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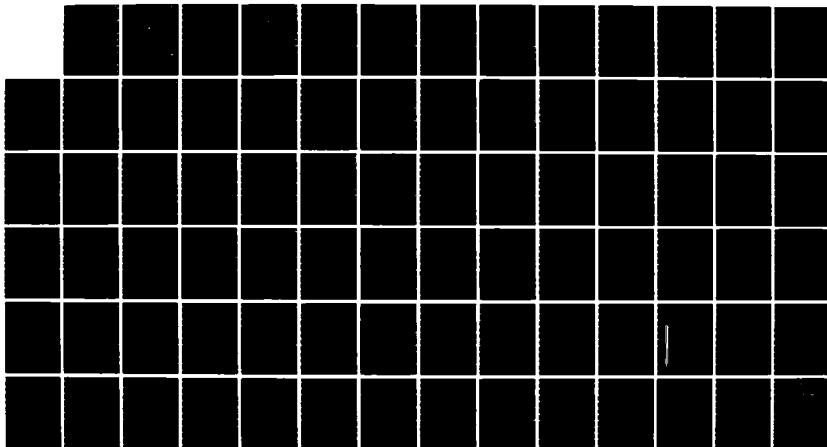
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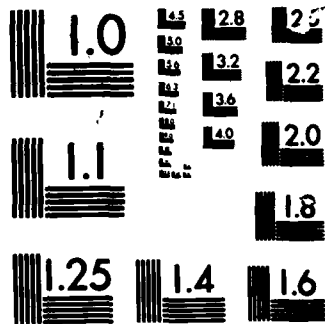
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STUDENT REPORT

JOB ATTITUDES OF USAF OFFICERS

MAJOR JEFFREY B. KNIGHT

86-1425

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86-1425

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JOB ATTITUDES OF USAF OFFICERS

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Submitted to the faculty in partial fulfillment of
requirements for graduation.

**AIR COMMAND AND STAFF COLLEGE
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The Leadership and Management Development Center (LMDC) will phase out its management consultation service in 1986. Throughout its tenure it has acquired a large and valuable job attitude data base from the Organizational Assessment Package (OAP) survey it administered throughout the Air Force. This study documents a portion of that data base, while specifically comparing job attitudes of USAF officers in the grades O-1 to O-6 and above. Overall job attitudes were positive. The statistical comparison of the various grades of officers shows that there is a definite trend of increasing favorableness of job attitudes with increases in grade.				
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PREFACE

The purpose of this research study is to compare job attitudes and identify trends among USAF officers. By identifying the job attitudes among the various grades leaders may capitalize on strengths and improve weaknesses. The results of this study may help the Air Force remain competitive in the market place for retention and recruitment.

This research study was sponsored by the Leadership and Management Development Center (LMDC). This project used job attitude survey data which was captured by their Organizational Assessment Package. This research study is a historical record of a portion of their data base from October 1981 to September 1985. The manuscript is written in the style of the American Psychological Association in accordance with the requirements of LMDC.

The author acknowledges and is grateful for the assistance of the personnel at LMDC/AN and the administrative advisor, Major Ron Sams. Additionally, he thanks his supportive wife Brenda for her cooperation throughout the writing of this report.

ABOUT THE AUTHOR

Major Jeffrey B. Knight graduated from the USAF Academy in 1973 with a Bachelor of Science Degree in Pre-Med. For the next four years he served as a Security Police Officer at Luke AFB, AZ, Korat RTAB, Thailand, Osan AB, Korea, and Vance AFB, OK. In 1978 he graduated from Undergraduate Pilot Training. Major Knight flew the KC-135 for seven years in SAC at KI Sawyer AFB, MI. He began as a copilot, upgraded to aircraft commander then instructor pilot, and held Assistant Flight Commander, Flight Commander, and Training Flight Instructor Pilot positions. While there he earned his Master of Arts Degree in Public Administration from Northern Michigan University. He came to Air Command and Staff College in 1985. He completed Squadron Officer School by correspondence and in residence, and Air Command and Staff College and Marine Corps Command and Staff College by correspondence. His decorations include the Air Force Meritorious Service Medal, the Air Force Commendation Medal, and the Combat Readiness Medal. Major Knight is married and has three daughters.

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EXECUTIVE SUMMARY

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REPORT NUMBER

86-1425

AUTHOR(S)

MAJOR JEFFREY B. KNIGHT

TITLE

JOB ATTITUDES OF USAF OFFICERS

I. Purpose: To compare job attitudes and identify trends among the Air Force officer grades O-1 through O-6 and above.

II. Background: The diagnostic instrument used for this study is the Organizational Assessment Package (OAP), a survey used by the Leadership and Management Development Center (LMDC), Maxwell Air Force Base, AL, to analyze attitudes and provide Air Force decisionmakers with systemic information and leadership trends. To accomplish its purpose this study analyzes OAP responses from USAF officers collected from October 1981 to September 1985. The data were collected by LMDC's management consultant teams, who responded to unit commanders' requests to analyze job attitudes within their units. Due to funding cutbacks LMDC will transfer the OAP data base and no longer collect job attitudinal data for analysis. This study serves as a historical record for a portion of LMDC's OAP data base and fulfills the requirements for an Air Command and Staff College (ACSC) research project. This comparative study of Air Force officers helps to identify the attitudes at the various grade levels. It may help leaders improve weak areas and capitalize on strengths. This in turn would enhance the Air Force for its current members, and continue to make it competitive for recruitment and retention.

CONTINUED

III. Procedures and Results: Several steps were taken to reach the goals of the present research.

(1) A review of literature was conducted and no studies were found which specifically compared job attitudes among the various officer grades.

(2) The OAP data were analyzed in two parts: the demographic analysis, which characterizes the respondents, and the attitudinal analysis, which compares attitudes among the grades. Because the OAP is administered only by request the subjects comprise an opportunity sample. However, these data are from surveys administered virtually world wide and represent a large portion of the Air Force population.

(3) Statistical analyses of the data were conducted using standard inferential statistics (Oneway Analysis of Variance with Newman-Keuls follow-up) at the 95% confidence level. Groups (or grades of officers) not significantly different from each other were placed into common subsets.

(4) The demographic results showed a much larger percentage of women in the company grades than in the field grades (ranging from 24% (O-1) with a successive decrease in each grade to 2% (O-6 and above)). Also a larger percentage of the spouses of company grade officers than spouses of field grade officers were employed outside the home. The educational levels, both academically and militarily, were much higher at the field grade level. Lastly, desire for making the Air Force a career increased with each successive increase in grade. About 40% of the company grade officers considered themselves career officers compared to about 72% of the field grade officers.

(5) The attitudinal analysis indicated significant differences among the various grades of officers for all 21 of the OAP job attitude factors except one. Generally, the higher the officer grade the more favorable the job attitudes. In 18 of 20 factors with significant differences, the colonels and above group (colonel+) were higher than all other grades. Lt colonels were significantly higher than all grades except colonels+ in 15 of the factors.

CONTINUED

IV. Conclusions:

(1) There is a definite trend of increasing favorableness of job attitudes with successive increases in grade.

(2) The overall job attitudes of Air Force officers are quite positive.

(3) This study supports previous literature which indicates job attitudes increase with age, longevity, and increased grade.

(4) The Air Force provides challenging jobs to meet the higher level needs of its more senior officers.

(5) The OAP factor Need for Enrichment has the highest means for all grades in the survey and should be considered very important to Air Force officers. This factor characterizes job desires that include opportunities to have a meaningful job, to use skills, to have independence in work, to perform a variety of tasks, and for personal growth in the job.

(6) Although the job attitudes were generally favorable, some findings may suggest needed actions (see Recommendations).

V. Recommendations:

(1) Whenever possible, leaders should seek to allow the lower grade officers to meet their higher level needs through job enrichment of lower grade job positions.

(2) Commanders should educate junior officers more completely on the Air Force promotion system to help them understand their advancement opportunities.

(3) Leaders and functional managers should continue programs of reward, competition, etc., that foster recognition and pride among their subordinates. Formal recognition should be augmented through daily efforts by leaders to informally recognize younger officers' efforts.

(4) Leaders should create and maintain an organizational climate that allows junior officers to freely communicate.

(5) Senior officers should recognize that generally the company grade officers do not view the Air Force as favorably as they do, and hence they should not expect the junior officers' attitudes to mirror their own attitudes.

CONTINUED

(6) Leaders should recognize that enrichment within the job is an important factor to officers of all grades. Jobs should use the skills people are trained for, but also allow opportunity for people to expand in a variety of skills and to work as independently as possible.

(7) Leaders should recognize that more spouses of the company grade officers work outside the home and should accomodate for the stress and pressures this may bring, where feasible.

Chapter One

INTRODUCTION

The purpose of this research study is to compare job attitudes and identify trends among various officer grades (O-1 thru O-6) in the USAF. The tool used for this research is the Organizational Assessment Package (OAP), a job attitude survey developed jointly by the Leadership and Management Development Center (LMDC), Maxwell Air Force Base, Alabama, and the Air Force Human Resources Laboratory (AFHRL) at Brooks Air Force Base, Texas (Short, 1985). This research study provides a historical record of a portion of this large, valuable data base of OAP survey results.

Reduced LMDC manning requirements will force a relocation of the currently available, and extensive, OAP data base to AFHRL in the near future. Thus, this research will document a portion of that data base while specifically investigating the job attitudes between the various officer grades.

Job attitudes probably receive more attention than any other aspect of work psychology. Only a decade ago a conservative estimate of the number of published articles and dissertations on the subject was 3,350 in 1976 (Locke). Since then, a great many more studies have been published.

Clearly the study of job attitudes is considered important by behavioral scientists. Why is this so? And what is the importance of job attitudes to the Air Force?

There are several reasons as to why job attitudes are so important. First, generally it is inferred that individuals with more favorable attitudes will perform better and be more reliable. Second, retention is, and will be, an important concern as the Air Force competes to keep its highly trained people. A 1983 Dunhill Research Grant study stated:

Even greater attention to the retention function is likely to develop in the coming years. First, a shortage of workers--particularly entry level employees--is predicted for the 1990s. Second, movement toward greater technological job content has led to greater training and development investment in workers, which must be protected. Third, the forecast shortage of entry level workers will additionally make recruitment a key issue. (Farrell & Rusbult, 1985, p. 130)

Potential officers may view attitudes among the current Air Force officers and use their observations as a gauge to decide their career intentions. A comparative study of attitudes among Air Force officers may help identify the attitudes at various grade levels. This may help leaders improve weak areas, capitalize on strengths, enhance the Air Force for its current members, and continue to make it competitive in the market place both in terms of recruitment and retention.

This research study pursues four objectives:

- (1) To conduct a review of current research on the job attitudes of various grades of officers.
- (2) To compare OAP measured demographic characteristics and job attitudes of officers at various grade levels.
- (3) To analyze significant attitudinal differences between officers in various grade levels.
- (4) To develop appropriate recommendations for Air Force leaders.

To achieve these objectives the report is organized as follows: First, Chapter Two shows the results of the literature review. Next, Chapter Three details the research method, to include instrumentation, data collection, subjects, and procedures. Chapter Four presents the demographic and attitudinal results of the survey for various officer grades. The results are then discussed in Chapter Five with suggested reasons for the differences between the various grades of officers. Finally, Chapter Six presents some conclusions and recommendations.

Chapter Two

LITERATURE REVIEW

A review of the literature produced no studies which specifically compared job attitudes across the different grades of officers. However, many research studies in organizational behavior have focused on job attitudes and the work environment. The present review first considers a history of key results from representative studies in this area. Age, longevity, and potential to meet higher level needs are then presented to explain why the author expects that job attitudes will increase with grade.

History

The birth of the "human relations" school of management, which emphasizes the importance of worker attitudes, is generally attributed to research conducted at the Hawthorne plant of the Western Electric Company in Cicero, Illinois (Roethlisberger & Dickson, 1943). Here, in 1920, Elton Mayo and his associates began the now famous "Hawthorne Studies" with a scientific management question: What is the effect of illumination on productivity? Because workers failed to respond consistently to changes in

illumination, the researchers shifted their focus to the study of worker attitudes in an effort to explain the inconsistency. After years of study, the researchers arrived at the (then) radical conclusion that workers have feelings which affect their work behavior and that the way workers perceive objective reality (i.e., job attitudes) is most important (Talbot, 1979).

Since the Hawthorne studies, the human relations school of thought has de-emphasized economic rewards in favor of the social aspects of work environment. The different roles within the work group, and workers' contentment with supervisory practices became central issues in organizational behavior. The function of management consultants and industrial psychologists was seen as improving the contentment of the worker (Talbot, 1979). The important assumption was that the satisfied worker produces more (Gruneberg, 1976). Through the 30's and 40's many studies were predicated on this assumption. Most studies failed to completely support this tenet, however.

In 1955 Brayfield and Crockett published a systematic review of the empirical data which cast serious doubt on the satisfaction-causes-performance assumption (Petty, McGee, & Cavender, 1984). Lawler and Porter (1967) re-analyzed the Brayfield and Crockett reviews and concluded a low but consistent relationship exists between satisfaction and performance. The essence of their

conclusion was that performance leads to rewards, and rewards to satisfaction (Petty, 1984).

A third group of theorists assert that certain moderators affect the relationship of satisfaction and performance. Among these are reward contingencies, occupational group, degree of job fit, supervisory level, self-esteem, and need for achievement. Some theorists propose none of the three theories has strong support (Petty, 1984), but Fisher (1980) feels that the intrinsic appeal of the satisfaction-causes-performance relationship warrants further study.

More recently, theorists have begun to view people as being motivated and satisfied by a complex set of interrelated factors (Talbot, 1979). Jobs which are high in variety, autonomy, responsibility, etc., are viewed as meaningful and lead to high motivation (Steers & Porter, 1975). Three factors that may increase officers' job attitudes are discussed next.

Job Attitudes and Grades

Age, longevity, and potential to meet higher level needs are three factors that lead the author to expect that an increase in grade results in improved job attitudes. In a 1979 report, Talbot hypothesized that majors would have significantly higher levels of satisfaction than captains (Talbot, 1979). His data did not support this hypothesis;

however, the sample was limited in number and it only compared two adjacent ranks (captain vs major).

Talbot's study did indicate that older workers with more time in the Air Force (longevity) are more satisfied than their younger counterparts (Talbot, 1979). Other studies have shown that among workers in the United States, job satisfaction varies directly with age (Glenn, Taylor, & Weaver, 1977; Hulin & Smith, 1965).

The present study compared second lieutenants through colonels and above, and has a large enough sample to clearly show if there is a relationship between an officer's grade and job attitudes.

The positive relationship between overall job attitudes and organizational longevity can be explained by treating job attitudes as both the cause and the effect of longevity. Many studies have concluded that overall job attitude is negatively related to turnover (Brayfield & Crockett, 1955; Dachler & Schneider, 1978; Locke, 1976; Uroom, 1964). "Based on the job satisfaction-turnover relationship one concludes that less satisfied workers tend to resign and more satisfied workers tend to remain" (Talbot, 1979, p.74). This may explain more favorable job attitudes among those with more longevity.

People usually receive greater rewards the longer they stay with an organization and this certainly applies to the Air Force. For example, Air Force officers get pay increases

every two years and regulations tie promotion eligibility to time in grade. Associated with promotion are increased intrinsic and extrinsic rewards.

These intrinsic rewards translate to a potential to meet higher level needs. Slocum (1971) used data collected from first-line supervisors and top- and middle-level managers and found that satisfaction generally increased with each level of management. This may be explained by the popular heirarchy of needs theory proposed by Maslow (1943, 1954, 1970). It has two premises. First, humans are seen as being motivated by a desire to satisfy certain types of needs. The categories of needs are:

- (1) Physiological needs, such as food, air, water, etc.,
- (2) Safety needs, such as freedom from harm,
- (3) Social needs, such as love, belongingness,
- (4) Esteem needs, need for mastery and achievement, recognition, approval of others,
- (5) Self-actualization, "the desire to become more and more of what one is, to become everything that one is capable of becoming" (Maslow, 1954, pp. 91-92).

The second premise of Maslow's theory is that the five needs are arranged in a hierachy. Thus, as lower or basic needs are met, the ability to achieve the higher level needs determines satisfaction. Movement up the hierarchy is a long term process which may take a lifetime (Maslow, 1970). The Slocum study found security and social needs roughly

equal for both levels of management but that the satisfaction of higher order needs (esteem, self-actualization) was more closely related to middle-top managerial positions (Slocum, 1971).

It generally follows in the Air Force that an increase in rank brings greater challenge, more respect, more responsibility and greater authority. This gives an officer the potential to meet higher-level needs. Therefore, job attitudes should improve as rank increases.

This chapter has briefly reviewed worker attitude studies, and age, longevity, and potential to meet higher level needs as three factors that may explain more favorable job attitudes with increases in grade. The next chapter explains the method used to gather the data to test the prediction of a positive correlation between job attitude and grade.

Chapter Three

METHOD

In 1975 the Leadership and Management Development Center was established at Maxwell Air Force Base, Alabama. Its charter is to provide better leadership and management education for Air Force personnel on a worldwide basis. To accomplish this charter, LMDC responds to unit commanders' invitations to analyze job attitudes within their units. The OAP is a key instrument LMDC uses to analyze organizations and provide Air Force decisionmakers with systemic information and leadership trends. This chapter first discusses the OAP. Next, it explains how the data is gathered, followed by a look at the subjects. It concludes with the procedures used to analyze the data.

Instrumentation

The survey consists of a computer-scored response sheet and a 109-item booklet. Sixteen items gather demographic information about the respondent. The remaining items are grouped to form 25 attitudinal factors, and these factors are grouped into four areas: Work Itself, Job Enrichment, Work Group Process, and Work Group Output. Respondents use

a scale of "1" (generally indicating strong disagreement or dissatisfaction with the question or statement) to a "7" (indicating strong agreement or satisfaction). See the listing of factors and their areas in Appendix C. Waller (1982) also provides a concise description of the OAP factors.

A comprehensive review of the history, development, standardization, and survey procedures of the OAP is documented by Short (1985). The OAP has been shown to be reliable (Short & Hamilton, 1981), valid (Hightower & Short, 1982a, 1982b), and consistent (Hightower & Short, 1982c). Since all data for the present report come from OAP administrations in conjunction with the LMDC consultant process, the next section explains how the process works.

Data Collection

After LMDC officials have accepted the organizational commander's invitation to consult, a team travels to the organization and administers the OAP. The LMDC consulting team administers the initial OAP surveys in group sessions. All military and civilian members are scheduled for the survey. LMDC consultants explain the purpose for the survey, give specific instruction for its completion and assure the confidentiality of the individual respondent's data. The administration process takes approximately 90 minutes. LMDC consultants collect all survey answer

sheets and return them to Maxwell for analysis. After about six weeks of analyzing the data, the LMDC team returns to the organization and presents the survey results (in aggregate form) to commanders and supervisors. LMDC treats the results confidentially. When a specific problem is identified, a consultant and the affected supervisor develop a plan to solve the problem. Workshops and training sessions are alternate methods to address problems.

Four to seven months later the LMDC team returns to re-administer the OAP and do a follow-up data gathering. The purpose of this OAP administration is to evaluate the impact of the consulting process. The consulting team includes an analysis of the pre- and post-OAP comparisons in the final report. LMDC stores all OAP data in a cumulative data base.

Only the pre-OAP administration data are used in the present study. Data for the analyses were collected between 1 October 1981 and 16 September 1985.

Subjects

Subjects for the current analysis were Air Force officers in the grades O-1 (second lieutenant) to O-6 (colonel) or higher. Table 1 shows the ranks and sample sizes associated with each grade. For the purpose of this analysis the responses of generals were grouped with those of colonels because generals comprise less than one percent

Table 1

Ranks and Sample Sizes by Grade

<u>Grade</u>	<u>Rank</u>	<u>Sample Size</u>
0-1	2LT	1293
0-2	1LT	2131
0-3	CAPT	4920
0-4	MAJ	2166
0-5	LT COL	1390
0-6	COL+	558

of the officer corp surveyed. Because the OAP is administered only by request and not at randomly selected bases, from an Air Force perspective the subjects comprise an "opportunity sample" or "sample of convenience". However, these data are from surveys administered virtually worldwide at 72 different bases or organizations from all major commands, or direct reporting units. Since the survey was in effect a census of each of these organizations, they are representative of a large portion of the Air Force population. For a further look at the demographic characteristics of the subjects see Appendix A.

Procedures

The analysis was conducted in two parts: the demographic analysis which characterizes the respondents, and the attitudinal analysis which compares attitudes between the officer grades. For these analyses the Statistical Package for the Social Sciences (SPSS^x)

subprogram "CROSSTABS" was used to tabulate the demographic data and the subprogram "ONEWAY" was used to analyze the attitudinal data for the six grades of officers. The Oneway Analysis of Variance (ANOVA) tested for a significant difference among means for all grades. Following the ANOVA, the Student-Newman-Keuls procedure, a multiple range test, was performed to compare all possible pairs of group (each officer grade) means. Officer grades not significantly different are placed into a common subset consequently officer grades not in the same subset are significantly different from each other. This study used an alpha = .05 (ie., 95% statistical confidence) level of significance for the F-ratio. The number, n , throughout the study indicates the total number of valid responses in the data base for the specific variables or factors being compared. See Appendix B, page 52 for further explanations.

Chapter Four presents the results of the demographic and attitudinal comparisons.

Chapter Four

RESULTS

This chapter presents the results of the statistical analyses conducted on the OAP survey responses. The first analysis highlights the demographic characteristics. The second analysis describes the attitudinal comparisons between the various grades of officers.

Demographic Analysis

The following is a summary of the demographic results for the officers' responses on the OAP data base. Appendix A provides detailed demographic information about each grade of officer. Second lieutenants have the highest percentage of females at 24%. This percentage decreases successively with each increase in grade, with only 2% of colonels+ being female. A large majority of company grade officers (2lt-capt) are below the age of 35, and conversely a great percentage of field grade officers (maj-col+) are over 35. Correspondingly, most company grade officers have less than twelve years time in the Air Force while most field grade officers have over 12 years in the Air Force. The percentages of officers in each grade who spent either less

than 6 months, 6-18 months, 18-36 months, or greater than 36 months in their present career field, present position, and duty station were relatively uniform for all grades except lieutenants. Most lieutenants had less than four years total time in the Air Force.

The majority ethnic group in each grade is white. The percentage of whites within each grade increased with rank, while the percentage of blacks and hispanics decreased. The majority of officers were married and the percentage within each group increased with higher rank (53%/2lt - 92%/col+). A larger percentage of the company grade spouses were employed outside the home than field grade spouses. The level of education both academically (bachelor's, master's, doctor's), and militarily (Squadron Officer School, intermediate service school, senior service school) was higher with each increase in grade. A larger percentage of the field grade officers supervised more people. Additionally, the field grade officers' work schedules provided for more day shift work. There was a decreased percentage of non-rated officers with each increase in grade. Correspondingly, there was an increased percentage of rated officers within each increased grade in the support area. Lastly, desire for making the Air Force a career increased with each successive increase in grade. About 40% of the company grade officers considered themselves career

officers compared to about 72% of the field grade officers.

Attitudinal Comparisons Within the Officer Grades

The results show that for all factors measured but one (Task Identity), there were significant attitudinal differences between various grades of officers. In general, the higher the officer grade the more positive the job attitudes. For these analyses the mean (average score) of each officer grade was compared to the other grades. The Student-Newman-Keuls procedure identified these significant differences among officer grades by comparing their means and placing the means in appropriate subsets. All members of the same subset have means which are not statistically different from each other. (See Table 2).

On 18 of 20 factors with significant differences, colonels and above were significantly different with the highest mean values of all the grades. Lt colonels were in a subset with the second highest mean value on 15 of 21 factors followed by majors which were exclusively in their own subset on nine factors.

The ranking of subsets from lowest positive view to the highest positive view correspondingly went from the lower grades to the higher grades except in three factors, Work Support, Task Autonomy, and Job Related Satisfaction. In these three factors second lieutenants were more positive than captains or first lieutenants.

Table 2
Summary of Factor Means with Significant Differences

Factor	2LT	1LT	CAPT	MAJ	LT COL	COL+
	mean subset	-	-	-	-	-
Job Performance Goals	4.53 1	4.66 2	4.69 2	4.75 2	4.90 3	5.16 4
Task Characteristics	5.13 1	5.22 2	5.35 3	5.39 3	5.52 4	5.70 5
Task Autonomy	4.33 1,2	4.25 1	4.39 2	4.81 3	5.06 4	5.44 5
Work Repetition	4.38 4	4.49 4	4.48 4	4.14 3	3.92 2	3.74 1
Desired Repetitive Easy Tasks	2.60 4	2.52 4	2.53 4	2.39 3	2.31 2	2.15 1
Job Related Training	4.48 1	4.69 2	4.67 2	4.71 2	4.83 2	5.14 2
Skill Variety	5.02 1	5.27 2	5.44 3	5.56 4	5.71 5	5.96 6
Task Significance	5.55 1	5.64 1	5.80 2	5.83 2	5.99 3	6.36 4
Job Feedback	4.74 1	4.76 1	4.86 2	4.93 2	5.09 3	5.32 4
Need for Enrichment Index	6.02 1	6.02 1	6.02 1	6.18 2	6.28 3	6.39 4
Job Motivation Index	111.58 1	111.36 1	120.84 2	135.22 3	150.21 4	171.76 5
Work Support	4.56 2	4.39 1	4.44 1	4.63 2	4.85 3	5.11 4
Management and Supervision	5.20 1	5.21 1	5.25 1	5.37 2	5.49 3	5.85 4
Supervisory Communications Climate	4.82 1	4.82 1	4.81 1	4.91 1,2	4.98 2	5.16 3
Organizational Communications Climate	4.78 1	4.77 1	4.79 1	4.93 2	5.18 3	5.62 4
Pride	5.25 1	5.37 2	5.45 2,3	5.52 3	5.69 4	6.02 5
Advancement/Recognition	4.50 1	4.48 1	4.51 1	4.60 1	4.89 2	4.97 2
Workgroup Effectiveness	5.61 1	5.73 2	5.75 2	5.84 3	5.86 3	6.07 4
Job Related Satisfaction	5.34 1,2	5.26 1	5.24 1	5.39 2	5.68 3	5.95 4
General Organizational Climate	5.06 1	5.01 1	5.09 1	5.31 2	5.58 3	5.98 4

Task Identity, which measures the degree to which the job requires completion of a "whole" and identifiable piece of work from beginning to end, was the only factor which showed no significant difference between the officer grades. See Appendix B for the group means, standard deviations, degrees of freedom, F -ratio, and subset breakouts for each factor.

Chapter Five presents possible explanations for the differences between the various groupings.

Chapter Five

DISCUSSION

The overall results of this study support the hypothesis that an increase in grade is accompanied by improved job attitudes. The causal reasons for attitudinal differences are not completely clear; nevertheless, this chapter discusses some demographic and attitudinal comparisons between the various grades of officers and offers suggested reasons for the specific differences.

Demographics

The demographic results did not reveal any unexpected findings. There are at least two explanations for the decreased percentage of women with each increase in grade (see Table A-1). First, the Air Force has opened more and more opportunities for women, particularly in the last five to ten years, and being a woman in the Air Force has become more accepted by society as a "normal" role. Second, as women increase in grade (and age) more are married (Table A-8). Many women officers then choose to leave the Air Force to pursue traditional roles as wives and mothers, and this also accounts for the decreased numbers of women in the

higher grades.

Age (Table A-2) and longevity (Table A-3) were higher with each increase in grade. Time in grade is one requirement for promotion. With the age-grade correlation it was no surprise that an increase in grade brought an increased percentage of married officers (Table A-8), as this is the norm throughout our society.

The increased percentage of company grade spouses employed outside the home may be attributed to three explanations (Table A-9). First, it is now more socially acceptable (especially in younger generations) for women to work outside the home. Second, there may not yet be children in the home and the lack of child care responsibility may free both spouses to work. Third, with rising expectations among the younger grades, the desire for more money may cause more spouses to work outside the home.

Because both academic and military education are factors considered for promotion it naturally follows that the education levels will be higher with each increase in grade (Tables A-10 & A-11). The job positions that higher grade officers hold generally have authority over more people. This explains the results in Tables A-12 and A-13. A greater percentage of officers in the higher grades worked days (Table A-15). This may be attributed to the higher experience level required for staff positions, especially at the major command and air staff level; most staff work is

done during the day. The decreased percentage of rated officers in operational positions in the higher grades (Table A-18) can probably be explained by the fact that they've met their gate time (flying hours required under the Airman's Incentive Pay Act) and now are broadening to rated and non-rated support jobs to become more competitive for promotion.

The significant difference in career intent among the field grade and company grade officers (Table A-19) in many cases can be attributed to the fact that the field grade officers are nearer their retirement eligibility. But also, it may be attributed to more positive job attitudes, which will be discussed next.

Attitudinal Comparisons

The results of the comparisons between the officer grades support the hypothesis that the higher the grade the more positive the job attitudes. The specific results of the survey are presented in Appendix B. The author expected a trend of more favorable attitudes among the more senior officers, but not to the uniform degree across the many factors measured. In the way of limitations, there are two areas not specifically addressed in the OAP which may also significantly impact an officer's job attitudes. These are money and other compensation benefits, and the influence the family has on the officer's attitude toward his work. The

following discussion offers possible explanations for the attitudinal differences between the grades. The factors are considered under their subtitled functional areas.

Work Itself (Table B-1)

Lt colonels and above were significantly different from other officers in that they felt their Job Performance Goals were more clear, specific, realistic, understandable and challenging. Their higher measure of understanding of job performance might be attributed to the big picture view they have of where their jobs fit into the Air Force as a whole. This combined with their higher degree of education, breadth of experience, and higher positions of responsibility (more challenge) may account for these results.

The Task Characteristics factor measures task identity, skill variety, task significance and job feedback. The significantly higher ratings with increases in grade may result from the nature of the positions normally assigned to the higher grades. These positions require a greater variety of skills, more responsibility, and affect more people. For example, an officer may move from chief of a flight, section, or division to chief over several.

The Task Autonomy factor measures the degree of freedom one has to do the work as one sees fit. Again, the jobs associated with higher grades generally have greater responsibility and allow a greater degree of freedom to perform the tasks. These higher grade job positions, with a

greater variety of work, reduce the repetitiveness found in jobs held by company grade officers. This also accounts for the differences between the company grade and field grade officers within the Work Repetition and Desired Repetitive Easy Tasks factors.

Job Enrichment (Table B-2)

Skill Variety is a factor where each grade was significantly different from every other grade. Scores increased progressively from the lowest to the highest grade. The officers recognized that the jobs in each successive grade require greater numbers of skills.

Colonels and above had great differences from the other grades in the means and standard deviations within the Task Significance factor. The positions for these high grades are usually deputate or commander jobs. They consider their jobs extremely important because they have a substantial impact on the lives and work of others.

The Need for Enrichment Index factor had the highest mean for all grades, and also the smallest standard deviation. As pointed out earlier, Air Force officers are highly educated and usually have their lower needs fulfilled. The needs for esteem and self-actualization are high for all, but more so among the field grades because they are even more educated, more skilled, have mastered more complex tasks and seek more responsible jobs.

Work Group Process (Table B-3)

All grades rated the overall quality of Management and Supervision quite high. This may be because, by its very nature, the military emphasizes supervisory responsibility. Quality of supervision is a must in certain jobs such as flight instruction and other jobs where an error can cause death or great destruction of resources.

Under the Organizational Communications Climate factor the company grade officers were grouped closely together. The open communications climate may be rated higher by the field grade officers because by virtue of their grade they are less inhibited to speak and bring up issues. Often newer and young lieutenants may be intimidated by officers in the higher grade and experience levels. It is also true that usually a person of a higher position will have greater weight in voicing an opinion.

Work Group Output (Table B-4)

The Pride factor is measured by two variables. One measures the pride in the job and the second measures the degree to which the work gives a feeling of pride. Pride and teamwork are inherent in the military and the Air Force sometimes addresses this by rewards and/or competition. Pride was rated high by all the grades. The higher measurement by the field grade officers may be attributable to the positions they hold. These positions have greater responsibility and authority and likely account for the

greater feeling of pride. Also, the longer one is with an organization the closer association with it, and hence one develops a greater degree of pride.

The Advancement/Recognition factor had one of the lowest average means of all the factors measured. But this average can still be considered positive. This may be because of the limited early promotion opportunities for officers. Also the lower grade officers may not have as clear a picture of how the promotion board works. Additionally, certain officers may be limited by their career field or their specific position.

The Work Group Effectiveness factor had the second highest mean for all grades. This factor measures the quantity, quality, and efficiency of the work generated by the respondent's workgroup. One variable in this factor is the handling of crisis situations (short suspenses, schedule changes, crash programs, etc.). Again, crisis situations are often the nature of the work in the Air Force. The author's personal observation is that these crisis situations often bring out the best in a unit.

The overall high means for the Job Related Satisfaction factor across all grades shows officers' satisfaction with co-worker relationships, work schedules, job security, their family's attitude toward their job, a feeling of helpfulness, and their job as a whole. Again, field grade officers were significantly higher. This may be due to

their job security. Once officers reach the grade of major they are essentially "safe" under current Air Force policy for their twenty year retirement. Also, by virtue of a higher position they can make a more significant impact on the organization. And by this time in their careers their families are more adapted to the Air Force life.

Lastly, the measurement of the General Organizational Climate shows each successive field grade position with a higher mean. Why? Perhaps with time they have grown to appreciate more things in the Air Force. And if they feel the Air Force is, and has been good to them, they will view it higher than those in lower grades. When one is at the top--they usually consider it a "better" organization. They have invested a large part of their lives in the Air Force voluntarily--they must view the climate of the Air Force positively. In contrast, most officers who are not satisfied have left or been eliminated from the Air Force at earlier grade levels.

Causal reasons for attitude differences are hard to determine, and this chapter has offered suggested reasons for the differences found. The next chapter will summarize the findings of this report and provide some recommendations.

Chapter Six

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The question investigated in this study was whether there are significant differences between job attitudes among USAF officers in the various grade levels. The results demonstrate that there are significant differences between the officer grades. The following are some conclusions:

(1) There is a definite trend of increasing favorableness of job attitudes with successive increases in grade.

(2) The overall job attitudes of Air Force officers are quite positive.

(3) In general, officers within the Air Force consider their work-groups to be quite effective.

(4) This study supports previous literature which indicates job attitudes become more favorable as age, longevity, and grade increase.

(5) A greater number of company grade spouses work outside the home.

(6) The Air Force provides challenging jobs to meet the higher level needs of its more senior officers.

(7) The OAP factor Need for Enrichment Index has the highest mean for all grades in the survey and should be considered very important to Air Force officers. This factor characterizes job desires that include opportunities to have a meaningful job, to use skills, to work independently, to perform a variety of tasks, and to personally grow in the job.

(8) Although the job attitudes were generally favorable some findings may suggest needed actions (see Recommendations).

Recommendations

This study was general in nature and non-specific, as it dealt with the entire spectrum of Air Force officers. Thus, the author can only offer general recommendations in the area of job attitudes based on the results of the analysis. However, by recognizing the differences in job attitudes between the officer grades, leaders and functional managers can take this knowledge and apply it to their specific areas. Leaders and commanders may improve job satisfaction and commitment of the officer corps by doing the following:

(1) Whenever possible, leaders should seek to allow the lower grade officers to meet their higher level needs through enriching the lower job positions.

(2) Commanders should educate junior officers more completely on the Air Force promotion system to help them

understand their advancement opportunities.

(3) Leaders and functional managers should continue programs of reward, competition, etc., that foster recognition and pride among their subordinates. Formal recognition should be augmented through daily efforts by leaders to informally recognize the younger officers' efforts.

(4) Leaders should create and maintain an organizational climate that allows junior officers to freely communicate.

(5) Senior officers must recognize that generally the company grade officers do not view the Air Force as favorably as they do, and hence should not expect the junior officer attitudes to mirror their own attitudes.

(6) The findings underscore the need for leaders to recognize that enrichment within the job is an important factor to all officers. Job positions should use the skills people are trained for but also allow opportunities to expand their variety of skills, and to work as independently as possible.

(7) Leaders should recognize that more spouses of the company grade officers work outside the home and should accomodate for the stress and pressures this may bring, where feasible.

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APPENDIX

Appendix A

Demographic Information

(NO PRINT)

Table A-1

Percent Sex by Grade

	2LT (n)	1LT (2129)	CAPT (4911)	MAJ (2160)	LT COL (1386)	COL+ (552)
(%) male	76.5	81.7	86.5	93.6	96.5	98.2
(%) female	23.5	18.3	13.5	6.4	3.5	1.8

Table A-2

Age by Grade

	2LT % (n)	1LT % (2131)	CAPT % (4920)	MAJ % (2166)	LT COL % (1390)	COL+ % (558)
21-25	53.2	35.7	1.2	.2	.4	0
26-30	30.1	44.6	43.5	.6	.5	1.1
31-35	15.1	15.4	38.7	22.8	1.1	0
36-40	1.2	3.8	13.6	53.5	35.8	3.4
41-45	0	0	2.3	19.3	44.7	38.2
46-50	0	0	.1	2.6	12.5	35.3
50+	.4	.5	.5	1.0	5.0	22.0

Table A-3

Time in the Air Force

	2LT % (n)	1LT % (2127)	CAPT % (4914)	MAJ % (2160)	LT COL % (1388)	COL+ % (558)
< 1 yr	23.9	1.1	1.3	.3	.1	0
1-2 yr	35.6	4.2	2.0	.3	.4	0
2-3 yr	10.8	32.3	2.1	.6	.5	0
3-4 yr	2.1	31.0	3.8	.7	.2	.2
4-8 yr	11.9	15.2	42.6	4.5	2.3	1.3
8-12 yr	8.4	8.1	30.6	8.5	2.9	3.6
> 12 yr	7.2	8.1	17.7	85.1	93.7	95.0

Table A-4

Months in Present Career Field

	2LT % (n)	1LT % (2118)	CAPT % (4878)	MAJ % (2152)	LT COL % (1381)	COL+ % (557)
< 6 mos	19.8	3.2	3.6	3.6	3.1	4.1
6-12 mos	27.1	6.8	5.8	4.3	4.0	4.8
12-18 mos	23.7	9.8	5.9	3.7	4.0	5.7
18-36 mos	23.2	54.0	16.1	10.9	10.5	10.2
> 36 mos	6.1	26.2	68.6	77.5	78.4	75.0

Table A-5

Months at Present Duty Station

	2LT % (n)	1LT % (2122)	CAPT % (4910)	MAJ % (2160)	LT COL % (1384)	COL+ % (555)
< 6 mos	29.2	11.0	12.3	11.3	12.1	16.0
6-12 mos	30.0	14.4	15.8	13.4	14.4	17.8
12-18 mos	22.0	17.0	16.3	15.5	13.0	15.1
18-36 mos	17.6	47.1	37.1	35.1	34.8	31.2
> 36 mos	1.2	10.6	18.5	24.7	25.7	19.8

Table A-6

Months in Present Position

	2LT % (n)	1LT % (2123)	CAPT % (4898)	MAJ % (2159)	LT COL % (1384)	COL+ % (556)
< 6 mos	43.4	23.8	25.7	23.7	23.1	23.6
6-12 mos	31.8	24.9	24.2	22.3	23.8	24.3
12-18 mos	16.0	17.9	17.6	16.9	15.5	16.2
18-36 mos	8.7	29.4	24.6	26.3	28.5	27.9
> 36 mos	.1	4.0	7.9	10.8	9.1	8.1

Table A-7
Percent Ethnic Group

	2LT % (n)	1LT % (2124)	CAPT % (4899)	MAJ % (2154)	LT COL % (1381)	COL+ % (556)
Amer Ind	.5	.8	.7	.8	.6	.4
Asian	2.1	1.6	1.2	1.3	1.7	1.1
Black	9.3	7.3	6.8	2.6	2.5	3.1
Hispanic	3.8	3.0	2.5	1.5	.9	1.6
White	82.5	85.4	86.3	91.9	92.8	93.2
Other	1.8	1.8	2.6	1.8	1.6	.7

Table A-8
Marital Status

	2LT % (n)	1LT % (2127)	CAPT % (4917)	MAJ % (2164)	LT COL % (1389)	COL+ % (557)
Not Married	44.9	34.3	19.3	10.2	7.3	6.8
Married	52.7	64.5	79.7	87.5	90.9	91.6
Single	2.3	1.2	1.1	2.3	1.8	1.6
Parent						

Table A-9

Spouse Employment and Geographical Separation

2LT			
(n)	Separated % (43)	Together % (693)	Row Total % (736)
Civilian Employed Outside Home	7.7	92.3	38.0
Not Employed Outside Home	1.8	98.2	47.8
Military Member	17.5	82.5	14.2
Column Total %	6.3	93.7	100.0
1LT			
(n)	Separated % (52)	Together % (1319)	Row Total (1371)
Civilian Employed Outside Home	4.9	95.1	37.0
Not Employed Outside Home	1.2	98.8	48.0
Military Member	9.2	90.8	15.0
Column Total %	3.8	96.2	100.0
CAPT			
(n)	Separated % (162)	Together % (3755)	Row Total % (3917)
Civilian Employed Outside Home	7.3	92.7	32.2
Not Employed Outside Home	1.4	98.6	56.2
Military Member	8.8	91.2	11.6
Column Total %	4.1	95.9	100.0

Table A-9 continued

MAJ			
(n)	Separated % (79)	Together % (1814)	Row Total % (1893)
Civilian Employed Outside Home	8.1	91.9	39.2
Not Employed Outside Home	1.0	99.0	55.4
Military Member	8.7	91.3	5.4
Column Total %	4.2	95.8	100.0

LT COL			
(n)	Separated % (58)	Together % (1264)	Row Total % (1322)
Civilian Employed Outside Home	8.0	92.0	37.6
Not Employed Outside Home	2.2	97.8	60.5
Military Member	12.0	88.0	1.9
Column Total %	4.6	95.4	100.0

COL+			
(n)	Separated % (25)	Together % (485)	Row Total % (510)
Civilian Employed Outside Home	8.1	91.9	31.4
Not Employed Outside Home	3.2	96.8	67.6
Military Member	20.0	80.0	1.0
Column Total %	4.9	95.1	100.0

Table A-10
Educational Level
(Highest Level)

(n)	2LT % (1290)	1LT % (2126)	CAPT % (4913)	MAJ % (2162)	LT COL % (1382)	COL+ % (554)
< Bachelor's	1.4	1.2	1.8	2.2	1.7	1.7
Bachelor's	93.3	85.9	54.8	25.2	17.7	15.7
Master's	5.1	12.5	35.0	60.5	66.8	59.6
PHD	.3	.4	8.4	12.1	13.7	23.1

Table A-11
Professional Military Education
(Highest Level)

(n)	2LT % (1293)	1LT % (2128)	CAPT % (4912)	MAJ % (2164)	LT COL % (1389)	COL+ % (556)
None	75.2	66.2	30.3	10.0	9.8	11.3
Sq Off Sch	8.8	26.2	47.0	12.1	4.9	3.8
Int Ser Sch	2.2	1.6	21.0	59.2	34.5	9.0
Sen Ser Sch	.2	.1	.2	18.3	50.1	75.4

Table A-12

Number of People Directly Supervised

(n)	2LT % (1289)	1LT % (2120)	CAPT % (4894)	MAJ % (2155)	LT COL % (1381)	COL+ % (555)
None	50.7	50.8	45.2	29.0	15.6	7.0
1 person	5.6	7.5	7.9	7.0	4.3	4.1
2 people	6.5	6.9	6.8	5.6	4.2	2.3
3 people	7.0	7.5	8.2	7.7	7.5	4.0
4-5 people	8.7	8.8	11.6	17.1	20.1	17.7
6-8 people	3.7	4.2	6.8	13.8	19.2	27.7
9+ people	7.5	6.1	7.9	17.0	26.8	36.4
No response	10.2	8.3	5.5	2.8	2.3	.7

Table A-13

Number of People for Whom Resondent Writes Airman Performance Report/ Officer Effectiveness Report/ Civilian Appraisal

(n)	2LT % (1290)	1LT % (2122)	CAPT % (4909)	MAJ % (2161)	LT COL % (1385)	COL+ % (557)
None	71.2	67.8	59.0	37.4	20.2	7.5
1 person	8.8	10.0	10.1	9.6	6.6	5.6
2 people	6.4	6.8	7.2	8.4	6.4	4.7
3 people	5.4	6.0	7.3	8.1	9.3	5.0
4-5 people	5.0	5.9	8.7	16.1	23.9	19.6
6-8 people	1.7	2.5	4.7	12.3	21.7	32.5
9+ people	1.4	.9	3.0	8.1	11.8	25.1

Table A-14

Supervisor Writes Respondent's DER

(n)	2LT % (1272)	1LT % (2107)	CAPT % (4848)	MAJ % (2125)	LT COL % (1372)	COL+ % (546)
Yes	76.2	82.1	79.6	75.0	74.1	66.5
No	14.9	13.3	14.0	14.4	14.0	15.0
Not Sure	9.0	4.6	6.4	10.6	12.0	18.5

Table A-15

Work Schedule

(n)	2LT % (1276)	1LT % (2111)	CAPT % (4876)	MAJ % (2149)	LT COL % (1370)	COL+ % (552)
Day Shift	65.7	48.8	52.6	66.8	73.3	75.0
Swing Shift	.4	.3	.2	.1	.1	.2
Mid Shift	.2	.1	0	0	0	0
Rotating	8.5	7.4	5.6	1.6	.8	.4
Irregular	10.1	13.9	13.8	10.7	10.9	12.7
Freq TDY	4.6	8.1	8.2	8.6	8.4	10.9
Crew Sched	10.4	19.5	19.5	19.5	6.6	.9

Table A-16

Supervisor Holds Group Meetings

	2LT %	1LT %	CAPT %	MAJ %	LT COL %	COL+ %
(n)	(1267)	(2105)	(4861)	(2142)	(1379)	(555)
Never	9.6	7.5	7.1	6.3	3.1	1.8
Occasionally	26.4	26.2	24.6	21.3	16.5	11.2
Monthly	12.0	13.9	17.3	14.0	7.0	6.7
Weekly	39.9	37.4	40.3	45.4	54.5	39.5
Daily	9.6	11.6	8.8	11.8	17.5	38.2
Continuously	2.7	3.3	1.9	1.4	1.5	2.7

Table A-17

Supervisor Holds Group Meetings to Solve Problems

	2LT %	1LT %	CAPT %	MAJ %	LT COL %	COL+ %
(n)	(1249)	(2097)	(4827)	(2134)	(1380)	(554)
Never	18.8	16.5	16.9	15.0	9.9	5.1
Occasionally	39.4	42.3	41.7	45.1	43.0	43.0
Half the Time	20.4	19.9	20.7	22.8	27.2	28.7
Always	21.4	21.2	20.7	17.0	19.9	23.3

Table A-18
Aeronautical Rating and Current Status

(n)	2LT % (1282)	1LT % (2119)	CAPT % (4882)	MAJ % (2127)	LT COL % (1349)	COL+ % (531)
Nonrated	81.4	59.4	60.0	57.8	57.4	51.2
Nonrated crew	3.0	3.3	2.5	1.9	1.4	.6
Rated Ops	14.7	36.2	31.8	24.4	18.9	10.5
Rated Suprt	.9	1.2	5.7	15.9	22.3	37.7

Table A-19
Career Intent

(n)	2LT % (1282)	1LT % (2119)	CAPT % (4897)	MAJ % (2152)	LT COL % (1385)	COL+ % (556)
Retire in Year	.2	.2	1.0	7.5	10.0	11.9
Career	31.4	32.5	46.5	72.7	72.2	71.8
Likely Career	25.4	28.7	28.6	11.8	10.0	9.2
Maybe	30.3	25.7	14.6	4.7	5.8	6.1
Prb Not	10.1	8.8	5.5	1.0	.9	.5
Separate	2.5	4.2	3.7	2.2	1.0	.5

APPENDIX

Appendix B

Attitudinal Comparisons

The tables in Appendix B have six statistical numbers for each factor.

- n - total number of respondents.
- Mean - The average score for that grade or the total of all scores divided by the total number of respondents.
- SD - standard deviation. This term indicates the degree of dispersion of scores about the mean score. The smaller the SD, the closer most scores fall in distribution of scores about the mean.
- Subset - A group composed of an officer grade or grades whose means are not statistically different from each other. Groups not in the same subset are significantly different at the 95% confidence level.
- df - degrees of freedom. The first number is the number of groups minus one, and represents the number of possible independant comparisons. This number is five throughout this study. The second number is the total responses minus the number of groups compared or $n-6$.
- F - F-ratio. This is a ratio of the variability of the group means to the variability of scores within the groups. The F-ratio and a set of degrees of freedom determine the significance level. The F-ratio with an * tells that there is a significant difference at the 99.9% confidence level. The analysis set 95% as the confidence level, but the results showed a 99.9% confidence level.

Note. For further information concerning these terms refer to the statistical textbook Statistics by Hayes (1963).

Table B-1

Work: Itself

Work Itself. This area deals with the task properties (technologies) and environmental conditions of the job. It measures perceptions of task characteristics.

Factor	Mean	SD	Subset	df	F
Job Performance				5,11974	42.91*
2LT	4.53	.99	1		
1LT	4.66	1.00	2		
CAPT	4.69	.97	2		
MAJ	4.75	.98	2		
LT COL	4.90	.97	3		
COL+	5.16	.92	4		
Task Characteristics				5,12034	46.25*
2LT	5.13	.97	1		
1LT	5.22	.94	2		
CAPT	5.35	.95	3		
MAJ	5.39	.95	3		
LT COL	5.52	.92	4		
COL+	5.70	.85	5		
Task Autonomy				5,12066	148.72*
2LT	4.33	1.34	1,2		
1LT	4.25	1.32	1		
CAPT	4.39	1.36	2		
MAJ	4.81	1.29	3		
LT COL	5.06	1.21	4		
COL+	5.44	1.12	5		
Work Repetition				5,12251	71.23*
2LT	4.38	1.42	4		
1LT	4.49	1.35	4		
CAPT	4.48	1.36	4		
MAJ	4.14	1.35	3		
LT COL	3.92	1.30	2		
COL+	3.74	1.26	1		
Desired Repetitive Easy Tasks				5,11887	26.44*
2LT	2.60	1.08	4		
1LT	2.52	1.07	4		
CAPT	2.53	1.05	4		
MAJ	2.39	1.00	3		
LT COL	2.31	1.01	2		
COL+	2.15	1.02	1		

Table B-1 continued (Work: Itself)

Factor	Mean	SD	Subset	df	F
Job Related Training					5.9716 13.31*
2LT	4.48	1.61	1		
1LT	4.69	1.53	2		
CAPT	4.67	1.49	2		
MAJ	4.71	1.41	2		
LT COL	4.83	1.29	2		
COL+	5.14	1.23	3		

Table B-2

Job Enrichment

Job Enrichment. Measures the degree to which the job itself is interesting, meaningful, challenging, and responsible.

Factor	Mean	SD	Subset	df	F
Skill Variety				5,12332	71.82*
2LT	5.02	1.35	1		
1LT	5.27	1.31	2		
CAPT	5.44	1.27	3		
MAJ	5.56	1.22	4		
LT COL	5.71	1.19	5		
COL+	5.96	1.11	6		
Task Identity				5,12300	3.32
2LT	5.14	1.21	1		
1LT	5.18	1.20	1		
CAPT	5.26	1.20	1		
MAJ	5.24	1.22	1		
LT COL	5.24	1.23	1		
COL+	5.17	1.25	1		
Task Significance				5,12349	46.75*
2LT	5.55	1.37	1		
1LT	5.64	1.27	1		
CAPT	5.80	1.24	2		
MAJ	5.83	1.24	2		
LT COL	5.99	1.16	3		
COL+	6.36	.98	4		

Table B-2 continued (Job Enrichment)

Factor	Mean	SD	Subset	df	E
Job Feedback				5,12319	33.72*
2LT	4.74	1.20	1		
1LT	4.76	1.16	1		
CAPT	4.86	1.17	2		
MAJ	4.93	1.20	2		
LT COL	5.09	1.16	3		
COL+	5.32	1.08	4		
Need for Enrichment Index				5,12043	43.16*
2LT	6.02	.89	1		
1LT	6.02	.88	1		
CAPT	6.02	.90	1		
MAJ	6.18	.80	2		
LT COL	6.28	.74	3		
COL+	6.39	.72	4		
Job Motivation Index				5,11265	127.43*
2LT	111.58	61.93	1		
1LT	111.36	60.46	1		
CAPT	120.84	64.93	2		
MAJ	135.22	68.88	3		
LT COL	150.21	70.43	4		
COL+	171.76	71.16	5		
Work Support				5,11879	70.39*
2LT	4.56	1.04	2		
1LT	4.39	1.04	1		
CAPT	4.44	1.09	1		
MAJ	4.63	1.12	2		
LT COL	4.85	1.05	3		
COL+	5.11	1.03	4		

The Job Motivation Index factor is a composite index derived from six other job characteristics. See page 67, Appendix C. The formula for the index explains the higher mean and standard deviation scores.

Table B-3

Work Group Process

Work Group Process. Measures the effectiveness of supervisors and the process of accomplishing the work.

Factor	Mean	SD	Subset	df	F
Management and Supervision				5,11628	28.63*
2LT	5.20	1.37	1		
1LT	5.21	1.41	1		
CAPT	5.25	1.36	1		
MAJ	5.37	1.28	2		
LT COL	5.49	1.29	3		
COL+	5.85	1.03	4		
Supervisory Communications Climate				5,11383	8.41*
2LT	4.82	1.42	1		
1LT	4.82	1.49	1		
CAPT	4.81	1.42	1		
MAJ	4.91	1.39	1,2		
LT COL	4.98	1.37	2		
COL+	5.16	1.31	3		
Organizational Communications Climate				5,11487	60.72*
2LT	4.78	1.24	1		
1LT	4.77	1.25	1		
CAPT	4.79	1.26	1		
MAJ	4.93	1.26	2		
LT COL	5.18	1.22	3		
COL+	5.62	1.00	4		

Table B-4

Work Group Output

Work Group Output. Measures task performance, group development, and the effects of the work situation on group members.

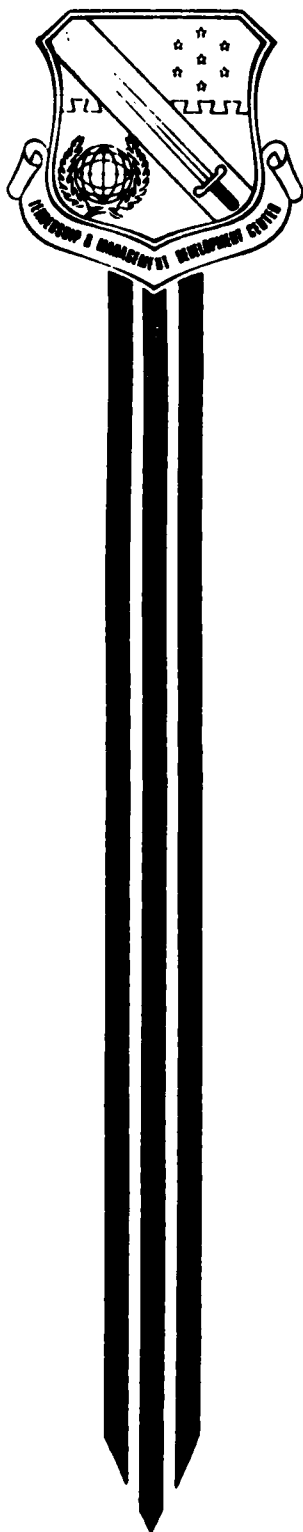
Factor	Mean	SD	Subset	df	F
Pride				5,12291	33.85*
2LT	5.25	1.46	1		
1LT	5.37	1.45	2		
CAPT	5.45	1.37	2,3		
MAJ	5.52	1.36	3		
LT COL	5.69	1.30	4		
COL+	6.02	1.26	5		
Advancement/Recognition				5,11801	37.10*
2LT	4.50	1.11	1		
1LT	4.48	1.15	1		
CAPT	4.51	1.17	1		
MAJ	4.60	1.22	1		
LT COL	4.89	1.22	2		
COL+	4.97	1.25	2		
Work Group Effectiveness				5,11923	18.02*
2LT	5.61	1.12	1		
1LT	5.73	1.11	2		
CAPT	5.75	1.08	2		
MAJ	5.84	1.07	3		
LT COL	5.86	1.01	3		
COL+	6.07	.87	4		
Job Related Satisfaction				5,11117	68.66*
2LT	5.34	1.09	1,2		
1LT	5.26	1.09	1		
CAPT	5.24	1.11	1		
MAJ	5.39	1.08	2		
LT COL	5.68	.96	3		
COL+	5.95	.90	4		
General Organizational Climate				5,11560	89.47*
2LT	5.06	1.21	1		
1LT	5.01	1.29	1		
CAPT	5.09	1.26	1		
MAJ	5.31	1.22	2		
LT COL	5.58	1.15	3		
COL+	5.98	.91	4		

APPENDIX

Appendix C

Organizational Assessment Package Survey:

OAP Factors and Variables



**ORGANIZATIONAL ASSESSMENT
PACKAGE SURVEY**

**FACTORS
AND
VARIABLES**

JANUARY 1986

**LEADERSHIP AND MANAGEMENT DEVELOPMENT CENTER
AIR UNIVERSITY
Maxwell Air Force Base, Alabama 36112-5712**

FACTORS AND VARIABLES OF THE ORGANIZATIONAL ASSESSMENT PACKAGE

The OAP is a 109-item survey questionnaire designed jointly by the Air Force Human Resources Laboratory and the Leadership and Management Development Center (LMDC) and is used to aid LMDC in its missions to: (a) conduct research on Air Force systemic issues using information in the OAP database, (b) provide leadership and management training, and (c) provide management consultation service to Air Force commanders upon request.

Allowable responses to the attitudinal items on the survey range from 1 (low) to 7 (high). The attitudinal items are grouped into 25 factors that address such areas as the job itself, management and supervision, communications, and performance in the organization. Each data record consists of 7 externally coded descriptors and 24 demographic items as well as the responses to the 93 attitudinal items.

The factors measured by the OAP are grouped into a systems model to assess three aspects of a work group: input, process, and output (adapted from McGrath's model).

Input. In LMDC's adaptation of the model, input is comprised of demographics, work itself, and job enrichment.

A. Demographics. Descriptive or background information about the respondents to the OAP survey.

B. Work Itself. The work itself has to do with the task properties (technologies) and environmental conditions of the job. It assesses the patterns of characteristics members bring to the group or organization, and patterns of differentiation and integration among position and roles. The following OAP factors measure the work itself:

- 806 - Job Desires (Need For Enrichment)
- 810 - Job Performance Goals
- 812 - Task Characteristics
- 813 - Task Autonomy
- 814 - Work Repetition
- 816 - Desired Repetitive Easy Tasks
- 823 - Job Related Training
- Job Influences (not a statistical factor)

C. Job Enrichment. Measures the degree to which the job itself is interesting, meaningful, challenging, and responsible. The following OAP factors measure job enrichment:

- 800 - Skill Variety
- 801 - Task Identity
- 802 - Task Significance
- 804 - Job Feedback
- 806 - Need for Enrichment Index (Job Desires)
- 807 - Job Motivation Index

- 808 - QJI Total Score
- 809 - Job Motivation Index - Additive
- 825 - Motivation Potential Score

Work Group Process. The work group assesses the pattern of activity and interaction among the group members. The following OAP factors measures leadership and the work group process:

- 805 - Performance Barriers/Blockages (Work Support)
- 818 - Management and Supervision
- 819 - Supervisory Communications Climate
- 820 - Organizational Communications Climate
- Work Interferences (not a statistical factor)
- Supervisory Assistance (not a statistical factor)

Work Group Output. Measures task performance, group development, and effects on group members. Assesses the quantity and quality of task performance and alteration of the group's relation to the environment. Assesses changes in positions and role patterns, and in the development of norms. Assesses changes on skills and attitudes, and effects on adjustment. The following OAP factors measure the work group output:

- 811 - Pride
- 817 - Advancement/Recognition
- 821 - Work Group Effectiveness (Perceived Productivity)
- 822 - Job Related Satisfaction
- 824 - General Organizational Climate

EXTERNALLY CODED DESCRIPTORS

Batch Number
Julian Date of Survey
Major Command
Base Code
Consultation Method
Consultant Code
Survey Version

(Note: These items are concatenated to each data record during EDP processing.)

DEMOGRAPHIC ITEMS (NOT A STATISTICAL FACTOR)

Variable Number	Statement Number	Statement
-	-	Supervisor's Code
-	-	Work Group Code
-	-	Sex
-	-	Your age is
-	-	You are (officer, enlisted, GS, etc.)
-	-	Your pay grade is
-	-	Primary AFSC
-	-	Duty AFSC
(Note: The above items are on the response sheet 1)		
001	-	(Not used)
002	-	(Not used)
003	1	Total years in the Air Force:
		1. Less than 1 year
		2. More than 1 year, less than 2 years
		3. More than 2 years, less than 3 years
		4. More than 3 years, less than 4 years
		5. More than 4 years, less than 6 years
		6. More than 6 years

3

Variable Number	Statement Number	Statement
004	2	Total months in present career field:
		1. Less than 1 month
		2. More than 1 month, less than 6 months
		3. More than 6 months, less than 12 months
		4. More than 12 months, less than 18 months
		5. More than 18 months, less than 24 months
		6. More than 24 months, less than 36 months
		7. More than 36 months
005	3	Total months at this station:
		1. Less than 1 month
		2. More than 1 month, less than 6 months
		3. More than 6 months, less than 12 months
		4. More than 12 months, less than 18 months
		5. More than 18 months, less than 24 months
		6. More than 24 months, less than 36 months
		7. More than 36 months
006	4	Total months in present position:
		1. Less than 1 month
		2. More than 1 month, less than 6 months
		3. More than 6 months, less than 12 months
		4. More than 12 months, less than 18 months
		5. More than 18 months, less than 24 months
		6. More than 24 months, less than 36 months
		7. More than 36 months
007	5	Your Ethnic Group is:
		1. American Indian or Alaskan Native
		2. Asian or Pacific Islander
		3. Black, not of Hispanic Origin
		4. Hispanic
		5. White, not of Hispanic Origin
		6. Other
008	11	Which of the following "best" describes your marital status?
		0. Not married.
		1. Married: Spouse is a civilian employed outside home.
		2. Married: Spouse is a civilian employed outside home - geographically separated.
		3. Married: Spouse not employed outside home.
		4. Married: Spouse not employed outside home - geographically separated.
		5. Married: Spouse is a military member.
		6. Married: Spouse is a military member - geographically separated.
		7. Single parent.

4

<u>Variable Number</u>	<u>Statement Number</u>	<u>Statement</u>
009	6	Your highest education level obtained is: 1. Non-high school graduate 2. High school graduate or GED 3. Less than two years college 4. Two years or more college 5. Bachelors Degree 6. Masters Degree 7. Doctoral Degree
010	7	Highest level of professional military education (residence or correspondence): 0. None or not applicable 1. MCD Orientation Course or US3F Supervisor Course (MCD Phase 1 or 2) 2. MCD Leadership School (MCD Phase 3) 3. MCD Academy (MCD Phase 4) 4. Senior MCD Academy (MCD Phase 5) 5. Squadron Officer School 6. Intermediate Service School (i.e., ACSC, AFSC) 7. Senior Service School (i.e., AWC, ICAF, MDC)
011	8	How many people do you directly supervise? 1. None 2. 1 3. 2 4. 3 5. 4 to 5 6. 6 to 8 7. 9 or more
012	9	For how many people do you write performance reports? 1. None 2. 1 3. 2 4. 3 5. 4 to 5 6. 6 to 8 7. 9 or more
013	10	Does your supervisor actually write your performance report? 1. Yes 2. No 3. Not sure
014	11	Your work requires you to work primarily: 1. Alone 2. With one or two people 3. As a small work group (3-5 people) 4. As a large work group (6 or more people) 5. Other
015	12	What is your usual work schedule? 1. Day shift, normally stable hours 2. Swing shift (about 600-2400) 3. Mid shift (about 2400-0800) 4. Rotating shift schedule 5. Day or shift work with irregular/unstable hours 6. Frequent TDY/travel or frequently on-call to report to work 7. Crew schedule
016	13	How often does your supervisor hold group meetings? 1. Never 2. Occasionally 3. Monthly 4. Weekly 5. Daily 6. Continuously
017	14	How often are group meetings used to solve problems and establish goals? 1. Never 2. Occasionally 3. About half the time 4. All of the time
018	15	What is your aeronautical rating and current status? 1. Nonrated, not on aircrew 2. Nonrated, now on aircrew 3. Rated, in crew/operations job 4. Rated, in support job

Variable
Number

019

Statement

16

Which of the following best describes your career or employment intentions?

1. Planning to retire in the next 12 months
2. Will continue in/with the Air Force as a career
3. Will most likely continue in/with the Air Force
4. May continue in/with the Air Force
5. Will most likely not make the Air Force a career
6. Will separate/terminate from the Air Force as soon as possible

NOTE: Variable 009, Statement 11 was added to the QAP on 19 Jan 80 and replaced variable 014 which appears on page 6. Although no longer used, Variable 014 is still shown because data collected from about 25,000 samples for this variable are still in the data base.

FACTORS

Each 800 series factor consists of two or more variables which correspond to statements in the QAP. A mean score can be derived for each factor except 805, 807, 808, 809 and 825 by using a "straight average." The formula for computing the exceptions is indicated.

FACTOR 800 - SKILL VARIETY: Measures the degree to which a job requires a variety of different tasks or activities in carrying out the work; involves the use of a number of different skills and talents of the worker; skills required are valued by the worker.

Variable Number	Statement Number	Statement
201	17	To what extent does your job require you to do many different things, using a variety of your talents and skills?
212	29	To what extent does your job require you to use a number of complex skills?

FACTOR 801 - TASK IDENTITY: Measures the degree to which the job requires completion of a "whole" and identifiable piece of work from beginning to end.

Variable Number	Statement Number	Statement
202	18	To what extent does your job involve doing a whole task or unit of work?
211	26	To what extent does your job provide you with a chance to finish completely the piece of work you have begun?

FACTOR 802 - TASK SIGNIFICANCE: Measures the degree to which the job has a substantial impact on the lives or work of others; the importance of the job.

Variable Number	Statement Number	Statement
203	19	To what extent is your job significant in that it affects others in some important way?
210	27	To what extent does doing your job well affect a lot of people?

FACTOR 803 (NOT USED)

FACTOR 804 - JOB FEEDBACK: Measures the degree to which carrying out the work activities required by the job results in the worker obtaining clear and direct information about job outcomes or information on good and poor performance.

Variable Number	Statement Number	Statement
272	22	To what extent are you able to determine how well you are doing your job without feedback from anyone else?
209	26	To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?

FACTOR 805 - WORK SUPPORT: Measures the degree to which work performance is hindered by additional duties, details, inadequate tools, equipment, or work space.

Variable Number	Statement Number	Statement
206	23	To what extent do additional duties interfere with the performance of your primary job?
207	24	To what extent do you have adequate tools and equipment to accomplish your job?
208	25	To what extent is the amount of work space provided adequate?

Formula (8-206+207+208)/3

9

FACTOR 806 - NEED FOR ENRICHMENT INDEX (JOB DESIRES): Has to do with job related characteristics (autonomy, personal growth, use of skills, etc.) that the individual would like in a job.

Variable Number	Statement Number	Statement
		(In my job, I would like to have the characteristics described--from "not at all" to "an extremely large amount")
249	51	Opportunities to have independence in my work.
250	52	A job that is meaningful.
251	53	The opportunity for personal growth in my job.
252	54	Opportunities in my work to use my skills.
253	55	Opportunities to perform a variety of tasks.

FACTOR 807 - JOB MOTIVATION INDEX: A composite index derived from the six job characteristics that reflects the overall "motivating potential" of a job; the degree to which a job will prompt high internal work motivation on the part of job incumbents.

Index is computed using the following factors:

800	Skill variety
801	Task identity
802	Task significance
803	Performance barriers/blockages
813	Task autonomy
804	Job feedback

Formula ((800+801+802+803)/4) + 813 * 804

FACTOR 808 - QJI TOTAL SCORE: Assesses one's perception of motivation provided by his or her job. This factor is a variation of a scale employed by other job motivation theorists.

Score is computed using the variables in the following formula:

Formula (Y201+Y202+Y203+Y270+Y271+Y272
+Y206+Y207+Y208+Y209+Y210
+Y211+Y212+Y213)

10

FACTOR 809 - JOB MOTIVATION INDEX ---- ADDITIVE: This factor is a variation of a scale employed by other job motivation theorists.

Index is computed using the following factors:

- 800 Skill variety
- 801 Task identity
- 802 Task significance
- 803 Performance barriers/blockages
- 813 Task autonomy
- 804 Work repetition

$$\text{Formula } (800-801+802+803)/4 \times 813+804$$

FACTOR 810 - JOB PERFORMANCE GOALS: Measures the extent to which job performance goals are clear, specific, realistic, understandable, and challenging.

Variable Number	Statement Number	Statement
217	34	To what extent do you know exactly what is expected of you in performing your job?
218	35	To what extent are your job performance goals difficult to accomplish?
273	36	To what extent are your job performance goals clear?
274	37	To what extent are your job performance goals specific?
221	38	To what extent are your job performance goals realistic?

FACTOR 811 - PRIDE: Measures the pride in one's work.

Variable Number	Statement Number	Statement
215	32	To what extent are you proud of your job?
275	46	To what extent does your work give you a feeling of pride?

11

FACTOR 812 - TASK CHARACTERISTICS: A combination of skill variety, task identity, task significance, and job feedback designed to measure several aspects of one's job.

Variable Number	Statement Number	Statement
201	17	To what extent does your job require you to do many different things, using a variety of your talents and skills?
202	18	To what extent does your job involve doing a whole task or unit of work?
203	19	To what extent is your job significant, in that it affects others in some important way?
272	22	To what extent are you able to determine how well you are doing your job without feedback from anyone else?
209	26	To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?
210	27	To what extent does doing your job well affect a lot of people?
211	28	To what extent does your job provide you with a chance to finish completely the piece of work you have begun?
212	29	To what extent does your job require you to use a number of complex skills?

FACTOR 813 - TASK AUTONOMY: Measures the degree to which the job provides freedom to do the work as one sees fit; discretion in scheduling, decision making, and means for accomplishing a job.

Variable Number	Statement Number	Statement
270	20	To what extent does your job provide a great deal of freedom and independence in scheduling your work?
271	21	To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?
213	30	To what extent does your job give you freedom to do your work as you see fit?
214	31	To what extent are you allowed to make the major decisions required to perform your job well?

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FACTOR 814 - WORK REPETITION: Measures the extent to which one performs the same tasks or faces the same type of problems in his or her job on a regular basis.

Variable Number	Statement Number	Statement
226	39	To what extent do you perform the same tasks repeatedly within a short period of time?
227	40	To what extent are you faced with the same type of problem on a weekly basis?

FACTOR 815 (NOT USED)

FACTOR 816 - DESIRED REPETITIVE EASY TASKS: Measures the extent to which one desires his or her job involve repetitive tasks or tasks that are easy to accomplish.

Variable Number	Statement Number	Statement
255	56	A job in which tasks are repetitive.
256	57	A job in which tasks are relatively easy to accomplish.

FACTOR - JOB INFLUENCES (NOT A STATISTICAL FACTOR):

Variable Number	Statement Number	Statement
216	33	To what extent do you feel accountable to your supervisor in accomplishing your job?
238	42	To what extent do co-workers in your work group maintain high standards of performance?

FACTOR 817 - ADVANCEMENT/RECOGNITION: Measures one's awareness of advancement and recognition, and feelings of being prepared (i.e., learning new skills for promotion).

Variable Number	Statement Number	Statement
234	41	To what extent are you aware of promotion/advancement opportunities that affect you?
239	43	To what extent do you have the opportunity to progress up your career ladder?

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240	44	To what extent are you being prepared to accept increased responsibility?
241	45	To what extent do people who perform well receive recognition?
276	47	To what extent do you have the opportunity to learn skills which will improve your promotion potential?

FACTOR 818 - MANAGEMENT AND SUPERVISION (A): Measures the degree to which the worker has high performance standards and good work procedures. Measures support and guidance received, and the overall quality of supervision.

Variable Number	Statement Number	Statement
404	59	My supervisor is a good planner.
405	59	My supervisor sets high performance standards.
410	60	My supervisor encourages teamwork.
411	61	My supervisor represents the group at all times.
412	62	My supervisor establishes good work procedures.
413	63	My supervisor has made his responsibilities clear to the group.
445	64	My supervisor fully explains procedures to each group member.
416	65	My supervisor performs well under pressure.

FACTOR - MANAGEMENT AND SUPERVISION (B): (NOT A STATISTICAL FACTOR)

Variable Number	Statement Number	Statement
424	66	My supervisor takes time to help me when needed.
434	71	My supervisor lets me know when I am doing a poor job.
439	75	When I need technical advice, I usually go to my supervisor.

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FACTOR 819 - SUPERVISORY COMMUNICATIONS CLIMATE: Measures the degree to which the worker perceives that there is good rapport with supervisors, that there is a good working environment, that innovation for task improvement is encouraged, and that rewards are based upon performance.

Variable Number	Statement Number	Statement
425	67	My supervisor asks members for their ideas on task improvements.
428	68	My supervisor explains how my job contributes to the overall mission.
431	69	My supervisor helps me set specific goals.
433	70	My supervisor lets me know when I am doing a good job.
435	72	My supervisor always helps me improve my performance.
436	73	My supervisor insures that I get job related training when needed.
437	74	My job performance has improved due to feedback received from my supervisor.
442	76	My supervisor frequently gives me feedback on how well I am doing my job.

FACTOR 820 - ORGANIZATIONAL COMMUNICATIONS CLIMATE: Measures the degree to which the worker perceives that there is an open communications environment in the organization, and that adequate information is provided to accomplish the job.

Variable Number	Statement Number	Statement
300	82	Ideas developed by my work group are readily accepted by management personnel above my supervisor.
301	83	My organization provides all the necessary information for me to do my job effectively.
302	84	My organization provides adequate information to my work group.
303	85	My work group is usually aware of important events and situations.
304	86	My complaints are aired satisfactorily.
309	91	The information in my organization is widely shared so that those needing it have it available.

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- 314 96 My organization has clear-cut goals.
- 317 99 The goals of my organization are reasonable.
- 318 100 My organization provides accurate information to my work group.

FACTOR 821 - WORK GROUP EFFECTIVENESS: Measures one's view of the quantity, quality, and efficiency of work generated by his or her work group.

Variable Number	Statement Number	Statement
259	77	The quantity of output of your work group is very high.
260	78	The quality of output of your work group is very high.
261	79	When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.
264	80	Your work group always gets maximum output from available resources (e.g., personnel and material).
265	81	Your work group's performance in comparison to similar work groups is very high.

FACTOR - WORK INTERFERENCES (NOT A STATISTICAL FACTOR): Identifies things that impede an individual's job performance.

Variable Number	Statement Number	Statement
277	48	To what extent do you have the necessary supplies to accomplish your job?
278	49	To what extent do details (task not covered by primary or additional duty descriptions) interfere with the performance of your primary job?
279	50	To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?

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FACTOR 822 - JOB RELATED SATISFACTION: Measures the degree to which the worker is generally satisfied with factors surrounding the job.

Variable Number	Statement Number	Statement
705	101	Feeling of Helpfulness The chance to help people and improve their welfare through the performance of my job. The importance of my job performance to the welfare of others.
709	102	Co-worker Relationships My amount of effort compared to the effort of my co-workers, the extent to which my co-workers share the load, and the spirit of teamwork which exists among my co-workers.
710	103	Family Attitude Toward Job The recognition and the pride my family has in the work I do.
717	106	Work Schedule My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.
718	107	Job Security
719	108	Acquired Valuable Skills The chance to acquire valuable skills in my job which prepare me for future opportunities
723	109	My Job as a Whole

FACTOR 823 - JOB RELATED TRAINING: Measures the extent to which one is satisfied with on-the-job and technical training received.

Variable Number	Statement Number	Statement
711	104	On-the-Job Training (OJT) The OJT instructional methods and instructors' competence.
712	105	Technical Training (other than OJT) The technical training I have received to perform my current job.

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FACTOR 824 - GENERAL ORGANIZATIONAL CLIMATE: Measures the individual's perception of his or her organizational environment as a whole (i.e. spirit of teamwork, communications, organizational pride, etc.).

Variable Number	Statement Number	Statement
305	87	My organization is very interested in the attitudes of the group members toward their jobs.
306	88	My organization has a very strong interest in the welfare of its people.
307	89	I am very proud to work for this organization.
308	90	I feel responsible to my organization in accomplishing its mission.
310	92	Personnel in my unit are recognized for outstanding performance.
311	93	I am usually given the opportunity to show or demonstrate my work to others.
312	94	There is a high spirit of teamwork among my co-workers.
313	95	There is outstanding cooperation between work groups of my organization.
315	97	I feel motivated to contribute my best efforts to the mission of my organization.
316	98	My organization rewards individuals based on performance.

FACTOR 825 - MOTIVATION POTENTIAL SCORE: This factor is another variation of a scale employed by other job motivation theorists. The score ranges between 1 and 343 with 109 being the Air Force average. Low scores indicate a poorly motivating job. Score is computed using the following factors:

800	Skill variety
801	Task identity
802	Task significance
804	Job feedback
813	Task autonomy

Formula: $(800+801+802+713)+813=804$

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VARIABLES

Variable Number	Factor	Statement Number
201	800/812	17
202	801/812	18
203	802/812	19
204 & 205	--	--
206	805	23
207	805	24
208	805	25
209	804/812	26
210	802/812	27
211	801/812	28
212	800/812	29

Statement

To what extent does your job require you to do many different things, using a variety of your talents and skills?

To what extent does your job involve doing a whole task or unit of work?

To what extent is your job significant, in that it affects others in some important way?

(Not used)

To what extent do additional duties interfere with the performance of your primary job?

To what extent do you have adequate tools and equipment to accomplish your job?

To what extent is the amount of work space provided adequate?

To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?

To what extent does doing your job well affect a lot of people?

To what extent does your job provide you with a chance to finish completely the piece of work you have begun?

To what extent does your job require you to use a number of complex skills?

Variable Number	Factor	Statement Number
-----------------	--------	------------------

213	813	30
214	813	31
215	811	32
216*	--	33
217	810	34
218	810	35
219 & 220	--	--
221	810	36
222-225	--	--
226	814	39
227	814	40

Statement

To what extent does your job give you freedom to do your work as you see fit?

To what extent are you allowed to make the major decisions required to perform your job well?

To what extent are you proud of your job?

To what extent do you feel accountable to your supervisor in accomplishing your job?

To what extent do you know exactly what is expected of you in performing your job?

To what extent are your job performance goals difficult to accomplish?

(Not used)

To what extent are your job performance goals realistic?

(Not used)

To what extent do you perform the same tasks repeatedly within a short period of time?

To what extent are you faced with the same type of problem on a weekly basis?

* This variable is an element of "job influences" (not a statistical factor).

Variable Number	Factor	Statement Number
228-233	--	--
234	817	41
235-237	--	--
238*	--	42
239	817	43
240	817	44
241	817	45
242-248	--	--
249	806	51
250	806	52
251	806	53
252	806	54
253	806	55
254	--	--
255	816	56

Statement

(Not used)

To what extent are you aware of promotion/advancement opportunities that affect you?

(Not used)

To what extent do co-workers in your work group maintain high standards of performance?

To what extent do you have the opportunity to progress up your career ladder?

To what extent are you being prepared to accept increased responsibility?

To what extent do people who perform well receive recognition?

(Not used)

Opportunities to have independence in my work?

A job that is meaningful.

The opportunity for personal growth in my job.

Opportunities in my work to use my skills.

Opportunities to perform a variety of tasks.

(Not used)

A job in which tasks are repetitive.

* This variable is an element of "job influences" (not a statistical factor).

Variable Number	Factor	Statement Number
-----------------	--------	------------------

256 & 257 -- --

(Not used)

258 816 57

A job in which tasks are relatively easy to accomplish.

259 821 77

The quantity of output of your work group is very high.

260 821 78

The quality of output of your work group is very high.

261 821 79

When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.

262 & 263 -- --

(Not used)

264 821 80

Your work group always gets maximum output from available resources (e.g., personnel and material).

265 821 81

Your work group's performance in comparison to similar work groups is very high.

266-269 -- --

(Not used)

270 813 20

To what extent does your job provide a great deal of freedom and independence in scheduling your work?

271 813 21

To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?

272 804/812 22

To what extent are you able to determine how well you are doing your job without feedback from anyone else?

Variable Number	Factor	Statement Number
-----------------	--------	------------------

273	810	36
274	810	37
275	811	46
276	817	47
277**	--	49
278**	--	49
279**	--	50
280-299	--	--
300	820	82
301	820	83
302	820	84

To what extent are your job performance goals clear?
 To what extent are your job performance goals specific?
 To what extent does your work give you a feeling of pride?
 To what extent do you have the opportunity to learn skills which will improve your promotion potential?
 To what extent do you have the necessary supplies to accomplish your job?
 To what extent do details (last not covered by primary or additional duty descriptions) interfere with the performance of your primary job?
 To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?
 (Not used)
 Ideas developed by my work group are readily accepted by management personnel above my supervisor.
 My organization provides all the necessary information for me to do my job effectively.
 My organization provides adequate information to my work group.

** These variables are elements of "work interferences" (not a statistical factor).

Variable Number	Factor	Statement Number
-----------------	--------	------------------

303	820	85
304	820	86
305	824	87
306	824	88
307	824	89
308	824	90
309	820	91
310	824	92
311	824	93
312	824	94
313	824	95

My work group is usually aware of important events and situations.
 My complaints are aired satisfactorily.
 My organization is very interested in the attitudes of the group members toward their jobs.
 My organization has a very strong interest in the welfare of its people.
 I am very proud to work for this organization.
 I feel responsible to my organization in accomplishing its mission.
 The information in my organization is widely shared so that those needing it have it available.
 Personnel in my unit are recognized for outstanding performance.
 I am usually given the opportunity to show or demonstrate my work to others.
 There is a high spirit of teamwork among my co-workers.
 There is outstanding cooperation between work groups of my organization.

Variable
Number

Factor

Statement
Number

314 820 96 My organization has clear-cut goals.
315 824 97 I feel motivated to contribute my best efforts to the mission of my organization.
316 824 98 My organization rewards individuals based on performance.
317 820 99 The goals of my organization are reasonable.
318 820 100 My organization provides accurate information to my work group.
319-403 -- -- (Not used)
404 818 56 My supervisor is a good planner.
405 818 59 My supervisor sets high performance standards.
406-409 -- -- (Not used)
410 818 60 My supervisor encourages teamwork.
411 818 61 My supervisor represents the group at all times.
412 818 62 My supervisor establishes good work procedures.
413 818 63 My supervisor has made his responsibilities clear to the group.
414 & 415 -- -- (Not used)
416 818 65 My supervisor performs well under pressure.
417-423 -- -- (Not used)
424*** -- 66 My supervisor takes time to help me when needed.
425 -- -- (Not used)

*** This variable is an element of "supervisory assistance" (not a statistical factor).

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Variable
Number

Factor

Statement
Number

426 819 67 My supervisor asks members for their ideas on task improvements.
427 -- -- (Not used)
428 819 68 My supervisor explains how my job contributes to the overall mission.
429 & 430 -- -- (Not used)
431 819 69 My supervisor helps me set specific goals.
432 -- -- (Not used)
433 819 70 My supervisor lets me know when I am doing a good job.
434*** -- 71 My supervisor lets me know when I am doing a poor job.
435 819 72 My supervisor always helps me improve my performance.
436 819 73 My supervisor insures that I get job related training when needed.
437 819 74 My job performance has improved due to feedback received from my supervisor.
438 -- -- (Not used)
439*** -- 75 When I need technical advice, I usually go to my supervisor.
440 & 441 -- -- (Not used)
442 819 76 My supervisor frequently gives me feedback on how well I am doing my job.
443 & 444 -- -- (Not used)
445 818 64 My supervisor fully explains procedures to each group member.
446-704 -- -- (Not used)
*** These variables are elements of "supervisory assistance" (not a statistical factor).

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Variable Number	Factor	Statement Number	Statement
705	822	101	Feeling of Helpfulness The chance to help people and improve their welfare through the performance of my job. The importance of my job performance to the welfare of others.
706-708	--	--	(Not used)
709	822	102	Co-worker Relationships My amount of effort compared to the effort of my co-workers, the extent to which my co-workers share the load, and the spirit of teamwork which exists among my co-workers.
710	822	103	Family Attitude Toward Job The recognition and the pride my family has in the work I do.
711	823	104	On-the-Job Training (OJT) The OJT instructional methods and instructor's competence.
712	823	105	Technical Training (Other than OJT) The technical training I have received to perform my current job.
713-716	--	--	(Not used)
717	822	106	Work Schedule My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.
718	822	107	Job Security
719	822	108	Acquired Valuable Skills The chance to acquire valuable skills in my job which prepare me for future opportunities.
720-722	--	--	(Not used)
723	822	109	By Job as a Whole
724-999	--	--	(Not used)

END
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5-86

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