

A COMPARISON OF CURRENT RESPONSES TO THE
ORIGINAL FINDINGS OF SELECTED ELEMENTS
OF THE MOTIVATION-HYGIENE THEORY

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CHAPTER I

INTRODUCTION

Man is a social, wanting being, each with his own set of needs and wants (Higgins, 1982). Needs and wants fall into two categories, physiological and psychological. In an age of shortage of resources, it is increasingly important to develop a workforce that is highly motivated. To increase the motivational level of workers, managers must first increase their understanding of the needs workers expect to fulfill through their employment (Terpstra, 1979).

To understand motivation, managers must understand why workers do, or do not, undertake certain tasks, why they do, or do not, achieve expected quantity standards, and why they do, or do not, achieve expected quality standards. In short, managers must understand those factors that cause satisfaction or dissatisfaction of workers. "Only those administrators who have grasped why people behave as they do can meet the challenge of the 1980's" (Hoy and Miskel, 1982, p. 136).

Statement of the Problem

Motivation of employees is one of the most fascinating and perplexing concerns of a manager (Terpstra, 1979). The

lack of current data on the subject of motivation will increase the perplexity of the manager. A current study to determine the needs and wants of workers could enhance training programs in both the educational and business settings.

Purpose of the Study

The Frederick Herzberg Motivation-Hygiene Theory is a particularly popular study in the field of human resources development. That study describes those factors in the workplace which tend to produce motivation of workers. The purpose of this study was to determine if the satisfaction (motivation) and dissatisfaction (hygiene) factors in the workplace have changed since the 1950's when the Herzberg study was conducted.

The specific questions this study attempted to answer concerning employees' perceptions of job satisfaction and dissatisfaction factors were:

1. Is achievement a motivation or hygiene factor?
2. Is recognition a motivation or hygiene factor?
3. Is the work itself a motivation or hygiene factor?
4. Is responsibility a motivation or hygiene factor?
5. Is advancement a motivation or hygiene factor?
6. Is salary a motivation or hygiene factor?
7. Are interpersonal relationships with a supervisor a motivation or hygiene factor?

8. Is supervision--technical a motivation or hygiene factor?

9. Is company policy and administration a motivation or hygiene factor?

10. Are working conditions a motivation or hygiene factor?

11. Have the relative rankings of the motivation and hygiene factors changed since the Herzberg study was conducted?

12. Does the general background of respondents affect the relative ranking of the motivation and hygiene factors?

Scope and Limitations

The scope of this study was limited to junior college students in the Tulsa, Oklahoma, area. The limitations of this study were:

1. The implications of the study may not be applicable to employees in all geographical areas.

2. The study was limited by the survey instrument's ability to yield reliable data.

3. The study was not an attempt to replicate Herzberg's study as only selected elements of that study were compared.

Assumptions

The following assumptions were made:

1. The number of subjects involved in this study was

approximately the same as in the original Herzberg study, therefore valid comparisons could be made.

2. The use of a survey instrument (questionnaire) would yield comparable information to that obtained through the interview procedure used in the Herzberg study.

3. The respondents understood all the job factors included in the questionnaire.

4. The respondents reported their perceptions and attitudes accurately.

5. The population of this study is representative of all junior college business students.

Definitions

The following terms and phrases are defined to provide clear and concise meanings to this study.

Dissatisfiers--Factors in the workplace that cause a feeling of dissatisfaction about the job (synonymous with hygiene factors). The absence of these factors will not cause increased motivation, but their presence will cause dissatisfaction (Herzberg, 1966).

Satisfiers--Factors in the workplace that cause increased motivation on the job (synonymous with motivators). The absence of these factors will not cause dissatisfaction, but their presence will motivate the worker (Herzberg, 1966).

Content Theories--The motivation theories that attempt

to specify those factors that motivate behavior (Hoy and Miskel, 1982).

Process Theories--The motivation theories that attempt to define the variables affecting the choice, effort expended, and persistence in behaviors (Hoy and Miskel, 1982).

Job Attitude Factors--Those factors in the workplace that cause workers to change their attitudes about their jobs. The factors considered in this study as defined by Sithiphand (1983, pp. 8-10) were:

1. Achievement

This category is defined as successful completion of a job solution of problems or the visible results of one's work. The definition also includes its opposite--failure--as the absence of achievement.

2. Recognition

The major emphasis in this category is on some act of recognition or notice in which praise or blame is involved. The source can be anyone in the work setting: supervisor, various people in management, a peer, or a colleague.

3. Work Itself

This category is used when the actual performance of the job or its component tasks are considered a source of good or bad feelings about it. (The duties of a position can include an opportunity to carry through an entire operation, or they can be restricted to one minute portion of it.)

4. Responsibility

This category includes factors relating to responsibility and authority such as deriving satisfaction from being given responsibility for one's own work, for the work of others, or for being given new responsibility. It also includes stories in which loss of satisfaction or negative attitude towards the job stems from lack of responsibility.

5. Advancement

This category is used only when there is an

actual change in the status or position of the person in the organization.

6. Company Policy and Administration

This category describes those components of a sequence of events in which some overall aspect of the organization was a factor. Two kinds of overall company policy and administration characteristics can be identified. One involves the adequacy or inadequacy of the organization and its management. The other involves the detrimental or beneficial effects of the organization's policies, primarily personnel policies.

7. Supervisor--Technical

This category deals with the competence or incompetence and the fairness or unfairness of the supervisor. Facts regarding the supervisor's willingness or unwillingness to delegate responsibility or to educate workers would be noted in this category.

8. Salary

This category includes the entire sequence of events in which compensation plays a role. All of these events involve wage or salary increase, or the unfulfilled expectation of salary increases.

9. Interpersonal Relations

This category is restricted to those stories in which there is some actual verbalization about the characteristics of the interaction between the person speaking and some other individual. This is set up in terms of the three major categories corresponding to those with whom the interaction occurs:

Interpersonal Relations--Superior
Interpersonal Relations--Subordinate
Interpersonal Relations--Peers

10. Working Conditions

This category includes stories in which the physical conditions at work, the amount of work, or the facilities available for doing the work are mentioned.

Organization of the Study

Chapter I introduces the study, presents the problem, and states the purpose, limitations, assumptions, and

organization of the study. Chapter II consists of the review of literature which is divided into the following parts:

1. The Meaning of Motivation
2. Content Theories of Motivation
3. Process Theories of Motivation
4. Recent Related Studies

Chapter III reports the selection of subjects, data collection, and analysis of data. Chapter IV includes the presentation and interpretation of the findings. Chapter V summarizes the study, states conclusions, and recommends further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

The review of literature was organized into the following categories: (1) The Meaning of Motivation, (2) Content Theories of Motivation, (3) Process Theories of Motivation, and (4) Recent Related Studies.

The Meaning of Motivation

There are many ways to define motivation. One can usually find one or more of the following words in those definitions: incentives, needs, drives, rewards, action, goals, and behavior (Hoy and Miskel, 1982).

Gellerman (1976, p. 15) defines motivation as "any action or event that causes someone's behavior to change." Hitt, Middlemist, and Mathis (1983, p. 271) offer these three definitions:

1. A predisposition to act in a specific goal-directed way.
2. The immediate influences on the direction, vigor, and persistence of behavior.
3. Steering one's actions towards goals and committing a certain part of one's energies to reach them.

Ivancevich, Donnelly, and Gibson (1983, p. 343) define motivation as "all those inner striving conditions described

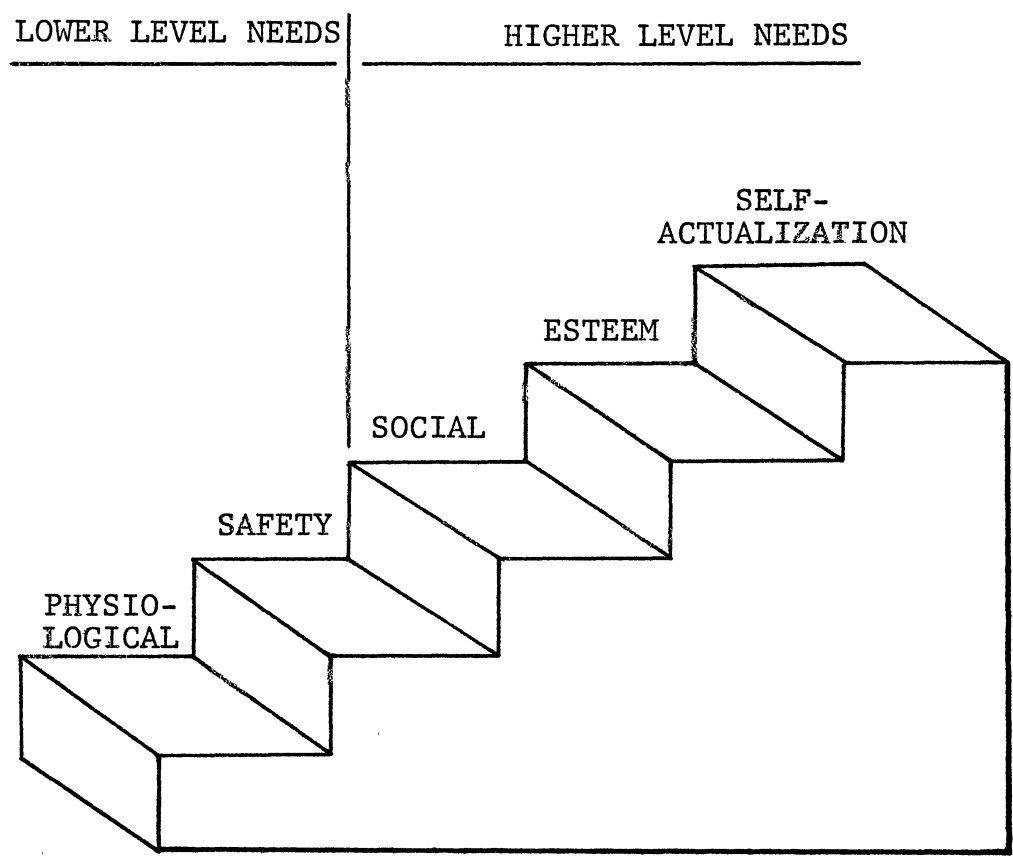
as wishes, desires, drives...." They later stated "it is an inner state that activates or moves."

This study dealt with motivation in the workplace, therefore the following meaning for motivation seemed most appropriate: "Getting them to do what you want them to do" (Higgins, 1982, p. 16).

Content Theories of Motivation

The Content Theories of Motivation specify or attempt to specify those factors that motivate behavior. "The so-called need theories are among the most important content models of motivation" (Hoy and Miskel, 1982, p. 139). Three content (need) theories will be discussed: The Needs Hierarchy (Maslow, 1970); The Existence-Relatedness-Growth (ERG) Theory (Hoy and Miskel, 1982); and The Dual-Factor (Herzberg) Theory (Hoy and Miskel, 1982). The Dual-Factor Theory was the theory upon which this study was based. The Needs Hierarchy and ERG Theories complement and lend understanding to the Dual-Factor Theory.

Abraham Maslow (1970) developed the Hierarchy of Human Needs which arranged the various human needs into five categories or levels based on the potency of the needs (Figure 1). The first level of need was called the "Physiological" and included those things necessary to sustain life such as food, water, air, and shelter. The second level was called "Safety and Security" and involved the desire for protection from harm, freedom from fear, and a stable environment. The



Source: Haimann and Hilgert, 1982.

Figure 1. Maslow's Hierarchy of Needs

third level was "Belonging, Love, and Social" which involved the desire to develop social relationships, belonging to groups, and developing friendships. The fourth level, "Esteem," reflected the need for a positive self image and having the respect of others through status, recognition, and appreciation. The fifth, and highest, level was called "Self-Actualization" or "Self-Fulfillment." This level reflected man's need to reach goals, to achieve maximum self development, or to be all one could be.

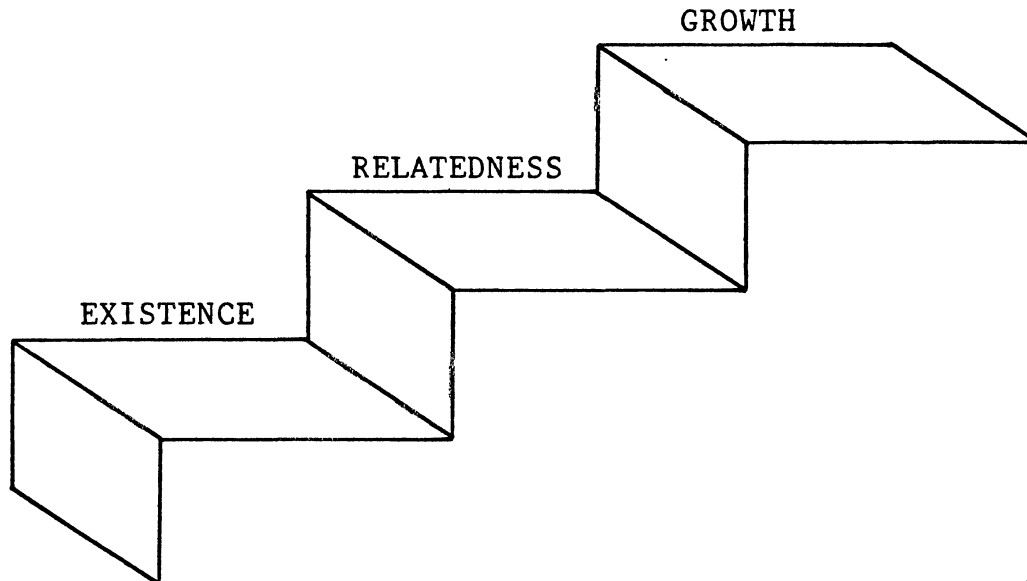
The first two levels of Maslow's Hierarchy, Physiological and Safety, are often referred to as lower level needs and the other three levels, Social, Esteem, and Self-Fulfillment, are considered higher level needs (Haimann and Hilgert, 1982). As one level becomes satisfied, a higher level needs becomes more potent as a driving force. A satisfied need is not a motivator, while an unsatisfied need is a motivator. For most of society, the bottom three levels are relatively well satisfied, and thus have little effect on motivation. Esteem and Self-Fulfillment needs would have a strong impact on motivation as these levels are not fully satisfied for most people.

Maslow applied to human wants what might be called 'marginal utility'--and his was a profound and lasting insight....The more one want is being satisfied, the less its satisfaction matters (Drucker, 1974, p. 195).

For employees, there are legislative acts such as minimum wage laws, the Occupational Safety and Health Act, and equal pay acts to help employees fulfill the lower level

needs. Fulfillment of the upper level needs may be helped or hindered, according to the organizations environment and attitude. Management must, therefore, concentrate their attention on the upper level needs if they are truly concerned with developing a highly motivated workforce.

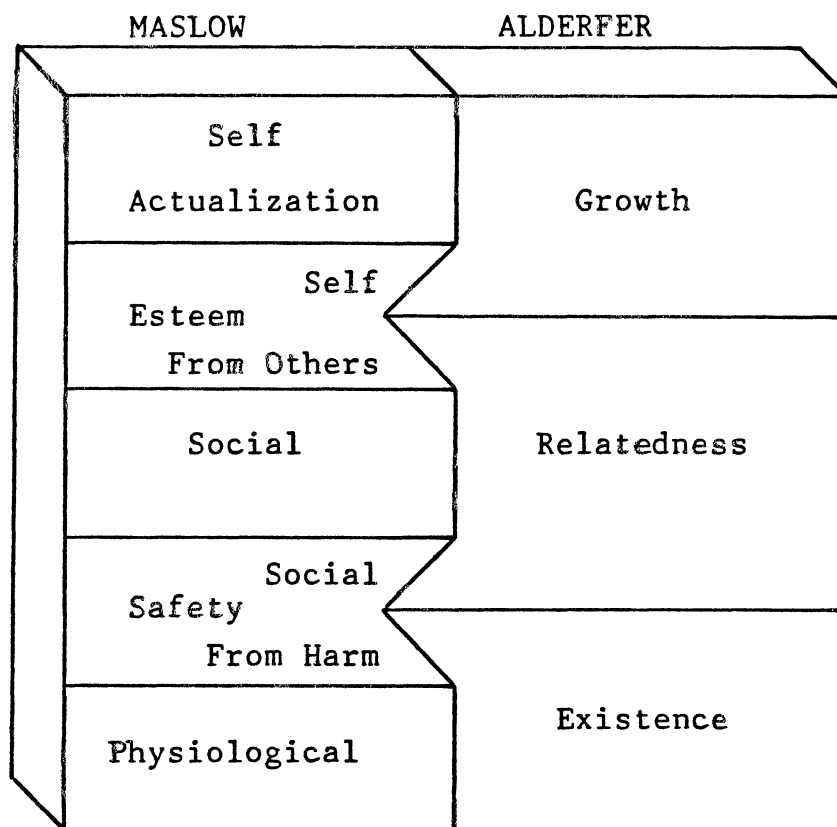
The ERG Theory developed by Clayton P. Alderfer (1972) contained three levels of needs: existence, relatedness, and growth. His theory was similar to Maslow's Hierarchy of Needs in that the needs were arranged in order of potency (Figure 2).



Source: Hoy and Miskel, 1982.

Figure 2. Alderfer's ERG Theory

Alderfer viewed the safety level of Maslow's Hierarchy as containing both physiological and social elements. The physiological aspect of Maslow's safety level--freedom from physical harm--was included in Alderfer's existence needs while the social element of safety was a relatedness need. Alderfer likewise divided Maslow's esteem level into two categories. The esteem from others was a relatedness need, while self-esteem was a growth need (Figure 3).



Source: Hoy and Miskel, 1982.

Figure 3. A Comparison of Maslow's Hierarchy and Alderfer's Theory

Existence needs can be fulfilled by having the necessities to sustain life and a relatively stable, safe environment. If the existence needs are adequately satisfied, one then becomes concerned with the satisfaction of relatedness needs.

Relatedness needs are satisfied through sharing with others. This level of the ERG Theory suggests that people need to tell others their feelings and thoughts, as well as have others reciprocate with their thoughts. Relatedness is thus a need requiring social interaction for its satisfaction. The important element of this level is that messages are being exchanged. According to Alderfer (1972, p. 11), "expression of anger and hostility is a very important part of meaningful interpersonal relationships, just as is the expression of warmth and closeness." Growth needs are fulfilled by individuals fully developing their abilities.

As in the Maslow study, the Alderfer needs are sequential. The more fully the existence needs are satisfied, the more important relatedness needs become. Then the more adequately the relatedness needs are satisfied, the more important growth needs become. For most employed people, the existence needs are relatively well satisfied. The organizational climate may play an important role in determining the extent to which employees are able to satisfy their relatedness and growth needs.

The Herzberg Motivation-Hygiene Theory, also referred to as the Dual-Factor Theory, determined that certain job

related factors led to a feeling of satisfaction while other factors caused a feeling of dissatisfaction with the job (Herzberg, Mausner and Snyderman, 1959).

The motivation-hygiene study was designed to test the concept that man has two sets of needs: the need to avoid pain (animalistic) and the need to grow psychologically (humanistic) (Herzberg, 1966). In his original study, 203 engineers and accountants in Pittsburgh, Pennsylvania were interviewed and asked to describe work-related events which had resulted in either a marked improvement or reduction in their level of job satisfaction. They were also asked about events that returned their attitude to normal. The criteria Herzberg (1966, p. 72) established for the "events" were:

First, the sequence must revolve around an event or series of events; that is, there must be some objective happening. The report cannot be concerned entirely with the respondent's psychological reactions or feelings.

Second, the sequence of events must be bound by time; it should have a beginning that can be identified, a middle and, unless the events are still in process, some sort of identifiable ending (although the cessation of events does not have to be dramatic or abrupt).

Third, the sequence of events must have taken place during a period in which feelings about the job were either exceptionally good or exceptionally bad.

Fourth, the story must be centered on a period in the respondent's life when he held a position that fell within the limits of our sample. However, there were a few exceptions. Stories involving aspirations to professional work or transitions from subprofessional to professional levels were included.

Fifth, the story must be about a situation in which the respondent's feelings about his job were directly affected, not about a sequence of events unrelated to the job that cause high or low spirits.

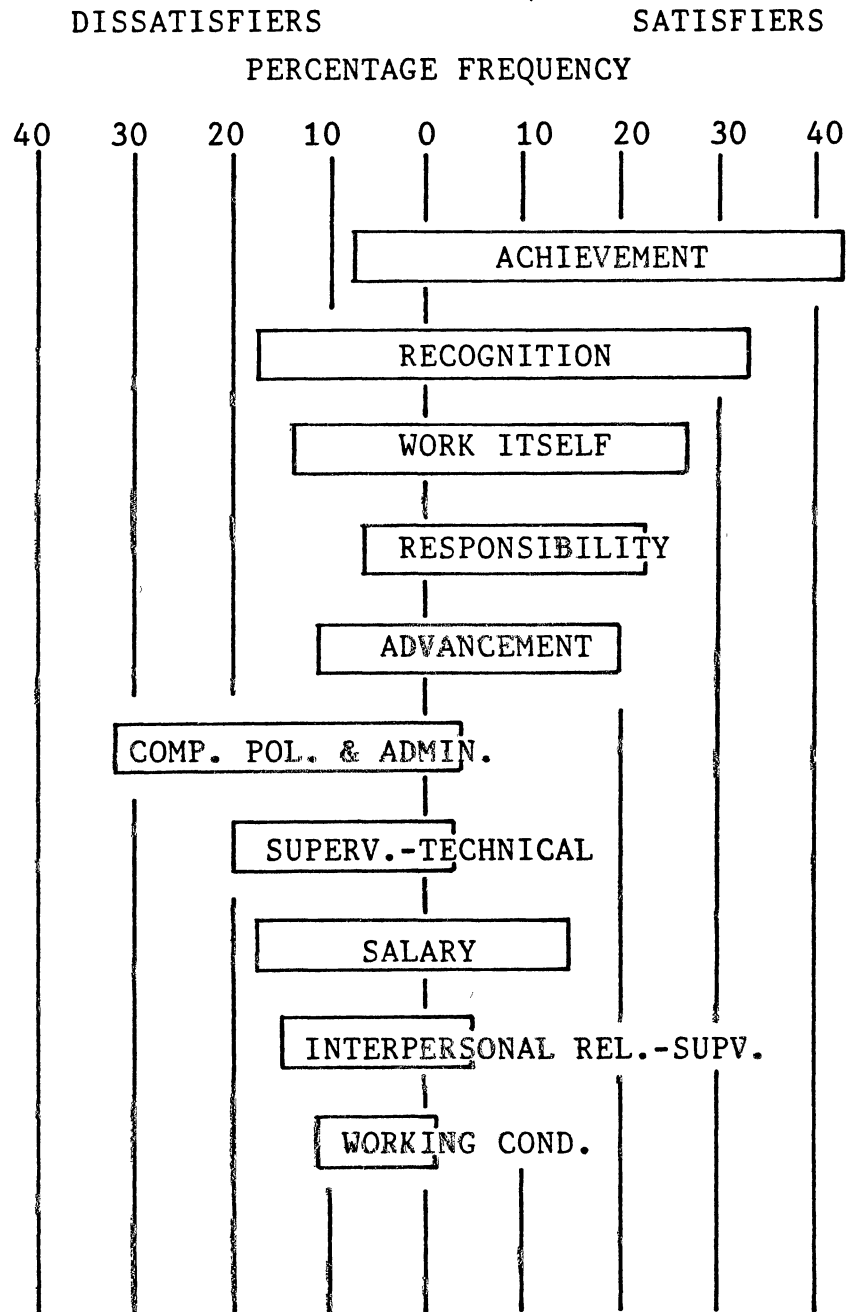
Those factors that caused satisfaction are referred to as "motivators" and those factors that caused dissatisfaction are called "hygiene" factors. The results of the interviews were that 16 job attitude items were classified as satisfiers (motivators) or dissatisfiers (hygiene). Herzberg (1966) determined there were six motivators and ten hygiene factors. The motivators were:

1. Achievement
2. Recognition for Achievement
3. Work Itself
4. Responsibility
5. Advancement
6. Possibility of Growth

The hygiene factors were:

1. Supervision
2. Company Policy and Administration
3. Working Conditions
4. Interpersonal Relations with Peers
5. Interpersonal Relations with Subordinates
6. Interpersonal Relations with Superiors
7. Status
8. Job Security
9. Salary
10. Personal Life

The results of the findings are presented in Figure 4. The left side of the chart reflects frequency of responses concerning events that caused dissatisfaction. The right



Source: Herzberg, 1966.

Figure 4. Findings--Herzberg's Satisfiers and Dissatisfiers

side indicates frequency of responses concerning events that caused satisfaction on the job. The length of each box represents the percentage frequency of responses for each item.

In presenting the results of the study, only those items that were shown to be statistically differentiated between positive and negative job attitudes were indicated. Those items that were not statistically different at the 0.05 level between positive and negative feelings were: (1) possibility of growth, (2) interpersonal relationships with peers, (3) interpersonal relationships with subordinates, (4) status, (5) job security, and (6) personal life.

The final results of the study indicated five factors as strong motivators:

1. Achievement
2. Recognition
3. Work Itself
4. Responsibility
5. Advancement

These factors were seldom mentioned as a cause of dissatisfaction, therefore they were one-directional items. The time duration of the motivators on attitudes was relatively long-term.

The dissatisfiers (hygiene factors) were, likewise, one-directional in that they were seldom mentioned as a cause of positive feelings. In contrast to the motivators, the hygiene factors produced short-term attitudinal changes.

The hygiene factors were:

1. Company Policy and Administration
2. Supervision--Technical
3. Salary
4. Interpersonal Relations--Supervisor
5. Working Conditions

The Herzberg Motivation-Hygiene Theory meshes well with the Hierarchies of Maslow and Alderfer in its findings concerning motivation (Hoy and Miskel, 1982). A comparison of those content theories is illustrated in Figure 5.

MASLOW	ALDERFER	HERZBERG
SELF-ACTUALIZATION	GROWTH	MOTIVATORS: Achievement Recognition Work Itself Responsibility Advancement
ESTEEM		
SOCIAL	RELATEDNESS	HYGIENE: Company Policy & Administration Supervision-Technical Salary Interpersonal Relations-Supervisor Working Conditions
SAFETY		
PHYSIOLOGICAL	EXISTENCE	

Figure 5. A Comparison of the Maslow Hierarchy With the Alderfer and Herzberg Theories

Process Theories of Motivation

Process theories attempt to explain the various factors affecting choice of, effort expended in, and persistence of behaviors. In the study of behavior in the work environment, the major process approaches to motivation are the expectancy, goal, and attribution theories (Hoy and Miskel, 1982).

Expectancy theory was popularized by Victor Vroom and is called the Valence-Instrumentality-Expectancy (VIE) Theory (Hoy and Miskel, 1982). Valence is the perceived value, positive or negative, of results of one's actions. Instrumentality is the perceived likelihood of an award for performance being granted. Expectancy is the probability that certain behavior will result in the desired level of performance or, in other words, the probability that the required skill level is present for adequate results.

Motivation to behave in a certain way is greatest when the individual believes that (1) the behavior will lead to rewards (high instrumentality), (2) these outcomes have positive personal values (high valence), and (3) the ability exists to perform at the desired level (high expectancy) (Hoy and Miskel, 1982, p. 156).

The VIE Theory considers skill levels of the workers and the relationship of performance to rewards.

Goal Theory is quite simple compared to some of the other motivational theories. Edwin A. Locke, as reported by Terpstra (1979), stated that the motivating forces of work behavior stem from the desire to reach a certain goal.

Specific and difficult goals produce greater effort than general and easily attained goals.

The Attribution Theory is a judgment as to the causes of behavior. Fritz Heider, the founder of the theory, states that behavior is a result of two forces, personal and environmental (Hoy and Miskel, 1982). Effort and ability represent personal forces, while the difficulty of the job-related tasks are environmental forces. In this theory, as in other motivational theories, the worker is deciding to behave in a certain way to reach a desired goal.

Recent Related Studies

What employees want is a question Minnesota Gas Company has been asking their employees for over 30 years (Sears, 1984). Minnesota Gas asks non-management people to rank ten job factors according to the importance they attach to those factors. The company also asks their managerial personnel to rank those same factors as to importance. In addition to the managers ranking their priorities of importance, they are asked to predict employee (non-management) preferences.

The ten factors on the questionnaire ranked from 1, most important, to 10, least important, for the managers were (Sears, 1984):

1. Advancement
2. Type of Work
3. Company (Pride In)
4. Security

5. Pay
6. Supervisor
7. Co-workers
8. Benefits
9. Working Conditions
10. Hours

Managers predicted that their employees would rate the ten factors in the following order:

1. Pay
2. Security
3. Advancement
4. Type of Work
5. Benefits
6. Hours
7. Company
8. Working Conditions
9. Supervisor
10. Co-workers

The actual responses of employees as to importance of items was very similar to the priorities of managers. A comparison of the ratings is presented in Table I.

In addition to the composite rankings shown in Table I, the following data were disclosed:

1. Males consider job security to be most important, and working conditions least important.
2. Females place type of work as the most important, and benefits as the least important.

TABLE I
 WHAT MANAGERS WANT, WHAT WORKERS WANT,
 AND WHAT MANAGERS THINK WORKERS
 WANT FROM THEIR JOBS

Factor	What Managers Think Workers Want		
	What Workers Want		
	What Managers Want		
Advancement	1	3	3
Type of Work	2	2	4
Company (Pride In)	3	4	7
Security	4	1	2
Pay	5	5	1
Supervisor	6	7	9
Co-Workers	7	6	10
Benefits	8	8	5
Working Conditions	9	10	8
Hours	10	9	6

1 = Most Important
 10 = Least Important

Source: "What Do Employees Want?" (Sears, 1984).

3. The relative importance of pay and benefits have been decreasing over the years for both males and females.

4. As the level of education increases, importance of security decreases and importance of type of work increases.

Be careful when making assumptions about the needs that motivate employees. Don't guess at what they are--find out what they really are... thus, the results of this ongoing study point to the need for all organizations to strive for truly understanding employee needs, and to align their motivational efforts with the needs that employees express as important to them (Sears, 1984, p. 16).

Some interesting information about what workers want was presented in the article, "Workers Rate the Top 100 U.S. Companies" (Levering, Moskowitz and Katz, 1984). In order to compile a list of the 100 best companies, 350 companies were studied. These 350 candidates for the "Best 100" list were obtained from recommendations of consultants, publishers, business teachers, news reporters, friends, and relatives. Based on written information, the list was reduced to 135 companies. An interviewing process, involving employees of the remaining companies, was conducted in 27 states over several months, and reduced the list to the 100 best companies.

In determining the best companies to work for, a five-part rating system was used. Those five factors were:

1. Pay--How does their pay scales compare to other companies' in their industry.

2. Benefits--How strong and varied are their benefits?

3. Job Security--Do employees fear a lay-off?

4. Chance to Move Up--Is there an effective training program and does the company promote from within?

5. Ambience--What are the unique qualities that set this company apart from others?

The following data about the 100 best companies were compiled from the article (see Table II for detail):

1. Pay--23% above average, 77% average or below.

2. Benefits--49% above average, 51% average or below.

3. Job Security--37% above average, 63% average or below.

4. Advancement--35% above average, 65% average or below.

5. Ambience--59% above average, 41% average or below.

Most of the large companies that made the list have done so by maintaining small company traits. They divide their operation into small units, push responsibility down into the ranks, and do not mangle people (Levering, Moskowitz and Katz, 1984, p. 74).

Pascarella (1980) reported that people must find new avenues for personal growth. Quality of people and quality of product could become the core of new and more realistic aspirations for this country. We should develop organizations that determine what things are worth doing, and then do them well. In this manner we could develop humanistic organizations that make use of people's full potential.

Enrichment of jobs to the extent that workers have a client relationship with those for whom they work was

TABLE II
 HOW WORKERS RATE THE TOP 100 COMPANIES
 ON FIVE JOB-RELATED FACTORS

	R A N K I N G S (In Percent)				
	<u>AT THE TOP</u>	<u>SUPERIOR</u>	<u>AVERAGE</u>	<u>BELOW AVERAGE</u>	<u>AT THE BOTTOM</u>
Pay:	5	18	53	19	5
Benefits:	13	36	43	7	1
Job Security:	10	27	44	14	5
Advancement:	1	34	48	12	5
Ambience:	12	47	31	8	2

Adapted from: "Workers Rate the Top 100 Companies"
 (Levering, Moskowitz and Katz, 1984).

proposed by Pascarella (1980). That approach meshes well with the current cries for more meaningful lives, since the workplace can provide opportunities for the development of personal relationships, use of talents, and the unleashing of workers' creative abilities. Finding happiness on the job is important to finding happiness in life. "One study found that unhappy workers were also unhappy with life in general" (Milbourn and Francis, 1984, p. 43).

Job satisfaction is the result of a person's expectations of, and what is actually received from, the workplace. The closer a worker's expectations are to what is actually perceived, the greater the job satisfaction.

The key to providing job satisfaction is to determine workers' expectations, then to the extent possible "alter the important objects, conditions, or situations affecting overall satisfaction" (Milbourn and Francis, 1981, p. 37).

The diversity of the workforce is a factor to consider in any study of employee motivation. The average age of the workforce is increasing. The average educational level is increasing, and more two-worker families and more single head-of-household workers are all altering the workforce. These factors are, as Schiavoni (1978, p. 25) stated, "...bringing to the workforce differences in personal circumstances and needs."

Additional insight into determining the needs and wants of employees was provided in the recent book, In Search of Excellence (Peters and Waterman, 1982). Treating people as the most important resource may be the key to high productivity. Many companies, however, use the scientific management approach which is too rational and too analytical. Rationality sounds desirable, but it tends to ignore the human element. "The central problem with the rationalist view of organizing people is that people are not very rational" (Peters and Waterman, 1982, p. 55).

In their treatment of people, the excellent companies seem to realize that people want to be "winners" and they devise means for their employees to achieve success. The excellent companies truly view their employees as their most important resource, while the not-so-excellent companies

give only lip-service to that idea. The excellent companies treat people with respect, dignity, and as adults. "Many of the best companies really do view themselves as an extended family" (Peters and Waterman, 1982, p. 261).

Summary of Related Literature

The review of related literature was sectioned into four areas: (1) The Meaning of Motivation, (2) Content Theories of Motivation, (3) Process Theories of Motivation, and (4) Recent Related Studies.

The common elements of most definitions of motivation are "goals" and "behaviors." The literature suggests that motivated employees exhibit behaviors designed to reach specific goals.

The content theories of motivation specify those factors that prompt people to exhibit certain behavior. The "needs" theories are considered content theories. The Herzberg Motivation-Hygiene Theory is one of the needs theories and was the theory emphasized in this study. These theories were compared in Figure 5.

The process theories explain the various factors that affect the persistence of and effort expended in certain behaviors. The three process theories included in this study were the Expectancy, Goal, and Attribution theories. The Expectancy Theory involves the probability of certain behaviors producing desired results. The Goal Theory suggests behavior stems from a desire to reach specific goals.

The Attribution Theory suggests behavior is a result of two forces--personal and environmental.

The more recent studies that were reviewed involved two factors: (1) what employees want, and (2) what companies are doing to help employees achieve what they want. It was determined from this review that what managers think workers want is often not what those workers really want.

The literature suggests that motivation comes from within an individual, referred to as intrinsic motivation. A person thus motivates himself or herself and is not motivated by others. Motivation involves an individual asking, "What is in it for me?"

CHAPTER III

METHODOLOGY

This chapter details the procedures utilized for collecting and analyzing data and comparing that information to the findings of the original Herzberg study. The description of the subjects, methods of selecting subjects, method and nature of data obtained, and statistical analyses of the data are presented.

Selection of Subjects

The Herzberg study involved 203 engineers and accountants in the Pittsburgh, Pennsylvania area. This study involved 263 junior college students in the Tulsa, Oklahoma area.

Eight business-related courses were randomly selected from the Spring 1985 schedule of the downtown campus of a junior college. This sample of classes included both on-campus and television courses. The cooperation of the instructors in distributing the questionnaire was requested by the researcher in person or by telephone. All instructors agreed to that request.

Questionnaires equal in number to the enrollment of each of the classes were sent to the instructors. The

instructors administered the questionnaires to each student in attendance on a specific single data. Each instructor then collected the completed questionnaires and returned them to the researcher.

Source and Nature of Data

The source of data for this study was the responses on the questionnaires that were distributed to the subjects. The survey instrument was pilot tested with 20 junior college accounting students and two instructors. Based on the recommendations of the pilot group, minor modifications in the instrument were made to enhance its clarity and conciseness.

The questionnaire contained the following three parts:

- I. General Background Information
- II. Satisfiers
- III. Dissatisfiers

In Part I, General Background Information, the following information was requested: (1) whether employed or not employed; (2) if employed, number of hours per week; (3) sex; (4) age; (5) marital status; (6) highest educational level attained; (7) years service with present employer; and (8) supervisory or nonsupervisory status. Those data were requested to determine if the background of the respondents affected their perceptions of satisfaction (motivation) or dissatisfaction (hygiene) on the job.

Herzberg's (1959) study included the following 16 items:

1. Achievement
2. Recognition
3. Work Itself
4. Responsibility
5. Advancement
6. Salary
7. Possibility of Growth
8. Interpersonal Relations--Subordinate
9. Status
10. Interpersonal Relations--Supervisor
11. Interpersonal Relations--Peers
12. Supervision--Technical
13. Company Policy and Administration
14. Working Conditions
15. Personal Life
16. Job Security

It is from the above list of Herzberg's items that the job factors for this study were selected. Parts II and III of the survey instrument listed the following ten job related factors:

1. Achievement
2. Advancement
3. Company Policy and Administration
4. Interpersonal Relations--Supervisor
5. Recognition

6. Responsibility
7. Salary
8. Supervision--Technical
9. The Work Itself
10. Working Conditions

Part II asked the subjects to indicate which of the above factors gave them a feeling of exceptional satisfaction about their job. Part III asked the subjects to indicate which of the above factors gave them a feeling of exceptional dissatisfaction about their job.

The introduction of the instrument with definitions, instructions given to each respondent, and a copy of the questionnaire are presented in Appendixes A, B and C.

Analysis of Data

Frequency distributions for demographic information, satisfaction, and dissatisfaction scales were generated using the Statistical Package for the Social Sciences (SPSS) subprogram FREQUENCIES (Nie, 1975). Relative frequencies occurring from data obtained by this study for the satisfaction and dissatisfaction categories were then statistically compared with Herzberg's (1959) findings. (The percentage and ranking of each satisfier and dissatisfier factor identified in Herzberg's study are shown in Table III.)

The statistical comparison was made by means of the "Z Proportions" test (Johnson, 1984) which statistically

TABLE III
 THE PERCENTAGE AND THE RANKING OF EACH FACTOR APPEARING
 IN THE SATISFYING AND DISSATISFYING SEQUENCES:
 HERZBERG'S DATA

Factor	Satisfying Sequences		Dissatisfying Sequences	
	%	Rank	%	Rank
Achievement	41	1	7	11
Recognition	33	2	18	3
Work Itself	26	3	14	6
Responsibility	23	4	6	12
Advancement	20	5	11	7
Salary	15	6	17	4
Possibility of Growth	6	7	8	9
Interpersonal Relations-- Subordinates	6	7	3	15
Status	4	9	4	14
Interpersonal Relations-- Supervisor	4	9	15	5
Interpersonal Relations-- Peers	3	11	8	9
Supervision--Technical	3	11	20	2
Company Policy and Administration	3	11	31	1
Working Conditions	1	14	11	7
Personal Life	1	14	6	12
Job Security	1	14	1	16

Source: Sithiphand, Chirarak. "Testing Employee Motivation Based on Herzberg's Motivation-Hygiene Theory in Selected Thai Commercial Banks." (1983, p. 56)

compares percentages between two populations. The "Z Proportions" formula used for comparisons is as follows:

$$Z = \frac{P_1^1 - P_2^1}{\sqrt{pq\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

where P_1^1 = percent obtained from study data
 P_2^1 = percent obtained from Herzberg data
 P = probability of success in a binominal
 experiment with n repeated measures
 q = $1 - P$
 n_1 = number in present study (212)
 n_2 = number in Herzberg study (203)

The SPSS subprogram CROSSTABS was used to generate crosstabulation tables. A crosstabulation is a joint frequency distribution according to two or more classificatory variables (nominal level data). Demographic data obtained in the study were crosstabulated with each of the satisfaction and dissatisfaction categories and analyzed using the Chi Square test of significance to determine if the variables were statistically independent. The Cramer's V and Phi measures of association were used for each category tested to determine strength of possible existing relationships (Nie, 1975) because of the nominal level of data used in the analysis. All statistical comparisons were tested at the 0.05 level of significance.

Summary

This chapter has presented the procedures and methods utilized in this study. Mention was made of the selection process for the 212 respondents and the number of respondents (203) in the original Herzberg study. The development and pilot testing of the questionnaire were discussed, as was the statistical treatment of the raw data.

CHAPTER IV

FINDINGS

This chapter reports the findings of the study. Findings detailed include the return rate of the survey instrument, total frequency responses for the satisfier and dissatisfier job factors, and responses for several categories of demographic data.

Survey Instrument Responses

A total of 263 questionnaires were distributed to the instructors of eight junior college business classes. That number represented the total enrollment for those eight classes for the Spring semester, 1985. The returned questionnaires totalled 212. The rate of return of the survey instrument was, therefore, 80.61 percent.

Demographics: Descriptive Statistics

The demographic data was obtained from the "General Background Information" section of the questionnaire. The data requested were: employment status, hours worked per week, sex, age, marital status, highest educational level attained, seniority, and job classification.

Descriptive Statistics

The demographic data are presented in Table IV through Table XI. Absolute and percentage frequencies are given for each item.

The employment status of the subjects is shown in Table IV. The employed subjects totalled 193 (91.0 percent) and those not currently employed totalled 19 (9.0 percent).

TABLE IV
DISTRIBUTION BY EMPLOYMENT STATUS

<u>Status</u>	<u>No. of Respondents</u>	<u>Percent</u>
Employed	193	91.0
Not Employed	<u>19</u>	<u>9.0</u>
Totals	212	100.0

Table V indicates the distribution of the subjects as to hours worked weekly. Seventeen of the subjects (8.0 percent) offered no response to this item. Of the respondents answering this question, 15 (7.1 percent) reported a work week of less than 21 hours. Those working from 21-40 hours weekly totalled 109 (51.4 percent). Those subjects working over 40 hours weekly numbered 71 (33.5 percent).

TABLE V
DISTRIBUTION BY HOURS WORKED WEEKLY

<u>Hours</u>	<u>No. of Respondents</u>	<u>Percent</u>
No Response	17	8.0
0 - 20	15	7.1
21 - 40	109	51.4
Over 40	<u>71</u>	<u>33.5</u>
Totals	212	100.0

As shown in Table VI, of the 212 subjects, 76 (35.8 percent) were male and 136 (64.2 percent) were female.

TABLE VI
DISTRIBUTION BY SEX

<u>Sex</u>	<u>No. of Respondents</u>	<u>Percent</u>
Male	76	35.8
Female	<u>136</u>	<u>64.2</u>
Totals	212	100.0

The age categories of the respondents are presented in Table VII. Sixty one (28.8 percent) of the respondents indicated they were under 25 years of age. The 25-29 age category had 43 subjects (20.3 percent). The 30-34 age range included 40 (18.9 percent) individuals. In the 35-39 age category there were 27 (12.7 percent) respondents. The 40-44 age group accounted for 17 (8.0 percent) respondents while the remaining 24 (11.3 percent) subjects indicated they were 45 years of age or older.

TABLE VII
DISTRIBUTION BY AGE

<u>Age</u>	<u>No. of Respondents</u>	<u>Percent</u>
Under 25	61	28.8
25 - 29	43	20.3
30 - 34	40	18.9
35 - 39	27	12.7
40 - 44	17	8.0
45 or Older	24	11.3
Totals	212	100.0

One hundred fourteen (53.8 percent) subjects indicated they were married. Those indicating their marital status as single totalled 82 (38.7 percent), while 16 (7.6 percent) indicated the "other" category. These data are shown in Table VIII.

TABLE VIII
DISTRIBUTION BY MARITAL STATUS

<u>Marital Status</u>	<u>No. of Respondents</u>	<u>Percent</u>
Married	114	53.8
Single	82	38.7
Other	16	7.5
Totals	212	100.0

Table IX indicates the highest educational level attained by the respondents. Those with a high school diploma as the highest level attained numbered 143 (67.5 percent). Associate degrees were held by 40 (18.9 percent) of the respondents. Bachelor's degrees were the highest level of attained for 23 (10.8 percent) of the subjects, while six subjects (2.8 percent) held Master's degrees or higher.

TABLE IX
DISTRIBUTION BY HIGHEST EDUCATIONAL
LEVEL ATTAINED

<u>Level</u>	<u>No. of Respondents</u>	<u>Percent</u>
High School	143	67.5
Associates	40	18.9
Bachelor's	23	10.8
Master's or Above	6	2.8
Totals	212	100.0

Years service with present employer (seniority) is shown in Table X. Fourteen (6.6 percent) did not respond to this question. Up to two years of service was indicated by 80 (37.7 percent) of the subjects. Three to five years seniority was listed by 65 (30.7 percent) of the respondents. Forty one (19.3 percent) of the subjects had six to ten years of service, and 12 (5.7 percent) indicated over ten years seniority.

The final category of demographic data involved the job status as to whether the subjects were supervisory or non-supervisory personnel. No response was given by nine (4.2 percent) of the subjects. Supervisory status was indicated by 53 (25.0 percent) of the respondents, while 150 (70.8 percent) indicated they were employed in nonsupervisory capacities. Table XI presents the job status data.

TABLE X
DISTRIBUTION BY SENIORITY

<u>Years Service</u>	<u>No. of Respondents</u>	<u>Percent</u>
No Response	14	6.6
0 - 2	80	37.7
3 - 5	65	30.7
6 - 10	41	19.3
Over 10	12	5.7
Totals	212	100.0

TABLE XI
DISTRIBUTION BY JOB STATUS--
SUPERVISOR OR NONSUPERVISOR

<u>Status</u>	<u>No. of Respondents</u>	<u>Percent</u>
No Response	9	4.2
Supervisor	53	25.0
NonSupervisor	150	70.8
Totals	212	100.0

Satisfiers and Dissatisfiers

Table XII shows the percentage frequencies of "satisfier" job factors as determined by this study. The ten job factors are arranged in the order of most frequently cited factor to least frequently cited factor of satisfaction. The most frequently listed satisfier was "Responsibility" with a 59.4 percent rating. The least cited factor was "Supervision--Technical" with a five percent rating.

TABLE XII
PERCENTAGE FREQUENCIES OF SATISFIERS

<u>Factor</u>	<u>Rank</u>	<u>Percent (Rounded)</u>
Responsibility	1	59
Achievement	2	59
Recognition	3	46
The Work Itself	4	42
Advancement	5	39
Salary	6	34
Interpersonal Relations-- Supervisor	7	26
Working Conditions	8	24
Company Policy and Administration	9	8
Supervision--Technical	10	5

The dissatisfaction factors as determined by this study are presented in Table XIII. The most frequently cited reason for job dissatisfaction was "Company Policy and Administration." The least cited factor was "Achievement." The ten job factors causing dissatisfaction are arranged in Table XIII in the order of most frequently to least frequently cited reasons.

As shown in Tables XII and XIII, both the satisfier and the dissatisfier response for "Salary" was 34 percent.

TABLE XIII
PERCENTAGE FREQUENCIES OF DISSATISFIERS

<u>Factor</u>	<u>Rank</u>	<u>Percent (Rounded)</u>
Company Policy and Administration	1	47
Interpersonal Relations-- Supervisor	2	37
Working Conditions	3	35
Salary	4	34
The Work Itself	5	20
Recognition	6	17
Advancement	7	16
Supervision--Technical	8	14
Responsibility	9	9
Achievement	10	4

Figure 6 combines the data from Tables XII and XIII to show the relative frequencies for both satisfaction and dissatisfaction responses on job factor tested in this study.

Inferential Statistics: Z Proportions Test

The Z Proportions Test was used to statistically compare the relative frequencies (percentages) of answers in this study to those of the original Herzberg (1959) study. The Z Proportions Test compares percentages between two populations. The 0.05 level of significance was used in this study. A calculated Z of greater than the table Z of 1.65 is significant. Table XIV shows the percentage of responses for the satisfiers for this study and the percentages for the Herzberg study.

Supervision--Technical was the lone satisfaction job factor with a relative frequency that was not significantly different from the Herzberg finding. The calculated Z value of this one factor was 1.03, which was less than the table Z value of 1.65 (Johnson, 1984). All other satisfiers were statistically different than the Herzberg findings, with calculated Z values greater than the 1.65 table value.

Table XV indicates the percentage of responses for the dissatisfiers for this study and the percentages for the Herzberg study. Four of the dissatisfiers in the current study were not significantly different from the Herzberg data, having calculated Z values of less than the Z table

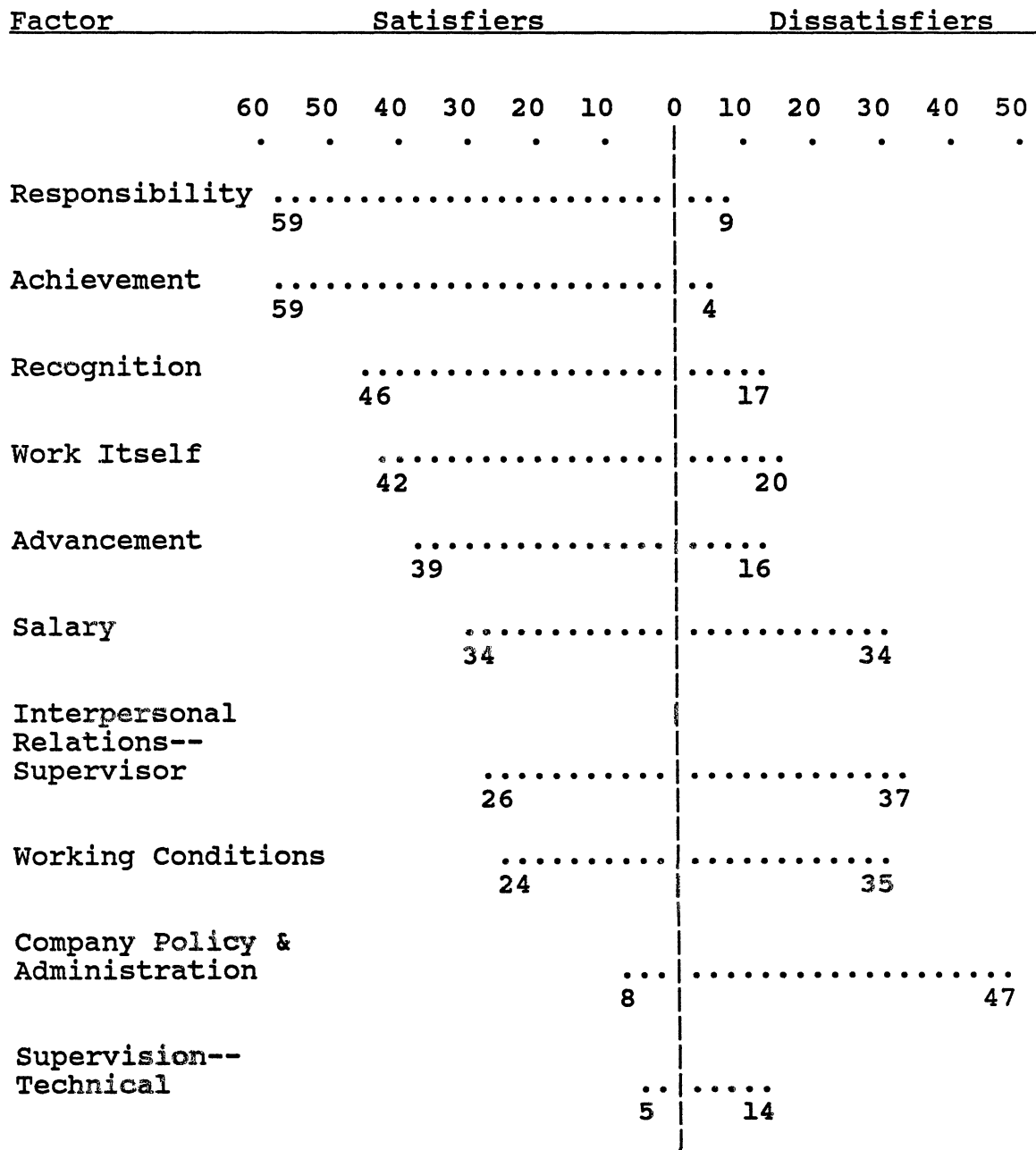


Figure 6. Relative Frequencies for Satisfaction and Dissatisfaction Factors.

TABLE XIV
 SATISFACTION TABLE: PERCENTAGES WITH
 Z PROPORTIONS TEST RESULTS

<u>Factor</u>	<u>Z Test</u>	<u>Current Study %</u>	<u>Herzberg Study %</u>
Achievement	*	59	41
Advancement	*	39	20
Company Policy & Administration	*	8	3
Interpersonal Relations-- Supervisor	*	26	4
Recognition	*	46	33
Responsibility	*	59	23
Salary	*	34	15
Supervision-- Technical		5	3
The Work Itself	*	42	26
Working Conditions	*	24	1

*Significant: $P < 0.05$

value of 1.65. These statistically similar dissatisfiers were: recognition, responsibility, supervision--technical, and the work itself.

Six of the dissatisfiers of the current study were significantly different from the Herzberg responses, with Z values greater than the Z table value of 1.65. The six job

TABLE XV
DISSATISFACTION TABLE: PERCENTAGES WITH
Z PROPORTIONS TEST RESULTS

<u>Factor</u>	<u>Z Test</u>	<u>Current Study %</u>	<u>Herzberg Study %</u>
Achievement	*	4	7
Advancement	*	16	11
Company Policy & Administration	*	47	31
Interpersonal Relations-- Supervisor	*	37	15
Recognition		16	18
Responsibility		9	6
Salary	*	34	17
Supervision-- Technical		14	20
The Work Itself		19	14
Working Conditions	*	35	11

* Significant: $P < 0.05$

factors causing dissatisfaction with significant differences from the earlier study were: achievement, advancement, company policy and administration, interpersonal relations--supervisor, salary, and working conditions.

Five of the six statistically different dissatisfiers--advancement, company policy/administration, interpersonal

relations--supervisor, salary, and working conditions--were stronger dissatisfiers with the subjects of the current study than with those of the Herzberg study. The remaining significant factor, achievement, was a lesser dissatisfier with the current group than with the earlier respondents.

The calculated Z values are given for each item for both satisfiers and dissatisfiers in Table XVI.

TABLE XVI
CALCULATED Z VALUES: SATISFIERS AND DISSATISFIERS
(TABLE Z = 1.65)

<u>Factor</u>	<u>Satisfiers</u>	<u>Dissatisfiers</u>
Achievement	3.67	- 2.62
Advancement	3.17	43.86
Company Policy & Administration	2.05	3.28
Interpersonal Relations-- Supervisor	5.80	5.06
Recognition	2.75	0.40
Responsibility	7.52	1.30
Salary	4.39	3.95
Supervision-- Technical	1.03	1.56
The Work Itself	3.43	1.35
Working Conditions	7.22	7.09

Where the absolute value of the calculated Z is greater than 1.65 (the Z table value), the difference in responses between the current study and the Herzberg study is significant statistically. Where the Z value is positive, the responses to the specific item of this study was greater than in the earlier study. Where the Z value is negative, the response frequency was greater in the Herzberg study than in this study.

Inferential Statistics: Crosstabulations

Crosstabulations were generated using the SPSS subprogram CROSSTABS (Nie, 1975). The demographic data were crosstabulated with each satisfaction and dissatisfaction factor and then statistically analyzed using Chi Square to determine if the variables were statistically independent. Cramer's V/Phi (Nie, 1975) were used for each category to determine strength of relationship.

Crosstabulations were made for each of the following demographic data:

1. Employed or Not Employed
2. Hours Worked Per Week
3. Sex
4. Age
5. Marital Status
6. Highest Educational Level Attained
7. Years Service with Present Employer
8. Supervisory or Nonsupervisory Employee

comparing these eight items in both satisfaction and dissatisfaction of each of the following job factors:

1. Achievement
2. Advancement
3. Company Policy and Administration
4. Interpersonal Relations--Supervisor
5. Recognition
6. Responsibility
7. Salary
8. Supervision--Technical
9. The Work Itself
10. Working Conditions

For the "Employment Status" demographic, there were no significant differences for any of the satisfiers or dissatisfiers.

In the "Hours Worked per Week" category, there was a significant difference in the satisfier "Supervision--Technical" and the dissatisfier "Advancement."

The "Sex" category indicated a significant difference in the satisfier "Supervision--Technical" but no differences in the dissatisfier factors.

The demographic factor of "Age" indicated a statistically different response for the dissatisfier "Working Conditions" with all other dissatisfiers and all of the satisfiers of no significant difference.

"Marital Status" made no statistical difference in any of the satisfier or dissatisfier categories.

Significantly different responses were noted for the various "Highest Educational Level Attained" for the satisfier "Advancement" and the dissatisfier "Salary."

The "Years Service with Present Employer" demographic indicated the amount of seniority significantly affected the satisfier "Working Conditions" and the dissatisfiers "Advancement" and "Interpersonal Relations--Supervisor."

Type of employment, "Supervisory or Nonsupervisory," yielded a significant difference in the two satisfiers "Advancement" and "Achievement." No statistical differences were indicated for any of the dissatisfiers.

Table XVII presents these crosstabulations resulting in significant (at the 0.05 level) relationships between the demographic data and the satisfiers. The Chi Square and Cramer's V/Phi are indicated in Table XVII also.

Table XVIII presents those significant relationships between the demographic data and dissatisfiers, with the Chi Square and Cramer's V/Phi shown.

The Research Questions

Of the ten satisfier/dissatisfier job factors discussed in this paper, the original Herzberg (1959) study classified five of them as motivators and five as hygiene. Motivators are equated with satisfiers and hygiene factors are equated with dissatisfiers. The Herzberg (1959) motivators listed in descending order from strongest to weakest motivator are:

1. Achievement

TABLE XVII
 STATISTICALLY SIGNIFICANT RELATIONSHIPS BETWEEN
 DEMOGRAPHIC DATA AND SATISFACTION FACTORS

<u>Demographic</u>	<u>Satisfier</u>	<u>χ^2*</u>	<u>V/Phi</u>
Hours Per Week	Supervision-- Technical	8.3998	0.1991
Sex	Supervision-- Technical	5.2740	0.1799
Educational Level	Advancement	16.6328	0.1981
Years Service	Work Conditions	13.5709	0.2530
Supervisor/ Nonsupervisor	Achievement	112.4748	0.5150
	Advancement	109.3151	0.5078

*Significant at the 0.05 level.

TABLE XVIII
 STATISTICALLY SIGNIFICANT RELATIONSHIPS BETWEEN
 DEMOGRAPHIC DATA AND DISSATISFACTION FACTORS

<u>Demographic</u>	<u>Dissatisfier</u>	<u>χ^2*</u>	<u>V/Phi</u>
Age	Working Conditions	12.3625	0.2415
Hours Per Week	Advancement	10.1746	0.2191
Educational Level	Salary	9.6697	0.2136
Years Service	Advancement	10.6114	0.2238
	Interpersonal Relations-- Supervisor	11.7798	0.2358

*Significant at the 0.05 level.

2. Recognition
3. The Work Itself
4. Responsibility
5. Advancement

The hygiene factors, according to Herzberg's (1959) data, and arranged in order from greatest to least dissatisfier, were:

1. Company Policy and Administration
2. Supervision--Technical
3. Salary
4. Interpersonal Relations--Supervisor
5. Working Conditions

Research questions one through five of this study were:

1. Is achievement a motivation or hygiene factor?
2. Is recognition a motivation or hygiene factor?
3. Is the work itself a motivation or hygiene factor?
4. Is responsibility a motivation or hygiene factor?
5. Is advancement a motivation or hygiene factor?

The data presented in Tables XII, XIV, and XVI answer these questions as summarized below.

Question 1. Achievement was listed as a satisfier by 59 percent of the current study respondents. The calculated Z value was 3.66 which, when compared to the table Z value of 1.65, indicates a significant difference in the current responses compared to the Herzberg data. The difference is in the direction of a stronger response rate in the current study. Therefore, achievement is a motivator.

Question 2. Recognition had a 46 percent response rate as a satisfier in the current study. The Z test indicated a significant difference with a calculated Z value of 2.75 and a table Z value of 1.65. The recognition response as a satisfier was stronger in this study than in the Herzberg study. Therefore, it is concluded that recognition is a motivator.

Question 3. The work itself was the fourth most frequently listed satisfier, with a 42 percent rate. The calculated Z value of 3.43 as compared to the table Z value of 1.65 indicated a significant difference from the earlier study, again in the direction of a more frequently cited satisfier. The work itself, therefore, is a motivator.

Question 4. Responsibility was the most frequently cited satisfier in this study. The percent of response was 59.4 percent (rounded to 59 percent in Table XII). The calculated Z value of 2.75 indicated a significant difference as compared to the Herzberg data, in the direction of a stronger response rate in the current study. Responsibility can therefore be considered a motivator.

Question 5. Advancement had a response frequency of 39 percent which differed significantly from Herzberg's data with a calculated Z value of 3.17. This difference was a greater response of advancement as a satisfier in the current study. Based on the this data, it is concluded that advancement is a motivator.

Research question six of this study asked if salary was

a motivation or hygiene factor. Based on the findings of this study, information to answer this question is presented in Tables XII, XIII, XIV, XV, and XVI.

Question 6. Salary was listed as a satisfier by 34 percent of the respondents to this study. With a calculated Z value of 4.39, that response rate was a significant departure from Herzberg's data, with the greater rate being in this study. Salary was also listed as a dissatisfier in 34 percent of the responses to this study. The calculated Z value of 3.95 indicates a significant difference from Herzberg's data. With an equal response rate of 34 percent for satisfaction and dissatisfaction related to this factor, and both being significant at the 0.05 level, it can be concluded that salary is both a motivation and a hygiene factor.

Questions seven through ten of this study were:

7. Are interpersonal relations with the supervisor a motivation or hygiene factor?

8. Is technical supervision a motivation or hygiene factor?

9. Is company policy and administration a motivation or hygiene factor?

10. Are working conditions motivation or hygiene factors?

The information presented in Tables XIII, XV, and XVI addresses these questions.

Question 7. Interpersonal relations with one's

supervisor was listed as a dissatisfier by 37 percent of current respondents. The calculated Z value of 5.06 exceeds the table Z value of 1.65 and indicates a significant difference from the Herzberg study. It is concluded that interpersonal relations with supervisor is a hygiene factor.

Question 8. Technical supervision was listed as a dissatisfier by 20 percent of current respondents. The calculated Z value of 1.56 did not indicate a significant departure from Herzberg's data. Since Herzberg listed this category as a dissatisfier (hygiene factor), it must be concluded that technical supervision is still hygiene in nature.

Question 9. Company policy and administration was the most frequently listed dissatisfier in this study, with a response rate of 47 percent. With a calculated Z value of 3.28, it was significantly different from Herzberg's data. The higher rate was in the current study so company policy and administration must be considered a hygiene factor.

Question 10. Working conditions were considered dissatisfiers by 35 percent of the current respondents. The calculated Z value of 7.09 indicates a significant and greater response than in the earlier study by Herzberg. Working conditions are, therefore, hygiene factors.

Research question 11 asked if the relative rankings of the motivation and hygiene factors have changed since the Herzberg study was conducted. As Table XIX and Table XX show, the rankings of these factors have changed.

In the satisfaction category, as indicated in Table XIX, "Responsibility" was ranked first in the current study but was ranked fourth in the Herzberg study. "Salary" was ranked sixth as a satisfier in this study but was not considered as a satisfier in the earlier study. The satisfiers of "Achievement," "Recognition," "Work Itself", and "Advancement" were ranked second, third, fourth, and fifth, respectively, in the current study. These same items were ranked first, second, third, and fourth, respectively, in the Herzberg study.

TABLE XIX
RANKINGS OF SATISFIERS: CURRENT STUDY AND
HERZBERG'S STUDY

<u>Factor</u>	<u>Current Rank</u>	<u>Herzberg's Rank</u>
Responsibility	1	4
Achievement	2	1
Recognition	3	2
The Work Itself	4	3
Advancement	5	5
Salary	6	*

*Not Ranked as a Satisfier

Table XX indicates "Company Policy and Administration" was the strongest dissatisfier in both the current study and the Herzberg study. The remaining dissatisfiers, "Interpersonal Relations--Supervisor", "Working Conditions," "Salary," and "Supervision--Technical" were ranked second, third, fourth, and fifth, respectively, in this study. These same items were ranked fourth, fifth, third, and second, respectively, in Herzberg's study.

TABLE XX
RANKINGS OF DISSATISFIERS: CURRENT STUDY AND
HERZBERG'S STUDY

<u>Factor</u>	<u>Current Rank</u>	<u>Herzberg's Rank</u>
Company Policy and Administration	1	1
Interpersonal Relations--Supervisor	2	4
Working Conditions	3	5
Salary	4	3
Supervision--Technical	5	2

Research question 12 dealt with the effect of demographic background of the subjects on their classification of

satisfiers and dissatisfiers. Table XVII and Table XVIII presented the data to answer this question.

Question 12. The Chi Square and Cramer's V/Phi were used to determine the significant differences of demographic background on satisfiers and dissatisfiers.

"Hours Worked per Week", "Sex", "Highest Educational Level Attained", "Years Service with Present Employer", and "Supervisor/Nonsupervisor" all had a significantly different effect on at least one factor of job satisfaction (see Table XVII). "Age", "Hours Worked per Week", "Highest Educational Level Attained", and "Years Service with Present Employer" all had a significantly different effect on at least one factor of job dissatisfaction (see Table XVIII). Thus, some demographic categories had no effect on the responses to satisfiers or dissatisfiers. Some demographic categories had a significant effect on satisfiers or dissatisfiers. And some demographic categories had a significant effect on both satisfiers and dissatisfiers.

Summary

This chapter discloses the return rate of the survey instrument, the results of the responses of the subjects by demographic categories and in total, and the significant findings of the study as they relate to the research questions. Descriptive and inferential statistics were presented to analyze the raw data.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER STUDY

This chapter presents a summary of the study, a summary of the statistical methods used, and a summary of the findings. Conclusions reached from the findings and recommendations for further study are discussed.

Summary of the Study

Humans are social beings, each with a personal set of needs and wants. Motivation is involved with the satisfaction of those needs and wants.

The Frederick Herzberg Motivation-Hygiene Theory (1959) was conducted to determine those job factors that could lead to motivation of employees. The purpose of this study was to determine if the motivation and hygiene factors in the workplace have changed over the years. According to the Herzberg study (1959), satisfaction and dissatisfaction on the job are synonymous with motivation and hygiene factors, respectively.

Herzberg's study involved 203 engineers and accountants in the Pittsburgh, Pennsylvania area. This study involved 263 junior college students enrolled in business-related

courses in the Tulsa, Oklahoma area.

A survey instrument was developed requesting the respondents to check one or more of ten listed factors that led to exceptional job satisfaction and to repeat the process for job dissatisfaction. Each respondent was also requested to complete a section of the questionnaire concerning general background of the respondent. The 212 respondents represent an 80.6 percent return of the 263 questionnaires that were distributed.

This study attempted to answer twelve survey questions concerning employees' perceptions of job satisfaction and dissatisfaction factors. These questions were:

1. Is achievement a motivation or hygiene factor?
2. Is recognition a motivation or hygiene factor?
3. Is the work itself a motivation or hygiene factor?
4. Is responsibility a motivation or hygiene factor?
5. Is advancement a motivation or hygiene factor?
6. Is salary a motivation or hygiene factor?
7. Are interpersonal relationships with a supervisor a motivation or hygiene factor?
8. Is technical supervision a motivation or hygiene factor?
9. Is company policy and administration a motivation or hygiene factor?
10. Are working conditions a motivation or hygiene factor?
11. Have the relative rankings of the motivation and

hygiene factors changed since Herzberg conducted his study?

12. Does the general background of respondents affect the relative ranking of the motivation and hygiene factors?

Analysis of the data was done through frequency distributions, Z Proportions tests, crosstabulations, Chi Square, and the Cramer's V/Phi.

Summary of the Research Findings

Research questions one through ten involved the classification of job factors into satisfiers (motivators) and dissatisfiers (hygienes). The motivators were found to be, listed in order from strongest to weakest:

1. Responsibility
2. Achievement
3. Recognition
4. The Work Itself
5. Advancement
6. Salary

The hygiene factors, listed in order from strongest to weakest, were:

1. Company Policy and Administration
2. Interpersonal Relations with Supervisor
3. Working Conditions
4. Salary
5. Supervision--Technical

It should be noted that Salary is listed as both a motivator and a hygiene because it received an equal percentage of

responses in both categories.

As addressed in research question eleven, it was discovered that the current study's rankings of both motivation and hygiene factors differ from the Herzberg findings. Responsibility was the strongest motivator in the current study, but was the fourth strongest motivator in the earlier study. Salary was determined to be a motivator in this study, but was classified as a hygiene by Herzberg. In both the current study and Herzberg's study, company policy and administration was the strongest dissatisfier. The remaining four dissatisfiers each had different rankings in the two studies.

Research question twelve led to the fact that five of the eight demographic categories had a significant effect on the responses of the subjects for satisfiers, and four of the eight categories had an effect on the responses of the subjects regarding dissatisfiers.

Differences in "Hours Worked Per Week" and "Sex" of the respondent each had a significant effect on the satisfier "Supervision--Technical." Differences in "Highest Educational Level Attained" yielded differences in the satisfier "Advancement." "Years of Service with Present Employer" (seniority) differentials resulted in the satisfaction responses for "Working Conditions." Supervisors and non-supervisors gave significantly different responses to two of the satisfiers, "Achievement" and "Advancement."

In the responses for dissatisfaction, "Age" affected

"Working Conditions"; "Hours Worked Per Week" affected "Advancement"; "Highest Educational Level Attained" affected "Salary"; and "Years Service" affected both "Advancement" and "Interpersonal Relations--Supervisor."

Conclusions

The following conclusions were reached as a result of this study:

1. Those job factors that tend to motivate the workers are responsibility, achievement, recognition, the work itself, advancement, and salary.

2. The single greatest source of job satisfaction was responsibility.

3. Those job factors that tend to cause employee dissatisfaction are salary, interpersonal relations with supervisor, working conditions, company policy and administration, and technical supervision.

4. The single greatest source of job dissatisfaction was company policy and administration.

5. The subjects of this study viewed salary, in equal proportions, as both a motivator and a hygiene factor.

6. The classification of job factors in this study closely matched the findings of the Herzberg study.

7. To promote the highest level of employee motivation, employers should aid their employees in reaching the upper levels of Maslow's hierarchy (esteem and self-fulfill-

ment) as the satisfiers of this study are related to those levels.

8. Cultural differences among people may account for a different set of needs and wants of individuals.

9. Managerial training programs should emphasize the importance of individual differences in the study of motivation.

Recommendations for Further Study

As a result of this study, the following recommendations are made:

1. This study involved junior college students, 91 percent of whom were employed in the Tulsa, Oklahoma area. Additional studies with similar populations in other geographic areas should be made.

2. Salary was equally cited as a satisfier and as a dissatisfier in this study. Additional studies should be conducted to determine the effect of salaries on employee motivation.

3. This study involved subjects enrolled in business-related courses. Further study should be done with subjects in other educational disciplines.

4. A study could be made to determine if any changes in emphasis from hygiene to satisfaction job factors have taken place in labor/management negotiations over the past three decades.

5. Additional studies could be conducted to determine specific differences in satisfaction and dissatisfaction based on demographic factors.

6. A study should be conducted to determine the extent to which businesses survey their employees to ascertain the employees' needs and wants.

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APPENDIXES

APPENDIX A

**INTRODUCTION OF INSTRUMENT
WITH DEFINITIONS**

INTRODUCTION

You are invited to participate in this study which is intended to compare current job satisfaction and dissatisfaction factors to those of a landmark study conducted in 1959. Your responses will be used to determine if the job factors causing exceptional satisfaction or dissatisfaction have changed over the past 26 years.

DEFINITIONS

For the purpose of this study, the following three word meanings are provided.

1. Event--A single, specific job-related incident which caused a change in your attitude about your job, creating either a feeling of exceptional satisfaction or exceptional dissatisfaction. This event could have occurred on your present job or any job you have held.

2. Satisfaction--An exceptional good feeling about your job, resulting from a specific event.

3. Dissatisfaction--An exceptional bad feeling about your job, resulting from a specific event.

Please note that "satisfaction" and "dissatisfaction" relate to "exceptional" feelings and not your general, ongoing feelings about your job.

APPENDIX B

INSTRUCTIONS GIVEN TO EACH RESPONDENT

INSTRUCTIONS

Part I. General Background Information. Complete all questions by indicating the category reflecting your status. As all responses are intended to be anonymous, do not put your name on the form.

Part II. Indicate all of the factors on the questionnaire that led to a feeling of exceptional job satisfaction.

Part III. Indicate all of the factors on the questionnaire that led to a feeling of exceptional job dissatisfaction.

Thank you for participating in this study. Your effort is appreciated.

APPENDIX C

THE QUESTIONNAIRE

PART II

Think of a job-related event which gave you a feeling of exceptional satisfaction about your job. If any of the following factors were the cause of that feeling, please indicate by a check mark.

<input type="checkbox"/> Achievement	<input type="checkbox"/> Responsibility
<input type="checkbox"/> Advancement	<input type="checkbox"/> Salary
<input type="checkbox"/> Company Policy and Administration	<input type="checkbox"/> Supervision- Technical
<input type="checkbox"/> Interpersonal Relations- Supervisor	<input type="checkbox"/> The Work Itself
<input type="checkbox"/> Recognition	<input type="checkbox"/> Working Conditions

PART III

Think of a job-related event which gave you a feeling of exceptional dissatisfaction about your job. If any of the following factors were the cause of that feeling, please indicate by a check mark.

<input type="checkbox"/> Achievement	<input type="checkbox"/> Responsibility
<input type="checkbox"/> Advancement	<input type="checkbox"/> Salary
<input type="checkbox"/> Company Policy and Administration	<input type="checkbox"/> Supervision- Technical
<input type="checkbox"/> Interpersonal Relations- Supervisor	<input type="checkbox"/> The Work Itself
<input type="checkbox"/> Recognition	<input type="checkbox"/> Working Conditions

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