



1981

## Organizational Surveys and Employee Attitudes: A Review and a Field Study

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ORGANIZATIONAL SURVEYS AND EMPLOYEE ATTITUDES:  
A REVIEW AND A FIELD STUDY

by  
Patrick Calby

A Thesis Submitted to the Faculty of the Graduate School  
of Loyola University of Chicago in Partial Fulfillment  
of the Requirements for the Degree of

Master of Arts

December

1981

## ACKNOWLEDGEMENTS

Many people deserve thanks for their help in making this research project possible. Dr. Homer Johnson was especially helpful through all phases of the project. In our frequent and open discussions he provided support and stimulated ideas which were necessary for its completion.

Dr. Emil Posavac made numerous helpful suggestions with regard to the layout of the report and the statistical analyses involved. His suggestions for editing and presentation of the final write-up were very helpful.

Mr. Tom Welch, the manager at Illinois Bell who requested the research, also deserves many thanks. He was very helpful with engaging the cooperation of his subordinates who were needed to provide information for the project. Also, the managers, supervisors and service representatives who gave their time for interviews and filling out questionnaires deserve thanks.

Other members of the psychology department faculty also deserve thanks. Dr. Frank Slaymaker offered several helpful suggestions with analyses of the data and interpretation of the results. Dr. John Edwards helped provide in depth knowledge and understanding of attitude and social psychological theory.

Finally, the consultants at Loyola Data Center deserve thanks for their assistance with the computer operations.

## VITA

The author, Patrick Calby, is son of Edward M. Calby and Margaret D. Calby. He was born on March 11, 1955, in Montrose, Pennsylvania.

His elementary and secondary education were obtained in the public schools of Montrose, Pennsylvania, where he graduated in June 1973.

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## INTRODUCTION

Recently there has been a great deal of interest in organizational survey research (Dunham & Smith, 1979; Taylor & Bowers, 1972). Schiller (1979) pointed out that organizational surveys are usually questionnaires filled out by employees to obtain information about their current level of satisfaction with their jobs and the organization. However, Hackman and Oldham (1975, 1976) used questionnaires to measure "perceived job characteristics" for the purpose of redesigning jobs, and Litwin and Stringer (1968) used questionnaires to assess "organizational climate," which they hypothesized to have a significant influence on employee motivation. Thus, organizational surveys have been used to obtain information about a variety of organizational variables in addition to job satisfaction.

Most researchers claim that the results of organizational surveys can be used to guide managers in the development of new programs which will lead to a variety of desirable outcomes for the organization, such as improved employee performance, improved satisfaction, reduced turnover, and fewer grievances. For example, the results of a study in a midwestern bank showed an expected direct cost savings of \$17,664 from a .5 standard deviation increase in job satisfaction (Mirvis & Lawler, 1977). On the other hand, however, sound theory and explicit

definitions of the organizational variables which cause satisfaction, motivation, and performance seem to be lacking.

One purpose of this project was to explain that "employee attitude" is a generic term relevant to the expressed or implied theory and goals of most organizational surveys currently used in industry. That is, organizational surveys are usually used to find out how employees think, feel, and expect to behave in respect to their jobs. Job satisfaction, job motivation, and perceived job characteristics can all be considered specific kinds of employee attitudes. Whenever employees are given questionnaires and are requested to provide other than factual information, the questionnaire is being used to obtain information about their attitudes. The second purpose of this project was to investigate by means of a thorough review of the research literature the nature of the numerous variables typically measured on organizational questionnaires, and then to develop a plausible cause and effect model of organizational variables and employees' reactions to them.

Before continuing this discussion, however, I will point out some of the reasons for the current heightened interest in employee attitudes and organizational surveys.

Ongoing social and economic developments have made employee attitudes a topic of foremost concern to management in the 1980s.

Yankelovich (1979) wrote about the changing expectations of "new breed workers," for whom the old-fashioned carrot-and-stick approach to motivation, money and success being the carrot and threat of economic insecurity the stick, no longer works as well as in the past. The traditional work values and symbols of success no longer fulfill their needs for psychological well-being, self-esteem, and individual self-worth. They are looking for something more and something different. Yankelovich proposed that perhaps no question will dominate the workplace more in the 1980s than how to revamp incentives to make them a better match for the work motivation of the new breed.

An increasing demand for interesting and challenging jobs and less demand for "secure" jobs is characteristic of new breed workers. They are more concerned about psychic rewards and less concerned about financial security. They want recognition for individual achievements, less depersonalization, and more freedom and say in what goes on at the workplace. They want to believe that they are making a contribution to the "good society."

For new breed workers family life and leisure time activities take on more importance in comparison to work. A paid job is seen only as providing freedom and independence and possibly the opportunity to explore one's own personal "lifestyle." To the "psychology of entitlement" that dominates their thinking a job is not a privilege but a right. In a sense they are asking for full enjoyment as well as full employment.

Paralleling the current changes in workers' expectations is a heightened societal interest in the "quality-of-work-life," which connotes people's feelings about work in much the same way as the "quality of life" is used to describe one's reaction to life in general (Landy & Trumbo, 1979, p. 387). One quality-of-work-life issue is the role work plays in the total framework of people's lives. Since people spend nearly 50% or more of their waking hours at work, many social advocates believe that it should contribute meaningfully in some way to their lives. That is, work should be more than simply putting in eight hours a day and collecting a paycheck.

Traditional quality-of-work-life issues regarding the physical requirements of work are still of concern today. Kerr (1979) noted that workers are increasingly rejecting "bad jobs" which require undesirable physical, routine, or dirty work. However, he also noted that there are possibly no inherently bad jobs, but rather only the way people are treated make them bad.

For many organizations, quality-of-work-life means exploring the use of opportunity, recognition, participation, and rewards for employees to optimize their involvement and contribution to work (Kerr & Rosow, 1979). The goal is to get workers to accept organizational goals as individual ones, in short, to derive life satisfaction from job satisfaction. At the same time, however, organizations have also started to recognize the problems of occupational stress among those

people who become excessively involved their work. These quality-of-work-life issues add to the attention organizations must give to employee attitudes today.

Concerns about changing worker expectations and quality-of-work-life are taking place within the context of a serious decline in productivity in the United States. During the last decade the rate of increase in productivity has fallen dramatically to 1.8 percent per year from the 3.2 percent per year of the twenty year period following World War II (Kerr, 1979). Organizations have increased their focusing on human factors in the productivity equation to increase both individual and organizational output through more effective use of human resources (Kerr & Posow, 1979). Management has recognized that employees contribute important know-how and ingenuity to increase output, reduce waste, and maintain product quality. Employee-management cooperation is a necessity, which requires extensive ingenuity and attention to employees' attitudes. Thus, organizations need to balance the quality-of-work-life motivations with their requirements for efficiency and productivity.

Clark Kerr (1979) pointed out that the challenges of today are inherently no more difficult than those of the past, and possibly less so, and we are better equipped with knowledge and institutional structures to meet them. Having met these challenges, the United States will have the most productive and satisfied workforce since industrialization began.

A theoretical overview on the meaning of different kinds of employee attitudes is presented in the next section. The following section goes into an in-depth review of job satisfaction research, including the satisfaction-performance controversy. The next four sections on leadership, job design, climate, and systems theory represent different ways on "how to" create favorable employee attitudes. Then in the next section the results of a field study are presented. The field study was a typical example of how the principles and concepts of employee attitude surveys could be applied in a practical situation. Finally, in the last section the theories and results of the field study are synthesized and some general conclusions are drawn.

## KEY CONCEPTS ABOUT WORK ATTITUDES

It is easy to speak glibly about "worker attitude" as though it were some uniform or aggregate property as worker age or take-home pay (Katzell, 1979). Actually, however, there are many different kinds of work attitudes, all which hold different meaning for different individuals. For example, some researchers consider job attitudes as synonymous with job satisfaction, to others work attitudes have more to do with work motivation. As should become quite evident, in the past there has been considerable ambiguity surrounding the meaning of different kinds of work attitudes. Therefore, it will be helpful to discuss some generally accepted definitions of key attitudinal terms and concepts.

### Attitude Theory

This section deals with a current theoretical perspective on attitudes in general with specific examples of work attitudes. It will help provide depth for understanding the formation, change, and significance of employees' attitudes toward their work.

An attitude represents a person's complex set of beliefs, feelings, and behavioral intentions with respect to some object, person, issue, or event (Fishbein & Ajzen, 1975; Dunham & Smith, 1979).



Attitude objects can be very specific, such as one's desk at work or one's supervisor, or they can be very general, such as a whole company or organization. Regardless of the level of object specificity, every attitude has three basic components: affective, cognitive, and conative (or behavioral intention). It is important to distinguish among these three different components.

The affective component refers to a person's feelings toward and evaluation of the attitude object. Adjectives like good-bad, like9xahdaon, and others with similar positive or negative evaluative connotations describe one's affective orientation. The affective component is the feeling part of an attitude.

The cognitive component denotes one's knowledge, opinions, beliefs, and thoughts about the attitude object. It is important to note that the cognitive element is based on perceptual reality, which does not necessarily reflect objective reality. Through perceptual processes, people have a tendency to distort new information to make it consistent with or "fit" with what they already believe. This tendency makes attitudes very resistant to change and sometimes hard to explain.

The conative component refers to one's behavioral intentions and actions with respect to the presence of the attitude object. Both the cognitive and affective components influence the behavioral component. For example, you are likely to interact socially with someone you like

but not with someone you dislike. One very simple behavioral intention is approach or avoidance.

Thus, attitudes are made up of affect (feelings, evaluations), cognition (beliefs, thoughts), and conation (behavioral intentions). What various types of attitudes have in common is that they are covert mental representations, they have an evaluative or emotional aspect, and they are assumed to influence behavior. Beyond these general characteristics, it is possible to distinguish among several different kinds of work attitudes.

### Kinds of Work Attitudes

Katzell (1979) identified three major classes of work attitudes, which are somewhat but not completely separable from one another. They pertained to (1) how important a person's work is to him or her, called "job involvement"; (2) what a person wants, needs, or expects from a job, termed "work values"; and (3) how strongly a person likes or dislikes a job, called "job satisfaction." In addition, "job motivation" and "morale" are two other important kinds of work attitudes which are distinguishable from the other three. Each of these kinds of work attitudes is discussed in detail below.

## Work Values

A work value is what a person consciously or subconsciously desires, wants, or seeks to attain from a job. Values have two attributes: content or what is valued or wanted; and intensity or how much it is wanted or valued (Locke, 1976). Good pay, benefits, and a chance to learn new skills are a few things most people value in a job.

Work values are important because they represent sources of employee satisfaction and motivation. Managers need to keep abreast of current work values so that the money they spend is spent on programs and benefits that are congruent with workers' wants and desires. As already noted, new breed workers tend to value psychic rewards more than older workers who seemed to focus more intently on the financial rewards of work. Thus, at least for new breed workers, interesting and meaningful work could possibly stimulate as much or more satisfaction than monetary payoffs.

Work values are generally measured in terms of "how important" various aspects of jobs are to workers. For example, Ronan (1970) requested employees to rate how important 68 different aspects in their work situation were to them, 7 being "very important" and 1 being "not important." Type of work one does, co-workers' morale and cooperation, company reputation, promotion fairness, pay and benefits, and working conditions were viewed by most employee groups as "very important." Company publications, recreation programs, and the management club were viewed as "not important" by most employees.

The results also indicated slight differences across employee groups, similar to differences found by other researchers (e.g., Hoppock, 1935; Katzell, 1979). For the hourly (bluecollar) workers, financial considerations headed their list, compared to salaried employees who rated pay sixth and managerial employees who did not even rate pay in the top ten most important aspects. Typically, interesting work and a chance to develop new skills are rated most important by white-collar workers, whereas economic considerations are are rated most important by blue-collar workers. These differences in work values also tended to parallel differences in educational level.

These results suggested that the more education and skills people have the more interesting and challenging their work will have to be in order to satisfy them. People probably will not be satisfied doing tasks which require considerably less skill than they possess. Furthermore, if a job does not meet employees' expectations and values, they will look for other alternatives and eventually find another job elsewhere (Mobley, 1977).

It is important to note that employees' values may change as a result of their experiences on the job. For example, in Bonan's study, the aspects presented on the importance questionnaire represented work niceties and benefits, but when the employees were given the opportunity to write-in what was on their minds, they mentioned things like those shown in Table 1. Thus, while people might begin a job expecting good

pay and benefits, etc., management integrity, personnel practices, and other factors may become more salient to them as a result of experience on the job. Thus, a person's work values are the result of both what they desire and what is available in the work situation. Researchers should use in-depth interviews and careful observations to identify important worker values other than the ones listed on standardized questionnaires.

Another way to consider worker values is in terms of general personality characteristics or traits of individuals rather than in terms of specific things they want from work. For example, people differ in the extent to which they believe in the the Protestant Work Ethic (see Table 2). Adherence to the Protestant Work Ethic in a way could be considered something that a person expects at work. One who adheres strongly to it would probably desire and expect the opportunity to work hard and to do good work. They might also expect others to do the same. Other similar personality characteristics (values) which might influence peoples' work behavior are general aspiration level and need for achievement (Litwin & Stringer, 1968).

In summary, values are what people want, desire, or need, and even though people might have a fairly good idea of what their work values are when they start a job, those values are likely to change as a result of experience in the actual job situation. Furthermore, values differ with one's socio-economic status. If a job is incompatible with

TABLE 1

## Categories of Employees' Written-In Comments

- 28.5% Management: integrity, talent utilization, communications, union-management relations, effectiveness, responsibility-authority balance, contract engineers.
- 25.6% Personnel policy and practices: general inequities, promotion opportunities and fairness, adherence to rules, performance evaluation, overtime, training and education, transfers or shift changes, racial discrimination, and layoff policies.
- 18.7% Tangible rewards: pay, benefits and services.
- 14.9% Work environment: housekeeping, work conditions, plant security, safety, support operations, interdepartment cooperation, job security, recognition for good work, environmentally derived status.
- 3.0% Job itself: intrinsic job satisfaction, paper work involved.
- 9.2% Miscellaneous comments: general satisfaction, opinion survey.

---

Source: Ronan (1970a, p. 197).

TABLE 2

## Protestant Work Ethic Scale

1. When the workday is finished, a person should forget his job and enjoy himself.
2. Hard work makes a man a better person.
3. The principal purpose of a man's job is to provide him with a means for enjoying his free time.
4. Wasting time is as bad as wasting money.
5. Whenever possible a person should relax and accept life as it is.
6. A good indication of a man's worth is how well he does his job.
7. If all other things (pay, hours, benefits, etc.) are equal, it is better to have a job with a lot of responsibility rather than one with little responsibility.
8. People who "do things the easy way" are the smart ones.

---

Items are rated on a six point scale from "disagree completely" to "agree completely". Items 2, 4, 6, 7 form the "Protestant Ethic" scale, and items 1, 3, 5, 8 form the "non-Protestant Ethic" scale. Source: Motowidlo et al., 1976, p. 101.

workers' values, they will look for alternatives and if any are available they will leave. Management needs to use ingenuity to identify key worker values and to develop ways to meet those values at the workplace. Values are also important because they form the basis for other work attitudes, particularly satisfaction and motivation.

### Job Satisfaction

Job satisfaction is probably the most frequently mentioned kind of job attitude. The term job satisfaction is often used as a generic term for all types of job attitudes; however, this usage is entirely improper and misleading. Actually, the concept job satisfaction, as formally defined, refers to a specific type of job attitude with rather narrow breadth.

Job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300). Numerous other researchers (Athanasiou, 1969; Korman, Greenhaus, & Badin 1977; Motowidlo, Dowell, Hopp, Borman, Johnson, & Dunnette, 1976; Vroom, 1964) also agreed that satisfaction refers to an affective emotional orientation toward one's job or job experiences. Quite simply, one could describe job satisfaction as the extent to which a people like or dislike their jobs. People are satisfied if they express happiness or fulfillment when they talk about their jobs; they are dissatisfied if they express feelings of unhappiness or frustration (Motowidlo et al., 1976). In terms of attitude theory, job satisfaction refers primarily to the affective (feeling) component.



Values are important to satisfaction, because people are satisfied when they have obtained desired rewards, and when their needs and values have been satisfied. They are relatively more satisfied with a given outcome if it matches or exceeds in desirability what they expected to obtain according to their prior experiences or frame of reference (Motowidlo et al., 1976). That is, they are satisfied when a job meets or is congruent with their important values.

A great deal of research has been done on job satisfaction, and controversy and ambiguity surround it. Therefore, a whole chapter is devoted to the review of this important research area later on. For now, it is important to note that job satisfaction is just one kind of job attitude, which essentially refers to how much people like or dislike their jobs.

### Work Motivation

It is proverbial wisdom that job performance is a function of ability times motivation (Landy & Trumbo, 1980, p. 258). Once employees are trained for a job and are given the opportunity to practice it, their proficiency to do the job reaches an asymptotic peak. Beyond this point, further improvements or decrements in performance are due mostly to variations in effort or motivation. In other words, "given that a people have the ability to do something, whether or not they do it and how vigorously and persistently they do it depend on their motivation" (Motowidlo et al., 1976, p.4).

Litwin and Stringer (1968) explained that

In business, motivational language is used to describe the behavior and productivity of employees and managers. The term 'motivation' is often used as a synonym for productivity or as a description of the energetic behavior desired by management. People are 'motivated' if they are doing or exceeding what is expected of them (p. 7).

Thus, we usually infer one's level of motivation from one's behavior. In terms of attitude theory, motivation refers primarily to the behavioral component.

Motivation is an attitude because it represents a conscious decision on the part of the employee. It is the extent to which a person is willing to work, to expend effort toward meeting work objectives. In terms of expectancy-value theory (Vroom, 1964), people are motivated to perform acts which they expect to result in desired outcomes. For example, if a person values promotions and getting ahead, and believes that doing good work and being productive is the way to get ahead, then he or she will be motivated to do good work. Thus, the relationship between work values and motivation is obvious, people seek out and try (are motivated) to obtain the things they value or desire. People are satisfied when they actually obtain the things they value.

In terms of equity theory (see Motowidlo et al., 1976), people are motivated to reduce feelings of discomfort or inequity which result when they perceive their ratio of inputs to outputs as different from that of a referent other. If rewards (e.g., pay, recognition) are distributed unfairly, people will be motivated to reduce the inequity through some

means, perhaps by decreasing output. Practically speaking, then, managers should distribute rewards for good work fairly, according to the knowledge, skills, abilities, and effort people contribute to their jobs.

As already noted, one way to measure motivation is by observation of performance on the job. For when observations are not feasible or when another measure is desired, Patchen (1965) developed a brief four item questionnaire to measure work motivation (see Table 3). The questionnaire is used to measure motivation from a general standpoint, usually shown by general devotion of energy to job tasks. Patchen noted that question one, "clock watching," is a good measure of job alienation or the opposite of devoting energy to work. The other questions for the most part are self-report measures of behaviors which are indicative of motivation.

For some applications Patchen's questionnaire might be rather transparent and susceptible to a social desirability response bias, i.e., employees might have a tendency to respond in a way to give them a high motivation score in order to please their boss. Thus, for some research purposes, a more sophisticated measure of motivation, such as one based on the expectancy-value theory (see Ivancevich, Szilagyi, & Wallace, 1977, p. 37) will be needed.

TABLE 3

## Job Motivation Index

1. On most days on your job, how often does time seem to drag for you?

- (1)  About half the day or more
- (2)  About one-third of the day
- (3)  About one-quarter of the day
- (4)  About one-eighth of the day
- (5)  Time never seems to drag

2. Some people are completely involved in their job- they are absorbed in it night and day. For other people, their job is simply one of several interests. How involved do you feel in your job?

- (1)  Very little involved: my other interests are more absorbing
- (2)  Slightly involved
- (3)  Moderately involved; my job and my other interests are equally absorbing to me
- (4)  Strongly involved
- (5)  Very strongly involved; my work is the most absorbing interest in my life

3. How often do you do some extra work for your job which isn't really required of you?

- (5)  Almost every day
- (4)  Several times a week
- (3)  About once a week
- (2)  Once every few weeks
- (1)  About once a month or less

4. Would you say you work harder, less hard, or about the same as other people doing your type of work at (name of organization)?

- (5)  Much harder than most others
- (4)  A little harder than most others
- (3)  About the same as most others
- (2)  A little less hard than most others
- (1)  Much less hard than most others

Three separate scales have been used: 1+2, 3+4, or 1+2+3+4.  
Source: Patchen (1965, p. 26).

In summary, motivation is an attitude because it is directly related to one's values and it is a conscious decision about the amount of effort to put into one's work. Job motivation is also directly linked to job performance and productivity, and so it is of utmost importance to management. The important goal for management is to keep employees motivated toward the achievement of organizational goals and objectives. They can do that by keeping track of important employee values and trying to provide work incentives to match those values in a fair and equitable manner. Motivation is measurable with questionnaires or through observation of on the job behavior.

### Job Involvement

Job involvement pertains to how important work is to a person. Lohdal and Kejner (1965) tried to develop an instrument to measure "the degree to which a person's work affects his self-esteem," that is "the degree to which a person is identified psychologically with his work, or the importance of work in his total self-image" (p. 24). This notion of job involvement comes conceptually close to work motivation in a general sense; not specific motivation to perform the component tasks of one's job, but the motivation to perform one's job when broadly conceived as an integral part of one's life (Motowidlo et al., 1976, p.98).

Perhaps the most fundamental attitude toward work is whether a person wants to work at all. On one side, are people who view work as an evil necessity that interferes with other interests and activities.

Alternatively, for "workaholics," work is everything, and it can easily get out of hand, occupying inordinate amounts of time, often to the detriment of those around such individuals and eventually to the individuals themselves (Landy & Trumbo, 1980). Thus, there is a need to find the proper balance between under and over job involvement.

Katzell (1979) pointed out, traditionally, in industrialized societies, a person's work role has been perceived as central to his or her entire persona - who the person is has been defined pretty much by what he or she does for a living. However, in the near future, one of the key problems confronting our civilization will be how to reconcile the social and psychological requirements of working with its lessening economic necessity. Thus, to some extent job involvement is a social issue as well as an organizational issue.

The short form of the job involvement scale, shown in Table 4, helps to illustrate the meaning of the concept. As one can see, it refers to how important work is to a person in comparison to other aspects of the person's life. As was noted, job involvement might be lower among new breed workers, since they tend to emphasize their own personal lifestyles away from work. The job involvement scale could also be used to see how well managers are doing at keeping their subordinates involved in their work. One might expect work that meets workers' important needs and values also would result in high job involvement.

TABLE 4

## Short-Form Job Involvement Scale

1. The major satisfaction in my life comes from my job.
2. The most important things that happen to me involve my work.
3. I'm really a perfectionist about my work.
4. I live eat and breath my job.
5. I am very much personally involved in my work.
6. Most things in my life are more important than my work.

---

Items are scored on a 4-point scale, "strongly agree" to "strongly disagree." Source: Motowidlo et al., 1976, p. 98.

## Morale

Motowidlo et al. (1976) noted that a great deal of terminological confusion enshrouds "morale," at least among psychologists. For some morale means essentially the same thing as job satisfaction. However, based on the combined writings of psychologists and military authors, Motowidlo summarized the meaning of morale as follows:

A high morale group is cohesive with high levels of esprit de corps and unit pride. It has a clearly defined goal to which its members are totally committed. They persist tenaciously, undaunted in the face of even the greatest adversity. They sense that they are advancing toward their goals and are hopeful of reaching them. They cling to ideals like patriotism, honor, and loyalty which are bound up somehow in the group's goal. The group members are cheerful even in the most trying conditions which they shrug off with satiric laughter. They are contented, free from worries or doubts, perform bravely, and are contemptuous of danger. Disciplined and self-confident, they willingly sacrifice themselves for the welfare of the group (p. 48).

Although this definition of morale sounds somewhat like an oath for indoctrinating marine cadets, it does have aspects which would be desirable among an organization's work force. It also shows that the concept of morale has considerably more meaning than simply another way to say job satisfaction. Morale seems to be a very complex concept which consists of at least three different facets: motivation (goals, determination, persistence, tenacity, progress); satisfaction (cheerfulness, contentment, freedom from worry, satisfaction of physical needs for food, water, rest, etc.), and group cohesiveness (solidarity, cooperation, self-sacrifice for the group, esprit de corps, traditions).



Morale, per se, because of its complexity, would be difficult study in a research project, but it could be studied in its component parts. As for identifying level of morale, following a round table discussion, Kurt Lewin, Rensis Likert, and other noteables said "Good morale is shown by stamina with which people stand up under punishment and by the energy with which they strive to realize their ideals. Poor morale is evidenced by those who can't take it and who become easily discouraged and disillusioned" (see Motowidlo et al., 1976, p. 50).

It seems evident that an organization or a work unit with good morale would have a great desire to achieve and maintain high quality and quantity performance. Perhaps high morale represents the ultimate in favorable work attitudes.

### Summary

In summary, attitudes are complex mental representations of thoughts, feelings, and action tendencies with respect to some object, in this case, generally, work. There are numerous different kinds of work attitudes all which have slightly different implications for productivity and quality-of-work-life. It is useful to keep these different kinds of job attitudes meaningfully distinct and separate because of their different implications. However, all kinds of job attitudes are related in that they all have affective, cognitive, and behavioral components. A survey will have different emphases on values, satisfaction, or motivation depending on its purposes.

The various kinds of job attitudes have been the focus of numerous research projects at both the organizational and societal level. The research usually pertained the determinants and consequences of the different kinds of attitudes. For most organizations the goal has been to create high morale, high motivation, high satisfaction, and high job involvement, because they lead to high productivity and a satisfied and stable workforce. At the societal level the aim has been to find the optimal balance among the different kinds of job attitudes which leads to the optimal quality-of-work-life. Now that the different kinds of work attitudes have been defined, the following chapters focus on a more in depth analysis into the nature and particularly the determinants of job attitudes, especially job satisfaction and motivation.

## JOB SATISFACTION RESEARCH

Perhaps no other area of research in industrial organizational psychology received as much attention and interest from the 1930s through the mid 1970s as the nature and causes of job satisfaction. Locke (1976) estimated that by 1976 there were over 3,350 articles or dissertations on the topic.

In reviewing the literature on job satisfaction (Athanasidou, 1969; Herzberg, 1968; Kimmel, 1969; Korman, Greenhaus, & Badin, 1977; Mirvis & Lawler, 1977; Schwab & Cummings, 1970; Wernimont, Toren, & Kapel, 1970), one thing seemed perfectly clear, job satisfaction has been used as a catchall concept for all different kinds of job attitudes. Seldom was an adequate distinction made among job satisfaction and other types of job attitudes such as motivation or morale. Any study with reference to job attitudes of any sort was automatically categorized as a study on job satisfaction. In this section some of the major studies and theories which led up to the ambiguity surrounding the meaning of job satisfaction are reviewed, and then a clearer and more logical approach to job satisfaction research is proposed.

### The Satisfaction-Performance Controversy

By far, the most research and theoretical interest in job satisfaction has been in the hypothesized connections between job satisfaction and job performance (Schwab & Cummings, 1970). One well-known and frequently discredited hypothesis is that job satisfaction leads to or causes job performance, or in other words, "a happy worker is a productive worker." This hypothesis has a long history with roots as far back as the Hawthorne studies, which took place between 1927 and 1932 in the Western Electric plant in Chicago.

### The Hawthorne Studies

In a series of studies at the Hawthorne plant, Mayo and his associates adopted the experimental methodology used by their predecessors, Taylor and Gilbreth, the efficiency engineers. That is, they measured workers' output, manipulated some aspect of their working situation, such as lighting, temperature, or noise level, and then measured output again to see if it had increased.(1)

In a classic study, the experimenters only pretended to change the illumination by replacing light bulbs with other light bulbs of the same intensity, but the workers expressed pleasure with the "increased illumination" and continued to increase their output. The experimenters then refined their experiments and began to focus on possible confounding variables such as fatigue. They introduced work breaks, a  
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(1) The material for this section was adapted from Kimmel (1969) and Landy and Trumbo (1980, p. 392).

shorter workday, and a shorter workweek. The researchers were startled to find that almost any manipulation that they undertook with a group of female assembly line workers resulted in heightened productivity. Although this interpretation has been severely criticized, after talking with the workers Mayo came to the conclusion that the primary factor influencing the results was the "attitudes" of the participants in the experiment toward each other and toward the experiment itself.

### Human Relations Movement (1940-1960)

The Hawthorne studies gave birth to the human relations movement (Bass & Barrett, 1981, p.57). Schwab and Cummings (1970) explained, human relations might be described as an attempt to increase productivity by satisfying the needs of employees. Early human relationists viewed the morale-productivity relationship quite simply: higher morale would lead to improved productivity.(2)

Kimmel (1969) pointed out that by the middle and late 1950s the study of job attitudes and their effects on performance had become the the dominant concern of the human relations experts. The passion of the  
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(2) During the human relations period was when researchers first started to neglect the distinctions between different kinds of work attitudes. Particularly, morale and job attitudes in general were simply considered as synonyms for job satisfaction. The reader should recognize this as incorrect and misleading. However, throughout the remainder of this section the concepts are used interchangeably as they were in most writings at that time and even still are used sometimes today. This should demonstrate some of the problems and ambiguity which were created.

The reader interested in a more in depth discussion of human relations theory should see Maier (1952), "Principles of Human Relations."

day was to prove that job satisfaction did improve productivity. The management consultants, or human relations experts as they were called, were determined to solve all of their employers' problems by increasing workers' job satisfaction. Few and far between were studies which suggested morale, happiness or job satisfaction were worthy ends in and of themselves.

Three extensive literature reviews (Brayfield & Crocket, 1955; Herzberg, Mausner, Peterson, & Capwell, 1957; Vroom, 1964) indicated the failure of the research that attempted to show that job satisfaction caused job performance. For example, Vroom summarized data from 20 studies in which one or more measures of job satisfaction were correlated with one or more criteria of performance. For all the studies, the median correlation between satisfaction and performance was .14 with a range of -.31 to +.86. He concluded that there was no simple relationship between satisfaction and performance. Furthermore, he stated that the extent to which a worker is satisfied with his work and the extent to which he is motivated to perform in it can be defined independently of one another both conceptually and operationally.

Herzberg et al. (1957) listed over 1000 references, and examined job attitude studies under various headings of job dissatisfaction, effects of job attitudes, supervision of job attitudes, vocational selection and job attitudes, and mental health in industry. The problems associated with inexplicit definitions of various kinds of job

attitudes were evident in this review. They concluded after a thorough review that positive job attitudes are a tremendous asset to industry because of the unequivocal evidence of the relation of attitudes to turnover and absenteeism. However, they did not claim that job attitudes as they had been measured showed any consistent relationship to on the job performance.

The most significant aspect of these reviews was that they began to cast doubt on the before unquestioned notion of the human relations movement, that job satisfaction necessarily caused high job performance. They also recognized the critical importance of explicitly defining the meaning of different attitudinal concepts in future research. The numerous conceptions and different measuring devices used made the previous studies very difficult to compare. Furthermore, they surfaced several methodological issues, such as the reliability of the attitude and the performance measures, which had been seldom questioned, and the use of individual versus group average scores in analyses. Vroom also cautioned that most studies were correlational and reminded researchers that correlation does not imply cause and effect. In short, these reviews changed the direction of future job attitude studies. They brought up critical issues and promoted the need for more complex and sophisticated theorizing and research on job attitudes.

It appears as though Herzberg's Two-Factor Theory was originally proposed as an answer to the call for theories to take account of the

more complex relationships between job attitudes and job performance. However, as Schwab and Cummings (1970) stated, it was only a slightly more sophisticated version of the satisfaction causes performance hypothesis.

### Herzberg's Motivation-Hygiene Theory

The motivation-hygiene (or two-factor) theory of job attitudes (Herzberg, Mausner, & Snyderman, 1959; Herzberg, 1968) explains job satisfaction and thus (indirectly) motivation of people to work. In a study with 200 engineers and consultants Herzberg had employees respond to the following statements:

- a) "Describe, in detail, a job experience that made you feel exceptionally good about your job," and
- b) "Describe, in detail, a job experience that made you feel exceptionally bad about your job,"

On the basis of the responses collected using this procedure, Herzberg reached the following two conclusions:

1. There were some conditions of the job which operated primarily to dissatisfy employees when they were not present. However, the presence of these conditions did not necessarily motivate employees to contribute extra effort. Herzberg called these conditions "maintenance" or "hygiene" factors, since they were necessary to maintain a level of at least no dissatisfaction. The dissatisfaction-avoidance or hygiene factors and their explanations were:

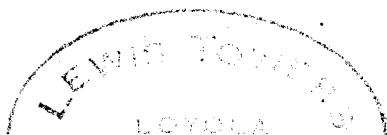


- a) Company policy and administration - adequacy of company organization and management, lines of communication, accountability, and authority;
  - b) Supervision - competency or technical ability, willingness to teach or delegate responsibility, fairness, knowledge of job, etc.;
  - c) Interpersonal relations (with superiors, with subordinates, with peers) - refers to explicit interaction between employee and someone else. "Sociotechnical" interactions involve those in performance of the job, and "social" interactions involve coffee breaks, lunch, recreation;
  - d) Salary - wages, increases, or unmet expectations;
  - e) Personal life - job factors that affect personal life, so long as they influence the way a person feels about the job, e.g. relocation to an area where the person was unhappy;
  - f) Status - indications of status per se, e.g., carpeted office, company car, access to "special" dining area; and
  - g) Security - objective signs of security, e.g., tenure, company stability.
2. There were other job conditions which, if present, operated to build high levels of job satisfaction and motivation. However, if these conditions were not present, they did not prove highly dissatisfying. These factors, which Herzberg called motivators were:

- a) Achievement - personal satisfaction of completing a job, solving a problem, seeing the results of one's work;
- b) Recognition - in terms of a job well done or personal accomplishment;
- c) Work itself - positive or negative aspects of the job content; the job is interesting or boring, varied or routine, creative or stultifying, easy or difficult, challenging or nondemanding;
- d) Responsibility - refers to employee's control over his own job, or responsibility for the work of others;
- e) Advancement - actual change in upward status;
- f) Growth - learning new skills with greater possibility of advancement, either for immediate or future growth.

Thus, according to Herzberg, the factors involved in producing job satisfaction (and motivation) were separate and distinct from the factors that led to job dissatisfaction. The opposite of job satisfaction was no job satisfaction; and the opposite of job dissatisfaction was no job dissatisfaction.

According to Herzberg, the hygiene and motivator factors were related to two different human needs. One set of needs stemmed from people's animal nature - the built-in drive to avoid pain and other biological drives like hunger. The other set of needs related to their unique ability to achieve and through achievement to experience



psychological growth. According to Herzberg, only the psychological growth needs satisfied and motivated employees to high levels of job performance. The stimuli for the growth needs were tasks that induced growth; in the industrial setting they were the job content or motivator factors. The stimuli inducing pain-avoidance were hygiene factors, which were found in the job environment.

Criticisms of Herzberg's Theory. Although Herzberg may have never stated his theory quite so simply, many researchers have interpreted it to mean that satisfaction on the job is essentially equivalent to motivation on the job, which no different than the human relations view that a happy worker is a productive worker. Consequently, researchers who were interested in the two-factor theory made very little distinction between studies of motivation and studies of job satisfaction. They simply assumed that positive feelings toward the motivator factors were indicative of both motivation and satisfaction. However, as pointed out in the previous section, motivation and satisfaction are two different kinds of work attitudes.

Wernimont, Toren, and Kapell (1970) studied the practical and theoretical differences between job motivation and job satisfaction. They noted that much of the research literature that purported to measure job motivation used questions remarkably similar to those used in studies of job satisfaction. They prepared a list of 17 variables (see Table 5) thought to be important on technical employees' jobs and

then requested employees to rank the variables twice: once according to their importance "in making you want to put extra effort into your job," and once according to the importance of the variables in contributing to greater personal satisfaction on the job.

The results indicated that, in the employees' view, the 17 variables did not have the same importance in contributing to their satisfaction on the job as to their motivation to work. The first six variables listed in Table 5 appeared to have more importance in contributing to increased effort than to personal satisfaction. The last five variables (13 through 17) appeared to have more importance in contributing to personal satisfaction as compared to their effects on job effort. Variables seven through twelve showed little or no difference in their importance to effort or satisfaction. Wernimont et al. concluded it was incorrect to assume high levels of motivation necessarily accompany high levels of satisfaction.

According to the two-factor theory, the the motivator factors caused both satisfaction and motivation. Perhaps it would be more useful to propose that some some job factors are important for satisfaction, others are important for motivation, and some are important for both satisfaction and motivation. Rather than considering job satisfaction as two continua, one from dissatisfaction to no dissatisfaction and the other from no satisfaction to satisfaction, we should think in terms of the two separate constructs, satisfaction and

TABLE 5

## Variables for Comparison of Satisfaction and Motivation

1. Knowing what my supervisor expects of me.
2. Having a capable and knowledgeable supervisor.
3. Being responsible (and accountable) for all or nearly all aspects of my job assignments.
4. Being kept informed about things which affect my work.
5. Being faced with a difficult challenge in my job.
6. Having the opportunity to take part in decisions which affect my work.
7. Being rewarded for good work with a promotional opportunity.
8. Having a good working environment; Lab facilities, services, assistants, etc.
9. Being rewarded for good work with extra money payments.
10. Doing the kind of work which I like to do.
11. Having the opportunity to develop a scientific or technical reputation.
12. Working for a company with a good public and technical reputation.
13. Being given full credit for a good idea or suggestion.
14. Working in a geographical location possessed of desirable recreational, cultural, and educational facilities.
15. Getting along with the people with whom I work.
16. Being praised for a job well done.
17. Having accomplished a lot, according to my own standards standards for accomplishments.

motivation. This would avoid the problem of equating satisfaction with motivation. However, even if Herzberg were to relabel his factors as suggested here, there has been minimal evidence to suggest that his original dichotomization of the variables most important for each was appropriate.

For example, in a related study Dunnette, Cambell, and Hake1 (1967) found that achievement, responsibility, and recognition were perceived as contributing both to satisfaction and dissatisfaction. Thus, they found considerable overlap between the job conditions that caused job satisfaction and dissatisfaction. Furthermore, as Wernimont et al. found and as will be pointed out in later sections, supervision and communication patterns have been shown to have a great effect on motivation and performance. In Herzberg's theory, these factors were reduced to "hygiene factors."

In summary, Herzberg's theory has been widely received and applied by managers, but the theory per se has not received a great deal of empirical support. It was very heuristic in its time, but a better theory is needed to take account of the differences between satisfaction and motivation and the relationships of those to job performance. Porter and Lawler (1968) proposed an interesting model to take account of some of the problems with previous job satisfaction research. In their theory, satisfaction is the result of rather than the cause of job performance.

### Porter and Lawler's Model

Lawler and Porter (1967) and Porter and Lawler (1968) hypothesized that job satisfaction, rather than causing job performance, as had been previously assumed, is caused by it. They noted that in Vroom's (1964) review of studies on the satisfaction-performance relationship, 20 out of 23 correlations between these two variables were positive. Hence, they said we should not glibly accept view that satisfaction and performance are unrelated.

Porter and Lawler derived their ideas from earlier research on the path-goal or instrumentality theory of work motivation (Georgopolous, Mahoney, & Jones, 1957; Vroom, 1964). Briefly, according to path-goal theory, people are motivated to do things which they feel have a high probability of leading to rewards which they value. For example, if a person sees high productivity as a path leading to the attainment of one or more personal goals, that worker will tend to be a high producer. Conversely, if low productivity is seen as a path to the attainment of goals, low production will result (Landy & Trumbo, 1980).

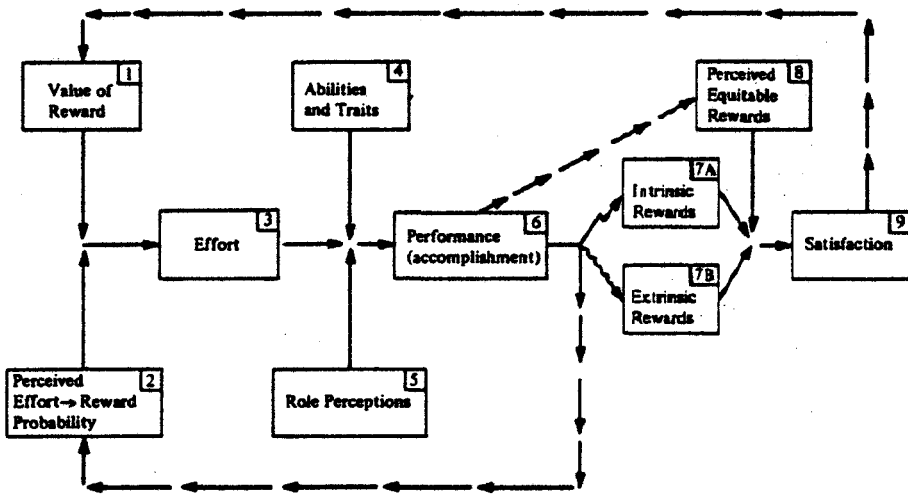
Vroom, using a path-goal theory of motivation, had pointed out that satisfaction and performance were caused by quite different things: "Individuals are satisfied with their jobs to the extent to which their jobs provide them with what they desire, and they perform effectively in them to the extent effective performance leads to the attainment of what they desire" (Lawler & Porter, 1967, p. 34).

Thus, Lawler and Porter argued that:

If we assume, as seems reasonable in terms of motivation theory, that rewards cause satisfaction, and that in some cases performance produces rewards, then it is possible that the relationship between satisfaction and performance comes about through the action of a third variable - rewards. Briefly stated, good performance may lead to rewards, which in turn lead to satisfaction (p. 35).

The diagrammatic model in Figure 1 shows that the most direct linkage has performance as the causal and satisfaction as the dependent variable. That relationship is mediated only by intrinsic and extrinsic rewards, and the perceived equity of those rewards. The model suggests that generally low performance-satisfaction relationships observed in previous empirical research may result from rewards, particularly extrinsic rewards, which are often not closely tied to performance. This is because even though an organization may have a policy of rewarding merit, performance is difficult to measure, and in dispensing extrinsic rewards like pay, many other factors are frequently taken into consideration. Intrinsic rewards, however, are given to the individual by himself for good performance. Thus, they are likely to be more directly related to good performance. Thus, individuals' satisfaction is a function of both the number and amount of rewards they receive as well as what they perceive to be a fair level of reward. Individuals can be satisfied with a small amount of reward if they feel that it is a fair amount for their job (Lawler & Porter, 1967).





Source: Landy and Trumbo (1980, p. 346).

Figure 1: Porter and Lawler's Model of Satisfaction and Performance

The implications for managers discussed by Porter and Lawler were that if a strong positive relationship between satisfaction and performance existed, one would assume that the organization effectively distributed differential extrinsic rewards based on performance. In addition, the relationship indicated that the organization provided jobs that allowed for satisfaction of intrinsic rewards. Finally, since satisfaction was negatively related to turnover and absenteeism, the poorer performers rather than the better ones were showing high absenteeism and quitting. Thus, in conclusion, it was desirable for organizations to develop a strong relationship between satisfaction and performance.

#### Summary for Satisfaction-Performance Controversy

In the final analysis, the hypothesis that job satisfaction causes job performance was perhaps an over interpretation of the results of the Hawthorne studies by the human relationists. Locke (1976) noted that the term "attitude" as the Hawthorne researchers used it, referred to more than just satisfaction. It included the workers' view of management, of the economic situation of the time, and their own hypotheses about the purpose of the experiment. In short the most significant implication of the Hawthorne studies was that now workers were seen as active participants in the work process, and researchers felt impelled to take account of their motives and attitudes in attempting to predict and improve productivity and efficiency and reduce turnover (Kimmel, 1969).

Herzberg's Two-Factor Theory of satisfaction and motivation was a heuristic advancement beyond the simple statement that job satisfaction causes job performance; however, the theory was essentially only a slightly more sophisticated statement of the same old hypothesis. By hypothesizing that the same job factors caused satisfaction as motivation, Herzberg ran into the problem of equating satisfaction with motivation. The theory could be restated so that one set of job conditions were important for job satisfaction and another set were important for job motivation, but there has been very little evidence that Herzberg's dichotomization of job factors was exactly correct.

Based on the path-goal theory of motivation, Porter and Lawler came up with a model which adequately distinguished between motivation and satisfaction and accounted for the complex relationships between these two variables. According to their theory, the relationships between satisfaction and performance are explainable in terms of a third variable, rewards. Essentially, employees are satisfied when they receive rewards which they desire and perceive as fair. When rewards are not contingent on performance or are not fair, employees will be dissatisfied, and they will not be productive because they will not perceive that their desired rewards are available for good performance.

As numerous researchers have pointed out (Athanasiou, 1969; Vroom, 1964), the relatively simple dichotomy of attitude factors into satisfaction and motivation components is a very useful distinction.

Motivation implies a willingness to work or put forth effort on the job; satisfaction implies a positive emotional state which may be totally unrelated to productivity. Workers may like their job simply because it is a "nice place to be," or even because they are not expected to work too hard or to do too much. Schwab and Cummings (1970) explained, when satisfaction and motivation are treated separately as dependent variables, they are complexly related to a number of other variables. To the extent these other variables differentially affect satisfaction and performance, they become potential moderators of the satisfaction-performance relationship. After a thorough review of the literature they concluded:

We are frankly pessimistic about the value of any additional satisfaction-performance theorizing at this time. The theoretically inclined might do better to work on a theory of satisfaction or a theory of performance. Such concepts are clearly complex enough to justify their own theories. Prematurely focusing on the relationships between the two has probably helped obscure the fact that we know so little about the structure and determinants of each (p. 420).

Thus, the questions for the researcher become: What are the variables that lead to job satisfaction? Which ones lead to motivation (or performance)? And which ones influence both in the same or opposite directions? For example, pressure for performance might influence both satisfaction and motivation to perform, but not in the same fashion. As job pressure increases, job satisfaction probably decreases irrespective of concomitant variation in performance. Employee performance, alternatively, might increase up to a point with increased job pressure and then taper off (Triandis, 1959). Thus, other variables besides

rewards could influence both satisfaction and performance. The goal should be to identify the variables that are most important for each.

### Satisfaction as a Dependent Variable

A somewhat different way to study job satisfaction has been to identify the effects of specific job factors on job satisfaction solely as a dependent variable. In this type of research job satisfaction is considered of value in its own right, not only in relation to its effects on productivity. This type of research is consistent with the quality-of-work-life advocates who consider job satisfaction as much of a right as the right to a good job. Furthermore, job satisfaction is of value in its own right because it has been related to heart disease, mental illness, and life satisfaction in general (Locke, 1976). Thus, some researchers have considered job satisfaction apart from motivation or performance because it is of value in its own right.

### Hoppock's Studies

Around the same time as the Hawthorne studies, Robert Hoppock (1935) began to use the survey research approach to study job satisfaction. He was primarily interested in studying job satisfaction conceptually without being particularly concerned with changing worker behavior or improvement of productivity. His interests were collecting normative data and the assessment of social change in relation to job satisfaction.

For example, Hoppock was perhaps the first to note the relation between satisfaction and occupational status. The mean score on his job satisfaction scale (see Table 6) was 494. Unskilled manual workers scored 401, semiskilled 483, skilled and white-collar 510, sub professional and lower level management 548, and professional and upper management 560 (Robinson, Athanasiou, & Head, 1969).

Note how Hoppock's questionnaire conforms to the definition of job satisfaction as an evaluative, emotional, feeling kind of work attitude. Also, how one feels about changing jobs is considered as indicative of job satisfaction. His questionnaire provides a unidimensional measure of job satisfaction without reference to which specific aspects of the job cause it. This type of approach to measuring job satisfaction is particularly useful for social research or to just obtain general satisfaction indicators over time. Another way to consider job satisfaction as a dependent variable is to identify the specific sources of job satisfaction on the job. This has been the most typical approach.

TABLE 6

## Hoppock's (1935) Job Satisfaction Questionnaire

1. Choose ONE of the following statements which best tells how well you like your job.
  - I hate it
  - I dislike it
  - I don't like it
  - I am indifferent to it
  - I like it
  - I am enthusiastic about it
  - I love it
  
2. Check one of the following to show HOW MUCH OF THE TIME you feel satisfied with your job:
  - All of the time
  - Most of the time
  - A good deal of the time
  - About half of the time
  - Occasionally
  - Seldom
  - Never
  
3. Check the ONE of the following which best tells how you feel about changing your job:
  - I would quit this job at once if I could get anything else to do
  - I would take almost any other job in which I could earn as much as I am earning now
  - I would like to change both my job and my occupation
  - I would like to exchange my present job for another job in the same line of work
  - I am not eager to change my job but would do so if I could get a better job
  - I cannot think of any jobs for which I would exchange mine
  - I would not exchange my job for any other
  
4. Check one of the following to show how you think you compare with other people:
  - No one likes his job better than I like mine
  - I like my job much better than most people like theirs
  - I like my job better than most people like theirs
  - I like my job about as well as most people like theirs
  - I dislike my job more than most people dislike theirs
  - I dislike my job much more than most people dislike theirs
  - No one dislikes his job more than I dislike mine

Each item is scored 1 through 7 or (100-700).

Source: Robinson, Athanasiou, and Head (1969, p. 134).

### Sources of Job Satisfaction

For most research purposes job satisfaction is usually considered a multidimensional construct, and the dimensions or job factors that show up in almost all job satisfaction studies are supervision, co-workers, pay and benefits, the work itself, working conditions, and promotion opportunities. These factors represent the most common things that people look for, desire, or expect from a job, and how well a person likes his or her job depends on the discrepancy between what individuals want or desire (job values) and what the job delivers, or at least what the person thinks the job delivers (Locke, 1976). If the job provides what the person wants then he or she will be satisfied, but if it does not then he or she will be dissatisfied.

One goal of many job satisfaction researchers has been to identify the important sources of job satisfaction. Although Herzberg's theory (see previous section) had some serious flaws, it did provide a fairly good description of the kinds of job factors that might provide satisfaction if present on the job. Locke (1976) also made a list of the typical dimensions of job satisfaction studied by previous investigators. They were:

1. Work: including intrinsic interest, variety, opportunity for learning, difficulty, amount, chances for success, control over pace and methods, etc.
2. Pay: including amount, fairness or equity, method of payment, etc.



3. Promotions: including opportunities for, fairness of, basis for, etc.
4. Recognition: including praise for accomplishment, credit for work done, criticism, etc.
5. Benefits: such as pension, medical, annual leave, paid vacations, etc.
6. Working conditions: such as hours, rest pauses, equipment, temperature, ventilation, humidity, location, physical layout, etc.
7. Supervision: including supervisory style and influence; technical, human relations, and administrative skill, etc.
8. Co-workers: including competence, helpfulness, and friendliness, etc.
9. Company and management: including concern for the employee as well as pay and benefits.

Locke (1976) noted that this classification of job dimensions mixed two different levels of analysis, namely, events or conditions (the first six elements in the above list) and agents (the last three elements in the above list). Since every event or condition is ultimately caused by someone or something, and since every agent is liked or disliked for having done (or failed to do) something, a logical type of analysis might involve a consideration of not only events and agents separately, but also the interaction between them. This event/agent distinction seems very useful for the study of other types

of job attitudes as well as job satisfaction. A goal for a study on employees' attitudes might be to identify which agents employees perceive as responsible for which events and conditions and which events or conditions affect which outcomes, such as satisfaction, motivation, or performance.

### Measurement of Job Satisfaction

Numerous job satisfaction measurement instruments are available for use by qualified researchers. One thing researchers must keep in mind when making a decision about which instrument to use is that all questionnaires about work are not necessarily job satisfaction scales. The researcher who is primarily interested in job satisfaction should select a measure which conforms with the definition of job satisfaction discussed earlier. The researcher who is interested in attitudes related to motivation and performance would use different measures.

Another thing researchers must consider is whether to use a unidimensional or multidimensional measure of satisfaction. As already pointed out, a unidimensional scale may be appropriate for social research and perhaps some organizational applications, but job satisfaction is usually considered to be multidimensional and the most popular measures of job satisfaction are also multidimensional.

The Job Description Index (JDI) is a popular job satisfaction instrument which has good scale properties and has been recommended by

many sources (e.g., Robinson et al., 1969). However, the JDI consists of only five job categories: supervision, work itself, people, pay, and promotions, and the response alternatives are only one or two word evaluative phrases to which the employee responds agree or disagree. While the JDI provides a measure of satisfaction with these job factors, the information about "what" specific aspects of the job factors cause satisfaction is very limited. For practical applications, then, the JDI would not provide the operations manager with a great deal of information to take action on. The JDI might be more useful as a dependent variable in pure research applications. The JDI is available from numerous sources, Robinson et al. (1969, p. 107), to name one.

The Minnesota Satisfaction Questionnaire (MSQ) consists of items that refer to reinforcers in the work environment. The respondent indicates how satisfied he or she is with each reinforcer on a five-point scale, from "very dissatisfied" to "very satisfied." Twenty different scales or job categories are measured with the MSQ (see Table 7).

On the MSQ a distinction is made between intrinsic satisfaction, which is the result of rewards that the individual gives to himself, (e.g., ability utilization, achievement, creativity, responsibility, social status, etc.), and extrinsic satisfaction, which is the result of rewards that somebody else gives to the person (e.g., advancement, company policies and practices, compensation, recognition, and

TABLE 7

## Scales on the Minnesota Satisfaction Questionnaire

1. Ability utilization. The chance to do some thing that makes use of my abilities.
2. Achievement. The feeling of accomplishment I get from the job.
3. Activity. Being able to keep busy all the time.
4. Advancement. The chances for advancement on this job.
5. Authority. The chance to tell other people what to do.
6. Company policies and practices. The way company policies are put into practice.
7. Compensation. My pay and the amount of work I do.
8. Co-workers. The way my co-workers get along with each other.
9. Creativity. The chance to try my own methods of doing the job.
10. Independence. The chance to work alone on the job.
11. Moral values. Being able to do things that don't go against my conscience.
12. Recognition. The praise I get for doing a good job.
13. Responsibility. The freedom to use my own judgement.
14. Security. The way my job provides for steady employment.
15. Social service. The chance to do things for other people.
16. Social status. The chance to be "somebody" in the community.
17. Supervision-human relations. The way my boss handles his men.
18. Supervision-technical. The competence of my supervisor in making decisions.
19. Variety. The chance to do different things from time to time.
20. Working conditions. The working conditions.

Source: Weiss, Davis, England, and Lofquist (1967, p. 1).

supervision). The intrinsic-extrinsic satisfaction distinction has been made by numerous theorists, and the MSQ provides a very good instrument for measuring job satisfaction and keeping this distinction clear. The MSQ would be very useful for testing hypotheses about different consequences of intrinsic versus extrinsic satisfaction, such as could be generated from Porter and Lawler's model (see Figure 1).

The MSQ also provides a lot of information that a manager could use to make changes in the workplace in order to improve job satisfaction. It provides more specific information than the JDI and therefore it is recommended rather than the JDI. The MSQ is available in both a 100 item long form and a 20 item short form (see Weiss et al., 1967).

It is possible that no published job satisfaction scale will meet the needs for a particular project, and so the researcher may want to develop his own scale. In which case, the instruments discussed here and numerous other published scales (see Robinson et al., 1969) are available to help generate ideas. One thing that is important for all job satisfaction studies is that the measurement instrument used should conform to the definition of job satisfaction as an affective, emotional, feeling with respect to one's job. Other measures will reflect some other kind of job attitude. Other considerations about the measurement of job satisfaction and job attitudes in general will be presented in the following sections of this paper. They deal primarily with theories about how to create favorable attitudes in the workplace.

## JOB DESIGN

The previous sections have pointed out that the nature of the study of job attitudes depends to a great extent on the specific purposes of the study. In some cases job satisfaction and quality-of-work-life issues may be the major concern, whereas in other cases the major concern may have to do with motivation and improving productivity. In either case the question for the researcher or the manager is, What are the determinants of satisfaction, motivation, and performance? This section, and those that follow it deal with different theories on how to create favorable attitudes toward work. This section deals with the motivation and satisfaction of employees through the design of work itself.

### Job Enrichment

Despite several flaws in the two-factor theory, the literature is full of studies that show job enrichment, i.e., the practical application of the two-factor theory in the work setting, works (Aldao & Brief, 1979). Job enrichment is a strategy of job redesign which is used to improve performance and satisfaction by building more challenge, responsibility, authority, and recognition into jobs, i.e., building "motivators" into the work. The principles of job enrichment and the motivators involved are shown in Table 8. The basic idea is giving the

worker more responsibility for setting goals and more responsibility for the excellence of the finished product. Herzberg emphasized the importance of changing and structuring the content of the job itself to build in the motivators, and he cautioned against only giving the workers a "sense of" or "feeling of" responsibility.

Ford and Borgotta (1970) were concerned with how the various concepts of job enrichment were related to employees' attitudes toward the "work itself." In a series of studies they factor analyzed questionnaire data and identified eight clusters of employees' attitudes related to job enrichment. The provisional names of these clusters were as follows:

1. The work itself is interesting
2. The job is not wasteful of time and effort
3. Need for more freedom in planning the job
4. Having reasonable say on how the job is done
5. The job provides opportunities
6. The job provides feedback
7. The job is too closely supervised
8. The job is not worth putting effort into it

Ford and Borgotta noted that subsequent research needs to focus on which clusters of employees' attitudes are most subject to change through the enrichment of work.

TABLE 8  
Principles of Job Enrichment

Principle	Motivator involved
A. Removing some controls while retaining accountability	Responsibility and personal achievement
B. Increasing the accountability of individuals for their own work	Responsibility and recognition
C. Giving a person a complete and natural unit of work (module, division, and so on)	Responsibility, achievement, and recognition
D. Granting additional authority to an employee in his activity; job freedom	Responsibility, achievement, and recognition
E. Making periodic reports directly available to the worker himself rather than to the supervisor	Internal recognition
F. Introducing new and more difficult tasks not previously handled	Growth and learning
G. Assigning individuals specific or specialized tasks, enabling them to become experts.	Responsibility, growth, and advancement

Source: Herzberg (1968, p. 123).



The clusters of attitudes that Ford and Borgotta found pertained to the "work itself" and were not linked to any specific agent or person in the job situation. It would be useful to learn who was responsible for creating the conditions associated with enriched jobs and what kinds of things they could do to enrich jobs. One would expect that the supervisor played a key role in job enrichment. Furthermore, the clusters of attitudes were similar to some dimensions on the MSQ, e.g., Independence, Responsibility, and Supervision-human relations. Perhaps job enrichment was mostly associated with intrinsic satisfaction and less with the practices and procedures associated with performance and accomplishment of organizational goals and objectives. Moreover, if enriched jobs created intrinsic challenge but no achievement they might also create frustration. There is a need to focus more on the practices and procedures associated with performance as well as satisfaction. Another recent job design strategy provides a further indication as to which job characteristics are critical for high levels of motivation and satisfaction. It is discussed below.

#### The Job Characteristics Model of Task Design

Hackman and Oldham (1975, 1976) developed a model to describe the relationships between job characteristics and individual responses to work. At the most general level, five "core" job characteristics are seen as prompting three critical psychological states which, in turn, lead to a number of beneficial personal and work outcomes. Specifically, Hackman and Oldham proposed that high internal motivation,

high work satisfaction, high quality performance, and low absenteeism and turnover are obtained when three "critical psychological states" are present for an employee. The three psychological states are:

- a) Experienced Meaningfulness of the Work. The degree to which the individual experiences the job as one which is generally, meaningful, valuable, and worthwhile;
- b) Experienced Responsibility for Work Outcomes. The degree to which the individual feels personally accountable and responsible for the results of the work he or she does;
- c) Knowledge of Results. The degree to which the individual knows and understands, on a continuous basis, how effectively he or she is performing on the job.

Experienced meaningfulness of the work is enhanced by three of the core job characteristics. They are:

- 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 person.
- b) Task Identity. The degree to which the job requires the completion of a "whole" and identifiable piece of work; that is, doing a job from beginning to end with a visible outcome.
- 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.

Experienced responsibility for the work is increased when a job is high on autonomy. Autonomy is defined as follows:

d) Autonomy. The degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.

And knowledge of results is increased when a job is high on feedback. Feedback is defined as follows:

e) Feedback. The degree to which carrying out the work activities required by the job results in the individual obtaining direct and clear information about the effectiveness of his or her performance.

Hackman and Oldham postulated an individual experiences positive affect to the extent that he learns (knowledge of results) that he personally (responsibility) has performed well on a task that he cares about (task meaningfulness). This positive affect is reinforcing to the individual, and serves as an incentive for him to continue to try to perform well in the future.

The links between the job dimensions and the psychological states, and between the psychological states and the outcomes, are moderated by employee growth need strength (GNS). People who strongly value and desire personal feelings of accomplishment and growth should respond very positively to a job high on the core dimensions; individuals who do not value personal growth and accomplishment may find such jobs anxiety

arousing and may be uncomfortably "stretched" by them. However, in a test of the theory Hackman and Oldham (1976) found that employees with high GNS did respond more favorably to jobs with high motivating potential as measured by the presence of the core characteristics, but even employees with low GNS responded favorably to jobs with high motivating potential. This suggests that jobs high on the core dimensions could have positive effects on most employees, regardless of GNS.

The Job Diagnostic Survey (JDS) is an instrument designed specifically to measure all of the variables in the job characteristics model (see Hackman & Lawler, 1971 for the complete questionnaire). Unlike job satisfaction questionnaires which assess employees' positive or negative affect toward their job experiences, the JDS has employees describe the extent to which they perceive the core job characteristics to be present on their job. These measures of "perceived job characteristics" can then be correlated separately with measures of satisfaction, motivation, performance, or other work outcomes.

Dunham and Smith (1979, p. 81) noted that this approach allows a crude kind of cause and effect analysis. They pointed out that it is useful to develop a core questionnaire of evaluative (satisfaction type) items and to supplement the core with descriptive (job characteristics type) items. The responses made to the descriptive items can provide insights into reasons for a high level of satisfaction or

dissatisfaction in a given group. Unfortunately, however, they noted that evaluative and descriptive items are not as independent as researchers might hope. For example, employees who dislike their supervisor (evaluative) are also more likely to deny that he or she conducts performance reviews regularly (descriptive).

This distinction between descriptive and evaluative items is very useful and it parallels the distinction between the evaluative and cognitive components of an attitude. The measures of the core job characteristics on the JDS are good examples of descriptive type items. They request employees to respond in terms of "how often" they get feedback or "how much" variety they have on their jobs rather than "how satisfied" they are with those characteristics. Although these items are not independent of evaluations, they do provide more accurate descriptions of the job characteristics than purely evaluative items. They also provide a manager with more useful information for changing jobs to improve satisfaction and/or motivation.

### Criticisms of the Job Characteristics Model

The JCM is a parsimonious theory for linking various concepts of job characteristics, motivation, and satisfaction into a sequence of causal, intervening, and outcome variables. However, the theory has been recently criticized on several grounds. In a recent review article Roberts and Glick (1981) criticized the literature on the job characteristics approach to job design because three kinds of relations

are often inappropriately assumed to be isomorphic: within-person relations, among perceptions of tasks and of other attitudinal and behavioral characteristics of the individual; person-situation relations, linking independently assessed characteristics of jobs or situations with characteristics of individuals; and situational relations, which involve only the characteristics of the objective jobs or situations that are invariant across people. They argued that the job design literature is primarily concerned with person-situation relations, but studies fail to distinguish between perceptual and objective tasks. They contend that a good theory in this area should simultaneously model situational (taxonomic), within-person (cognitive-consistency), and person-situation (task-incumbent and environment-incumbent) relations.

Another theme in their critique was the problem of common method variance. In tests of the job characteristics model (e.g., Hackman & Oldham, 1976) the core job dimensions, GMS, psychological states internal motivation, and satisfaction were all measured on questionnaires with similar response formats. Thus, all the correlations among the variables in the model may have been inflated by common method variance. They recommended more concern about convergent and discriminant validity - especially in situational or person-situation studies. These criticisms were all directed primarily toward the problems associated with the nonindependence of evaluative and descriptive items, and future research will need to address this problem further.

Another problem with the JDS instrument involves the construct validity of the scale used to measure intrinsic motivation, an outcome variable. Hackman and Lawler (1971) used the following three items to measure intrinsic motivation: a) I feel a great deal of personal satisfaction when I do my job well; b) Doing my job well increases my self-esteem; and c) I feel bad when I do my job poorly. By definition these are measures of achievement satisfaction, not motivation. Perhaps the concept of intrinsic motivation has little value and measures like Patchen's (1965) questionnaire (see Table 3) would provide a better dependent measure in this type of research. Korman, et al, (1977) also questioned the appropriateness of the questionnaire used to measure employee GMS, which is based on Maslow's need hierarchy theory (see Aldag & Brief, 1979, p. 90 for a recent version of the questionnaire).

The tests of the theory also had problems with lack of reliability in performance measures. Hackman and Oldham (1976) used supervisors' ratings of quantity and quality of performance and effort on the job. Also, they pointed out some of the proverbial problems they had with absentee data. Obviously, better, more objective measures of job performance and other work outcomes are needed to validate questionnaire data.

In the JCM Hackman and Oldham focused on the content of the job itself, but there is some evidence that they should add other situational factors into it. For example, Aldag and Brief (1979) noted

that if there is much dissatisfaction with extrinsic factors such as pay or supervision, it is unlikely that employees will place a great emphasis on job characteristics. Oldham, Hackman, and Pearce (1976) found that employees who were satisfied with extrinsic factors (including pay, security, co-workers, and supervision) showed significant positive relationships between the level of enriched characteristics of their jobs and internal work motivation and performance. For employees who were dissatisfied with the extrinsic factors, relationships were regularly weaker. Thus, job design may be a viable alternative only when there is already a relatively high level of satisfaction, and it might not work very well as a corrective strategy.

In summary, the Job Characteristics Model is presently the most popular approach to job redesign. The idea of measuring "perceived job characteristics" has advantages over only measuring satisfaction or motivation per se. It provides a means for identifying the relationships of specific aspects of jobs to separate measures of different kinds of work attitudes and outcomes, provided of course that reliable and valid measures of the variables are available. The recommendations made by Roberts and Glick (1981) along with working on better measures of work outcomes should facilitate further developments in job design research.

The JCM model has elements which are very similar to the principles of job enrichment and the clusters of job attitudes found by



Ford and Borgotta. For example, "task meaningfulness" is similar to "interesting work" and "experienced responsibility" is similar to "having freedom to do the job." Consequently, perhaps the theory explains intrinsic satisfaction on the job but does not explain the practices and procedures associated with the accomplishment of goals and who is responsible for those procedures. The next section deals briefly with theories of leadership and its likely effects on different kinds of work attitudes.

## LEADERSHIP THEORIES

The supervisor (or leader) mediates the relationship between the worker and the work environment. Therefore, it is extremely important to take account of the role of the leader when considering how to motivate employees and provide for their satisfaction on at work. Probably no other aspect of the work situation has a greater influence on work motivation and satisfaction than the supervisor. Two theories of covering somewhat different perspectives are discussed in this section: McGregor's Theory X-Theory Y and a review of the behavioral theories of leadership.

### McGregor's Theory X-Theory Y

In the Human Side of Enterprise, McGregor (1960) presented some innovative perspectives on the management of human resources. According to McGregor, "Man is a wanting animal and as soon as one of his needs is satisfied another one takes its place... Man continuously puts effort - works, if you please, to satisfy those needs" (p. 36).

According to McGregor, the needs of greatest significance to management and to man himself are the egoistic needs and they are of two kinds:

- a) Those that relate to one's self-esteem: needs for self-respect and self-confidence, for autonomy, for achievement, for competence for knowledge;
- b) Those that relate to one's reputation: needs for status, for recognition, for appreciation, for the deserved respect of one's fellows (p. 38).

Thus, through work man seeks to satisfy needs for self-respect and to gain the respect of his fellows. Although management cannot directly provide such satisfactions for employees, they can create conditions such that they are encouraged to and enabled to seek them. McGregor's views encompass two different images of workers and ways in which they can be managed.

### Theory X

Underlying the Theory X approach to management are three assumptions about human nature:

- a) The average human being has an inherent dislike of work and will avoid it if he can.
- b) Because of this human characteristic of dislike of work, most people must be coerced, controlled, directed, threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.
- c) The average human being prefers to be directed, wishes to avoid responsibility, wants security above all (p. 33).

Theory X provides a very unflattering image of human nature (Schultz, 1978). It is incompatible with current values of new breed worker, who desire more freedom and challenge and to feel useful in their work. Actually, people are reduced to desiring only security and shunning responsibility only after they have been confronted with authoritative, dictating, and demanding leaders; only after authoritative leadership has depressed them and deflated their self-worth.

### Theory Y

The assumptions which lead to favorable attitudes and high effort and performance on the job are called the Theory Y approach to management. The assumptions of Theory Y managers are:

- a) The average human being does not inherently dislike work. Depending on controllable conditions, work may be a source of satisfaction (and will be voluntarily performed) or a source of punishment (and will be avoided if possible).
- b) External control and threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed.
- c) Commitment to objectives is a function of the rewards associated with their achievement. The most significant of such rewards, e.g., satisfaction of ego and self-actualization needs can be direct products of effort directed toward organizational objectives.

- d) The average human being learns, under proper conditions, not only to accept but to seek responsibility. Avoidance of responsibility, lack of ambition, and emphasis on security are generally consequences of experience, not inherent human characteristics.
- e) The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.
- f) Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized (p. 47).

The most significant assumptions from Theory Y for motivation of new breed workers are two and three: "Man will exercise self-direction in service of objectives to which he is committed" and "Commitment to objectives is a function of the rewards associated with their attainment," especially the egoistic rewards. People desire work which contributes to their individual feelings of self-worth and importance. It is sometimes astonishing how little it takes to make people feel wanted, challenged, and needed and useful in their work. The treatment of employees begins with the proper assumptions on the part of management. At least with the proper assumptions about human nature, managers have a chance to treat employees in a desirable manner. Although authoritative, dictatorial, and demanding leadership may have short-run payoffs for the employer, in the long-run poor attitudes, low

productivity, avoidance of work, and high turnover are the likely results of that type of management.

### Principle of Integration

According to McGregor, the central principle of organization which derives from Theory X is that of direction and control through the exercise of authority - what has been called "the scalar principle." The central principle which derives from Theory Y is that of integration: the creation of conditions such that the members of the organization can achieve their own goals best by directing their efforts toward the success of the enterprise. The concept of integration and self-control carries the implication that the organization will be more effective in achieving its economic objectives if adjustments are made, in significant ways, to the needs and goals of its members.

McGregor discussed several techniques a manager can use to facilitate integration which include a) mutual process goal setting between subordinate and manager, b) self-appraisal of progress toward objectives, c) management development, d) the Scanlon plan, and f) face-to-face work groups. One important aspect of all these techniques is that the manager acts as a resource person rather than to direct and control work. McGregor said that the Scanlon plan which stressed ultimate participation and rewards for cost reduction was the ultimate approach to integration. Actually, McGregor says that "the limits on human collaboration in the organizational setting are not the limits of

human nature but of management's ingenuity in discovering how to realize the potential represented in its human resources" (p. 4).

In summary, McGregor brought up the idea that people can actually satisfy important egoistic needs under the proper conditions at work. His ideas have been widely accepted and applied in organizations. Some ideas about implementation of Theory Y are brought up throughout the following sections, especially in the section on Likert's principle of supportive relationships.

### Behavioral Theory of Leadership

Researchers who advocated behavioral theories of leadership focused on what leaders do in their leadership roles. On the basis of extensive questionnaire studies leadership behaviors have been grouped into two basic dimensions defined as follows:

- a) Consideration includes behavior indicating mutual trust, respect, and a certain warmth and rapport between the supervisor and his group. This does not mean that this dimension reflects superficial "pat-on-the-back, first name calling" kind of human relations behavior. This dimension seems to emphasize a deeper concern for group members' needs, and includes such behavior as allowing subordinates more participation in decision making and encouraging more two-way communication.
- b) Structure includes behavior in which the supervisor organizes and defines group activities and his relation to the group. Thus, he

defines the role he expects each member to assume, assigns tasks, plans ahead, establishes ways of getting things done, and pushes for production. This dimension seems to emphasize overt attempts to achieve organizational goals (Landy & Trumbo, 1980, p. 438).

The Leadership Behavior Description Questionnaire (LBDQ) is used to measure subordinates' perceptions of "leadership style" with respect to consideration and structure (see Fleishman, 1957). Generally, the most effective leaders score high on both the consideration and initiating structure scales, although some studies suggest that effectiveness depends on other factors, e.g., technology. Other research has shown that a leader high on structure and low on consideration creates an undesirable situation, and so consideration is the best leader style (Ivancevich et al., 1977, p. 281).

In presentation of the path-goal theory of leader-effectiveness House (1971) discussed the following four typical leadership styles:

1. Directive leadership. Provides explicit expectations to subordinates. Provides specific work related guidance to subordinates. Maintains definite standards of performance.
2. Supportive leadership. Demonstrates concern for the well-being of subordinates. Treats subordinates as equals.
3. Participative leadership. Consults subordinates and asks for suggestions. Considers subordinates' suggestions in decision making.



4. Achievement-oriented leadership. Sets challenging goals. Stresses performance improvement. Expresses confidence in subordinates' ability to meet challenging goals.

An advantage of the behavioral theories of leadership is that they indicate some behaviors leaders can take to motivate and satisfy their subordinates. That is the behavioral theories deal with behaviors that will satisfy subordinate's intrinsic needs as well as behaviors that will lead to getting the work done. The breakdown of leadership behaviors into four categories (directive, supportive, participative, and achievement oriented) provides more information to supervisors who are interested in changing their leadership style than the two dimensions (consideration and structure). The leader should learn to use all four styles of management intermixed.

The theories discussed in the next chapters deal with a broad perspective of attitudes and organizations. They take into account more factors than just satisfaction, job design, or leadership behavior alone. Instead all of these factors are considered together in a "systems" view of organizational attitudes and behavior.

## ORGANIZATIONAL CLIMATE THEORY

### Definition of Organizational Climate

Litwin and Stringer(3) introduced the concept "organizational climate" to link McClelland and Atkinson's theory of human motivation to the behavior of individuals in organizations. As used in their research, "the term organizational climate refers to a set of measurable properties of the work environment, perceived directly or indirectly by the people who live and work in that environment and assumed to influence their behavior" (p. 1). In other words, "organizational climate is a concept describing the subjective nature or quality of the organizational environment. Its properties can be perceived or experienced by members of the organization and reported by them on an appropriate questionnaire" (p. 187)

According to Litwin and Stringer, numerous earlier organizational theories focused on the objective features of organizations, such as the technology, the organizational structure, the decision-making processes, and so forth. They reasoned, however, that the members' perceptions of and subjective responses to the organizational environment have the greatest influence on their motivation and behavior. In other words,

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(3) The material for this chapter was adapted from "Motivation and Organizational Climate", by G. H. Litwin and R. H. Stringer, 1968.

peoples' subjective experiences are not totally describable in terms of but are only indirectly related to the objective characteristics in the organizational environment. Furthermore, in terms of motivation and behavior, subjective experience is more important than objective reality. Therefore, the organizational climate model was introduced as a subjective intervening variable, mediating between the objective organizational system and the aroused motivational tendencies.

Organizational climate, then, refers to what Roberts and Glick (1981) called within-person relations or perceptions of the environment. In terms of attitude theory organizational climate refers primarily to the cognitive component, what the person believes about the organizational environment. Litwin and Stringer attempted to identify the major dimensions along which people perceive or classify climates. Before discussing those, however, I will present the model of human motivation that they were trying to link to organizational environments.

#### Model of Human Motivation

The basic principles of human motivation which climate theory sought to explain were as follows. "A person's aroused motivation to behave in a particular way is said to depend on the strength ... of his motives, and on two kinds of perceptions of the situation: his expectancies of goal attainment and the incentive values he attaches to the goals presented" (i.e., Aroused Motivation = Motive Strength X Expectancy of Goal Attainment X Perceived Value of the Goal) (p. 12).

Motives are conceived here as dispositions to strive for general and often internalized goals. They are presumably acquired in childhood and are relatively enduring and stable over periods of time. Expectancies and incentive values depend on the person's experience in specific situations like the one he now confronts, and they change as the person moves from one situation to another or as the situation itself is altered (p. 12).

Climate theory was developed in an attempt to explain three "motives" or "needs" which had been shown by McClelland and others to be important determinants of performance and success in business. They were:

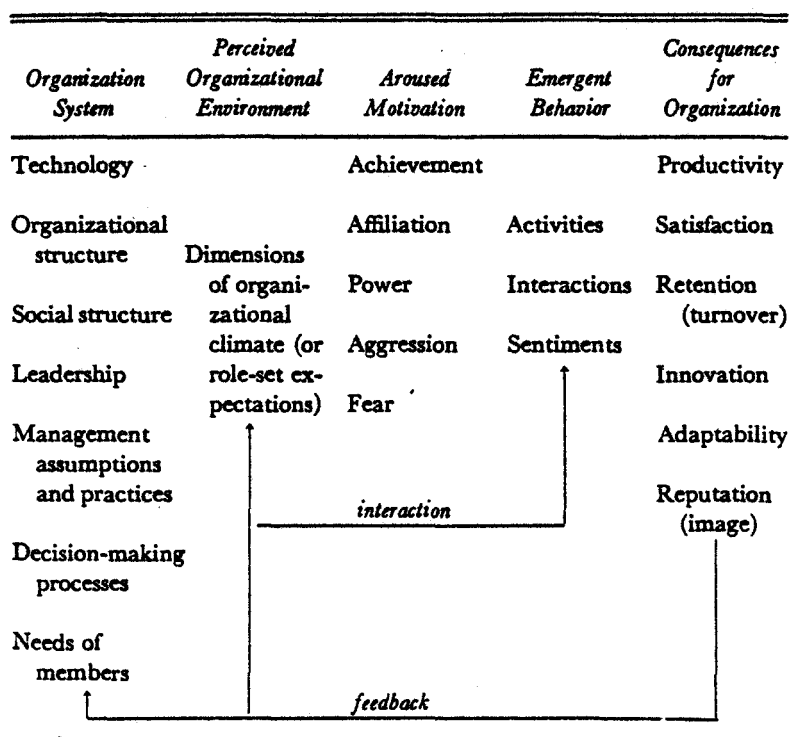
- a) Need for achievement- defined as the need to excel in relation to competitive or internalized standards. A person high in need for achievement (nAch) likes situations in which he takes personal responsibility for finding solutions to problems. Responsibility allows him to get personal achievement satisfaction from the successful outcome. He also has the tendency to set moderate achievement goals and to take calculated risks. The moderate risk situation simultaneously maximizes his expectancy of success and the incentive value associated with that success. Finally, the people with a strong concern for achievement want concrete feedback on how they are doing.
- b) Need for power- defined as the need for control and influence over others. People with a strong need for power (nPower) usually

attempt to influence others directly - by making suggestions, by giving their opinions and evaluations, and by trying to talk others into things. They seek positions of leadership in group activities; whether they become leaders or are seen only as dominating individuals depends on other attributes such as ability and sociability.

- c) Need for affiliation- defined as the need for warm, friendly, relationships. People with strong affiliation needs (nAff) think about friendly, companionate relationships they would like to have. Since they want others to like them, they are likely to pay attention to the feelings of others. In group meetings they make efforts to establish friendly relationships, often by agreeing or giving emotional support.

### The Climate Model

The general factors which influence organizational climate and its consequences for the organization are summarized in the model in Figure 2. The organization system features are seen as generating an organizational climate, which in turn arouses (or suppresses) particular motivational tendencies. The patterns of motivated behavior that result are seen as determining a variety of consequences for the organization, including productivity, satisfaction, retention (or turnover), adaptability, and reputation. The importance of the feedback cycles is also noted schematically.



Source: Litwin and Stringer (1968).

Figure 2: Climate Model of Motivation and Organizational Behavior

### Dimensions of Organizational Climate

Throughout their research, Litwin and Stinger worked toward isolating the most important dimensions of organizational climate and their influence on aroused motivation tendencies. The exact dimensions and the questionnaire items which they used to measure them changed slightly as their research progressed, and so did the hypothesized effects on motivation. Generally speaking, however, the important dimensions and their expected effects on aroused motivation tendencies can be described as follows.

1. Structure- defined as the feeling that employees have about the constraints in the group, how many rules, regulations, and formal procedures there are; is there an emphasis on "red tape" and going through channels, or is there a loose and informal atmosphere?

An excessive amount of structure is related to authoritarianism, i.e., stringent authority-based values and behavior by persons with authority. Excessive structure and constraint acts to reduce either the challenge of the job or the perceived worth of succeeding at the job. Thus, it does not arouse nAch, but it does arouse nPower, particularly where there is competition for recognition or status. By the statements used to measure structure, it appeared that some degree of structure was necessary to achieve any effectiveness at all. That is, the complete absence of structure would not arouse nAch or nPower, but rather frustration.

2. Responsibility- the extent to which individuals are expected to and encouraged to take personal responsibility and emphasis is given to individual accountability.

Need for achievement is nurtured in a climate that allows individuals to assume a good deal of responsibility. If the climate of responsibility is such that status differentiation is made salient rather than emphasizing freedom and feedback aspects of personal responsibility, then nPower may also be induced by this dimension.

3. Reward- the feeling of being rewarded for a job well done emphasizing positive rewards rather than punishments; the perceived fairness of the pay and promotion policies.

A climate oriented toward giving reward, rather than dealing out punishment, is more likely to arouse expectancies of achievement and affiliation and reduce expectancies of the fear of failure. A performance-based reward climate arouses nAch. Rewards for excellent performance and fair appraisal of all performance stimulate individuals high in nAch to strive for these rewards as symbols of their success. The individual high in nAff will be stimulated by this climate to the extent he perceives that his strivings will lead to warm, close, interpersonal relationships. Generalized approval, like friendliness will not arouse nAch; it must be performance based. The perceived emphasis on reward vs. punishment is intimately related to the degree of warmth and support.



4. Risk- the sense of riskiness and challenge in the job and organization; is there an emphasis on taking calculated risks or is playing it safe the best way to operate.

Climates that allow and emphasize moderate, calculated risk taking will arouse nAch. Climates that tend to stress a conservative approach to tasks will frustrate and weaken nAch. This dimension has no effect on nAff or nPower.

5. Warmth- the feeling of general good fellowship that prevails in the work group atmosphere; the emphasis on being well-liked; the prevalence of friendly and informal social groups.

This dimension is positively related to the development of nAff. Warmth and friendliness may reduce work-related anxieties, but there is no basis to hypothesize that a jocular, friendly environment will arouse nAch. It is unrelated to power motivation.

6. Support- the perceived helpfulness of the managers and other employees in the group; emphasis on mutual support from above and below.

Support and encouragement reduce the salience of fear of failure and increase the salience of achievement motivation and achievement oriented activity. This dimension is also positively related to nAff.

7. Standards- the perceived importance of implicit and explicit goals and performance standards; the emphasis on doing a good job; the challenge represented in personal and group goals. This dimension could be called high performance standards.

High performance standards are related to the arousal of nAch and stimulation of achievement related needs. The theory of achievement motivation is built around the notion of achievement relative to a standard of excellence, and it should be expected that the level of standards that are set would be an important determinant of aroused nAch. No direct effect on nPower or nAff is expected. However, in a climate of warmth and friendliness, rewards and approval, a person with high nAff might respond favorably in order to please their fellow workers or boss.

8. Conflict- the feeling that managers and other workers want to hear different opinions; the emphasis placed on getting problems out in the open, rather than smoothing them over or ignoring them. Is conflict between individuals tolerated or accepted, or is there an emphasis on cooperation at any cost?

Confrontation and conflict may serve to arouse nAch in many ways. First, direct confrontation and conflict tend to increase flow of relevant information. Therefore, achievement goals can be clarified. Confrontation and conflict may increase promptness and concreteness of performance feedback. The alternatives for action and the obstacles to achievement are often made explicit, and the individual can better judge how well he is doing.

Confrontation and conflict would tend to threaten stability of warm, friendly relationships and would reduce arousal of nAff. Tolerance for conflict will arouse nPower only when status and influence are related to the ability to deal with and confront

conflicts. Generally, persons with high nPower seek confrontation as a means of influencing others.

9. Identity- the feeling that you belong to a company and you are a valuable member of a working team; the importance placed on this kind of spirit; emphasis is given to cooperation and getting along well.

Individuals high in nAff will respond positively to an environment that emphasizes group cohesiveness and loyalty. Such an environment tends to emphasize the need for close interpersonal relationships. Mutual support should be high, and affiliative cues should be widespread.

Indirectly, group identity would arouse nAch. It is the group itself which is important to the affiliative individual, but it is the goal or the norm of the group that is important to the high achiever. If the identification were centered around an achievement goal - a goal that the achieving individual believed could be best attained through group action - then he would respond favorably to an emphasis on group identity. Thus, to arouse nAch the climate should combine identity with high standards.

Litwin and Stringer also reviewed some research on the effects of feedback on group interpersonal relations, such as trust and openness. They found that emphasizing group loyalty and group goals (i.e., providing only group feedback as to how the whole group was doing)

increased group identity and led to improved performance, less concern about personal rewards, more mutual trust, and less strain in interpersonal relations. Deemphasizing group goals (giving individual feedback only) led to more withdrawal from personal interaction, less desire to achieve a good score, and less mutual trust. When both personal and group goals were emphasized (when there was feedback as to how the group was doing and how individuals were doing), there was greatest increase in personal performance, interpersonal sensitivity was increased, and task organization was most prevalent. Thus, feedback appeared to be an important determinant of group cohesiveness and group and individual performance. Feedback was also stressed in the JCM.

#### Management of Climate

An important distinction was made between motive, which is a relatively stable personality characteristic, and aroused motivation, which is a situationally influenced action tendency (p. 25). The situationally aroused motivational tendency may or may not "fit" a person's dominant motive or need pattern. It is possible for a person with a strong nAff to find himself in an achievement-oriented climate. The ideal climate is where there is a good fit between the demand of the task and the motives of the individual. In which case the ideal climate would emphasize those dimensions which arouse the motive in question. Therefore, managers must attempt to match the needs of their subordinates with the various task demands. However, this individual approach to motivation is time consuming and very difficult to manage

effectively. Therefore, the entire organizational climate must become the focus of management actions.

The capacity to influence climate is perhaps the most powerful leverage point in the entire management system. Litwin and Stringer recommended five phases for controlling climate:

1. Phase one: Deciding what kind of climate is most appropriate (given the nature of your workers and the jobs to be done).
2. Phase two: Assessing the present climate.
3. Phase three: Analyzing the "climate gap" and establishing a plan to reach the ideal climate.
4. Phase four: Taking concrete steps to improve climate.
5. Phase five: Evaluating your effectiveness in terms of your action plans and (redirecting your climate emphasis).

For the second phase, the manager can develop special questionnaires tailored to his objectives and the specific organization. The questionnaire Litwin and Stringer (1968, p. 204) developed can serve as a guideline. Additionally, careful observations and in-depth interviews will help identify the specific concerns which should be included on the questionnaire.

Through analysis of the climate survey and comparison of the ideal climate with the here and now situation, the nature and size of the "climate gap" can be determined. The specific aspects of the climate gap then become the focus of action planning.

Litwin and Stringer described four broad action alternatives available to managers to control the organizational climate:

1. Spatial arrangement changes.
2. Changes in job goal specifications.
3. Changes in communication/reporting patterns.
4. Changes in leadership style.

A brief statement of the behavioral and climate effects from various action alternatives are outlined in Table 9.

It was pointed out that the most important determinant of climate seems to be the leadership style utilized by the managers or informal leaders. The emphasis a leaders put on adherence to rules, the kind of goals and standards they set, and perhaps most important, the nature of their informal relationships and communications with subordinates, have a very great impact on the climate. There are two aspects of leadership which were found to be most important. The first involves the manager's ability to recognize and reward excellent performance. The second aspect involves what Litwin and Stringer called "coaching". Coaching is the extent to which a manager works with his people on the job (or in the field) to solve problems and encourage more effective goal-directed behavior. Coaching tends to lead to a climate characterized by very high support and team spirit.

Litwin and Stringer listed some general guidelines for creating different types of climate. They are:

To create an achievement oriented climate:

TABLE 9

## Action Alternatives for Controlling Climate

<i>Category</i>	<i>Action Alternatives</i>	<i>Anticipated Behavioral Effects</i>	<i>Anticipated Effects on Climate*</i>
Spatial Arrangements	Put people close together	Interaction and cohesion	Increase in Warmth, Support, Identity
	Put work partners close together	Task-related interaction	Increase in Support, Identity, Responsibility
	Determined by status	Interaction within status levels	Increase in Structure, Responsibility
Job and Goal Specifications	Define job duties in detail	Constrained (stereotyped) behavior	Increase in Structure Decrease in Warmth, Responsibility
	Delegate overall responsibility and allow individual job planning	Individuality of work activity	Increase in Responsibility, Risk Decrease in Structure
	Set and review goals periodically	Mutual goal-oriented activity (of managers and subordinates)	Increase in Responsibility, Standards, Reward, Support
Communication/ Reporting Patterns	Establish formal channels and procedures	Constrained (stereotyped) behavior and decreased interaction	Increase in Structure Decrease in Warmth, Support
	Maintain informal contact	Manager-subordinate interaction and information sharing	Increase in Support, Reward, Identity
Leadership Style	Recognize and reward excellent performance	Increase in quality of output	Increase in Reward, Standards
	Provide coaching	Manager-subordinate problem solving	Increase in Support, Standards, Reward

- a) emphasize personal responsibility
- b) allow calculated risks and innovation
- c) give recognition and reward for excellent performance
- d) create the impression that the individual is part of an outstanding and successful team
- e) have a moderate degree of structure.

Achievement oriented climates are good for sales, engineering, or organizations interested in rapid growth. They create excitement about personal goals and accomplishment.

To create an affiliative climate:

- a) allow the development of close warm relationships
- b) provide considerable support and encouragement for the individual
- c) provide considerable freedom and very little structure or constraint
- d) give the individual the feeling that he is an accepted member of a family or group.

Affiliation-oriented climates are good for counseling centers, or people responsible for coordinating the efforts of others. Some degree of affiliation is needed in large, complex organizations where close coordination and integration of different functions is required.

To create a power-oriented climate:

- a) provide considerable structure (in the form of rules, procedures, etc.)
- b) allow individuals to obtain positions of responsibility, authority, and high status



c) encourage the use of formal authority as a basis for resolving conflict and disagreement.

Power-oriented climates are reasonably appropriate for very hierarchical organizations (such as the military) and for organizations where work is highly routine and repetitive (as in many manufacturing organizations).

Finally, it is important to make periodic assessments of changes in organizational climate. This assessment allows the manager to track the development of certain climate characteristics and evaluate the effectiveness of attempts he has made to influence and change climate. Litwin and Stringer pointed out that it is just as important to be aware of the organizational climate as it is to be aware of inventory, projected sales, cash flow, and available financial resources.

### Summary

Litwin and Stringer presented a different perspective from most of the other theorists discussed so far. Herzberg, McGregor, and to some extent Hackman and Oldham viewed people as motivated primarily by intrinsic, egoistic needs. They proposed that satisfaction of intrinsic needs was associated with high job satisfaction and high motivation to perform on the job. Alternatively, Litwin and Stringer emphasized the significance of the external climate on people's "aroused motivation" tendencies. They acknowledged that people had their own intrinsic "motives", but they proposed that the environmentally "aroused motivation" had the most influence on their behavior. In other words,

rather than viewing people as motivated by intrinsic needs and values, Litwin and Stringer hypothesized that the norms and expectations portrayed by the organizational climate determined one's level of motivation on the job. Similarly, Moos (1973) referred to this latter perspective in terms of the influence of the "psychosocial environment" on behavior. According to his view, each individual has input into the psychosocial characteristics of the environment, but in general the aggregated climate characteristics have a greater influence on any individual than he or she has on the overall climate. Thus Litwin and Stringer shifted away from the emphasis on individual intrinsic needs and values to the influence of the external climate on aroused motivation and behavior.

Climate theory is consistent with the general notion of the influence of employees' attitudes on behavior. Their subjective perceptions as measured on a climate questionnaire reflect quite simply the cognitive component of an attitude. That is, the responses on the questionnaire represent their beliefs, thoughts, and opinions about the characteristics of the environment. In Climate Theory it is clear that the measures represent subjective perceptions of the characteristics in the environment, and these perceptions are at least indirectly related to the objective characteristics of the situation.

Climate Theory also is related to leadership theories. Because of the leader's position he or she has control over the climate to a

greater extent than his or her subordinates. One would expect as Litwin and Stringer hypothesized, different leadership styles e.g., supportive, participative, achievement, and directive would create different expectations and values for incumbents. For example, directive leadership alone might lead to a climate with a lot of structure. Achievement leadership might lead to a climate of high standards and so on. Some aspects of leadership are built into Climate Theory.

The Climate Theory has not been well received by some researchers. For example, Guion (1973) said "organizational climate is undoubtedly important, but it seems to be one of the fuzziest concepts to come along in a long time." He said that climate was no different than satisfaction or employee attitudes in general. However, one can reason from the above discussion that Climate Theory is considerably more comprehensive and contributes a different perspective than satisfaction or attitudes alone. Furthermore, there is a growing amount of literature on the influence of the "psychosocial characteristics" of environments on behavior (Moos, 1973). Thus, Climate Theory is useful and will probably continue to receive researchers' attention in the future.

One significant contribution of climate theorists was the various dimensions of climate they identified, several which had not been considered in previous job satisfaction research, e.g. standards, conflict, and risk. Furthermore, they dealt they made specific hypotheses about the effects of leadership style, job design, and other

practices on three types of motivation, nAch, nAff, and n Power, which had been shown to be important for performance and success in business. Thus, the theory was well researched. Climate Theory was particularly useful because it shifted away from the importance of only job satisfaction and placed more emphasis on motivation and performance. Likert's Systems Theory which is presented in the next chapter goes into even more detail about the kinds of practices and procedures leaders can use to create favorable attitudes among their subordinates.

## LIKERT'S SYSTEMS OF ORGANIZATION

### The System 1-4 Continuum

Likert(4) proposed that any management or human organizational system can be measured and described in terms of well defined variables. The focal variable in Likert's theory was the System 1 to System 4 continuum. This variable pertained to the motive sources used by an organization, the manner in which these motive sources are utilized, and the magnitude of effective motivation created among the organization's members.

In System 1 organizations the principle motive sources used are security and economic motives. These motives are utilized through fear, threats, punishment, and occasional rewards. The results for the organization are hostile attitudes among members, little cooperative teamwork, distortion of information, and the presence of an informal system with goals counter to the formal organization. Briefly, a System 1 organization attempts to motivate by fear and punishment which results in hostile motives and attitudes and restriction of output among members.

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(4) The material for this chapter was adapted primarily from two sources: Likert & Likert, "New Ways of Managing Conflict," 1976; and D. G. Bowers, "Systems of Organization," 1976.

Alternatively, System 4 organizations recognize and attempt to use members' desire to achieve a sense of personal worth and importance. Economic motives are satisfied through a group planned compensation system. Group participation is used in setting goals, improving work methods, and appraising progress. There is full recognition for accomplishment, and there is opportunity for free responsible behavior in achieving established goals. The results for the organization include strongly favorable attitudes, substantial cooperative teamwork, accurate upward communication, and the goals of the formal and informal system are one and the same. Generally, in System 4 organizations all social systems support efforts to achieve organizational goals. The organization utilizes supportive treatment and involvement to motivate members, which results in favorable attitudes and cooperative, responsible behavior toward the accomplishment of organizational goals and objectives.

#### Cause and Effect Nature of Systems

Bowers explained that in Likert's conceptualization of the human organizational system is the notion of a flow of events from causal conditions, through intervening processes to end results. Likert pointed out that

The causal variables are independent variables that can be altered directly by an organization and its management and that, in turn, determine the course of developments within the organization and the results achieved by that organization. The general level of business conditions, for example, although an independent variable, is not viewed as a causal variable since the management of a particular enterprise ordinarily can do little about it. Causal variables include the structure of the organization, and management's

objectives, policies, decisions, business and leadership strategies, skills, and behaviors.

The intervening variables reflect the internal state, health, and performance capabilities of the organization, e.g. the loyalties, attitudes, motivation, performance goals, and perceptions of all members and their collective capacity for effective action, interaction, communication, and decision making.

The end-result variables are the dependent variables which reflect the achievements of the organization, such as its productivity, costs, scrap loss, earnings, and services rendered (Likert & Likert, p. 46).

Two basic causal characteristics are given preeminent status in Likert's theory: 1) the basic structure and climate of expectations, roles, policies, and practices of the organization, and 2) leadership behavior. These are described in detail below.

### Structure and Climate

According to Likert, the basic building blocks of organizational structure are face-to-face workgroups, consisting of supervisors and those subordinates immediately responsible to them. The structure consists most basically of a structure of groups, linked together by overlapping memberships into a pyramid through which the work flows. All groups are essential; all are characterized by the same basic processes that make them function either well or poorly. By the scope of their authority and responsibility, however, the groups nearer the top of the pyramid have a greater effect upon the conditions within which groups nearer its base must work than the latter have upon the former.

In addition to the basic structure of multiple overlapping groups, other "organizational climate" conditions are described in terms of the extent to which information flows freely and accurately in all directions, the degree to which there is coordination among separate operations and units, the degree to which there is a participative decision-making structure, and the extent to which the motivational forces are positive and mutually reinforcing, as opposed to negative and conflicting. Bowers pointed out that the use of the term organizational climate differs from that of other writers in the field, who mean by it the general or emotional "tone" which exists throughout the organization. The characteristics denoted within the present usage are not feelings but practices, and they are somewhat different from one group to another within the organization. Groups within the same department will experience slight differences among themselves in organizational climate. Much greater differences will exist among groups who come from different departments or who are at different levels in the organization, and very great differences will occur for groups drawn from different organizations.

### Leadership

Within any group, a sequence is set in motion by the behavior of the group's supervisor. The supervisor's actions toward subordinates set the tone for their behavior toward one another and for their performance on the job. Effective supervisors accomplish through their behavior the building of groups oriented toward cooperative



accomplishment of the task or mission. In contrast, ineffective supervisors set in motion through their actions patterns of behavior which detract from, or depress, that performance.

Managerial behavior, although primarily a causal variable itself, is determined in part by the climate of the organizational conditions. In most situations, the organizational climate and the leaders' own characteristics make separate inputs to behavior, and the result is some combination of their thrust. It should be emphasized, however, that each is a separately limiting factor: this is especially true for organizational climate. For example, policies which prohibit or discourage the holding of group meetings have a profound, and detrimental effect upon subordinate managers' ability to employ group methods of supervision. They can also scarcely maintain high standards of performance against objectives that are inherently unreasonable, unattainable, or unclear. In part managers' behavior is determined by factors specific to them as persons, such as the information which they have acquired over time about what is effective or appropriate, their skills in actually engaging in a particular form of behavior, and their values.

### Peer Leadership and Group Processes

Somewhat subsequent to these two causal factors of organizational climate and managerial behavior, yet antecedent to intervening processes per se, is the behavior of peer subordinates toward one another. Like

managers' behavior, the behavior of subordinates is in part caused by the organizational climate in which they all live, and in part by their expectations, skills, and values. In part, however, their behavior is caused by the managers' behavior, either as a reflection of the way in which managers deal with subordinates, or as a reaction to it.

From these causal and semicausal events the basic processes of the group are formed. Some of the important group processes include, the extent to which the group plans together, coordinates their efforts, makes good decisions, solves problems, and shares information are all influenced by peer leadership.

#### First Level Outcomes and End Results

Between the intervening group processes and hard performance results is a class of outcomes that is partly intervening and partly results in its own right. These outcomes are measures of health, satisfaction, and personnel performance, such as manpower turnover, grievance rate, absence rate and the like. End results are output rate, operating costs, quality of product service, and ultimately earnings.

The flow of events from one set of characteristics to another is diagrammed in Table 10. Questionnaire items used to measure each of these causal and semicausal variables are shown in Table 11. The significance of the cause and effect nature of the System and of the items to measure the variables will become obvious as the principles of the theory are covered in more detail in the following sections.

TABLE 10

## Diagram of Organizational System Flow of Events

Causal Variables	Semi-Causal Variables	Intervening Variables	First level Outcomes	End Results
Structural variables		Group processes	System 1-4 continuum,	Output rate
Overlapping groups, Organization- al climate	Peer group leadership	Planning, Decisions, Sharing information, Confidence and	Health, Satis- faction,	Operating costs
Leadership Supportive behavior, Goal emphasis, Help with work, Teambuilding		trust, etc.	Personnel performance	Quality of product
				Earnings

TABLE 11

## Items to Measure Causal and Semicausal Variables

## CAUSAL VARIABLES

## Supervisory (Managerial) Leadership

Support: Friendly, pays attention to what you are saying, listens to subordinates' problems.

Team building: Encourages subordinates to work together as a team, encourages exchange of opinions and ideas.

Goal emphasis: Encourages best effort, maintains high standards.

Help with work: Shows ways to do a better job, helps subordinates plan, organize and schedule, offers new ideas, solutions to problems.

## Organizational Climate

Communication flow: Subordinates know what's going on, superiors are receptive, subordinates are given information to do jobs well.

Decision-making practices: Subordinates are involved in setting goals, decisions are made at levels of accurate information, persons affected by decisions are asked for their ideas, know-how of people of all levels is used.

Concern for persons: The organization is interested in the individual's welfare, tries to improve working conditions, organizes work activities sensibly.

Influence on department: From lower level supervisors and from employees who have no subordinates.

Technological adequacy: Improved methods are quickly adopted, equipment and resources are well managed.

Motivation: Differences and disagreements are accepted and worked through, people in the organization work hard for money, promotions, job satisfaction, and to meet high expectations from others and are encouraged to do so by policies, working conditions, and people.

### INTERVENING VARIABLES

#### Peer Leadership

Support: Friendly, pays attention to what others are saying, listens to others' problems.

Goal emphasis: Encourages best efforts, maintains high standards

Help with work: Shows ways to do a better job, helps others plan, organize and schedule, group shares with each other new ideas, solutions to problems.

#### Group Process

Planning together, coordinating efforts.

Making good decisions, solving problems.

Sharing information.

Wanting to meet objectives.

Having confidence and trust in other members.

Ability to meet unusual work demands.

#### Satisfaction

With other workers, superiors, jobs, this organization as compared with others, pay, progress in this organization up to now, chances for getting ahead in the future.

Source: Likert and Likert (1976, p. 73-74).

## Essential Characteristics of Effective Systems

### Description of System 4

Basically, Likert found that managers who achieve the highest production, lowest cost and most financially successful operations use management principles which differ significantly from those used by managers who achieve below-average productivity, costs, and earnings. The basic principles used by the highest-producing managers have been integrated into a general organizational system called System 4. It is described as follows:

The human organization of a System 4 firm is made up of interlocking work groups with a high degree of group loyalty among the members and favorable attitudes and trust among peers, superiors, and subordinates. Consideration for others and relatively high level of skill in personal interaction, group problem solving, and other group functions are also present. These skills permit effective participation in decisions on common problems. Participation is used for example, to establish organizational objectives which are a satisfactory integration of all the needs and desires of all the members in the organization and of persons functionally related to it. Members of the organization are highly motivated to achieve the organization's goals. High levels of reciprocal influence occur, and high levels of total coordinated influence are achieved in the organization. Communication is efficient and effective. There is a flow from one part of the organization to another of all relevant information important for each decision and action. The leadership in the organization has developed a highly effective social system for interaction, problem solving, mutual influence, and organizational achievement. This leadership is technically competent and holds high performance goals (Likert & Likert, 1976, p.16).

This description of System 4 illustrates what Likert called an interaction-influence network. The interaction influence network refers to both the structure of the organization and interaction processes by

which it functions. These processes include all those dealing with leadership, communication, control, decision-making, and goal-setting. The variables that make up the interaction-influence network are causal of the motivational sources tapped by an organization. As already noted, these make up the climate variables which are related to structure and leadership.

The important organizational characteristics of System 1 and System 4 are contrasted in Table 12. As shown, the System 1 organization was called the "Exploitative Authoritative" organization. This system hoards control and direction at the very top of the organization, decisions are made at the top, and orders are issued. Although there is some downward communication, these communications are received with hesitancy and suspicion by subordinates. Mistrust is prevalent and control and responsibility for organizational goals is felt only at the top.

System 4 is termed the "Participative Group" system. In this system decisions are made throughout the organization. Goals are established by group participation, except in emergencies, and for this reason are accepted both overtly and covertly. Information flows freely upward, downward, and laterally, and there exist practically no forces to filter communication. The interpersonal climate is one of trust.

TABLE 12

## Profile of System 1 and System 4 Characteristics

System 1: Exploitative Authoritative	System 4: Participative Group
<p>1. <u>Leadership process</u> includes no perceived confidence and trust. Subordinates do not feel free to discuss job problems with their superiors.</p>	<p>1. <u>Leadership process</u> includes perceived confidence and trust between superiors and subordinates on all matters. Subordinates feel free to discuss job related problems with their superiors who in turn solicit their ideas and opinions</p>
<p>2. <u>Communication process</u> is such that information flows downward and tends to be distorted, inaccurate, and viewed with suspicion by subordinates.</p>	<p>2. <u>Communication process</u> is such that information flows freely throughout the organization-upward, downward, and laterally. The information is accurate and undistorted.</p>
<p>3. <u>Interaction-influence process</u> is minimal and almost always with fear and distrust; subordinates have little effect on departmental goals, methods, and activities.</p>	<p>3. <u>Interaction-influence process</u> is extensive and friendly with a high degree of trust and confidence; subordinates and supervisors have a great deal of influence on goals, methods, and activities of of their units.</p>
<p>4. <u>Decision-making process</u> occurs only by the supervisor or at higher levels; subordinates are rarely involved in decisions that affect their work; decision makers are often unaware of problems at lower levels.</p>	<p>4. <u>Decision-making process</u> occurs by group participation and usually by consensus; subordinates are almost always involved in decisions which affect their work; decision makers are quite aware of problems at lower levels.</p>
<p>5. <u>Goal-setting process</u> is in the form of orders issued.</p>	<p>5. <u>Goal-setting process</u>, except in emergencies, is in the form of group participation.</p>
<p>6. <u>Control process</u> is centralized at the top and emphasizes fixing blame for mistakes.</p>	<p>6. <u>Control process</u> is dispersed throughout the organization and emphasizes self-control and problem solving.</p>

Source: Adapted from Ivancevich et al. (1977, p. 352).



Likert presented a questionnaire for the measurement of these organizational characteristics (see Likert & Likert, 1976, p. 28-32). Thus, one can use questionnaires to assess all the variables in Likert's Systems Theory. In order to use the information collected with questionnaires to change or develop a system toward the ideal System 4 from some other level it is necessary to consider some of the causal and semi-causal variables in more detail.

### The Principle of Supportive Relationships

The effectiveness of an interaction-influence network depends upon the adequacy of its structure and interaction processes. The interactions occurring within a network are profoundly affected by the leadership provided. Leadership, consequently, is of major importance in building and operating highly effective interaction-influence networks.

System 4 leadership differs in important respects from the leadership required by other systems. The most fundamental of all System 4 leadership principles is the principle of supportive relationships which is stated as follows:

The leadership and other processes of the organization must be such as to ensure a maximum probability that in all interactions and all relationships with the organization, all members will, in the light of their background, values, and expectations, view the experience as supportive and one which builds and maintains their sense of personal worth and importance (Likert & Likert, p. 108).

Likert pointed out that there is a substantial and growing body of research findings demonstrating that the application of this leadership principle yields favorable attitudes and highly motivated cooperative behavior and helps an organization achieve its goals effectively.

Bowers pointed out five things that supportive leaders do:

1. Supportive supervisors are basically friendly and unpretentious people. They are firm when firmness is called for, but not threatening or hostile. They talk with subordinates, listen closely and patiently to what they have to say, and make themselves available when needed.
2. Supportive supervisors demonstrate by their behavior that they are interested in their subordinates as human beings, not simply as hands useful for getting work done, or impersonal cogs in a machine. They show that they are sensitive to their subordinates' feelings, mindful of their needs and interests, and concerned with helping them solve their problems.
3. Supportive supervisors seek involvement of their subordinates in issues affecting the latter's work lives.
4. Supportive supervisors show that they have trust and confidence in the integrity, ability, and motives of their subordinates. They demonstrate by their behavior that they have confidence that their subordinates can do their jobs successfully. They exercise general, rather than close, supervision and they share information with their subordinates that will add to the latter's understanding of events which affect them.

5. Supportive supervisors are careful to provide praise and recognition for a job well done. To the extent that they err, they do so on the side of commission rather than omission, since they are probably aware that deserved recognition builds newer and higher levels of aspiration.

Likert pointed out that it is not enough for leaders to believe genuinely that they are reacting in a supportive manner. The principle of supportive relationships is being applied only when the persons with whom leaders are dealing see the leaders' behavior as contributing to their sense of personal worth and importance. A particularly effective step in getting an accurate picture of leaders' behavior and reactions of others to it is to obtain quantitative measurements of the leaders' behavior as perceived by their subordinates using the profile of leadership behavior questionnaire (see Likert & Likert, 1976, p. 112).

The questionnaire is used to measure behaviors which reflect the use of the principle of supportive relationships. After administering it to subordinates the results can be used to provide feedback to the leader. Supportive discussion by the group of these data about what can be done to bring about improvement can be of great value in assisting the leader and the members to improve. A similar scale can be used to get feedback on the nature of interactions among the members of the group themselves and this information can lead to improving group interaction as well.

The principle of supportive relationships embodies a highly important concept about human behavior, i.e., all persons have a strong, inherited desire or motive to achieve and maintain a sense of personal self-worth and importance. All people want appreciation, recognition, influence, a feeling of accomplishment, and a feeling that people who are important to them believe in them and respect them. All people want to feel that they have a place in the world. This desire appears to be universal (Bowers, p. 4).

Thus, to motivate its members, an organization must provide opportunities for accomplishment, fulfillment, satisfaction, and pleasure in the attainment of organizational objectives. All members must feel that the organization's objectives are important, that its mission is of genuine significance. They must also feel that their own job contributes in an important manner to the organization's attaining its objectives. They should view their job as challenging, meaningful and important. This idea is very similar to the notion of "task meaningfulness" in Hackman and Oldham's job characteristics model.

Leaders must recognize and understand this basic human desire for personal worth and importance in order to behave in ways consistent with the principle of supportive relationships. Leaders must have basic faith in people and a generous attitude toward others. They cannot deal openly and supportively with others unless they have confidence and trust in others' abilities, judgement, and integrity. They must believe

that people fundamentally and inherently are decent and trustworthy and will behave that way when given the opportunity and encouragement to do so. Clearly, this view is totally compatible with the assumptions about human nature in McGregor's "principle of integration" and Theory Y approach to management.

### Importance of High Performance Goals

Likert pointed out that the principle of supportive relationships does not mean that leaders should simply "be nice to people and let them relax and take it easy." People who are not expected to do much will assume that others view them as weak, incompetent, and inferior. This is ego-deflating and contrary to the principle of supportive relationships.

High aspirations for the attainment of excellence are an important aspect of the leaders' job. Leaders must create a personal and organizational image that encourages excellence. Leaders must have expectations of superior accomplishment for themselves as well as for others. This is one of the most effective procedures for helping subordinates accomplish difficult tasks and, in the process of doing so, acquire increased competence and self-confidence. This is seen by subordinates as a vote of confidence in their abilities. The boss's belief in them makes them willing to undertake with confidence more and more difficult assignments.

Bowers pointed out that enthusiasm of high performance goals is different from punitive pressure. Subordinates want to be stimulated and helped but not nagged. Moreover, care must be taken not to encourage the setting of goals that are unreasonably high. Finally, effective supervisors help to encourage high performance goals by reciprocation and setting a good example.

### The Central Role of the Work Group

Another characteristic of System 4 which has already been discussed to some extent is its heavy reliance upon problem-solving by highly effective face-to-face work groups. The powerful emotional, motivational, and interactional phenomena of a group profoundly affect both its determination to do group tasks well and its capacity for productive problem-solving. Successful problem-solving requires a high level of group loyalty and cooperative attitudes and behavior.

Leaders can help to build and maintain their groups as effective, cooperative, problem-solving units by skillfully applying the principle of supportive relationships and other relevant System 4 principles at every step throughout the intellectual problem-solving process. If the principles are applied skillfully by leaders and members in the interactions which occur during intellectual problem-solving, the cooperative attitudes and behavior among the group members will be increased or maintained at a high level. Friendliness, confidence and trust, attraction to the group, and similar reactions will grow in

response to the supportive treatment each member experiences from the leader and colleagues (Likert & Likert, p. 132).

To the extent that the group is positive, rewarding, reassuring and stimulating, it will be attractive to its members. They will develop a closeness, cohesiveness, confidence and trust that will result in pride in their group and loyalty to its aims and objectives. Under these conditions values that seem important to the group will carry greater likelihood of acceptance by individual members, who will be more highly motivated, not only to abide by these values, but to achieve the important goals of the group. Because of these processes, the values of the group are more likely to represent a satisfactory integration of the members' values and needs.

It is assumed, of course, that with these conditions that the group has been in existence for a sufficient period of time to have developed "well-established working relationships" among all of its members. Irrespective of the level of interpersonal sensitivities and group skills, present at the onset among its members, each group must develop over time the confidence, trust, loyalty and favorable attitudes which characterize highly effective workgroups. Members must come to know each other well enough to know the meaning of communications coming to them from others. Each person must learn his or her own role and that of every person to whom he or she must relate. There appears, according to Likert, no fully acceptable substitute for time together

for developing these close bonds. Members of System 4 organizations seek to help one another, and their motivation and capacity to cooperate become substantial as their working relationships are firmly established (Likert & Likert, p. 49).

Thus, groups are a valuable management resource. As Likert stated, management will make full use of the potential capacities of its human resources only when each person in an organization is a member of one or more effectively functioning work groups that have a high degree of group loyalty, effective skills of interaction, and high performance goals. Supportive behavior helps establish effective groups and both supportive behavior and group membership can help satisfy important human needs for esteem and personal worth.

### The Role of Participative Decision Making

Another important aspect of System 4 organizations, which goes hand in hand with the central role of the work group, is participative decision making. The basis of participative decision making is that well-nigh all persons have a need to feel that they are contributing members of some entity larger than themselves, to accomplish something meaningful, to do a good job, and to be recognized for it. When organizations permit those who must do a job to settle on a way of doing it that meets their personal needs, motivational forces felt by employees align themselves in ways which help to build a drive toward meeting the organizational objective. For self-fulfillment, people need



and appreciate, having a voice in deciding those issues closely related to their work lives.

The elements of participation consist of (a) group, rather than person-to-person, methods of supervision, (b) the open flow of information in all directions (with immunity from ridicule or vindictiveness), and (c) the ability of all parties to exercise a measure of influence over outcomes.

Supervisors attempting to follow a participative pattern typically present to their groups in regular staff meetings problems which face them collectively, and before any decision has been made about it, they encourage all views, make their own views available without presenting them in such a way as to override others, and develop those processes which result in the pooling of all relevant information. From this they help the group to develop an integrative solution to the problem at hand, one to which all are willing to commit themselves (Bowers, p. 22).

As a general rule, at each level the problems considered should be those for which the supervisor has responsibility.

Through participative decision making, the supervisor structures and guides events so that all the relevant information is made available, and the best possible decisions are made. This is in contrast to the supervisors electing to make the decision themselves, which almost certainly means that it is based on limited information.

Bowers pointed out that:

When all persons in a group feel responsible for that group's success and have the ability to influence events, the group's success is more likely than when the reverse exists. Furthermore, participation results in widely dispersed control

throughout the organization. Persons at all levels of high performing organizations feel that they have and do have, more say and influence over what goes on in their departments or units than do persons at those same levels in organizations that perform poorly (p. 27).

Thus, participative decision making motivates employees because it gives them a stake in the successful performance of the group and the organization. It provides them with ownership of the problem. However, motivational consequences alone are not at issue. It is in addition, the simple error proneness of the autocratic system which presents itself to be judged, because the prerogative of deciding things unilaterally carries with it the privilege of being far more often wrong.

### The Communication Process

The flow of information throughout the organization is critical to its effective functioning. Bowers pointed out that most organizations highly value downward communication, but that they have relatively little concern about upward flow of information. He suggested, however, that it is critical for the organization to concern itself with the flow of information upward, laterally, and downward. Some of the principles which encourage this type of communication were already discussed, e.g. emphasis on developing effective face-to-face work groups and participative decision making and problem solving.

Moreover, like downward communication, communication upward is likely to be enhanced where there is created within the organization, a climate which encourages it. It is important that the organization demonstrate by its pronouncements, policies, and by the behavior of its managers at all levels, that it actively seeks the inputs and views of those at lower levels. Downplaying status distinctions aids this process, as does encouraging openness and expression of divergent views. An ability to accept and cope constructively with criticism from one's subordinates also helps. The manager who can do this is likely to be participative. The participative stance is likely to improve downward communication as well.

It is important to note just as individuals and groups have an effect on communication, so does the flow of communication affect the groups which make up this system. All the groups need pertinent information about the relationships of their tasks to operations in the other parts of the system in order to perform those tasks effectively. Upper level groups cannot make effective decisions if denied the information pertinent to those decisions stored in the experience and heads of persons at lower levels.

Beyond these things, an organization by sharing information with its membership, says to the individual members that it trusts and respects them. In doing so, it enhances their motivation to accomplish the objectives because it adds to, rather than detracts from, their loyalty to the organization and their identification with it.

### Coordination and the Linking-Pin Function

This principle of effective organizational functioning has been alluded to several times already, but it deserves more explicit explanation at this point, i.e., linkage (coordination) appears to be best where the organization consists of a meaningfully integrated network of overlapping groups. Linkage primarily means that in a complex organization the efforts of one subsegment of the organization supplement or compliment, and do not counteract or confound, those of another. The linking-pin function is similar to what Lawrence and Lorsch (1969) referred to as "integration," the quality of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment.

The purpose of linkage is to keep those operations which are functionally distinct, but interdependent, in gear with one another. The channels of linkage are often lateral, rather than vertical, and operate ordinarily without an authority base. The foreman who encounters a difficulty caused by a unit responsible to another command chain often simply goes to his counterpart in the other unit. The two of them settle on a decision which solves the problem. Application of the concept of multiple overlapping groups facilitates this process.

When an organization consists of multiple overlapping groups, all people above the bottom tier and below the top tier belong to more than one group. They are simultaneously superiors of the group below and

subordinates in the group above. The more participative the groups are, the more members are able to influence peers and superiors in directions which square both with the facts of the real situation and with the needs which their subordinates' feel. At the same time group members have greater real influence with their subordinates, greater credibility with them, and more "in the bank" upon which to draw. They are therefore better able to align their commitments to the requirements which their superiors have established. All groups, superiors, and subordinates, have through their common membership, greater positive impact on the others.

One important requirement is that the groups must be such that genuine upward influence is possible. When supervisors, who by their membership are linking pins in the system, have the ability to influence their own superiors within the upper groups, linkage is possible and likely. If they lack that ability, little linkage will occur. Their efforts to build committed groups among their subordinates will falter because of a demonstrated inability on their part to deliver from the larger organization in a way that will meet their subordinates' needs.

The overlapping group structure is an important part of the System 4 organization. Systems 1, 2, and 3 utilize person-to-person rather than group-to-group relationships. A few organizations lack any structure at all, that is they are like amorphous masses and are very ineffective. Likert called this type of an organization System 0.

### Importance of Technical Competence

The last important aspect of an effective system to be discussed is the technical competence of leadership. Likert does not mean that supervisors must necessarily personally have the greatest technical knowledge of the work they supervise. In fact, he says very high technical competence can even be a liability as people move up the hierarchy. This is not to say that technical competence necessarily is negatively related to managerial capability; it simply suggests that there is not a perfect correspondence between personal technical know-how and the ability to get technical resources to the locations where they are needed and in the amounts and kinds required (Bowers, p.75).

Likert described this aspect of supervisors' behavior in the following way:

Leaders have adequate competence to handle the technical problems faced by their group, or they see that access to this technical knowledge is fully provided. This may involve bringing in, as needed, technical or resource persons. Or they may arrange to have technical training given to one or more members of the group so that the group can have available the necessary technical know-how when the group discusses a problem and arrives at a solution (Bowers, p. 75).

Thus, highly effective managers make full use of technical resources, but they do so in a manner that motivation is enhanced rather than diminished, and favorable, cooperative attitudes are created rather than destroyed. More specifically, they direct the work by seeing that the work to be done is planned and scheduled, that subordinates are

supplied with materials and tools, that the work activities are initiated, and by making sure that necessary technical information is made available to them. They make certain that subordinates are well trained for their particular jobs, and endeavor to help subordinates gain promotion by training them for jobs at the next level. This involves giving them the relevant experience and coaching them whenever the opportunity arises. They coach and assist employees whose performance is below standard as well.

### Summary

In summary, Likert made little direct reference to job satisfaction per se. Instead his theory was directed more toward the processes involved in running an effective organization. The key aspects of the theory were "participative group management" and the use of questionnaires for obtaining quantitative measures of workers' thoughts, feelings, and behaviors for feedback and organizational development.

Systems Theory encompassed numerous principles brought out in the other theories discussed previously. Perhaps the most salient one was the proposed motivational basis of behavior, man's desire for self-worth and importance. McGregor and Herzberg also hypothesized that man's egoistic needs were the ones of most significance to management. Hackman and Oldham also got at this point in proposing the importance of "experienced meaningfulness" of work in motivating and satisfying

workers. The principles of leadership (see Table 11) overlapped directly with the directive, supportive, participative, and achievement oriented leadership styles discussed in an earlier chapter. Furthermore, the principles also enveloped several of the climate dimensions in Litwin and Stringer's theory, such as high performance standards, support, warmth, and group identity. Overall, Systems Theory is a comprehensive theory of management and motivation. It provides consensus on numerous principles in the other theories regarding employee attitudes.

In terms of attitudes, Systems Theory dealt with employees' perceptions of organizational variables, leadership, communication, etc. Employees describe the perceived nature of the system on questionnaires. The measurements are different from climate measures in that they are usually tied to specific events and/or agents while climate theory measures abstract feelings or tone not tied to any specific events or conditions. For that reason, the descriptive measures of specific practices and procedures are more useful for making improvements than the climate measures.



## FIELD STUDY

### Background and Problem

The field study was done in a telephone company in South Chicago. The purpose, in general, was to investigate employee-customer relations and specifically to identify barriers to high quality customer service as measured by company performance indexes. The problem was large size differences in the performance among service representatives located in different offices throughout the division. This study focused on two offices (hereafter referred to as the "target offices") because they had consistently shown low performance, particularly on sales. The division average sales index was 335.9 and the two target offices were at 267.1 and 287.5. Their minimum objective was 300.0.

The service representatives received excellent training for all aspects of their jobs, and so it was proposed that they all had the ability to do their jobs and the cause of the low Sales performance in the target offices was attitudinal in nature. The division manager asserted that the service representatives in the target offices had poor attitudes about everything from race relations to their sales responsibilities, and so he commissioned the study to learn the causes of their apparent poor attitudes and what could be done to improve them. Thus, the general aim of the study was to develop and administer an

employee attitude questionnaire in order to identify the job factors that were important to service representatives and could be expected to influence their attitudes and performance. The focus of the study was on job factors that managers and supervisors had the authority to control themselves so that they could use the survey results to make changes geared toward performance improvement.

### Description of Performance Indexes

The service representatives' job required technical, organizational, and telephone communication skills, as all their contacts with customers were made over the telephone. They were responsible for answering customers' questions about billing, service, and equipment; bill collections from delinquent customers; and as mentioned above for selling new telephone equipment to customers. Service representatives were expected to treat customers personally and professionally. Their motto was "quality and service."

The division manager kept records on how well service representatives performed their various responsibilities. For example, observers listened in on samples of service representatives' contacts with customers and made ratings on Quality of Contact Handling (QCH), an index of how natural, friendly, courteous, understanding, and helpful they were during the contacts. The Contact Waiting Interval (CWI) was the number of seconds customers had to wait on the telephone while service representatives retrieved information from files. Their goal

was to minimize CWI. The Contacts Without Defects (CWD) was an index of the correctness of information provided on orders, adequacy of arrangements made, and overall quality of customer handling. The Sales index indicated the number and types of products service representatives sold.

### Research Design

The division in this study was divided into three districts, and the districts were further subdivided into 12 geographically separated offices. Each district was headed by a district manager and each office was headed by an office manager. Within each office 20 to 50 service representatives worked in groups consisting of five to 10 service representatives and a supervisor. In the whole division there were approximately 450 service representatives in 48 work groups.

The research design was correlational, consisting of correlations between the performance indexes and service representatives' responses to a job attitude questionnaire. The average of the performance ratings for three months, the month the attitude survey was administered and the two months prior to that, were used as the criterion variables for this study.

The QCH, CWI, and CWD indexes were averages computed over all the service representatives in a given office, whereas the Sales index was broken down by group averages within each office. Thus, the Sales index

was available for approximately 48 groups whereas the other indexes were available for 12 offices. For this study, the Sales index was the primary criterion, and the group was used as the primary unit of analysis, because this provided the most observations for statistics. A secondary analysis involved the correlations between the office level performance indexes (QCH, CWI, CWD) and office averages on the attitude questionnaire.

As already indicated, the basic purpose of this study was to identify the job factors which influenced service representatives' attitudes and job performance. It was expected that some job factors were very important for their effects on job performance and other factors were less important for job performance but more important for job satisfaction. Specifically, participative group approaches to supervision e.g., using performance results for group feedback and using the group to emphasize performance improvement and problem solving were expected to be associated with high performance. Good pay, working conditions, and promotion opportunities were expected to be associated more with job satisfaction. The goal was to develop a path diagram showing the flow from causal variables to intervening variables and finally to job performance and job satisfaction.

### Method

The first step in the research process involved the collection of background information regarding the nature of the service representatives' work and the problems they encountered in carrying out their daily tasks. This was accomplished through interviews with the division manager, his staff, and the district manager who was responsible for the two target offices. Additional interviews were conducted with office managers, supervisors, and service representatives. All the interviews were open-ended allowing the respondents to discuss their most salient problems, goals, priorities, likes and dislikes. An attempt was made to interview a representative sample of old and young, experienced and inexperienced service representatives. In all, the division manager, the district manager, two office managers, and 13 service representatives were formally interviewed. Except for a few additional informal interviews with employees in other offices, all the interviews were with employees in the target offices. In future research it would be better to interview a representative sample of employees from all the offices.

In the interview with the district manager, she mentioned that one reason for the low Sales in the target offices was that the customers in those areas were old-fashioned, hard-minded, and very difficult to sell to. She also mentioned that some of the service representatives in those offices were old-timers and they just were not motivated to sell, because selling was a new responsibility to them. On the other hand,

the division manager said the Sales in the target offices had been higher in the past and that they could show better results if they only had better attitudes.

Some of the service representatives' most salient concerns centered around the "Fads" schedule, which was a mechanized system for determining the number of telephone lines that had to be open in each office. Based on the number of incoming calls during the previous hour, Fads automatically determined the number of service representatives who had to be available to answer telephones for any given time period. When managed well, the Fads schedule was supposed to make efficient use of service representatives' time, but several of them complained that it limited their freedom and basically caused more headaches than it did good. Another concern was the "pressure to sell" which they said led to cheating and lack of cooperation with other departments, such as installation and repairs. Most of the service representatives expressed satisfaction with their pay and the general working conditions. Some concerns came up about the nature of supervision, but this was usually with reference to specific supervisors rather than supervision in general. Along with the material from the previous research, the information collected from these interviews was used as content for the attitude questionnaire items.

### Description of the Questionnaire

In addition to the interviews with the employees and the review of the literature presented in the previous chapters, ideas for the content of questionnaire items were derived from other popular questionnaires used in industry today. The Science Research Associates' Employee Attitude Survey (SRA, 1973), the Hospital Climate Survey (Carey, 1975), Sears' Employee Attitude and Research Survey (Sears, 1978), and General Motors' Organizational Description Questionnaire (GMC, 1974), were all reviewed for content and format ideas. Robinson, et al. (1969), "Measures of Occupational Attitudes and Occupational Characteristics" was also a good source of ideas for item content. The plan was to factor analyze the questionnaire data to derive factors for later analyses, but on the basis of all the above sources, items were written to preliminarily assess the following content areas.

- a) Job demands- work scheduling (Fads), sales pressure, amount of work.
- b) Problem solving- help from supervisor and co-workers in solving problems that occur in the daily work; holding meetings to solve problems.
- c) Improvement emphasis- how often the supervisor and/or co-workers came up with ideas of how to do the job better.
- d) Feedback and rewards- compliments for good work, finding out how you are doing on the job, constructive criticism.
- e) Promotions- opportunities for and fairness of.
- f) Teamwork- sharing information, solving problems, team effort.

- g) Autonomy- taking action without supervisor's review, using your own ideas.
- h) Interdepartment cooperation- cooperation from other departments.
- i) Job importance- contribution to company success and influencing one's own pay level.
- j) Satisfaction- overall satisfaction with job, satisfaction with pay and working conditions.

The majority of the questionnaire items and response scale formats were written so that they would yield descriptive information about the various events and conditions in the job situation. For example, to the question "Are you kept up to date on important changes that affect your job?" the respondents indicated "how often" (i.e. 1=Almost always; 5=Almost never) that event occurred. Fewer items dealt simply with job satisfaction, e.g. "Overall, how is Illinois Bell as a company to work for?" (1=Very good; 5=Very poor)(5).

The items were arranged on the questionnaire so that the flow was interesting and smooth and so that items with similar response formats were grouped together. A draft of the questionnaire was pilot tested on several service representatives to make sure that all the items were

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- (5) As shown here the high end of the response scale, i.e., "Almost always" was anchored with a 1 and the low end, i.e., "Almost never" was anchored with 5. This resulted in negative correlations between Sales and most of the attitude scales. In future research it would be better to use response anchors so 1=low and 5=high, because positive correlations are intuitively easier to interpret than negative correlations.



meaningful and unambiguous and that it could be administered in a timely manner. In all, the final questionnaire consisted of 63 items, 55 with five-point response scales, five questions on demographic variables, one question to identify group and office membership, and three open-ended questions for respondents to write in anything they wanted. The group identification codes were vital because they were used to match the questionnaire responses with the group and office performance indexes. A copy of the final questionnaire is included in Appendix A.

#### Administration of the Questionnaire

The questionnaires were administered to the service representatives in all 12 offices during a three week period in July 1979. Taylor and Bower's (1972) book, "Survey of Organizations" was used as a guideline for administering them. A questionnaire was placed on each service representatives' desk in the morning before any of them started working. When they all convened for work, the project coordinator briefly discussed the purpose of the questionnaire and read instructions for filling it out. At this time anonymity and confidentiality were emphasized, and the service representatives were insured that none of them would be identified personally. Then they completed the questionnaires and returned them in a sealed ballot-like box. This procedure took less than 30 minutes. In nine offices the project coordinator personally administered the questionnaires. In the other three offices the questionnaires and written instructions for its administration were delivered to the office managers the day before

administration was scheduled. The managers administered the questionnaires the next morning, and the sealed box was picked up a few hours later.

## Results and Discussion

### Summary of Return Rates and Demographic Characteristics

All the service representatives in the division, except for the ones who were absent, on vacation, or away from the office for job related reasons, had the opportunity to participate in the survey. The actual number of questionnaires administered and returned in each office is shown in Table 13. The overall return rate was 67 percent and the rates from the different offices ranged from 44 to 78 percent. The return rates from the target offices (offices 2 and 4) were slightly but not significantly lower than the overall rate.

The demographic characteristics of the service representatives who returned questionnaires are summarized in Table 14. The average Time In Job was between five and 10 years. The majority were full-time, female employees; only 11.4% were males. Seventy-five percent had Previous Experience with another company. The average Age was between 30 and 35 years, but more than 50% were 30 years or younger.

Chi-square tests were computed to test for differences on the demographic variables across the twelve offices. Because so few questionnaires returned and the problems created by empty cells in the

TABLE 13  
Survey Return Rates

Office	Number of Questionnaires Administered	Number of Questionnaires Returned	Percent Return Rate
1	50	30	60%
2	33	17	52%
3	50	23	46%
4	29	16	55%
5	40	31	78%
6	35	23	66%
7	50	35	70%
8	29	20	69%
9	37	27	73%
10	18	8	44%
11	29	18	62%
12	31	22	71%
NA	NA	20	NA
TOTALS	431	290	67%

Note: The managers administered the questionnaires in offices 1, 3, & 9. The office identification was Not Available (NA) for twenty questionnaires because they had missing or invalid identification codes.

TABLE 14  
Summary of Demographic Characteristics

<u>TIME IN JOB</u>			<u>CLASSIFICATION</u>		
	N	%		N	%
1 Less than 1 year	73	25.2	1 Full-time	267	92.1
2 1 to 5 years	88	30.3	2 Part-time	10	3.4
3 6 to 10 years	68	23.4	NA	8	2.8
4 11 to 15 years	34	11.7			
5 Over 15 years	21	7.2			
NA	6	2.1			

<u>SEX</u>			<u>PREVIOUS EXPERIENCE</u>		
	N	%		N	%
1 Male	33	11.4	1 Yes	218	75.2
2 Female	246	84.8	2 No	62	21.4
NA	11	3.8	NA	10	3.4

<u>AGE</u>		
	N	%
1 25 years or under	88	30.3
2 26 to 30 years	71	24.5
3 31 to 35 years	46	15.9
4 36 to 45 years	40	13.8
5 46 to 55 years	21	7.2
6 56 years or over	3	1.0
NA	21	7.2

chi-square test, office 10 was omitted from these tests. Two significant differences were found on Time in Job ( $\chi^2 = 106.2$ ,  $df=40$ ,  $p<.001$ ) and Age ( $\chi^2 = 71.65$ ,  $df=50$ ,  $p<.05$ ). There were no significant differences on the other demographic variables.

It was possible that these differences were related to Sales and the other performance indexes. This possibility was tested by computing correlations between office averages on the demographic variables and the performance indexes. There were significant correlations between Time in Job and Sales ( $r(10) = -.66$ ,  $p<.05$ ), Time in Job and CWD ( $r(10) = .67$ ,  $p<.01$ ), and Time in Job and QCH ( $r(10) = -.57$ ,  $p<.05$ ). Thus, it appeared that service representatives with more experience had lower Sales, lower QCH, and higher CWD. As one would expect, Age and Time in Job were highly correlated,  $.77$ ,  $p<.01$ .

An examination of the data revealed that the target office with the lowest Sales (267.1) had the highest average Time in Job. Thus, the district manager may have been partially correct in saying that the service representatives in the target offices were old-timers and just not motivated to sell. However, the other target office was less than one standard deviation above the mean on Time in Job. These results should be interpreted with caution, since broad categories rather than exact measures were used for Time in Job, but still the results provided some evidence that Sales were negatively related to Time in Job. Perhaps the questionnaire results provided some information on how to overcome this possible barrier to high quality performance.

### Analysis and Interpretation of Attitude Data

Three pieces of information were computed for the interpretation of the attitude data: 1) a factor analysis to identify the major themes or dimensions in the data, 2) the mean and standard deviation for each factor, and 3) the intercorrelations among the factors. The individual item means and standard deviations were also used in interpreting some of the overall factor means. As already noted, the focus of the study was at the group level of functioning. However, for the factor analysis it was necessary to maximize the number of respondents in relation to the number of items factored, and so the data from all 290 service representatives who returned questionnaires were used in the factor analysis. For subsequent analyses, group averages were computed for each factor.

Factor Analysis. A principal factor analysis with Varimax rotation was used to identify the major dimensions represented in the 55 attitude items. Other iterative factor analytic procedures and rotations (e.g. oblique) were examined, but they resulted in nearly the same solutions, and so the principal factor analysis was used because it required the fewest assumptions (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

The average squared multiple correlation or communality estimate between each item and all the other items as predictors was .70 with a range from .54 to .82, which indicated all the items were highly

interrelated. The standardized alpha reliability coefficient for 195 respondents who had complete answers to all the questionnaire items was .90, which also indicated the items were highly interrelated and that the questionnaire had good reliability.

The eigen values and the percent of variance accounted for by each principal factor are shown in Table 15. With a cutoff at eigenvalues equal to one, 15 factors were retained for rotation. The first factor accounted for 25.6% of the variance and then after a sharp drop in the variance accounted for by the second factor, each subsequent factor accounted for gradually decreasing variance. All together the 15 factors accounted for 65.9 percent of the variance in all the data, which was considered a satisfactory solution.

The factor loadings or correlations between the items and the factors are shown in Appendix B. Items were assigned to factors with which they correlated highest, except for item 29 which loaded .49 on both factor eight and factor 13 and was included on both factors. The preliminary factor names and the items that loaded on each factor are shown in Appendix C. The item mean and standard deviation are in the parentheses following each item. Before discussing the individual factors I will present the factor means, standard deviations, and factor intercorrelation matrix because these facilitated the interpretation of the factors.

TABLE 15  
 Factor Eigenvalues and Percent of Variance Accounted For

Factor	Eigenvalue	Percent of Variance	Cumulative Percent of Variance
1	14.09	25.6	25.6
2	2.86	5.2	30.8
3	2.36	4.3	35.1
4	2.11	3.8	39.0
5	1.87	3.4	42.4
6	1.83	3.3	45.7
7	1.62	2.9	48.6
8	1.46	2.6	51.3
9	1.37	2.5	53.8
10	1.24	2.2	56.0
11	1.18	2.1	58.2
12	1.13	2.1	60.2
13	1.09	2.0	62.2
14	1.04	1.9	64.1
15	1.00	1.8	65.9



Computation of Group Factor Scores. The computation of the group factor scores was as follows: First, the average was computed for each group on each item. Then, the items assigned to each factor were summed and divided by the number of items on the factor. Unit weighting was used and items with negative factor loadings were reverse scored (1=5, 2=4, etc.) so that all the factor means were comparable on the same one to five scale.

At the group level data for several cases were eliminated because they had missing or invalid group identification codes, no sales data were available, or else less than three respondents were in the group. A group size of three or more was considered sufficient to provide reliable group data. The mean number of people in the remaining groups was 5.7 with a range from three to nine. In all, 42 groups representing 240 service representatives were used for the group level analyses. The data from these 42 groups were used in the computation of the overall factor means and standard deviations (see Table 16 and the factor intercorrelation matrix (see Table 17)).

Generally, low ratings on the item and factor means were favorable and high ratings were unfavorable because the rating scales on the questionnaire were such that 1=high and 5=low. Factors 11, 13, and 15 were negative and so the reverse was true.

TABLE 16  
Overall Factor Means and Standard Deviations

Factor	Factor Name	Mean	Standard Deviation	N
1	Supervision	2.55	.47	42
2	General Satisfaction	2.75	.40	42
3	Teamwork	2.91	.47	42
4	Intergroup Relations	3.55	.45	42
5	Communication	2.75	.34	42
6	Promotion Opportunities	3.38	.40	42
7	Pay Satisfaction	2.80	.46	42
8	Fads/Autonomy	3.20	.47	42
9	Working Conditions	2.85	.51	42
10	Job Clarity	1.98	.42	42
11	Job Pressure(-)	1.77	.34	42
12	Say Over Objectives	3.70	.61	42
13	Amount of Work(-)	1.80	.45	42
14	Job Importance	2.14	.36	42
15	Undeserved Praise(-)	3.68	.55	42

TABLE 17  
Factor Intercorrelation Matrix

	1	2	3	4	5	6	7	8	9	10
1 Supv.										
2 Satis.	.51									
3 Teamwork	.50	.44								
4 Grp. Rel.	.35	.75	.35							
5 Comm.	.36	.57	.42	.50						
6 Promo.	.40	.78	.32	.71	.49					
7 Pay	.19	.41	.22	.24	.27	.22				
8 Fads/Aut.	.56	.73	.23	.53	.45	.59	.45			
9 Wkg. Cond.	.28	.30	.15	.29	.41	.30	.31	.43		
10 Clarity	.29	.10	.11	.07	.27	.18	.09	.20	.33	
11 Pressure	-.04	-.39	-.07	-.26	-.39	-.23	-.05	-.34	-.20	.04
12 Say	.09	.22	.23	.15	.20	.08	.10	.16	.01	-.08
13 Workload	-.33	-.32	.06	-.28	-.26	-.36	-.32	-.71	-.58	-.26
14 Import.	.17	.38	.08	.24	.26	.30	.29	.33	.03	-.15
15 Unfair	.02	-.01	-.10	-.06	-.09	-.04	.07	.04	-.13	-.01

Note:  $r$  (df=40) > .29,  $p$  < .05 (Brunnering & Kintz, 1968, p. 229).

TABLE 18  
Factor Intercorrelation Matrix (continued)

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	11	12	13	14
11 Pressure				
12 Say	-.12			
13 Workload	.13	-.08		
14 Import.	-.28	-.01	-.13	
15 Unfair	-.36	-.15	-.13	-.03

---

Interpretation of Factors. Overall, the results of the factor analysis were very meaningful and interpretable, although a few factors did not come out exactly as expected. The items dealing with improvement emphasis and problem solving loaded on the Supervision, Teamwork, and Communication factors rather than forming separate factors. The items dealing with individual praise and constructive criticism loaded on the Supervision factor rather than forming a separate "rewards" factor. As might have been expected, Pay, Working Conditions, and Promotion Opportunities formed separate factors rather than loading together on the General Satisfaction factor. Two factors, Say Over Objectives and Unfair Praise only had one item each. The data are presented for these factors, but because of the low reliability of just one item they should be interpreted very cautiously. Each factor is discussed in more detail below taking into account the grand mean (Table 16) and correlations with the other factors (Table 17).

The Supervision factor encompassed several leadership principles discussed in earlier chapters. By representing employees' concerns to upper management supervisors showed support and concern for their subordinates' well-being. Knowing when to let people work on their own and when to give them a little extra help was characteristic of general rather than close supervision, and it also showed confidence in employees' ability to do the job themselves as did supporting employees' decisions on difficult customer contacts. By helping employees work out problems in their daily work and showing them ways to do their jobs better, supervisors set standards, provided expectations, and generally helped get the work done. By giving compliments for good work and constructive criticism when needed supervisors showed support and provided subordinates with feedback on what they did well and what they needed to improve on. These leadership behaviors were negatively related to the frequency of subordinates' thinking that they would work better under a different supervisor. Thus, showing support, providing expectations, helping with work, and providing feedback were all associated with supervision and employees' satisfaction with supervision.

The grand mean (1=high, 5=low) on Supervision was 2.55 which indicated that service representatives thought their supervisors generally used good leadership practices and that they were satisfied with their supervision. Ratings on discussing ways to do the job better (item 43) and influence on upper management (item 11) were slightly less

favorable than ratings on the other items. Perhaps service representatives desired more feedback at the individual level and a little more response to their concerns from upper management.

An examination of the factor loadings for items 10 and 11 dealing with representing concerns to upper management indicated that these items loaded fairly high on the Intergroup Relations factor as well as on the Supervision factor. Perhaps service representatives expected management to work out problems with different departments, a problem which was beyond service representatives' and possibly even supervisors' authority. They viewed the supervisor as responsible for interfacing with management on this problem.

Supervision correlated significantly with General Satisfaction, Teamwork, Intergroup Relations, Communication, Promotions, Fads/Autonomy, and Workload. In terms of cause and effect Supervision was more likely to cause more Teamwork, better Communication, smaller perceived Workload, etc. than than the other way around. Thus, leadership practices described on this questionnaire appeared to lead to favorable attitudes toward numerous conditions in the work situation.

The General Satisfaction factor was named such because the items dealt with employees' general evaluations and feelings about their job and company. Reciprocity was implied in that employees who viewed the company as concerned for their welfare and happiness felt loyal to the

company and responsible for its success. Employees who felt good about doing their jobs and got to use their own ideas were generally satisfied with their jobs and thought the company was a pretty good place to work. The item dealing with thoughts about working for a different company was included as a measure of propensity to turnover. Its negative loading on this factor supported the notion that satisfaction is negatively related to turnover.

The grand mean on General Satisfaction, 2.75, was in the favorable direction. The most favorable ratings were on loyalty toward the company, responsibility for its success, feeling good about doing a job well, and overall rating of the company as a place to work. Ratings were less favorable on how much concern the company showed for employees' welfare, overall satisfaction with the job, and opportunities to use one's own ideas. Perhaps the employees felt that overall the company was a pretty good place to work in comparison to other companies, but a few specific changes could be made to make them even more satisfied.

The factor loadings indicated that the company's concern for the welfare and happiness of employees (item 3) also loaded fairly high on the Supervision, Intergroup Relations, Promotions, and Working Conditions factors. Thus, all these factors appeared to contribute to employees' overall job satisfaction and how much they perceived the company to be concerned about their welfare and happiness.

General Satisfaction correlated significantly with 11 of the 14 other job factors. Logically, Teamwork, Communication, Pay, Promotions, etc. caused satisfaction more than the other way around; however, having a satisfied work group may have facilitated Teamwork and Communication. In other words it may have been easier to manage a satisfied work group than a dissatisfied work group. Generally, however, it was logical to consider General Satisfaction as dependent on the other job factors.

The Teamwork factor was nearly the mirror image of the Supervision factor with regards to problem solving and improvement emphasis. It represented the extent to which peers within work groups worked together as a team to solve job related problems and to find new ways to improve their performance. It also represented Teamwork at the office level by sharing ideas that improved performance in one group with the other groups in the office.

The grand mean, 2.91, indicated that employees "sometimes" worked together as a team. "Most of the time" (2.1) they were helpful in working out problems in the daily work but only "sometimes" (3.0) discussed ways to improve their performance, shared ideas with other groups, and coordinated their efforts toward achieving objectives.

Teamwork correlated significantly with Supervision, General Satisfaction, Intergroup Relations, Communication, and Promotions. It



was considered an intervening variable, dependent on the extent supervisors encouraged and facilitated it and at the same time a cause of General Satisfaction and perhaps Intergroup Relations. Again, circularity in causation was likely in that a group that worked together as a team may have made it easier to use group management techniques, but generally Teamwork was most appropriately viewed as an intervening variable.

The Intergroup Relations factor was designed to assess cooperation between service representatives and other departments such as installations and repairs. As it turned out, cooperation between different groups within the same office also loaded on this factor. Perhaps this factor actually measured how openly conflicts between employees in different units were handled. This was similar to the "conflict" dimension in Litwin and Stringer's (1968) Climate Theory.

The grand mean, 3.55, indicated that service representatives may have been experiencing some problems with Intergroup Relations. Particularly, service representatives thought problems between departments were "rarely" (3.6) faced openly and cleared up. Since the item dealing with using the survey to make improvements in the job (item 55) loaded highest here, perhaps service representatives were saying that this was one problem they hoped would get cleared up as a result of the survey. However, they rated the chances that the survey would be used to make actual improvements in their job "rather poor" (3.6).

Intergroup Relations correlated significantly with Supervision, General Satisfaction, Teamwork, Communication, Promotions, and Fads/Autonomy. The supervisor was viewed as responsible for getting things done about Intergroup Relations. Teamwork and Communication, especially at the office level, should have facilitated Intergroup Relations both within an office and between departments. In turn, Intergroup Relations were viewed as causal of General Satisfaction and perhaps how well the Fads schedule was organized. Thus, Intergroup Relations was considered an intervening variable, dependent on Supervision, Communication, and Teamwork, and in turn influencing General Satisfaction and how the Fads schedule was organized.

The Communication factor represented the frequency of using office and group meetings to keep employees up to date on important changes, discuss job related problems, and provide feedback. Apparently, service representatives regarded group and office level feedback as an indication of how well they were doing individually (item 41). Item 43 dealing with discussing ways to do the job better loaded highest on the Supervision factor but it also loaded quite high on this factor. Thus, to some extent, this factor represented Communication at the office, group, and individual level.

The grand mean, 2.75, indicated that employees thought this type of Communication was used "occasionally." In general, office meetings and office level feedback were used more than group meetings and

individual feedback. Across the different offices, frequency ratings on this factor ranged from "quite often" (2.0) to less than "occasionally" (3.3), which indicated some offices needed to use meetings and feedback more frequently, especially since a half hour was set aside for meetings each morning. That is, management recognized the value of group and office meetings and established company policies to facilitate holding them.

In relation to Litwin and Stringer's (1968) findings regarding feedback, emphasizing office level feedback should increase office identity. However, emphasizing feedback and communication at all levels, office, group, and individual should maximize overall effectiveness. One requirement for meetings to increase effectiveness is obviously that the content and process of the communication be of high quality. One suggestion is that meetings focus on job related problems of concern to the people involved.

The Communication factor correlated significantly with Supervision, General Satisfaction, Teamwork, Intergroup Relations, Promotions, Fads/Autonomy, Working Conditions, and Job Pressure. As in Likert's Systems Theory, Communication was regarded as a causal variable, and Supervision was viewed as the major determinant of the extent of Communication. All the factors which correlated significantly with Communication represented potential topics for group discussions in meetings, depending on priorities and current concerns. For example, a

supervisor could use a group meeting to discuss problems and possible solutions for Intergroup Relations. Furthermore, Communication appeared to be one factor which was effective in reducing experienced Job Pressure. Overall, using office meetings to provide feedback and address job related problems represented a useful tool for employing participative management practices.

The Promotion Opportunities factor indicated that service representatives who thought the company tried to help them find out how to advance in the company and that the promotional system made sure the best qualified people got promoted also thought they had good opportunities for promotion and were not uncertain about those opportunities. That is, service representatives who thought the promotional system was implemented fairly were also generally satisfied with the system.

The grand mean, 3.38, indicated that the service representatives may have had some concerns about the promotion system. Their ratings showed they thought the company less than "sometimes" (3.3) tried to help them find out how to advance and the promotional system even less frequently (3.5) made sure the best people got promoted. Since openings were usually difficult to predict it was understandable that employees felt somewhat uncertain of their personal opportunities for a promotion. Service representatives average rating of their own opportunities for a promotion from their present job was "so-so" (3.0).

The Promotion Opportunities factor correlated significantly with Supervision, General Satisfaction, Teamwork, Intergroup Relations, Communication, Fads/Autonomy, Working Conditions, Workload, and Job Importance. The equity principle was useful for interpreting these correlations. Perhaps the more job demands (Fads, Workload, and Job Importance) and more problems (Intergroup Relations) on the job the more service representatives felt entitled to good promotion opportunities. Factors such as good Supervision and Teamwork could lessen job demands and therefore compensate and lessen the importance of Promotion Opportunities. One would also expect individual differences were important with respect to Promotion Opportunities in that some people sought promotions more aggressively than others, and Promotion Opportunities were more important to them. However, since Promotions were available to everyone it was reasonable to assume that most employees desired them. Low ratings on this factor could have come from resentment among workers who came to realize after several years of experience that they were not likely to ever get promoted.

The Pay Satisfaction factor was relatively simple. It measured how satisfied employees were with their pay considering the skills and effort they put into their job and considering their pay compared to pay for similar work in other companies. The questions were designed to see if employees felt they received a fair and equitable wage.

The grand mean, 2.8, showed most employees rated their pay toward the good side. As indicated in the interviews, pay did not appear to be a major issue with the service representatives.

Pay correlated significantly with General Satisfaction, Fads/Autonomy, Working Conditions, Workload, and Job Importance. Again, the principle of equity was relevant to Pay Satisfaction. Employees may have weighed job demands such as Fads, Workload, and Job Importance and evaluated their wages in relation to these demands. Good Working Conditions perhaps compensated for job demands to some extent and thus lessened the amount of pay service representatives viewed as equitable. Also, satisfaction with Pay should have contributed to General Satisfaction with the job.

The Fads/Autonomy factor was centered on the mechanized system for controlling the number of service representatives who were expected to be available at any given time for answering telephones. The items dealt with how much of the time the Fads schedule allowed workers to schedule their work ahead of time and how much of the time there was good communication about the Fads schedule so that everyone agreed on what the schedule was supposed to be. The Fads schedule was also related to Autonomy, or how much of the time service representatives felt they could take action without detailed review and approval from their supervisors. In an interview one woman mentioned that because of the Fads schedule she had to ask permission to go to the bathroom, she

resented that. The Fads schedule was also related to workers' desire to work in a different department.

The grand mean, 3.2, indicated the service representatives' concern about the Fads schedule. Specifically, they thought it "rarely" (3.7) allowed them to schedule their work ahead of time and consequently they "quite often" (2.3) wished they could work in a different department. Perhaps in respects unrelated to Fads, service representatives felt that "most of the time" (2.3) they could take action without detailed review and approval from their supervisors.

The Fads/Autonomy factor correlated significantly with Supervision, Satisfaction, Intergroup Relations, Communication, Promotions, Pay Satisfaction, Working Conditions, Job Pressure, Workload, and Job Importance. Clearly, Fads was related to the way service representatives felt about almost all other aspects of their jobs covered on the questionnaire. In terms of cause and effect, the supervisor was responsible for coordinating the Fads schedule. Since Fads had to be coordinated among all the groups within an office, it was a potential source of Intergroup conflicts. Fads correlated negatively with Workload and Job Pressure, so when Fads worked well, experienced Pressure and Workload were low, but when it worked poorly, experienced Pressure and Workload increased.

Perhaps one way to clear up problems with Fads was to use group and or office meetings to discuss the schedule and to get the service representatives involved along with supervisors in planning the schedule. One would expect that the Fads schedule generally increased job demands and therefore was related to what employees felt entitled to in terms of Pay and Promotions. Finally, the functioning of Fads and Autonomy on the job were related to General Satisfaction with the job. Overall, the Fads schedule appeared to have major significance in relation to how service representatives viewed their jobs.

The Working Conditions factor dealt with the overall physical conditions of the immediate work area and the quality of equipment service representatives had to do their jobs. The grand mean on this factor was on the favorable side (2.85), although the workers rating on the conditions of the work area (2.60) was better than the rating on the quality of equipment they had to do their job (3.0). In one office, service representatives mentioned that they had been expecting to get push-button telephones to replace their dial phones for quite some time. They felt that the new phones would facilitate their work, and they had already been installed in several offices.

Working Conditions correlated significantly with General Satisfaction, Communication, Promotions, Pay, Fads, Job Clarity, and negatively with Workload. The factor loadings showed that item 54, overall rating of the company as a place to work, and item 3, company's



concern for employees' welfare and happiness also loaded fairly high on this factor. Thus, Working Conditions may have symbolized to employees how much the company was concerned with their welfare. As mentioned before, employees may have also viewed Working Conditions among the benefits associated with their job.

The Job Clarity factor pertained to how much of the time service representatives were clear as to which objectives were important and what was expected of them on their job. As the grand mean on the factor, 1.98, showed, "most of the time" service representatives were very clear what was expected of them. Job Clarity correlated significantly with only one factor, Working Conditions, and there was no clear explanation for this relationship.

The Job Pressure factor consisted of two items about the overall amount of pressure felt on the job and the amount of pressure superiors put on service representatives to meet Sales objectives. The mean ratings indicated that service representatives experienced "fairly much" to a "great deal" (1.77) of Pressure on the job.

The correlations of all the job factors except Workload with Job Pressure were negative and the correlations with General Satisfaction, Communication, and Fads/Autonomy were significant. It appeared that Job Pressure contributed negatively to General Satisfaction, but good Communication and Fads scheduling helped to reduce experienced Job

Pressure. In interviews service representatives said that Job Pressure was one of their major concerns.

The Say Over Objectives factor was only one item dealing with how much say service representatives had over what their objectives should be. It was designed to measure mutual process goal setting, but since only one item came out on the factor it was not given much attention. In future research more items should be added to explore this factor in more depth.

The Workload factor dealt primarily with the amount of work a person had to do on the job. The idea was that a person should have enough work to keep busy most of the time but not so much work that he or she felt overworked. The perceived Workload appeared to be directly related to the Fads schedule. Because of the skewed ratings (mean=1.2; S.D.=.6) on the item regarding having enough work to keep busy (item 28) and the negative loading of the Fads item (item 29), this factor actually appeared to represent the perceived extent of overwork. One person wrote in "always" for his response to item 28 because the "almost always" choice was not extreme enough.

The low mean rating, 1.80, on this factor indicated that "most of the time" service representatives thought they were overworked, and this was closely related to the Fads schedule. The negative correlations of the Workload factor with the other factors also indicated that it

represented the extent of experienced overwork. It correlated significantly with Supervision, Satisfaction, Promotion Opportunities, Pay, Fads, and Working Conditions. Good Supervision and Fads scheduling perhaps reduced the perceived Workload, and good Promotion Opportunities, Pay, and Working Conditions compensated for the heavy Workload. In general, however, a heavier experienced Workload was negatively related to General Satisfaction.

The Job Importance factor measured how much service representatives' tasks and responsibilities contributed to overall company profits and how much their base pay was related to how much profit the company made. The idea was to see if service representatives thought they could help increase company profits and thereby increase their own pay by doing a good job.

The item means indicated that service representatives thought their job contributed "fairly much" to "a great deal" (1.7) to company profits, and their base pay depended "some" (2.8) on how much profit the company made. It appeared as though they agreed with the concept but thought they contributed more than they expected to receive in return.

Job Importance correlated significantly with General Satisfaction, Promotion Opportunities, and Fads/Autonomy. It appeared that acceptance of this concept contributed to service representatives' General Satisfaction. In terms of equity perhaps service representatives felt

entitled to more Promotion Opportunities to the extent they viewed their job as important to the overall success of the company, and the Fads schedule made them believe their job was truly important. The factor loadings indicated this factor was also related to Pay Satisfaction.

The Unfair Praise factor was only one item. It was supposed to come out on a "rewards" factor that did not appear, and it did not load on the Supervision factor with the other rewards items. Perhaps this was a bad item and should have been eliminated during pilot testing.

### Summary

Overall, the ratings were quite favorable. The average rating for the whole scale, 2.77, was on the favorable side. One must also acknowledge that employees will use an opportunity like this to voice their gripes. One can look at these factors in terms of the most to least favorable ratings as shown in Table 19. Generally, ratings below three indicated factors that service representatives rated favorably, ratings below three indicated factors they had some concerns about. The kinds of things they had problems with appeared to center around factors associated with increased pressure or stress on the job, e.g., Job Pressure, Workload, Intergroup Relations, and Fads/Autonomy. Thus, perhaps the supervisor should focus on things that would help make the work flow smoothly and free from Pressure.

TABLE 19

Ranking of Job Factors from Most to Least Favorable Ratings

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Job Clarity	1.98
Job Importance	2.14
Supervision	2.55
General Satisfaction	2.75
Communication	2.75
Pay Satisfaction	2.80
Working Conditions	2.85
Teamwork	2.91
Fads/Autonomy	3.20
Promotion Opportunities	3.38
Intergroup Relations	3.55
Workload	4.20
Job Pressure	4.23

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### Relationship of Job Factors to Sales Performance

So far the discussion has been on the description of the job factors and the interrelationships among them without any direct reference to their relationship to on the job performance. The focus in this section is on the correlations between the job factors and Sales performance, which was measured idependently of the questionnaire data. The correlation between each factor and the Sales criterion is shown in Table 20.

Most of the correlations were negative because the rating scales on the questionnaire were such that 1=high and 5=low. All the correlations were in the expected direction except for Job Clarity, and that was not significant. Sales correlated significantly with Supervision, General Satisfaction, Teamwork, Intergroup Relations, Communication, Job Pressure, and Say Over Objectives. The reliability of Say Over Objectives, was questionable because it consisted of only one item. However, its correlation with Sales here indicated it may be worthwhile to develop this factor and examine it further in future research. Generally, good Supervision, high Satisfaction, a lot of Teamwork, good Intergoup Relations, good Communication, and low Pressure were associated with high Sales performance. Thus, there was considerable evidence that the kinds of conditions measured on the attitude questionnaire were significantly related to on the job performance.

TABLE 20

## Correlations of Job Factors with Sales Performance

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<u>Factor Name</u>	<u>r with Sales</u>
Supervision	-.30*
General Satisfaction	-.41*
Teamwork	-.40*
Intergroup Relations	-.34*
Communication	-.37*
Promotion Opportunities	-.26
Pay Satisfaction	-.17
Fads/Autonomy	-.22
Working Conditions	-.19
Job Clarity	.22
Job Pressure	.34*
Say Over Objectives	-.33*
Workload	.00
Job Importance	-.27
Unfair Praise	.19

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\*p&lt;.05, df=40

As mentioned previously, one goal of this study was to develop a plausible cause and effect model that managers could use to get ideas about how to improve employees' on the job performance and job satisfaction. That is, the aim was to treat job performance and job satisfaction as separate job outcomes and then identify which job factors were most important for each. The procedures and results of an attempt to develop such a model are described below.

### Proposed Cause and Effect Model

It is understood that correlation does not imply causation, but by making certain assumptions one can use correlation and path analytic procedures to come up with plausible cause and effect explanations among variables. Path analysis is primarily a method of decomposing and interpreting linear relationships among a set of variables by assuming that (1) a weak causal order among these variables is known, and (2) the relationships among the variables are causally closed (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

Nie et al. defined the idea of causation in the following way. A is a cause of B if and only if B can be changed by manipulating A and A alone. Alone does not imply that all other causes of B are controlled or held constant. A change in A alone will bring about changes in many other variables that are affected by A. Changes in other variables induced by A may in turn affect B. These induced changes in other variables should not be controlled or held constant when we examine the effects of A on B.



For example, say we are interested in the effects of the Fads schedule on job satisfaction and we try to change the schedule so that employees are more satisfied with it. The change in Fads might also induce changes in Intergroup Relations and experienced Job Pressure which in turn might affect General Satisfaction. Simply then, in a path analysis an attempt is made to take account for direct as well as indirect effects on the variable in question.

Nie et al. went on to explain that the relationship between the manipulated changes in A and the accompanying changes in B must be a linear function of the form  $B = cA$  where c is a constant standing for the magnitude of changes in B for a unit change in A. The coefficient so measured is called the linear effect coefficient or simply the effect coefficient. Given a regression of Y on X, for example  $Y' = a + bX$ , the regression coefficient can be interpreted as an effect coefficient under the assumptions of weak causal order and causal closure. If one interprets the regression coefficients as effect coefficients, then one is performing a path analysis.

The aim here was to perform a path analysis using the job factors from the questionnaire and the Sales performance results. The assumption of weak causal ordering among the variables has been alluded to throughout the description of the job factors and it is outlined again in Table 21. The ordering is based on logical and theoretical grounds.

TABLE 21

## Causal Order Among Job Factors and Job Outcomes

Causal Variables

Supervision

Communication

Semi-Causal Variables

Teamwork

Intergroup Relations

Fads/Autonomy

Job Clarity

Intervening Variables

Job Pressure

Workload

Job Importance

Outcome Variables

Sales Performance

General Satisfaction

Pay Satisfaction

Promotion Opportunities

Working Conditions

For example, in the majority of theories reviewed in the earlier chapters, supervision was viewed as the key causal variable mediating between the organizational goals and objectives and its employees. Communication was the other key causal variable in Likert's Systems Theory. In this situation Supervision and Communication were treated as the key variables influencing employees' attitudes, and Supervision was viewed as the major determinant of Communication patterns. In Likert's theory supervision and communication were important because they set in motion the basic group processes, which in this case were the semi-causal variables Teamwork and Intergroup Relations. The Fads schedule was also viewed as a semi-causal variable, dependent upon Supervision and Communication and in turn influencing the intervening variables Job Pressure, experienced Workload, and Job Importance. These in turn influenced the outcome variables, Sales Performance and attitudes toward Pay, Working Conditions, Promotion Opportunities, and General Satisfaction. Attitudes toward Pay, Promotions, and Working Conditions are generally considered as separate facets of job satisfaction and so they were viewed as dependent variables along with General Satisfaction.

The two outcomes of most interest were Sales performance and General Satisfaction, and so multiple regression analyses were done with those as the dependent variables and the other job factors as predictors. Although General Satisfaction correlated significantly with Sales, it was not included as a predictor in the regression model for

Sales. The goal was to identify the predictors of job performance and job satisfaction separately and leave the problem of the relationship between the two open for now.

The results of the regression analyses for Sales and General Satisfaction are shown in Table 22. One can see that Teamwork and Job Pressure were the best predictors of Sales Performance. Together they accounted for 26% of the variance in Sales. The B-weights are interpretable as the expected change in Sales for a unit change in the predictor. Actually, the interpretation of the signs on the B-weights should be reversed because of the direction of the rating scales on the questionnaire. Theoretically, an increase of one unit in Teamwork would bring about a 31.9 point increase in Sales, and a decrease of one unit in Job Pressure would lead to a 36.9 increase in Sales.

Attitudes toward Promotion Opportunities, Fads/Autonomy, Intergroup Relations, Teamwork, Job Pressure, and Pay were the best predictors of General Satisfaction. Again, the B-weights are directly interpretable as the expected change in General Satisfaction per unit change in the predictors, and the signs are all appropriate since all the variables were measured on the same questionnaire.

The next step in the path analysis was to identify which variables had the most influence on the ones that were the best predictors of Sales performance and General Satisfaction, that is to identify the best

TABLE 22

## Regression Analyses for Sales and Satisfaction

Dependent Variable: SALES

Multiple R .51  
 R-square .26  
 F (2,39) 6.35\*

<u>Predictors</u>	<u>B-weight</u>	<u>Df</u>	<u>F</u>
Teamwork	-31.90	1,39	7.45*
Job Pressure	36.90	1,39	5.12*

Dependent Variable: GENERAL SATISFACTION

Multiple R .90  
 R-square .81  
 F (6,35) 24.60\*

<u>Predictors</u>	<u>B-weight</u>	<u>Df</u>	<u>F</u>
Promotions	.35	1,35	9.22*
Fads/Autonomy	.22	1,35	5.61*
Intergroup Rel.	.23	1,35	5.22*
Teamwork	.13	1,35	3.52
Job Pressure	-.17	1,35	3.23
Pay	.11	1,35	2.15

---

\*p<.05

predictors of Teamwork, Job Pressure, Fads/Autonomy, and Intergroup Relations. The results of the regression analyses using these variables as the dependent measures and the other causal variables as predictors are shown in Tables 23 and 24. To prevent the model from becoming too complex, no attempt was made to identify the predictors of satisfaction with Pay and Promotion Opportunities. The most likely predictors of these variables were discussed in the descriptions of the factors on pages 143 & 145.

Controlling for the suppression effect of Fads/Autonomy, Communication and Supervision accounted for 34% of the variance in Teamwork. Thus, having a supervisor who encouraged groups to work together as a team, providing feedback at the group and office level, and holding group and office meetings to discuss job related problems were conducive to Teamwork. The best predictors of Job Pressure were Communication and the Fads/Autonomy factor. Supervision had a suppression effect in predicting job Pressure. The only effect of Supervision on Job Pressure appeared to be through its effects on Communication and Fads/Autonomy.

Together Supervision and Communication accounted for 38% of the variance in the Fads/Autonomy factor. Perhaps when group and office meetings were used to discuss problems related to the Fads schedule the supervisors were able to coordinate the schedule so that service representatives could plan and schedule their work ahead of time.

TABLE 23

## Regression Analyses for Teamwork and Job Pressure

Dependent Variable: TEAMWORK

Multiple R .59

R-square .34

F (3,38) 6.63\*

<u>Predictors</u>	<u>B-weight</u>	<u>Df</u>	<u>F</u>
Supervision	.50	1,38	9.47*
Communication	.46	1,38	4.99*
Fads/Autonomy	-.20	1,38	1.35

Dependent Variable: JOB PRESSURE

Multiple R .48

R-square .23

F (3,38) 3.88\*

<u>Predictors</u>	<u>B-weight</u>	<u>Df</u>	<u>F</u>
Communication	-.33	1,38	4.21*
Fads/Autonomy	-.25	1,38	3.66
Supervision	.20	1,38	2.52

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 n<.05

TABLE 24

## Regression Analyses for Intergroup Relations and Fads

Dependent variable: FADS/AUTONOMY

Multiple R .62  
 R-square .38  
 F (2,39) 11.96\*

<u>Predictors</u>	<u>B-weight</u>	<u>Df</u>	<u>F</u>
Supervision	.45	1,39	11.26*
Communication	.39	1,39	4.47*

Dependent variable: INTERGROUP RELATIONS

Multiple R .53  
 R-square .28  
 F (2,39) 7.70\*

<u>Predictors</u>	<u>B-weight</u>	<u>DF</u>	<u>F</u>
Communication	.56	1,39	8.61*
Supervision	.19	1,39	1.89

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p<.05



Communication was the best predictor of Intergroup Relations, and Supervision added about 3% to the amount of variance accounted for after controlling for Communication. Intergroup Relations were probably improved when problems with other groups or departments were discussed in group and office meetings. Thus, problems with Fads and Intergroup Relations were good topics for supervisors or managers to discuss in group or office meetings. These meetings would be expected to facilitate Teamwork toward generating solutions for clearing up these problems.

The results of the regressions and theoretical analyses were used to develop the path diagrams shown in Figures 3 and 4. A separate diagram was drawn for Sales performance and General Satisfaction, in keeping with the decision to work on separate theories of job performance and job satisfaction. However, one can see that some job factors were important for both General Satisfaction and Sales performance. Teamwork was somewhat more important in influencing Sales than General Satisfaction, but it generally increased them both. High job Pressure was associated with both low Sales and low General Satisfaction. Similarly, Communication and Fads/Autonomy had the same indirect influence on Sales performance and General Satisfaction. Attitudes toward Pay, Promotion Opportunities, and Intergroup Relations were related to General Satisfaction, but they had little or no influence on Sales performance.

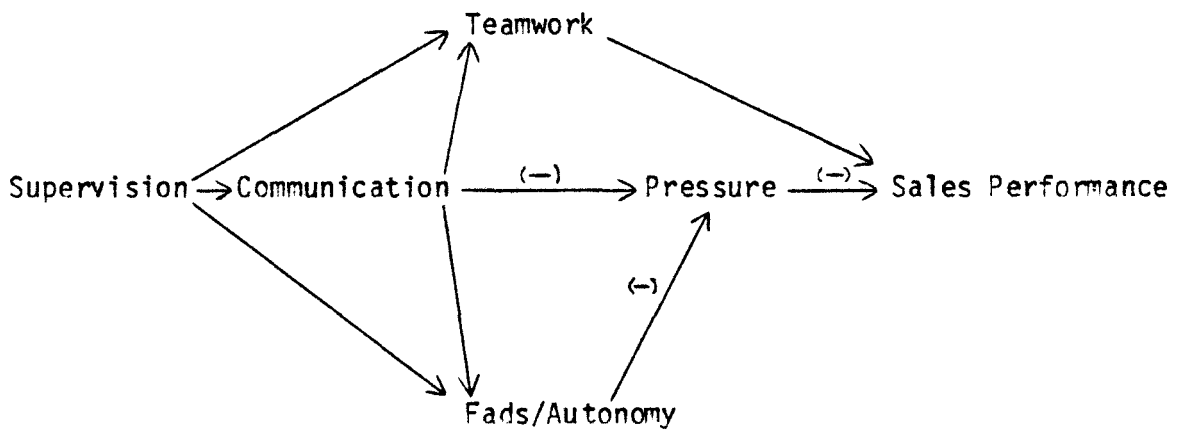


Figure 3: Path Diagram for Sales Performance

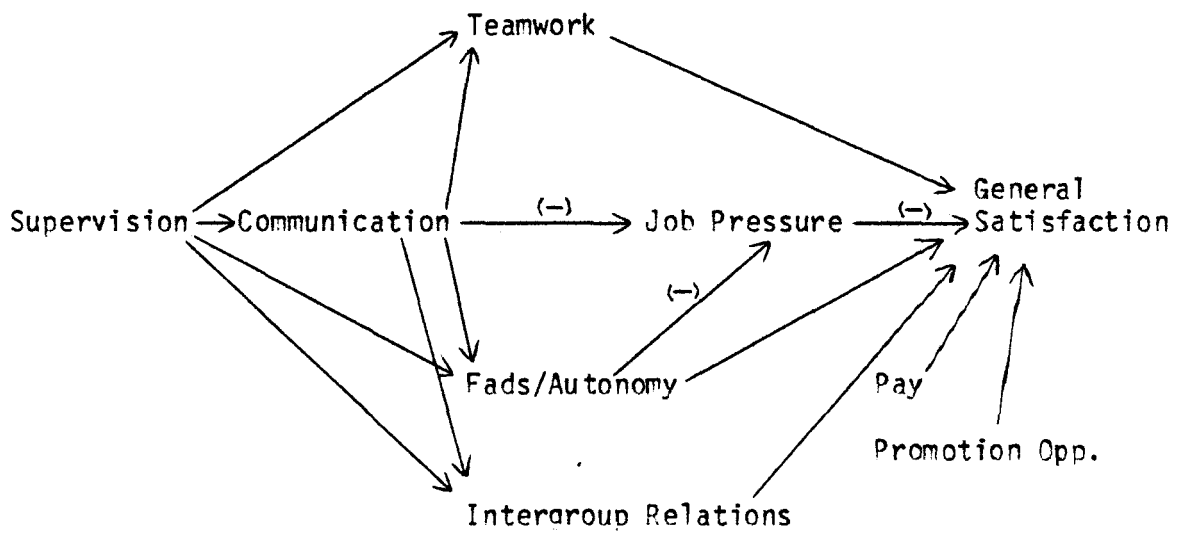


Figure 4: Path Diagram for General Satisfaction

The path diagrams illustrate that the work situation is a network or system of interrelated variables and that changing any one variable will have reverberations throughout the network. Although the path flow shown is unidirectional, an assumption required for path analysis, it is quite possible that changes in the semi-causal variables in the middle of the system would also influence the causal variables at the front of the system. For example, an organizational change of the Fads schedule could influence a supervisor's behavior on the job.

One can use the path diagrams and the regression analyses to calculate the expected change in an outcome variable from a unit change in a causal variable as measured on the questionnaire. To calculate the expected change in Sales from an unit change in Supervision, one would simply use the B-weights from the regression analyses to calculate the intermediate expected effects on Teamwork and Job Pressure. The correlation between Supervision and Communication (.36) can be used as an estimate of the effect coefficient. Thus, the expected effect of a unit change in Supervision on Sales would be the sum of the effects of Supervision on Teamwork and Job Pressure times their respective B-weights for Sales. That is, the expected effect would be the direct effect of Supervision on Teamwork (.50) plus the indirect effect on Teamwork through Communication  $(.36)(.46) = .17$ , for a total expected effect of .67. That times the B-weight for Teamwork on Sales  $(.67)(31.9) = 21.4$ , gives the expected change in Sales through Teamwork for a unit change in Supervision.

Similarly, the expected effect on Sales through Job Pressure is the effect of Supervision on Pressure through Communication  $(.36)(.33) = .12$ , plus the effect of Supervision on Pressure through Fads  $(.45)(.25) = .11$ , plus the effect of Supervision on Pressure through the Communication to Fads path  $(.36)(.39)(.25) = .04$ , for a total expected effect of  $.27$  on Pressure from a unit change in Supervision. That times the B-weight of Pressure on Sales  $(.27)(36.9) = 10.0$  yields the expected effect on Sales through Pressure from a unit change in Supervision. Thus, the total expected effect on Sales is  $21.4 + 10.0 = 31.4$  from a unit change in Supervision. Similarly, the expected effect on General Satisfaction from a unit change in Supervision is  $.37$ . This analysis illustrates the improvements in job satisfaction and job performance that could be expected from application of the behaviors and practices described on the questionnaire.

These regression results and the calculations based on them should be interpreted with caution. They require numerous assumptions. Furthermore, Cohen and Cohen (1975) recommended that researchers keep a ratio of 40 observations or cases per predictor variable in multiple regression analyses. The observations in this study had good reliability and were based on group mean scores, but only 42 observations were available. These results need to be crossvalidated with more observations and in different situations.

### Analyses at the Office Level

As mentioned before, several performance indexes, QCH, CWD, and CWI, were available only at the office level, which meant an N of 12 observations for analyses. Additionally, the average number of "incidental" or unexcused absences was also available for each office. Average ratings for each office on each job factor were computed for analyses using these performance indexes. The correlations between the job factors and the performance indexes at the office level are shown in Table 25.

None of the job factors correlated significantly with absences. Perhaps the reason for this was that the number of unexcused absences was only 1 or 2 per month in each office, and so there was very little variance in the absence data. The QCH rating, the percentage of customer contacts rated good or excellent, correlated significantly with several job factors. Again, the interpretation of the signs on the correlations should be reversed because of the rating scales on the questionnaire. In general, more favorable attitudes were associated with higher QCH indexes at the office level.

Several job factors correlated significantly with the CWD index but in the unexpected direction. That is, more favorable attitudes were associated with more defects in customer contacts. There was no obvious explanation for these correlations, except they may have been an artifact of the restricted range in the index and the small number of

TABLE 25

Correlations of Job Factors with Performance at Office Level

Factor Name	Absences	OCH	CWD	CWI
Supervision	.55	-.65	.76	-.02
Gen. Satisfaction	.37	-.69	.39	-.22
Teamwork	.48	-.42	.55	-.57
Intergroup Rel.	.54	-.57	.53	-.31
Communication	.33	-.45	.64	-.34
Promotion Opp.	.49	-.58	.38	-.32
Pay Satisfaction	.25	-.77	.61	-.02
Fads/Autonomy	.22	-.77	.39	.19
Working Cond.	.05	-.75	.41	-.01
Job Clarity	.26	-.24	-.13	.01
Job Pressure	.40	.34	.01	.16
Say Over Obj.	.10	-.19	-.05	-.30
Workload	-.21	.62	-.41	-.23
Job Importance	.16	-.11	.35	-.25
Unfair Praise	.13	.35	-.35	.28

 $r(10) > .58, p < .05$

observations. All the indexes were above 92%. One other possibility was that the service representatives in the offices with more favorable attitudes were making more customer contacts and therefore made more errors .

None of the correlations with the CWI index were significant. Apparently, other factors were more important than attitudes in determining how long service representatives stayed away from the phone.

Overall, there was some evidence of validity of the questionnaire measures on office level performance indexes, particularly with QCH. However, due to the restricted range on some indexes and the small N these analyses were only of secondary significance.

#### Feedback of Survey Results to Employees

One major purpose of the survey was to collect information that could be used to make changes geared toward performance improvement in the different offices. This involved returning the survey data to the managers, supervisors, and service representatives. One major advantage of the survey feedback process was that it stimulated the need for change. Often employees became comfortable with their usual ways of doing things and didn't look for new ways to do their jobs more effectively. A strategy that seemed very effective for stimulating change in this situation was to present employees in each office with the results of the survey in their office compared to the division



average in graphic form (see Figures 5 and 6). Carey (1975) has used similar graphs for reporting survey results. Figure 5 shows the profile of job factor ratings for the lowest performing office in the division, and Figure 6 shows the profile for the highest performing office in the division.

It is obvious that in the lowest performing office most of the job factor ratings were below the division average and in the highest performing office most of the job factor ratings were above the division average. In the low performing office graphic results were distributed to all employees and they were encouraged discuss their reactions. That is, the results were used to stimulate discussion about improvement. In the high performing office, the results were used as a basis to give recognition and praise to employees for their outstanding performance.

In the low performing office it was very important to present the results in a supportive rather than threatening manner. A common goal for everyone involved had been stressed throughout the survey process. The goal was to create a situation where service representatives could feel good about providing high quality service to customers. Thus, basically two goals were involved, high quality job performance and employees' job satisfaction. Service representatives generally accepted these as reasonable goals.

D—D Division Average

O---O High Performance Office

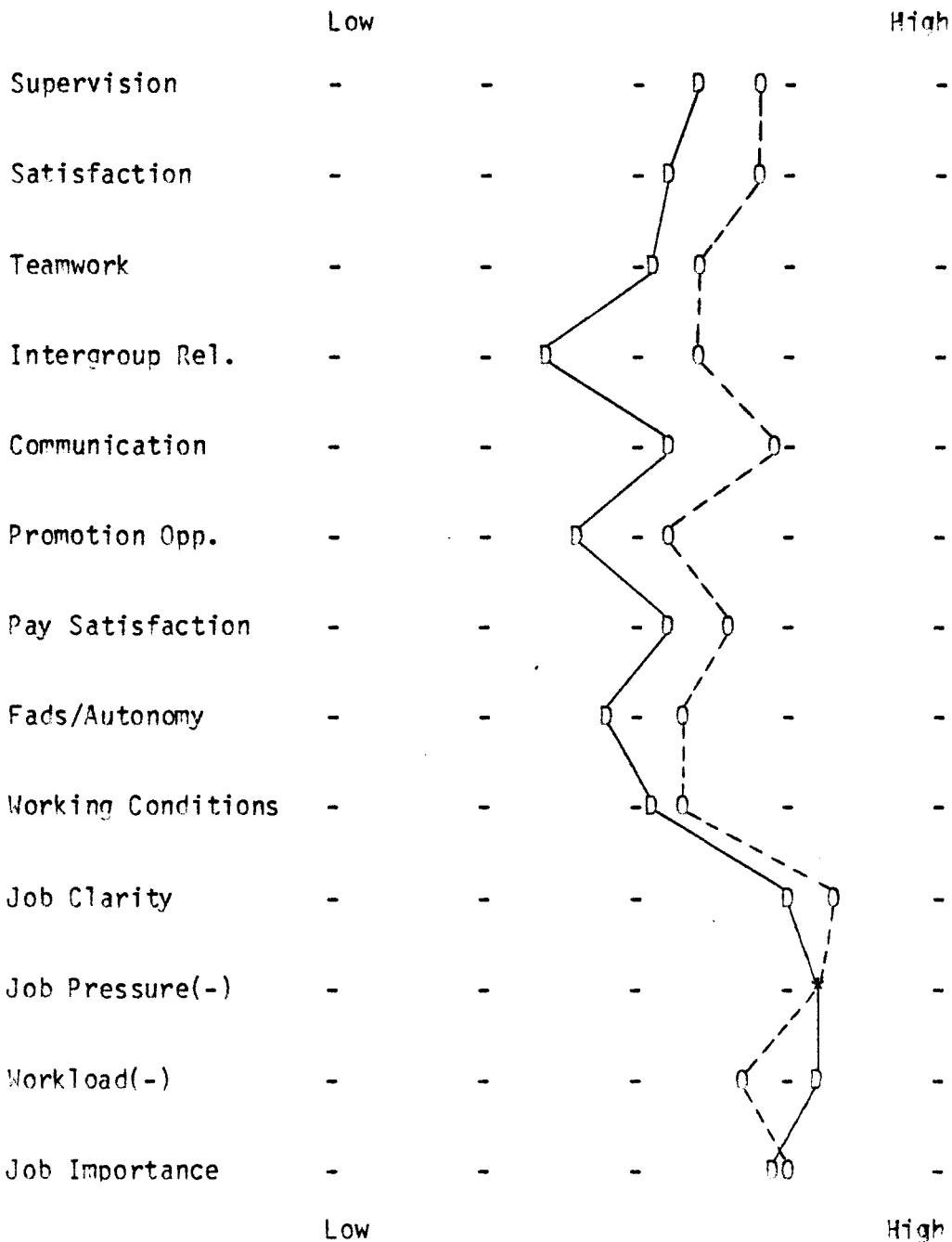


Figure 5: Profile for Highest Performing Office Compared to Division

—D—D Division Averages

---O--- Low Performance Office

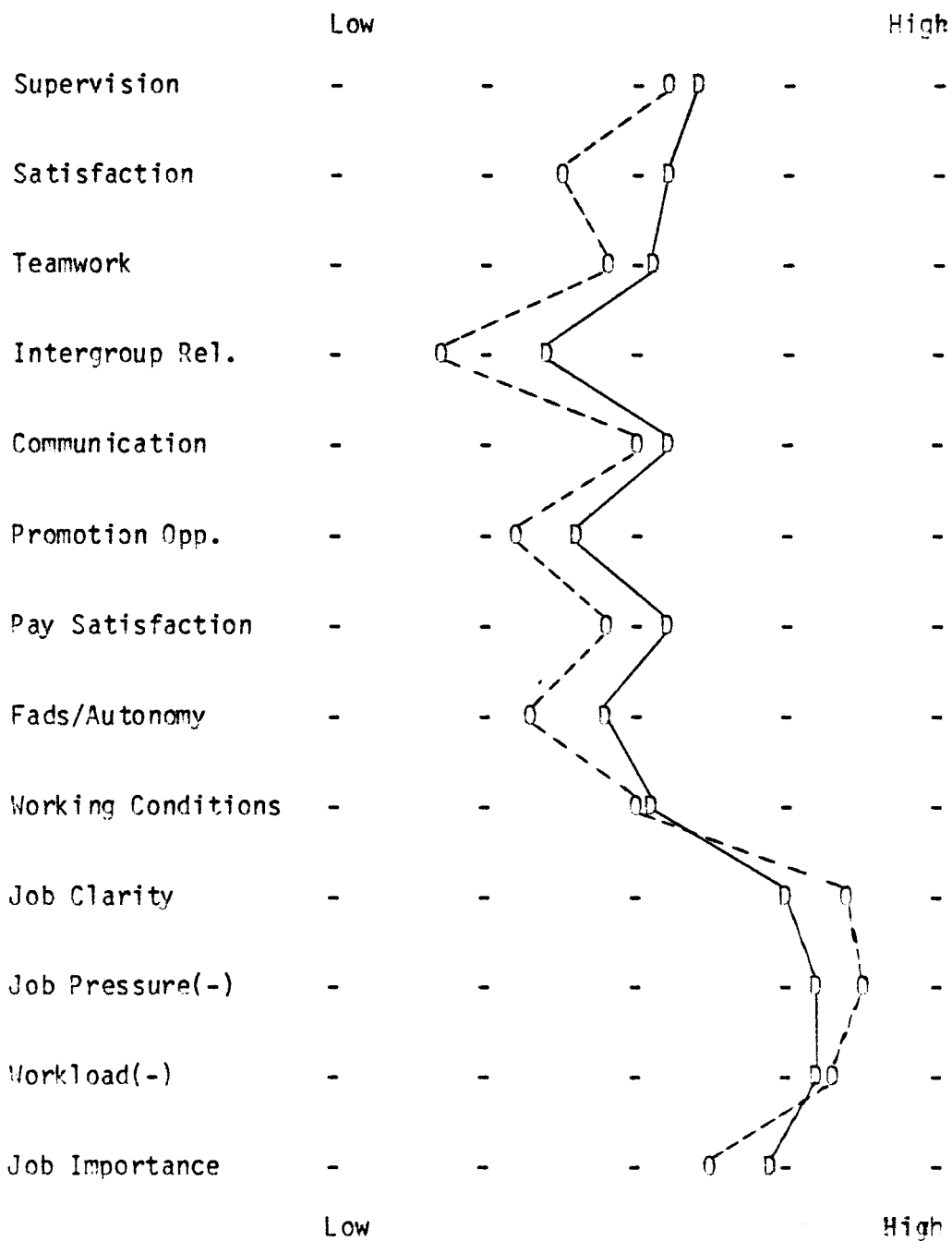


Figure 6: Profile for Lowest Performing Office Compared to Division

Essentially, the survey feedback process involved putting into practice some of the key concepts that had been measured on the questionnaire, namely Communication and Teamwork or the use of information for feedback and group problem solving. The feedback process involved the employees in clarifying and expanding the issues and concerns that had come up in the survey. They were also encouraged to recommend ideas to clear up the concerns that arose. Employees' participation in this process gave them ownership of the problems and stimulated them to do whatever they could to make the situation better.

Dunham and Smith (1979) recommended that managers make a list of what actions they can and will take, which actions they can but will not take and why, which actions will have to be taken by managers at a higher level, and which actions will require the cooperation of both managers and employees. The actions taken in one target were simple and straightforward. For example, the manager agreed to hold an office meeting to discuss job related concerns at least once per week. Another action was the formation of a committee to look into ways to improve the Fads schedule. The aim was to get more involvement of the service representatives along with the supervisors in planning the schedule. The problem with cooperation from other departments was going to require actions from higher management, although a committee was formed to make periodic inquiries and progress reports on this problem. Thus, future meetings consisted of progress reports on various concerns and discussion and problem solving on new issues as they came up.

The feedback process also provided training for supervisors on how to conduct good group and office meetings. Thus, to the extent the questionnaire contained items describing desirable behaviors and practices it served a training function for supervisors. The survey feedback process was an example of implementing participative management practices and was a learning experience for everyone involved. The biggest advantage was that it stimulated or "unfroze" the group and made them ready for new developments. The next step was to plan a follow-up survey to identify successful improvements.

## SUMMARY AND CONCLUSIONS

The results of this study illustrated plausible cause and effect relationships among job variables as measured on an employee attitude questionnaire and employees' job performance and job satisfaction. The most important causal variables for both satisfaction and performance were supervision, communication, teamwork, autonomy, and job pressure. Intergroup relations, pay, and promotion opportunities were important for satisfaction but not for performance.

Specifically, high teamwork and low job pressure were associated with high job performance and high job satisfaction. Teamwork meant, simply, that members of work groups worked together to help work out problems that occurred in their daily activities, to discuss ways to improve their performance, to share ideas that helped them improve their performance with other groups, and generally to plan and coordinate their efforts toward achieving group objectives. Teamwork was increased through good supervision and good communication.

Supervisors facilitated teamwork by encouraging members of work groups to work together as a team, by showing support for their subordinates' decisions, by helping them work out problems in their daily work, by showing them ways to do their jobs better, and by giving

compliments to workers for doing a good job. When supervisors made use of these helpful, problem solving behaviors, they set an example which their subordinates followed in their own interactions with other members of their work groups.

Supervisors also facilitated teamwork by creating the conditions necessary for good communication. This simply involved bringing employees together in group and office meetings in order to provide feedback on their job performance, to discuss job related problems, and to keep them up to date on important changes that affected their jobs. These group and office meetings provided a semi-formal, structured process whereby supervisors and coworkers shared information necessary for the accomplishment of high performance goals.

Good communication through involvement of employees in frequent, work oriented group and office meetings along with the supervisors' own personal skills and behaviors were the keys for successfully maintaining a productive and satisfied work group. Apart from its effect on teamwork, good communication also led to low job pressure which in turn led to high job performance and high job satisfaction. Furthermore, good communication was important for good intergroup relations and employees' experienced autonomy on the job. Group and office meetings provided opportunities for employees to bring up and discuss solutions to problems that affected their work, e.g., the work schedule (Fads) and conflicts with other units, thereby increasing their autonomy, reducing

experienced job pressure, and ultimately improving job performance and job satisfaction.

In addition to the variables discussed so far, employees' satisfaction with their promotion opportunities was very important for their overall job satisfaction. However, in order to be fair, promotions were awarded only to employees who showed exceptionally high performance on the job. Thus, as Porter and Lawler (1968) proposed, one way to maintain high satisfaction was to first achieve high performance, because high performance led to promotion opportunities which in turn led to satisfaction. Practically, then, it was prudent for supervisors to inform their subordinates that promotions were available for employees who showed consistently high performance and to do whatever was necessary to help their subordinates maintain consistently high performance on the job.

In the final analysis, all the variables discussed so far as important for employees' high job performance and high job satisfaction were linked back to the behaviors and practices of the supervisor. Thus, the supervisor was viewed as primarily responsible for good communication, teamwork, and keeping the work flow smooth and free from barriers to high quality performance. Poor work scheduling or excessive intergroup conflicts blocked employees' attempts to do their work and resulted in experienced pressure and dissatisfaction on the job. On the other hand, good communication, teamwork, and a helpful, problem solving



attitude on the supervisor's part were the keys to high performance and satisfaction. One would expect that implementing these practices in a work situation where they did not already exist would lead to numerous benefits for the employees and the organization overall.

Future research should focus on methods to build better supervision, communication, and teamwork into work situations where improvement is needed. The survey feedback process using graphic displays comparing survey results from separate work units was recommended as approach for starting the improvement process. The survey feedback should be coordinated with structured supervisor training in team building (see Patten, 1980), performance feedback, effective communication, and problem solving using examples from the actual work situation. Future research should also further document the the effects of changes in these job variables on job performance, job satisfaction, and intervening variables such as job pressure and autonomy. The measure of autonomy used in future research should be expanded from the one used on the questionnaire in this study.

One additional very significant factor in this study was the availability of reliable and objective performance data. This data was very useful for providing employee performance feedback, focusing problem solving activities on performance objectives, keeping teamwork and communication directed toward work oriented objectives, and for validating the relationships of the questionnaire measures to job

performance. Development of similar performance measures would facilitate the implementation of improvement programs in other work situations.

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**Appendix A**  
**SERVICE REPRESENTATIVE JOB SURVEY QUESTIONNAIRE**



## Service Representative Job Survey

This survey is part of a project designed in conjunction with your division manager to learn more about what service representatives think about their jobs. The aim is to use the information to help provide a situation where service representatives can feel good about delivering high quality service to customers.

For this study to be helpful in making improvements in your office it is important for you to answer each question as thoughtfully and frankly as possible. This is not a test so there are no right or wrong answers.

All reports include group averages only, so you can be assured that individual service representatives will not be identified.

Instructions

Read the following questions and response choices carefully. Circle the number under the label which best describes how you feel about the question. Circle only one number for each question. Try to answer all the questions, but if you don't understand one or don't think it applies to you, leave it blank.

	A Great Deal	Fairly much	Some	A Little	Almost None
1. How much loyalty do you feel toward Illinois Bell?	1	2	3	4	5
2. How much of a responsibility do you feel for the future success of Illinois Bell?	1	2	3	4	5
3. How much of a real interest do you think Illinois Bell has for the welfare and happiness of its employees?	1	2	3	4	5
4. How much do you think service representatives' sales, collections, and service contribute to company profits?	1	2	3	4	5
5. How much do you think the base pay for service representatives depends on how much profit the company makes?	1	2	3	4	5
6. All in all, how satisfied are you with your job?	1	2	3	4	5
7. Overall, how much pressure do you feel on your job?	1	2	3	4	5
8. How much pressure do your superiors put on you to meet sales objectives?	1	2	3	4	5
9. How much say do you have over what your individual objectives should be?	1	2	3	4	5

Read the new response choices carefully before continuing!

	Almost Always	Most of the Time	Sometimes	Rarely	Almost Never
10. Does your supervisor try to represent your concerns about your job to higher level management?	1	2	3	4	5

Continue on the next page.

	Almost Always	Most of the Time	Sometimes	Rarely	Almost Never
11. Do you think your supervisor has enough influence on higher level management decisions so that he/she can represent your concerns effectively?	1	2	3	4	5
12. Does you supervisor know when to let people work on their own and when to give them a little extra help?	1	2	3	4	5
13. When your supervisor takes over a difficult contact, does he/she support the decision you've made on the customer's case?	1	2	3	4	5
14. Is your supervisor helpful in working out problems that occur in your daily work?	1	2	3	4	5
15. Does your supervisor encourage the members of your group to work together as a team?	1	2	3	4	5
16. Is your supervisor helpful in showing you ways in which you can do your job better?	1	2	3	4	5
17. Do your superiors compliment you when you've done a good job?	1	2	3	4	5
18. Do some people in your group seem to get praise even when they don't really deserve it?	1	2	3	4	5
19. Do your superiors try to look for good things to praise instead of negative things to criticize?	1	2	3	4	5
20. Do you feel that any criticism you do get is constructive?	1	2	3	4	5
21. Are the people in your work group helpful with working out problems that occur in your daily activities?	1	2	3	4	5
22. Do the members of your work group discuss ways to improve their performance?	1	2	3	4	5
23. Does your group share ideas that helped them improve their performance with other groups in the office?	1	2	3	4	5
24. Are problems between different work groups in your office faced openly and cleared up rather than "swept under the rug" ?	1	2	3	4	5
25. Do the members of your work group plan together and co-ordinate their efforts toward achieving group objectives?	1	2	3	4	5

	Almost Always	Most of the Time	Sometimes	Rarely	Almost Never
26. Are you clear as to which objectives the company feels are important and those that it feels are less important?	1	2	3	4	5
27. Are you clear as to what is expected of you on your job?	1	2	3	4	5
28. Do you have enough work to keep you busy all the time?	1	2	3	4	5
29. Does the schedule for fads, closed key, and breaks allow you to schedule your work ahead of time?	1	2	3	4	5
30. Do the supervisors in your office communicate with each other about the fads schedule so that they all agree on who should be open and who should be closed?	1	2	3	4	5
31. Do you ever feel overworked on your job?	1	2	3	4	5
32. Does your job allow you to take action without detailed review and approval from your supervisor?	1	2	3	4	5
33. Are you kept up to date on important changes that affect your job?	1	2	3	4	5
34. Does Illinois Bell try to help you find out how you can advance in their company?	1	2	3	4	5
35. Does the company promotional system make sure that the best qualified people get promoted?	1	2	3	4	5
36. Do you ever feel uncertain about what your chances for promotion really are?	1	2	3	4	5
37. Do other departments cooperate when you need their help to solve a problem?	1	2	3	4	5
38. Are problems between different departments faced openly and cleared up rather than "swept under the rug"?	1	2	3	4	5

Read the new response choices before continuing!

	Very Often	Quite Often	Occasionally	Rarely	Almost Never
39. How often does your office have meetings to discuss job related problems?	1	2	3	4	5

	Very Often	Quite Often	Occasionally	Rarely	Almost Never
40. How often does your group have meetings to discuss job related problems?	1	2	3	4	5
41. How often do you get feedback as to how well you are doing on your job?	1	2	3	4	5
42. How often do you get feedback as to how your whole office is doing?	1	2	3	4	5
43. Do you and your supervisor discuss ways you can do your job better?	1	2	3	4	5
44. Does your job give you a chance to use your own ideas?	1	2	3	4	5
45. How often do you feel good about doing your job well?	1	2	3	4	5
46. Have you ever thought that you might work better under a different supervisor?	1	2	3	4	5
47. Have you ever wished that you could work in a different department?	1	2	3	4	5
48. Have you ever thought that you would like to get a different job outside the telephone company completely?	1	2	3	4	5

Read the new response choices before continuing!

	Very Good	Quite Good	So-so	Rather Poor	Very Poor
49. How would you rate your opportunities for a promotion from your present job?	1	2	3	4	5
50. Considering your skills and the amount of effort you put into your job, how would you rate your pay?	1	2	3	4	5
51. How do you think your pay is compared to pay for similar work in other companies?	1	2	3	4	5
52. How would you rate the overall physical conditions of your immediate working area?	1	2	3	4	5
53. How would you rate the overall quality of the equipment (telephones, copiers, etc.) you have to do your job?	1	2	3	4	5
54. Overall, how is Illinois Bell as a company to work for?	1	2	3	4	5
55. What are the chances that this survey will be used to make improvements in your job?	1	2	3	4	5

56. How long have you been a service representative?

- |   |                  |   |               |
|---|------------------|---|---------------|
| 1 | Less than 1 year | 4 | 11 - 15 years |
| 2 | 1 - 5 years      | 5 | Over 15 years |
| 3 | 6 - 10 years     |   |               |

57. 1 Full-time 2 Part-time 3 Temporary Check if you work in a public office \_\_\_\_\_

58. Sex: 1 Male 2 Female

59. Have you ever worked for a company other than IBT? 1 Yes 2 No

- |          |   |                   |   |                   |
|----------|---|-------------------|---|-------------------|
| 60. Age: | 1 | 25 years or under | 4 | 36 to 45 years    |
|          | 2 | 26 to 30 years    | 5 | 46 to 55 years    |
|          | 3 | 31 to 35 years    | 6 | 56 years and over |

61. To identify your particular work group without identifying you personally, write the first 5 digits of your sales code here.

62. Briefly list up to 3 procedures, policies, etc. that you think hinder you from being more effective on your job. These are things you think ought to be changed.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_

63. Briefly list up to 3 procedures, policies, etc. that you think are especially helpful in making you effective on your job. These are things you think should not be changed.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_

64. Make any additional comments about this survey or about your job on the back of this page.

**Appendix B**  
**FACTOR MATRIX FOR QUESTIONNAIRE DATA**

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
Q1	0.13056	0.75909	0.08673	0.11120	0.04557
Q2	0.12251	0.65552	0.08014	0.08022	0.13782
Q3	0.29473	0.33718	0.10562	0.31496	0.00871
Q4	0.07058	0.21862	0.01730	-0.01422	0.09605
Q5	0.12961	0.14683	0.04690	0.12322	0.03777
Q6	0.30560	0.58146	0.10366	0.12352	0.10708
Q7	-0.08176	-0.10841	0.02492	-0.04473	-0.17116
Q8	-0.08215	-0.03677	-0.06372	-0.15603	-0.03383
Q9	0.09839	0.11309	0.08101	-0.01999	0.09343
Q10	0.64373	-0.01184	0.15195	0.25973	0.06721
Q11	0.52113	0.12745	0.13142	0.36690	0.19478
Q12	0.72791	0.13296	0.10756	0.12282	0.06320
Q13	0.69046	0.10609	-0.03589	0.11752	-0.09041
Q14	0.78491	0.16062	-0.00498	0.08555	0.08466
Q15	0.67723	0.12577	0.23137	0.08108	0.10864
Q16	0.77638	0.16181	0.17338	0.01544	0.16183
Q17	0.71689	0.07805	0.05506	0.01040	0.06619
Q18	-0.11469	-0.07703	0.02071	0.10076	-0.05429
Q19	0.58216	0.17050	0.17130	0.13422	-0.01015
Q20	0.50651	0.21149	0.15554	0.15519	0.04863
Q21	0.23964	0.14075	0.64703	0.02560	0.03920
Q22	0.18309	0.11621	0.84618	0.09002	0.14687
Q23	0.10830	0.10119	0.84177	0.07910	0.14434
Q24	0.23199	0.17051	0.27074	0.53100	0.13992
Q25	0.43529	0.15510	0.51646	0.13568	0.20395
Q26	0.15427	0.01629	0.03392	0.04884	0.10970
Q27	0.18963	0.10422	0.03398	0.08215	0.12973
Q28	-0.01376	0.06218	0.00769	0.06672	0.07666
Q29	0.14381	0.02663	0.04659	0.26855	0.07730
Q30	0.22357	0.07869	0.06564	0.26161	0.24911
Q31	-0.07419	-0.15566	0.00270	-0.04109	-0.09340
Q32	0.16551	0.26245	0.09547	0.14133	0.02573
Q33	0.26692	0.10833	0.13210	0.29409	0.46709
Q34	0.17280	0.18653	0.08971	0.15691	0.21232
Q35	0.14945	0.08290	0.15356	0.29159	0.16769
Q36	-0.10421	-0.01015	0.02084	0.02279	0.13477
Q37	0.07547	0.17509	-0.01940	-0.73367	0.14367
Q38	0.16505	0.12843	0.10167	0.76425	0.12959
Q39	0.08449	0.15399	0.16475	0.20005	0.75100
Q40	0.22575	0.12630	0.21784	0.19042	0.63667
Q41	0.42740	0.04881	0.15134	0.05348	0.43060
Q42	0.03994	0.03381	0.02749	0.04044	0.67325
Q43	0.53183	0.12667	0.21277	-0.07097	0.41255
Q44	0.18289	0.40984	0.11528	0.07457	0.14704
Q45	0.14517	0.60179	0.15933	0.19494	0.13537
Q46	-0.63207	0.05495	0.05313	0.08261	-0.03845
Q47	-0.16466	-0.35317	-0.16833	0.10793	-0.02375
Q48	-0.14959	-0.51637	-0.19789	-0.12009	-0.04352
Q49	0.18603	0.35731	0.03213	0.10945	0.10765
Q50	0.08678	0.09616	0.05797	0.05331	0.06271
Q51	0.09933	0.13893	0.06538	0.14865	0.03610
Q52	0.23216	0.09189	0.04324	-0.03420	0.04927
Q53	0.14961	0.03731	0.05037	0.23212	0.20260
Q54	0.20536	0.55642	0.05903	0.25945	0.06262
Q55	0.15463	0.18646	0.17459	0.36797	0.08949



FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
-0.01389	0.09592	0.01587	0.00657	0.05471
0.19014	0.05446	-0.05969	0.04211	0.04487
0.28495	0.11528	0.09698	0.32455	-0.02191
-0.05001	-0.10806	0.11368	-0.00434	0.24400
0.11343	0.28498	-0.10879	-0.04170	0.00268
0.19126	0.15359	0.23067	0.21270	-0.06467
-0.06697	-0.04994	0.03067	-0.05298	0.02764
-0.06325	0.04037	-0.03289	-0.08236	-0.01068
0.10731	-0.02767	0.02241	0.06563	0.07244
0.14564	0.02262	-0.03767	0.02238	-0.01925
0.12722	-0.00334	0.02537	0.07720	-0.02967
-0.04925	0.13691	0.11038	0.07400	0.10372
0.02760	-0.00182	-0.04883	0.04307	0.20789
-0.01723	0.08460	-0.03581	0.14419	0.14311
-0.01060	0.05974	-0.09118	0.04717	0.01225
0.08990	0.02234	0.05135	0.13268	-0.05491
0.15840	0.03273	0.16311	-0.03297	0.10233
-0.11288	0.02498	-0.12864	0.02887	-0.05533
0.19408	0.09746	0.34285	0.12174	0.12405
0.21100	-0.01232	0.28047	0.19551	0.21007
0.12279	0.20556	-0.06956	0.20004	0.14447
0.04519	0.01750	0.10296	0.00993	-0.02994
0.04496	-0.00205	0.07649	0.01759	0.01624
0.06008	0.05664	-0.01949	-0.00782	0.06173
-0.04982	0.04717	0.14719	-0.08195	0.06280
0.13119	0.05356	-0.00217	0.09344	0.76977
0.03117	0.00915	0.10522	0.12204	0.70459
-0.00270	0.01642	0.09083	0.01881	-0.01883
0.11083	-0.01971	0.49445	0.15655	0.07330
0.21142	-0.02350	0.40639	0.09025	0.11111
-0.20545	-0.17117	-0.17914	-0.25222	-0.03006
-0.22116	0.00416	0.56199	-0.09701	0.19589
0.22141	0.02219	0.16783	0.30196	0.12249
0.64618	-0.01927	0.15494	0.06320	0.10106
0.57479	0.08677	0.09008	0.18923	0.03163
-0.65950	-0.06884	-0.02441	0.15081	-0.10789
0.07628	0.13152	0.08753	0.06389	0.06203
0.10394	0.05581	0.06565	0.02307	0.06281
-0.00088	0.05656	-0.05006	0.12279	0.03934
0.03872	0.12313	-0.02526	0.08344	-0.04801
0.21130	0.04597	0.19322	-0.08475	0.01603
0.07011	0.05282	0.06104	-0.01289	0.33183
0.19588	-0.05559	0.07384	0.01309	-0.03833
0.06691	0.21506	0.14938	-0.10293	0.28278
-0.07728	0.04752	0.13310	-0.06881	0.23954
-0.14533	-0.05452	-0.22767	-0.14376	-0.05599
-0.18534	-0.16368	-0.44210	-0.16217	0.12712
-0.21004	-0.13669	-0.33560	-0.09485	0.07884
0.64289	-0.08298	-0.16798	-0.00304	0.06634
-0.02932	0.88247	0.01505	0.00110	0.00229
0.03070	0.82450	0.03977	0.10130	0.06948
-0.03967	-0.01690	-0.06179	0.78871	0.11680
0.03406	0.15818	0.21473	0.54181	0.13991
0.15719	0.26314	0.14238	0.38263	0.01759
0.20665	0.14921	0.21370	0.18708	0.01760

	FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15
Q1	0.00495	0.09432	-0.04533	0.20663	-0.00578
Q2	-0.02483	0.13972	-0.00787	0.31198	-0.01668
Q3	-0.03496	0.21732	-0.06006	0.11785	0.12644
Q4	0.02944	0.02393	-0.02310	0.65687	0.08051
Q5	0.06091	0.10298	0.12588	0.64250	-0.00868
Q6	-0.08490	0.16950	-0.05420	0.09156	-0.08981
Q7	0.74074	-0.13392	0.25153	0.05485	-0.10499
Q8	0.77718	-0.08644	0.00609	0.03882	0.11697
Q9	-0.17973	0.69880	0.02037	0.12380	-0.18568
Q10	-0.11929	0.18768	-0.03513	0.02054	-0.22122
Q11	-0.09669	0.18782	-0.15330	0.15076	-0.00925
Q12	0.05339	0.00948	-0.17275	-0.03580	-0.16423
Q13	0.00303	0.07694	-0.03475	0.10523	-0.25838
Q14	-0.00866	0.00473	-0.05259	-0.01586	-0.15095
Q15	0.06981	-0.12041	-0.02212	0.14244	0.11923
Q16	0.02375	-0.03935	-0.06113	0.04536	0.12790
Q17	-0.11955	0.19499	0.09691	-0.06611	0.12522
Q18	0.04958	-0.11987	0.07113	0.06681	0.66817
Q19	-0.08159	0.14206	0.06084	-0.03796	0.03714
Q20	-0.07877	0.03729	0.07273	-0.02087	0.01989
Q21	-0.03241	-0.17885	-0.00751	-0.07213	-0.14652
Q22	-0.02309	0.06059	0.01828	0.09755	0.01488
Q23	-0.00578	0.15344	0.01140	-0.00950	0.04394
Q24	-0.18588	0.25766	0.07662	-0.00171	-0.09388
Q25	-0.00391	0.15270	-0.10604	0.04705	0.15702
Q26	-0.02579	0.02061	-0.03657	0.09833	0.05416
Q27	0.04435	0.08784	-0.02682	0.11324	-0.17998
Q28	0.07905	0.08781	0.79858	0.07061	0.11067
Q29	-0.05957	0.18665	-0.48575	0.07540	-0.08072
Q30	0.14654	-0.10838	-0.06608	0.24484	-0.29767
Q31	0.17136	-0.08121	0.63830	0.00818	-0.09198
Q32	0.10680	0.11072	0.01290	-0.25304	-0.11220
Q33	0.04125	0.06670	0.06363	-0.07962	-0.07606
Q34	-0.02290	0.11668	-0.03659	0.06689	-0.12523
Q35	0.07451	0.32886	-0.12399	-0.04553	-0.15492
Q36	0.36175	0.07203	0.10692	-0.24122	0.05857
Q37	0.01685	-0.01153	-0.02787	0.00372	0.03706
Q38	-0.15073	-0.10150	0.02686	-0.05048	0.10510
Q39	-0.07659	0.05411	-0.03456	0.11402	-0.15222
Q40	-0.13572	0.13482	0.01491	0.09843	-0.12674
Q41	-0.14149	0.29184	0.03289	-0.01865	0.19387
Q42	-0.01718	-0.04770	0.01372	-0.01131	0.11116
Q43	-0.08801	0.20257	0.04296	0.02380	0.20188
Q44	-0.16581	0.38689	0.01413	-0.15813	0.11104
Q45	-0.09644	-0.05998	-0.00957	-0.23820	-0.08334
Q46	0.19423	0.15706	-0.05879	-0.13758	0.11165
Q47	0.21771	-0.00991	0.05383	-0.18618	0.17773
Q48	0.09208	0.17274	-0.04107	-0.14745	0.02133
Q49	-0.00249	0.04253	-0.04578	-0.16001	0.04677
Q50	-0.04851	-0.00206	-0.00654	0.07230	0.01335
Q51	0.04082	0.02256	-0.08222	0.00470	0.01810
Q52	-0.03095	0.02795	-0.11461	-0.05099	-0.01841
Q53	-0.17909	0.02469	-0.10050	0.04575	0.06932
Q54	0.00184	0.03847	0.05159	-0.00874	-0.04123
Q55	-0.08486	0.35523	-0.15729	0.10224	0.25023

Appendix C

FACTOR NAMES AND ITEMS ON EACH FACTOR

TABLE 26

## Factor Names and Items on Each Factor

## FACTOR 1 SUPERVISION

Loading

- .64 10. Does your supervisor try to represent your concerns about your job to higher level management? (M=2.8; SD=1.2)
- .52 11. Do you think your supervisor has enough influence on higher level management decisions so that he/she can represent your concerns effectively? (M=3.0; SD=1.1)
- .73 12. Does your supervisor know when to let people work on their own and when to give them a little extra help? (M=2.2; SD=1.2)
- .69 13. When your supervisor takes over a difficult contact, does he/she support the decision you've made on the customer's case? (M=2.4; SD=1.1)
- .78 14. Is your supervisor helpful in working out problems that occur in your daily work? (M=2.1; SD=1.1)
- .68 15. Does your supervisor encourage the members of your group to work together as a team? (M=2.2; SD=1.2)
- .78 16. Is your supervisor helpful in showing you ways to do your job better? (M=2.5; SD=1.2)
- .72 17. Do your superiors compliment you when you've done a good job? (M=2.5; SD=1.3)
- .58 19. Do your superiors try to look for good things to praise rather than negative things to criticize? (M=2.9; SD=1.2)
- .51 20. Do you feel that any criticism you do get is constructive? (M=2.4; SD=1.0)
- .53 43. Do you and your supervisor discuss ways you can do your job better? (M=3.2; SD=1.1)
- .63 46. Have you ever thought that you might work better under a different supervisor? (M=3.8; SD=1.3)

## FACTOR 2 GENERAL SATISFACTION

- .76 1. How much loyalty do you feel toward Illinois Bell?

(M=2.2; SD=1.0)

- .66 2. How much of a responsibility do you feel for the future success of Illinois Bell? (M=2.5; SD=1.1)
- .34 3. How much of a real interest do you think Illinois Bell has for the welfare and happiness of its employees? (M=3.2; SD=1.2)
- .58 6. All in all, how satisfied are you with your job? (M=2.9; SD=1.1)
- .41 44. Does your job give you a chance to use your own ideas? (M=3.3; SD=1.1)
- .60 45. How often do you feel good about doing your job well? (M=2.4; SD=1.0)
- .52 48. Have you ever thought that you would like to get a job outside the telephone company completely? (M=3.3; SD=1.4)
- .56 54. Overall, how is Illinois Bell as a Company to work for? (M=2.4; SD=0.9)

### FACTOR 3 TEAMWORK

- .65 21. Are the people in your work group helpful in working out problems that occur in your daily activities? (M=2.1; SD=1.1)
- .85 22. Do the members of your work group discuss ways to improve their performance? (M=3.0; SD=1.1)
- .84 23. Does your work group share ideas that helped them improve their performance with other groups in the office? (M=3.2; SD=1.2)
- .52 25. Do the members of your work group plan together and coordinate their efforts toward achieving group objectives? (M=3.1; SD=1.2)

### FACTOR 4 INTERGROUP RELATIONS

- .53 24. Are problems between different work groups in your office faced openly and cleared up rather than "swept under the rug?" (M=3.3; SD=1.2)
- .73 37. Do other departments cooperate when you need their help to solve a problem? (M=3.3; SD=1.0)

- .76 38. Are problems between different departments faced openly and cleared up rather than "swept under the rug?" (M=3.6; SD=1.1)
- .37 55. What are the chances that this survey will be used to make improvements in your job? (M=3.6; SD=1.1)

#### FACTOR 5 COMMUNICATION

- .47 33. Are you kept up to date on important changes that affect your job? (M=2.2; SD=1.0)
- .75 39. How often does your office have meetings to discuss job related problems? (M=2.8; SD=1.0)
- .64 40. How often does your group have meetings to discuss job related problems? (M=3.1; SD=1.0)
- .43 41. How often do you get feedback as to how well you are doing on your job? (M=3.2; SD=1.0)
- .67 42. How often do you get feedback as to how your whole office is doing? (M=2.2; SD=0.8)

#### FACTOR 6 PROMOTION OPPORTUNITIES

- .65 34. Does Illinois Bell try to help you find out how you can advance in their company? (M=3.3; SD=1.2)
- .57 35. Does the company promotional system make sure that the best qualified people get promoted? (M=3.5; SD=1.1)
- .66 36. Do you ever feel uncertain about what your opportunities for promotion really are? (M=2.5; SD=1.1)
- .64 49. How would you rate your opportunities for a promotion from your present job? (M=3.0; SD=1.1)

#### FACTOR 7 PAY SATISFACTION

- .88 50. Considering your skills and the amount of effort you put into your job, how would you rate your pay? (M=2.8; SD=0.9)
- .82 51. How do you think your pay is compared to pay for similar similar work in other companies? (M=2.7; SD=1.0)

#### FACTOR 8 PADS/AUTONOMY

- .49 29. Does the schedule for fads, closed key, and breaks allow you to schedule your work ahead of time? (M=3.7 SD=1.2)
- .41 30. Do the supervisors in your office communicate with each other about the fads schedule so that they all agree on who should be open and who should be closed? (M=2.7; SD=1.3)
- .56 32. Does your job allow you to take action without detailed review and approval from your supervisor? (M=2.4; SD=0.9)
- .44 47. Have you ever wished that you could work in a different department? (M=2.3; SD=1.3)

#### FACTOR 9 WORKING CONDITIONS

- .79 52. How would you rate the overall physical conditions of your immediate working area? (M=2.6; SD=1.0)
- .54 53. How would you rate the overall quality of the equipment (telephones, copiers, etc.) you have to do your job? (M=3.0; SD=1.1)

#### FACTOR 10 JOB CLARITY

- .77 26. Are you clear as to which objectives the company feels are important and those that it feels are less important? (M=2.2; SD=1.0)
- .70 27. Are you clear as to what is expected of you on your job? (M=1.7; SD=0.8)

#### FACTOR 11 JOB PRESSURE

- .74 7. Overall, how much pressure do you feel on your job? (M=1.7; SD=0.9)
- .78 8. How much pressure do your superiors put on you to meet sales objectives? (M=1.9; SD=1.0)

#### FACTOR 12 SAY OVER OBJECTIVES

- .70 9. How much say do you have over what your individual objectives should be? (M=3.7; SD=1.3)

#### FACTOR 13 WORKLOAD

- .80 28. Do you have enough work to keep you busy all the time?

(M=1.2; SD=0.6)

- .49 29. Does the schedule for fads, closed key, and breaks allow you to schedule your work ahead of time? (M=3.7; SD=1.2)
- .64 31. Do you ever feel overworked on your job? (M=2.1; SD=1.0)

FACTOR 14 JOB IMPORTANCE

- .66 4. How much do you think service representatives' sales, collections, and service contribute to company profits? (M=1.5; SD=0.8)
- .64 5. How much do you think the base pay for service representatives depends on how much profit the company makes? (M=2.8; SD=1.3)

FACTOR 15 UNDESERVED PRAISE

- .57 18. Do some people in your group seem to get praise even when they don't really deserve it? (M=3.7; SD=1.1)
-



Appendix D  
APPROVAL SHEET

APPROVAL SHEET

The thesis submitted by Patrick Calby has been read and approved by the following committee:

Dr. Homer Johnson, Director  
Professor, Psychology, Loyola

Dr. Emil Posavac  
Professor, Psychology, Loyola

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given the final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

December 7 1981

Date

Homer Johnson

Director's Signature