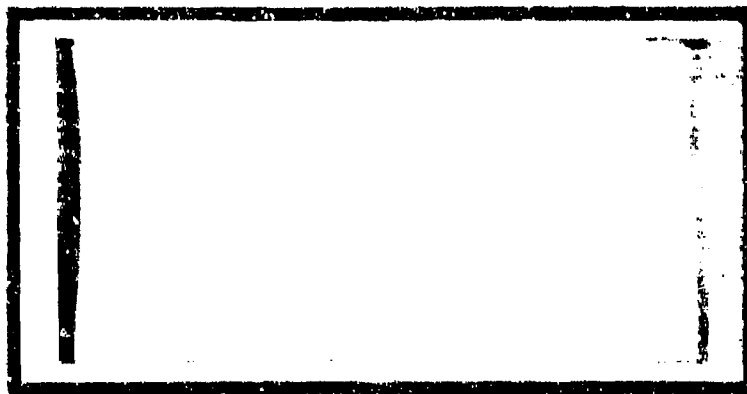


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AN ORGANIZATIONAL ASSESSMENT: A
PILOT STUDY TO DETERMINE IF
A SURVEY FEEDBACK PROGRAM
PRODUCED NEEDED CHANGES
IN AN ORGANIZATION

John D. Fiorini, Captain, USAF

LSSR 55-81

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The purpose of this research was to determine if Survey Feedback, an Organizational Development technique, was effective enough in a sample of an organization so that it could be used throughout the organization. Lloyd's Survey Feedback Model II was used because it curtails many of the assumptions found in other Survey Feedback models. The design of the research consisted of administering a presurvey and postsurvey to both a treatment and control group with only the treatment group receiving survey feedback. It was hypothesized that the treatment group would improve significantly subsequent to the Survey Feedback in the areas of satisfaction, organizational climate, perceived productivity, and employee perceptions of management. Six factors from the Organizational Assessment Package were used to test the areas of concern. T-tests for matched pairs and simple t-tests were used to test the hypotheses. This research provided evidence that the Survey Feedback intervention had a statistically significant positive effect on perceived productivity, but it had no significant effect on satisfaction, organizational climate, or employee perceptions of management. The limited success of the intervention was attributed to a lack of supervisory support.

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AN ORGANIZATIONAL ASSESSMENT: A PILOT STUDY TO
DETERMINE IF A SURVEY FEEDBACK PROGRAM
PRODUCED NEEDED CHANGES IN
AN ORGANIZATION

A Thesis

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Systems Management

By

John D. Fiorini, BA
Captain, USAF

September 1981

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This thesis, written by

Captain John D. Fiorini

has been accepted by the undersigned on behalf of the
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CHAPTER I

INTRODUCTION

Organizational Development

Organizational Development (OD) is

. . . a planned, systematic process in which applied behavioral science principles are introduced into an ongoing organization toward the goals of effecting organization improvement, greater organizational competence, and greater organizational effectiveness [9:3].

OD encompasses a myriad of techniques that are used to facilitate change. Change may take place in the organization's members, technology, processes, and/or structures.

OD involves diagnosing the organization and helping the organization to change in the direction it wants to go (28:28). Through change, OD seeks to optimize human and social improvement and/or task accomplishment (9:314).

Since survey feedback is an OD technique that attempts to increase an organization's ability to perform its tasks and meet its goals (28:29) by seeking to change individuals and their interaction processes (9:314; 27:523), it is referred to as a human-processual approach. The term *process* refers to how actions or tasks are accomplished; it includes the group and interpersonal dynamics which are occurring as people relate to each other in the accomplishment of the task. Survey feedback, focusing on process and task issues

and group learning (9:110), is more applicable where problems related to employee attitudes, morale, frustration, and role relationships exist (28:108).

The Survey Feedback Process

Survey feedback involves systematically collecting data, analyzing the data, feeding the data back to organization members, interpreting the data, and designing actions for the resolution of the problems surfaced in the data (9:152; 22:177). Figure 1 is a model of the survey feedback process. Survey feedback centers upon the data gathered by surveys administered within the organization (28:108). French and Bell (8:152) identify two major components of any survey feedback program--the attitude survey and the feedback workshops.

The data is normally aggregated with the smallest aggregation being at the work group level. This is done in order to maintain the confidentiality of the individual. The data is analyzed in this aggregated form to show the work groups their strengths and weaknesses. During feedback workshops (work group members meeting to discuss the survey results) the work groups interpret the data. Survey data provide the basis for discussion and analysis of problems which may exist in a work group (29:499). As the group members participate in feedback meetings they contribute their own observations, uncovering areas that may

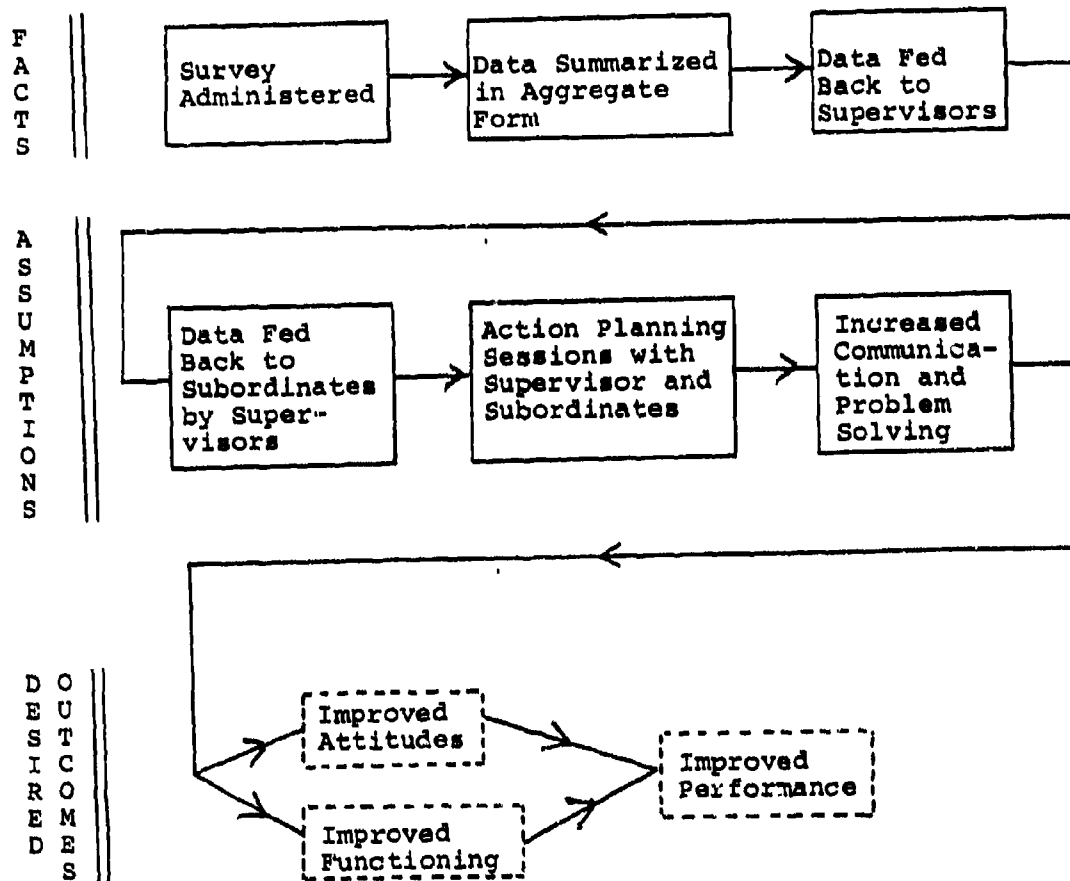


Fig. 1. Survey Feedback, Model I (16:34)

require further attention (29:501). The survey data also provide evidence that may either confirm or disaffirm vague feelings that previously existed (29:501). Furthermore, a well-designed survey can help the group members to develop valid models of how organizations function (9:156). Feedback sessions can become learning experiences wherein the group members learn about components of the organization that interact with each other, causing the organization to be either effective, ineffective, or somewhere in between.

During action-planning sessions, which follow the feedback sessions, the members of the work groups design action plans which they believe will lead to the resolution of the problems. The intent of survey feedback is to provide valid information (objective data) and to encourage organizational members to act on documented problems at the most appropriate level (9:155; 28:108). Nadler (21:334) points out that feedback can have cognitive, affective, and behavioral outcomes. The cognitive and affective outcomes of feedback are changes in the level of attraction to the group and the degree of task directed motivation. The behavioral outcomes are the level of participation, task performance, coping behavior, performance in problem solution, and changes in group structure. The objective of feedback is for these outcomes to improve the

organization's functioning. In order for this improvement to occur, three things must happen:

1. The work group must accept the data as valid.
2. The work group must accept responsibility for the part they play in the problems identified.
3. The work group must commit itself to solving problems (9:155).

Wieland and Ullrich believe that the problems must be solved at the lowest possible level (29:502). They advocate the waterfall pattern,¹ and stress the importance of two-way reporting. Two-way reporting is important because it establishes accountability between the organizational levels, it keeps the process moving, and managers are forced to seek the cooperation and opinions of others thereby involving significant employees in the process (29:503). It is not likely that problems will get buried with two-way reporting. Without two-way reporting a problem could be passed to a lower level for resolution and never be worked on, or a lower level could request higher level assistance and either be or feel that they were being ignored because they received no feedback from the higher level. Survey feedback can be instrumental in establishing or revitalizing two-way communication within

¹Waterfall pattern is the process of feeding data from the higher level of the organization to the lower levels.

an organization, and it can be used to establish responsibility for task performance to designated levels within an organization.

Survey feedback is a highly desirable change technique because it is a cost-effective means of implementing a comprehensive program (9:156), and it offers low personal risk for individuals (28:110). In comparison to other techniques, it is a relatively inexpensive means to accomplish the intended changes. The program is comprehensive since it may encompass all work groups within the organization. Because survey feedback is a surface-oriented intervention,² it is less interpersonal than other techniques. The consultant,³ or change agent, plays the role of collaborator in the organization's attempts at solving problems. For the intervention to be successful, a consultant must intervene just deeply enough to affect enduring solutions (28:111). The consultant's job is to help the client develop solutions to their problems. As the client members participate and learn, the stage is set for productive change (29:506). This widely used OD

²Surface oriented intervention: most of the planning and action is accomplished by the organization (client) with the consultant acting only as an advisor.

³OD interventions are normally conducted by consultants who are either internal or external to the organization.

technique is based on theories involving feedback and group decision making. A review of that empirical and theoretical literature follows.

CHAPTER II

LITERATURE REVIEW

Theoretical Basis

Survey feedback is based on the following assumptions dealing with human behavior and feedback:

1. Human behavior is goal-seeking or goal-oriented.
2. Confronting and working through differences among people who must work together can enhance collaboration.
3. Participation in decision making can lead to increased commitment.
4. Sharing information can be valuable (9:156).

French and Bell (9:156) note that the survey feedback technique considers people as rational, perceptive, information-processing organisms. When individuals have differences of opinion they are motivated to resolve these differences. Cybernetics, the study of self-correcting mechanisms, appears relevant to this reasoning. According to cybernetic theory, information can be fed back and used to make decisions that may bring the work system more in line with its predetermined goals (6:13). However, organizations are not *automatically* self-correcting; thus, the

process of attending to, interpreting, and acting on feedback is critical (21:310). Survey feedback provides a process for detecting, diagnosing, and correcting errors within an organization.

Through survey feedback, the organization members are confronted with differences in beliefs, feelings, attitudes, values, and norms. Removing obstacles to growth and learning involves surfacing and addressing these differences (9:113). Confrontation will naturally lead to emotional involvement, but, Wieland and Ullrich contend that "Emotional involvement is instrumental in changing perceptions, attitudes, and motivations [29:504]." Survey data lends a degree of rationality to the issues that are usually clouded by emotionalism (29:501), and the receiving of this data can be a potentially significant event towards enhancing the collaboration of a work group (21:309). Changes in attitudes and behavior may result from the increased communication and interaction that takes place providing individuals an opportunity to see if their perceptions are socially validated and shared (9:113). Once these differences are confronted and discussed, the group is ready to participate in making decisions.

Incorporated in the survey feedback technique is Lewin's phenomenon that individuals taking part in a decision are more likely to execute the agreed-upon course of action than individuals who did not participate in the

decision-making process (29:500). Individuals and groups are more committed to decisions that they were instrumental in formulating. Goal-seeking, collaboration, and commitment are all vital to the success of a survey feedback intervention. However, the process of sharing the survey data can also be valuable.

Sharing the data also uses the concept of feedback and how feedback impacts on behavior in groups. French and Bell refer to feedback as

. . . learning new data about oneself, others, group processes, or organizational dynamics--data that they did not previously take active account of. Feedback refers to activities and processes that "reflect" or "mirror" an objective picture of the real world. Awareness of this "new information" may lead to change if the feedback is not too threatening [8:111].

Nadler (21:325) proclaims that *feedback effectiveness depends on the desired impact of the feedback (affective, cognitive, or behavioral), the nature of the group task, and group member personalities*. Group level feedback appears to affect the attitudes of the individuals towards the group and task motivation, and is most effective in those situations where task performance is interdependent, and differentiated roles exist for group members. Affiliation oriented individuals appear to respond to group level feedback.

Nadler (21:331) further notes that the *evaluative content of the feedback is an important determinant of feedback effects*. Although the research does not indicate

what factors tend to make evaluative data (particularly unfavorable data) have positive as opposed to negative effects on group functioning, the evaluative element of feedback can lead to changes in motivation, defensive coping, and in patterns of group interaction.

Feedback can give the group, or individuals within the group, either a positive or negative message and this message in turn causes the group and group members to cope with success or failure (21:328). Research indicates that there is less defensiveness when negative feedback is given to the group rather than the individual (21:329), and that achievement oriented groups respond more positively to unfavorable feedback. Unfavorable feedback tends to be less inspiring than favorable feedback; it can cause team members to blame outside factors for team performance, and it causes them to distort team scores in a positive direction (21:329). Group members tend to take credit for the favorable parts of the feedback, and attribute unfavorable parts to other members of the group.

. . . feedback is critical in aiding members in forming attributions, both about the nature of group functioning and the relative responsibility of individual group members for group performance [21:330].

The evaluative nature of feedback can also be used to change group structure by changing the nature of relationships among group members (21:330). Favorable feedback can cause group members to be more attracted to each

other (21:330). Participation levels can be increased by favorable feedback and decreased by negative feedback. Nadler says that by providing a group with information (survey data) it can be cued to problems in its human system, can learn new ways of dealing with these problems, and can be motivated to improve its functioning in the future (22:178).

Empirical Research

The purpose of this section is to review the research literature on the subject of survey feedback to determine what effect it has been shown to have on organizations and the people who comprise those organizations.

Floyd C. Mann was one of the first to document the survey feedback process (22:179). Mann (1961) conducted a field experiment with eight accounting departments in the same company involving 78 supervisors and 800 employees (17:610). Mann found that more significant positive changes occurred in employee attitudes and perceptions in the experimental departments than in the control departments (17:611). Mann also noted that the greater the involvement of all department members, the greater the change in that department (17:612).

Brown (1972) also addressed the involvement aspect of survey feedback. He found that feedback meetings substantially improved the level of participant

involvement (4:706). Both the content of communications and the relationships among the communicators seemed to improve through the mutual sharing of information (4:707). He found that feedback meetings are not only a source for validating the information, but they also lead to positive changes in participant involvement (4:710).

Miles (1969) conducted his research in a small school system, and according to interviews, interpersonal relationships and communications improved among the top administrators. However, the quantitative data did not show more than chance fluctuation in measures of power equalization, communication, and norms for the teachers and the administrative group (19:466). Miles noted that

Presenting the data may have any combination of the following three effects. The data may corroborate the client's feelings. . . . Or, the data may have a disconfirming effect if they contradict beliefs. . . . In addition, the data have inquiry-encouraging effects: clients begin to wonder why people responded as they did, what the underlying causes were, and how they might be altered. Examination of the data usually also leads to discussion of related problems not directly dealt with by the data [19:459].

Along these same lines, Bowers (1973) says that

. . . an effective survey feedback operation helps an organization's groups move from a discussion of the tabulated perceptions, through a cataloguing of their implications, to commitment to solutions to the problems identified and defined by the discussion [3:24].

Bowers compared 6 forms of intervention in 23 different organizations comprised of more than 14,000 white and blue collar workers (3:23). Out of the six forms of

intervention, survey feedback appeared to be the only treatment associated with substantial improvement in the organizational climate variables (3:21). Bowers found that survey feedback reflected positive and significant changes in every area except managerial leadership (3:33). The reason for these findings may be that survey feedback, more so than other interventions, draws attention to those issues related to organizational climate that must change if the system itself is to change (3:42).

Nadler and Pecorella (1975) conducted a study where feedback was done concurrent with team building sessions (23:351). The site for their investigation was a small manufacturing company which has five different plant locations within two geographically distant cities. The interventions were effective at the line production level with resultant increases in performance and satisfaction (23:354). However, at the supervisory and technical employee level, role ambiguity and dissatisfaction developed as they felt their traditional roles and decision-making prerogatives were being invaded (23:362). Nadler and Pecorella concluded that

. . . long-lasting change can only be effectively brought about when the changes are accepted and owned by all those in the organization who are affected by new programs, including supervisors [23:362].

A small midwestern manufacturing company suffering from excessive turnover was the setting for a study

conducted by Hautaloma and Gavin (1975). Survey feedback was initially used to diagnose the organization and to develop action plans to resolve problems uncovered by the feedback. Team development, supervisory skills workshops, and Advisory Committee meetings were subsequently used to enhance the organization (12:483). The intervention affected, in a positive manner, turnover, absenteeism, and attitudes (12:485). "Probably the most compelling findings of this study have to do with positive changes noted on the measures of job attitude [12:488]."

Another study involving survey feedback in conjunction with team building was performed by Kimberly and Nielsen (1975). They based their study on a planned change program which involved the production group of an automotive division. Their findings revealed that

. . . the organizational participants perceived greater levels of trust and support in the target subsystem, conflicts were handled more openly, and the skills and resources of the participants were more fully utilized. In addition, they saw greater opportunities for autonomy and self-direction [15:196].

Hand, Estafen, and Sims (1975) conducted an experiment with the specific purpose of testing the effectiveness of survey feedback. Their experiment used a simulation game which involved 216 business students at a major mid-western university (11:336). ". . . the survey feedback technique focused on organizational and communication aspects directly related to the team decision-making

process [11:337]." As a result of the intervention, absenteeism declined and team members were more attentive at meetings. Functioning more as a cohesive unit, the experimental team members began to identify and resolve problems (11:339). Furthermore, the experimental group was significantly more satisfied than the control group subsequent to the survey feedback. However, the treatment had no significant effect on the performance criteria (11:343).

In Nadler's (1976) study of feedback for organizational change he points out the importance of how feedback is used. He cites Coughlan and Cooke and their very structured survey feedback program which had significantly more positive results, including changes in decision-making structures, increased organizational health, changes in individual perceptions of decision-making processes, and more favorable individual attitudes toward the work environment (22:181). Nadler came to two general conclusions with regards to survey feedback:

(1) survey feedback has positive effects in some situations and under certain conditions and (2) the process of collecting, analyzing, and using the data is an important determinant of the nature and extent of the effects [22:128].

Solomon noted that

Friedlander and Brown (1974) reviewed the survey feedback literature and stated that survey feedback's primary impact appears to be on attitudes and perceptions of the situation. They stated that survey

feedback might best be viewed as a bridge between diagnosis of organizational problems, and implementation of active problem solving methods, and that there was little evidence to suggest that survey feedback will result in changes in individual behavior or organizational output [26:584].

Although there is comparatively little current literature (1976 to present) describing the effectiveness of survey feedback as an organizational change method, some research does report evidence which suggests that it has some impact in this role. Adams (1977) performed a study which investigated the effects of a survey feedback intervention in a military unit which consisted of almost 300 soldiers. The primary dependent variables included unit efficiency, measures of soldier attitudes (both general and specific satisfactions), intergroup relations, supervisory considerations, absenteeism, punishment, and reenlistments. Adams hypothesized there would be significant improvements in organization effectiveness, levels of work satisfaction, intergroup work relations, and supervisory consideration following the survey intervention (1:26). The research design for this study consisted of two experimental treatment groups, a placebo treatment group, and a control group. The longitudinal investigation began with a pretest, followed by a manipulation, and ending with a posttest (1:38).

Objective data from three types of projects were used to analyze organization effectiveness (1:77). The

comparisons among the groups were based on manhours used to complete each given type of project (1:78). Adams found significant improvement for only one of the three work efficiency measures in the experimental treatment units (1:82). Furthermore, general satisfaction declined in one treatment unit, but improved in the other. Specific satisfaction (1:93) and intergroup relations (1:96) reflected no significant changes in either treatment unit. Supervisor consideration declined in one of the treatment units and improved in the other (1:104).

. . . exploratory research investigated the relationship of absence rates, rates of punishment, and reenlistment changes as results of survey feedback programs. No significant changes were noted across treatment conditions when these variables were measured over time [1:145].

It appears that Adams had limited success in improving work efficiency and supervisor consideration, and no success in improving intergroup work relations and work satisfaction. The limited success may be due to the nature of the task and the climate of the different groups.

Haythorn (1977) supervised a project with Army units in Europe. Measures of unit improvement--unit indicators--did not indicate that the survey feedback program had produced any significant change. However, responses to survey questionnaire items, particularly by E1-E4s, became more positive over time in companies receiving feedback. Many company commanders considered the feedback process

useful in promoting insight and communication. Some commanders found survey feedback valuable to unit operations during the project (13:ii). Seventy-six percent of the company commanders who were interviewed (n=49) felt that survey feedback was valuable as a learning experience (13:28).

As important as the process itself may be towards instituting change, the following studies indicate that the organizational climate must also be taken into account. Solomon (1976) examined the relationship between survey feedback and organizational environment in an attempt to see if the climate of the organization and the degree of feedback made a difference on the impact of a survey feedback intervention (26:585). For this study, Solomon used a questionnaire that measured five organizational variables, three work group variables, five task variables, four attitude variables, and six within-system relations. Five management styles and criteria of satisfaction with supervisor, satisfaction with job, and work unit effectiveness were also assessed (26:586). About four months after the manager feedback sessions, the participants (library employees) were interviewed to ascertain whether anything happened as a result of the feedback sessions, and whether the results of the feedback were discussed with the respondents. If the organizational climate was poor, the subordinates tended to report that something had happened in

their work group due to manager feedback sessions. The data also suggested that the presence of forceful subordinates may motivate managers to use survey feedback information. Solomon noted that the *survey feedback intervention tended to have its greatest impact in those situations in which it appeared to be most needed* (26:591). These findings also suggest that the survey feedback intervention was seen as most useful when subordinates previously had little input into the decision-making process (26:592). Solomon concludes that ". . . survey feedback would appear to be a suitable O.D. technique to choose for organizations in serious trouble [26:592]." The lack of a control group and the absence of a true experimental design should be noted when evaluating Solomon's conclusions (26:593).

Another study which did not discuss the statistical findings, but nevertheless helps to shed some light on the survey feedback process, was performed by Frye, Seifert, and Yaney (1977). Their study involved a large midwestern utility company (n=3,000). They studied what would happen to an organization that was undergoing severe reorganizational stresses while attempting to use OD techniques to reduce those stresses (10:296). The organizational tasks involved not only technical skills, but also a high degree of planning for the future (10:298). The goals for the intervention were to improve the quality of

the management process and to increase productivity (10:301). Interviews were used initially to gather data on each division manager's perceptions of the issues and options available to the network organization (10:301). The managers held meetings to develop objectives, assign priorities, and to build "family" teams (10:302). The division managers were briefed in detail on the survey feedback results (10:305). Performance, measured by productivity (output), improved after these meetings. Performance may have improved because the motivational energies of the division managers were transmitted to the other employees (10:305).

Because a control group was not used, the results should be taken with caution. Although the second round of survey data was not complete, the authors offered the following observations: communications improved, goal clarity improved, team work increased, and expectations for better leadership and information increased (10:306). Feedback sessions were limited although there was some participation, and the performance data was positive in two of the three main categories used in telecommunications utility companies. The linkages, however, are not clear (10:307).

The following study, conducted under similar circumstances, but statistically validated, had less positive inferences concerning survey feedback. Lloyd (1977)

investigated the differential effects between traditional survey feedback (Model I), in which little training is given to supervisors on how to interpret the data and feed it back to their subordinates, and a proposed style of survey feedback (Model II), in which the supervisors receive extensive training in analyzing the data and feeding it back to their subordinates. The research was conducted in a military organization. Data were collected via questionnaires which measured attributes of the employees' jobs (16:69), employee satisfactions and attitudes (16:72), and productivity (16:76). Lloyd hypothesized that Model II survey feedback intervention would improve productivity and employee affective reactions more than Model I. He further hypothesized that

. . . employees demonstrating a strong desire to obtain growth satisfaction from their work, . . . will experience . . . improvements in their attitudes toward their work [16:47].

The employees' perceptions about productivity were supported by significant changes (16:100). However, objective performance data did not support an improvement in productivity (16:112).

Out of the seven Affective Reactions tested, only Communications Patterns showed significant improvement, and that was for both Model I and Model II (16:124). Furthermore, Growth Need Strength had either a nonsignificant correlation with or did not have a sufficient

covariant relationship with other variables studied; therefore, the hypothesis concerning improved attitudes toward work could not be supported (16:134). Lloyd notes that

. . . with the exception of self-perceptions of productivity and the quantity and quality of communication, every dependent measure either declined (as most did) or remained static [16:174].

The data suggested that the climate in this organization was deteriorating; however, the cause of the deterioration appeared not to be caused by the survey feedback intervention.

While Lloyd did a comparative study of two different models of survey feedback, Pasmore and King (1978) did a comparative study of three different types of interventions at a food processing facility in the midwest. The types of interventions used were: survey feedback, job redesign, and a sociotechnical systems intervention. They hypothesized that employee attitudes would become more positive following either technique and that the sociotechnical system intervention would be the only intervention to have a positive effect on productivity (25:462).

The experimental design consisted of two units within the organization, and three time periods (25:460). A survey which contained ten measures of employee attitudes was administered in all three time periods. Survey feedback was conducted during periods two and three in both units. Sociotechnical system and job redesign were

conducted in unit one during period two, and job design only was used in unit two, period three.

Pasmore and King found that the sociotechnical systems intervention produced more positive effects on employee attitudes than did survey feedback itself. Univariate analyses of variance performed on the data indicated that general job satisfaction, intrinsic motivation, and job involvement increased significantly whereas alienation decreased significantly. Satisfaction with specific aspects of jobs and working conditions, intergroup relations, supervisory consideration, and absenteeism were not significantly affected by the interventions (25:462). They also found there was no improvement in productivity when the survey feedback intervention was used; whereas, major productivity improvements (133 percent of the originally planned production volume (25:464)) were associated with sociotechnical systems intervention (25:466).

Pasmore and King summarize their findings in saying that

. . . in terms of improving employee attitudes, the method of intervention used makes little difference. In terms of improving productivity however, the method of intervention appears to be critical [25:456].

They also felt that survey feedback helped in building trust and understanding in the organization, thereby creating a foundation on which to intervene in other ways (25:468).

A study which does not concentrate on any one organization, but gives an overview of companies which use attitude surveys, was performed by Miller (1978). Miller conducted a survey to investigate the use of attitude surveys as organizational development tools. Out of the 57 companies that responded to the survey, 25 said they use surveys to make a preliminary diagnosis of the causes of the problems they instinctively felt existed and to develop steps to resolve these problems (20:4). Miller concluded from his findings that

. . . systematic efforts by managers to keep in touch with their employees' feelings, hopes, disappointments, and frustrations, if coupled with a sincere willingness to take necessary and feasible corrective actions, should help them gain further use of the skills, talents, and enthusiasm of their employees [20:10].

Summary of Empirical Research

Survey feedback appears to be one of the most widely used types of OD interventions (7:11; 29:497). Past research, according to Franklin (1978) and Wieland and Ullrich (1976), indicates that survey feedback will improve personal attitudes (7:11) and organizational functioning (7:11; 29:497). However, these results are not in agreement with Friedlander and Brown as cited on page 16 of this document. Furthermore, the current studies addressed in this section do not tend to clear up these disagreements.

It appears that productivity can be improved (Frye, Seifert, and Yaney), but it is highly dependent on the

nature of the task (Adams and Lloyd). Pasmore and King indicated that there are better methods than survey feedback for improving productivity.

Survey feedback, as noted by Solomon, should have its greatest impact on organizations that most need the intervention. This is substantiated by Frye, Seifert, and Yaney; however, Lloyd found that survey feedback had little effect in an organization whose climate was deteriorating. In order to clarify and solidify the underlying theories of survey feedback, more research needs to be done in this area.

Models

The reader may have noticed that throughout the literature review there was very little commonality in regards to the methodology used to test survey feedback as a method to accomplish the goals of OD. Researchers have either compared it to other interventions or have used different models of the process. Although the historical literature has tested certain parameters of the process and allows one to make certain statements about survey feedback, such as its success at changing attitudes, this variability in methodology leaves one wondering exactly what constitutes a survey feedback program and which model of the process is best for the situation. As Lloyd (1976) noted in his doctoral dissertation,

If scientific research is to progress as it is definitionally intended to, it must slowly and methodically build upon prior research, expanding what is known while narrowing what is suspected [16:31].

Survey Feedback, Models I and II

The aim of this research is to build on prior research, specifically that performed by Lloyd. As was mentioned in the literature review, Lloyd compared two models of survey feedback. Figure 1 is what Lloyd referred to as Model I and Figure 2 is the model he proposed, Model II. Note that Model I *assumes* that the data will be fed back, that action planning sessions will be held, and that increased communication and problem solving will occur. Model II does not assume these important factors that lead to the success of the program will take place. Model II is structured so that supervisors receive training and make commitments to encourage maximum participation in the program. Reports are required to insure compliance with feedback and action planning meetings. Lloyd notes that

The structure in Model II is the vehicle through which the consultant can be confident that (1) the data will be fed back with some skill, (2) that the skills necessary for effective problem solving and action planning are at least present, (3) that commitment at all levels to do the above is present, and (4) that the best possible environment exists in which an intervention can have its effect [16:37].

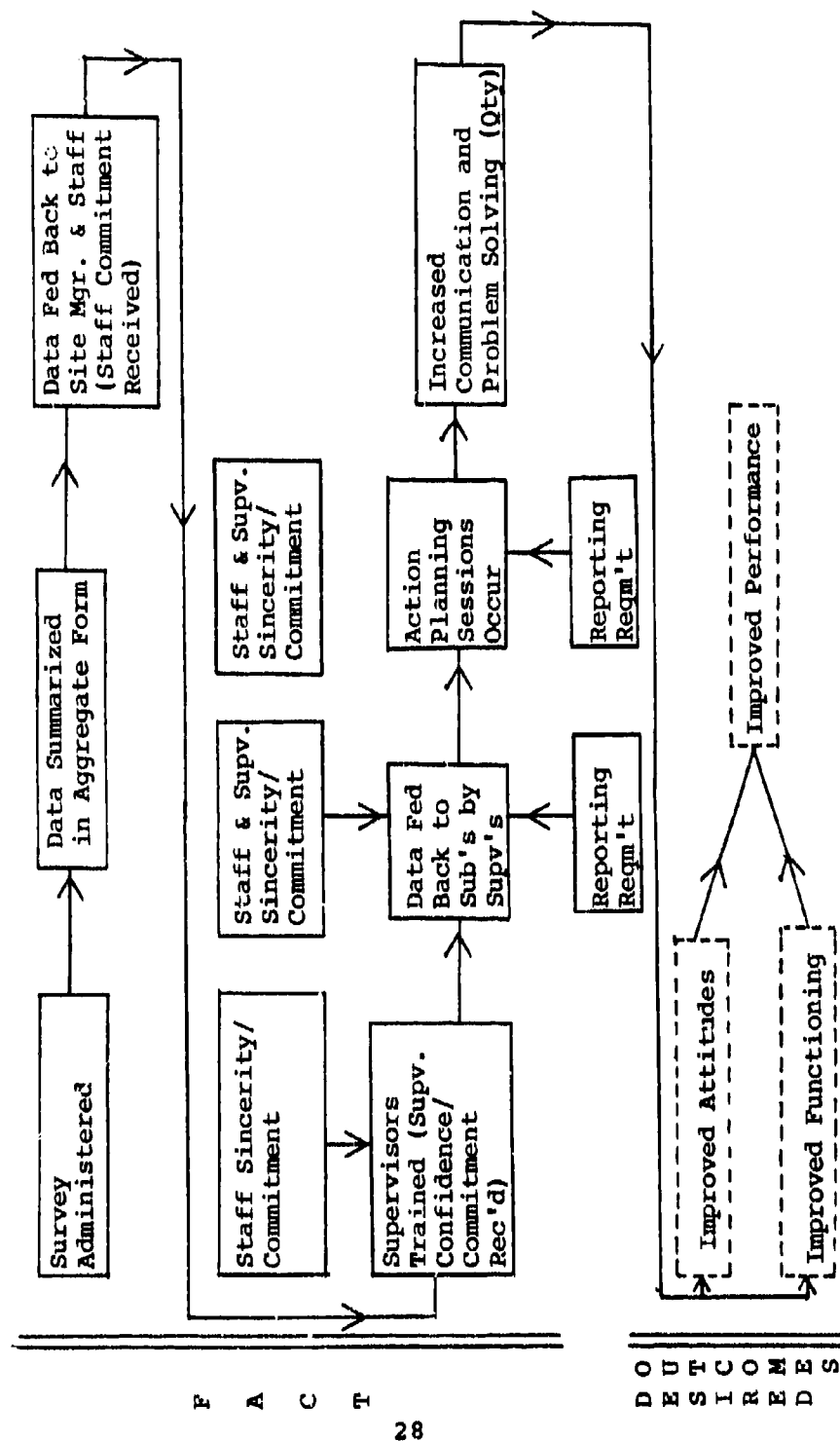


Fig. 2. Survey Feedback, Model II (16:38)

Bottoms Up Feedback

Because Model II is a very structured program, it follows that the process of feeding back the data should also be structured. Bottoms up feedback, according to Lloyd, offers the most structure and, therefore, the greatest control over its outcome (16:40). Bottoms up feedback begins at the bottom of the organizational structure with the feedback process reoccurring at each higher level until it finally reaches the top or executive level without skipping any intermediate levels from the bottom to the top. Each level bases its action plans on the information provided, via a structured format, from the level below it (16:26). Bottoms up feedback provides a greater certainty that feedback and subsequent action planning will occur (16:27), and that areas requiring coordination/attention of lateral or higher levels will be addressed (16:28). When the report reaches the executive level it indicates what action has been and is to be taken at all levels and what issues remain that require executive level attention (16:28). Lloyd suggests that ". . . the increased structure and control bottoms up provides results in greater effectiveness [16:40]." It is important to note that

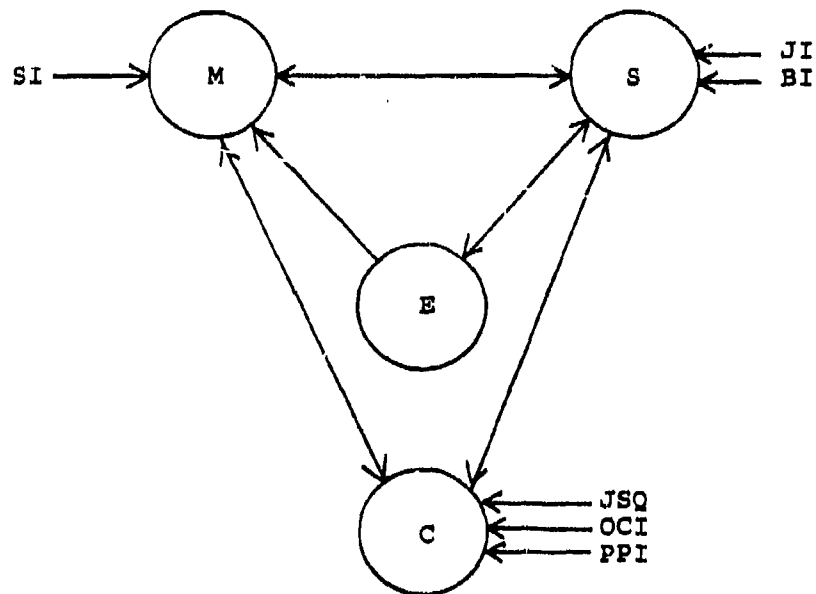
. . . the issues addressed in the Bottoms Up feedback variation are *largely* determined by the employees and their immediate supervisor, and until they are satisfied with the issues on their action plans, they can not progress upward [16:44].

Three-Component Organizational Effectiveness Model

Organizational Development, as has been mentioned, is a program to change or modify an organization to make it function more effectively. Any attempt to alter an organization should be based on a well-founded conceptual framework that explicitly identifies the key variables, relationships between variables, and anticipated outcomes. In addition to Lloyd's Model II survey feedback, the Three-Component Organizational Effectiveness model as described by Hendrix (1976) will be used to identify the key variables of interest in this research. This model (Figure 3) shows that organizational effectiveness is a function of selected criteria, the managerial style employed, and the situational environment. Furthermore, Figure 3 shows how these components are interrelated (14:5). The selected criteria includes satisfaction, organizational climate, and perceived productivity, while the situational environment consists of job inventory and background information.

Hypotheses

If any one of the components of the Three-Component Organizational Effectiveness model are changed, the organization's effectiveness will be changed. Based upon the literature review and the preceding discussion, the following hypotheses are posited:



Legend

M = Management Style
 SI = Supervisory Inventory
 S = Situational Environment
 JI = Job Inventory
 BI = Background Information
 E = Effectiveness
 C = Criterion
 JSQ = Job Satisfaction Questionnaire
 OCI = Organizational Climate Inventory
 PPI = Perceived Productivity Inventory

Fig. 3. Three-Component Organizational Effectiveness Model (14:5)

- H₁: *Satisfaction*. It is hypothesized that satisfaction will improve significantly in the treatment group and not in the control group following the survey feedback intervention.
- H₂: *Organizational Climate*. It is hypothesized that organizational climate will improve significantly in the treatment group and not in the control group following the survey feedback intervention.
- H₃: *Perceived Productivity*. It is hypothesized that perceived productivity will improve significantly in the treatment group and not in the control group following the survey feedback intervention.
- H₄: *Employee Perceptions of Management*. It is hypothesized that employee perceptions of management will improve significantly in the treatment group and not in the control group following the survey feedback intervention.

CHAPTER III

METHODOLOGY

The Experimental Setting

The experiment was conducted at a Department of Defense military installation in the midwest. The organization involved in this experiment employs 635 civilians and 93 military personnel with an annual payroll of approximately 27 million dollars.

The primary responsibility of this organization is to establish plans and make policy in the area of logistics operations. Figure 4, an organizational chart, is offered as a means for the reader to grasp the complexity of the organization under study.

Experimental Background

Prior to the involvement of the consultant, a new member of the organization wrote a letter to the civilian executive of the organization describing problems he had encountered and stated that ". . . unless these problems are confronted and handled the system will continue to be ineffective." Among the problems he identified were low morale, poor communication among employees, outdated management techniques, and no structured training program for new employees. The executive appointed the new member as

the chairperson of a committee to investigate programs to enhance the effectiveness of the organization. The committee approached a member of the AFIT faculty and after a diagnosis of the organization, hereafter referred to as the client, a survey feedback intervention was suggested. The faculty member, hereafter referred to as the consultant, met with the executive and they drew up a plan of action. A summary of that meeting and a subsequent letter are Appendices A and B, respectively. A tentative schedule of events was also developed and appears in this paper as Appendix C. A consulting team was also organized which consisted of the consultant, three members of the client organization, and a researcher (the author).

The Experimental Design

The experimental design for this research was constrained to a large extent by the organization's executive. The executive's interest in this research was to run a pilot program within the organization and then to expand the program if it was successful. The executive selected both the group to receive survey feedback (the treatment group) and the group that would not receive survey feedback (the control group). These groups are identified in Figure 4 so that the reader can better visualize the location within the organization of the selected groups. Figure 5 is a diagram of the

O_{1t}	X_t	O_{2t}
O_{1c}		O_{2c}

Legend: O_{1t} = premeasure of treatment group
 O_{2t} = postmeasure of treatment group
 O_{1c} = premeasure of control group
 O_{2c} = postmeasure of control group
 X_t = exposure of the treatment group to survey feedback

Fig. 5. Quasi-Experimental Nonequivalent Control Group Design

quasi-experimental nonequivalent control group design (Campbell and Stanley, 1966) developed for this research. Assumptions not met in this experiment are the random selection and assignment of groups to the treatment and control conditions (5:47).

The nonequivalent control group design generates data to control for the following sources of internal invalidity as discussed by Campbell and Stanley: maturation, history, testing, instrumentation, selection, and mortality. All of these sources of invalidity are controlled for in that they should have occurred in the treatment as well as the control group. The more similar the treatment and the control groups are at the study's outset,

the more effective this control becomes (5:48). One threat to the internal validity of the experiment is the interactions of the above-mentioned confounds; a threat that increases as the difference between the groups increases (5:48).

Another possible threat to the internal validity of this experimental design is regression to the mean, which operates where groups have been selected on the basis of their extreme scores (5:5). This did not occur in this experiment because the selection of the groups was not based on their survey scores. However, the possibility does exist that the executive perceived one group to be "better" than the other.

Interaction effects involving the treatment and some other variable are referred to as threats to external validity, or to the generalizability of the experiment (5:17). Since survey feedback uses the pretest as a means to initiate the process, the interaction effects of testing and the treatment are desirable and are not a threat to the experiment. The interaction of selection of the treatment group and the treatment can be an area of concern if there is a significant difference between the treatment and control group (5:19). The threats to the validity of this experiment were recognized and were taken into account in the analysis of the data.

Measures

All variables were measured using a survey instrument entitled the Organizational Assessment Package (OAP) (Appendix H).

Satisfaction

Satisfaction is measured by the combination of the responses to seven questions in the OAP (Factor 822, Appendix I). The questions ask the respondents about feelings of being helpful, coworker relationships, family attitude toward their job, work schedule, job security, chance to acquire valuable skills, and how they feel about their job in general.

Organizational Climate

Organizational climate is measured by two factors, General Organizational Climate and Organizational Communications Climate (Factors 824 and 820 respectively, Appendix I). General Organizational Climate is a combination of the responses to ten questions addressing the organization's interest in group member attitudes toward jobs and welfare of its people, pride in the organization, responsibility for accomplishing the mission, recognition, opportunities to brief others, team work, cooperation between work groups, motivation, and rewards based on performance. Organizational Communications Climate combines responses to six questions dealing with management's acceptance of

work group ideas, enough information to perform effectively, adequate information for the work group, awareness of important events, response to complaints, and disbursement of information.

Perceived Productivity

Perceived productivity is measured by Factor 821, Work Group Effectiveness (Appendix I). This factor uses the responses to five questions on the OAP which seek information on the quantity and quality of the work group's output. The questions also ask the respondents to compare their work group to similar work groups, whether their work group uses available resources effectively, and the ability of their work group to adapt to high priority situations.

Employee Perceptions of Management

Employee perceptions of management is measured by Factors 818 and 819, Management Supervision and Supervisory Communications Climate respectively (Appendix I). The eight questions used to measure Management Supervision ask the respondents to rate their supervisors in the areas of planning, setting performance standards, encouraging team work, representing the work group, establishing work procedures, clarifying his responsibilities, explaining procedures, and performing under pressure. Supervisory Communications Climate is composed of eight statements.

These statements address whether the supervisor solicits ideas on task improvement, explains how the job contributes to the overall mission, helps set specific goals, recognizes good work, helps improve performance, insures that training needs are met, and feeds back information that leads to improved performance.

Procedures

The pretest baseline measure was administered on 21, 24, and 25 November 1980. In addition, key supervisors, who were unable to take the survey on the aforementioned dates, were given the survey on an individual basis. The administration of the pretest was completed on 5 December 1980. Out of a possible 229 employees, 191, or 83 percent responded to the survey. The treatment and control groups had a participation rate of 77 percent and 88 percent, respectively. This information, along with a tentative schedule, and other pertinent information was sent to the executive on 12 December 1980 (Appendix D).

Supervisor training was conducted by the consultant on 26 and 27 January 1981 (Appendix E) at which time the pretest results were given to the appropriate supervisors.

The supervisors conducted initial feedback sessions and action planning sessions with varying degrees of adherence to the prescribed time schedule (Appendix F). Supervisors were requested to action-plan with their work

groups every other week. Because of higher priority workloads, conflicting TDY schedules, apathy, and, in some cases, outright distrust or opposition, the action-planning meetings were either not conducted at all or not according to schedule. This prompted the consultant to write a letter to the executive of the treatment group and request his assistance in rectifying the situation (Appendix G).

The treatment group executive met with all of his supervisors on 22 April 1981 and reiterated the importance of the survey feedback program and his support of it.

Between 22 April and 1 May 1981 the author interviewed twelve of the sixteen supervisors (not including the treatment group executive) to see if they understood the objectives of the program and, in general, how they felt about the program. All twelve of the supervisors understood (at least to some extent) the objectives of the survey feedback program. Five out of the twelve had negative feelings toward the program, three were positive, and four had mixed feelings. The negative responses had mostly to do with not having enough time. One supervisor questioned the cost-effectiveness of the program indicating he did not feel it was worth the time or money involved. Generally speaking, the program was not receiving the required support.

The consultant conducted refresher training with all but one of the supervisors in attendance on 4 May 1981.

The purpose of this meeting was to review the survey feedback program and to offer an opportunity for the supervisors to air their positive as well as negative perceptions of the program. The supervisors were requested to bring with them ideas that had worked well for their group in the action-planning meetings and also things that were a hinderance to the program. During the review session the treatment group executive once again emphatically expressed his positive support of the program.

Some supervisors looked at the program as an opportunity to get away from the regular work and discuss problems of a group and individual nature. One supervisor noted that problems can only be dealt with when they are not suppressed. The issue of whether the program was cost-effective was brought up. The consultant skirted this issue by saying the program needed about six months of faithful response. The consultant's philosophy was not one of debating the merits of the program but to encourage the client members to accept the program as their own and realize that its success or failure depended on them. If successful, then it *would* be cost-effective.

Subsequent to the refresher training, the consulting team made it a policy to attend action-planning meetings with the supervisor's permission. The decision was based upon a need for the team members to learn more of how the action-planning meetings were being conducted and

to offer immediate assistance if requested. The team members could also discuss with the supervisor after the meetings any positive or negative aspects of the meeting and offer the supervisor individual assistance.

Only two of the action-planning meetings were attended by members of the consulting team. Team members called the supervisors and requested permission to attend the meetings and to be informed as to when the meetings would be held. All but two of the supervisors either did not hold the meetings or held the meetings and did not inform the team member. All but one of the supervisors granted the team members permission to attend the meetings. Of the two meetings that were monitored, one was considered a success and the other had very little interaction among the participants.

Two surveys were administered over the course of this research (Appendix H). With each administration, full participation of members of the treatment and control groups was encouraged. The surveys were supported by the client executive, but it was made clear that individual participation was voluntary. It was also made clear that individual responses to the surveys would not be identified for a person and would not be reported in the results; that survey results for work groups would not be shared with anybody outside that work group; and that only aggregated data would be presented to the client executive and

his staff. Although anonymity was guaranteed, the combination of demographic data collected made it obvious that personal identification could be made. Members of the consulting team addressed this issue at each administration of the survey in order to remove any misgivings of the survey participants.

The pretest instrument contained eight sections totalling 120 individual items. It was administered on a Friday, Monday, and Tuesday with four administrations occurring each day. In order to insure that key supervisors took the survey, it was offered to them on an individual basis if they were unable to take it at the scheduled time.

The posttest instrument contained the same 120 items as the pretest with the addition of questions to determine if the respondent took the pretest and if action-planning meetings were attended during the interim. It was administered on a Monday, Tuesday, and Wednesday (22, 23, and 24 June 1981) with four administrations occurring each day. Out of a possible 229 employees, 129, or 56 percent, responded to the postsurvey. The treatment and control groups had participation rates of 63.5 percent and 51 percent, respectively.

All of the data in the pretest and posttest instruments are expressed in terms of factors. A factor is defined as a combination of items, each of which solicits

information about a common theme. The combination of items gives a truer picture of how a respondent perceives or feels about a theme. The equations for combining items to create factors are listed in Appendix I. The factors measured and their definitions are contained in Appendix J, which was used during the initial supervisor training session.

Pre-analysis Procedures

As mentioned previously, the quasi-experimental design used in this research calls for a high degree of similarity between the treatment and control group in order to minimize the threats to internal validity. If this similarity does not exist, then the data must be analyzed in such a way that the validity threats will be accounted for. Therefore, a determination must be made as to whether the groups are similar or not.

Discriminant Analysis

This determination was made through a statistical procedure known as discriminant analysis. The objective in this research was to determine if there was a statistical distinction between the two groups. In order to accomplish this objective, a discriminant function, which is linear, was built using a stepwise selection of the factors in Appendix I. Which factors are most important in separating the groups can be determined by examining

those variables selected to be part of the discriminant function (18:7-2).

Using the subprogram, DISCRIMINANT, within the Statistical Package for the Social Sciences (SPSS), four of the twenty-four factors were selected as discriminating variables. Eighty-four of the cases were randomly selected to develop the discriminant function, seventy-five other cases were used to cross-validate the results, and thirty-six cases were not used due to missing values.

A stepwise method which seeks to maximize the Mahalanobis' distance⁴ between the two groups was used in this analysis. An example of this stepwise process appears in Table 1.

The canonical correlation coefficient is a measure of the function's ability to discriminate between the groups. The canonical correlation coefficient squared is the proportion of variance in the discriminant function explained by the groups. For this study, the canonical correlation squared was 0.2094, indicating that the ability to discriminate treatment from control members on the basis of their responses is moderate (24:442). The discriminant function itself is not important in this analysis because

⁴Mahalanobis' distance is a method used for calculating the distance of a multivariate observation from the centroid of a multivariate normal population while accounting for the effects of the population covariance structure (18:7-48).

TABLE 1
DISCRIMINANT ANALYSIS

Step	Factor Entered	Minimum Mahalanobis' Distance Squared	Significance	Factor Label
1	V823	.58535	.0009	Job Related Training
2	V813	.70166	.0015	Task Autonomy
3	V825	.92738	.0008	Motivation Potential Score
4	V806	1.06348	.0009	Need for Enrichment

the goal is not to be able to place a new respondent in one group or the other but to determine if the groups are different based on factors derived from surveying the groups.

In this analysis the cases or respondents were randomly divided into two groups, one for the purpose of developing a discriminant function, the other to test the adequacy of the derived discriminant function by using classification. Classification is the process of identifying the likely group membership of a case when the only information known is the case's values on the discriminating variables (selected factors). By classifying cases *not* used to derive the discriminant function and comparing predicted group membership with actual group membership, an *unbiased* measure of the success of discrimination is given by the proportion of correct classifications (24:445).

The unbiased measure in this instance was 60 percent of the cases correctly classified. The bottom line of this discriminant analysis is that there is a difference, in a multivariate sense, between the control and treatment groups, and this should be taken into account during the analysis of the data.

Simple t-tests

Another area of interest in this study is whether the two groups are different at the time of the pretest on an individual factor basis. That is, do the control and treatment groups differ when considering them one factor at a time. A simple t-test for the difference between two means was used for this purpose. The simple t-tests indicated that seven of the factors had unequal means, i.e., the null hypothesis can be rejected.

Final Analysis Procedures

Based on the above information and that derived from the discriminant analysis, t-tests for matched pairs, which control for these differences, were used to test for significant changes in the treatment and control groups from pretest to posttest, and simple t-tests were used to test for significant differences between the two groups at posttest time.

CHAPTER IV

RESULTS

Introduction

This chapter presents the results of the t-test for matched pairs used to test the four hypotheses stated previously. For these tests, eleven work groups were selected from the control group and eight work groups were selected from the treatment group. These selected work groups are identified in Figure 4, page 34, with an asterisk. In order for a work group to be selected, it had to have four or more participants in both the presurvey and postsurvey; or, if there were three participants in the postsurvey, all of them had to have taken both the presurvey and the postsurvey. Seventy-five percent of the postsurvey participants in both the control and treatment groups took the presurvey. The number of participants in the selected work groups were as follows:

	<u>Presurvey</u>	<u>Postsurvey</u>	<u>Both</u>
Treatment group	48	48	34
Control group	68	55	42

This sample represents 61 percent (116/191) of the presurvey participants and 80 percent (103/129) of the postsurvey participants. The results of this study should be

considered in the light of these percentages, and in light of the fact that the sample includes 62 percent of the total treatment and control group members.

Hypotheses Testing

As an aid to the reader in understanding how each hypothesis was tested, the following description is offered. With reference to Figure 6, a t-test for matched pairs was used to test for a difference *within* the treatment (A-B) and control (C-D) groups. The t-test for matched pairs was done separately for each group on each applicable factor. In order to see if there was a statistically significant difference *between* the treatment and control groups, a simple t-test was performed (B-D) on each factor. The following tests of hypothesis were performed in this manner.

	<u>Pre-Survey</u>	<u>Survey Feedback</u>	<u>Post-Survey</u>
Treatment Group	A	I	B
Control Group	C	-	D

Fig. 6. Hypotheses Testing Design

Test of Hypothesis 1

Hypothesis 1 was stated as follows:

Satisfaction. It is hypothesized that satisfaction will improve significantly in the treatment group and not in the control group following the survey feedback intervention.

This hypothesis was tested using a t-test for matched pairs on Factor 822, Job Related Satisfaction, from the OAP. Table 2 summarizes the results of this test. Neither the treatment nor the control groups had a significant change in this area (levels of significance were .961 and .125 and difference means were -.010 and .322, respectively). Furthermore, there was no significant difference between the treatment and control groups ($\alpha=.473$) (Table 3). Therefore, *this hypothesis cannot be supported; i.e., the survey feedback intervention did not improve satisfaction in the treatment group.*

TABLE 2
FACTOR 822, t-TEST FOR MATCHED PAIRS

	Difference* Mean	t Value	2-Tail** Prob.
Treatment Group	-.010	-.05	.961
Control Group	.322	1.67	.125

*The Difference Mean is the presurvey mean minus the postsurvey mean. Therefore, a negative sign indicates an increase.

**2-Tail Probability is the level of significance (α) which is statistically significant when it is equal to or less than .05.

TABLE 3
FACTOR 822, SIMPLE t-TEST AT POSTMEASURE

	Mean	t Value	2-Tail Prob.
Treatment Group	5.38		
		.73	.473
Control Group	5.25		

Test of Hypothesis 2

Hypothesis 2 was stated as follows:

Organisational Climate. It is hypothesized that organizational climate will improve significantly in the treatment group and not in the control group following the survey feedback intervention.

To test this hypothesis, Factor 824, General Organizational Climate, and Factor 820, Organizational Communications Climate, were used in t-tests for matched pairs. Tables 4 and 5 summarize the results of these tests. For Factor 824 the treatment group score increased (Difference Mean = $-.085$) with a level of significance of $.748$, and the control group score decreased (Difference Mean = $.457$) with a level of significance of $.188$. For Factor 820 the levels of significance were $.608$ and $.171$ with Difference Means of $.121$ and $.417$ for the treatment and control groups respectively. Furthermore, there was no statistically significant difference between the two

TABLE 4
FACTOR 824, t-TEST FOR MATCHED PAIRS

	Difference Mean	t Value	2-Tail Prob.
Treatment Group	-.085	-.33	.748
Control Group	.457	1.41	.188

TABLE 5
FACTOR 820, t-TEST FOR MATCHED PAIRS

	Difference Mean	t Value	2-Tail Prob.
Treatment Group	.121	.54	.608
Control Group	.417	1.48	.171

groups for either factor (Factor 824, $\alpha=.230$; Factor 820, $\alpha=.578$) (Tables 6 and 7). Thus, *Hypothesis 2 cannot be supported.*

Test of Hypothesis 3

Hypothesis 3 was stated as follows:

Perceived Productivity. It is hypothesized that perceived productivity will improve significantly in the treatment group and not in the control group following the survey feedback intervention.

TABLE 6
FACTOR 824, SIMPLE t-TEST AT POSTMEASURE

	Mean	t Value	2-Tail Prob.
Treatment Group	5.09	1.25	.230
Control Group	4.68		

TABLE 7
FACTOR 820, SIMPLE t-TEST AT POSTMEASURE

	Mean	t Value	2-Tail Prob.
Treatment Group	4.69	.57	.578
Control Group	4.50		

This hypothesis was tested using Factor 821, Work Group Effectiveness, in the t-test for matched pairs. Table 8 summarizes the results of this test. Although both the treatment and control groups had levels of significance within the critical region (.026 and .014 respectively, the treatment group Difference Mean increased (-.489), whereas the control group Difference Mean decreased (.488). In addition, the difference *between* the two groups was statistically significant ($\alpha=.050$) (Table 9).

TABLE 8

FACTOR 821, t-TEST FOR MATCHED PAIRS

	Difference Mean	t Value	2-Tail Prob.
Treatment Group	-.489	-2.82	.026
Control Group	.488	2.98	.014

TABLE 9

FACTOR 821, SIMPLE t-TEST AT POSTMEASURE

	Mean	t Value	2-Tail Prob.
Treatment Group	5.95		
		2.09	.05
Control Group	5.41		

Thus, the third hypothesis cannot be rejected; i.e., perceived productivity increased significantly for the treatment groups following the survey feedback intervention.

Test of Hypothesis 4

Hypothesis 4 was stated as follows:

Employee Perceptions of Management. It is hypothesized that employee perceptions of management will improve significantly in the treatment group and not in the control group following the survey feedback intervention.

In order to test this hypothesis, two factors were used from the OAP; Factor 818, Management Supervision, and Factor 819, Supervisory Communications Climate. Tables 10 and 11 summarize the results of these tests. The differences between the presurvey and postsurvey in both the treatment and control groups for both factors was *not sufficient to accept the hypothesis*. The simple t-test for between group differences were not statistically significant ($\alpha=.310$ for Factor 818 and $\alpha=.374$ for Factor 819) (Tables 12 and 13).

TABLE 10
FACTOR 818, t-TEST FOR MATCHED PAIRS

	Difference Mean	t Value	2-Tail Prob.
Treatment Group	-.208	-.85	.422
Control Group	.548	1.90	.087

TABLE 11
FACTOR 819, t-TEST FOR MATCHED PAIRS

	Difference Mean	t Value	2-Tail Prob.
Treatment Group	-.437	-1.50	.178
Control Group	.478	1.48	.169

TABLE 12
FACTOR 818, SIMPLE t-TEST AT POSTMEASURE

	Mean	t Value	2-Tail Prob.
Treatment Group	5.35		
		1.06	.310
Control Group	4.95		

TABLE 13
FACTOR 819, SIMPLE t-TEST AT POSTMEASURE

	Mean	t Value	2-Tail Prob.
Treatment Group	4.89		
		.92	.374
Control Group	4.54		

Summary

On every factor that was tested (with the exception of Factor 820) in the above hypotheses, the treatment group increased and the control group decreased. However, only in the instance of perceived productivity (Factor 821, Work Group Effectiveness) was the increase in the treatment group and the decrease in the control group statistically significant.

In addition to the t-test for matched pairs used to test for statistically significant changes between pre-survey to postsurvey administrations, simple t-tests were used to determine if there was a statistically significant difference between the treatment and control groups on the postmeasure. The only factor which revealed a significant difference (the treatment was better than the control group) was Factor 821, Work Group Effectiveness. It is also interesting to note that on the pretest the control group was significantly better ($\alpha=.049$) (Table 14). This reversal of the treatment group being significantly worse to being significantly better adds further support to the hypothesis that perceived productivity for the treatment group improved significantly.

TABLE 14
FACTOR 821, SIMPLE t-TEST AT PREMEASURE

	Mean	t Value	2-Tail Prob.
Treatment Group	5.46	-2.10	.049
Control Group	5.94		

These results must be taken with caution due to the sample size and the sampling method; however, they do indicate that, for those groups studied, there was a statistically significant increase in the perceived

productivity due to the survey feedback intervention. The members in the treatment group perceived an increase in the quantity and quality of their output. They also felt that they were better able to handle high priority work and use available resources more efficiently. The opinion of their work as a working unit in comparison to similar work groups also increased.

CHAPTER V

CONCLUSION, OBSERVATIONS, AND RECOMMENDATIONS

Conclusion

Results

This research provides evidence that the survey feedback intervention had a statistically significant effect *within* the treatment and control groups on perceived productivity, but that the intervention had no significant effect on satisfaction, organizational climate, or employee perceptions of management.

The study also revealed that there was a significant difference *between* the treatment and control groups in the area of perceived productivity. On the pretest the treatment group scored significantly lower than the control group, whereas on the posttest and treatment group scored significantly higher than the control group.

If there was a statistically significant positive difference only at the postsurvey time, this would be evidence enough to say that the intervention had a profound effect in the area of perceived productivity. However, the statistically significant difference for the pretest in the reverse direction makes the results even more conclusive.

With the following limitations in mind, it can be concluded that the survey feedback program improved perceived productivity.

Limitations

Several constraints existed which are thought to be potentially confounding variables in this research. Specifically, the procedure utilized to obtain the sample, and the sample size itself, are seen as weaknesses that cannot be discounted.

Sampling Technique. It was noted that the senior civilian officer of the organization selected the groups to be involved in the study. Random selection of the sample or of the control and treatment groups did not occur.

Number of Work Groups. The number of work groups involved in the final analysis of the data was small due to the small turnout of participants for the posttest (56 percent). Even with this small turnout, 75 percent of those who took the pretest took the posttest. Based on the selection criteria for those involved in the final analysis, 62 percent of the total sample was represented.

Observations

Model II (Figure 2, page 28) eliminates many of the assumptions involved in other models of survey feedback. By requiring reports, the consulting team can know

that every work group in the treatment group is or is not holding the data feedback session. Model II also aids the consulting team in keeping track of how the program is progressing. Consultants can know that the action planning sessions are or are not being held according to schedule, since each work group is required to submit a report subsequent to each action-planning meeting. The quality of the meetings can also be determined by what is written in the reports that are submitted.

Supervisor commitment and sincerity in this research was ostensibly poor throughout the program. Supervisors gave the survey feedback process a very low priority. According to the reports received at this writing, out of a possible 170 reports required, of those received most were received late, and 120 were not received at all. In general, the supervisors showed their lack of sincerity and commitment by *not adhering to the schedule for meetings, not action-planning* the problems that existed in their work groups, and, where action-planning did occur, giving the majority of their attention to superficial issues.

Some of the first level supervisors indicated there was no commitment at their level because there was no commitment at the upper levels of the treatment group. The executive of the treatment group was one who himself submitted none of the required reports and had very few of

the required meetings. There was a great deal of apathy among the supervisors and some considered the program as another ploy to maneuver them.

As an indication of the positive effects survey feedback can have, it is interesting to compare the results of the treatment group as a whole to that of one group whose supervisor *did* demonstrate a commitment to the program. Out of a possible ten reports, this supervisor submitted all ten. His work group's skill variety, task significance, job performance goals, advancement and recognition, supervisor communication climate, job-related satisfaction, and job-related training scores increased significantly⁵ in comparison to the total treatment group. In addition, the performance barriers score decreased significantly in comparison to the total treatment group.

In discussions with the senior civilian officer and with the treatment executive, it was revealed to the researcher that no "new information" was found in the presurvey data; i.e., the results of the presurvey was what they had expected. The treatment executive was anticipating ". . . more profound discoveries to come out of the survey feedback process." The senior civilian executive refused to believe, in some instances, what his

⁵Significant in this instance indicates that this work group had a Difference Mean of .5 or better than the Difference Mean for the remainder of the treatment group.

employees were telling him. Neither executive appeared to be very enthusiastic about the program.

There are other examples of this noncommitment. Throughout the program, the consultant tried a number of times to contact the treatment executive but rarely was put through and rarely received an answer. On one occasion the consultant had a scheduled meeting with the treatment executive. The executive did not come (he was playing golf), but sent instead a representative who was not at all aware of what was to be discussed.

This lack of support from upper level as well as lower level supervisors contributed significantly to the limited success of the program. When the supervisors do not support the program, the work group members will respond in a like manner.

Recommendations

Additional Research

Because only one of the four areas tested showed significant improvement, it would be difficult at this point to determine if survey feedback should be applied to the remainder of the organization. Since the OAP measures other areas such as Performance Barriers, Job Motivation Index, Job Performance Goals, and many others (as listed in Appendix I), these areas should be investigated for

this organization to help the executive make the decision as to whether to continue with survey feedback or not.

Management Support

First Level. It is the researcher's belief that the survey feedback intervention had only limited success, but that this was due, in no small part, to the poor support the treatment work groups had from their management to the action planning process. As was noted earlier, most work groups did not meet as scheduled nor did they problem-solve around issues of importance when they did meet. A positive attitude from all work group supervisors may very well have resulted in a truly successful program. Additionally, when Survey Feedback is implemented, the first level supervisors should endorse it by providing for sufficient time to hold the required sessions. Instead of treating Survey Feedback as an additional duty, it should be a main part of every supervisor's job, and emphasized as such.

Executive Level. In order for this positive attitude to prevail throughout the organization, upper level management must also demonstrate a commitment to the program. Of course, of greatest importance, the executives must themselves participate, i.e. conduct feedback and action-planning sessions with their immediate subordinates. [And they must provide prompt review of action plans

requiring their attention/referral.) Additionally, the executives should make the program an agenda item at all staff meetings. They should also attend action-planning meetings of their immediate subordinates, review their action plans, and enforce suspense dates. When the lower level supervisors witness a true commitment among the upper level supervisors, they in turn will grasp this commitment.

APPENDICES

APPENDIX A
SUMMARY OF 11 SEPTEMBER 80 MEETING

LSB

Survey Feedback Program

1. To insure accurate expectations, I want to summarize my understanding of our meeting of 11 Sep 80, 1330, in your office.

SCHEDULE:

I informed you of AFIT's decision to enter into a consultation arrangement with given agreements by both over the particulars. We discussed a tentative schedule (Atch 1) and agreed that it was reasonable.

THE CLIENT:

We discussed the question of who the client was to be, since that quickly becomes an important issue in consultant-client relationships. I indicated that in an arrangement such as this where the change program would occur in only one subsystem, a viable model is one in which a single manager superior to the relevant subsystem is the "client" (i.e., yourself), and the manager of the applicable subsystem is what we might call the "key client." Your roll as "client" would be to facilitate the commitment (perceived and real) from above that is so often needed to engender support, and to work those inevitable cross-directorate issues. But to be effective, we also must develop a relationship with, and be able to influence, the manager of the subsystem with which we engage--the "key client." We cannot help those with whom we do not interact, and we must demonstrate that we are not carrying out some secret mandate of higher management. As such, 90% of my time would be spent with the subsystem manager. Of course, if he is unwilling to conduct a Survey Feedback Program in his directorate, it would be unwise to continue. Successful organization development efforts are a process of mutual influence, not imposed programs from above. As appropriate, I would need to meet with you to keep you informed and to seek your assistance when, and if, difficulties arose. Beyond our occasional meetings, your involvement would also include reviewing those action plans requiring review at your level. I understand you to have agreed to these distinctions.

LIAISON:

It was agreed that Messrs. , and would serve as liaisons on a part-time basis to administer the Survey Feedback Program, and that their immediate supervisors would be informed so as to coordinate their work loadings. It was also agreed that the liaisons would be involved to the maximum extent possible to insure a learning outcome/growth experience from this change program.

CONFIDENTIALITY/ANONYMITY OF DATA:

It was agreed that data for any supervisor would be fed back only to that supervisor and his employees, and that it would not be released to his superior except at the supervisor's own discretion.

VOLUNTARISM:

It was agreed that taking the survey itself would be considered voluntary for employees. Each supervisor would, however, be required to participate in the survey feedback irrespective of how many of his employees chose to take the survey.

STUDENT THESIS:

It was agreed that if AFIT students became involved, they could use the Survey Feedback Program as the nucleus of a thesis. When published, would remain anonymous.

SUBSYSTEMS INVOLVED:

It was my understanding that you were as yet undecided as to the specific directorates to be involved either as the survey feedback group or the control (comparison) group.

WHERE DO WE GO FROM HERE?

In accordance with the adopted schedule (Atch 1), we agreed that AFIT would develop a draft survey instrument in preparation for a meeting on or about 15 Oct 80. In attendance at the meeting would be the subsystem manager (i.e., directorate chief) of the group you select to receive the Survey Feedback Program, the liaisons, yourself, and the AFIT Project Team. I understand the agenda of the meeting to be threefold:

- to share the objectives/process of survey feedback with the directorate chief;
- to seek his "go--no go" decision; and
- to review the draft survey instrument.

Let me suggest that the first two agenda items would best be accomplished in an interim meeting between yourself, the appropriate directorate chief, and I, where he can be more open and at ease in making his decision. If you concur, I am available at your convenience. A subsequent meeting could then take place (on or about 15 October) to review the draft survey. Your presence at this subsequent meeting would not be required unless you so desired.

2. I appreciate the opportunity to meet with you, and I respect your desire to improve your organization. Many managers do not. We in AFIT are excited about this joint effort and look forward to a mutually beneficial experience. I will await your call.

RUSSELL F. LLOYD, Major, USAF
Assistant Professor of Management
Department of Organizational Sciences
School of Systems and Logistics

1 Atch
Survey Feedback
Program

APPENDIX B
OUTCOMES OF 14 OCTOBER 80 MEETING



DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTITUTE OF TECHNOLOGY (ATIC)
WRIGHT PATTERSON AIR FORCE BASE, OH 45433

20 OCT 1980

LSB

Survey Feedback Program

1. I want to offer some of my thoughts regarding attitude surveys, and to summarize my understanding of the outcomes of our 14 October 1980 meeting at 1430 with
2. Many consultants take management's viewpoint. I attempt to take an organizational perspective; that is, what's in the long-term best interests of as a system with a mission. While you as top management and the client must be wholly involved and committed to a survey of employee attitudes, the organization as a whole must be similarly involved. I, therefore, attempt to insure the participation both of top management and of the employees being surveyed in the design of the survey, as well as in working its outcomes in order to increase organizational effectiveness.
3. In my judgment, the major objective of an attitude survey is to increase organizational effectiveness. Why are so many surveys unsuccessful and why do they create more skepticism than anything else? The answers to these questions lie (a) in management's not understanding that a survey is more than a reading of present attitudes, it is an opportunity to involve people in building on existing organizational strengths and in addressing real problems so as to enhance effectiveness at the level of each employee's job, and (b) a second reason so many surveys fail to produce much of any consequence is that while consultants encourage the feedback of survey results to those who participate in the survey, they fail to understand that managers must be held accountable both for effective action in response to problems as well as for feeding back information learned in the survey.
4. In summary, it is important (a) that top management sponsor the survey via its involvement and commitment to it; (b) that both top management and the employees being surveyed be involved in the construction of the survey so that top management receives information about what it needs to know, and the employees surveyed are able to say what they want their own management to hear; (c) that management make two commitments--the first is to feedback what is learned from the survey to the people who provided the input, and second to listen carefully and, where possible, to act in meaningful ways on those problems that are identified; and finally, (d) that top management hold their key managers accountable for follow-up with their subordinates on any problems which are identified.

5. In our discussions we selected the following divisions to comprise either the treatment or the control group:

TREATMENT GROUPS

CONTROL GROUPS

Additionally, , and will be surveyed at the premeasure after which a decision will be made as to whether to add them to the treatment group. It is my understanding that we all agreed to the above.

6. There is some unfinished business that requires attention. I have sent Messrs. , and (hereafter referred to as the "liaisons") copies of sample action-plans in order that they could tailor-make one for . All of the division/branch managers in the treatment group (not the control group), in addition to Mr. , should have input into the design of this form. Obviously, the notion of this program should be presented to them beforehand by Mr. . Also, I have asked the liaisons to begin to make the arrangements (i.e., optimum time, place, etc.) for the premeasure, and to coordinate that with all of the appropriate directorate/division chiefs in both the treatment and control groups. Of course, before these individuals are approached with prospective dates and places for the premeasure, they need to be informed of the program. Let me recommend that at the next Staff Meeting you announce this "pilot" program, and which directorate/divisions have been selected to participate. Permit me to caution you that, to the maximum extent possible, we do not want to reveal the distinction between what we know as the "treatment" and the "control" groups. Finally, we in AFIT are concluding the rough draft survey and will o/a 23 October 1980 offer that to for additions. I would suggest a meeting at which all parties from AFIT and are in attendance.

Russell F. Lloyd
RUSSELL F. LLOYD, Major, USAF
Asst Prof of Management
Department of Organizational Sciences
School of Systems and Logistics

Cy Lo:

Lt Col Hendrix (AFIT/LSB)
Maj Ovalle (AFIT/LSB)
Maj Stewart (AFIT/LSB)
1Lt Fiorini (AFIT/LSOG)

APPENDIX C
TENTATIVE SCHEDULE OF EVENTS

SURVEY FEEDBACK PROGRAM

Project Leader - Maj Russ Lloyd

Project Members - Lt Col Herlie Hendrix
Maj Todd Stewart
Maj Nick Ovalle

Student Assistants -

MILESTONES

<u>TASK</u>		<u>DATE DONE BY</u>
Develop Draft Survey Instrument	AFIT	15 Oct 80
Finalize Survey Instrument	AFIT	1 Nov 80
Type & Proof Survey in Final		7 Nov 80
Print Survey		15 Nov 80
1st Administration of Survey (Pre-measure)	AFIT	o/a 15 Nov 80
Data Analysis	AFIT	15 Dec 80
Prepare Feedback Packages	AFIT	1 Jan 81
Develop Feedback Training Program for Supv.	AFIT	1 Jan 81
First Feedback/Action Planning Meeting by Supv.	AFIT	15 Jan 81
Post-Measure	AFIT	1 Apr 81

APPENDIX D
SUMMARY OF THE PREMEASURE



DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTITUTE OF TECHNOLOGY (ATC)
WRIGHT-PATTERSON AIR FORCE BASE, OH 45433

12 DEC 1980

REPLY TO
ATTN OF LSB

SUBJECT Survey Feedback Program

TO

1. I want to take this opportunity to review where we are and where we are going.

a. The first survey (pre-measure) was given on 21, 24, and 25 November 1980. It then took until 5 December 1980 to survey, on an individual basis, those key supervisors who, for a variety of reasons, were unable to take the survey when initially offered.

b. We have surveyed all who we are going to get. Out of a possible 229 employees in both the treatment and control groups, 191 participated. That is an 83% participation rate and is acceptable. A breakdown by treatment and control group is as follows:

- | | | | | | | |
|---------------------|---|------------|--------|------------|--------------|-------------|
| (1) Treatment Group | : | <u>74</u> | out of | <u>96</u> | employees -- | <u>77 %</u> |
| (2) Control Groups | : | <u>117</u> | out of | <u>133</u> | employees -- | <u>88 %</u> |

c. The answer sheets are presently being statistically analyzed after which feedback packages will be prepared for each supervisor from yourself down to branch/section level. I expect to have that completed by 1 January 1980.

d. Concurrent with c. above, I am developing the survey feedback training program for the supervisors and will have that completed on schedule, approximately by 15 January 1980.

e. The training can take place any time after 15 January 1980 with the systematic feedback sessions commencing immediately afterwards.

2. With respect to the frequency we require the supervisors to meet with their subordinates (and to develop action plans), I would suggest every two weeks (i.e., semimonthly). A lesser frequency results in lethargy in the action planning process, and a greater frequency can easily become disruptive to the primary mission. I will be chatting with you on this later as it will involve your support.

3. Due to fatigue and time factors, a survey is necessarily limited in the topical areas it addresses. For that reason, it is advisable to collect data on those topical areas deemed important, but not addressed in the survey,

through other means. I have asked the liaisons to conduct interviews with a small but representative sample of employees, and I have given them some suggested questions to review. We will shortly make decisions on those topical areas, select the sample and conduct the interviews. These interviews would be conducted again after the next survey.

4. In addition to the interviews, I want to suggest that you send letters to all employees in both the treatment and control groups. This is desirable for at least four reasons: (a) it gets you involved; (b) it gives you an opportunity to collect data on topical areas that you personally have an interest in; (c) it reinforces the perception that top management is involved and is sincere in its commitment to the program; and (d) it increases the likelihood that we are providing employees with the opportunity to say what they want management to hear. Attachment 1 is a suggested letter format for you to use. Attachment 2 contains examples of open-ended questions you might want to include in paragraphs 4a and 4b of your letter.

5. If you have any questions I am, of course, at your service. Otherwise, I will contact you after the holidays. I wish you a blessed holiday season.

Russell F. Lloyd

RUSSELL F. LLOYD, Major, USAF
Asst Prof of Organizational Behavior
Department of Organizational Sciences
School of Systems and Logistics

2 Atch

1. Letter Format
2. Sample Questions

Cy to:

Lt Col Hendrix (AFIT/LSB)
Maj O'valle (AFIT/LSB)
Maj Stewart (AFIT/LSB)
Capt Fiorini (AFIT/LSOG)

AFIT/LSB (Attn: Maj Lloyd)

Survey Feedback Program

Members of _____

1. I want to thank you for your recent participation in the organizational survey given by AFIT. I am anxious to see the results and am committed to making whatever change(s) we can to improve the quality of work life and the effectiveness of our deputate.
2. I want to make a personal request of you. The topical areas addressed in a survey are necessarily limited, so to insure that we in management are exposed to all you desire to say to us, I need your honest response to the questions which follow. Your candor will assist us in more fully appreciating those areas that need our attention.
3. Your individual responses to these questions will not be seen by any member of the deputate; rather, the AFIT consulting team will aggregate the information you provide and brief me and appropriate managers on the average responses.
4. Please respond to the following questions. You may write on the back or on an additional page(s) if necessary.

a. Question #1: _____

b. Question #2: _____

c. Additional Comments: _____

5. Thank you for your assistance. I look forward to working with all of you in the future as we strive to implement needed change.

EXAMPLES OF OPEN-ENDED QUESTIONS

Section A. Sample inputs are provided below as an aid in helping develop the open-ended questions. The word/words can be placed in the blank spaces in the questions provided in Section B.

1. Work Group: Section, Branch, Division, Directorate, Deputate
2. Supervisor
3. Division Chief, Directorate Chief, DCS, Chief of Staff, MAJCOM CV or CC
4. ___ vs. ___; ___ vs. the Front Office; ___ vs. OTHER; etc.

Section B. Questions.

1. What is the greatest barrier to accomplishing your #1 mission objectives?
2. What is the greatest contributing factor to the success of your #1?
3. What could be done to improve your #1 or #2 effectiveness?
4. What are the problems in the #1 structure that impair your effectiveness?
5. What do you like the most about your #1, #2, or #3?
6. What do you like least about your #1, #2, or #3?
7. What would you change to make the #1 or #2 better?
8. If you were selected to represent your #1 or #2 at a one-time private discussion with #3, what would your #1 or #2 want you to talk about? Why?
9. What is not, but should be, discussed at your Commander's Call?
10. Describe the biggest annoyance/aggravation about your job?
11. How do you perceive the relationship between #4 and #4?
12. How could your #2 or #3 be a more effective member?
13. How would you describe the effectiveness of the #1 as a group in your #1?
14. What are your performance standards and your responsibilities?
15. How has your supervisor assisted you to become more competitive for promotion?

16. When you first arrived at #1 , what was your impression?
17. How has your initial impression changed?
18. What is the one best thing you like about your job?
19. What is the least thing you like about your job?
20. You have been asked to comment on many areas. However, perhaps areas of special concern to you may not have been addressed. Please take this opportunity to discuss your special concerns.

APPENDIX E
SUPERVISOR TRAINING AGENDA

AGENDA - First Day, 26 January 1981

0830 Welcome/Introduction by General /Mr.
0845 Warm-Up
0900-1045 Understanding the Data
1045-1100 Coffee Break
1100-1200 Review Own Data - Q&A
1200-1300 LUNCH
1300-1430 State of the _____ Message
How to Conduct First Feedback Meeting
 Its Objective
 Suggestions for Analyzing the Data
 Suggestions for Preparing the Presentation
 Suggestions for What to Say . . . Or Not to Say
 Suggestions About What to Do . . . And Not to Do
 Suggested Agenda
 Scheduling
 Potential Problems
 Feedback Meeting Report
1430 Coke Break
1445-1600 How to Conduct Action-Planning Meetings
 Their Objective
 Suggested Agenda
 Scheduling
 Potential Problems
 Action Planning Report
1600- Assignment/Adjourn

AGENDA - Second Day, 27 January 1981

0800-0815 Introduction to Role Playing
0815-1000 Role Playing
 4 Groups of 4
 Do Iteratively
 Critique After Each
1000-1015 Coffee Break
1015-1200 Role Playing
1200-1230 Critique/Adjourn

APPENDIX F
ACTION PLANNING MEETING SCHEDULE

Meeting Schedule

13 Feb

27 Feb

13 Mar

27 Mar

10 Apr

24 Apr

8 May

29 May

12 Jun

26 Jun

APPENDIX G
LETTER FROM CONSULTANT TO TREATMENT
EXECUTIVE, 11 MARCH 81



DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTITUTE OF TECHNOLOGY (AFIT)
WHIGHT-PATTERSON AIR FORCE BASE, OH 45433

11 March 1981

REPLY TO: LSB

SUBJECT: Survey Feedback Program

1. I am concerned about the quality of the Survey Feedback Program now underway. At this writing, two individuals (yourself and Mr.) still have not submitted their Initial Survey Feedback Meeting Report which was due on 13 February 1981, a month ago. Concerning the first Supervisor Bi-Monthly Action Plan Report due two weeks ago (27 Feb 81), only three of the 17 supervisors have complied. Again, you are among those who have not. At this writing, we are two days away from the due date for the second Action Plan Report and 14 supervisors have yet to comply to the first.

2. During the week of 2-6 March 1981, I attempted to contact you four times, on each occasion leaving a message with your secretary asking you to return the call. I did not hear from you. I called a fifth time and left a message for you to call me either during or after your daily . As of yet, I have not heard from you.

3. I truly regret having to write this letter, , but the integrity of the Survey Feedback Program is literally at stake. A characteristic of these programs is a propensity to become lethargic and eventually stall out. It must be managed closely to preclude this. In addition to noncompliance with suspense dates, there are additional issues which require our attention, and there will be yet others in the months ahead.

4. Please contact me so that we may rectify this situation and place in being a procedure which will safeguard the program and maximize its likelihood of benefiting . It is my desire that we work closely together in this effort.

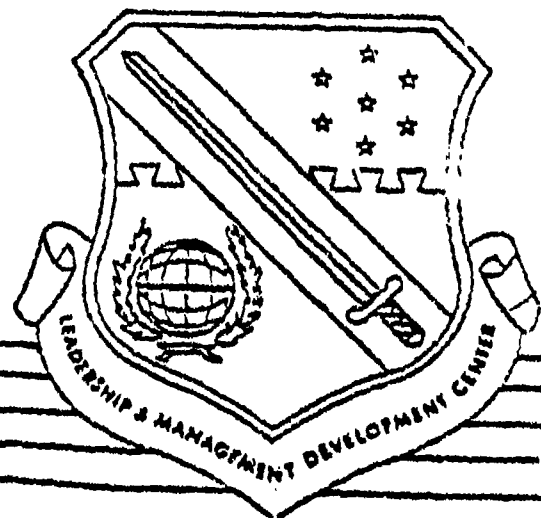
RUSSELL F. LLOYD, Major, USAF
Asst Prof of Organizational Behavior
Department of Organizational Sciences
School of Systems and Logistics

Cy to:

AFIT/LSB (Lt Col Hendrix)
AFIT/LSB (Maj Ovalle)
AFIT/LSB (Maj Stewart)
AFIT/LSOG (Capt Fiorino)

APPENDIX H
ORGANIZATIONAL ASSESSMENT PACKAGE

**ORGANIZATIONAL
ASSESSMENT
PACKAGE**



PRIVACY ACT STATEMENT

In accordance with paragraph 30, AFR 12-35, The Air Force Privacy Act Program, the following information about this survey is provided:

a. Authority: 10 U.S.C., 8012, Secretary of the Air Force: Powers and Duties, Delegation by Compensation E. O. 9397, 22 Nov 43, Numbering System for Federal Accounts Relating to Individual Persons.

b. Principal Purpose: The survey is being conducted to assess your organization from a leadership and management perspective.

c. Routine Uses: Information provided by respondents will be treated confidentially. The averaged data will be used for organizational strength and weakness identification and Air Force wide research and development purposes.

d. Participation: Response to this survey is voluntary. Your cooperation in this effort is appreciated.

[PLEASE DO NOT TEAR, MARK ON, OR OTHERWISE DAMAGE THIS BOOKLET.]

EXPIRATION DATE: 31 Dec 1980

SCN 30-23

GENERAL INFORMATION

The leaders of your organization are genuinely interested in improving the overall conditions within their areas of responsibility. Providing a more satisfying Air Force way of life and increasing organizational effectiveness are also goals. One method of reaching these goals is by continual refinement of the management processes of the Air Force. Areas of concern include job related issues such as leadership and management; training and utilization; motivation of and concern for people; and the communication process.

This survey is intended to provide a means of identifying areas within your organization needing the greatest emphasis in the immediate future. You will be asked questions about your job, work group, supervisor, and organization. For the results to be useful, it is important that you respond to each statement thoughtfully, honestly, and as frankly as possible. Remember, this is not a test, there are no right or wrong responses.

Your completed response sheet will be processed by automated equipment, and be summarized in statistical form. Your individual response will remain confidential, as it will be combined with the responses of many other persons, and used for organizational feedback and possibly Air Force wide studies.

KEY WORDS

The following should be considered as key words throughout the survey:

- Supervisor : The person to whom you report directly.
- Work Group : All persons who report to the same supervisor that you do.
- Organization : Your directorate/division/branch/section, etc.

INSTRUCTIONS

1. All statements may be answered by filling in the appropriate spaces on the response sheet provided. If you do not find a response that fits your case exactly, use the one that is the closest to the way you feel.

2. Be sure that you have completed Section 1 of the response sheet, as instructed by the survey administrator, before beginning Section 2.

3. Please use the pencil provided, and observe the following:

--Make heavy black marks that fill the spaces.

--Erase cleanly any responses you wish to change.

--Make no stray markings of any kind on the response sheet.

--Do not staple, fold or tear the response sheet.

--Do not make any markings on the survey booklet.

4. The response sheet has a 0-7 scale. The survey statements normally require a 1-7 response. Use the zero (0) response only if the statement truly does not apply to your situation. Statements are responded to by marking the appropriate space on the response sheet as in the following example:

Using the scale below, evaluate the sample statement.

1 = Strongly disagree

5 = Slightly agree

2 = Moderately disagree

6 = Moderately agree

3 = Slightly disagree

7 = Strongly agree

4 = Neither agree nor disagree

Sample Statement. The information your work group receives from other work groups is helpful.

If you moderately agree with the sample statement, you would blacken the oval (6) on the response sheet.

Sample Response:

NA

⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙
⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙
⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙
⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙
⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙

5. When you have completed the survey, please turn in the survey materials as instructed in the introduction.

BACKGROUND INFORMATION

This section of the survey concerns your background. The information requested is to insure that the groups you belong to are accurately represented and not to identify you as an individual. Please use the separate response sheet and darken the oval which corresponds to your response to each question.

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 8 years.
6. More than 8 years.

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.

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.

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.

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

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

7. Highest level of professional military education (residence or correspondence):

0. None or not applicable
1. NCO Orientation Course or USAF Supervisor Course (NCO Phase 1 or 2)
2. NCO Leadership School (NCO Phase 3)
3. NCO Academy (NCO Phase 4)
4. Senior NCO Academy (NCO Phase 5)
5. Squadron Officer School
6. Intermediate Service School (i.e., ACSC, AFSC)
7. Senior Service School (i.e., AWC, ICAF, NWC)

8. How many people do you directly supervise?

- | | |
|---------|--------------|
| 1. None | 5. 4 to 5 |
| 2. 1 | 6. 6 to 8 |
| 3. 2 | 7. 9 or more |
| 4. 3 | |

9. For how many people do you write performance reports?

- | | |
|---------|--------------|
| 1. None | 5. 4 to 5 |
| 2. 1 | 6. 6 to 8 |
| 3. 2 | 7. 9 or more |
| 4. 3 | |

10. Does your supervisor actually write your performance reports?

- | | | |
|--------|-------|-------------|
| 1. yes | 2. no | 3. not sure |
|--------|-------|-------------|

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.
12. What is your usual work schedule?
1. Day shift, normally stable hours
 2. Swing shift (about 1600-2400)
 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
13. How often does your supervisor hold group meetings?
1. Never
 2. Occasionally
 3. Monthly
 4. Weekly
 5. Daily
 6. Continuously
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
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
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 as a career
 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

JOB INVENTORY

Below are items which relate to your job. Read each statement carefully and then decide to what extent the statement is true of your job. Indicate the extent to which the statement is true for your job by choosing the phrase which best represents your job.

- | | |
|-----------------------------|------------------------------|
| 1 = Not at all | 5 = To a fairly large extent |
| 2 = To a very little extent | 6 = To a great extent |
| 3 = To a little extent | 7 = To a very great extent |
| 4 = To a moderate extent | |

Select the corresponding number for each question and enter it on the separate response sheet.

17. To what extent does your job require you to do many different things, using a variety of your talents and skills?
18. To what extent does your job involve doing a whole task or unit of work?
19. To what extent is your job significant, in that it affects others in some important way?
20. To what extent does your job provide a great deal of freedom and independence in scheduling your work?
21. To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?
22. To what extent are you able to determine how well you are doing your job without feedback from anyone else?
23. To what extent do additional duties interfere with the performance of your primary job?
24. To what extent do you have adequate tools and equipment to accomplish your job?
25. To what extent is the amount of work space provided adequate?
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?
27. To what extent does doing your job well affect a lot of people?
28. To what extent does your job provide you with the chance to finish completely the piece of work you have begun?

- | | |
|-----------------------------|------------------------------|
| 1 - Not at all | 5 - To a fairly large extent |
| 2 - To a very little extent | 6 - To a great extent |
| 3 - To a little extent | 7 - To a very great extent |
| 4 - To a moderate extent | |

29. To what extent does your job require you to use a number of complex skills?
30. To what extent does your job give you freedom to do your work as you see fit?
31. To what extent are you allowed to make the major decisions required to perform your job well?
32. To what extent are you proud of your job?
33. To what extent do you feel accountable to your supervisor in accomplishing your job?
34. To what extent do you know exactly what is expected of you in performing your job?
35. To what extent are your job performance goals difficult to accomplish?
36. To what extent are your job performance goals clear?
37. To what extent are your job performance goals specific?
38. To what extent are your job performance goals realistic?
39. To what extent do you perform the same tasks repeatedly within a short period of time?
40. To what extent are you faced with the same type of problem on a weekly basis?
41. To what extent are you aware of promotion/advancement opportunities that affect you?
42. To what extent do co-workers in your work group maintain high standards of performance?
43. To what extent do you have the opportunity to progress up your career ladder?
44. To what extent are you being prepared to accept increased responsibility?
45. To what extent do people who perform well receive recognition?
46. To what extent does your work give you a feeling of pride?

- | | |
|-----------------------------|------------------------------|
| 1 = Not at all | 5 = To a fairly large extent |
| 2 = To a very little extent | 6 = To a great extent |
| 3 = To a little extent | 7 = To a very great extent |
| 4 = To a moderate extent | |

47. To what extent do you have the opportunity to learn skills which will improve your promotion potential?
48. To what extent do you have the necessary supplies to accomplish your job?
49. To what extent do details (tasks not covered by primary or additional duty descriptions) interfere with the performance of your primary job?
50. To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?

JOB DESIRES

The statements below deal with job related characteristics. Read each statement and choose the response which best represents how much you would like to have each characteristic in your job.

In my job, I would like to have the characteristics described:

- | | |
|---------------------------|-------------------------------|
| 1 = Not at all | 5 = A large amount |
| 2 = A slight amount | 6 = A very large amount |
| 3 = A moderate amount | 7 = An extremely large amount |
| 4 = A fairly large amount | |

51. Opportunities to have independence in my work.
52. A job that is meaningful.
53. The opportunity for personal growth in my job.
54. Opportunities in my work to use my skills.
55. Opportunities to perform a variety of tasks.
56. A job in which tasks are repetitive.
57. A job in which tasks are relatively easy to accomplish.

SUPERVISION

The statements below describe characteristics of managers or supervisors. Indicate your agreement by choosing the phrase which best represents your attitude concerning your supervisor.

- | | |
|--------------------------------|----------------------|
| 1 = Strongly disagree | 5 = Slightly agree |
| 2 = Moderately disagree | 6 = Moderately agree |
| 3 = Slightly disagree | 7 = Strongly agree |
| 4 = Neither agree nor disagree | |

Select the corresponding number for each statement and enter it on the separate response sheet.

58. My supervisor is a good planner.
59. My supervisor sets high performance standards.
60. My supervisor encourages teamwork.
61. My supervisor represents the group at all times.
62. My supervisor establishes good work procedures.
63. My supervisor has made his responsibilities clear to the group.
64. My supervisor fully explains procedures to each group member.
65. My supervisor performs well under pressure.
66. My supervisor takes time to help me when needed.
67. My supervisor asks members for their ideas on task improvements.
68. My supervisor explains how my job contributes to the overall mission.
69. My supervisor helps me set specific goals.
70. My supervisor lets me know when I am doing a good job.
71. My supervisor lets me know when I am doing a poor job.
72. My supervisor always helps me improve my performance.
73. My supervisor insures that I get job related training when needed.
74. My job performance has improved due to feedback received from my supervisor.

75. When I need technical advice, I usually go to my supervisor.
76. My supervisor frequently gives me feedback on how well I am doing my job.

WORK GROUP PRODUCTIVITY

The statements below deal with the output of your work group. The term "your work group" refers to you and your co-workers who work for the same supervisor. Indicate your agreement with the statement by selecting the phrase which best expresses your opinion.

- | | |
|-------------------------|--------------------------------|
| 1 = Strongly disagree | 4 = Neither agree nor disagree |
| 2 = Moderately disagree | 5 = Slightly agree |
| 3 = Slightly disagree | 6 = Moderately agree |
| | 7 = Strongly agree |

Select the corresponding number for each statement and enter it on the separate response sheet.

77. The quantity of output of your work group is very high.
78. The quality of output of your work group is very high.
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.
80. Your work group always gets maximum output from available resources (e.g., personnel and material).
81. Your work group's performance in comparison to similar work groups is very high.

ORGANIZATION CLIMATE

Below are items which describe characteristics of your organization. The term "your organization" refers to your squadron or staff agency. Indicate your agreement by choosing the phrase which best represents your opinion concerning your organization.

- | | |
|--------------------------------|----------------------|
| 1 = Strongly disagree | 5 = Slightly agree |
| 2 = Moderately disagree | 6 = Moderately agree |
| 3 = Slightly disagree | 7 = Strongly agree |
| 4 = Neither agree nor disagree | |

Select the corresponding number for each item and enter it on the separate response sheet.

- | | |
|-------------------------------|----------------------|
| 1 = Strongly disagree | 5 = Slightly agree |
| 2 = Moderately disagree | 6 = Moderately agree |
| 3 = Slightly disagree | 7 = Strongly agree |
| 4 = Neither agree or disagree | |

82. Ideas developed by my work group are readily accepted by management personnel above my supervisor.
83. My organization provides all the necessary information for me to do my job effectively.
84. My organization provides adequate information to my work group.
85. My work group is usually aware of important events and situations.
86. My complaints are aired satisfactorily.
87. My organization is very interested in the attitudes of the group members toward their jobs.
88. My organization has a very strong interest in the welfare of its people.
89. I am very proud to work for this organization.
90. I feel responsible to my organization in accomplishing its mission.
91. The information in my organization is widely shared so that those needing it have it available.
92. Personnel in my unit are recognized for outstanding performance.
93. I am usually given the opportunity to show or demonstrate my work to others.
94. There is a high spirit of teamwork among my co-workers.
95. There is outstanding cooperation between work groups of my organization.
96. My organization has clear-cut goals.
97. I feel motivated to contribute my best efforts to the mission of my organization.
98. My organization rewards individuals based on performance.
99. The goals of my organization are reasonable.
100. My organization provides accurate information to my work group.

JOA RELATED ISSUES

The items below are used to determine how satisfied you are with specific job related issues. Indicate your degree of satisfaction or dissatisfaction with each issue by choosing the most appropriate phrase.

- | | |
|--|--------------------------|
| 1 = Extremely dissatisfied | 5 = Slightly satisfied |
| 2 = Moderately dissatisfied | 6 = Moderately satisfied |
| 3 = Slightly dissatisfied | 7 = Extremely satisfied |
| 4 = Neither satisfied nor dissatisfied | |

Select the corresponding number for each question and enter it on the separate response sheet

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.
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.
103. Family Attitude Toward Job
The recognition and the pride my family has in the work I do.
104. On-the-Job Training (OJT)
The OJT instructional methods and instructors' competence.
105. Technical Training (Other than OJT)
The technical training I have received to perform my current job.
106. Work Schedule
My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.
107. Job Security
108. Acquired Valuable Skills
The chance to acquire valuable skills in my job which prepare me for future opportunities.
109. My Job as a Whole

THE ITEMS BELOW RELATE TO ASPECTS OF YOUR WORK AND YOUR WORK ENVIRONMENT.

- | | |
|-----------------------------|--|
| 0 = Not applicable | 4 = Neither satisfied nor dissatisfied |
| 1 = Extremely dissatisfied | 5 = Slightly satisfied |
| 2 = Moderately dissatisfied | 6 = Moderately satisfied |
| 3 = Slightly dissatisfied | 7 = Extremely satisfied |

Select one of the above responses for questions 110-114 and enter it on the separate response sheet. How satisfied are you with:

- 110. The performance of the Word Processing Center.
 - 111. The performance of the Administrative Support Cluster.
 - 112. The performance appraisal system.
 - 113. The merit promotion system.
 - 114. The orientation/indoctrination given to new employees by your organization.
-

- | | |
|------------------|----------------|
| 1 = Never | 5 = Often |
| 2 = Very Seldom | 6 = Very often |
| 3 = Seldom | 7 = Always |
| 4 = Occasionally | |

Select one of the above responses for question 115 and enter it on the separate response sheet.

- 115. My immediate supervisor treats all persons in our work group as equals.
-

- | | |
|--------------------------------|--------------------|
| 1 = Strongly disagree | 5 = Slightly agree |
| 2 = Disagree | 6 = Agree |
| 3 = Slightly disagree | 7 = Strongly agree |
| 4 = Neither agree nor disagree | |

Select one of the above responses for questions 116-118 and enter it on the separate response sheet.

- 116. I don't care what happens to this organization as long as I get my pay check.
 - 117. I have too much work to do to do everything well.
 - 118. Groups around here just don't cooperate with each other.
-

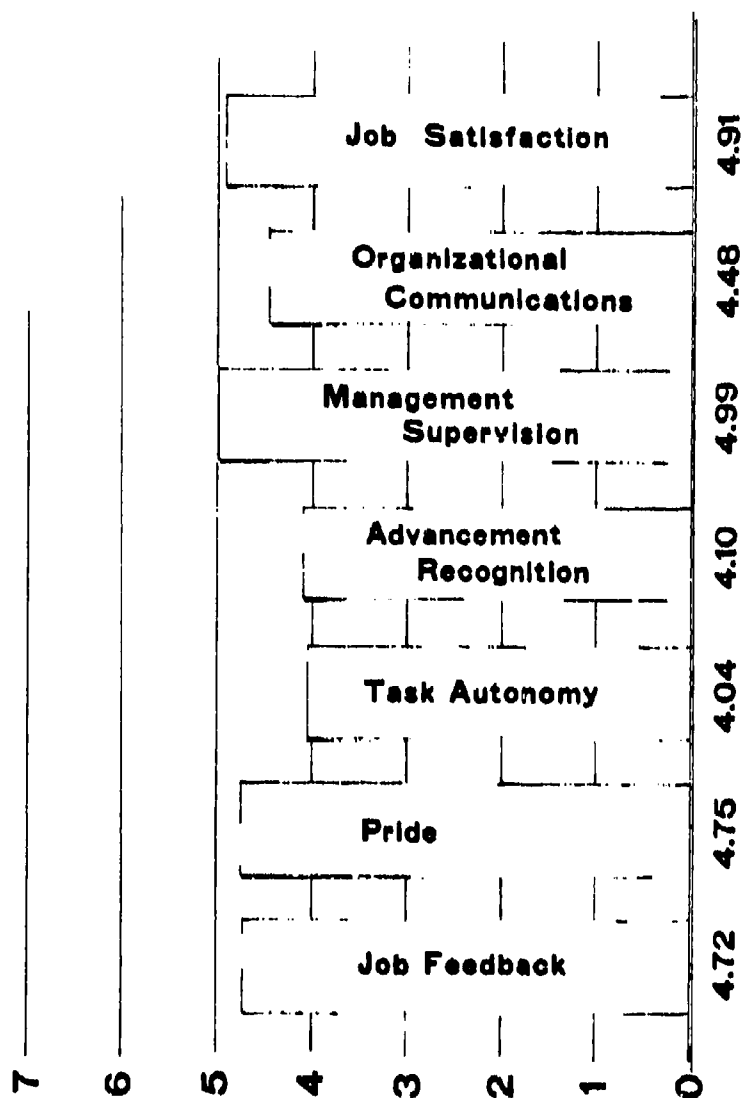
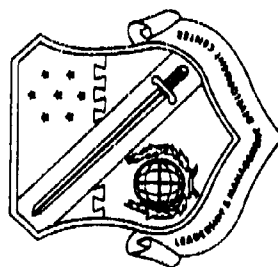
- | | |
|-----------------------------|------------------------------|
| 1 = Not at all | 5 = To a fairly large extent |
| 2 = To a very little extent | 6 = To a great extent |
| 3 = To a little extent | 7 = To a very great extent |
| 4 = To a moderate extent | |

Select one of the above responses for questions 119 and 120 and enter it on the separate response sheet.

- 119. How likely is it that you will actively look for a new job in the next year?
- 120. To what extent is the temperature of your work area comfortable?

APPENDIX I
ORGANIZATIONAL ASSESSMENT PACKAGE OUTPUT

ORGANIZATIONAL ASSESSMENT PACKAGE OUTPUT



ORGANIZATIONAL ASSESSMENT PACKAGE OUTPUT

The Organizational Assessment Package (OAP) was developed for use by the Air Force Leadership and Management Development Center (LMDC), Maxwell AFB, Alabama. The LMDC mission includes (a) providing management consultation services to Air Force commanders, (b) providing leadership and management training to Air Force personnel in their work environment, and (c) performing research in support of (a) and (b). The consultative role involves organizational problem area identification and recommendations for resolving problems identified.

The OAP was designed to support the mission objectives of LMDC. First, the OAP provides a means of identifying existing strengths and weaknesses within organizational work groups and aggregated work groups, such as directorates. Second, research results can be fed back into Professional Military Education curricula; other leadership and management training courses; and when action is required, to Air Staff and functional offices of primary responsibility. Third, the OAP data base established can be used for research to strengthen the overall Air Force organizational effectiveness program.

EXTERNALLY CODED DESCRIPTORS

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

FACTORS

Survey Version: OAP 14 Feb 79

FACTOR: DEMOGRAPHIC (NOT A STATISTICAL FACTOR)

SECTION A

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

SECTION B

VARIABLE NUMBER	STATEMENT NUMBER	STATEMENT
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 8 years
		6. More than 8 years

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.
		NOTE: Variable 008, statement 11 was added to the OAP on 19 Jan 80 and replaced variable 014 which appears on page 3. Although no longer used Variable 014 is still shown because data collected from about 25,000 samples for this variable is still in the data base.

VARIABLE NUMBER	STATEMENT NUMBER	STATEMENT
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. MCO Orientation Course or USAF Supervisor Course (MCO Phase 1 or 2) 2. MCO Leadership School (MCO Phase 3) 3. MCO Academy (MCO Phase 4) 4. Senior MCO Academy (MCO Phase 5) 5. Squadron Officer School 6. Intermediate Service School (i.e., ACSC, AFSC) 7. Senior Service School (i.e., AIC, ICAF, MAC)
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 reports? 1. Yes 2. No 3. Not sure

VARIABLE
NUMBER

STATEMENT
NUMBER

014

11

STATEMENT

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 1600-2400)
3. Mid shift (about 2400-0800)
4. Rotating shift schedule
5. Day or shift work with irregular/unstable hours
6. Frequent IDI/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

STATEMENT
NUMBER

019

16

STATEMENT

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

FACTORS, 800 SERIES: Each 800 series factor consists of two or more variables which correspond to statements in the OAP. 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

VARIABLE
NUMBER

STATEMENT
NUMBER

201

17

STATEMENT

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

VARIABLE
NUMBER

STATEMENT
NUMBER

202

18

STATEMENT

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

211

28

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

VARIABLE NUMBER	STATEMENT NUMBER
--------------------	---------------------

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

VARIABLE NUMBER	STATEMENT NUMBER
--------------------	---------------------

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: PERFORMANCE BARRIERS/BLOCKAGES

VARIABLE NUMBER	STATEMENT NUMBER
--------------------	---------------------

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

FACTOR 806: NEED FOR ENRICHMENT INDEX (JOB DESIRES)

VARIABLE NUMBER	STATEMENT NUMBER
--------------------	---------------------

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

Index is computed using the following factors:

800	Skill variety
801	Task identity
802	Task significance
805	Performance barriers/blockages
813	Task autonomy
814	Work repetition

Formula (800+801+802+805)/4)+813+804

FACTOR 808: DJI TOTAL SCORE

Score is computed using the variables in the following formula:

(V201+V202+V203+V270+V271+V272
+8-V206+V207+V208+V205+V210
+V211+V212+V213)

FACTOR 809: JOB MOTIVATION INDEX ---- ADDITIVE

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

FORMULA: $(800+801+802+803)/4 + 813 + 804$

FACTOR 810: JOB PERFORMANCE GOALS

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?
219	36	To what extent are your job performance goals clear?
214	37	To what extent are your job performance goals specific?
221	38	To what extent are your job performance goals realistic?

FACTOR 811: PRIDE

VARIABLE NUMBER	STATEMENT NUMBER	STATEMENT
215	32	To what extent are you proud of your job?
215	46	To what extent does your work give you a feeling of pride?

FACTOR 812: TASK CHARACTERISTICS

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?
212	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

VARIABLE NUMBER	STATEMENT NUMBER	STATEMENT
210	20	To what extent does your job provide a great deal of freedom and independence in scheduling your work?
211	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?

FACTOR 814: WORK REPETITION

VARIABLE 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

VARIABLE 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
-----------------	-----------

216 33 To what extent do you feel accountable to your supervisor in accomplishing your job?

230 42 To what extent do co-workers in your work group maintain high standards of performance?

FACTOR 817: ADVANCEMENT/RECOGNITION

VARIABLE 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?

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 46 To what extent do you have the opportunity to learn skills which will improve your promotion potential?

FACTOR 818: MANAGEMENT - SUPERVISION (A)

VARIABLE NUMBER	STATEMENT
-----------------	-----------

404 58 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 - SUPERVISION (B) (NOT A STATISTICAL FACTOR)

VARIABLE NUMBER	STATEMENT
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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 72 When I need technical advice, I usually go to my supervisor

FACTOR 819: SUPERVISOR: COMMUNICATIONS CLIMATE

VARIABLE NUMBER	STATEMENT NUMBER	STATEMENT
426	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

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

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

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)

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?

FACTOR 822: JOB RELATED SATISFACTION

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.
18	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

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.

FACTOR 824: GENERAL ORGANIZATIONAL CLIMATE

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

Score is computed using the following factors:

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

Formula: $(800+801+802)/3 + 813 + 804$

Value range will be from 1 to 343.

APPENDIX J
DEFINITION OF STATISTICAL TERMS

DEFINITION OF STATISTICAL TERMS

- MEAN ($\bar{X}$) - The mean is the average for a given set of numbers.
- STANDARD DEVIATION(S) - The standard deviation of a set of numbers measures the degree to which the scores are dispersed around the mean for that set of numbers. When most numbers of a set of numbers cluster around the mean of the set, the value of the standard deviation will be relatively small; when the numbers are more dispersed from the mean, the value of the standard deviation will be larger. In a normal distribution of data, ± 1 standard deviation unit from the mean include approximately 68% of the data, ± 2 units = 95%, ± 3 units = 99%.
- FACTOR - A factor is a combination of questions each of which solicits information about a common theme. By combining them, the risk of a misinterpretation is minimized and the accuracy (thus meaningfulness) of the score is maximized.

DEFINITION OF FACTORS

CATEGORY 1. WORK ITSELF

A. Job Performance Goals - The degree to which the employee perceives that job goals are present, understood, clear, specific and realistic.

(Range of scores = 1 - 7)

B. Task Characteristics - The degree to which the employee perceives that his/her job requires a variety of skills, is significant in that others are affected, and lets him know when he is doing a good job.

(Range of scores = 1 - 7)

C. Task Autonomy - The degree to which the employee perceives his/her job as providing substantial freedom, independence, and discretion in scheduling the work and in determining the procedures to be used in carrying it out.

(Range of scores = 1 - 7)

D. Work Repetition - The degree to which the employee perceives his/her job as involving the same tasks and problems over and over again.

(Range of scores = 1 - 7)

E. Job Desires - The degree to which the employee would like to have a job which is meaningful, which offers an opportunity for independence and personal growth, and which provides a chance to use his/her skills in a variety of tasks.

(Range of scores = 1 - 7)

F. Desired Repetitive/Easy Tasks - The degree to which the employee would like to have a job which tasks are repetitive and relatively easy to accomplish.

(Range of scores = 1 - 7)

G. Job Influences - The degree to which the employee perceives that he/she is accountable to his/her supervisor, and that co-workers maintain high standards of performance.

(Range of scores = 1 - 7)

H. Job Related Training - The degree to which the employee is satisfied with the OJT and technical training he has received.

(Range of scores = 1 - 7)

CATEGORY 2. WORK GROUP PROCESS

A. Performance Barriers/Blockages - The degree to which the employee perceives that the work space and tools and equipment are adequate, and that additional duties do not interfere with his/her primary job.

(Range of scores = 1 - 7)

B. Work Interferences - The degree to which the employee perceives that adequate supplies are available, and that excessive details and other organizational bottlenecks do not exist.

(Range of scores = 1 - 7)

C. Management-Supervision - The degree to which the employee perceives that his/her supervisor sets high performance standards, encourages teamwork, represents the group at all times, establishes good work procedures, makes his/her responsibilities clear, fully explains procedures and performs well under pressure.

(Range of scores = 1 - 7)

D. Supervisory Assistance - The degree to which the employee perceives that his/her supervisor helps subordinates when needed and gives feedback when work is poor, and the degree to which the employee seeks advice from his supervisor.

(Range of scores = 1 - 7)

E. Supervisory Communications Climate - The degree to which the employee perceives that his/her supervisor is generally communicative; e.g., seeks ideas, helps set specific goals and provides positive feedback.

(Range of scores = 1 - 7)

F. Organizational Communications Climate - The degree to which the employee perceives that there is an ample flow of information within the organization; e.g., ideas are readily accepted by management, information to do an effective job is provided, the employees are kept advised of important events and complaints are aired satisfactorily.

(Range of scores = 1 - 7)

CATEGORY 3. SYSTEM OUTPUT

A. Pride - The degree to which the employee feels a sense of pride in his/her work.

(Range of scores = 1 - 7)

B. Advancement/Recognition - The degree to which the employee is aware of advancement opportunities, is given the chance to acquire skills necessary for promotion, considers himself prepared to accept additional responsibility, and has the opportunity to progress up the career ladder. Includes the employee's perception as to whether or not people who perform well receive the recognition they earn.

(Range of scores = 1 - 7)

C. Work Group Effectiveness - The degree to which the employee perceives the productivity of his/her work group to be of very high quantity and quality and that his/her work group handles well stressful workload situations, gets maximum output from available resources, and is superior in comparison to other work groups' productivity.

(Range of scores = 1 - 7)

D. General Organization Climate - The degree to which the employee perceives the general organizational climate to be favorable in such areas as the interest the organization exhibits toward its members and the spirit of teamwork among co-workers.

(Range of scores = 1 - 7)

E. Job Related Satisfaction - The degree to which the employee is satisfied with his/her job with respect to the opportunities to help others, co-worker relationships, the work schedule, job security, acquired skills, the recognition and pride his/her family has in his/her work, and in general, with his/her job as a whole.

(Range of scores = 1 - 7)

CATEGORY 4. ADDED QUESTION

Q110. Word Processing Center - The degree to which the employee is satisfied with the performance of the Word Processing Center.

(Range of scores = 1 - 7)

Q111. Administrative Support Cluster - The degree to which the employee is satisfied with the performance of the Administrative Support Cluster.

(Range of scores = 1 - 7)

Q112. Performance Appraisal - The degree to which the employee is generally satisfied with the performance appraisal system in being.

(Range of scores = 1 - 7)

Q113. Merit Promotion - The degree to which the employee is generally satisfied with the merit promotion system.

(Range of scores = 1 - 7)

Q114. Orientation/Indoctrination - The degree to which the employee is satisfied with the orientation/indoctrination given to new employees.

(Range of scores = 1 - 7)

Q115. Equal Treatment - The degree to which the employee perceives his supervisor as treating all workers as equals.

(Range of scores = 1 - 7)

Q116. Primary Concern - The degree to which the employee regards only his pay check as important.

(Range of scores = 1 - 7)

Q117. Too Much Work To Do - The degree to which the employee perceives that the volume of work reduces the quality of work.

(Range of scores = 1 - 7)

Q118. Intergroup Cooperation - The degree to which the employee perceives work groups as not cooperating together.

(Range of scores = 1 - 7)

Q119. Turnover - The employee's perception as to the likelihood of him/her actively looking for a new job in the next year.

(Range of scores = 1 - 7)

Q120. Temperature Control - The extent to which the employee perceives the temperature of his/her work area as being comfortable.

CATEGORY 5. JOB ENRICHMENT

A. Skill Variety - The degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the employee.

(Range of scores = 1 - 7)

B. Task Identity - The degree to which the job requires completion of a "whole" and identifiable piece of work--i.e., doing a job from beginning to end with a visible outcome.

(Range of scores = 1 - 7)

C. Task Significance - The degree to which the job has a substantial impact on the lives or work of other people--whether in the immediate organization or in the external environment.

(Range of scores = 1 - 7)

D. Feedback From Job - The degree to which carrying out the work activities required by the job results in the employee obtaining direct and clear information about the effectiveness of his or her performance.

(Range of scores = 1 - 7)

E. Need For Enrichment Index - The degree to which an employee would like to have an enriched job including such things as independence in work, meaningfulness, personal growth, and opportunities to use skills in a variety of tasks.

(Range of scores = 1 - 7)

F. Organizational Job Index (OJI) - An overall measure reflecting the motivating potential of a job in terms of skill variety, task identity, task significance, autonomy and job feedback. Individuals who desire personal feelings of accomplishment and growth are theorized to respond very positively to a job high in motivating potential, whereas individuals who do not value personal growth and accomplishment may find such a job anxiety arousing and may be uncomfortably "stretched" by it.

(Range of scores = 1 - 98)

SELECTED BIBLIOGRAPHY

REFERENCES CITED

1. Adams, Major Jerome, Ph.D., "An Evaluation of Organization Effectiveness," Unpublished doctoral dissertation, Purdue University, December 1977.
2. Blalock, Hubert M. Social Statistics. New York: McGraw-Hill Book Company, Inc., 1960.
3. Bowers, D. G. "OD Techniques and Their Result in 23 Organizations: The Michigan ICL Study," Journal of Applied Behavioral Science, IX, 1973, pp. 21-43.
4. Brown, L. D. "Research Action: Organization Feedback, Understanding, and Change," Journal of Applied Behavioral Science, VIII, 1972, pp. 697-711.
5. Campbell, Donald T., and Julian C. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally College Publishing Company, 1960.
6. Duncan, Major Stewart S. "The Relationship Between Organizational Feedback Mechanisms, Employee Use, and Organizational Outcomes," Unpublished doctoral dissertation, University of Southern California, 1973.
7. Franklin, Jerome L. "Improving the Effectiveness of Survey Feedback," Personnel, May-June 1978, pp. 11-17.
8. French, Wendell L., and Cecil H. Bell, Jr. Organization Development. Englewood Cliffs NJ: Prentice-Hall, Inc., 1978.
9. Friedlander, Frank, and L. Dave Brown. "Organization Development," Annual Review of Psychology, Vol. 25, 1974, pp. 313-341.
10. Frye, Nelson, George Seifert, and Joseph P. Yaney. "Organizational Change Through Feedback and Research (OD) Efforts," Group & Organization Studies, September 1977, pp. 296-309.

11. Hand, H. H., B. G. Estaffen, and H. P. Sims. "How Effective is Data Survey and Feedback as a Technique of OD? An Experiment," Journal of Applied Behavioral Science, Vol. XI, 1975, pp. 333-347.
12. Hautaluoma, J. E., and J. F. Gavin. "Effects of Organizational Diagnosis and Intervention on Blue-collar Blues," Journal of Applied Behavioral Science, Vol. XI, 1975, pp. 475-496.
13. Haythorn, William E. "Survey Feedback in Combat Units in the U.S. Army in Europe: A Pilot Project," Army Project Number 2Q762722A765, July 1977.
14. Hendrix, Lieutenant Colonel William H. "Organizational Assessment Indices of Effectiveness," Research report No. AFHRL-TK-79-46, Air Force Systems Command, Brooks AFB TX, December 1979.
15. Kimberly, J. R., and W. R. Nielsen. "Organization Development and Change in Organization Performance," Administrative Science Quarterly, Vol. XX, 1975, pp. 191-206.
16. Lloyd, Russell Frederick. "Introducing Model II Survey Feedback: A Longitudinal Investigation of the Effects of Traditional Survey Feedback and a Proposed Feedback Style on Job Attributes, Employee Affective Reactions and Organizational Performance Measures," Unpublished doctoral dissertation, Purdue University, August 1977.
17. Mann, F. C. "Studying and Creating Change," The Planning of Change, edited by W. G. Bennis, K. D. Benne, and R. Chin. New York: Holt, Rinehart, and Winston, 1961.
18. McNichols, Charles W. An Introduction to: Applied Multivariate Data Analysis, Course Notes. Wright-Patterson AFB OH: Air Force Institute of Technology, 1980.
19. Miles, M. B., and others. "The Consequences of Survey Feedback Theory and Evaluation," The Planning of Change, edited by W. G. Bennis, K. D. Benne, and R. Chin. New York: Holt, Rinehart, and Winston, 1969.

20. Miller, Ernest C. "Attitude Surveys: A Diagnostic Tool," Personnel, May-June 1978, pp. 4-10.
21. Nadler, David A. "The Effects of Feedback on Task Group Behavior: A Review of Experimental Research," Organizational Behavior and Human Performance, Vol. 23, 1979, pp. 309-338.
22. _____. "The Use of Feedback for Organizational Change: Promises and Pitfalls," Group & Organization Studies, June 1976, pp. 177-186.
23. _____, and P. A. Pecorella. "Differential Effects of Multiple Interventions in an Organization," Journal of Applied Science, Vol. XI, 1975, pp. 348-366.
24. Nie, Norman H., and others. Statistical Package for the Social Sciences. New York: McGraw-Hill Book Company, 1975.
25. Pasmore, William A., and Donald C. King. "Understanding Organizational Change: A Comparative Study of Multifaceted Interventions," Journal of Applied Behavioral Science, Vol. 14, No. 4, 1978, pp. 455-468.
26. Solomon, Robert J. "An Examination of the Relationship Between a Survey Feedback O.D. Technique and the Work Environment," Personnel Psychology, Vol. 29, No. 4, Winter 1979, pp. 583-594.
27. Szilagyi, Andrew D., Jr., and Marc J. Wallace, Jr. Organizational Behavior and Performance. Santa Monica CA: Goodyear Publishing Company, Inc., 1980.
28. Varney, Glenn H. Organization Development for Managers. Menlo Park CA: Addison-Wesley Publishing Company, Inc., 1977.
29. Wieland, George F., and Robert A. Ullrich. Organizations: Behavior, Design, and Change. Homewood IL: Richard D. Irwin, Inc., 1976.