Ability	3. Delegation	4. Conflict Resolution	5. Mediate Others	6. Written Commun.	7. Reading Ability	8. Oral Commun.	9. Public Speaking	10. Teaching Ability	11. Persuasion	12. Decision Making	13. Stress Tolerance	14. Teamwork	15. Response to Criticism	16. Non-Discriminatory	17. Human Relations	18. Courage to Confront	19. Coordination	20. Planning	21. Organizing	22. Problem Ident.	23. Economics	24. Develop. Counseling	25. Pers. Counseling	26. Time Management		
A. Staff Positions																												
B. Manage Position Requirements																												
C. Enforce EEO Policies																												
D. Provide Recognition & Rewards																												
E. Motivate Employees																												
F. Manage Employees w/ Personal Problems																												
G. Evaluate Performance																												
H. Discipline Employees																												
I. Train & Develop Employees																												
J. Conduct Meetings & Briefings																												
K. Provide Orientation																												
L. Communicate																												
M. Conduct Admin. Duties																												
N. Manage Work Schedules																												
O. Conduct Travel Related Activities																												
P. Maintain Safety Requirements																												
Q. Manage Employee's Work																												
R. Overseer Operations																												
S. Manage Materials & Supplies																												
T. Plan																												
U. Budget																												
V. Practice Security Procedures																												

II. ASO - TASK CLUSTER IMPORTANCE RATING FORM

How important is this ability or skill for effective performance of this task?

1 = Unimportant; 2 = Minor Importance; 3 = Important; 4 = Very Important; 5 = Extremely Important

ID Code _____

Task Cluster	Abilities, Skills, and Other Characteristics																										
	27. Monitoring Work	28. Flexible	29. Self-Confident	30. Thorough	31. Honest	32. Self-Starter	33. Responsible	34. Dependable	35. Achievement Oriented	36. Cooperative	37. Empathetic	38. Tech. Competent	39. Fair	40. Gets Facts Before Act.	41. Tactful & Diplomatic	42. Real. Self Appraisal	43. Self-Sufficient	44. Tolerance of Ambiguity	45. Energetic	46. Creative	47. Risk Taker	48. Aggressive	49. Job Involved	50. Emotionally Stable	51. Trustworthy		
A. Staff Positions																											
B. Manage Position Requirements																											
C. Enforce EEO Policies																											
D. Provide Recognition & Rewards																											
E. Motivate Employees																											
F. Manage Employees w/ Personal Problems																											
G. Evaluate Performance																											
H. Discipline Employees																											
I. Train & Develop Employees																											
J. Conduct Meetings & Briefings																											
K. Provide Orientation																											
L. Communicate																											
M. Conduct Admin. Duties																											
N. Manage Work Schedules																											
O. Conduct Travel Related Activities																											
P. Maintain Safety Requirements																											
Q. Manage Employee's Work																											
R. Oversee Operations																											
S. Manage Materials & Supplies																											
T. Plan																											
U. Budget																											
V. Practice Security Procedures																											

I. KNOWLEDGE - TASK CLUSTER IMPORTANCE RATING FORM

How important is this knowledge for effective performance of this task?

1 = Unimportant; 2 = Minor Importance; 3 = Important; 4 = Very Important; 5 = Extremely Important

ID Code _____

Task Cluster	Knowledges																				
	1. Maint Promotion System	2. Employee Reassignment	3. Part Time Hiring	4. Position Management	5. Staffing/Manpower Requirements	6. EEO/Alternative Action	7. Alternative Action Programs	8. Eligibility Requirements	9. Promotion Policies	10. Performance Appraisal System	11. Productivity Improvement	12. Supervising Local Nationals	13. Drug and Alcohol Abuse	14. Referral Sources	15. Discipline Policies and Procedures	16. Training Policies and Procedures	17. Career Management	18. Overseas Regulations	19. Salary Administration	20. Leave Policies and Procedures	21. Workers' Compensation
A. Staff Positions																					
B. Manage Position Requirements																					
C. Enforce EEO Policies																					
D. Provide Recognition & Rewards																					
E. Motivate Employees																					
F. Manage Employees w/ Personal Problems																					
G. Evaluate Performance																					
H. Discipline Employees																					
I. Train & Develop Employees																					
J. Conduct Meetings & Briefings																					
K. Provide Orientation																					
L. Communicate																					
M. Conduct Admin. Duties																					
N. Manage Work Schedules																					
O. Conduct Travel Related Activities																					
P. Maintain Safety Requirements																					
Q. Manage Employee's Work																					
R. Overseas Operations																					
S. Manage Materials & Supplies																					
T. Plan																					
U. Budget																					
V. Practice Security Procedures																					

II. KNOWLEDGE - TASK CLUSTER IMPORTANCE RATING FORM

How important is this knowledge for effective performance of this task?

1 = Unimportant; 2 = Minor Importance; 3 = Important; 4 = Very Important; 5 = Extremely Important

ID Code _____

Task Cluster	Knowledges																					
	22 Rf/TCF Policies and Procedures	23 Command Activities	24 Standards of Conduct	25 Accountability	26 Clearance Procedures	27 Labor-Management Relations	28 Safety and Health Regulations	29 MAF Policies	30 Internal Controls	31 Budget Policies	32 PPBS	33 Freedom of Information Act	34 Security Policies	35 Military Performance Evaluation	36 Military Rank Structure	37 Military Customs	38 Military/Defense Structure	39 Army Chain of Command	40 Army's General Mission	41 Organization's Mission	42 UCMJ	
A. Staff Positions																						
B. Manage Position Requirements																						
C. Enforce EEO Policies																						
D. Provide Recognition & Rewards																						
E. Motivate Employees																						
F. Manage Employees w/ Personal Problems																						
G. Evaluate Performance																						
H. Discipline Employees																						
I. Train & Develop Employees																						
J. Conduct Meetings & Briefings																						
K. Provide Orientation																						
L. Communicate																						
M. Conduct Admin. Duties																						
N. Manage Work Schedules																						
O. Conduct Travel Related Activities																						
P. Maintain Safety Requirements																						
Q. Manage Employee's Work																						
R. Overseas Operations																						
S. Manage Materials & Supplies																						
T. Plan																						
U. Budget																						
V. Practice Security Procedures																						

Appendix I

KSAO-Task Rating Workshop Administrator's Manual

**ARMY CIVILIAN FIRST LINE SUPERVISOR
KSAO - TASK IMPORTANCE RATING WORKSHOP**

Administrator Manual

Human Resources Research Organization (HumRRO)

JUNE 1988

This manual is a guide for conducting KSAO - Task Linkage importance rating workshops. The text that is in bold capital letters is to be read aloud to workshop participants.

I. Preparatory Activities

Workshop conductors should make sure that there is an adequate supply of the following materials:

- BACKGROUND INFORMATION SHEETS
- KSAO - TASK IMPORTANCE RATING FORMS A - V (except O)
- KSAO DEFINITION LISTS

Workshop participant master lists should be completed prior to each workshop. Also prior to the workshop, ID codes need to be issued. Each administrator will issue his/her own coding scheme, beginning with his/her last name initial. For example:

John might assign Z1 - Z10 for his first workshop with 10 participants, and Z11 - Z16 for his second workshop with 5 participants. Each administrator will be responsible for keeping track of these numbers on his/her workshop participant master list. The ID codes should be entered on each Background Information Sheet (BIS) prior to the workshop.

Workshop materials will be counterbalanced by order of administration across sites and by forms within sites. This counterbalancing will be determined well in advance of the workshops and the workshop master lists will be filled out and serve to keep track of these procedures. The following shows the two different sets of forms that will be counterbalanced within a session (i.e., half the people in the session will complete set I and the other half will complete set II):

Set I Forms

A	
B	1
G	
H	
J	2
M	
S	
T	3
V	

Set II Forms

C	
D	1
E	
F	
I	
K	2
L	
N	
P	
Q	3
R	
U	

Each set of forms is segmented into 3 blocks. All three blocks of both sets of forms will be administered at each site. However, the order of administration will differ from site to site. For example, at site 1, the blocks in set I and II will be administered in the following order: 123. At site 2, the blocks will be administered in the order 132; and so on. Order of administration will be counterbalanced by these blocks in the following combinations:

<u>Site</u>	<u>Order of blocks</u>
1	123
2	132
3	213
4	231
5	312
6	321
7	123
8	231
9	312

Each block is first in a session three times, last in a session three times, and in the middle three times. This should adequately counterbalance fatigue effects given the number of forms, the sample size, and the number of workshop sessions.

Based on the master lists, each administrator will be responsible for:

- writing in ID codes on all rating forms and BISS
- stapling rating forms in the order in which they will be administered

II. Provide an Overview of the Project

WAIT FOR ALL PARTICIPANTS TO ARRIVE AND THEN BEGIN

HI, I'M _____ AND I WORK FOR HUMRRO (THE HUMAN RESOURCES RESEARCH ORGANIZATION). THE ARMY RESEARCH INSTITUTE (ARI) IS SPONSORING A MULTI-YEAR CIVILIAN PERSONNEL RESEARCH EFFORT FOR THE DIRECTORATE OF CIVILIAN PERSONNEL (DCP) TO ENHANCE THE ARMY'S ABILITY TO MANAGE ITS CIVILIAN WORK FORCE. THE DIRECTORATE FOR CIVILIAN PERSONNEL HAS IDENTIFIED THREE PRIORITY AREAS OF RESEARCH: (1) PERSONNEL SELECTION, (2) MANAGEMENT TRAINING, AND (3) PERSONNEL MEASURES. HUMRRO IS WORKING ON THE PERSONNEL SELECTION PART OF THIS RESEARCH FOR THE ARMY RESEARCH INSTITUTE. A PART OF THIS EFFORT IS TO CONDUCT RESEARCH ON CIVILIAN FIRST-LINE SUPERVISOR JOBS. THE RESULTS OF THIS RESEARCH WILL BE USED TO DEVELOP IMPROVED SELECTION PROCEDURES FOR FIRST-LINE SUPERVISORS. I'D LIKE TO GIVE YOU SOME BACKGROUND ABOUT THIS PROJECT SO THAT YOU UNDERSTAND THE REASON YOU'RE HERE AND THE ROLE THAT YOU PLAY AS AN EXPERT ON THE FIRST-LINE SUPERVISOR JOB.

IF THERE IS A BLACKBOARD AVAILABLE, IT WOULD BE USEFUL TO WRITE OUT KNOWLEDGES, SKILLS, ABILITIES, AND OTHER CHARACTERISTICS (KSAOS) AND TASKS ON THE BOARD.

IN A PREVIOUS PROJECT, WE CONDUCTED A JOB ANALYSIS OF THE FIRST-LINE SUPERVISOR JOB. BASED ON THE RESULTS OF THAT STUDY, WE DEVELOPED LISTS OF SUPERVISOR JOB TASKS, AND JOB KNOWLEDGES, SKILLS, ABILITIES, AND OTHER CHARACTERISTICS (OR WHAT WE REFER TO AS KSAOS). JOB TASKS ARE SUPERVISORY

TASKS THAT ARE COMMONLY PERFORMED BY MOST FIRST-LINE SUPERVISORS. KNOWLEDGES INCLUDE THINGS SUCH AS POLICIES AND PROCEDURES THAT FIRST-LINE SUPERVISORS TYPICALLY NEED TO KNOW IN PERFORMING THEIR JOBS. SAOS ARE SKILLS, ABILITIES, AND OTHER CHARACTERISTICS THAT ARE TYPICALLY NEEDED FOR PERFORMING THE FIRST-LINE SUPERVISOR JOB.

THESE LISTS HAVE BEEN REVISED BY FIRST LINE SUPERVISORS LIKE YOURSELVES IN A SERIES OF WORKSHOPS, AND THROUGH A SURVEY. BASED ON THESE WORKSHOP AND SURVEY RESULTS, WE HAVE A GREAT DEAL OF DATA ON THE FIRST LINE SUPERVISOR JOBS. AT THIS POINT IN THE STUDY, WE NEED YOUR INPUT TO SYNTHESIZE THE DATA SO THAT WE CAN DEVELOP IMPROVED SELECTION PROCEDURES. IN ORDER TO DEVELOP VALID AND USEFUL SELECTION METHODS, WE NEED TO LINK KSAOS TO ACTUAL TASKS PERFORMED BY FIRST LINE SUPERVISORS. THIS WILL ALLOW US TO DEVELOP A STRUCTURED INTERVIEW GUIDE AND A CANDIDATE RATING FORM THAT ARE BOTH READILY TIED TO SPECIFIC OBSERVABLE BEHAVIORS, THEREFORE MAKING THESE PROCEDURES REALISTIC, EASY TO USE, AND VALID.

TODAY WE ARE ASKING YOU AS INCUMBENT FIRST LINE SUPERVISORS TO INDICATE WHETHER THESE KSAOS ARE RELATED TO THE TASKS. THE LINKAGES AND RATINGS YOU PROVIDE WILL ENABLE US TO USE THE MOST IMPORTANT TASK - KSAO COMBINATIONS AS THE BASIS FOR THE SELECTION PROCEDURES WE DEVELOP. SO YOUR PART IN THIS PROJECT IS A VERY IMPORTANT ONE AND IS CENTRAL TO THE LEGAL DEFENSIBILITY OF THESE SELECTION PROCEDURES.

HAND OUT MATERIALS:

- BACKGROUND INFORMATION SHEETS
- KSAO - TASK IMPORTANCE RATING FORMS
- KSAO DEFINITION LISTS

III. Complete Background Information Sheet (BIS)

I'D LIKE TO REMIND YOU AT THIS POINT THAT YOUR PARTICIPATION IN THIS WORKSHOP IS STRICTLY VOLUNTARY. IF THERE IS ANYTHING DURING THIS WORKSHOP THAT YOU ARE UNCOMFORTABLE RESPONDING TO, YOU CAN CHOOSE NOT TO RESPOND. BEFORE WE GET STARTED I NEED TO HAVE YOU FILL IN A BACKGROUND INFORMATION SHEET. THIS INFORMATION IS NEEDED TO DOCUMENT YOUR QUALIFICATIONS AS A SUBJECT MATTER EXPERT (i.e., YOU ARE, AND HAVE EXPERIENCE AS A FIRST LINE SUPERVISOR). PLEASE FILL THIS OUT NOW. DO NOT PUT YOUR NAME ON ANY OF THESE MATERIALS. YOU WILL REMAIN ANONYMOUS. THE ID CODE WE ARE USING SIMPLY ALLOWS US TO KEEP TRACK OF RATINGS BY GRADE LEVEL, JOB SERIES, AND THE OTHER DEMOGRAPHIC CHARACTERISTICS ON YOUR BACKGROUND INFORMATION SHEET. DO NOT BEGIN THE RATINGS YET.

ALLOW SEVERAL MINUTES FOR THIS

IV. Provide an Overview of Workshop Procedures

NOW, AS I MENTIONED EARLIER, THE GOALS OF THIS WORKSHOP ARE TO LINK KSAOS TO TASKS BY RATING THEIR IMPORTANCE TO PERFORMING TASKS. YOU WILL EACH BE USING SEVERAL RATING FORMS TO DO THIS. EACH FORM CONTAINS A GROUP OF SIMILAR TASKS AND HAS FROM 1 TO 19 KSAOS ACROSS THE TOP. THESE ARE KSAOS THAT FIRST-LINE SUPERVISORS SUCH AS YOURSELVES HAVE DETERMINED TO BE IMPORTANT TO THESE GROUPS OF TASKS. TO MAKE YOUR JOB A LITTLE EASIER, WE

DIVIDED THE LIST OF TASKS IN HALF SO THAT EACH OF YOU WILL BE RATING HALF OF THE TASKS. EACH OF THESE FORMS HAS THE RATING SCALE YOU WILL BE USING AT THE TOP OF THE FORM. THIS RATING SCALE WILL BE YOUR ASSESSMENT OF HOW IMPORTANT THAT KSAO IS TO PERFORMING THE TASKS; 1 BEING UNIMPORTANT, AND 5 BEING EXTREMELY IMPORTANT. FOR EACH CELL IN THE RATING FORM YOU WILL BE MAKING THIS JUDGMENT FOR THE CORRESPONDING KSAO AND TASK.

V. Explain Definition List

YOU SHOULD EACH HAVE A LIST DEFINING KSAOS. THIS LIST IS IMPORTANT SINCE KSAOS ARE ABBREVIATED ON THE RATING FORMS. YOU WILL NEED TO REFER TO THE INFORMATION ON THIS LIST WHILE YOU ARE MAKING YOUR RATINGS. PLEASE TAKE A FEW MINUTES NOW TO READ OVER THE LIST AND FAMILIARIZE YOURSELF WITH THE DEFINITIONS. NUMBERS 1 THROUGH 21 ON THE LIST ARE KNOWLEDGES AND 22 THROUGH 58 ARE SKILLS, ABILITIES, AND OTHER CHARACTERISTICS. THESE NUMBERS ARE ON YOUR RATING FORMS SO YOU CAN EASILY FIND THEM ON THE LIST. THERE ARE MORE KNOWLEDGES LISTED HERE THAN ANY ONE SUPERVISOR WOULD KNOW. YOU'RE NOT EXPECTED TO BE FAMILIAR WITH ALL OF THEM. SPEAK UP IF YOU HAVE ANY QUESTIONS. DO NOT BEGIN ANY RATINGS YET. WALK AROUND THE ROOM AND POINT OUT THE CORRESPONDING NUMBERS AND LETTERS OF ITEMS ON THE RATING FORMS WITH THE LISTS. ALLOW ABOUT 5 MINUTES FOR THIS AND ANSWER ANY QUESTIONS

VI. Begin the actual rating

LET ME REVIEW THE RATING INSTRUCTIONS BRIEFLY. YOU WILL RATE THE RELATIVE IMPORTANCE OF EACH KSAO FOR EFFECTIVELY PERFORMING EACH OF THE TASKS LISTED ON THE FORM. FOR EXAMPLE, LOOK AT YOUR KSAO-TASK IMPORTANCE RATING FORM. LOOK AT THE FIRST KSAO LISTED ACROSS THE TOP OF THE FORM.

YOU'LL HAVE TO ADLIB AT THIS POINT DEPENDING ON THE ORDER OF ADMINISTRATION FOR THIS SESSION. SUGGEST ASKING A WORKSHOP PARTICIPANT TO READ THE FIRST KSAO AND FIRST TASK TO YOU. USE THIS AS AN EXAMPLE.

YOU WILL ASK YOURSELF "HOW IMPORTANT IS THIS KSAO TO PERFORMING THIS TASK"? IF YOU THINK IT IS UNIMPORTANT, YOU WILL PUT A 1 IN THAT CELL. NEXT, YOU WILL RATE HOW IMPORTANT THIS SAME KSAO IS TO PERFORMING THE NEXT TASK. IF YOU THINK IT IS EXTREMELY IMPORTANT, YOU WILL WRITE A 5 IN THAT CELL. CONTINUE THIS WAY DOING A COLUMN AT A TIME.

IT MAY BE A GOOD IDEA TO RUN THROUGH ANOTHER EXAMPLE, CALLING ON SOMEONE WITH A DIFFERENT FORM TO GIVE YOU A KSAO AND A TASK.

DO YOU HAVE ANY QUESTIONS SO FAR? ANSWER ANY QUESTIONS

IF THERE ARE NO FURTHER QUESTIONS, WE WILL BEGIN THE RATINGS NOW. THE RATINGS SHOULD TAKE YOU BETWEEN 2 AND 3 HOURS TO COMPLETE. YOU CAN TAKE BREAKS IF YOU NEED TO. IF AT ANY TIME YOU HAVE A QUESTION, DO NOT HESITATE TO ASK FOR HELP. WHEN YOU ARE FINISHED MAKING THE RATINGS YOU ARE FREE TO GO.

WALK AROUND THE ROOM OFTEN WHILE RATINGS ARE IN PROGRESS.
SUGGESTED COMMENTS AS RATINGS ARE IN PROGRESS:

WE REALIZE THAT THIS TAKES A LOT OF CONCENTRATION, SO IF YOU START TO FEEL FATIGUED AT ANY POINT, PLEASE TAKE A BREAK. IT'S IMPORTANT THAT YOU CONCENTRATE ON THESE RATINGS.

REMEMBER THE QUESTION YOU ARE ASKING YOURSELF IS "HOW IMPORTANT IS THIS KSAO TO PERFORMING THIS TASK?"

VII. Debriefing

COLLECT ALL MATERIALS FROM PARTICIPANTS, MAKING SURE THAT ALL FORMS HAVE ID CODES FILLED IN. ASK EACH PERSON THE FOLLOWING:

HOW DID YOU FIND THE WORKSHOP? DO YOU HAVE ANY NEGATIVE/POSITIVE COMMENTS?

DO YOU HAVE ANY SUGGESTIONS FOR CHANGING THE WORKSHOP?

DO YOU THINK THE SELECTION PROCEDURES I DISCUSSED WOULD BE USEFUL TO YOU?

CAN YOU THINK OF ANY TRAINING THAT WOULD BE USEFUL TO NEW FIRST-LINE SUPERVISORS?

THANK YOU FOR YOUR TIME TODAY, YOUR INPUT IS VALUABLE.

Appendix J

KSAO-Task Importance Rating Forms

ESAD - TASK IMPORTANCE RATING FORM A

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Staff Positions

1. Identify requirements and hiring criteria for position vacancies (e.g., skills and knowledges, SKAP/ACCES elements, crediting plans).
2. Initiate requests (SF-52) for recruitment or other staffing actions.
3. Recruit/interview candidates at high schools or college campuses or conferences or job fairs, etc.
4. Review candidates' qualification summaries (e.g., resumes, DA 2302, SF 171, 201 files, performance ratings, SKAP/ACCES).
5. Participate as a member on applicant evaluation boards (e.g., local merit promotion or SKAP panels).
6. Interview candidates for vacant positions.
7. Check with references concerning candidates' background.
8. Participate as a member on selection boards/panels.
9. Recommend candidates for vacant position to the next level of supervision.
10. Select candidates for vacant position.
11. Justify in writing the selection/non-selection of candidates.
12. Answer subordinates' questions concerning position vacancy announcements.
13. Answer subordinates' questions concerning their non-selection for vacant positions.

ES404

ID CODE _____

[illegible]

USAO - TASK IMPORTANCE RATING FORM B

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Position Requirements

14. Justify the need for current/new positions.
15. Review subordinates' job descriptions for accuracy.
16. Identify changes in position duties/requirements.
17. Develop revisions to job descriptions.
18. Request that positions be audited or reviewed by the Civilian Personnel Office (CPO).
19. Establish upward mobility, intern, co-op student positions, etc.
20. Identify/restructure vacant positions that can be filled at lower grade levels with promotion potential to full level.
21. Justify retaining grade level of vacant positions.
22. Obtain and provide information for manpower surveys and studies (e.g., Schedule I, Efficiency Reviews, Commercial Activities Review).
23. Develop/provide input to Table of Distribution and Allowances (TDAs).
24. Adjust the composition of workforce (e.g., number of part time vs full time, low vs high grade) to satisfy TDA while maximizing work group productivity.

ESAOs

ID CODE _____

[illegible]

KSAO - TASK IMPORTANCE RATING FORM C**ISAOs**

ID CODE -----

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Enforce Equal Employment Opportunity (EEO) Policies

-
25. Coordinate with EEO office to determine if unit contains a representative number of minorities and women.
 26. Review own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to identify areas requiring affirmative action.
 27. Revise own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to achieve affirmative action.
 28. Take appropriate actions to minimize/eliminate discriminatory attitudes/behaviors of subordinates toward each other.
 29. Follow EEO procedures in response to EEO complaints.
 30. Participate in EEO/Affirmative Action conferences or workshops.
 31. Encourage subordinates to participate in Black History Month, Federal Women's Program, Hispanic Week, etc.
 32. Communicate with EEO counselors.
-

[illegible]

ID CODE _____

1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Provide Recognition and Rewards

33. Nominate subordinates for formal honors or awards.
34. Present on-the-spot cash awards to subordinates from discretionary funds.
35. Establish rewards or incentives to motivate subordinates (e.g., certificate of achievement, employee of the month).
36. Praise subordinates for effective job performance.
37. Write letters of appreciation/commendation for subordinates.

[illegible]

ESAO - TASK IMPORTANCE RATING FORM E

ESAOs

ID CODE _____

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
- 2 = Minor Importance
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Motivate Employees

- 38. Motivate subordinates.
- 39. Recognize and take steps to correct morale problems.
- 40. Encourage subordinates to perform their jobs to the best of their ability.
- 41. Foster/develop a positive work environment that will serve to motivate subordinates.
- 42. Foster/develop a positive working relationship between civilian and military subordinates.
- 43. Set an example for subordinates to follow.
- 44. Encourage subordinates to participate in productivity improvement programs (e.g., suggestion, cost-reduction, quality assurance, quality circles).
- 45. Involve subordinates in decision-making or planning processes.

8. Performance Appraisal System	9. Leadership	10. Motivate Others	11. Oral Communication	12. Persuasion	13. Non-Discriminatory	14. Human Relations	15. Coordination	16. Developmental Counseling	17. Performance/Conduct Counseling	18. Self-Confident	19. Honest	20. Self-Starter	21. Dependable	22. Sympathetic	23. Fair	24. Tactful and Diplomatic		

KS40 - TASK IMPORTANCE RATING FORM F

KS40a

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
- 2 = Minor Importance
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Manage Employees with Personal Problems

- 46. Detect/recognize personal problems of subordinates (e.g., drugs, alcohol, financial, family) that affect their job performance.
- 47. Offer to assist subordinates with personal problems that affect their job performance.
- 48. Discuss with subordinates personal problems that affect their job performance.
- 49. Refer subordinates with personal problems affecting their job performance for assistance.

9. Drug and Alcohol Abuse	10. Referral Sources	11. Discipline Policies and Procedures	22. Leadership	24. Conflict Resolution	26. Oral Communication	31. Persuasion	32. Stress Tolerance	34. Non-Discriminatory	35. Human Relations	36. Courage to Confront	42. Performance/Conduct Counseling	47. Honesty	55. Get a Taste Before Acting	56. Tactful and Diplomatic	57. Emotionally Stable	58. Trustworthy		

ESAO - TASK IMPORTANCE RATING FORM C

E340s

ID CODE *****

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Evaluate Performance for Feedback and Promotion

50. Develop subordinates' performance standards.
51. Document subordinates' poor performance.
52. Review performance standards with subordinates.
53. Formally review and evaluate job performance of subordinates.
54. Provide informal feedback to subordinates concerning their performance.
55. Complete written performance appraisals for civilian subordinates.
56. Complete/provide input to Officer Efficiency Report (OER).
57. Complete/provide input to Enlisted Evaluation Report (EER).
58. Review subordinates' performance ratings with approving official prior to review; ratings with subordinates.
59. Review performance ratings with subordinates.
60. Counsel subordinates about how to improve performance.
61. Provide subordinates with written guidelines on how to improve performance.
62. Evaluate probationary employees to determine suitability for permanent status.
63. Evaluate subordinates' suitability for promotion (e.g., local merit, SKAP/ACCES).
64. Evaluate trainees (e.g., interns, upward mobility) for target grade promotion.
65. Inform chain of command of performance problems with military subordinates.
66. Deny within grade increase to subordinates whose performance is below acceptable levels.

[illegible]

KS40 - TASE IMPORTANCE RATING FORM B

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor importance
3 = Important
4 = Very important
5 = Extremely important

Discipline Employees

67. Document subordinates' unauthorized absences, tardiness, or behavioral problems.
68. Confer with staff from Management Employee Relations (MER) prior to taking actions on subordinates.
69. Counsel subordinates about absences, tardiness, behavioral problems.
70. Inform chain of command of conduct/behavioral problems (e.g., absences, tardiness) with military subordinates.
71. Determine if adverse actions (e.g., suspension, removal) should be taken because of poor performance.
72. Determine if formal disciplinary steps should be taken in response to conduct/behavioral problems (e.g., absences, tardiness).
73. Initiate adverse actions (e.g., suspension, removal) for subordinates whose performance is below acceptable levels.
74. Write letters of reprimand.

KS400**ID CODE**[illegible]

ES494

ID CODE _____

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important.
5 = Extremely Important

Train and Develop Employees

75. Identify training needed by subordinates.
76. Complete training needs survey.
77. Determine if currently available training programs meet subordinates needs.
78. Identify available training/development opportunities for subordinates.
79. Inform subordinates of training/development opportunities.
80. Nominate subordinates to receive training.
81. Designate subordinates to receive cross-training.
82. Develop individual Development Plans (IDPs) with subordinates.
83. Develop training plans for subordinates in special employment programs (e.g., apprentices, co-op students, interns, upward mobility, veterans, re-adjustment employees).
84. Provide cross-training for subordinates.
85. Design on-the-job training programs.
86. Provide on-the-job training.
87. Instruct subordinates on how to use new equipment.
88. Assign experienced employee(s) to train new workers.
89. Provide career development counseling to subordinates.
90. Justify need for non-government sources of training.
91. Ensure subordinates are free for PT, training, etc.
92. Document effectiveness of training attended by subordinates (e.g., complete DD 1556).
93. Evaluate long term effectiveness of training attended by subordinates.

[illegible]

ESAO - TASK IMPORTANCE RATING FORM J**ESAs****ID CODE**

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Conduct Meetings and Briefings

94. Conduct staff meetings.
95. Conduct meetings with subordinates at beginning of their shift.
96. Participate in staff meetings, conferences, etc.
97. Brief upper management on progress of work or project activities.
98. Brief subordinates on progress of work or project activities.
99. Conduct safety meetings.

[illegible]

ESAO - TASK IMPORTANCE RATING FORM E

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Provide Orientation

100. Provide orientation to new employees.
101. Explain personnel policies and procedures to subordinates.
102. Explain administrative policies and procedures to subordinates (e.g., TDY, work hours, leave).
103. Explain local installation policies and procedures to subordinates.
104. Explain military policies and procedures to civilian supervisors and/or subordinates.
105. Explain civilian policies and procedures to military supervisors and/or military subordinates.
106. Inform subordinates of impending changes in policies or procedures.

ESAOs

ID CODE

[illegible]

ESAO - TASK IMPORTANCE RATING FORM L

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Communicate with Subordinates, Superiors, and Others

107. Inform higher management of employees' views and concerns.
108. Inform subordinates of management objectives, decisions, and views.
109. Ask second-line supervisor or above for help or advice with work-related problems.
110. Inform second-line supervisor or above when problems arise which will delay completion of work.
111. Communicate with union representatives/stewards.
112. Inform second-line supervisor or above of your subordinates' accomplishments.
113. Represent your subordinates during their absence.
114. Represent your immediate supervisor during his/her absence.
115. Communicate with other supervisors in your organization to improve operations.
116. Communicate with members of other organizations to improve operations.

ES40s

ID CODE

[illegible]

LSAO - TASK IMPORTANCE RATING FORM

ESAOs

ID CODE _____

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Conduct Administrative Duties

117. Write or keep records/logs (e.g., suspense dates, work status sheets, project logs, work orders).
118. Write policies and procedures (e.g., SOP).
119. Read memos, newsletters, regulations, journals, etc., to keep up with developments related to supervision.
120. Read, research regulations pertaining to personnel management and administrative procedures.
121. Provide job references for subordinates.
122. Enforce smoking/non-smoking regulations.
123. Assess/verify accuracy of facts, statements, or complaints by others before they become part of a record or a basis for action.
124. Resolve work-related complaints, conflicts or disputes among subordinates.
125. Resolve work-related conflicts between your subordinates and people in other offices.
126. Follow grievance procedures in response to grievances.
127. Keep up-to-date on union contracts or activities.
128. Monitor compliance with union agreements.
129. Assign work space to subordinates.
130. Allocate supplies or equipment to subordinates.
131. Arrange for support from other offices or activities.
132. Consult with off-going supervisor about shift conditions.

[illegible]

KS40 - TASK IMPORTANCE RATING FORM

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Work Schedules

133. Request/justify comp time or overtime for subordinates.
134. Approve comp time or overtime for subordinates.
135. Coordinate annual leave/vacation schedules for subordinates.
136. Approve/disapprove requests for absences and leave.
137. Complete subordinates' time cards and overtime sheets.
138. Certify time sheets/time cards.
139. Review personnel records and reports (e.g., time and attendance, sick leave, overtime) for accuracy and potential abuses (e.g., excessive tardiness, sick leave).
140. Schedule subordinates' work hours.
141. Revise work schedules to adjust for subordinates' vacations, retirements, leaves of absence, attendance at training, etc.
142. Revise work schedule to meet changes in the demands for unit's products or services.
143. Determine causes of subordinates' repeated absences/tardiness.

ESAO

ID CODE -----

[illegible]

LSAO - TASK IMPORTANCE RATING FORM F**ESAOs**

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Maintain Safety Requirements

149. Instruct personnel in the use of safety equipment.
150. Instruct personnel in the observance of safety regulations.
151. Conduct safety tests on equipment.
152. Request safety tests on equipment.
153. Inspect work area for safety hazards.
154. Investigate work-related accidents.
155. Ensure that safety hazards are addressed.
156. Instruct personnel in proper handling of hazardous materials.
157. Instruct personnel how to use work equipment safely.
158. Inspect safety equipment.
159. Report accidents.
160. Document safety violations.
161. Complete accident reports.
162. Complete workers' compensation forms.
163. Enforce safety programs and procedures.

[illegible]

ESAO - TASK IMPORTANCE RATING FORM Q**RS40s**

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Employee's Work

164. Delegate authority to work leader or other subordinates.
165. Establish work priorities and deadlines to meet milestones.
166. Assign work to subordinates.
167. Assign work priorities and deadlines to subordinates.
168. Explain work assignments to subordinates.
169. Review subordinates' work when in progress.
170. Review and approve subordinates' work upon completion.
171. Integrate the work of several subordinates to create a final product.

[illegible]

ESAO - TASK IMPORTANCE RATING FORM R**ESAOs**

ID CODE _____

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Oversee Operations

172. Monitor/evaluate work performed for the Army by outside vendors or contractors.
-
173. Evaluate program/project status or progress.
-
174. Evaluate work requests to determine if work can be accomplished and is within the mission of the unit.
-
175. Determine when work should be performed in-house and when to contract work out.

[illegible]

ESAO - TASK IMPORTANCE RATING FORM 3

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Materials and Supplies

176. Determine the supplies, parts, equipment, or tools needed to accomplish work.
177. Determine if supplies, parts, equipment or tools are available to accomplish work.
178. Request/order supplies, parts, equipment or tools required to accomplish work.
179. Receive/verify receipt of supplies, parts, equipment or tools.
180. Check equipment to assure it is working properly.
181. Request repairs on down equipment.
182. Schedule preventive maintenance on equipment.
183. Develop internal controls to minimize waste, fraud or abuse.
184. Implement internal controls to minimize waste, fraud or abuse.
185. Assess internal controls designed to minimize waste, fraud or abuse.
186. Account for hand receipt equipment on the survey list.
187. Report missing tools/equipment.
188. Justify the need for retaining allocated supplies or equipment for subordinates.
189. Justify the need for retaining allocated work space for subordinates.

ESAOs

ID CODE

[illegible]

ESAO - TASK IMPORTANCE RATING FORM 1

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Plan

190. Assess the impact of future workload on staffing requirements.

191. Assess the impact of mission changes on workload and staffing requirements.

192. Survey customers/users to estimate future workload.

193. Survey customers/users to assess quality of services provided.

194. Estimate unit's short-range workload.

195. Estimate unit's long-range workload.

196. Estimate time required to complete projects.

197. Assess impact of new technology on work group.

196. Assess efficiency of work operations.

199. Develop plans for improving work operations.

200. Develop plans to achieve goals or milestones.

201. Implement plans to achieve goals or milestones.

202. Participate in writing mission and function statements.

203. Monitor update mission and function statements.

204. Implement plans for improving work operations.

ESAOs

ID CODE _____

[illegible]

ESAO - TASK IMPORTANCE RATING FORM

ESAOs

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Budget

205. Monitor currently available financial resources.
206. Monitor long-range availability of financial resources.
207. Estimate financial resources required to complete projects.
208. Project resources (e.g., personnel, equipment, training, TDY) required on an annual basis so budgets can be determined.
209. Allocate/reallocate budget resources among different work/projects.
210. Justify allocation of budget resources for work/projects.
211. Develop internal work group operating budgets from allocations received.
212. Negotiate with others to obtain personnel, equipment, materials or financial resources to accomplish mission.
213. Monitor use of overtime, travel funds, training funds, incentive rewards, etc. to ensure that spending keeps within budgetary constraints.

[illegible]

ESAO - TASK IMPORTANCE RATING FORM V

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Practice Security Procedures

214. Explain security policies and procedures to subordinates.
215. Determine sensitivity of positions for security purposes.
216. Request security clearances for subordinates.
217. Review subordinates Personal History Statement (i.e., DD 398).
218. Maintain privacy/security of personnel information in accordance with the Freedom of Information/Privacy Act.
219. Develop SOP in accordance with security regulations.
220. Implement SOP in accordance with security regulations.
221. Notify appropriate personnel (e.g., security officer, Military Intelligence) of suspected security risks or violations.
222. Report/document security violations.
223. Monitor the physical security of the work area.
224. Conduct security training meetings.
225. Maintain records of subordinates' attendance at security meetings.
226. Identify changes in job requirements which require that subordinates clearance be upgraded or downgraded.

ESACs

ID CODE

[illegible]

KNOWLEDGES, SKILLS, ABILITIES, AND OTHER CHARACTERISTICS (KSAOs)

Knowledges

1. **Merit Promotion System:** Includes vacancy announcements, competitive and noncompetitive merit promotion actions, priority placements, reinstatement eligibles, and the rating/ranking process for applicants (e.g., FPM 335 and AR 690-300 chapter 335).
2. **Employee Reassignment:** Includes downgrade, and transfer procedures.
3. **Position Management:** And classification system. Includes job descriptions, position classification standards, position review, and position management principles (e.g., AR 690-500 chapter 501).
4. **Staffing/Manpower Requirements:** Schedule X, AR 570-4 and TDA, staffing guides. (DA PAM 570-551, DA PAM 570-558, APERS).
5. **EEO/Affirmative Action:** Day to day practices and procedures.
6. **Affirmative Action Programs:** Awareness of federal programs such as Federal Women's, upward mobility, and hire the handicapped.
7. **Eligibility Requirements:** Nominating procedures for decorations, awards, and honors (e.g., career service recognition for civilian employees, quality step increases, public service award).
8. **Performance Appraisal System:** Includes performance counseling process, feedback, guidance, review, goal setting, and development of performance standards (e.g., FPM 430, AR 690-430).
9. **Drug and Alcohol Abuse:** Its effect on worker performance, and the supervisor's responsibilities to detect and help correct problems.
10. **Referral Sources:** Available for subordinates with personal problems (e.g., financial counselor, drug and alcohol counselor, judge advocate office).
11. **Discipline Policies and Procedures:** Includes both formal and informal disciplinary actions (AR 690-700 chapters 751 and 752).
12. **Training Policies and Procedures:** Includes determination of training needs, procedures to follow to try and ensure subordinates/oneself receive training, and the types of training available (e.g., on-the-job training, Army/DoD courses, non-government courses).
13. **Career Management:** Policies and program requirements (e.g., AR 690-950-1).
14. **Overtime Regulations:** Includes the Fair Labor Standards Act (FLSA) and Title 5 United States Code Overtime Entitlement.
15. **Accountability:** Property policies and procedures (e.g., hand receipt survey, AR 735-5).

16. **Grievance Procedures:** Grievance and appeal procedures as outlined in Army Regulation 690-700, chapter 771.
17. **Safety and Occupational Health Regulations:** Procedures and practices (AR 40-5, AR 385-10, AR 385-32, AR 385-40).
18. **Budget Policies:** And Process.
19. **PPBES:** Planning, Programming, Budgeting, and Execution System.
20. **Security Policies:** Procedures (e.g., personnel security, classified documents security, ADP security, physical security).
21. **Organization's Mission:** Own organization's specific mission.

Skills, Abilities, and Other Characteristics

22. **Leadership:** The ability to take charge of a situation, to instill confidence, and promote action among subordinates.
23. **Delegation:** The ability to assign work, establish controls, and ensure that subordinates have the necessary authority and resources.
24. **Conflict Resolution:** The ability to listen to all sides of a dispute, objectively evaluate the situation, and respond appropriately.
25. **Motivate Others:** The ability to motivate subordinates to perform to the best of their abilities.
26. **Written Communication:** The ability to write memos, letters, instructions, and other materials in a clear and organized fashion.
27. **Reading Ability:** The ability to read and comprehend written material.
28. **Oral Communication:** The ability to express oneself clearly in a one-on-one or small group situation.
29. **Public Speaking:** The ability to communicate orally to large groups of people.
30. **Teaching Ability:** The ability to impart new skills and knowledges.
31. **Persuasion:** The ability to obtain acceptance or agreement to an idea, plan, or course of action.
32. **Decision Making:** The ability to make timely decisions based on factual information, personal experience, and knowledge of the mission of one's unit, specific organization, and the Army in general.
33. **Stress Tolerance:** The ability to maintain an acceptable level of performance and conduct under stressful conditions.

- 34. Non-Discriminatory:** The ability to relate without prejudice to individuals whose backgrounds, appearances, values, or physical condition are different from yours.
- 35. Human Relations:** The ability to develop and maintain cooperative and productive working relationships with peers, subordinates, and superiors.
- 36. Courage to Confront:** The ability to confront one's subordinates about performance or conduct problems.
- 37. Coordination:** The ability to coordinate the efforts of several people to achieve work or project goals efficiently.
- 38. Planning:** The ability to set goals, establish plans, anticipate obstacles, and identify means to overcome them.
- 39. Organizing:** The ability to prioritize tasks, schedule people, and arrange resources so as to achieve objectives most effectively.
- 40. Problem Identification:** The ability to assess the overall effectiveness of the work unit and identify any issues or problems.
- 41. Developmental Counseling:** Skill in helping subordinates identify their developmental needs and means for meeting them.
- 42. Performance/Conduct Counseling:** Skill in counseling employees about work-related problems (e.g., performance deficiencies, attitude problems, conduct problems).
- 43. Time Management:** Skill in managing one's time efficiently.
- 44. Monitoring Work:** Skill in monitoring the progress of subordinate's work (e.g., seeing that orders are carried out, correcting and assisting subordinates, making sure that work is up to standard, and knowing early when something goes wrong).
- 45. Self-Confident:** Believes in own abilities to get the job done. Acts with sureness and certainty.
- 46. Thorough:** Concerned for the completeness, accuracy, and overall quality of the work.
- 47. Honest:** Values the truth and refrains from making misleading statements.
- 48. Self-Starter:** Originates actions to obtain self-imposed or other-imposed goals rather than waiting to be told what to do next.
- 49. Responsible:** Accepts responsibility for own actions.
- 50. Dependable:** Reliably completes assignments, meets deadlines, follows up on requests, and pursues important matters until they are resolved.

- 51. Achievement Oriented:** Approaches the work situation ambitiously. Likes responsibility. Interested in getting ahead.
- 52. Empathetic:** Aware of the impact of own behavior on the feelings and needs of others.
- 53. Technically Competent:** Knows the work to be supervised. Has sufficient technical knowledge to be respected by other workers. Can make sound technical decisions.
- 54. Fair:** Treats subordinates without favoritism. Evaluates work and administers rewards based on subordinate's true ability and accomplishments.
- 55. Gets Facts Before Acting:** Seeks complete information from all available sources before making judgments or decisions about important work matters.
- 56. Tactful and Diplomatic:** Presents negative information clearly, yet without raising the listener's defenses or forcing the listener to lose face.
- 57. Emotionally Stable:** Reacts appropriately and predictably to everyday events. Is neither moody nor suspicious around others.
- 58. Trustworthy:** Handles confidential, classified, and/or personal information appropriately.

Appendix K

Phase II Reliability Estimates

Phase II Reliability Estimates

KSAO	Number of Raters	Single Rater Reliability ICC	SEM	Estimated Multiple Rater Reliability R _{mm}	SEM
1. Merit Promotion System	28	.242	.111	.899	.050
2. Employee Reassignment	28	.373	.122	.943	.044
3. Position Management	28	.367	.262	.942	.095
4. Staffing/Manpower Requirements	28	.448	.234	.958	.075
5. EEO/Affirmative Action	27	.565	.234	.972	.066
6. Affirmative Action Programs	27	.225	.022	.887	.010
7. Eligibility Requirements	26	.309	.457	.921	.187
8. Performance Appraisal System	31	.508	.688	.970	.195
9. Drug and Alcohol Abuse	26	.348	.058	.933	.022
10. Referral Sources	26	.609	.918	.976	.252
11. Discipline Policies and Procedures	30	.443	.401	.960	.126
12. Training Policies and Procedures	27	.331	.124	.930	.048
13. Career Management	27	.540	.061	.969	.018
14. Overtime Regulations	26	.307	.346	.920	.142
15. Accountability	31	.507	.052	.970	.015
16. Grievance Procedures	30	.527	.684	.971	.193
17. Safety and Health Regulations	27	.306	.071	.923	.029
18. Budget Policies	27	.698	.017	.984	.004
19. PPBES	27	.830	.007	.992	.001
20. Security Policies	30	.567	.204	.975	.055
21. Organization's Mission	28	.419	.094	.953	.031
22. Leadership	30	.530	.168	.971	.047
23. Delegation	27	.466	.183	.959	.059
24. Conflict Resolution	29	.326	.200	.933	.076
25. Motivate Others	27	.306	.241	.922	.098
26. Written Communication	31	.449	.343	.962	.105
27. Reading Ability	31	.406	.263	.955	.085
28. Oral Communication	31	.535	.213	.973	.058
29. Public Speaking	31	.554	.655	.975	.176
30. Teaching Ability	27	.501	.291	.964	.089
31. Persuasion	31	.581	.231	.977	.060
32. Decision Making	31	.358	.176	.945	.062
33. Stress Tolerance	29	.309	.123	.929	.048
34. Non-Discriminatory	31	.441	.371	.961	.115
35. Human Relations	26	.324	.102	.926	.041
36. Courage to Confront	31	.326	.233	.937	.086
37. Coordination	26	.458	.014	.957	.005
38. Planning	31	.422	.098	.958	.031
39. Organizing	31	.392	.409	.952	.136
40. Problem Identification	30	.401	.177	.953	.059
41. Developmental Counseling	31	.479	.447	.966	.131
42. Performance/Conduct Counseling	31	.304	.545	.931	.209
43. Time Management	25	.555	.178	.969	.053
44. Monitoring Work	31	.420	.340	.957	.108
45. Self-conflict	26	.399	.100	.945	.035
46. Thorough	31	.418	.316	.957	.101
47. Honest	31	.476	.297	.966	.088
48. Self-starter	26	.546	.142	.969	.042
49. Responsible	31	.411	.284	.956	.092
50. Dependable	31	.407	.310	.955	.100
51. Achievement Oriented	27	.529	.027	.968	.008
52. Empathetic	26	.646	.217	.979	.058
53. Technically Competent	31	.488	.327	.967	.095
54. Fair	31	.457	.324	.963	.098
55. Gets Facts Before Activity	31	.418	.455	.957	.145
56. Tactful and Diplomatic	29	.544	.137	.972	.038
57. Emotionally Stable	29	.295	.180	.924	.072
58. Trustworthy	29	.367	.380	.944	.135

Appendix L

KSAO Importance Ratings by Task

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 1

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=1 -- -----

1	28	3.7143	1.1819	0.2234	1	5
2	28	3.8214	0.8189	0.1548	2	5
3	27	2.9630	1.3723	0.2641	1	5
4	28	3.9643	0.8381	0.1584	3	5
5	27	3.7778	1.0500	0.2021	1	5
6	28	4.0357	0.9222	0.1743	2	5
7	28	3.6429	1.0616	0.2006	1	5
8	27	3.9259	0.9578	0.1843	1	5
9	28	4.0357	0.9616	0.1817	2	5
10	27	4.4444	0.7511	0.1445	3	5
11	27	3.7778	1.1875	0.2285	2	5
12	28	3.9643	0.8812	0.1665	2	5
13	28	3.7857	1.2578	0.2377	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 2

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=2 -- -----

1	28	3.3214	1.3068	0.2470	1	5
2	28	3.5357	1.2615	0.2384	1	5
3	26	2.0769	1.2625	0.2476	1	5
4	28	3.6071	1.1333	0.2142	1	5
5	27	3.1481	1.3503	0.2599	1	5
6	28	3.7143	1.1174	0.2112	1	5
7	28	3.2143	1.3432	0.2538	1	5
8	27	3.3333	1.1767	0.2265	1	5
9	28	3.5000	1.1055	0.2089	1	5
10	27	3.7778	1.1875	0.2285	1	5
11	27	3.2222	1.3107	0.2522	1	5
12	28	3.2143	1.2280	0.2321	1	5
13	28	3.0000	1.3053	0.2467	1	5
14	27	3.4074	1.3661	0.2629	1	5
15	27	3.5556	1.4233	0.2739	1	5
16	27	3.7037	1.2954	0.2493	1	5
17	27	3.3333	1.3009	0.2504	1	5
18	27	3.5556	1.0500	0.2021	1	5
19	26	3.4615	1.2403	0.2433	1	5
20	27	3.7037	1.1030	0.2123	1	5
21	27	3.5556	1.2810	0.2465	1	5
22	27	3.2222	1.5771	0.3035	1	5
23	27	2.9259	1.6155	0.3109	1	5
24	27	3.3333	1.2710	0.2446	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 3

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=3 -- -----

1	28	3.7857	1.2578	0.2377	1	5
2	28	3.4286	1.3174	0.2490	1	5
3	26	2.6538	1.4681	0.2879	1	5
4	28	3.3571	1.3113	0.2478	1	5
5	27	2.9259	1.2987	0.2499	1	5
6	28	3.1429	1.4836	0.2804	1	5
7	28	2.7500	1.3229	0.2500	1	5
8	27	2.9259	1.3847	0.2665	1	5
9	28	3.0357	1.2905	0.2439	1	5
10	27	3.3704	1.4451	0.2781	1	5
11	27	2.8148	1.5200	0.2925	1	5
12	28	3.0714	1.3589	0.2568	1	5
13	28	2.8929	1.4742	0.2786	1	5
14	27	4.0741	0.8286	0.1595	2	5
15	27	4.1481	0.8640	0.1663	3	5
16	27	4.4444	0.6405	0.1233	3	5
17	27	4.2593	0.7642	0.1471	3	5
18	27	4.0370	0.9799	0.1886	2	5
19	26	3.8462	1.1897	0.2333	1	5
20	27	4.1852	0.7863	0.1513	2	5
21	27	4.2222	0.8916	0.1716	2	5
22	27	3.9630	1.1260	0.2167	1	5
23	27	3.7407	1.3472	0.2593	1	5
24	27	3.8148	1.3598	0.2617	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 4

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=4 -- -----

1	28	3.6071	1.5715	0.2970	1	5
2	28	3.6071	1.3700	0.2589	1	5
3	26	2.7692	1.3056	0.2561	1	5
4	28	3.1786	1.3348	0.2523	1	5
5	27	2.9630	1.4539	0.2798	1	5
6	28	3.0000	1.5635	0.2955	1	5
7	28	2.5000	1.1386	0.2152	1	5
8	27	2.8889	1.4233	0.2739	1	5
9	28	2.9286	1.5618	0.2951	1	5
10	27	3.1852	1.6417	0.3159	1	5
11	27	2.7778	1.5275	0.2940	1	5
12	28	2.7143	1.3012	0.2459	1	5
13	28	2.5714	1.3992	0.2644	1	5
14	27	4.1852	1.0014	0.1927	1	5
15	27	3.9259	1.1743	0.2260	1	5
16	27	3.9259	0.9578	0.1843	1	5
17	27	3.7407	1.0225	0.1968	1	5
18	27	3.7778	1.2506	0.2407	1	5
19	26	3.5000	1.3638	0.2675	1	5
20	27	4.0000	1.1094	0.2135	1	5
21	27	4.0741	1.1743	0.2260	1	5
22	27	4.0000	1.3301	0.2560	1	5
23	27	3.9259	1.4122	0.2718	1	5
24	27	3.8519	1.3503	0.2599	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 5

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=5 -- -----

25	26	2.9615	1.2484	0.2448	1	5
26	26	3.6154	1.0983	0.2154	1	5
27	26	3.5769	1.2058	0.2365	1	5
28	26	4.1923	1.0590	0.2077	1	5
29	27	4.2593	0.9842	0.1894	2	5
30	26	3.3846	1.2354	0.2423	1	5
31	26	2.8077	1.2006	0.2355	1	5
32	26	3.3462	1.2631	0.2477	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 6

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=6 -- -----

25	27	3.3333	1.3009	0.2504	1	5
26	27	3.2963	1.1373	0.2189	1	5
27	26	3.4615	1.2403	0.2433	1	5
28	26	3.6154	1.3587	0.2665	1	5
29	26	3.3846	1.4718	0.2886	1	5
30	27	3.3333	1.2710	0.2446	1	5
31	27	2.9630	1.1260	0.2167	1	5
32	27	3.1852	1.2721	0.2448	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 7

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=7 -- -----

33	26	4.5385	0.6469	0.1269	3	5
34	26	4.0769	1.1286	0.2213	1	5
35	26	3.8846	1.0706	0.2100	1	5
36	26	2.9231	1.5211	0.2983	1	5
37	25	3.1600	1.2477	0.2495	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 8

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-8 -- -----

33	26	3.9615	1.0385	0.2037	1	5
34	26	3.1154	1.3365	0.2621	1	5
35	26	3.2692	1.2508	0.2453	1	5
36	26	3.5000	1.2728	0.2496	1	5
37	25	3.2000	1.2583	0.2517	1	5
38	26	3.5385	0.8593	0.1685	1	5
39	26	2.8846	1.2108	0.2375	1	5
40	26	3.7308	1.1852	0.2324	1	5
41	26	3.3077	1.1232	0.2203	1	5
42	25	3.0000	1.2910	0.2582	1	5
43	26	3.4615	1.3923	0.2730	1	5
44	26	2.6154	1.3879	0.2722	1	5
45	26	2.8462	1.3767	0.2700	1	5
50	31	4.6452	0.5507	0.0989	3	5
51	31	4.6129	0.6152	0.1105	3	5
52	31	4.5806	0.6720	0.1207	2	5
53	31	4.5161	0.6256	0.1124	3	5
54	31	4.4194	0.8072	0.1450	2	5
55	31	4.5806	0.5642	0.1013	3	5
56	27	3.4444	1.5021	0.2891	1	5
57	27	3.2593	1.6312	0.3139	1	5
58	31	4.0968	0.9076	0.1630	2	5
59	31	4.5806	0.5642	0.1013	3	5
60	31	4.4194	0.8072	0.1450	2	5
61	31	4.0323	1.1101	0.1994	1	5
62	31	4.4839	0.7244	0.1301	3	5
63	31	4.2581	0.7732	0.1389	2	5
64	31	4.0968	0.9076	0.1630	2	5
65	27	3.4074	1.4212	0.2735	1	5
66	30	4.4333	0.6789	0.1240	3	5
107	26	3.3077	1.1232	0.2203	1	5
108	26	3.0769	1.2938	0.2537	1	5
109	26	3.0000	1.2961	0.2542	1	5
110	26	2.8462	1.3767	0.2700	1	5
111	26	2.5000	1.2083	0.2370	1	5
112	26	3.4615	1.2403	0.2433	1	5
113	26	2.5000	1.3928	0.2732	1	5
114	26	2.7692	1.3945	0.2735	1	5
115	25	3.1200	1.3940	0.2788	1	5
116	25	3.0000	1.2910	0.2582	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 9

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-9 -- -----

46	26	4.4231	0.7027	0.1378	3	5
47	25	4.1600	0.9434	0.1887	2	5
48	25	4.0000	1.0000	0.2000	2	5
49	24	4.5417	0.7790	0.1590	3	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 10

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=10 -- -----

33	25	2.1600	1.3748	0.2750	1	5
34	25	2.0400	1.3064	0.2613	1	5
35	25	2.0400	1.2741	0.2548	1	5
36	25	2.0400	1.3064	0.2613	1	5
37	25	2.0400	1.2410	0.2482	1	5
46.	26	3.8462	1.3173	0.2584	1	5
47	26	4.0769	1.0168	0.1994	1	5
48	25	3.8800	1.0536	0.2107	1	5
49	25	4.5200	0.7141	0.1428	3	5

CIYPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 11

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=11 -- -----

46	26	3.6538	1.2944	0.2538	1	5
47	25	3.6000	1.2247	0.2449	1	5
48	26	3.7308	0.9616	0.1886	1	5
49	25	3.8400	1.1060	0.2212	1	5
67	30	4.4333	0.8172	0.1492	2	5
68	30	4.2000	0.8867	0.1619	2	5
69	30	4.7333	0.4498	0.0821	4	5
70	26	3.5769	1.4191	0.2783	1	5
71	30	4.4667	0.8193	0.1496	2	5
72	30	4.3667	0.9994	0.1825	1	5
73	30	4.4333	0.9353	0.1708	1	5
74	29	4.3793	0.9788	0.1818	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 12

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-12 -- -----

75	27	4.3333	0.7338	0.1412	3	5
76	27	3.9259	0.8286	0.1595	3	5
77	27	3.8148	0.8787	0.1691	2	5
78	27	3.7778	1.1209	0.2157	1	5
79	27	3.7407	0.9027	0.1737	2	5
80	27	3.8519	0.9885	0.1902	1	5
81	27	3.6667	1.1767	0.2265	1	5
82	27	4.0000	1.0000	0.1925	2	5
83	27	3.7037	1.2654	0.2435	1	5
84	27	3.6296	1.1485	0.2210	1	5
85	27	3.4074	1.1522	0.2217	1	5
86	27	3.7037	1.1030	0.2123	1	5
87	27	3.4074	1.3085	0.2518	1	5
88	27	3.5556	1.2506	0.2407	1	5
89	27	3.8148	0.9214	0.1773	2	5
90	26	3.7308	1.1509	0.2257	1	5
91	27	2.6296	1.0432	0.2008	1	5
92	27	3.2593	1.1298	0.2174	1	5
93	26	3.2692	1.0792	0.2116	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 13

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=13 -- -----

75	27	3.4444	1.0500	0.2021	1	5
76	27	3.2222	1.0500	0.2021	1	5
77	27	3.2593	1.1633	0.2239	1	5
78	27	3.1481	1.3215	0.2543	1	5
79	27	3.4074	1.1851	0.2281	1	5
80	27	3.3704	1.2755	0.2455	1	5
81	27	3.4815	1.1887	0.2288	1	5
82	27	3.5556	1.1875	0.2285	1	5
83	27	3.5556	1.4763	0.2841	1	5
84	27	3.2963	1.3248	0.2549	1	5
85	27	3.2963	1.3248	0.2549	1	5
86	27	3.2593	1.1959	0.2302	1	5
87	27	2.7778	1.3107	0.2522	1	5
88	27	3.1481	1.2921	0.2487	1	5
89	27	3.5185	1.2821	0.2467	1	5
90	26	3.1538	1.4055	0.2756	1	5
91	27	2.5556	1.1547	0.2222	1	4
92	27	2.9259	1.1743	0.2260	1	5
93	27	3.0370	1.3723	0.2641	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 14

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=14 -- -----

133	26	4.4231	0.7027	0.1378	3	5
134	26	4.1538	0.8806	0.1727	2	5
135	25	2.6400	1.4399	0.2880	1	5
136	26	2.9231	1.2625	0.2476	1	5
137	25	3.6400	1.3191	0.2638	1	5
138	26	3.8846	1.3062	0.2562	1	5
139	25	3.5600	1.2610	0.2522	1	5
140	25	3.5600	1.1210	0.2242	1	5
141	25	3.0800	1.2557	0.2511	1	5
142	25	3.4800	1.0847	0.2169	1	5
143	26	2.6154	1.5252	0.2991	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 15

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=15 -- -----

176	31	3.8710	1.0876	0.1953	1	5
177	31	3.8710	1.1472	0.2060	1	5
178	31	3.8387	1.1575	0.2079	2	5
179	31	3.7097	1.0390	0.1866	1	5
180	31	3.3226	1.2751	0.2290	1	5
181	31	3.8065	1.1950	0.2146	1	5
182	31	3.3548	1.3051	0.2344	1	5
183	31	3.8710	1.0244	0.1840	2	5
184	31	3.7419	1.0318	0.1853	2	5
185	31	3.6452	1.0503	0.1886	2	5
186	31	4.1935	1.0139	0.1821	1	5
187	31	4.0968	0.8701	0.1563	2	5
188	31	3.7419	1.1823	0.2123	1	5
189	31	3.5161	1.2877	0.2313	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 16

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=16 -- -----

25	26	2.8846	1.3062	0.2562	1	5
26	26	2.9615	1.3109	0.2571	1	5
27	26	2.7692	1.3359	0.2620	1	5
28	27	3.2222	1.5525	0.2988	1	5
29	26	4.0769	1.1635	0.2282	1	5
30	26	2.4615	1.2403	0.2433	1	4
31	26	1.9231	1.0168	0.1994	1	4
32	26	2.9231	1.3542	0.2656	1	5
67	30	4.1000	1.0289	0.1878	1	5
68	30	4.0333	1.0334	0.1887	1	5
69	30	4.1667	1.0854	0.1982	1	5
70	25	3.6400	1.5513	0.3103	1	5
71	30	4.2000	0.9965	0.1819	1	5
72	30	4.3000	0.9154	0.1671	1	5
73	30	4.2000	0.9613	0.1755	1	5
74	29	4.2414	1.0231	0.1900	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 17

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=17 -- -----

149	26	4.0385	1.1482	0.2252	1	5
150	27	4.0741	0.9971	0.1919	2	5
151	26	3.3846	1.2354	0.2423	1	5
152	26	3.4615	1.1741	0.2303	1	5
153	27	3.8519	1.0267	0.1976	1	5
154	27	4.1481	1.1670	0.2246	1	5
155	27	3.9259	0.9578	0.1843	2	5
156	26	3.8846	1.3365	0.2621	1	5
157	27	3.8148	1.0391	0.2000	1	5
158	27	3.4074	1.1184	0.2152	1	5
159	27	4.0741	0.9971	0.1919	2	5
160	27	3.9259	0.8738	0.1682	2	5
161	27	3.9630	0.9799	0.1886	1	5
162	26	3.9231	1.0554	0.2070	1	5
163	26	4.1538	0.8339	0.1635	3	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 18

TASKNUM	n	mean	std	stderr	min	max
----------------	----------	-------------	------------	---------------	------------	------------

----- **KNOWNUM-18** -- -----

205	27	3.7778	1.2506	0.2407	1	5
206	27	3.4815	1.3970	0.2688	1	5
207	27	3.4444	1.5275	0.2940	1	5
208	27	3.6296	1.4451	0.2781	1	5
209	27	3.4815	1.4510	0.2792	1	5
210	27	3.6296	1.3053	0.2512	1	5
211	27	3.2963	1.4092	0.2712	1	5
212	27	3.3333	1.3301	0.2560	1	5
213	27	3.5926	1.2788	0.2461	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 19

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-19 -- -----

205	27	3.2963	1.3816	0.2659	1	5
206	27	3.2222	1.5525	0.2988	1	5
207	27	3.3704	1.4451	0.2781	1	5
208	27	3.4815	1.5534	0.2990	1	5
209	27	3.2963	1.4362	0.2764	1	5
210	27	3.3333	1.4676	0.2824	1	5
211	27	3.1111	1.4763	0.2841	1	5
212	27	3.3704	1.2755	0.2455	1	5
213	27	3.4074	1.3085	0.2518	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 20

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=20 -- -----

214	30	4.1333	1.1666	0.2130	1	5
215	30	3.8000	1.2972	0.2368	1	5
216	30	3.7667	1.3047	0.2382	1	5
217	30	3.1333	1.4794	0.2701	1	5
218	30	3.8000	1.1567	0.2112	1	5
219	30	3.5333	1.3830	0.2525	1	5
220	30	3.4667	1.4559	0.2658	1	5
221	30	4.5667	0.7279	0.1329	3	5
222	30	4.5000	0.8200	0.1497	3	5
223	30	3.9667	1.1290	0.2061	1	5
224	30	3.2333	1.5241	0.2783	1	5
225	30	2.9000	1.4468	0.2641	1	5
226	30	3.5000	1.3065	0.2385	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 21

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-21 -- -----

1	28	3.9286	1.1524	0.2178	1	5
2	28	3.8571	0.9705	0.1834	1	5
3	26	3.3077	1.4358	0.2816	1	5
4	28	3.9286	1.0516	0.1987	1	5
5	27	3.4815	1.1559	0.2225	1	5
6	28	4.0714	0.9786	0.1849	1	5
7	28	3.3929	1.1655	0.2203	1	5
8	27	3.5926	1.0834	0.2085	1	5
9	28	3.6429	1.0616	0.2006	1	5
10	27	4.2222	0.8916	0.1716	1	5
11	27	3.4074	1.2788	0.2461	1	5
12	28	3.3214	1.2781	0.2415	1	5
13	28	3.3214	1.3623	0.2574	1	5
14	27	4.3333	0.6202	0.1194	3	5
15	27	4.1481	0.9074	0.1746	1	5
16	27	4.2222	0.9337	0.1797	1	5
17	27	4.2593	0.9842	0.1894	1	5
18	27	4.0000	1.0742	0.2067	1	5
19	26	3.7308	1.2508	0.2453	1	5
20	27	4.1111	0.9740	0.1875	1	5
21	27	4.0000	1.1767	0.2265	1	5
22	27	4.0741	1.1743	0.2260	1	5
23	27	4.0000	1.3301	0.2560	1	5
24	27	3.8889	1.3681	0.2633	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 22

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-22 -----

38	27	4.2593	0.8590	0.1653	2	5
39	26	4.2692	0.7776	0.1525	3	5
40	26	4.1923	0.8010	0.1571	3	3
41	26	4.2692	0.7776	0.1525	3	5
42	25	3.8800	1.0924	0.2185	1	5
43	27	4.3704	0.8389	0.1614	2	5
44	27	3.5185	1.1559	0.2225	1	5
45	27	3.6296	0.9260	0.1782	2	5
46	25	4.0400	1.0599	0.2120	1	5
47	25	3.9600	0.9345	0.1869	2	5
48	25	4.0000	0.8660	0.1732	2	5
49	24	4.0417	1.0417	0.2126	1	5
67	30	4.0333	0.8503	0.1552	2	5
68	30	3.5667	1.1351	0.2072	1	5
69	30	4.3667	0.7184	0.1312	3	5
70	25	3.4400	1.2610	0.2522	1	5
71	30	3.9000	0.8030	0.1466	3	5
72	30	3.9000	0.9595	0.1752	1	5
73	30	4.0333	0.8087	0.1477	2	5
74	29	3.9310	0.8422	0.1564	2	5
75	27	3.5556	1.1209	0.2157	1	5
76	26	2.8462	0.9672	0.1897	1	4
77	26	2.8846	1.1073	0.2172	1	5
78	27	3.1852	1.1107	0.2138	1	5
79	27	3.4074	0.9711	0.1869	1	5
80	27	3.2593	1.2276	0.2363	1	5
81	27	3.1481	1.1995	0.2308	1	5
82	27	3.3704	1.0432	0.2008	1	5
83	27	2.9630	1.2855	0.2474	1	5
84	27	3.2222	1.0127	0.1949	1	5
85	27	3.2222	1.0500	0.2021	1	5
86	27	3.6296	0.9667	0.1860	2	5
87	27	3.4444	0.9337	0.1797	2	5
88	27	3.5926	0.9306	0.1791	2	5
89	27	3.3704	1.1485	0.2210	1	5
90	26	2.7692	1.3359	0.2620	1	5
91	27	2.8519	1.2620	0.2429	1	5
92	27	2.8889	1.2810	0.2465	1	5
93	27	2.6667	1.3301	0.2560	1	5
107	26	3.7692	1.1066	0.2170	2	5
108	26	3.8846	0.9519	0.1867	2	5
109	26	3.2692	1.3728	0.2692	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 23

TASKNUM	n	mean	std	stderr	min	max
110	26	3.5385	1.2077	0.2368	1	5
111	26	3.2692	1.5377	0.3016	1	5
112	26	3.8077	1.2335	0.2419	1	5
113	26	3.2692	1.4299	0.2804	1	5
114	26	3.9615	1.1129	0.2183	2	5
115	25	3.9200	1.0770	0.2154	1	5
116	25	3.8800	1.0536	0.2107	1	5
164	27	4.1111	0.8006	0.1541	3	5
165	27	3.8889	1.0860	0.2090	1	5
166	27	3.5556	1.0127	0.1949	1	5
167	27	3.8148	0.9214	0.1773	2	5
168	27	3.8148	0.8338	0.1605	2	5
169	27	3.1481	0.9074	0.1746	1	5
170	27	3.4074	0.8884	0.1710	1	5
171	27	3.7407	0.9027	0.1737	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 24

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-23 -- -----

164	27	4.2222	0.6405	0.1233	3	5
165	27	3.6296	1.3053	0.2512	1	5
166	27	3.7778	1.0500	0.2021	1	5
167	27	4.0000	1.0000	0.1925	1	5
168	27	3.6296	1.0432	0.2008	1	5
169	27	3.0741	1.2066	0.2322	1	5
170	27	2.9630	1.2552	0.2416	1	5
171	27	3.1481	1.1995	0.2308	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 25

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-24 -- -----

46	25	3.7600	0.9695	0.1939	1	5
47	25	3.6400	0.9074	0.1815	1	5
48	25	3.7200	1.1000	0.2200	1	5
49	24	3.4167	1.2825	0.2618	1	5
67	29	3.8621	1.0930	0.2030	1	5
68	29	3.8276	1.1361	0.2110	1	5
69	29	4.1379	1.1252	0.2089	1	5
70	25	3.4000	1.4434	0.2887	1	5
71	29	4.0345	1.1175	0.2075	1	5
72	29	4.0345	1.1490	0.2134	1	5
73	29	3.7586	1.2721	0.2362	1	5
74	28	3.5714	1.2889	0.2436	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 26

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=25 -- -----

33	25	3.1600	1.1431	0.2286	1	5
34	25	2.9200	1.2220	0.2444	1	5
35	25	3.4400	1.1210	0.2242	1	5
36	25	3.6800	1.1804	0.2361	1	5
37	25	3.6000	1.2247	0.2449	1	5
38	26	4.1923	0.7494	0.1470	3	5
39	27	3.7778	0.8006	0.1541	2	5
40	27	4.2593	0.7642	0.1471	3	5
41	26	4.0000	1.0198	0.2000	1	5
42	25	3.6400	1.0360	0.2072	1	5
43	26	3.9231	0.8910	0.1747	2	5
44	27	3.7407	1.1298	0.2174	1	5
45	26	3.5385	1.1395	0.2235	1	5
75	27	3.2222	1.2506	0.2407	1	5
76	27	2.5926	1.0099	0.1944	1	4
77	27	2.5926	1.1851	0.2281	1	5
78	27	2.6667	1.0742	0.2067	1	5
79	27	3.1481	1.0991	0.2115	1	5
80	27	2.7778	1.2195	0.2347	1	5
81	27	2.9259	1.2687	0.2442	1	5
82	27	2.9630	1.0913	0.2100	1	5
83	27	2.5926	1.2788	0.2461	1	5
84	27	3.2963	1.0675	0.2054	1	5
85	27	3.0000	1.1767	0.2265	1	5
86	27	3.6667	1.0000	0.1925	1	5
87	27	3.1481	1.2620	0.2429	1	5
88	27	3.3704	1.1485	0.2210	1	5
89	27	3.2222	1.2506	0.2407	1	5
90	26	2.2308	1.2102	0.2373	1	5
91	27	2.5185	1.2207	0.2349	1	5
92	27	2.2963	1.2030	0.2315	1	5
93	27	2.1852	1.1779	0.2267	1	5
107	26	3.2692	1.2184	0.2390	1	5
108	26	3.5000	1.0296	0.2019	1	5
109	26	2.8077	1.3570	0.2661	1	5
110	26	2.7692	1.3655	0.2678	1	5
111	25	2.4400	1.3868	0.2774	1	5
112	26	3.4615	1.3336	0.2615	1	5
113	26	2.7692	1.3056	0.2561	1	5
114	26	3.3077	1.3197	0.2588	1	5
115	25	3.5600	1.2936	0.2587	1	5
116	25	3.4400	1.1210	0.2242	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 27

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=26 -- -----

14	27	4.5185	0.5798	0.1116	3	5
15	27	3.2963	1.2346	0.2376	1	5
16	27	3.8519	1.0267	0.1976	1	5
17	27	4.4815	0.7000	0.1347	3	5
18	27	3.4444	1.3681	0.2633	1	5
19	26	3.6538	1.3840	0.2714	1	5
20	27	3.7778	0.9740	0.1875	1	5
21	27	4.2593	1.0595	0.2039	1	5
22	27	4.1111	1.1875	0.2285	1	5
23	27	4.0370	1.1596	0.2232	1	5
24	27	3.4815	1.4510	0.2792	1	5
33	25	3.7200	1.2083	0.2417	1	5
34	25	2.9600	1.2069	0.2414	1	5
35	25	3.2400	1.2342	0.2468	1	5
36	25	2.9200	1.5253	0.3051	1	5
37	26	4.0000	1.0583	0.2075	1	5
50	31	4.6452	0.5507	0.0989	3	5
51	31	4.5806	0.6720	0.1207	3	5
52	31	3.4516	1.1207	0.2013	1	5
53	31	3.9355	1.0307	0.1851	1	5
54	31	3.0323	1.1101	0.1994	1	5
55	31	4.4839	0.9263	0.1664	1	5
56	27	3.4444	1.6486	0.3173	1	5
57	27	3.3704	1.6443	0.3164	1	5
58	31	3.1613	1.0984	0.1973	1	5
59	31	3.3871	1.1741	0.2109	1	5
60	31	3.0968	1.0442	0.1875	1	5
61	31	4.5161	0.7690	0.1381	2	5
62	31	3.5161	0.9957	0.1788	1	5
63	31	3.4839	0.9616	0.1727	1	5
64	31	3.3226	0.8713	0.1565	1	5
65	26	3.3077	1.4077	0.2761	1	5
66	30	3.9000	1.0289	0.1878	1	5
107	25	3.5200	1.0456	0.2091	1	5
108	25	3.5600	1.1576	0.2315	1	5
109	25	2.9200	1.3515	0.2703	1	5
110	25	3.1200	1.2689	0.2538	1	5
111	25	3.1600	1.4629	0.2926	1	5
112	26	3.4231	1.2385	0.2429	1	5
113	25	2.6000	1.3540	0.2708	1	5
114	25	3.2800	1.2083	0.2417	1	5
115	25	3.5200	1.2288	0.2458	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 28

TASKNUM	n	mean	std	stderr	min	max
116	25	3.5600	1.1210	0.2242	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 29

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-27 -- -----

1	28	4.0714	0.8576	0.1621	2	5
2	28	3.1786	0.9449	0.1786	1	5
3	26	2.5769	1.4191	0.2783	1	5
4	28	4.1786	0.7724	0.1460	3	5
5	27	4.0741	0.7299	0.1405	3	5
6	28	3.4643	1.1701	0.2211	1	5
7	28	3.4643	1.2317	0.2328	1	5
8	27	4.1111	0.7511	0.1445	2	5
9	28	3.3929	0.9940	0.1879	1	5
10	27	3.8148	0.8787	0.1691	2	5
11	27	3.6667	1.2089	0.2327	1	5
12	27	2.8519	1.1995	0.2308	1	5
13	27	2.9259	1.2066	0.2322	1	5
14	27	3.9259	0.8738	0.1682	2	5
15	27	4.4444	0.5774	0.1111	3	5
16	27	3.9630	0.8540	0.1644	2	5
17	27	4.0370	0.8077	0.1554	3	5
18	27	3.0741	1.3847	0.2665	1	5
19	26	3.3846	1.2026	0.2358	1	5
20	27	3.6667	1.1094	0.2135	1	5
21	27	3.7407	1.0952	0.2108	1	5
22	27	4.0000	1.1435	0.2201	1	5
23	27	3.7037	1.1030	0.2123	1	5
24	27	3.3704	1.3053	0.2512	1	5
117	31	3.9032	1.0118	0.1817	2	5
118	31	4.0968	0.9436	0.1695	2	5
119	31	4.2903	0.6925	0.1244	3	5
120	31	4.1290	0.8462	0.1520	2	5
121	31	3.5484	0.9946	0.1786	2	5
122	31	2.6452	1.2793	0.2298	1	5
123	31	4.4194	0.6720	0.1207	3	5
124	31	3.6774	1.0452	0.1877	2	5
125	31	3.4194	1.1768	0.2114	1	5
126	31	4.2903	0.7391	0.1327	3	5
127	31	3.7097	1.1603	0.2084	1	5
128	31	3.4516	1.2066	0.2167	1	5
129	31	2.8710	1.4316	0.2571	1	5
130	31	2.8710	1.2843	0.2307	1	5
131	31	2.9355	1.3647	0.2451	1	5
132	30	2.7000	1.4420	0.2633	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 30

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-28 -- -----

1	27	3.1481	1.2311	0.2369	1	5
2	27	2.8148	1.1779	0.2267	1	5
3	26	4.0385	1.3411	0.2630	1	5
4	27	2.9259	1.4657	0.2821	1	5
5	26	4.0385	0.9992	0.1960	2	5
6	28	4.5000	0.8819	0.1667	2	5
7	28	3.7857	1.3705	0.2590	1	5
8	27	4.0370	0.9799	0.1886	2	5
9	28	3.8214	0.8630	0.1631	2	5
10	26	3.1923	1.3862	0.2719	1	5
11	26	3.0000	1.4142	0.2774	1	5
12	28	4.1786	0.9833	0.1858	1	5
13	28	4.2500	0.8444	0.1596	2	5
38	27	3.9630	0.7586	0.1460	3	5
39	27	4.0370	0.7586	0.1460	3	5
40	27	4.1481	0.7181	0.1382	3	5
41	26	3.6154	0.9829	0.1928	1	5
42	25	3.6800	1.0296	0.2059	1	5
43	26	3.6923	1.1232	0.2203	1	5
44	27	3.5556	1.0500	0.2021	2	5
45	27	3.3333	1.0377	0.1997	2	5
46	25	3.5600	1.2936	0.2587	1	5
47	26	3.8846	0.9519	0.1867	2	5
48	26	4.0385	0.8237	0.1615	2	5
49	25	3.7200	1.0214	0.2043	1	5
67	30	3.6333	1.3257	0.2420	1	5
68	30	4.1667	1.0854	0.1982	1	5
69	30	4.6000	0.7240	0.1322	2	5
70	26	3.6154	1.3879	0.2722	1	5
71	29	3.3448	1.2614	0.2342	1	5
72	30	3.3333	1.3730	0.2507	1	5
73	29	3.4828	1.2427	0.2308	1	5
74	29	2.7931	1.3464	0.2500	1	5
94	30	4.5333	1.0743	0.1961	1	5
95	30	4.2333	1.0726	0.1958	1	5
96	30	4.3000	0.7497	0.1369	3	5
97	30	4.6333	0.6149	0.1123	3	5
98	30	4.5333	0.6814	0.1244	3	5
99	31	3.8710	1.4081	0.2529	1	5
100	27	4.4074	0.7971	0.1534	3	5
101	27	4.3333	0.7338	0.1412	3	5
102	27	4.2963	0.8234	0.1585	3	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 31

TASKNUM	n	mean	std	stderr	min	max
103	27	4.1481	0.8182	0.1575	3	5
104	26	3.9231	1.0554	0.2070	1	5
105	26	3.6923	1.3197	0.2588	1	5
106	27	4.2593	0.8130	0.1565	3	5
107	26	3.8077	0.8010	0.1571	2	5
108	26	3.9615	0.8709	0.1708	2	5
109	26	3.8077	0.7494	0.1470	3	5
110	26	3.8077	0.8494	0.1666	2	5
111	26	3.4615	1.3033	0.2556	1	5
112	26	3.7692	0.9511	0.1865	2	5
113	26	3.2692	1.1156	0.2188	1	5
114	26	3.8846	0.9519	0.1867	2	5
115	25	4.1200	0.8327	0.1665	3	5
116	25	3.9200	0.9539	0.1908	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 32

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-29 -- -----

94	30	3.8000	1.2429	0.2269	1	5
95	30	3.4333	1.1943	0.2181	1	5
96	30	3.8667	1.1059	0.2019	1	5
97	30	3.8333	1.2341	0.2253	1	5
98	30	3.7000	1.3170	0.2404	1	5
99	31	3.3226	1.5141	0.2719	1	5
107	25	2.3600	0.9522	0.1904	1	4
108	25	2.6400	0.9950	0.1990	1	4
109	25	1.9200	0.9539	0.1908	1	4
110	25	1.9600	0.9345	0.1869	1	4
111	25	2.1600	0.9434	0.1887	1	4
112	25	2.0000	0.9574	0.1915	1	4
113	25	2.1600	1.1431	0.2286	1	5
114	25	2.3600	1.2871	0.2574	1	5
115	24	2.7083	1.1602	0.2368	1	5
116	24	2.6667	1.0901	0.2225	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 33

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=30 -- -----

75	27	2.7778	1.3107	0.2522	1	5
76	27	2.1852	1.0014	0.1927	1	4
77	27	2.4074	1.3661	0.2629	1	5
78	27	2.4074	1.2484	0.2402	1	5
79	27	2.4815	1.1559	0.2225	1	5
80	27	2.2963	1.2654	0.2435	1	5
81	27	2.7778	1.2810	0.2465	1	5
82	27	2.4815	1.3118	0.2525	1	5
83	27	2.2593	1.2888	0.2480	1	5
84	27	3.0370	1.3150	0.2531	1	5
85	27	3.1481	1.3503	0.2599	1	5
86	27	3.7407	1.0952	0.2108	1	5
87	27	4.0370	1.0184	0.1960	2	5
88	27	3.1111	1.3107	0.2522	1	5
89	27	3.0370	1.3440	0.2586	1	5
90	26	1.9615	1.1482	0.2252	1	5
91	27	2.0370	1.1260	0.2167	1	5
92	27	2.2222	1.1547	0.2222	1	5
93	27	2.0741	1.1410	0.2196	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 34

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=31 -- -----

38	25	3.7200	0.8907	0.1781	2	5
39	26	3.1923	1.2006	0.2355	1	5
40	26	3.9231	0.9348	0.1833	2	5
41	25	3.4000	1.0408	0.2082	1	5
42	24	3.2500	1.1132	0.2272	1	5
43	25	3.3600	1.3191	0.2638	1	5
44	26	3.5769	1.0266	0.2013	1	5
45	25	2.9600	1.3988	0.2798	1	5
46	25	3.2800	1.2423	0.2485	1	5
47	25	3.7600	0.9256	0.1851	2	5
48	25	3.4000	1.0000	0.2000	1	5
49	24	3.5833	0.9286	0.1896	1	5
94	30	4.0333	0.8899	0.1625	1	5
95	30	3.5000	1.1371	0.2076	1	5
96	30	4.0000	1.0828	0.1977	1	5
97	30	4.1667	0.9129	0.1667	2	5
98	30	3.9667	1.0662	0.1947	1	5
99	31	3.7097	1.2960	0.2328	1	5
107	25	3.4000	1.0408	0.2082	1	5
108	25	3.4400	1.0440	0.2088	1	5
109	25	3.0400	1.1719	0.2344	1	5
110	25	3.2000	0.7638	0.1528	2	5
111	25	3.1600	1.4048	0.2810	1	5
112	25	2.8800	0.9274	0.1855	1	5
113	25	2.5200	1.2288	0.2458	1	5
114	25	3.0000	1.3540	0.2708	1	5
115	24	3.7917	0.8836	0.1804	2	5
116	24	3.4583	1.0624	0.2169	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 35

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-32 -- -----

1	28	4.1786	1.0203	0.1928	1	5
2	28	3.7143	1.0131	0.1915	2	5
3	25	3.0800	1.6052	0.3210	1	5
4	28	3.9286	1.1198	0.2116	1	5
5	27	4.0741	1.0350	0.1992	1	5
6	28	4.1071	0.9940	0.1879	1	5
7	28	3.6786	1.1564	0.2185	1	5
8	27	4.1481	0.7698	0.1481	2	5
9	28	3.8929	0.9165	0.1732	2	5
10	27	4.6296	0.6293	0.1211	3	5
11	27	3.8148	1.2101	0.2329	1	5
12	28	3.3929	1.3700	0.2589	1	5
13	28	3.4286	1.2599	0.2381	1	5
14	27	4.1852	0.7357	0.1416	2	5
15	27	3.8519	0.8640	0.1663	2	5
16	27	4.0000	0.8771	0.1688	2	5
17	27	4.0000	0.8771	0.1688	2	5
18	27	3.5556	1.3397	0.2578	1	5
19	26	3.4615	1.2403	0.2433	1	5
20	27	3.9630	0.9799	0.1886	1	5
21	27	4.0000	1.1094	0.2135	1	5
22	27	3.5556	1.2506	0.2407	1	5
23	27	3.5185	1.3692	0.2635	1	5
24	27	3.6296	1.3344	0.2568	1	5
50	31	4.1935	0.7033	0.1263	3	5
51	31	4.1935	0.7492	0.1346	3	5
52	31	3.8387	0.9694	0.1741	2	5
53	31	4.1613	0.8204	0.1474	2	5
54	31	4.0323	0.7951	0.1428	2	5
55	31	4.1935	0.6542	0.1175	3	5
56	27	3.2222	1.5021	0.2891	1	5
57	27	3.1852	1.5451	0.2974	1	5
58	31	3.7742	1.0234	0.1838	1	5
59	31	3.8710	1.0565	0.1897	2	5
60	31	3.7419	1.0318	0.1853	2	5
61	31	3.7419	0.8932	0.1604	2	5
62	31	4.0968	0.7463	0.1340	2	5
63	31	4.0968	0.9076	0.1630	2	5
64	31	3.9677	0.9123	0.1639	2	5
65	26	3.5385	1.2077	0.2368	1	5
66	30	4.4000	0.6747	0.1232	3	5
67	30	4.0333	0.8899	0.1625	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 36

TASKNUM	n	mean	std	stderr	min	max
68	30	3.8333	1.0532	0.1923	1	5
69	30	4.0667	0.9072	0.1656	2	5
70	26	3.5769	1.2385	0.2429	1	5
71	30	4.4000	0.6747	0.1232	3	5
72	30	4.3000	0.7944	0.1450	2	5
73	30	4.2667	0.8683	0.1585	1	5
74	29	4.1724	0.7592	0.1410	3	5
190	31	4.0968	1.0118	0.1817	2	5
191	31	4.2903	0.8244	0.1481	2	5
192	31	3.5161	1.2348	0.2218	1	5
193	31	3.7419	1.2374	0.2222	1	5
194	31	4.0323	1.0483	0.1883	1	5
195	31	3.9032	1.0442	0.1875	1	5
196	31	3.8387	1.0359	0.1861	1	5
197	31	3.6452	0.8774	0.1576	2	5
198	31	4.0000	0.8165	0.1466	2	5
199	31	3.9677	0.8360	0.1502	2	5
200	31	4.0000	0.9309	0.1672	1	5
201	31	4.0000	1.0646	0.1912	1	5
202	31	3.3871	1.2826	0.2304	1	5
203	31	3.2903	1.1603	0.2084	1	5
204	31	4.0323	0.9481	0.1703	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 37

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-33 -- -----

46	25	3.4400	1.1930	0.2386	1	5
47	25	3.4400	1.2275	0.2455	1	5
48	25	3.6400	1.1860	0.2372	1	5
49	24	3.3750	1.1349	0.2317	1	5
67	29	3.5172	1.1533	0.2142	1	5
68	29	3.4138	1.1501	0.2136	1	5
69	29	3.8276	1.1042	0.2050	1	5
70	25	3.2400	1.3626	0.2725	1	5
71	29	3.6207	1.2368	0.2297	1	5
72	29	3.5862	1.2106	0.2248	1	5
73	29	3.6552	1.2894	0.2394	1	5
74	28	3.5000	1.2910	0.2440	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 38

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-34 -- -----

1	28	4.0714	0.8576	0.1621	2	5
2	28	3.4286	1.2599	0.2381	1	5
3	26	3.9615	1.1826	0.2319	1	5
4	28	4.3214	0.8189	0.1548	2	5
5	27	4.2963	1.0675	0.2054	1	5
6	28	4.5357	0.7445	0.1407	2	5
7	28	4.1071	1.0659	0.2014	2	5
8	27	4.3704	0.8835	0.1700	2	5
9	28	4.4286	0.9201	0.1739	2	5
10	27	4.4074	0.8439	0.1624	2	5
11	27	3.8889	1.0860	0.2090	1	5
12	28	3.8571	1.1774	0.2225	1	5
13	28	3.9286	1.0862	0.2053	2	5
25	26	2.8462	1.5412	0.3023	1	5
26	26	3.7308	1.2824	0.2515	1	5
27	26	3.5000	1.2728	0.2496	1	5
28	26	3.9231	1.0554	0.2070	1	5
29	26	3.5769	1.2385	0.2429	1	5
30	26	2.8846	1.3950	0.2736	1	5
31	26	2.6923	1.2254	0.2403	1	5
32	26	2.6923	1.4358	0.2816	1	5
33	25	3.9200	0.9539	0.1908	1	5
34	25	3.8000	1.0000	0.2000	1	5
35	25	3.8800	0.9274	0.1855	2	5
36	25	3.7600	1.1284	0.2257	1	5
37	25	3.7200	1.1000	0.2200	1	5
38	26	3.6538	0.8458	0.1659	2	5
39	26	3.7308	0.7776	0.1525	2	5
40	26	3.7308	1.1156	0.2188	1	5
41	26	3.8077	1.0206	0.2001	1	5
42	25	3.7200	1.1733	0.2347	1	5
43	26	3.8077	1.0961	0.2150	1	5
44	26	3.1538	1.2866	0.2523	1	5
45	26	3.0385	1.0763	0.2111	1	5
46	25	3.9200	0.9539	0.1908	2	5
47	25	3.8400	0.8981	0.1796	2	5
48	25	3.8000	0.9574	0.1915	2	5
49	24	3.7917	0.9315	0.1901	2	5
50	31	4.2258	0.9205	0.1653	1	5
51	31	4.4516	0.6752	0.1213	3	5
52	31	4.2581	0.7732	0.1389	3	5
53	31	4.3871	0.7606	0.1366	3	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 39

TASKNUM	n	mean	std	stderr	min	max
54	31	4.3871	0.7606	0.1366	3	5
55	31	4.4194	0.6720	0.1207	3	5
56	27	3.3333	1.6172	0.3112	1	5
57	27	3.4074	1.6469	0.3169	1	5
58	31	3.8710	1.1472	0.2060	1	5
59	31	4.2903	0.9379	0.1684	2	5
60	31	4.1613	0.9344	0.1678	2	5
61	31	3.9032	1.2208	0.2193	1	5
62	31	4.1935	0.9458	0.1699	2	5
63	31	4.1935	0.9458	0.1699	2	5
64	31	4.1290	1.0876	0.1953	1	5
65	26	3.6538	1.3249	0.2598	1	5
66	30	4.4667	0.7303	0.1333	3	5
67	30	4.4000	0.8944	0.1633	1	5
68	30	3.9667	1.1885	0.2170	1	5
69	30	4.4000	0.9322	0.1702	1	5
70	26	3.6154	1.5252	0.2991	1	5
71	30	4.4000	0.8944	0.1633	1	5
72	30	4.3333	0.9223	0.1684	1	5
73	30	4.3333	0.9589	0.1751	1	5
74	29	4.1724	1.1671	0.2167	1	5
75	27	3.9630	0.9799	0.1886	2	5
76	26	3.0000	0.9381	0.1840	1	5
77	27	3.0000	1.3009	0.2504	1	5
78	27	3.2222	1.4500	0.2791	1	5
79	27	3.3333	1.1435	0.2201	1	5
80	27	3.7037	1.2030	0.2315	1	5
81	27	3.4444	1.2506	0.2407	1	5
82	27	3.5926	1.1184	0.2152	1	5
83	27	3.3704	1.3053	0.2512	1	5
84	27	3.6667	1.0000	0.1925	1	5
85	27	3.4444	1.2506	0.2407	1	5
86	27	3.7778	1.0127	0.1949	2	5
87	27	3.2963	1.3248	0.2549	1	5
88	27	3.6667	1.2089	0.2327	1	5
89	27	3.6296	1.2755	0.2455	1	5
90	26	2.5000	1.4491	0.2842	1	5
91	27	2.7407	1.1959	0.2302	1	5
92	27	2.4444	1.3397	0.2578	1	5
93	27	2.3333	1.3587	0.2615	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 40

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=35 -- -----

25	26	3.0769	1.4120	0.2769	1	5
26	26	3.5000	1.3038	0.2557	1	5
27	26	3.3846	1.2354	0.2423	1	5
28	26	4.0385	1.1482	0.2252	1	5
29	26	3.3077	1.2890	0.2528	1	5
30	26	2.8077	1.2335	0.2419	1	5
31	26	3.0769	1.1635	0.2282	1	5
32	26	3.0000	1.3565	0.2660	1	5
38	26	3.6923	0.8840	0.1734	1	5
39	26	3.8462	1.0842	0.2126	1	5
40	26	3.6154	1.0983	0.2154	1	5
41	26	3.5769	0.9868	0.1935	1	5
42	25	3.5600	0.9609	0.1922	1	5
43	26	3.6154	0.9829	0.1928	1	5
44	26	2.9231	1.1635	0.2282	1	5
45	26	2.9615	0.9157	0.1796	1	5
46	25	3.6400	1.1504	0.2301	1	5
47	25	3.6400	0.9522	0.1904	1	5
48	25	3.7600	0.9256	0.1851	1	5
49	24	3.7500	0.8470	0.1729	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 41

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=36 -- -----

46	26	4.1538	1.0077	0.1976	1	5
47	26	4.1923	0.7494	0.1470	3	5
48	25	4.3600	0.7000	0.1400	3	5
49	24	4.1667	1.0901	0.2225	1	5
50	31	3.4194	1.0886	0.1955	1	5
51	31	4.2258	0.8046	0.1445	3	5
52	31	4.1935	0.9805	0.1761	1	5
53	31	4.3548	0.9504	0.1707	1	5
54	31	4.3548	0.8386	0.1506	2	5
55	31	4.0645	0.9978	0.1792	1	5
56	27	3.2593	1.5589	0.3000	1	5
57	27	3.1111	1.6251	0.3128	1	5
58	31	3.5484	1.0595	0.1903	1	5
59	31	4.4194	0.9228	0.1657	1	5
60	31	4.5484	0.6752	0.1213	3	5
61	31	4.0000	0.9661	0.1735	2	5
62	31	3.8387	1.0032	0.1802	1	5
63	31	3.7742	0.9903	0.1779	1	5
64	31	3.7419	0.9650	0.1733	1	5
65	26	3.6538	1.1981	0.2350	1	5
66	30	4.3333	0.9589	0.1751	1	5
67	30	4.3000	1.0875	0.1986	1	5
68	30	3.8667	1.1059	0.2019	1	5
69	30	4.6333	0.7649	0.1396	2	5
70	26	3.7308	1.3132	0.2575	1	5
71	30	4.0333	1.2172	0.2222	1	5
72	30	4.0333	1.0662	0.1947	1	5
73	30	4.3333	0.7581	0.1384	3	5
74	29	4.3103	0.8495	0.1578	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 42

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=37 -- -----

38	26	3.3846	1.0228	0.2006	1	5
39	26	3.1154	0.9931	0.1948	1	5
40	26	3.2692	1.1852	0.2324	1	5
41	26	3.2692	1.1852	0.2324	1	5
42	25	3.2800	1.2083	0.2417	1	5
43	26	3.3077	1.3790	0.2704	1	5
44	26	3.0000	1.0954	0.2148	1	5
45	26	3.3077	1.1232	0.2203	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 43

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=38 -- -----

190	31	4.3226	0.8321	0.1495	3	5
191	31	4.3226	0.7911	0.1421	3	5
192	31	3.9032	1.1649	0.2092	1	5
193	31	3.8710	1.1178	0.2008	1	5
194	31	4.0968	1.0756	0.1932	1	5
195	31	4.1290	0.9571	0.1719	2	5
196	31	4.3226	0.9087	0.1632	2	5
197	31	3.6774	1.1369	0.2042	1	5
198	31	4.0000	0.8563	0.1538	2	5
199	31	4.3548	0.6607	0.1187	3	5
200	31	4.3548	0.8774	0.1576	1	5
201	31	3.9355	1.0626	0.1908	1	5
202	31	3.4194	1.1482	0.2062	1	5
203	31	3.3226	1.2487	0.2243	1	5
204	31	4.0323	0.9123	0.1639	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 44

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=39 -- -----

133	25	3.7600	1.2342	0.2468	1	5
134	25	3.2400	1.2342	0.2468	1	5
135	26	4.0769	0.8449	0.1657	3	5
136	25	3.5600	1.3565	0.2713	1	5
137	25	2.8000	1.4720	0.2944	1	5
138	25	2.6800	1.2819	0.2564	1	5
139	26	2.8077	1.2967	0.2543	1	5
140	26	3.8846	1.2108	0.2375	1	5
141	26	3.6538	1.2944	0.2538	1	5
142	26	4.0385	1.0763	0.2111	1	5
143	25	2.7600	1.4514	0.2903	1	5
190	31	4.0968	0.9436	0.1695	2	5
191	31	4.3226	0.7911	0.1421	2	5
192	31	3.7742	1.1750	0.2110	1	5
193	31	3.7419	0.9989	0.1794	2	5
194	31	3.9677	1.0796	0.1939	1	5
195	31	3.8710	0.9571	0.1719	2	5
196	31	4.1290	0.8462	0.1520	2	5
197	31	3.3548	1.0816	0.1943	1	5
198	31	3.8387	0.8980	0.1613	2	5
199	31	4.0968	0.8309	0.1492	2	5
200	31	4.0000	0.8944	0.1606	1	5
201	31	3.8387	1.0032	0.1802	1	5
202	31	3.1290	1.1759	0.2112	1	5
203	31	3.0323	1.3536	0.2431	1	5
204	31	4.1290	0.9914	0.1781	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 45

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-40 -- -----

67	30	4.1667	0.9855	0.1799	1	5
68	30	3.6667	1.0283	0.1877	1	5
69	30	4.2000	0.8867	0.1619	1	5
70	26	3.4615	1.4486	0.2841	1	5
71	30	4.0333	0.9643	0.1761	1	5
72	30	4.1667	0.9499	0.1734	1	5
73	30	3.6333	1.0662	0.1947	1	5
74	29	3.4828	1.2136	0.2254	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 46

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=41 -- -----

38	26	3.6154	0.9414	0.1846	2	5
39	26	3.3846	1.2026	0.2358	1	5
40	26	3.7692	0.8152	0.1599	2	5
41	26	3.3462	0.7971	0.1563	2	5
42	25	2.8000	1.1547	0.2309	1	5
43	26	3.0385	1.4555	0.2854	1	5
44	26	2.4615	1.1038	0.2165	1	5
45	26	2.8846	1.2434	0.2439	1	5
50	31	3.5484	1.3376	0.2402	1	5
51	31	3.8387	1.1859	0.2130	1	5
52	31	4.0323	1.0796	0.1939	1	5
53	31	4.1290	0.8462	0.1520	1	5
54	31	4.1935	0.9458	0.1699	1	5
55	31	3.7097	1.1013	0.1978	1	5
56	27	2.8889	1.5525	0.2988	1	5
57	27	2.7037	1.5396	0.2963	1	5
58	31	3.1613	1.3190	0.2369	1	5
59	31	4.1290	0.9217	0.1655	1	5
60	31	4.4839	0.8896	0.1598	1	5
61	31	4.3226	0.9447	0.1697	1	5
62	31	4.0000	0.8944	0.1606	2	5
63	31	3.7742	0.9903	0.1779	2	5
64	31	3.8387	0.8204	0.1474	2	5
65	26	2.7692	1.4507	0.2845	1	5
66	30	3.8000	1.2429	0.2269	1	5
75	26	3.9615	0.7200	0.1412	3	5
76	27	3.0000	1.1094	0.2135	1	5
77	27	3.1111	1.1875	0.2285	1	5
78	27	3.3333	1.1435	0.2201	1	5
79	27	3.6296	1.2136	0.2336	1	5
80	27	3.1852	1.0391	0.2000	1	5
81	27	3.3333	1.0742	0.2067	1	5
82	27	3.7407	1.0952	0.2108	1	5
83	27	3.2222	1.4233	0.2739	1	5
84	27	3.4444	1.1547	0.2222	1	5
85	27	3.1481	1.4061	0.2706	1	5
86	27	3.5556	1.1209	0.2157	1	5
87	27	2.8148	1.2721	0.2448	1	5
88	27	3.0000	1.2089	0.2327	1	5
89	27	3.6667	1.3009	0.2504	1	5
90	26	2.2308	1.2428	0.2437	1	5
91	27	2.1481	1.1670	0.2246	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 47

TASKNUM	n	mean	std	stderr	min	max
92	27	2.3704	1.2755	0.2455	1	5
93	27	2.2593	1.2888	0.2480	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 48

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=42 -- -----

38	26	3.6538	1.0175	0.1996	2	5
39	26	3.8846	1.0706	0.2100	1	5
40	26	3.9231	0.8910	0.1747	2	5
41	26	3.4231	0.8086	0.1586	2	5
42	25	3.0000	1.1180	0.2236	1	5
43	26	3.1538	1.2551	0.2462	1	5
44	26	2.7692	1.3056	0.2561	1	5
45	26	2.6538	1.1981	0.2350	1	5
46	26	3.8846	1.1774	0.2309	1	5
47	25	4.0800	1.0770	0.2154	1	5
48	26	4.1154	0.8162	0.1601	3	5
49	24	3.9583	0.9991	0.2039	1	5
50	31	3.5806	1.1188	0.2009	1	5
51	31	4.2903	1.1312	0.2032	1	5
52	31	4.1935	1.0139	0.1821	1	5
53	31	4.4516	0.6752	0.1213	3	5
54	31	4.4839	0.6256	0.1124	3	5
55	31	3.6774	1.1072	0.1989	1	5
56	27	2.9630	1.5807	0.3042	1	5
57	27	2.8148	1.6181	0.3114	1	5
58	31	3.0968	1.2208	0.2193	1	5
59	31	4.3871	0.8437	0.1515	2	5
60	31	4.5806	0.6720	0.1207	3	5
61	31	4.0968	0.8701	0.1563	2	5
62	31	3.9355	0.9286	0.1668	2	5
63	31	3.7097	1.0064	0.1808	2	5
64	31	3.6452	0.8774	0.1576	2	5
65	26	3.2692	1.3434	0.2635	1	5
66	30	4.0333	0.9994	0.1825	1	5
67	30	4.1667	0.9855	0.1799	1	5
68	30	3.5667	1.2507	0.2284	1	5
69	30	5.9000	7.4201	1.3547	3	45
70	25	3.2000	1.3844	0.2769	1	5
71	29	3.7931	1.2358	0.2295	1	5
72	30	4.0333	1.1592	0.2116	1	5
73	30	3.9333	1.1427	0.2086	1	5
74	29	3.6207	1.1776	0.2187	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 49

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM-43 -- -----

133	25	3.7600	1.2675	0.2535	1	5
134	25	3.2400	1.3000	0.2600	1	5
135	25	3.6800	1.1075	0.2215	1	5
136	25	3.5600	1.3565	0.2713	1	5
137	25	2.8000	1.4434	0.2887	1	5
138	25	2.6400	1.3503	0.2701	1	5
139	25	3.1200	1.3013	0.2603	1	5
140	25	3.8400	1.3748	0.2750	1	5
141	25	3.6400	1.4399	0.2880	1	5
142	25	3.9200	1.2220	0.2444	1	5
143	25	2.8000	1.5811	0.3162	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 50

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=44 -- -----

50	31	3.6129	1.0223	0.1836	1	5
51	31	4.4194	0.7648	0.1374	2	5
52	31	3.8065	1.2759	0.2292	1	5
53	31	4.1935	0.9099	0.1634	2	5
54	31	4.1935	0.8725	0.1567	2	5
55	31	3.9677	1.0160	0.1825	2	5
56	27	3.2593	1.6547	0.3184	1	5
57	27	3.0741	1.7080	0.3287	1	5
58	31	3.3548	1.4955	0.2686	1	5
59	31	4.0968	1.0756	0.1932	1	5
60	31	4.0645	0.9978	0.1792	2	5
61	31	3.8387	0.9344	0.1678	2	5
62	31	4.1290	0.8848	0.1589	2	5
63	31	4.2258	0.8450	0.1518	2	5
64	31	4.1613	0.8204	0.1474	2	5
65	26	3.3077	1.3790	0.2704	1	5
66	30	4.1000	1.2134	0.2215	1	5
164	27	3.5556	1.1875	0.2285	1	5
165	27	3.4074	1.2484	0.2402	1	5
166	27	3.1111	1.0860	0.2090	1	5
167	27	3.4074	1.0099	0.1944	1	5
168	27	3.3333	0.9199	0.1770	1	5
169	27	3.7037	1.1373	0.2189	1	5
170	27	3.2222	1.1875	0.2285	1	5
171	27	3.1481	1.0267	0.1976	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 51

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=45 -- -----

38	26	3.9231	0.9767	0.1915	2	5
39	26	3.6538	1.0933	0.2144	1	5
40	26	3.8846	1.1073	0.2172	2	5
41	26	3.5769	0.8086	0.1586	2	5
42	25	3.1200	1.1299	0.2260	1	5
43	26	4.0000	0.8485	0.1664	3	5
44	26	2.7308	1.1156	0.2188	1	5
45	26	3.2308	1.0318	0.2024	1	5
107	25	3.7600	0.8307	0.1661	2	5
108	25	3.8400	0.8000	0.1600	3	5
109	25	3.6000	0.9129	0.1826	2	5
110	25	3.6800	0.8524	0.1705	2	5
111	25	3.5600	1.4166	0.2833	1	5
112	25	3.7200	0.9798	0.1960	2	5
113	25	3.2800	1.2083	0.2417	1	5
114	25	3.8800	1.1299	0.2260	1	5
115	25	3.8800	1.1299	0.2260	1	5
116	24	4.0833	0.8297	0.1694	3	5
	24	4.0000	0.8847	0.1806	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 52

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=46 -- -----

14	27	4.2222	0.9337	0.1797	1	5
15	27	4.4815	0.5798	0.1116	3	5
16	27	4.2963	0.9121	0.1755	1	5
17	27	4.4444	0.5774	0.1111	3	5
18	27	3.8148	1.3020	0.2506	1	5
19	26	3.6923	1.2576	0.2466	1	5
20	27	4.0741	0.9971	0.1919	1	5
21	27	4.1481	0.9885	0.1902	1	5
22	27	4.3333	0.9608	0.1849	1	5
23	27	4.1111	1.1547	0.2222	1	5
24	27	3.8889	1.3397	0.2578	1	5
50	30	4.2667	0.8277	0.1511	2	5
51	31	4.3548	0.8774	0.1576	2	5
52	31	4.1290	0.9571	0.1719	2	5
53	31	4.3871	0.8823	0.1585	2	5
54	31	4.1613	0.8980	0.1613	2	5
55	31	4.3548	0.9146	0.1643	2	5
56	27	3.1852	1.7105	0.3292	1	5
57	27	3.1481	1.7476	0.3363	1	5
58	31	3.8710	1.1178	0.2008	1	5
59	31	4.4194	0.8072	0.1450	2	5
60	31	4.3226	0.9447	0.1697	2	5
61	31	4.1935	0.8725	0.1567	2	5
62	31	4.2903	0.8244	0.1481	2	5
63	31	4.1613	0.8980	0.1613	2	5
64	31	4.2258	0.8046	0.1445	2	5
65	26	3.6923	1.3496	0.2647	1	5
66	30	4.3667	0.8503	0.1552	2	5
107	25	3.7200	1.0214	0.2043	1	5
108	25	3.9600	1.0198	0.2040	1	5
109	25	3.7200	1.0214	0.2043	1	5
110	25	3.6800	1.1075	0.2215	1	5
111	25	3.4000	1.4142	0.2828	1	5
112	25	3.8000	1.1180	0.2236	1	5
113	25	3.3600	1.2207	0.2441	1	5
114	25	3.7200	1.1372	0.2274	1	5
115	24	3.5833	1.2825	0.2618	1	5
116	24	3.6250	1.1349	0.2317	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 53

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=47 -- -----

1	28	4.1786	0.9449	0.1786	1	5
2	28	3.2143	1.4235	0.2690	1	5
3	26	3.7308	1.3132	0.2575	1	5
4	28	4.0000	0.8607	0.1627	2	5
5	27	4.1852	1.0391	0.2000	1	5
6	28	4.3571	0.8262	0.1561	2	5
7	28	4.1071	0.9165	0.1732	2	5
8	27	4.2593	0.8590	0.1653	2	5
9	28	4.1786	0.8630	0.1631	2	5
10	27	4.3704	0.8389	0.1614	2	5
11	27	4.1111	1.0500	0.2021	1	5
12	28	4.2500	1.0408	0.1967	1	5
13	28	4.3214	0.8630	0.1631	2	5
14	27	4.1852	0.7863	0.1513	3	5
15	27	4.1852	0.8787	0.1691	2	5
16	27	4.1481	0.9488	0.1826	1	5
17	27	4.2593	0.7642	0.1471	3	5
18	27	3.2593	1.4031	0.2700	1	5
19	26	3.4615	1.2722	0.2495	1	5
20	27	3.9259	0.9168	0.1764	1	5
21	27	4.0741	0.9578	0.1843	1	5
22	27	3.8889	1.1875	0.2285	1	5
23	27	3.7778	1.1547	0.2222	1	5
24	27	3.5926	1.3376	0.2574	1	5
25	26	3.3846	1.6267	0.3190	1	5
26	26	3.7308	1.4016	0.2749	1	5
27	26	3.6923	1.3197	0.2588	1	5
28	26	3.9615	1.1482	0.2252	1	5
29	26	3.4615	1.3633	0.2674	1	5
30	26	2.6154	1.4718	0.2886	1	5
31	26	2.7308	1.3728	0.2692	1	5
32	26	2.9231	1.4676	0.2878	1	5
33	25	4.1600	0.8505	0.1701	3	5
34	25	4.0400	0.7895	0.1579	3	5
35	25	3.8400	1.0677	0.2135	1	5
36	25	3.8400	0.9866	0.1973	1	5
37	25	3.9200	0.9092	0.1818	2	5
38	26	4.1154	0.9931	0.1948	2	5
39	26	4.1154	0.9519	0.1867	2	5
40	26	4.0385	0.9992	0.1960	2	5
41	26	3.9615	0.8237	0.1615	3	5
42	25	3.6400	1.1504	0.2301	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 54

TASKNUM	n	mean	std	stderr	min	max
43	26	4.1538	0.9672	0.1897	1	5
44	26	2.8846	1.2434	0.2439	1	5
45	26	3.4615	0.9892	0.1940	1	5
46	25	3.8000	1.2910	0.2582	1	5
47	25	3.9600	1.1719	0.2344	1	5
48	25	3.9600	1.2069	0.2414	1	5
49	24	3.6250	1.4084	0.2875	1	5
50	30	4.2333	0.6789	0.1240	3	5
51	31	4.5161	0.6256	0.1124	3	5
52	31	4.3226	0.7478	0.1343	3	5
53	31	4.5161	0.7244	0.1301	3	5
54	31	4.3871	0.8032	0.1443	3	5
55	31	4.4194	0.8860	0.1591	2	5
56	27	3.1852	1.7767	0.3419	1	5
57	27	3.1111	1.8257	0.3514	1	5
58	31	4.2258	1.1168	0.2006	1	5
59	31	4.4194	0.7648	0.1374	3	5
60	31	4.4516	0.7229	0.1298	3	5
61	31	4.3226	0.7911	0.1421	3	5
62	31	4.2581	0.8551	0.1536	2	5
63	31	4.2581	0.8551	0.1536	3	5
64	31	4.3226	0.7018	0.1260	3	5
65	26	3.9231	1.2938	0.2537	1	5
66	30	4.5667	0.7279	0.1329	3	5
67	30	4.4333	0.8172	0.1492	3	5
68	30	4.1000	1.0939	0.1997	1	5
69	30	4.4667	0.8604	0.1571	2	5
70	26	3.7692	1.2746	0.2500	1	5
71	30	4.3000	0.8367	0.1528	3	5
72	30	4.4333	0.8172	0.1492	3	5
73	30	4.4333	0.8172	0.1492	3	5
74	29	4.3103	0.8906	0.1654	3	5
107	25	4.0800	0.8124	0.1625	3	5
108	25	4.0800	0.8124	0.1625	3	5
109	25	3.8800	0.9274	0.1855	2	5
110	25	3.9200	0.9092	0.1818	2	5
111	25	3.5600	1.3254	0.2651	1	5
112	25	3.9200	1.0376	0.2075	2	5
113	25	3.6000	1.1180	0.2236	1	5
114	25	3.7600	1.1648	0.2330	1	5
115	24	4.0833	0.8297	0.1694	3	5
116	24	3.9167	0.9286	0.1896	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 55

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=48 -- -----

38	26	3.7308	1.3132	0.2575	1	5
39	26	3.5385	1.2403	0.2433	1	5
40	26	3.5769	1.1721	0.2299	1	5
41	26	3.3077	1.1582	0.2272	1	5
42	25	2.8800	1.2689	0.2538	1	5
43	26	3.8846	1.2434	0.2439	1	5
44	26	2.9231	1.2625	0.2476	1	5
45	26	2.9615	1.1129	0.2183	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 56

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=49 -- -----

25	26	3.0385	1.3109	0.2571	1	5
26	26	3.5769	1.0266	0.2013	1	5
27	26	3.6154	1.0612	0.2081	1	5
28	26	3.8462	1.0842	0.2126	1	5
29	26	3.8462	1.0077	0.1976	1	5
30	26	2.6154	1.4164	0.2778	1	5
31	26	2.6538	1.3840	0.2714	1	5
32	26	2.9231	1.4676	0.2878	1	5
50	30	4.1000	0.8030	0.1466	3	5
51	31	4.4194	0.6204	0.1114	3	5
52	31	4.2581	0.7288	0.1309	3	5
53	31	4.3548	0.7094	0.1274	3	5
54	31	4.2258	0.7620	0.1369	3	5
55	31	4.2258	0.8450	0.1518	2	5
56	27	3.1852	1.6181	0.3114	1	5
57	27	3.1111	1.6718	0.3217	1	5
58	31	4.0000	0.9661	0.1735	1	5
59	31	4.2903	0.7391	0.1327	2	5
60	31	4.2903	0.7829	0.1406	2	5
61	31	4.0968	0.8701	0.1563	2	5
62	31	4.1613	0.8980	0.1613	2	5
63	31	4.0968	0.9076	0.1630	2	5
64	31	4.0645	0.8538	0.1534	2	5
65	26	3.7692	1.2428	0.2437	1	5
66	30	4.3333	0.7581	0.1384	3	5
67	30	4.2333	0.7739	0.1413	3	5
68	30	4.0000	0.9469	0.1729	1	5
69	30	4.2333	0.7739	0.1413	3	5
70	26	3.6154	1.2026	0.2358	1	5
71	30	4.1333	0.7761	0.1417	3	5
72	30	4.2333	0.7739	0.1413	3	5
73	30	4.1667	0.7915	0.1445	3	5
74	29	3.9655	0.9814	0.1822	2	5
107	25	3.9200	0.8622	0.1724	2	5
108	25	3.8800	0.9713	0.1943	1	5
109	25	3.5600	1.1210	0.2242	1	5
110	25	3.9600	0.7895	0.1579	2	5
111	25	3.4800	1.3266	0.2653	1	5
112	25	3.7200	0.9363	0.1873	2	5
113	25	3.6800	1.1075	0.2215	1	5
114	25	3.9600	1.0198	0.2040	1	5
115	24	3.9583	0.8587	0.1753	2	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 57

TASKNUM	n	mean	std	stderr	min	max
116	24	3.9167	0.9743	0.1989	2	5
164	27	3.9259	0.7299	0.1405	2	5
165	27	3.7407	0.8590	0.1653	2	5
166	27	3.4815	0.7000	0.1347	2	5
167	27	3.4815	0.8024	0.1544	2	5
168	27	3.6296	0.7415	0.1427	2	5
169	27	3.2593	0.8130	0.1565	2	5
170	27	3.5556	0.6980	0.1343	2	5
171	27	3.3704	0.8389	0.1614	2	5
172	26	3.8462	1.1556	0.2266	1	5
173	27	3.8519	0.8640	0.1663	2	5
174	26	3.5769	1.1017	0.2161	1	5
175	26	3.7308	1.1852	0.2324	1	5
190	30	3.6333	1.1885	0.2170	1	5
191	30	3.9000	1.0619	0.1939	1	5
192	30	3.2667	1.2299	0.2245	1	5
193	30	3.6000	1.1626	0.2123	1	5
194	30	3.8000	1.1265	0.2057	1	5
195	30	3.7667	0.9714	0.1774	2	5
196	30	3.7667	1.0726	0.1958	1	5
197	30	3.4000	1.0034	0.1832	1	5
198	30	3.8000	0.9613	0.1755	2	5
199	30	3.9667	0.8087	0.1477	2	5
200	30	3.8667	1.0417	0.1902	1	5
201	30	3.9667	0.9643	0.1761	1	5
202	30	3.2333	1.3309	0.2430	1	5
203	30	3.0667	1.2576	0.2296	1	5
204	30	4.1333	0.7761	0.1417	2	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 1

TASKNUM	n	mean	std	stderr	min	max
----- KNOWNUM=50 -- -----						
38	25	4.0000	1.0801	0.2160	1	5
39	25	3.7200	1.1000	0.2200	1	5
40	25	3.8000	1.0000	0.2000	1	5
41	25	3.6400	1.0755	0.2151	1	5
42	24	3.1250	1.2619	0.2576	1	5
43	25	4.1200	0.9713	0.1943	1	5
44	25	2.6800	1.3454	0.2691	1	5
45	25	3.0800	1.0770	0.2154	1	5
50	30	3.9333	0.9072	0.1656	2	5
51	31	4.2581	0.8152	0.1464	3	5
52	31	4.0968	0.8309	0.1492	3	5
53	31	4.1935	0.8725	0.1567	3	5
54	31	4.0645	0.9286	0.1668	2	5
55	31	4.2903	0.8638	0.1552	2	5
56	27	3.2222	1.5771	0.3035	1	5
57	27	3.1852	1.7105	0.3292	1	5
58	31	3.8710	0.9914	0.1781	2	5
59	31	4.1613	0.8601	0.1545	2	5
60	31	4.0968	0.9783	0.1757	2	5
61	31	3.9355	0.9978	0.1792	2	5
62	31	4.0323	0.9481	0.1703	2	5
63	31	4.0645	0.8920	0.1602	2	5
64	31	3.9677	0.8360	0.1502	2	5
65	26	3.5385	1.3336	0.2615	1	5
66	30	4.2000	0.8469	0.1546	3	5
67	30	4.0667	0.9803	0.1790	1	5
68	29	3.8966	1.0805	0.2006	1	5
69	30	4.1000	0.9948	0.1816	1	5
70	26	3.5385	1.3633	0.2674	1	5
71	30	3.7667	1.1351	0.2072	1	5
72	30	3.8667	1.1366	0.2075	1	5
73	30	4.0333	0.9994	0.1825	1	5
74	29	3.6897	1.1681	0.2169	1	5
133	25	3.5200	1.1944	0.2389	1	5
134	25	3.1600	1.2477	0.2495	1	5
135	25	3.2800	1.3392	0.2678	1	5
136	25	3.5600	1.3565	0.2713	1	5
137	25	3.2800	1.4000	0.2800	1	5
138	25	3.3200	1.5199	0.3040	1	5
139	25	3.3200	1.2490	0.2498	1	5
140	25	3.4400	1.2610	0.2522	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 2

TASKNUM	n	mean	std	stderr	min	max
141	25	3.2000	1.3844	0.2769	1	5
142	25	3.4400	1.1576	0.2315	1	5
143	25	3.4400	1.4742	0.2948	1	5
164	27	3.7037	0.9533	0.1835	1	5
165	27	3.8519	1.0267	0.1976	1	5
166	27	3.4815	1.0514	0.2023	1	5
167	27	3.6296	1.0432	0.2008	1	5
168	27	3.4074	1.0473	0.2016	1	5
169	27	3.1852	0.9623	0.1852	1	5
170	27	3.4074	0.8439	0.1624	1	5
171	27	3.4444	0.8473	0.1631	2	5
172	26	3.8462	1.1556	0.2266	1	5
173	27	3.8519	0.9885	0.1902	1	5
174	27	3.6296	0.9667	0.1860	1	5
175	26	3.5000	1.0677	0.2094	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 3

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=51 -- -----

164	27	3.2963	1.1706	0.2253	1	5
165	27	3.5556	0.9337	0.1797	1	5
166	27	3.0741	0.9578	0.1843	1	5
167	27	3.3704	1.0432	0.2008	1	5
168	27	3.0370	0.9398	0.1809	1	5
169	27	3.1111	1.1209	0.2157	1	5
170	27	3.2963	1.1373	0.2189	1	5
171	27	3.3704	1.0795	0.2077	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 4

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=52 -- -----

38	26	3.8077	1.1321	0.2220	1	5
39	25	3.8400	1.1060	0.2212	1	5
40	25	3.4800	1.2288	0.2458	1	5
41	25	3.3200	1.1804	0.2361	1	5
42	24	3.0417	1.1602	0.2368	1	5
43	25	3.2400	1.4514	0.2903	1	5
44	25	2.4000	1.1902	0.2380	1	5
45	25	2.6000	1.1180	0.2236	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 5

TASKNUM	n	mean	std	stderr	min	max
----- KNOWNUM=53 -- -----						
50	30	4.2667	0.6915	0.1262	3	5
51	31	4.2581	0.7732	0.1389	3	5
52	31	4.1290	0.8848	0.1589	2	5
53	31	4.1935	0.8725	0.1567	2	5
54	31	4.0968	0.7897	0.1418	3	5
55	31	4.1290	0.8848	0.1589	2	5
56	27	3.2222	1.6013	0.3082	1	5
57	27	3.1111	1.6486	0.3173	1	5
58	31	3.9032	0.9076	0.1630	2	5
59	31	4.1613	0.8601	0.1545	2	5
60	31	4.2581	0.8152	0.1464	2	5
61	31	4.1290	0.8848	0.1589	2	5
62	31	4.0645	0.8920	0.1602	2	5
63	31	4.1613	0.8980	0.1613	2	5
64	31	4.0968	0.8701	0.1563	2	5
65	26	3.5000	1.4213	0.2787	1	5
66	30	4.1667	0.7466	0.1363	3	5
75	26	3.7692	1.2428	0.2437	1	5
76	26	2.8846	1.0325	0.2025	1	5
77	27	3.5926	1.1184	0.2152	1	5
78	27	3.5185	1.2518	0.2409	1	5
79	27	3.0741	1.2380	0.2383	1	5
80	27	3.1111	1.3107	0.2522	1	5
81	27	3.2963	1.2346	0.2376	1	5
82	27	3.4074	1.0834	0.2085	1	5
83	27	3.2222	1.3107	0.2522	1	5
84	27	3.5556	1.1875	0.2285	1	5
85	27	3.7778	1.1875	0.2285	1	5
86	27	3.9630	0.9398	0.1809	1	5
87	27	3.8148	1.2415	0.2389	1	5
88	27	3.4815	1.1559	0.2225	1	5
89	27	3.7037	1.0309	0.1984	1	5
90	26	2.7308	1.5115	0.2964	1	5
91	26	1.9615	1.0763	0.2111	1	4
92	27	2.8519	1.3503	0.2599	1	5
93	27	3.2963	1.3535	0.2605	1	5
164	27	3.4074	1.2788	0.2461	1	5
165	27	3.6667	1.1767	0.2265	1	5
166	27	3.4074	1.1522	0.2217	1	5
167	27	3.5185	1.1222	0.2160	1	5
168	27	3.8889	1.1547	0.2222	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 6

TASKNUM	n	mean	std	stderr	min	max
169	27	3.5556	1.0860	0.2090	1	5
170	27	3.8148	1.1107	0.2138	1	5
171	27	3.8148	1.2101	0.2329	1	5
172	26	4.0000	1.2329	0.2418	1	5
173	27	3.9259	1.1743	0.2260	1	5
174	27	3.9630	1.1923	0.2295	1	5
175	26	4.0000	1.2961	0.2542	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 7

TASKNUM	n	mean	std	stderr	min	max
----- KNOWNUM=54 -- -----						
25	26	3.2692	1.6139	0.3165	1	5
26	26	3.7692	1.1767	0.2308	1	5
27	26	3.7308	1.1509	0.2257	1	5
28	26	4.1154	1.1429	0.2241	1	5
29	26	3.8846	1.2752	0.2501	1	5
30	26	2.5769	1.3015	0.2552	1	5
31	26	2.6923	1.2890	0.2528	1	5
32	26	3.0769	1.4120	0.2769	1	5
33	25	4.2400	0.7234	0.1447	3	5
34	25	4.0800	0.7024	0.1405	3	5
35	25	3.9200	0.9539	0.1908	1	5
36	25	4.0400	0.9781	0.1956	1	5
37	25	4.0800	0.8622	0.1724	2	5
38	24	4.0417	0.8587	0.1753	2	5
39	24	4.0417	0.8587	0.1753	2	5
40	24	3.9167	1.0598	0.2163	1	5
41	24	4.0417	0.8587	0.1753	3	5
42	23	3.6522	1.0273	0.2142	1	5
43	24	4.2917	0.8065	0.1646	3	5
44	24	2.6250	1.3772	0.2811	1	5
45	24	3.5417	0.9771	0.1994	2	5
50	30	4.1333	0.9732	0.1777	1	5
51	31	4.3871	0.7154	0.1285	3	5
52	31	4.2258	0.9903	0.1779	1	5
53	31	4.4194	0.8072	0.1450	3	5
54	31	4.2903	0.7829	0.1406	3	5
55	31	4.1613	1.0359	0.1861	1	5
56	26	3.2308	1.7506	0.3433	1	5
57	26	3.1154	1.7961	0.3523	1	5
58	31	4.0323	1.0160	0.1825	1	5
59	31	4.3226	0.9087	0.1632	2	5
60	31	4.2903	0.7829	0.1406	3	5
61	31	4.1290	1.0565	0.1897	1	5
62	31	4.1935	0.8725	0.1567	2	5
63	31	4.1613	0.8980	0.1613	2	5
64	31	4.2258	0.8835	0.1587	2	5
65	26	3.8462	1.4613	0.2866	1	5
66	30	4.3333	0.9942	0.1815	1	5
67	29	4.4138	0.8245	0.1531	2	5
68	29	4.0690	1.0997	0.2042	1	5
69	29	4.5172	0.7378	0.1370	3	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 8

TASKNUM	n	mean	std	stderr	min	max
70	25	3.6400	1.3503	0.2701	1	5
71	29	4.3793	0.7752	0.1440	3	5
72	29	4.3793	0.8200	0.1523	3	5
73	29	4.4138	0.7800	0.1448	3	5
74	28	4.2500	0.8872	0.1677	3	5
133	25	3.8000	1.3229	0.2646	1	5
134	25	3.8400	1.1790	0.2358	1	5
135	25	4.0000	1.1902	0.2380	1	5
136	25	4.3200	0.8524	0.1705	3	5
137	25	3.3600	1.5513	0.3103	1	5
138	25	3.3600	1.5513	0.3103	1	5
139	25	3.8000	1.4142	0.2828	1	5
140	25	3.8400	1.3441	0.2688	1	5
141	25	3.7200	1.4000	0.2800	1	5
142	25	3.9600	1.0985	0.2197	1	5
143	25	3.9600	1.0985	0.2197	1	5
164	27	4.1481	0.9885	0.1902	1	5
165	27	3.9259	1.0350	0.1992	1	5
166	27	4.0741	1.0715	0.2062	1	5
167	27	4.0370	1.0913	0.2100	1	5
168	27	3.5185	1.1222	0.2160	1	5
169	27	3.6296	1.1815	0.2274	1	5
170	27	3.9259	1.0715	0.2062	1	5
171	27	3.5185	1.1222	0.2160	1	5

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 9

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=55 -- -----

25	26	3.6538	1.5477	0.3035	1	5
26	26	4.0769	1.1974	0.2348	1	5
27	26	4.0000	1.2329	0.2418	1	5
28	26	4.2692	1.1852	0.2324	1	5
29	26	4.0385	1.2159	0.2385	1	5
30	26	2.7692	1.4507	0.2845	1	5
31	26	2.3077	1.3790	0.2704	1	5
32	26	3.1923	1.4972	0.2936	1	5
33	25	4.1200	0.7810	0.1562	3	5
34	25	3.9200	0.9967	0.1993	2	5
35	25	3.7600	1.2000	0.2400	1	5
36	25	3.5600	1.0832	0.2166	1	5
37	25	3.7200	1.1733	0.2347	1	5
46	25	4.2400	0.7789	0.1558	3	5
47	25	4.2000	0.8165	0.1633	3	5
48	25	3.9600	0.9345	0.1869	2	5
49	24	4.1250	0.7409	0.1512	3	5
50	30	4.0000	1.0171	0.1857	1	5
51	30	4.6333	0.4901	0.0895	4	5
52	31	4.0323	1.2243	0.2199	1	5
53	31	4.5161	0.6768	0.1216	3	5
54	31	4.4194	0.7199	0.1293	3	5
55	31	4.1935	0.9805	0.1761	1	5
56	26	3.1923	1.7209	0.3375	1	5
57	26	3.0769	1.7646	0.3461	1	5
58	31	3.9677	1.0796	0.1939	1	5
59	31	4.3226	0.8321	0.1495	2	5
60	31	4.3548	0.7549	0.1356	2	5
61	31	4.1290	0.9914	0.1781	1	5
62	31	4.2581	0.6816	0.1224	3	5
63	31	4.1613	0.8601	0.1545	2	5
64	31	4.2258	0.8450	0.1518	2	5
65	26	4.0000	1.4422	0.2828	1	5
66	30	4.4333	0.9353	0.1708	1	5
67	30	4.7333	0.5208	0.0951	3	5
68	30	4.4667	0.8996	0.1642	1	5
69	30	4.6667	0.5467	0.0998	3	5
70	26	4.1538	1.2866	0.2523	1	5
71	30	4.5667	0.6789	0.1240	3	5
72	30	4.6333	0.6149	0.1123	3	5
73	30	4.6667	0.6065	0.1107	3	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 10

TASKNUM	n	mean	std	stderr	min	max
74	29	4.7241	0.5914	0.1098	3	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 11

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=56 -- -----

38	24	4.0833	0.8805	0.1797	3	5
39	24	4.2500	1.0321	0.2107	1	5
40	24	3.8750	1.1539	0.2355	1	5
41	24	3.8750	1.1156	0.2277	1	5
42	23	3.5217	1.3097	0.2731	1	5
43	24	3.9167	1.1001	0.2246	1	5
44	24	2.9583	1.1971	0.2444	1	5
45	24	3.1250	1.1539	0.2355	1	5
46	25	3.9600	1.2069	0.2414	1	5
47	25	4.2000	0.8660	0.1732	3	5
48	25	4.1600	0.8000	0.1600	1	5
49	24	3.9167	1.1765	0.2401	1	5
67	29	3.8621	1.1870	0.2204	1	5
68	28	3.5357	1.2317	0.2328	1	5
69	29	4.3103	0.7608	0.1413	3	5
70	25	3.5600	1.2275	0.2455	1	5
71	28	3.6786	1.0203	0.1928	1	5
72	29	3.7241	1.0656	0.1979	1	5
73	29	3.8276	0.9662	0.1794	2	5
74	28	4.0000	0.9813	0.1854	2	5
107	25	3.8400	0.8981	0.1796	2	5
108	25	4.0800	0.8124	0.1625	3	5
109	25	3.6000	1.0000	0.2000	1	5
110	25	3.7600	1.0909	0.2182	1	5
111	25	3.4800	1.5308	0.3062	1	5
112	25	3.3200	1.2819	0.2564	1	5
113	25	3.1600	1.2806	0.2561	1	5
114	25	3.7200	1.1372	0.2274	1	5
115	24	3.9167	1.0598	0.2163	1	5
116	24	3.8333	1.0901	0.2225	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 12

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=57 -- -----

46	26	3.7308	1.2184	0.2390	1	5
47	25	3.8400	0.9866	0.1973	1	5
48	26	3.8846	0.9931	0.1948	1	5
49	24	3.5833	1.3160	0.2686	1	5
67	29	3.7241	1.1921	0.2214	1	5
68	28	3.6786	1.1239	0.2124	1	5
69	29	4.2759	0.8822	0.1638	1	5
70	25	3.4800	1.4177	0.2835	1	5
71	29	3.8276	1.1042	0.2050	1	5
72	29	4.1379	0.9533	0.1770	1	5
73	29	4.1724	1.0025	0.1862	1	5
74	28	3.8214	1.2488	0.2360	1	5

Corrected as of July 19, 1988

CIVPERS - SUMMARY DESCRIPTIVE STATISTICS FOR KSAO's (BY KSAO) Page: 13

TASKNUM	n	mean	std	stderr	min	max
---------	---	------	-----	--------	-----	-----

----- KNOWNUM=58 -- -----

25	26	3.2308	1.5571	0.3054	1	5
26	26	3.6154	1.5512	0.3042	1	5
27	26	3.5385	1.6058	0.3149	1	5
28	26	3.8462	1.2866	0.2523	1	5
29	26	3.6923	1.2254	0.2403	1	5
30	26	2.7692	1.5312	0.3003	1	5
31	26	2.3846	1.4164	0.2778	1	5
32	26	3.0000	1.4967	0.2935	1	5
46	25	4.2400	1.2000	0.2400	1	5
47	25	4.4000	0.7638	0.1528	3	5
48	25	4.4000	0.8165	0.1633	3	5
49	24	4.1250	1.2270	0.2505	1	5
67	29	4.3793	0.8625	0.1602	3	5
68	28	3.9643	1.2013	0.2270	1	5
69	29	4.4483	0.7831	0.1454	3	5
70	25	3.6800	1.4353	0.2871	1	5
71	29	4.0690	0.8836	0.1641	3	5
72	29	4.1724	0.8892	0.1651	3	5
73	29	4.0345	1.0516	0.1953	1	5
74	28	4.3571	0.8262	0.1561	3	5

Appendix M

KSAO Task List

ESAO - TASK IMPORTANCE RATING FORM A

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Staff Positions

1. Identify requirements and hiring criteria for position vacancies (e.g., skills and knowledges, SKAP/ACCES elements, crediting plans).
2. Initiate requests (SF-52) for recruitment or other staffing actions.
3. Recruit/interview candidates at high schools or college campuses or conferences or job fairs, etc.
4. Review candidates' qualification summaries (e.g., resumes, DA 2302, SF 171, 201 files, performance ratings, SKAP/ACCES).
5. Participate as a member on applicant evaluation boards (e.g., local merit promotion or SKAP panels).
6. Interview candidates for vacant positions.
7. Check with references concerning candidates' background.
8. Participate as a member on selection boards/panels.
9. Recommend candidates for vacant position to the next level of supervision.
10. Select candidates for vacant position.
11. Justify in writing the selection/non-selection of candidates.
12. Answer subordinates' questions concerning position vacancy announcements.
13. Answer subordinates' questions concerning their non-selection for vacant positions.

ES404ID CODE [illegible]

KDAO - TASK IMPORTANCE RATING FORM 2

KS404

ID CODE _____

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Position Requirements

14. Justify the need for current/new positions.
15. Review subordinates' job descriptions for accuracy.
16. Identify changes in position duties/requirements.
17. Develop revisions to job descriptions.
18. Request that positions be audited or reviewed by the Civilian Personnel Office (CPO).
19. Establish upward mobility, intern, co-op student positions, etc.
20. Identify/restructure vacant positions that can be filled at lower grade levels with promotion potential to full level.
21. Justify retaining grade level of vacant positions.
22. Obtain and provide information for manpower surveys and studies (e.g., Schedule I, Efficiency Reviews, Commercial Activities Review).
23. Develop/provide input to Table of Distribution and Allowances (TDAs).
24. Adjust the composition of workforce (e.g., number of part time vs full time, low vs high grade) to satisfy TDA while maximizing work group productivity.

2. Employee Reassignment	3. Position Management	4. Staffing/Manpower Requirements	21. Organization's Mission	26. Written Communication	27. Reading Ability	32. Decision Making	46. Thorough	47. Honest
X	X	X	X	X	X	X	X	X
X		X		X		X	X	X
X		X			X	X	X	X
X		X	X	X	X	X	X	X
X		X						
X	X	X				X		
X	X	X	X		X	X	X	
		X	X	X		X		
		X	X			X		

KS40 - TASK IMPORTANCE RATING FORM C

KS40c

ID CODE -----

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
- 2 = Minor Importance
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Enforce Equal Employment Opportunity (EEO) Policies

- 25. Coordinate with EEO office to determine if unit contains a representative number of minorities and women.
- 26. Review own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to identify areas requiring affirmative action.
- 27. Review own personnel practices (e.g., recruitment, selection, employee development, complaints resolution, workload distribution) to achieve affirmative action.
- 28. Take appropriate actions to minimize/eliminate discriminatory attitudes/behaviors of subordinates toward each other.
- 29. Follow EEO procedures in response to EEO complaints.
- 30. Participate in EEO/affirmative action conferences or workshops.
- 31. Encourage subordinates to participate in Black History Month, Federal Women's Program, Hispanic Week, etc.
- 32. Communicate with EEO counselors.

3. EEO/Affirmative Action	4. Affirmative Action Programs	16. Grievance Procedures	34. Non-Discriminatory	35. Human Relations	47. Honest	49. Responsible	54. Fair	55. Sets Facts Before Acting	59. Trustworthy										
								X											
								X											
X				X		X	X	X											
X		X						X											

ALAO - TASK IMPORTANCE RATING FORM D**ESAOs**

ID CODE _____

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Provide Recognition and Rewards

33. Nominate subordinates for formal honors or awards.
34. Present on-the-spot cash awards to subordinates from discretionary funds.
35. Establish rewards or incentives to motivate subordinates (e.g., certificate of achievement, employee of the month).
36. Praise subordinates for effective job performance.
37. Write letters of appreciation/commendation for subordinates.

[illegible]

E340 - TASK IMPORTANCE RATING FORM E

E340a

ID CODE -----

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
- 2 = Minor Importance
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Motivate Employees

38. Motivate subordinates.
39. Recognize and take steps to correct morale problems.
40. Encourage subordinates to perform their jobs to the best of their ability.
41. Foster/develop a positive work environment that will serve to motivate subordinates.
42. Foster/develop a positive working relationship between civilian and military subordinates.
43. Set an example for subordinates to follow.
44. Encourage subordinates to participate in productivity improvement programs (e.g., suggestion, cost-reduction, quality assurance, quality circles).
45. Involve subordinates in decision-making or planning processes.

9. Performance Appraisal System	12. Leadership	29. Motivate Others	30. Oral Communication	31. Persuasion	34. Non-Discriminatory	35. Human Relations	37. Coordination	41. Developmental Counseling	42. Performance/Conduct Counseling	43. Self-Confident	47. Honest	48. Self-Starter	50. Dependable	52. Empathetic	54. Fair	56. Tactful and Diplomatic
	X	X									X	X		X	X	
	X		X								X			X	X	
	X	X	X								X					
	X	X												X		
	X									X	X	X	X	X		

KS10 - TASK IMPORTANCE RATING FORM F

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
- 2 = Minor Importance
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Manage Employees with Personal Problems

- 46. Detect/recognize personal problems of subordinates (e.g., drugs, alcohol, financial, family) that affect their job performance.
- 47. Offer to assist subordinates with personal problems that affect their job performance.
- 48. Discuss with subordinates personal problems that affect their job performance.
- 49. Refer subordinates with personal problems affecting their job performance for assistance.

ISAS

IS CODE

9. Drug and Alcohol Abuse	10. Referral Sources	11. Discipline Policies and Procedures	12. Leadership	13. Conflict Resolution	14. Oral Communication	15. Persuasion	16. Stress Tolerance	17. Non-Discriminatory	18. Human Relations	19. Courage to Confront	20. Performance/Conduct Counseling	21. Honesty	22. Sets Facts Before Acting	23. Tactful and Diplomatic	24. Emotionally Stable	25. Trustworthy
X		X								X			X			X
X	X									X	X		X	X		X
X		X		X						X	X			X		X
X	X	X								X			X		X	

ESAO - TASK IMPORTANCE RATING FORM G

ESAOs

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
- 2 = Minor Importance
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Evaluate Performance for Feedback and Promotion

50. Develop subordinates' performance standards.
51. Document subordinates' poor performance.
52. Review performance standards with subordinates.
53. Formally review and evaluate job performance of subordinates.
54. Provide informal feedback to subordinates concerning their performance.
55. Complete written performance appraisals for civilian subordinates.
56. Complete/provide input to Officer Efficiency Report (OER).
57. Complete/provide input to Enlisted Evaluation Report (EER).
58. Review subordinates' performance ratings with approving official prior to reviewing ratings with subordinates.
59. Review performance ratings with subordinates.
60. Counsel subordinates about how to improve performance.
61. Provide subordinates with written guidelines on how to improve performance.
62. Evaluate probationary employees to determine suitability for permanent status.
63. Evaluate subordinates' suitability for promotion (e.g., local merit, SKAP/ACCES).
64. Evaluate trainees (e.g., interns, upward mobility) for target grade promotion.
65. Inform chain of command of performance problems with military subordinates.
66. Deny within grade increase to subordinates whose performance is below acceptable levels.

9. Performance Appraisal System	25. Written Communication	32. Decision Making	34. Non-Discriminatory	36. Courage to Confront	41. Developmental Counseling	42. Performance/Conduct Counseling	44. Monitoring Work	46. Thorough	47. Honest	49. Responsible	50. Dependable	53. Technically Competent	54. Fair	55. Sets Facts Before Acting				
X	X	X	X					X	X	X		X	X	X				
X	X	X	X	X		X	X	X	X	X	X	X	X	X				
X			X	X	X	X		X	X	X	X	X	X	X				
X		X	X	X	X	X	X	X	X	X	X	X	X	X				
X		X	X	X	X	X	X	X	X	X	X	X	X	X				
X	X	X	X	X				X	X	X	X	X	X	X				
X									X	X			X					
X			X	X	X	X	X	X	X	X	X	X	X	X				
X			X	X	X	X	X	X	X	X	X	X	X	X				
X	X			X	X	X		X	X	X		X	X	X				
X		X	X		X		X	X	X	X	X	X	X	X				
X		X	X				X	X	X	X	X	X	X	X				
X			X				X	X	X	X		X	X	X				
														X				
X		X	X	X		X	X	X	X	X	X	X	X	X				

KS40 - TASK IMPORTANCE RATING FORM 8

See important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
- 2 = Minor Importance
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Discipline Employees

67	Document subordinates' unauthorized absences, tardiness, or behavioral problems.
68	Confer with staff from Management Employee Relations (MER) prior to taking actions on subordinates.
69	Counsel subordinates about absences, tardiness, behavioral problems.
70	Inform chain of command of conduct/behavioral problems (e.g., absences, tardiness) with military subordinates.
71	Determine if adverse actions (e.g., suspension, removal) should be taken because of poor performance.
72	Determine if formal disciplinary steps should be taken in response to conduct/behavioral problems (e.g., absences, tardiness).
73	Initiate adverse actions (e.g., suspension, removal) for subordinates whose performance is below acceptable levels.
74	Write letters of reprimand.

KS40s

ID CODE

11. Discipline Policies and Procedures	16. Grievance Procedures	22. Leadership	24. Conflict Resolution	25. Oral Communication	27. Decision Making	31. Stress Tolerance	34. Non-Discriminatory	36. Courage to Confront	40. Problem Identification	42. Performance/Conduct Counseling	47. Honest	49. Responsible	50. Dependable	55. Fair	59. Sets Facts Before Acting	60. Tactful and Diplomatic	67. Emotionally Stable	69. Trustworthy
X	X	X			X		X	X	X	X	X	X	X	X	X			X
X	X		X								X	X		X	X			
X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
															X			
X	X		X		X		X	X	X		X	X		X	X			X
X	X		X		X		X	X	X	X	X	X		X	X		X	X
X	X	X		X			X	X			X	X	X	X	X		X	X
X	X				X		X	X			X			X	X	X		X

1 = Unimportant
2 = Minor importance
3 = Important
4 = Very Important
5 = Extremely Important

71. Identify training needed by subordinates.
72. Complete training needs survey.
73. Determine if currently available training programs meet subordinates needs.
74. Identify available training/development opportunities for subordinates.
75. Inform subordinates of training/development opportunities.
76. Nominate subordinates to receive training.
77. Designate subordinates to receive cross-training.
78. Develop individual Development Plans (IDPs) with subordinates.
79. Develop training plans for subordinates in special employment programs (e.g., apprentices, co-op students, interns, upward mobility, veterans, re-adjustment employees).
80. Provide cross-training for subordinates.
81. Design on-the-job training programs.
82. Provide on-the-job training.
83. Instruct subordinates on how to use new equipment.
84. Assign experienced employee(s) to train new workers.
85. Provide career development counseling to subordinates.
86. Justify need for non-government sources of training.
87. Ensure subordinates are free for PT, training, etc.
88. Document effectiveness of training attended by subordinates (e.g., complete DD 1536).
89. Evaluate long term effectiveness of training attended by subordinates.

[illegible]

K340 - TASK IMPORTANCE RATING FORM J

ES401

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Conduct Meetings and Briefings

94. Conduct staff meetings.
95. Conduct meetings with subordinates at beginning of their shift.
96. Participate in staff meetings, conferences, etc.
97. Brief upper management on progress of work or project activities.
98. Brief subordinates on progress of work or project activities.
99. Conduct safety meetings.

	28. Oral Communication	29. Public Speaking	30. Persuasion
X		X	
X			
X	X		
X	X		
X			

ESAO - TASK IMPORTANCE RATING FORM E

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Provide Orientation

100. Provide orientation to new employees.
101. Explain personnel policies and procedures to subordinates.
102. Explain administrative policies and procedures to subordinates (e.g., ID#, work hours, leave).
103. Explain local installation policies and procedures to subordinates.
104. Explain military policies and procedures to civilian supervisors and/or subordinates.
105. Explain civilian policies and procedures to military supervisors and/or military subordinates.
106. Inform subordinates of impending changes in policies or procedures.

ES401

ID CODE *****

[illegible]

READ - TASK IMPORTANCE RATING FORM L

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Communicate with Subordinates, Superiors, and Others

107. Inform higher management of employees' views and concerns.
108. Inform subordinates of management objectives, decisions, and views.
109. Ask second-line supervisor or above for help or advice with work-related problems.
110. Inform second-line supervisor or above when problems arise which will delay completion of work.
111. Communicate with union representatives/stewards.
112. Inform second-line supervisor or above of your subordinates' accomplishments.
113. Represent your subordinates during their absence.
114. Represent your immediate supervisor during his/her absence.
115. Communicate with other supervisors in your organization to improve operations.
116. Communicate with members of other organizations to improve operations.

ES40s

ID CODE _____

[illegible]

ESAO - TASK IMPORTANCE RATING FORM N**ESAOs**

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Conduct Administrative Duties

117. Write or keep records/logs (e.g., suspense dates, work status sheets, project logs, work orders).
118. Write policies and procedures (e.g., SOP).
119. Read memos, newsletters, regulations, journals, etc., to keep up with developments related to supervision.
120. Read, research regulations pertaining to personnel management and administrative procedures.
121. Provide job references for subordinates.
122. Enforce smoking/non-smoking regulations.
123. Assess/verify accuracy of facts, statements, or complaints by others before they become part of a record or a basis for action.
124. Resolve work-related complaints, conflicts or disputes among subordinates.
125. Resolve work-related conflicts between your subordinates and people in other offices.
126. Follow grievance procedures in response to grievances.
127. Keep up-to-date on union contracts or activities.
128. Monitor compliance with union agreements.
129. Assign work space to subordinates.
130. Allocate supplies or equipment to subordinates.
131. Arrange for support from other offices or activities.
132. Consult with off-going supervisor about shift conditions.

[illegible]

KS40 - TASK IMPORTANCE RATING FORM N

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Work Schedules

133. Request/justify comp time or overtime for subordinates.
134. Approve comp time or overtime for subordinates.
135. Coordinate annual leave/vacation schedules for subordinates.
136. Approve/disapprove requests for absences and leave.
137. Complete subordinates' time cards and overtime sheets.
138. Certify time sheets/time cards.
139. Review personnel records and reports (e.g., time and attendance, sick leave, overtime) for accuracy and potential abuses (e.g., excessive tardiness, sick leave).
140. Schedule subordinates' work hours.
141. Revise work schedules to adjust for subordinates' vacations, retirements, leaves of absence, attendance at training, etc.
142. Revise work schedule to meet changes in the demands for unit's products or services.
143. Determine causes of subordinates' repeated absences/tardiness.

ES408

ID CODE

[illegible]

ESAO - TASK IMPORTANCE RATING FORM

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Maintain Safety Requirements

149. Instruct personnel in the use of safety equipment.
150. Instruct personnel in the observance of safety regulations.
151. Conduct safety tests on equipment.
152. Request safety tests on equipment.
153. Inspect work area for safety hazards.
154. Investigate work-related accidents.
155. Ensure that safety hazards are addressed.
156. Instruct personnel in proper handling of hazardous materials.
157. Instruct personnel how to use work equipment safely.
158. Inspect safety equipment.
159. Report accidents.
160. Document safety violations.
161. Complete accident reports.
162. Complete workers' compensation forms.
163. Enforce safety programs and procedures.

ESAOs

ID CODE _____

[illegible]

ESAO - TASK IMPORTANCE RATING FORM 0

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Employee's Work

164. Delegate authority to work leader or other subordinates.
165. Establish work priorities and deadlines to meet milestones.
166. Assign work to subordinates.
167. Assign work priorities and deadlines to subordinates.
168. Explain work assignments to subordinates.
169. Review subordinates' work when in progress.
170. Review and approve subordinates' work upon completion.
171. Integrate the work of several subordinates to create a final product.

ES408

ID CODE _____

[illegible]

ESAO - TASK IMPORTANCE RATING FORM B

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Oversee Operations

172. Monitor/evaluate work performed for the Army by outside vendors or contractors.
173. Evaluate program/project status or progress.
174. Evaluate work requests to determine if work can be accomplished and is within the mission of the unit.
175. Determine when work should be performed in-house and when to contract work out.

ESAOs

ID CODE _____

[illegible]

ESAO - TASK IMPORTANCE RATING FORM 3

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Manage Materials and Supplies

176. Determine the supplies, parts, equipment, or tools needed to accomplish work.
177. Determine if supplies, parts, equipment or tools are available to accomplish work.
178. Request/order supplies, parts, equipment or tools required to accomplish work.
179. Receive/verify receipt of supplies, parts, equipment or tools.
180. Check equipment to assure it is working properly.
181. Request repairs on down equipment.
182. Schedule preventive maintenance on equipment.
183. Develop internal controls to minimize waste, fraud or abuse.
184. Implement internal controls to minimize waste, fraud or abuse.
185. Assess internal controls designed to minimize waste, fraud or abuse.
186. Account for hand receipt equipment on the survey list.
187. Report missing tools/equipment.
188. Justify the need for retaining allocated supplies or equipment for subordinates.
189. Justify the need for retaining allocated work space for subordinates.

ESAOs

ID CODE

15. Accountability

X

Y

K340 - TASK IMPORTANCE RATING FORM T

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Plus

190. Assess the impact of future workload on staffing requirements.
191. Assess the impact of mission changes on workload and staffing requirements.
192. Survey customers/users to estimate future workload.
193. Survey customers/users to assess quality of services provided.
194. Estimate unit's short-range workload.
195. Estimate unit's long-range workload.
196. Estimate time required to complete projects.
197. Assess impact of new technology on work group.
198. Assess efficiency of work operations.
199. Develop plans for improving work operations.
200. Develop plans to achieve goals or milestones.
201. Implement plans to achieve goals or milestones.
202. Participate in writing mission and function statements.
203. Monitor update mission and function statements.
204. Implement plans for improving work operations.

		ISAOs						ID CODE
	32. Decision Making	30. Planning	39. Organizing	49. Responsible				
X	X	X						
X	X	X						
X	X							
	X							
	X	X						
X	X							
	X	X						
X	X	X						
X								
X	X	X						

KS40 - TASK IMPORTANCE RATING FORM

KS408

ID CODE

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

345000

205. Monitor currently available financial resources.
206. Monitor long-range availability of financial resources.
207. Estimate financial resources required to complete projects.
208. Project resources (e.g., personnel, equipment, training, TDY) required on an annual basis so budgets can be determined.
209. Allocate/reallocate budget resources among different work/projects.
210. Justify allocation of budget resources for work/projects.
211. Develop internal work group operating budgets from allocations received.
212. Negotiate with others to obtain personnel, equipment, materials or financial resources to accomplish mission.
213. Monitor use of overtime, travel funds, training funds, incentive rewards, etc. to ensure that spending keeps within budgetary constraints.

[illegible]

KS40 - TASK IMPORTANCE RATING FORM V

How important is this knowledge, skill, ability, or other characteristic for effective performance of this task?

- 1 = Unimportant
2 = Minor Importance
3 = Important
4 = Very Important
5 = Extremely Important

Practice Security Procedures

214. Explain security policies and procedures to subordinates.
215. Determine sensitivity of positions for security purposes.
216. Request security clearances for subordinates.
217. Review subordinates Personal History Statement (i.e., DD 396).
218. Maintain privacy/security of personnel information in accordance with the Freedom of Information/Privacy Act.
219. Develop SOP in accordance with security regulations.
220. Implement SOP in accordance with security regulations.
221. Notify appropriate personnel (e.g., security officer, Military Intelligence) of suspected security risks or violations.
222. Report/document security violations.
223. Monitor the physical security of the work area.
224. Conduct security training meetings.
225. Maintain records of subordinates' attendance at security meetings.
226. Identify changes in job requirements which require that subordinates clearance be upgraded or downgraded.

ESAOs

ID CODE *****

[illegible]

Appendix N

Summary of Linkage Workshop Results

Abilities, Skills, and Other Characteristics (ASO)

<u>Abilities, Skills, and Other Characteristics (ASO)</u>	<u>Number of Task Cluster Linkages</u>	<u>Number of Task Linkages</u>	<u>Possible to Measure</u>
1. Leadership	6	4	Y
2. Learning Disability	0	-	-
3. Delegation	1	1	Y
4. Conflict Resolution	2	1	Y
5. Motivate Others	4	1	(Y)
6. Written Communication	4	3	Y
7. Reading Ability	3	3	(Y)
8. Oral Communication	7	7	Y
9. Public Speaking	2	0	-
10. Teaching Ability	1	1	Y
11. Persuasion	4	1	(Y)
12. Decision Making	5	5	Y
13. Stress Tolerance	2	0	-
14. Teamwork	0	-	-
15. Response to Criticism	0	-	-
16. Non-Discriminatory	8	3	Y
17. Human Relations	3	1	Y
18. Courage of Confront	3	3	Y
19. Coordination	1	0	-
20. Planning	1	1	Y
21. Organizing	2	2	Y
22. Problem Identification	1	1	Y
23. Economical	0	-	-
24. Developmental Counseling	3	1	Y
25. Performance/Conduct Counseling	4	3	Y
26. Time Management	1	0	Y
27. Monitoring Work	2	1	Y
28. Flexible	0	-	-
29. Self-Confident	2	2	Y
30. Thorough	3	2	Y
31. Honest	9	7	N

32.	Self-Starter	1	0	-
33.	Responsible	7	2	Y
34.	Dependable	6	3	N
35.	Achievement Oriented	1	0	-
36.	Cooperative	0	-	-
37.	Empathetic	1	0	N
38.	Technically Competent	4	2	Y
39.	Fair	7	7	Y
40.	Gets Facts Before Acting	5	-	Y
41.	Tactful and Diplomatic	4	4	Y
42.	Realistic Self Appraisal	0	-	-
43.	Self-Sufficient	0	-	-
44.	Tolerant of Ambiguity	0	-	-
45.	Energetic	0	-	-
46.	Creative	0	-	-
47.	Risk Taker	0	-	-
48.	Aggressive	0	-	-
49.	Job Involved	0	-	-
50.	Emotionally Stable	2	1	N
51.	Trustworthy	3	2	Y

<u>Knowledges</u>	<u>Number of Task Cluster Linkages</u>	<u>Number of Task Linkages</u>	<u>Possible to Measure</u>
1. Merit Promotion System	1	12	Y
2. Employee Reassignment	2	0	-
3. Part Time Hiring	0	-	-
4. Position Management	2	1	y
5. Staffing/Manpower Requirements	2	1	Y
6. EEO/Affirmative Action	1	1	Y
7. Affirmative Action Programs	1	0	-
8. Eligibility Requirements	1	1	Y
9. Probation Period	0	-	-
10. Performance Appraisal System	4	1	Y
11. Productivity Improvement	0	-	-
12. Supervising Local Nationals	0	1	-
13. Drug and Alcohol Abuse	1	1	Y
14. Referral Sources	1	1	Y
15. Discipline Policies & Procedures	2	1	Y
16. Training Policies & Procedures	1	1	Y
17. Career Management	1	0	-
18. Overtime Regulations	1	1	Y
19. Salary Administration	0	-	-
20. Leave Policies & Procedures	0	-	-
21. Workers' Compensation	0	-	-
22. RIF/TOF Policies & Procedures	0	-	-
23. Commercial Activities	0	-	-
24. Standards of Conduct	0	-	-
25. Accountability	1	1	Y
26. Grievance Procedures	2	2	-
27. Labor-Management Relations	0	-	-
28. Safety & Occupational Health Regulations	1	1	Y
29. NAF Policies	0	-	-
30. Internal Controls	0	-	-

(Continued)

31.	Budget Policies	1	0	-
32.	PPBES	1	0	-
33.	Freedom of Information Act	0	-	-
34.	Security Policies	1	1	Y
35.	Military Performance Evaluation	0	-	-
36.	Military Rank Structure	0	-	-
37.	Military Customs	0	-	-
38.	Military/Defense Structure	0	-	-
39.	Army Chain of Command	0	-	-
40.	Army's General Mission	0	-	-
41.	Organization's Mission	2	2	Y
42.	UCMJ	0	-	-