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WALKER, GARY KENNON
APPLICATION OF THE HERZBERG MOTIVATION-HYGIENE THEORY TO URBAN AND RURAL SCHOOL PRINCIPALS AT THE ELEMENTARY AND SECONDARY SCHOOL LEVELS.

THE UNIVERSITY OF OKLAHOMA, ED.D., 1979

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GRADUATE COLLEGE

APPLICATION OF THE HERZBERG MOTIVATION-HYGIENE THEORY TO URBAN AND RURAL SCHOOL PRINCIPALS AT THE ELEMENTARY AND SECONDARY SCHOOL LEVELS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF EDUCATION

BY

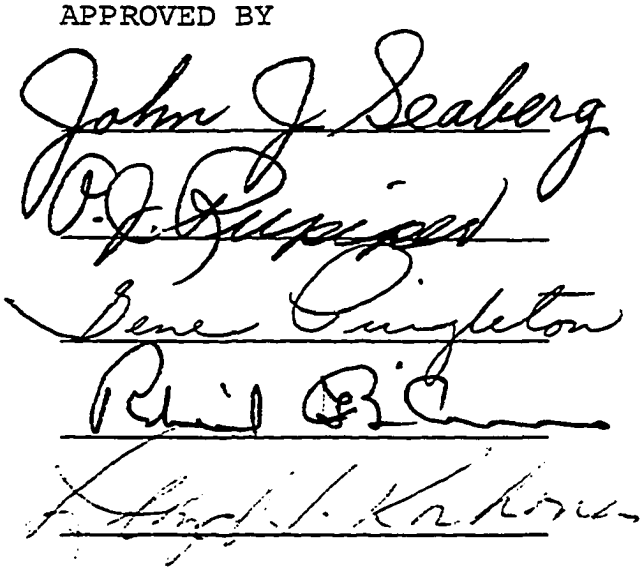
GARY KENNON WALKER

Norman, Oklahoma

1979

APPLICATION OF THE HERZBERG MOTIVATION-HYGIENE THEORY TO URBAN AND RURAL SCHOOL PRINCIPALS AT THE ELEMENTARY AND SECONDARY SCHOOL LEVELS

APPROVED BY



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APPLICATION OF THE HERZBERG MOTIVATION-HYGIENE THEORY TO URBAN AND RURAL SCHOOL PRINCIPALS AT THE ELEMENTARY AND SECONDARY SCHOOL LEVELS

CHAPTER I

THE PROBLEM

Introduction

Opportunity for the full development of human potential is essential to the life of organizations in a dynamic and constantly changing society. Failure to provide opportunity for the individual growth of employees has produced work situations resulting in entropy for organizations. Neglect in providing work which intrinsically reinforces the employee delimits the value of work to the individual. Walton (1974) stated: "Organizations acting in a socially irresponsible manner cause increasing numbers of their employees to depreciate the value of their work and career" (p. 12).

A review by Starcevich (1971) of studies concerning the meaning of work identified a tendency of employees to be non-job-oriented. A summary of these studies reported the following characteristics about work.

1. Work was something not liked. Something you have to do to prevent boredom, anxiety, loss of self esteem (Weiss and Kahn, 1959).

2. Work was monotonous, a burden, a physical fatigue. There existed a lack of feeling of accomplishment (Blum, 1953).

3. Professional and white collar workers identified more intrinsic involvement to work than blue collar workers (Friedman and Havighurst, 1954).

4. A low frequency of workers thought of work as a central concern in their life (Whitehill, 1964).

Starcevich offered the following summary of these studies.

> There also seems to emerge the commonality of viewing work as necessary (even if it may be undesirable) for the feeling of individual well being. This attitude seems to be based on the cultural taboos, which are integrated into the individual when non-work is mentioned as an alternative. Apparently, our society has successfully provided the mechanism for continued productive work by placing the obligation on the individual who in general feels a compelling drive to remain employed even if this entails subjecting oneself to an undesirable job (1971, p. 30).

As a result of negative attitudes about work, organizations have been confronted with increasing worker turnover, absenteeism, militancy, declining work productivity, drug abuse or alcoholism, and loss of public confidence. Part of the problem, according to Suttle (1977), existed in the tendency for management to emphasize efficiency at the expense of human needs.

> The importance of noneconomic reward (for example, challenging and interesting work) is increasing relative to the importance of economic ones, especially among white-collar and highly educated workers. Thus, there is need for improvement, and considerable room for improvement,

> in the quality of work life of many contemporary American workers (p. 8).

Research studies indicated that professional educators seek psychological reinforcement from their work. Iannone (1973) found that school principals are intrinsically motivated by recognition and achievement. Schmidt (1976) cited the value of relating the significance of tasks and job design to motivation among school principals. A question posed by Yeakey and Johnston (1977) was: "How can the school principal be motivated to achieve and be effective?" One of the concepts of motivation discussed by the authors, as a theoretical basis of job motivation for school principals, was the Motivation-Hygiene Theory developed by Herzberg (1959).

Herzberg's Motivation-Hygiene Theory made a distinction between two sets of factors. The first set included five factors which are most frequently associated with feeling exceptionally good about a job. These intrinsic factors were called motivators and included achievement, recognition, work itself, responsibility, and advancement. These were highly interrelated, and related to the doing of the job itself or the content of the job. They were considered job satisfiers. Herzberg contended that these factors lead to a sense of psychological growth, self realization, and positive attitudes.

The second set of factors were called hygiene factors and were extrinsic to the work environment. They included company policy and administration, technical supervision,

interpersonal relationships (superiors, subordinates, peers), working conditions, salary, status, and security. If hygiene factors are not perceived as fair or adequate by employees, it will lead to job dissatisfaction, and performance will be reduced or hindered.

A major hypothesis tested by Herzberg, et al. (1959) was that factors leading to positive attitudes and those leading to negative attitudes would differ. Results of studies confirmed the hypothesis. Herzberg explained his theory in the following excerpt.

> The findings of these studies, along with corroboration from many other investigations using different procedures, suggest that factors involved in producing job satisfaction (and motivation) are separate and distinct from the factors that lead to job dissatisfaction. Since separate factors need to be considered, depending on whether job satisfaction or job dissatisfaction is being examined, it follows that these two feelings are not opposites of each other. The opposite of job satisfaction is not job dissatisfaction but, rather, no job satisfaction; and similarly, the opposite of job dissatisfaction is not job satisfaction, but no job dissatisfaction (1968, p. 57).

Herzberg (1966) proposed that a healthy and hygienic work environment would prevent work dissatisfaction but would not positively motivate people. His approach to stimulating motivation was to identify job items that are satisfying to employees and to manipulate them as motivators.

Whitsett and Winslow (1967) drew a distinction between the two separate factors of job satisfaction and job dissatisfaction as illustrated in Figure I. The authors explained: "The opposite of satisfaction is no satisfaction, while the opposite of dissatisfaction is no dissatisfaction (Figure 1-B). This is different from traditional thinking of satisfaction

(A)

Dissatisfaction----------Satisfaction

(B)

Hygiene

Dissatisfaction----------No Dissatisfaction

Motivators

No Satisfaction----------Satisfaction

Figure 1. Traditional (A) and Motivator-Hygiene (B) Attitude models

Note. From "An analysis of studies critical of the motivation-hygiene theory" by David A. Whitsett and Erik K. Winslow, Personnel Psychology, 1967, 20, 394.

and dissatisfaction as simple opposites (Figures 1-A) (p. 394)."

Purpose of the Study

The Motivation-Hygiene Theory has been prominently utilized in business, industry, and government as a theoretical framework for job enrichment programs. Insights which the studies conveyed suggest pertinent use in the administration of public schools. Owens and Steinhoff (1976) proposed the use of job enrichment programs among professional educators as a means to increase confidence, to develop self direction, and to set new levels of performance. A review of the literature clearly indicated the lack of job enrichment programs in professional education. There were few reported studies that had tested Herzberg's Motivation-Hygiene Theory with school principals. The intent of the study was to assess the applicability of the Herzberg Motivation-Hygiene Theory among school principals in Oklahoma. Specifically, the study sought to reveal job items that influence job satisfaction and job dissatisfaction among school principals; and, to reveal differences as reported by elementary and secondary school principals in rural and urban work environments.

Significance of the Study

It was believed that information derived from this study would make a useful contribution toward a better understanding of job satisfaction and job dissatisfaction among

school principals. It was believed that the review of the application of the Motivation-Hygiene Theory in job enrichment programs; and, the investigation of the significance of certain job items as satisfiers and dissatisfiers among school principals at different levels and in different work environments would provide input for the development of job enrichment programs designed to provide opportunity for full development of human resources.

Statement of the Problem

The problem was to determine if certain job items differ as satisfiers and as dissatisfiers among rural and urban school principals at the elementary and secondary school levels. The study was designed to provide answers to the following questions.

1. Do certain job items differ as a source of job satisfaction and as a source of job dissatisfaction among school principals as a group?
2. Do rural and urban school principals at the secondary school level differ in their response to certain job items as a source of job satisfaction and as a source of job dissatisfaction?
3. Do rural and urban school principals at the elementary school level differ in their response to job items as a source of job satisfaction and as a source of job dissatisfaction?

Hypotheses to be Tested

Considering the theoretical framework and the related literature, the general hypothesis, for the current study, was that job items would differ as sources of job satisfaction and job dissatisfaction. The following null hypotheses were tested:

H_o1. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by school principals.

H_o2. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by urban school principals at the elementary school level.

H_o3. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by urban school principals at the secondary school level.

H_o4. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by rural school principals at the elementary school level.

H_o5. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by

item as reported by rural school principals at the secondary school level.

Limitations

The study was limited to school principals in Oklahoma. School principals were excluded from the study whose job responsibilities included a combination of two or more of the following positions: elementary school principal, middle school principal, junior high school principal, senior high school principal. Principals who were employed by private or nonpublic supported school systems were not included in the study. School principals employed by the Tulsa School District were not included in the study. Choice of the Oklahoma City School District as representative of urban school principals was determined by use of a coin toss.

Definition of Terms

1. Motivators--job content factors which relate to the tasks the individual is performing and the work itself. These are intrinsic factors which are psychologically rewarding and produce satisfying attitudes toward the job (Herzberg, et al., 1959, pp. 113-119).
2. Hygiene factors--job context or maintenance factors which relate to conditions of employment or the work environment. These are extrinsic factors which prevent job dissatisfaction when they are favorable (Herzberg, et al., 1959, pp. 113-119).

3. Elementary school principals--those school principals employed on the basis of the Elementary School Principal Certificate.
4. Secondary school principals--those school principals employed on the basis of the Secondary School Principal Certificate. Middle schools (grades 6, 7, 8) were included in this classification.
5. Rural school principals--those school principals employed by one of the 64 smallest school districts (classification based on enrollment membership) as determined by the Oklahoma Secondary Schools Association. Geographical location of these school districts was outside of Oklahoma County and Tulsa County.
6. Urban school principals--those principals employed by the Oklahoma City School District.

Organization of the Study

The organization of the study consisted of five chapters. Chapter 1 includes an introduction, purpose of the study, significance of the study, statement of the problem, hypotheses to be tested, statement of limitations, and definitions of terms. The theoretical framework and related literature pertinent to the study is presented in Chapter II. A detailed explanation of the methodology employed in the study is presented in Chapter III. Chapter IV contains the analysis of data. The final chapter includes the summary of results, interpretation of data, conclusions, and recommendations.

CHAPTER II

REVIEW OF RESEARCH AND RELATED LITERATURE

Essential to sound management is knowledge of how to engender employee behavior toward greater performance; and, consequently, achievement of organizational goals. Perhaps few problems are of greater concern in this endeavor than the issue of motivation. In a review of problems encountered by management Crabbs (1973) stated: "The central theme throughout these expressions of concern is that society's traditional mechanisms for motivation are inadequate today and managerial redirection is needed" (p. 4).

Herzberg's Motivation-Hygiene Theory had produced an effect on work redesign. It has fostered a great deal of research; and, has served as the theoretical framework for projects designed to improve life at work. The purpose of this section of the study was to review and present significant information for understanding the theoretical framework used in the study, and to evaluate the theory for use in educational administration. The chapter was organized to present a review of the theoretical framework and related research, relationship of the Motivation-Hygiene Theory in

job enrichment programs, issues related to the Motivation-Hygiene Theory, related studies in educational administration, use of the Friedlander Questionnaire to test the applicability of the theory, and a summary statement.

Theoretical Framework and Related Research

A discussion of the Motivation--Hygiene Theory first appeared in The Motivation to Work (Herzberg, Mausner, and Snyderman, 1959). Herzberg's Work and the Nature of Man (1966) elaborated further on the theory using related studies to substantiate earlier conclusions. Initial work by Herzberg and associates consisted of an extensive review of literature pertaining to studies of job attitudes (Herzberg et al., 1957). Brayfield and Crockett (1955) also published a systematic review of the literature in this area. Prior to these two reports there had not been a comprehensive review of the literature despite studies of job attitudes dating back to Hoppock's study (1935) and the impact of the Western Electric studies.

A major conclusion by Herzberg (1959) and associates was that there probably was some relationship between job satisfaction and performance, but the studies which demonstrated this relationship were not consistent. Brayfield and Crockett (1955) concluded from their review that there was no evidence to support the basic assumption of social scientists that job satisfaction engendered quality job performance. Reasons for the different conclusions were that the two reviews

did not cover the same studies, and that the Brayfield and Crockett study was less influenced by findings that did not reach statistical significance. In reviewing the contributions of the two studies, Porter and Lawler (1968) stated: "The one conclusion that was obvious from both reviews was that there was not the strong, pervasive relationship between job satisfaction and productivity that many people felt to be the case before the available evidence was thoroughly examined" (p. 122). In response to these two divergent views, Herzberg (1959) stated: "Certainly there is no basic disagreement [Brayfield and Scott] as to the tenuous nature of the relationship as it has been so far demonstrated" (p. 8).

Results of the 1959 study prompted Herzberg and associates to further investigate the question: "What does the worker want from his job?" According to Herzberg, there were three distinct ways to develop answers to this question.

1. An a priori list of factors can be presented to workers, who are then asked to rank or rate these factors as to desirability. Examples are wages, supervision, company and management policies, and communication.

2. Workers can be asked to indicate spontaneously what they like or dislike about their jobs.

3. Multiple-item inventories or questionnaires may be administered (Herzberg, et al., 1959), pp. 6-7).

From their review of literature Herzberg, et al. (1959) determined that some factors related to job morale were satisfiers and others were dissatisfiers. From this conclusion

the authors hypothesized that factors leading to positive attitudes would differ from those leading to negative attitudes.

The approach of obtaining information regarding how an employee thinks and emotionally feels is explained in the following excerpt:

> The individual or idiographic [dimension], starts with the premise that the relationship among the components of the factor-attitudes-effects complex should be studied within individuals. That is, an attempt should be made to note, individual by individual, how given kinds of factors lead to high or low morale and the consequences of the morale state as indicated by various criterion measures. A likely way of doing this is to obtain from the individual an account of his periods of high or low morale. In getting these accounts we would be able to find out what goes on during those times that lead to higher or low morale and what the reactions of the respondent are. Thus in analyzing the reports of such periods in an individual's life we would be able to delineate the factors-attitudes-effects complex (Herzberg, et al., 1959, p. 12).

Information was secured through use of a semi-structured interview which involved the following request of the respondent:

> Think of a time in the past when you felt especially good or bad about your job. It may have been on this job or any other. Can you think of such a high or low point in your feelings about your job? Please tell me about it (Herzberg, et al., 1959, p. 20).

Herzberg and associates used their first pilot project to test the feasibility of the approach. Three questions were formulated as specific objectives of the pilot study.

1. Would it be possible for people to tell us about times when they felt exceptionally good or bad about their jobs?

2. Would it be possible for us to develop from their reports a coherent picture of the factors responsible for their attitudes?

3. Would these reports reveal the effects of job attitude in sufficient detail so that a convincing account of these effects could be made (Herzberg, et al., 1959, p. 20)?

Results of the first pilot project showed that all but one of the 13 subjects taking part in the study reported a favorable response to the questions.

The second pilot study involved interviews with 39 middle-management personnel. For the second pilot study two terms were added to the research design to differentiate between events. Short-range sequence of events referred to anecdotal, narrowly delimited events. Long-range sequence of events were those which covered a longer period bounded in time. The respondent was required to describe the events that began the sequence and those that terminated it, if it were not occurring during the time of the interview (Herzberg, et al., 1959, p. 23). The authors reported no negative reactions to the semi-structured interview procedure. An examination of the data and analytical methodology did reveal the need to define two additional terms to differentiate psychological reasons to the sequence of events.

1. First-level factors: a description of the objective occurrences during the sequence of events, with special emphasis on those identified by the respondent as being related to his attitudes. Example: a promotion.

2. Second-level factors: these categorize the reasons given by the respondents for their feelings; they may be used as a basis for inferences about the drives or needs which are met or which fail to be met during the sequence of events. Example: a respondent's answer, "I felt good because the promotion meant I was being recognized" (1959, p. 28).

Results of the pilot projects provided the input necessary to develop and refine a set of criteria to be used in determining the acceptability of sequence of events. Sequence of events were reports given by the respondent during the interview.

1. 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.

2. 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).

3. 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.

4. 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 caused high or low spirits (Herzberg, 1966 , p. 72).

The population sample for the major study consisted of semi-structured interviews with 203 accountants and engineers of nine business organizations in the Pittsburg, Pennsylvania area. Data were analyzed through a posteriori

approach to content analysis. In this approach the categories of analysis were extracted from the material itself, rather, than through an a priori approach in which the analytic scheme is previously defined. The authors believed the a posteriori approach to be more related to the data, more meaningful, and communicable (Herzberg, et al., 1959, pp. 37-38). The major hypothesis tested in the study was that the factors (first-level factors--objective events) leading to positive attitudes and those leading to negative attitudes would differ (Herzberg, et al., 1959).

Figure 2 summarizes the findings of the study. First-level factors which were mentioned most often as determiners of "high feelings" (feelings exceptionally good) were achievement, recognition, work itself, responsibility, and advancement. First-level factors which were mentioned most frequently when respondents were asked to describe events which produced "low feelings" (feeling exceptionally bad) were company policy and administration, supervision, salary, interpersonal relationships-supervision, and working conditions. The factors with the longest duration of attitude effects (width of boxes) were work itself, responsibility, and advancement. Herzberg, et al. (1959) explained: "The width of the boxes represents the ratio of long-range to short-range attitude effects; the wider the box, the more frequently this factor led to long-range job attitude change" (pp. 80-81). The boxes depicting the frequency and duration of attitude effects for

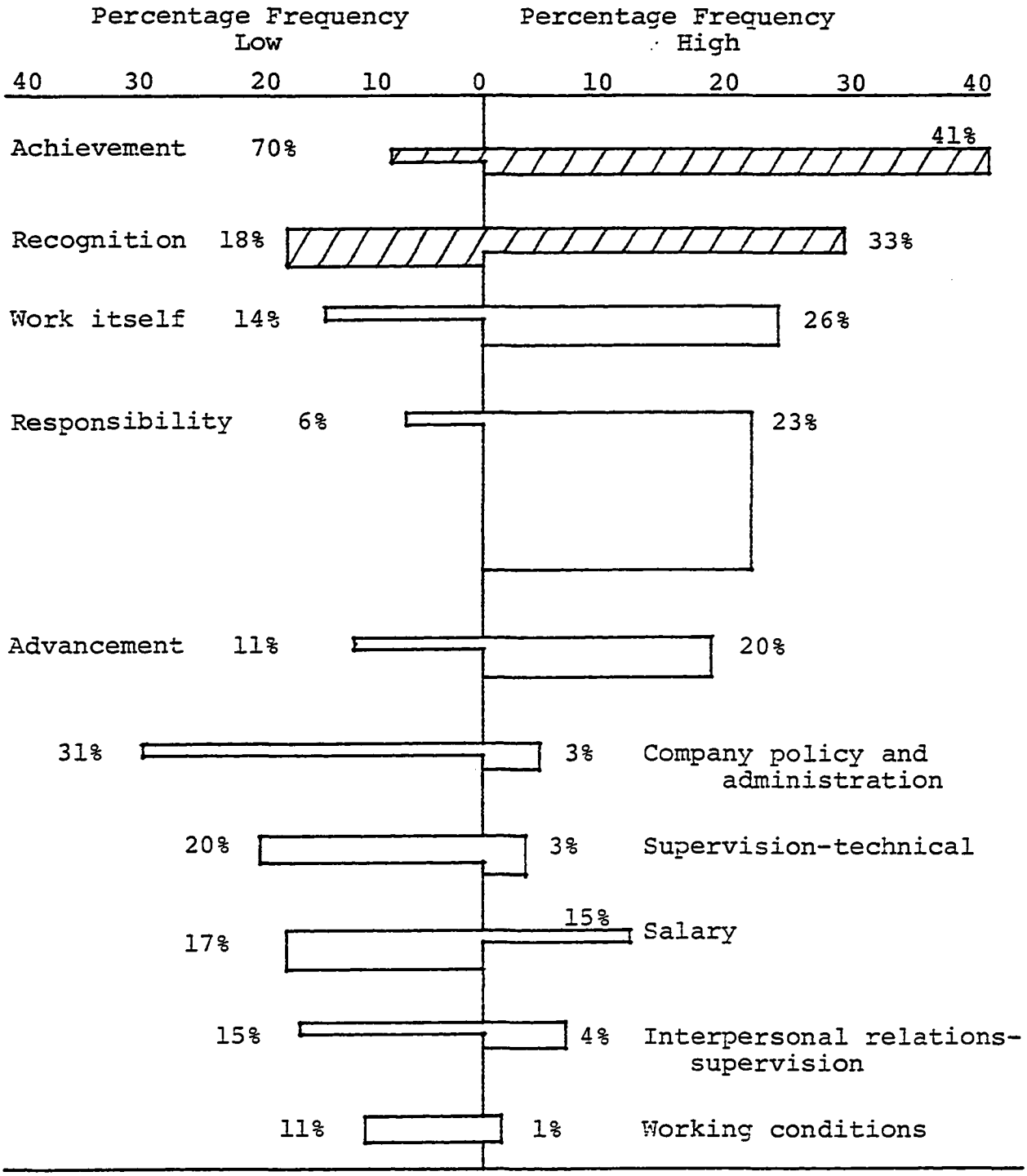


Figure 2. Comparison of satisfiers and dissatisfiers.

Note. From The Motivation to Work by Frederick Herzberg, Bernard Mausner, and Barbara Bloch Snyderman, 1959, p. 81.

achievement and recognition were hash marked to illustrate that the ratio of long-range to short-range attitude effects was reversed for these two factors. The attitude effects were more short-range than long-range. Herzberg provided the following explanation for the unipolar appearance of recognition and salary as both a "high" (satisfier) and as a "low" (dissatisfier).

> When it [recognition] appeared in a "high" sequence of events, it referred to recognition for achievement rather than to recognition as a human-relations tool divorced from any accomplishment. The latter type of recognition does not serve as a "satisfier" (Herzberg, 1966, pp. 73, 74).

> If we examine [Figure 2] for duration of attitude change, we find that in the lows salary is found almost three times as often in the long-range sequences as in the short-range sequences. For the high job-attitude stories salary is about equal in both durations. It would seem that as an affector of job attitudes salary has more potency as a job dissatisfier than as a job satisfier....Salary was mentioned in the high stories as something that went along with a person's achievement on the job. It was a form of recognition; it meant more than money; it meant a job well done; it meant that the individual was progressing in his work (Herzberg, et al., 1959, pp. 82, 83).

Rarely were factors most frequently mentioned as job satisfiers listed as job dissatisfiers. Conversely, the same characteristic was true of factors mentioned most often as job dissatisfiers. Thus, factors listed most frequently as job satisfiers and job dissatisfiers operated on a dual continua basis. Herzberg, et al., 1959, stated: "The satisfiers relate to the actual job. Those factors that do not act as satisfiers describe the job situation" (p. 63).

In addition to requesting the respondents to identify actual events (first-level factors) that produced exceptionally good or bad feelings, they were also asked to tell why the particular event produced a change in their job attitudes. Herzberg explained:

> The principle result of the analysis of this data was to suggest that the hygiene or maintenance events led to job dissatisfaction because of the need to avoid unpleasantness; the motivator events led to job satisfaction because of a need for growth or self-actualization. At the psychological level, the two dimensions of job attitudes reflected a two-dimensional need structure: one need system for the avoidance of unpleasantness and a parallel need system for personal growth (Herzberg, 1966, p. 75).

Results from the study confirmed the major hypothesis that factors leading to positive attitudes would differ from those leading to negative attitudes. Job satisfaction and job dissatisfaction did not operate on a bipolar continuum as traditionally had been assumed. As a result of the findings, Herzberg stated his theory:

> Since separate factors needed to be considered depending on whether job satisfaction or job dissatisfaction was involved, it followed that these two feelings were not the obverse of each other. Thus, the opposite of job satisfaction would not be job dissatisfaction, but rather no job satisfaction; similarly, the opposite of job dissatisfaction is no job dissatisfaction, not satisfaction with one's job (Herzberg, 1966, p. 76).

Herzberg related job satisfiers to the content of the job itself. Their intrinsic nature was evident in the factors of achievement, recognition, work itself, responsibility, and advancement. Those factors produced "high feelings" when experienced by the employee. Infrequently they produced bad

feelings about the job environment. They were termed motivators by Herzberg because they produced these feelings of satisfaction; and, because, as a result of their nature, they were conducive to the self-actualization of human potential.

Dissatisfiers related to the context of the environment. Their extrinsic nature was evident in the factors of company policy and administration, supervision-technical, salary, interpersonal relationships-supervision, and working conditions. According to Herzberg, they did not serve as motivators: rather, they served to prevent job dissatisfaction. Thus, they were termed hygiene factors, meaning preventive and environmental in their effect on behavior. Ford (1973), American Telephone and Telegraph Company, termed dissatisfiers as maintenance factors because of their preventive nature in combating job dissatisfaction. The attitude-effect changes produced by dissatisfiers were of shorter duration than satisfiers (Figure 2).

Herzberg proposed an analogy of the dual-factor theory to avoidance and approach behavior. Figure 3 illustrates this phenomenon. Herzberg explained:

> Man's basic needs can be diagrammed as two parallel arrows pointed in opposite directions. One arrow depicts his Animal-Adam nature, which is concerned with avoidance of pain stemming from the environment, and for man the psychological environment is the major source of this pain. The other arrow represents man's Human-Abraham nature, which is concerned with approaching self-fulfillment or psychological growth through the accomplishment of tasks (Herzberg, 1966, p. 76).

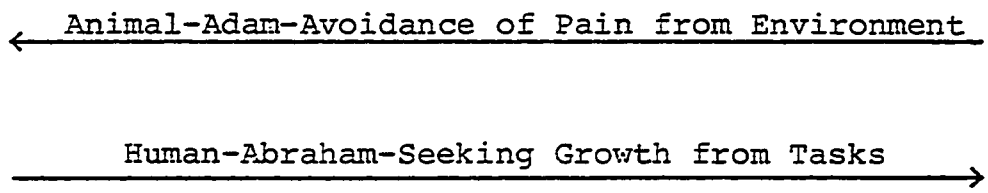


Figure 3. Man's Basic Needs.

Note: From Work and The Nature of Man by Frederick Herzberg, 1966, p. 76.

Further verification of the two-factor theory appears in Work and the Nature of Man (Herzberg, 1966). The author elaborated on research projects using a replication of the original research design, under the direction of different investigators, involving samples from different occupational and cross-cultural populations. Herzberg reviewed 17 projects. All but three substantiated his earlier findings. The three that partially substantiated his theory differed only with respect to interpersonal relationships. Two of these studies were conducted with women who were working in a competitive masculine work environment. Herzberg stated that a rational explanation for this finding was: "a sickness in motivation is brought about by the insecurity of women competing in a traditionally masculine domain" (1966, p. 128). The author cited additional studies using different methodologies than the semi-structured interview that substantiated his two-factor theory of satisfiers and dissatisfiers operating on different continua. Herzberg stated the following summary: "Few studies in industrial psychology have been replicated as often as the motivation-hygiene study, and the evidence appears to be overwhelming that the nature of job attitudes is reflected by the theory first proposed in The Motivation to Work (1966, p. 128).

Relationship of Motivation-Hygiene Theory to other Selected Theories

Carlisle (1976), Kimbrough (1976), Yeakey and Johnston (1977), Livy (1975), Owens and Steinhoff (1976) discussed the relationship of the Motivation-Hygiene Theory to Maslow's Hierarchy of Needs. The hygiene factors were compared to Maslow's physiological, safety, and social needs. Motivational factors were compared to the esteem and self-actualization needs of Maslow's hierarchy. Herzberg stated that the hygiene or maintenance factors do not motivate employees in a positive manner. According to Carlisle this viewpoint is the primary difference between the two theories. Herzberg stated:

> It is clear why the hygiene factors fail to provide for positive satisfactions: they do not possess the characteristics necessary for giving an individual a sense of growth. To feel that one has grown depends on achievement in tasks that have meaning to the individual, and since the hygiene factors do not relate to the task, they are powerless to give such meaning to the individual. Growth is dependent on some achievements but achievement requires a task (Herzberg, 1966, p. 78).

Yeakey and Johnston (1977) discussed selected theorists' concepts of motivation. They cited Maslow, Rogers, and Fromm as support for the idea of positive striving, and the work of McClelland on achievement as a motivator. Herzberg (1959) theorized that the nature of the work itself and the opportunity for achievement, recognition, responsibility, and advancement were intrinsic factors conducive to positive striving and self-actualization.

McGregor (1960) developed the Theory X-Y Model which can be compared in a parallel relationship to the Maslow and Herzberg models. The Theory X-Y Model depicts two theoretical views of human behavior. Theory X is based on the assumptions that the average human being has an inherent dislike of work and will avoid it if he can. Because of this dislike of work most people must be coerced, controlled, directed, and threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives. The average human being prefers to be directed, wishes to avoid responsibility, has little ambition, and wants security above all (McGregor, 1960). Theory-Y is based on the assumption that physical and mental effort is natural for man, that man is self-directed and seeks responsibility, ingenuity, and creativity (McGregor, 1960). As cited by Yeakey and Johnston (1977), the motivation comes from the nature of the work. According to McGregor's theory, the Theory-Y manager structures the work so that employees can experience a sense of accomplishment and personal growth.

Herzberg (1959) made the following suggestions as viable conditions for increasing work motivation and job satisfaction.

1. Jobs must be restructured to increase to the maximum the ability of workers to achieve goals meaningfully related to the doing of the job (p. 132).

2. Match an individual's work capacity with work he will be needed to do (p. 134).

> 3. [Supervisors] will have to learn discriminatively to recognize good work, to reward this good work appropriately...[and to maintain] optimal personal relationships between supervisor and subordinate (p. 136).

Argyris (1957) stated that the self-actualizing personality develops from a state of passiveness, dependency, and subordination to the adult state of independence, active use of capabilities, and equal status. He contended that formal organizations have traditionally developed work environments that thwarted the need for individual growth and self-actualization. He suggested that work be made more meaningful to the employee, and that job enlargement and employee participation be substituted in place of traditional approaches of the monocratic bureaucracy.

Herzberg's continuum of job satisfiers, stated as motivators for self-actualization, can be compared to the idiographic dimension versus the nomothetic dimension of the Getzels, Guba model, the concern for people dimension versus the concern for production dimension of the Blake, Mouton model, and the consideration dimension versus the initiating structure dimension of the Halpin model. The similarity of these models suggests that the individual can experience greater growth and reinforcement through increased participation in the planning and programming of work, the decision making process, and the evaluation and feedback process of organizational activity. Job enrichment programs based on the Motivation-Hygiene Theory are developed on this principle of employee participation.

Motivation-Hygiene Theory in Job Enrichment

Organization development programs designed to meet the demands of a changing society have utilized the job enrichment concept as part of a resource of systems tools to effectively respond to these demands. Emerging conditions which prompted change in the managerial philosophy of organizations are noted by Bennis (1966).

> 1. The emergence of the human sciences, such as psychology and sociology, and their contribution to the understanding of man's complexity.
>
> 2. Rising aspirations of individuals.
>
> 3. The development of a humanistic-democratic ethos (pp. 190-191).

In a review of Bennis' comments, Owens and Steinhoff (1976) noted the importance of members to be included in organizational planning. They stated: "These rapidly emerging conditions sharply limit the effectiveness of older concepts of organizational discipline and control and give rise to greater need for an organization's participants to be involved in their own destiny" (p. 110).

Organizational development programs require that members be involved in the planning and assessment phases of program development. The focus is on a participative management process that requires a leadership role which encourages human interaction and input in the decision making process. A long term goal of organizational development is to make fundamental changes in the structure of the organization so

that it will be adaptable and flexible to the thrust of changes from outside and from within. Encouraging employees to belong and take part in the process tends to establish a stronger commitment to organizational goals, to establish greater congruence between the needs of the individual and the needs of the organization, and to provide a greater number of opportunities for employees to self-actualize on the job.

Job enrichment programs introduced through the use of the Herzberg theory are an attempt to establish freedom and to make the job more psychologically rewarding. Owens and Steinhoff (1976) stated: "Basically, job enrichment--acknowledging that performance is a function of ability and motivation--takes the view that one's ability is not fixed; it can, in many cases, be increased through the use of appropriate motivational techniques" (p. 124). Job enrichment seeks to identify and program those conditions where positive work motivation can be generated and maintained. Livy (1975) stated: "One must have some idea of the needs which people seek to satisfy, and so far as is possible, structure the working environment to provide opportunities for the satisfaction of these needs" (p. 24). Herzberg (1966) proposed to identify satisfiers and manipulate them as motivators. The three most significant satisfiers, according to Herzberg (1959), are achievement, recognition, and work itself. Job enrichment programs based on the theoretical framework of

Motivation-Hygiene Theory utilized this finding as a basic format for program implementation. The significance of Herzberg's approach to work is summarized by Hackman (1977).

> In sum, what the Herzberg theory does, and does well, is point attention directly to the enormous significance of the work itself as a factor in the ultimate motivation and satisfaction of employees. And because the message of the theory is simple, persuasive, and directly relevant to the design and evaluation of actual organizational changes, the theory continues to be widely known and generally used by managers of organizations in this country (p. 108).

Herzberg (1976) recommended that organizations must move from management by movement to management by motivation. He proposed that management by motivation resulted in a longer duration of effective performance. According to Herzberg, management by movement can be expressed as a function of extrinsic fear and extrinsic reward. Herzberg stated:

> What is important to remember about [management by movement] is that for man the two variables, fear and reward, are very short lived. They may at times have great amplitude, but they are of short duration. Even when they are added, their summation only produces a short-term effect--movement (1976, p. 106).

His concept of management by motivation was based on the ratio of ability over potential, the ratio of opportunity over ability, and the reinforcement associated with the behavior. The formulas for management by movement and management by motivation appears in Figure 4. The author stated the following explanation for management by motivation.

> The first ratio of ability over potential determines what the individual is capable of doing. The more a person is capable of doing, the more you can motivate him.

Management by Movement

Movement = f (extrinsic fear and extrinsic reward)

Management by Motivation

$$\text{Motivation} = f\left(\frac{\text{Ability}}{\text{Potential}};\ \frac{\text{Opportunity}}{\text{Ability}};\ \text{What is reinforced}\right)$$

Figure 4. Management Concepts.

Note: From The Managerial Choice, Frederick Herzberg, 1976, p. 106.

> The second ratio, opportunity over ability, determines how much of an individual's talent or capability is permitted to come forth on the job. You cannot motivate anyone to do a good job unless he has a good job to do (p. 107).

Herzberg proposed that the first ratio, ability over potential, was pertinent in getting the right people into the right jobs. The second ratio, opportunity over ability, was pertinent for job design, job enrichment, and job advancement. Herzberg contended that job enrichment is based on programming motivator factors into the work itself. Herzberg (1974) recommended eight ingredients to be included in what he termed Orthodox Job Enrichment. These eight ingredients were: direct feedback, a client relationship, a learning function, the opportunity for each person to schedule his own work, unique expertise, control over resources, direct communication, and personal accountability. A discussion of each of these ingredients is helpful in understanding how this work approach produces motivators that allow the individual to obtain intrinsic reinforcement of achievement and recognition in his work.

Direct Feedback: When results of performance are given directly to the employee without going to supervisors, performance reviews, and through other administrative mediums, there is less personal threat to the employee and the learning impact of the feedback is increased (Herzberg, 1974, p.72).

Client Relationship: Having a customer or client to serve, either within or outside of the organization,increases

understanding of the total scope of the operation and the interrelationship therein; and, increases intrinsic interest in the subsystem operation (Herzberg, 1974, p. 73).

New Learning: When opportunities are provided to learn something that is purposeful and meaningful; and, is vertical (e.g. taking part in the evaluation process) psychological growth is more likely to ensue (Herzberg, 1974, p. 73).

Scheduling: Permitting the employee to set his own pace in meeting deadline for work completion increases a feeling of responsibility to the work and not the schedule (Herzberg, 1974, p. 73).

Unique Expertise: Providing opportunity for the employee to "do their own thing" produces a sense of importance and uniqueness to the work. It induces an expansion of work interest in other aspects of the operation (Herzberg, 1974, p. 73).

Control over Resources: Allowing control over resources produces a feeling of responsibility in budget control (Herzberg, 1974, p. 74).

Direct Communication Authority: Direct communication with other work areas of the organization reduces the time factor, provides new sources of information, and provides direct access throughout the communications structure (Herzberg, 1974, p. 74).

Personal Accountability: Increases a personal responsibility to the quality of work produced, increases creative effort, and constructive evaluation (Herzberg, 1974, p. 74).

In review of these job enrichment ingredients, Herzberg states: "What these ingredients have in common is that they attempt to build into a job motivators that allow the individual to stand up in the hierarchy and be recognized for both what he does and how he does it" (Herzberg, 1974, p. 78).

Vertical job loading is the method used to program job motivators into the work environment. According to Herzberg (1968), vertical job loading, providing job motivators, is the primary difference between job enrichment and job enlargement. Whereas job enrichment engenders psychological growth through greater participation in activities extending beyond the present work activity, job enlargement merely increases the work on a horizontal basis. Herzberg (1968) cited examples of increased production, work rotation, alternating work schedules, as examples of horizontal loading. The principles of vertical loading are presented in Figure 5. They are representative of those job ingredients that Herzberg recommended for job enrichment. Herzberg (1968) cited an application of a job enrichment project which utilized the principle of vertical job loading with stockholder correspondents. The project included an experimental group, a control group, and two uncommitted groups (used to measure the prevalence of the Hawthorne effect). No changes in hygiene were introduced other than normal pay increase. After three months, the experimental group using the principles

Principle	Motivators Involved
A. Removing some controls while retaining accountability	Responsibility and personal achievement
B. Increasing the accountability of individuals for own work	Responsibility and recognition
C. Giving a person a complete natural unit of work (module, division, area, 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 reviews 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

Figure 5. Principles of vertical job loading.

Note. From "One more time: how do you motivate employees?" part II by Frederick Herzberg, Harvard Business Review, Jan.-Feb., 1968, 46, 59.

of vertical job loading were performing better in terms of quality of letters, accuracy of information, and speed of response to inquiry from stockholders. When asked the question "As you see it, how many opportunities do you feel that you have in your job for making worthwhile contribution?", the members of the experimental group expressed more positive attitudes than did the control group. Herzberg (1968) recommended the following steps to job enrichment.

1. Select those jobs in which (a) the investment in industrial engineering does not make changes too costly, (b) attitudes are poor, (c) hygiene is becoming very costly, and (d) motivation will make a difference in performance (p. 61).

2. Approach these jobs with the conviction that they can be changed (p. 61).

3. Brainstorm a list of changes that may enrich the jobs, without concern for their practicality (p. 61).

4. Screen the list to eliminate suggestions that involve hygiene, rather than actual motivation (p. 61).

5. Screen the list for generalities, such as "give them more responsibility," that are rarely followed in practice.

6. Screen the list to eliminate any horizontal loading suggestions (p. 61).

7. Avoid direct participation by the employees whose jobs are to be enriched. . . . The job is to be changed, and it is the content that will produce the motivation, not attitudes about being involved or the challenge inherent in setting up a job (p. 61).

8. In the initial attempts at job enrichment, set up a controlled experiment. . . . For both groups, hygiene should be allowed to follow its natural course for the duration of the experiment (p. 61).

9. Be prepared for a drop in performance in the experimental group the first few weeks. The changeover to a new job may lead to a temporary reduction in efficiency (p. 62).

10. Expect your first-line supervisors to experience some anxiety and hostility over the changes you are making. The anxiety comes from their fear that the changes will result in poorer performance for their unit (p. 62).

Results of job enrichment programs have demonstrated favorable increases in work attendance, production, quality of work, and savings in cost and time. Paul, Robertson, and Herzberg (1969) reviewed job enrichment programs with laboratory technicians, sales representatives, design engineers, and factory supervisors. Their review confirmed the evidence of increase in these areas of work activity. Regarding monetary benefits associated with job enrichment programs, Herzberg stated:

> In all, 100 people were in the experimental groups in the studies described. A conservative reckoning of the financial benefit achieved, arrived at by halving all estimated annual gains or savings, would still be over $200,000 per year (1976, p. 161).

Herzberg and Rafalko (1975) reviewed the program of Orthodox Job Enrichment at Hill Air Force Base. Some of the job enrichment activities associated with this program included the avionics (test and repair of navigational equipment), wing slat project (maintenance function on the F-4 aircraft), warehouseman-driver project, buyers/contract negotiators, flight controllers, and merit placement function project. The authors reported a reduction in the number of tasks to do certain jobs, increased time for supervisors to engage in

planning and coordinating work activities, and significant savings ($377,900).

Walima (1975) reviewed some of the successful applications of job enrichment programs in business and industry. A list of prominent organizations which have utilized job enrichment programs is presented in Table 1. The author stated the following review of selected programs.

> AT&T, the job enrichment pioneer, has enriched over 10,000 jobs in the last nine years. Their original project in the Shareholder Relations Department brought about a 27 per cent reduction in the termination rate and a production cost-savings of $558,000 over a 12-month period. Later, when the jobs of service representatives were enriched in 12 districts, resignations and dismissals dropped by 14 per cent....All but one of their projects have been successful.
>
> The Chrysler Corporation has several programs underway which significantly involve the worker in decision making....Workers in the parts department ...operate without foremen. Chrysler management believes that new attitudes toward work as a result of these programs have reduced corporate turnover from 47 per cent in 1969 to 17 per cent now, and absenteeism from 7.9 to 5.6 per cent.
>
> Perhaps the most dramatic enrichment project is going on at General Foods pet food plant in Topeka, Kansas....The employees now work in semi-autonomous teams which select their own team leaders and determine at the start of each shift how to meet production goals, as well as how to divide up the job assignments. Each team member is also trained to do practically any job on the team. The teams interview and hire replacements, as well as train and discipline their own members. As a result, there is an exceptionally high level of worker commitment; absenteeism and turnover are each less than 1 percent; and the production rate is 30 percent higher and quality 80 percent better than in Topeka's sister plant at Kankakee, which operates in the older, traditional fashion (pp. 259-260).

Table 1

Organizations Using Job Enrichment Programs

Alco	Kaiser Aluminium
American Airlines	Maytag
AT&T	Monsanto Chemicals
Bankers Trust	Motorola
R. G. Barry	Polaroid
Chrysler Corporation	Proctor & Gamble
Corning Corporation	Saab
Corning Glass	Texas Instruments
Donnelly Mirrors	Travelers Insurance
Ford Motor Company	TRW Systems
General Foods	U.S. Steel
IBM	Volvo
Imperial Chemicals Industries	Western Electric

Note. From "Kaiser aluminum's action guide to job enrichment" by Susan E. Walima, condensed from the booklet Job Enrichment: An Action Guide, 1975.

Ford (1973), in evaluating the longitudinal efforts at AT&T, made the following statement of support for job enrichment programs:

> The enormous economic gains that sprang from the thinking of the scientific management school of the early 1900's--the time and motion study analysts, the creators of production lines--may have ended insofar as they depend on utilizing human beings more efficiently. Without discarding these older insights, we need to consider more recent evidence showing the tasks themselves can be changed to give workers a feeling of accomplishment (p. 96).

Herzberg (1976) offered the following comment for justification of job enrichment programs:

> Participation for participation's sake is another manipulative management device, but participation as a part of the job enrichment process can be a rich source of additional technical knowledge of jobs, while at the same time fulfilling individual needs. Employees want a sense of feeling that they have some say over their own destinies (p. 331).

The importance of Herzberg's findings and subsequent Motivation-Hygiene Theory is noted by Carlisle (1976):

> Herzberg's important contribution was in relating the significance of tasks and job design to motivation. Before this, motivation had concentrated on the hygiene factors. People will strive harder in terms of effort and advancing their skills when they have jobs that provide them a sense of accomplishment and demand a high level of skill utilization (p. 281).

Not all job enrichment programs are successful. Herzberg (1975) discussed the disparity between promise and reality. He identified barriers in the form of resistance to change, fear of loss of control, conflict between

management and unions, distrust of management, lack of understanding of job enrichment, reluctance to invest capital and time, fear of failure, and failure of long term commitment. Herzberg (1968) also acknowledged that not all jobs can be enriched, or that all need to be enriched. Walima (1975) recommended use of the following indicators to consider in determining if job enrichment programs are appropriate for use in organizations.

1. Absenteeism
2. Turnover
3. Frequently expressed grievances
4. Evidences of employee dissatisfaction such as strikes, sabotage, or work stoppages
5. Productivity as compared to ability of the people in the organization
6. Degree of apparent boredom with the work
7. Employee suggestions for improving work procedures (p. 262).

Selected Studies in Education

The review of literature pertaining to job enrichment programs, based on the Motivation-Hygiene Theory of Herzberg, indicated a cross-discipline application with the exception of the field of education. There appeared little evidence in the review of literature reporting the existence of programs designed to organize the work environment based on the method of structuring the work environment as reported in the preceding

discussion. Despite the apparent lack of job enrichment programs in education, the educational work force is faced with a similar need for improving morale through intrinsic motivation. The same indicators of poor employee morale cited by Walima (1975), Walters (1975), Bollmeier and Suojanen (1975) appear relevant to the field of education. School systems are facing demands from teachers, patrons, supportive personnel, and administrators to have greater participation in the traditional managerial functions of planning, programming, staffing, control, and evaluation. A work environment programmed with vertical loading activities can work in a positive manner for education with the same results as demonstrated in business, industry, and government. A substantial theoretical framework is a prerequisite to job enrichment programs. The following discussion was based on a review of the literature pertaining to studies which tested the applicability of the Herzberg theory with various groups of professional educators.

Sergiovanni (1966) tested the Motivation-Hygiene Theory with 40 teachers selected at random from 3682 teachers in New York. The investigation replicated the original study by Herzberg and associates using the semi-structured interview. Results of the study supported Herzberg's dual continuum theory of job satisfaction, job dissatisfaction. The study reported that satisfaction factors for teachers tend to focus on the work itself and the dissatisfaction factors

tend to focus on the conditions of work. Moreover, the elimination of dissatisfiers did not result in teacher satisfaction. Schmidt (1976) reviewed studies which tested the Herzberg theory with teachers. He cited studies by Savage (1967), Wickstrom (1971), Johnson (1967), and McGreal (1968) which generally supported the Herzberg theory with the exception of interpersonal relations which was found to be a motivational factor by Savage and Wickstrom. Since the time of the Sergiovanni study there have been various investigations that tested the Motivation-Hygiene Theory using different methodologies. Handy (1976) utilized the Job Factor Questionnaire to determine which of the sixteen factors in the Motivation-Hygiene Theory contributed to the development of negative and positive attitudes in jobs among adult educators. Results indicated that four of Herzberg's motivator factors were predominant in predicting job satisfaction: achievement, work itself, advancement, and recognition. Six maintenance factors or dissatisfiers were predominant in predicting job dissatisfaction: working conditions, company policy and administration, status, interpersonal relations, supervision, and job security. Rogers (1976) conducted an investigation of factors related to job satisfaction and job dissatisfaction of teachers in school districts with differing labor climates. A questionnaire was used to collect data. Results of the study confirmed the Motivation-Hygiene Theory with teachers in both school districts. Primary sources of job

satisfaction were found to be recognition, achievement, and work itself. Sources of work dissatisfaction were found to be work conditions and people that determined the work environment. Groseth (1978) conducted an investigation of the Motivation-Hygiene Theory among selected student affairs administrators in the State University System of Florida. Results tended to support the theory. Sixty-eight percent of the reported satisfying incidents were classified as satisfiers while 81 percent of the reported dissatisfying incidents were classified as dissatisfiers. The study did report some differences in the way certain administrators responded. The chief student personnel officer supported Herzberg's theory for satisfying factors, but not for dissatisfying factors. The directors of financial aid, housing, and the union supported Herzberg's theory for dissatisfying factors, but not for satisfying factors while data for the counselors supported both factors of the Motivation-Hygiene Theory. Thomas (1977), in a similar study with community college administrators, found evidence to support the Herzberg theory that motivators contributed more to role satisfaction than did hygiene factors. This study employed the semi-structured interview technique with a sample that consisted of 12 chief academic officers, 12 chief business officers, and 12 chief student personnel officers. Bechtold (1975) used the School Administrator Morale Measure IV (SAMM IV) to determine if the scores from this instrument can be interpreted

by use of the Herzberg Motivation-Hygiene Theory. The morale scores of 700 Indiana public school administrators were analyzed by two panels of sorters that classified the scores using the Herzberg theory. The author concluded that the results suggested the Administrator Moral Measure IV could not be interpreted in terms of the Motivation-Hygiene Theory using this classification scheme. In addition, the results indicated that both motivator and hygiene factors contributed to high morale; and, motivator factor items contributed more to low morale than did hygiene factor items. Interpersonal relations with teacher organizations were considered as important sources of satisfaction. The author reported that the conclusions provided more support for the single continuum model. The author noted that the classification procedures did not provide the judges sufficient knowledge of the Motivation-Hygiene Theory, the SAMM IV was insufficiently developed, and in terms of the Motivation-Hygiene Theory, many of the items of the SAMM IV survey were ambiguous. Johnson (1975) developed a questionnaire to assess the accessibility and importance of motivation and hygiene factors as perceived by public school principals and superintendents. Results indicated that superintendents accurately perceived what the principals' responses were regarding Hygiene Accessibility, Motivation Accessibility, and Hygiene Importance. However, superintendents did not accurately perceive what the principals' responses were regarding Motivation Importance.

Aebi (1972) tested the applicability of the Herzberg Motivation-Hygiene Theory to 230 faculty and 30 top level administrators in 15 private colleges using both the forced-choice structured questionnaire and the semi-structured interview technique. Results indicated that the Herzberg Motivation-Hygiene Theory was partially supported by the forced-choiced structured questionnaire while the replicated use of Herzberg's semi-structured interview technique supported the theory. The different methodologies resulted in different findings for sources of dissatisfaction more often than for sources of satisfaction. The most frequently identified factor for satisfaction was the work itself, while the most frequently identified factor for dissatisfaction was work conditions. Stefanski (1978) used the Minnesota Satisfaction Questionnaire to determine and analyze what factors were identified by principals as contributing to job satisfaction and to investigate job performance. The principal's immediate superior was asked to rate the principal's performance over a 12-month period. Forty high school principals were included in the study using the semi-structured interview and administered the questionnaire. Results of comparing the two methodologies supported the Motivation-Hygiene Theory. Major indicators of satisfaction were achievement, recognition, and work itself. Major indicators of dissatisfaction were interpersonal relations-supervision and salary. Iannone (1973) used the semi-structured

interview technique to test the Motivation-Hygiene Theory with a sample of 20 secondary school principals and 20 elementary school principals in an urban work environment. Results reported that the satisfiers, achievement and recognition, were statistically significant in frequency of job satisfaction but were not in job dissatisfaction. Interpersonal relations, policy and administration were mentioned with significantly greater frequency in job dissatisfaction. Schmidt (1976) used the semi-structured interview technique with high school principals in the suburban Chicago area. As a supplement to the interview, the subjects were asked to write their responses. The findings supported the Herzberg theory with the exception of responsibility which was reported as a dissatisfier.

A summary of the selected studies in education which tested the Motivation-Hygiene Theory with teachers and administrators at different levels and in different environments revealed support of the original findings of Herzberg and his conclusions drawn from related investigations in business and industry. The study by Bechtold did not support the dual factor theory, but, the author acknowledged deficiency in the survey instrument and method of analyzing data. Factors that differed with the Motivation-Hygiene Theory were interpersonal relations and responsibility. Interpersonal relations were reported as a source of satisfaction in the study by Bechtold, and, responsibility was reported as a

source of dissatisfaction by Schmidt. The review of these studies revealed the need to further investigate the applicability of the Herzberg Motivation-Hygiene Theory with school principals at different levels and in different work environments. Studies by Schmidt, Johnson, Stefanski, and Iannone did not direct an investigation into the possibilities of differences between school principals from different work environments. Finally, the review of studies revealed the need to utilize an instrument designed to measure the duality of the Herzberg theory in terms of time savings and cost to administer as opposed to the semi-structured interview technique.

Issues Related to the Motivation-Hygiene Theory

Despite the widespread application of the Motivation-Hygiene Theory in job enrichment programs; and, the favorable results of these programs, criticisms of the theory have been reported by various investigators. Whitsett and Winslow (1967) reviewed studies critical of the Motivation-Hygiene Theory from the time of the original study (Herzberg, et al., 1959) to 1966. Grigaliunas and Wiener (1974) dealt with a review of studies critical of the theory since that time. Both reports were presented by Herzberg (1976) in an attempt to refute conclusions critical of the theory.

One inadequacy of studies critical of the Motivation-Hygiene Theory concerned the misinterpretation of the theory; and, the testing of hypotheses that could not logically be

derived from the theory. Studies cited in the reviews as refuting the Motivation-Hygiene Theory on the basis that it failed to measure overall job satisfaction were Ewen, Smith, Hulin, and Locke (1966), Ewen (1964), Malinovsky and Barry (1965), Wernimont (1966), Burke (1966), Lindsay (1965), and Hulin and Smith (1967). Whitsett and Winslow (1967) and Herzberg (1976) contended that it was a misinterpretation to use measures of overall job satisfaction in making statements derived from testing the Motivation-Hygiene Theory. Whitsett and Winslow stated:

> The theory does not, and purposely does not, make statements about overall job satisfaction. The separateness of the sets of factors makes it apparent that job attitudes must be looked at twice--once to see if the needs fulfilled by the hygiene factors are indeed fulfilled, and again to see if the needs fulfilled by the motivator factors are met (1967, pp. 395, 398).

Another limitation of studies critical of Herzberg's theory concerned the use of measuring instruments that were unidimensional in structure. The authors cited the use of the General Motors Faces Scale used by Ewen, Smith, Hulin, and Locke (1966) to test the predictability of the Motivation-Hygiene Theory to overall job satisfaction. The procedure consisted of having the respondent check one of six faces which best represents feelings toward the job. Whitsett and Winslow noted that the authors who conducted the study stated that the instrument had not been validated. Whitsett and

Winslow stated: "The magnitude of their error is increased by the fact that the score on this one item is used as the sole criterion measure for their entire study" (1967, p. 398). Grigaliunas and Wiener (1974) cited the error by Hulin and Smith (1967) of breaking the unidimensional scale into two parts to measure the Motivation-Hygiene Theory. In addition to questioning the psychological meaningfulness in having the respondent measure satisfaction or dissatisfaction on the basis of pictures, Grigaliunas and Wiener cited the difficulty of interpretations due to broad cultural differences associated with meanings attributed to facial expressions.

Ott (1965) used a 115 item questionnaire with 350 telephone operators. Ten factors emerged from a factor analysis of the responses. Three of the first five factors were related to the hygiene dimension of Herzberg's theory; and, accounted for most of the variance associated with the questionnaire. The author concluded that the validity of the Herzberg construct was questionable. Whitsett and Winslow (1966) stated that the results, as a basis for refuting the Motivation-Hygiene Theory, was questionable because the questionnaire was constructed with the majority of items (90 out of 115) dealing with hygiene, leaving 25 that pertained to motivator items. Burke (1966) tested the unidimensionality of the Motivation-Hygiene Theory to determine how the respondents would rank by preference five motivator items and five

hygiene factors. Results of the investigation revealed that the subjects' feelings about the "importance of self" for these factors varied. Burke concluded that the Herzberg theory was an oversimplification of job satisfaction and job dissatisfaction among employees. In response to this conclusion, Whitsett and Winslow stated: "We do not understand this conclusion, since M-H Theory makes no claim that there should be any fixed order of importance among either motivator or hygiene factors"(1967, p. 410).

Whitsett and Winslow (1967) cited additional studies that investigated the relative importance of motivator and hygiene factors: Centers & Bugental (1966), Dunnette (1965), Ewen, et al. (1966), Friedlander (1964), and Graen (1966). The summary of this review by Whitsett and Winslow stated:

> These studies report, in general, that the motivators appear more important in ranking of factors in job attitudes than the hygiene factors. One possible explanation for this result becomes evident in examining the populations used in these studies. The subjects, for the most part, have been drawn from higher occupational and educational groups. The finding that these groups regard the motivators as more important is by no means a new one (1967, p. 411).

The authors cited the study by Herzberg, et al. (1959) which reported the same finding. In a final summary statement regarding the issue of one dimension having importance over the other, Whitsett and Winslow stated:

> The essence of the theory is that the two are served by the independent and different groups of factors, that both sets of needs must be met and that an overemphasis on either may lead to serious personnel problems. It should be obvious that an

> overemphasis on hygiene, to the exclusion of motivators, cannot result in superior performance, while ignoring hygiene and concentrating solely on the motivators will lead to dissatisfaction (1967, p. 412).

The review by Grigaliunas and Wiener (1974) of studies critical or nonsupportive of the Motivation-Hygiene Theory revealed similar deficiencies as those reported earlier by Whitset and Winslow (1967). Hulin and Smith (1967) attempted to achieve a meaningful separation of the two factors of satisfaction and dissatisfaction through use of the General Motors Faces Scale which they divided into two separate scales; the smiling scale to indicate satisfaction; and, the frowning scale to indicate dissatisfaction. Grigaliunas and Wiener pointed out two limitations to this methodology. One, the General Motors Faces Scale measures overall job satisfaction which is inconsistent with the dual factor theory of Motivation-Hygiene. Secondly, the dividing of a unidimensional scale into two parts did not result in a valid dual continua of measurement. Another study, cited by the authors using this method, was Graen and Hulin (1968). Additional studies which sought to test the Motivation-Hygiene Theory by dividing a unidimensional scale of satisfaction-dissatisfaction into two scales were Waters and Waters (1969), Waters and Roach (1971).

Use of research methods which employed overall job satisfaction as a construct to test the applicability of the Herzberg theory was found to be a deficiency in studies

reviewed by Whitsett and Winslow (1967). Similar findings were reported by Grigaliunas and Wiener (1974). Studies critical of the Herzberg theory which fall in this category were Hinrichs and Mischkine (1967), Wolf (1967), Kosmo & Behling (1969), Armstrong (1971), Weissenberg & Gruenfield (1968), Greunfield & Weissenberg (1970), and Graen (1968).

Grigaliunas and Wiener (1974) reviewed studies by Dunnette, Campbell, & Hakel (1967); and Schwab & Heneman (1970) which reported that the association between satisfying and dissatisfying job experiences and motivator and hygiene factors predicted by the Herzberg theory is not supported. The authors stated:

> The fact that data do not perfectly support a prediction does not automatically mean that the prediction "ignored individual differences." Very possibly, the imperfect prediction was caused by errors of measurement inherent in any psychological procedure. One will be hard pressed to find even one psychological study that produced results conforming "perfectly" to prediction (1974, pp. 853, 854).

Jamann (1974), in a review of these same studies, concluded that these studies misinterpreted the Motivation-Hygiene Theory because of methodologies which produced inaccurate results. Herzberg (1976) suggested that the utility of the theory is for work design and not predicting worker attitudes. In an attempt to substantiate the general predictive power of the Motivation-Hygiene Theory, and refute the charges by these studies, Grigaliunas and Wiener (1974) quoted Dunnette, et al. (1967), who stated: "Clearly the first five job features . . . are more often associated with

satisfying stories, and another five job features . . . are more often associated with dissatisfying stories" (p. 145).

Criticism concerning the reliability of the coding process and the consistency of the data are two additional issues discussed in the review by Grigaliunas and Wiener. The authors reported that there has been no research which reported poor reliability of the coding process, or inconsistency of the data. They stated: "Consistency of results is best indicated by the numerous replications that have been already performed on a wide variety of populations, geographic locations, and jobs, as well as other demographic variables" (1974, p. 858). Herzberg (1959) reported 95 percent agreement between two independent coders, with an additional check by a third person. Schmidt (1976) reported a correlation of .77 between the coders' decisions.

Two final issues selected from the review by Grigaliunas and Wiener concern the social desirability of respondents to look good (defensive responding); and, the criticism that the Motivation-Hygiene Theory is methodology bound. Bobbitt and Behling (1972) manipulated situational variables to determine if there were significant differences between the following two experimental conditions. In condition one, the subjects were led to believe that their responses might affect their futures within the organization. In condition two, the subjects were led to believe that their responses would have no effect on their futures. Results of

the study revealed no statistical significant differences under the two conditions. Grigaliunas and Wiener (1974) quoted the conclusion of Bobbitt and Behling which stated: "that individuals attribute satisfaction to their own actions and dissatisfaction to those of others in order to appear in a favorable light to significant others is not supported by the results" (1974, pp. 865-866). A study conducted by Wiener, Vaitenas, and Herzberg (1975) also refuted the issue of social desirability and defensive responding attributed to the Herzberg theory by Dunnette, et al. (1967).

A final criticism associated with the Herzberg theory is that it is method bound. The criticism that methods other than the semi-structured interview technique tend to produce results nonsupportive of the theory was not supported by a review of the literature. Crabbs (1973) presented a summary of 66 studies related to the Motivation-Hygiene Theory. The review indicated general support of the theory.

> The present review identified 15 studies between 1959 and 1970 that used the Herzberg methodology. Each of these studies supported (at least in part) the Motivation-Hygiene Theory. No studies replicating the original study failed to support the theory. Between 1959 and 1970, there were 37 studies that met the criteria for the "Studies Using Other Methodologies" and "Findings Support Motivation-Hygiene Theory" categorization. Fourteen studies between 1962 and 1969 failed to support the theory while using other methodologies (p. 30).

Aebi (1972) included a review of 156 job satisfaction studies which supported, partially supported, or did not support the theory. The review supported the conclusion by Crabbs that

the Motivation-Hygiene Theory was supported by the majority of studies that utilized methods different from the original study by Herzberg and associates (1959).

In summary, those studies that did not support the Motivation-Hygiene Theory were frequently inadequate due to a lack of understanding the bidimensionality of the theory, the use of inappropriate measuring devices, and inaccurate conclusions. The summary by Whitsett and Winslow (1967) appeared to be substantiated.

> It would appear, because of the numerous misinterpretations of the M-H Theory, the general weaknesses in methods, and the frequent misinterpretations of results, that taken as a group the studies reviewed offer little empirical evidence for doubting the validity of the theory. We conclude that the theory has clearly retained its utility and viability. In fact, it is interesting to note that the results of some of the most critical studies (Dunnette, 1965; Ewen, 1964; Ewen, et al., 1966; Malinovsky and Barry, 1965; Wernimont, 1966) actually support, in part, the M-H Theory. These studies serve to illustrate that findings in the direction of those of the original study (Herzberg, et al., 1959) are obtainable through a variety of methodologies (p. 415).

Use of Friedlander Questionnaire to Test Herzberg Theory

One of the major issues associated with the Motivation-Hygiene Theory is the use of methodologies, other than the semi-structured interview, to test the applicability of the theory. The inadequacy, namely, rating scales, is discussed by Grigaliunas and Wiener.

> The basic point made [in review of studies critical of the Motivation-Hygiene Theory] was that the simple rating scale cannot meaningfully separate the two feeling states of "satisfaction" and "dissatisfaction"; they actually measure just one "overall" state

> . . . . The fact that the variety of rating-scale methods has not come up with results similar to those of the critical-incident method only points out the need to keep looking in different directions for psychologically and logically valid alternatives (1974, p. 866).

Friedlander developed a two-part questionnaire which incorporated Herzberg's motivator and hygiene factors into the format of the instrument. The questionnaire is composed of two sets of 18 questions designed to measure the importance of 18 job items as both satisfiers and dissatisfiers. The composition of the factors is presented in Table 2. Part I was developed in 1962 for use in a study to determine sources of job satisfaction in the work environment. Herzberg assisted in the design of the questionnaire (Friedlander, 1964). The second part of the questionnaire was completed for a study in 1964 to test the dual continuum theory of job satisfaction and job dissatisfaction. Friedlander (1964) concluded: "Herzberg's findings that satisfiers and dissatisfiers were not opposite ends of a common set of dimensions were substantiated by the current study" (p. 391). The part of the Friedlander study which supported this conclusion consisted of comparisons between each of the 18 job items as satisfiers and dissatisfiers. The second part of the study consisted of determining which of the job items provide the greatest source of job satisfaction, and which job items serve as the greatest source of job dissatisfaction. Results of the second part of the investigation did not, according to Friedlander, support the Herzberg theory.

Table 2

Intrinsic--Extrinsic Job Items

Intrinsic Job Items	Extrinsic Job Items
1. Promotion	1. Relationship with supervisor
2. Challenging assignments	2. Relationship with co-workers
3. Recognition	3. Technical competence of supervisor
4. Feeling of achievement	4. Merit increases
5. Responsibility	5. Working conditions
6. Growth on the job	6. Job security
7. Work itself	7. Home life
8. Use of the best abilities	8. Work group
	9. Management policies
	10. Employee benefits

Note. From "An analysis of the relationships among sources of job satisfaction" by Frank Friedlander (Unpublished dissertation, Department of Psychology, Western Reserve University, 1962).

Friedlander stated: "Only half of this framework was substantiated by the current study; intrinsic job characteristics were found to be important to both satisfaction and dissatisfaction, while extrinsic aspects were relatively unimportant as satisfiers or dissatisfiers" (1964, p. 391). The population used in the study consisted of students enrolled in college courses, employed in different jobs. This finding by Friedlander is not inconsistent with an earlier finding by Herzberg, et al (1957) who reported:

> The factor preferences of workers are affected similarly by employee occupational level and education. One of the most consistent findings is that intrinsic aspects of the job are more important to employees with greater education and to employees at higher occupational levels (p. 54).

Thus, use of the Friedlander Questionnaire and the part of his 1964 investigation which supported the Herzberg Motivation-Hygiene Theory, by comparing job items as satisfiers and dissatisfiers, is consistent with the theoretical framework of a dual continua of job attitudes. As noted by Starcevich (1971), the similarity of Friedlander's classification of job factors to Herzberg's classification of job factors may be thought of as the satisfying situation--motivation--intrinsic relationship, and, the dissatisfying situation--hygiene--extrinsic relationship. The presence of its bidimensional approach to measuring job attitudes bridges the criticism directed at methodologies different from the semi-structured interview.

Additional studies have utilized the Friedlander Questionnaire to test the applicability of the Motivation-Hygiene Theory with different populations. Maas (1968) used a modified version of the Friedlander Questionnaire with public school teachers. Results of the study supported the existence of a dual continua of satisfiers and dissatisfiers. Poosawtsee (1973) used the questionnaire to determine the environment preference and job satisfaction of junior college faculty. Sheely (1975) also used the Friedlander Questionnaire in conjunction with the Faculty Environmental Preference Scale to determine preferred environment and job satisfaction among public school teachers. The Friedlander Questionnaire was used by Donahue (1978) in investigating factors influencing job satisfaction and job dissatisfaction of nursing faculty with faculty in other departments of selected private liberal arts colleges. The reported reliability scores, using the Kuder Richardson formula 20 were all over .70 for both the satisfaction and dissatisfaction measures of the instrument.

Summary

The Motivation-Hygiene Theory developed by Herzberg was found to be substantiated by related research investigations. Use of the theory as a theoretical framework for job enrichment programs in business, industry, and government was found to have widespread application. Results of these

programs indicated an improvement in worker absenteeism, turnover, productivity, monetary savings, and morale. The programming of opportunities for achievement, recognition, advancement, and work involvement were included within the framework of vertical job loading that involved employees in the traditional managerial functions of planning, programming, staffing, control, and evaluation.

Implications for job enrichment programs in other fields, such as education,were evident. However, the current review of literature did not reveal any specific programs that used the Motivation-Hygiene Theory as a theoretical framework for job enrichment programs in education. The need to further test the applicability of the theory in education was evident by the limited number of reported investigations.

Issues associated with the theory were not well substantiated due to lack of understanding the theory, inappropriate methodologies, and misinterpretation of results. It was found that the use of a methodology, other than the semi-structured interview, was contingent upon the use of an instrument designed to measure the bidimensionality of the dual factor theory.

Use of Friedlander's Questionnaire was found to demonstrate a bidimensional scale of measurement. It was evident that the questionnaire would be easier to administer, time saving, and less costly in terms of rising transportation costs. In addition, if the questionnaire did accurately test

the applicability of the Herzberg theory to school principals, it would provide the basis for testing the theory to groups of people rather than on an individual basis. Based on the review of the current literature, it was determined that further testing of the theory was necessary in education, especially with school principals. It was determined that use of the Friedlander Questionnaire to test the applicability of the Motivation-Hygiene Theory with school principals at the elementary and secondary school levels and between urban and rural school principals was feasible and appropriate. There were no reported studies in the current review of literature which tested the applicability of the Herzberg theory with school principals at these levels and in these work environments using the Friedlander Questionnaire.

CHAPTER III

DESIGN AND METHODOLOGY

Design of the Study

The study was designed to determine what factors affected job satisfaction and job dissatisfaction among school principals at selected levels, and, to identify differences between selected groups of principals regarding factors of job satisfaction and job dissatisfaction. A descriptive-survey method investigation was used in the research design. Selltiz, Wrightsman, and Cook (1976) described the method as useful in determining frequency and in determining or reporting the way things are. A modification of Friedlander's Questionnaire was employed to obtain data for analysis and evaluation.

Population and Sample Selection

Public school principals in the Oklahoma City School District and public school principals from the 64 smallest school districts in Oklahoma comprised the population. Selection of the urban segment of the population was based on the use of a coin toss to determine whether the Tulsa

School District or the Oklahoma City School District would be used in the study. Rural school principals were selected from the 64 school districts with the lowest average enrollment membership as determined by the Oklahoma Secondary Schools Association. Total population for the study consisted of 235 school principals. Rationale for the selected population was based on the assumption that school principals from these geographical locations would be representative of rural and urban school settings in Oklahoma.

School principals whose job responsibilities included a combination of two or more of the following positions were excluded from the study: elementary school principal, middle school principal, junior high school principal, senior high school principal. Twenty-six school principals from rural school districts were excluded from the study based on this selection procedure. Using this criterion there were no urban school principals excluded from the investigation. The population consisted of 79 rural school principals (38 elementary school principals, 41 secondary school principals) and 128 urban school principals (72 elementary school principals, 56 secondary school principals).

The sample for the study included 120 school principals. Groups comprising the sample were rural school principals (elementary school level), rural school principals (secondary school level), urban school principals (elementary school level), and urban school principals (secondary school

level). Thirty school principals were randomly selected for each group through use of a table of random numbers (Downie and Heath, 1974). Sample size was determined at 120 using Minium (1970) for estimating sample size for tests between dependent means. The table and instructions for calculating sample size were interpreted as follows:

> β, the probability of accepting a false hypothesis was set at the .05 level. The magnitude of the discrepancy relative to the standard deviation was set at the .50 level. Therefore, where the significance level for the study was set at .05, the sampling number of 106 was determined. The sample size was increased from 106 to 120 to compensate for the loss of degrees of freedom when p must be estimated from r when the sample size is used as a test between dependent means (pp. 339-342).

Instrument

The Friedlander Questionnaire is a two-part instrument that measures the way a respondent views work. Part one was developed for a study completely by the author in 1962 to determine the sources of job satisfaction in the work environment. The questionnaire contained 17 job items designed to measure job satisfaction. The questionnaire was administered to over 10,000 employees consisting of engineers, managers, and salaried employees. Over 92 per cent completed the questionnaire. The validation process consisted of factor analysis of the questionnnaire responses. Three factors were identified as contributing to job satisfaction: social and technical environment, intrinsic work aspects, and recognition through achievement. Herzberg assisted in the design of the questionnaire (Friedlander, 1964).

Part-two, designed to measure job dissatisfaction, was developed for a study completed in 1964 to test Herzberg's dual continua theory of job satisfaction, job dissatisfaction. An additional item, employee benefits, was added to the two-part questionnaire for use in the 1964 study. The sample was comprised of 80 subjects representing various occupations and job positions. Results of the investigation substantiated Herzberg's findings that satisfiers and dissatisfiers were not opposite ends of a bipolar continuum. The Kuder-Richardson formula 20 was used to calculate the reliability scores of .79 for the satisfaction measure and .72 for the dissatisfaction measure of the two-part questionnaire. Starcevich (1971), Sheely (1975), Jamann (1974), and Donahue (1978) used the Friedlander Questionnaire to test the applicability of Herzberg's Motivation-Hygiene Theory with different occupational populations. Though none of the cited studies conducted an investigation using this instrument with school principals, they did substantiate the use of the Friedlander Questionnaire as a valid instrument to test the applicability of the Herzberg Motivation-Hygiene Theory.

Instructions requested respondents to think of a time when they felt exceptionally good about a job, either the present job or any other job. Part-two of the questionnaire requested respondents to think of a time which was exceptionally dissatisfying, either the present job or any

other job. Thus, the format for instructions was the same procedure employed in Herzberg's initial investigations. The difference in the approaches of Herzberg and Friedlander is that Herzberg used the semi-structured interview to determine what employees want from their jobs while Friedlander used the questionnaire to determine how employees view certain job items as satisfiers and dissatisfiers. Friedlander explained:

> The respondent thus was not questioned as to whether he was satisfied or dissatisfied; rather he was asked to draw upon his entire past vocational repertoire and to indicate the extent to which each job aspect was important as a source of satisfaction and dissatisfaction (1964, p. 389).

Using a four point rating scale, each of the 18 job items was measured in terms of its importance as a satisfier and as a dissatisfier. The scale extended from the lack of the specific job item as a contributor of job attitude to a major contributor of job attitude. The four-point scale, with their assigned numerical weights, is presented, as follows:

1. This factor was not present
2. This factor was present but was not important
3. This factor was fairly important
4. This factor was of major importance.

Instructions were modified for the current study to request the respondents to think of a specific satisfying work experience and a specific dissatisfying work experience in the

present job. This modification was made to focus the attention of the respondent on the present job thereby eliminating difficulty of recall which might be associated with an open ended request.

Pilot Study

The modified questionnaire was administered to a graduate educational administration class of 15 students at The University of Oklahoma. Reliabilities of the satisfaction and dissatisfaction measures, computed by use of the Kuder-Richardson formula 20 were .76 and .70, respectively. Students were asked to write comments regarding the instructions and the content of the questionnaire. This request was made to determine if ambiguity existed in the content of the cover letter, the instructions, or the questionnaire. Also, the respondents were asked to make written comments regarding any difficulty in maintaining focus of attention on a specific job situation which was satisfying and one which was dissatisfying. There were no reported comments to question the validity of the instrument. Therefore, based on the validation of the instrument from cited studies and the results of the pilot project, the decision was made to use the questionnaire as an instrument to measure job satisfaction and job dissatisfaction in a present job assignment among school principals at the elementary and secondary school levels in rural and urban work environments.

Procedures for Data Collection

Each school principal included in the sample was mailed a questionnaire and cover letter explaining the nature of the research project. Names of persons employed as school principals were obtained from the Oklahoma Educational Directory, Bulletin 110-A, 1978-79. Permission to contact school principals employed by the Oklahoma City School District was approved by the Research and Evaluation Unit of that school district.

The packet mailed to principals in the sample included: the cover letter, a respondent identity information sheet, the questionnaire, and a self-addressed, stamped envelope. Copies of the questionnaire, cover letter, follow-up letter, and approval letter are presented in the Appendices. A record of mail return was maintained by identification of code numbers written on the return envelope. The final follow-up consisted of a telephone inquiry to those principals whose questionnaire had not been received. The sample composition of the study is presented in Table 3. Percentage of total returns for the questionnaire was 90 percent. Each group responded with a minimum of 90 percent return of the questionnaire except for rural school principals (secondary school level). The percentage of return for this group was 87 per cent.

TABLE 3

SAMPLE COMPOSITION

Urban School Principals	Sample Size	Number Returned	Percentage of Returns
Elementary School Level	30	27	90
Secondary School Level	30	28	93
Rural School Principals			
Elementary School Level	30	27	90
Secondary School Level	30	26	87
Totals	120	108	90

Statistical Procedures

To determine if the Herzberg Motivation-Hygiene Theory was applicable to school principals through use of the Friedlander Questionnaire, a comparison was made between satisfiers and dissatisfiers. The significance of the difference between each job item as a satisfier and as a dissatisfier was computed by use of a *t*-test for each job item. Friedlander (1964) stated: "If satisfaction and dissatisfaction are complementary functions, one would expect no significant differences between the mean satisfaction and mean dissatisfaction for the same item" (p. 389).

Pearson product-moment correlations were calculated to determine the degree of relationship between each job item as a satisfier and as a dissatisfier. Friedlander (1964) reported: "Generally, to the extent that these items are important to satisfaction, lack of these items may or may not be important to dissatisfaction" (p. 390).

To the degree that the difference between mean ratings on job satisfaction and job dissatisfaction by item was significant or not significant, and the degree of relationship existing between each item was significant or not significant, a determination of a bipolar continuum or a dual continua was made thereby testing the applicability of Herzberg's theory to school principals through use of the Friedlander Questionnaire.

The Kuder-Richardson formula 20 was used to determine the reliabilities of the satisfaction and dissatisfaction measures of the Friedlander Questionnaire.

The alpha level was set at .05 level of significance for testing the hypotheses. In order to reject the null hypothesis, a *t* value must be equal to, or greater than, the value required at the .05 level. The format used to present comparisons of means, standard deviations, and correlations between job items as sources of job satisfaction and as sources of job dissatisfaction followed the format by Friedlander (1964).

CHAPTER IV

ANALYSIS OF DATA

The problem was to determine if certain job items differ as a source of satisfaction and as a source of dissatisfaction among rural and urban school principals at the elementary and secondary school levels. The sample consisted of 120 school principals selected by use of a table of random numbers. The total number of respondents participating in the study was 108.

A modification of the Friedlander Questionnaire was used to collect the data. Instructions requested the respondents to think of a specific satisfying work experience and a specific dissatisfying work experience in their present job. Measurement of job attitudes consisted of a four point scale ranging from 1 (the factor was not present) to 4 (the factor was of major importance). The scale was employed for each of the 18 job items included in the questionnaire. The measurement scheme was the same for both the satisfaction and dissatisfaction measures of the questionnaire. The coefficient of internal consistency for the questionnaire was computed by means of the Kuder-Richardson

formula 20. Reliabilities of the satisfaction and dissatisfaction measures of the questionnaire were .79 and .78, respectively.

Five null hypotheses were tested to determine if the 18 job items, included in the questionnaire, differed as sources of job satisfaction and as sources of job dissatisfaction. Using procedures described in Chapters I and III, data analyses were performed to test the following null hypotheses:

H_0^1. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by school principals.

H_0^2. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by urban school principals at the elementary school level.

H_0^3. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by urban school principals at the secondary school level.

H_0^4. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by rural school principals at the elementary school level.

H_0^5. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by rural school principals at the secondary school level.

The significance of the difference between each job item as a satisfier and as a dissatisfier was computed by use of the *t*-test for correlated data. Similarly, Pearson product-moment correlations were calculated to determine the degree of relationship between each job item as a satisfier and as a dissatisfier. Results of comparison between each job item as a satisfier and as a dissatisfier were tested at the .05 level of significance. Statistical analysis of the data was conducted at The University of Oklahoma Merrick Center using the IBM 370/158 computer. The data analysis program was a modified version of the Statistical Analysis System (SAS), version 76.6D. Since the data were drawn from a single group of respondents recalling two separate incidents; and, since the sample takes into account the possible correlation between the paired measures of satisfaction and dissatisfaction, the *t*-test for correlated means was added to the program.

Results of the treatment of the data were presented in tables to provide clarification in the discussion of the null hypotheses (Appendix C). Comparisons of results for the groups, used in testing the five null hypotheses, were presented in Tables 4 and 5. Table 4 reports the composite summary of significant mean differences of job items by groups. Table 5 reports the composite summary of significant job item correlations by groups. The following tables were used to present the treatment of data for the five null hypotheses:

Table No. 6--Total Group (Null Hypothesis No. 1)

Table No. 7--Urban Elementary School Principals (Null Hypothesis No. 2)

Table No. 8--Urban Secondary School Principals (Null Hypothesis No. 3)

Table No. 9--Rural Elementary School Principals (Null Hypothesis No. 4)

Table No.10--Rural Secondary School Principals (Null Hypothesis No. 5)

The following discussion of results was based on the summary of the treatment as presented in Table 4 and Table 5.

The first null hypothesis stated that there is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by school principals. This hypothesis was tested for each of the 18 job items included in the questionnaire. As reported in Table 4, there were significant differences between the mean satisfaction and mean dissatisfaction scores for 14 of the 18 job items. For these job items, satisfaction and dissatisfaction were not complementary functions. The null hypothesis was rejected for 14 of the 18 job items. As reported in Table 5, there were 13 correlations that were not significant, indicating that for those job items satisfaction and dissatisfaction were unrelated, and operated on a dual continua. Those 13 job items supported the Herzberg theory that satisfiers and dissatisfiers were not opposite ends of a bipolar continuum. These items were challenging assignments, recognition, relations with supervisor, relations

Table 4

Composite Summary of Significant Mean Differences of Job Item by Groups[a]

Job Item	Total Groups	Rural Elem.	Rural Secon.	Urban Elem.	Urban Secon.
1. Promotion	*	*			
2. Challenging assignments	*	*	*	*	*
3. Recognition	*		*	*	*
4. Relations with supervisor	*		*	*	*
5. Relations with coworkers	*	*	*	*	*
6. Technical supervision	*		*	*	*
7. Merit increases			*		
8. Achievement	*	*	*	*	*
9. Working conditions	*			*	
10. Responsibility	*	*	*	*	*
11. Security	*	*		*	
12. Growth	*	*	*	*	
13. Employee benefits					
14. Work itself	*	*	*	*	*
15. Home life					
16. Work group	*		*	*	*
17. Management policies					
18. Use of best abilities	*	*	*	*	*
Total mean	*	*	*	*	*

[a]The asterisk represents the differences that were significant at the .05 level.

Table 5-

Composite Summary of Significant Job Item Correlations by Groups[a]

Job Item	Total Group	Rural Elem.	Rural Secon.	Urban Elem.	Urban Secon.
1. Promotion	*				*
2. Challenging assignments					
3. Recognition					*
4. Relations with supervisor					
5. Relations with co-workers					
6. Technical supervision				*	
7. Merit increases	*				
8. Achievement	*				
9. Working conditions		*		*	
10. Responsibility					*
11. Security			*		
12. Growth			*		*
13. Employee benefits	*	*		*	
14. Work itself					
15. Home life	*	*			
16. Work group			*		
17. Management policies					
18. Use of best abilities					

[a]The asterisk represents the correlations that were significant at the .05 level.

with co-workers, technical supervision, working conditions, responsibility, security, growth, work itself, work group, management policies, and use of best abilities. The results were similar to the study conducted by Friedlander (1964) with the exception of the job item, use of best abilities. This job item was found to operate in a bipolar fashion in the Friedlander study.

Null Hypothesis 2 stated that there is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by urban school principals at the elementary school level. As reported in Table 4, there were significant differences between the mean satisfaction and mean dissatisfaction scores for 13 of the 18 job items. The null hypothesis was rejected for those 13 job items. As reported in Table 5, there were three correlations of job items, as satisfiers and dissatisfiers, that were statistically significant, indicating that for these items the bipolar theory of job attitudes was supported. These items were technical supervision, working conditions, and employee benefits. The remaining 15 job items were found to have nonsignificant correlations, indicating that satisfaction and dissatisfaction were unrelated. Herzberg's dual continua theory of job attitudes was supported by these 15 job items.

Null Hypothesis No. 3 stated that there is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported

by urban school principals at the secondary school level. As reported in Table 4, there were significant differences between the mean satisfaction and mean dissatisfaction scores for 10 of the 18 job items. The null hypothesis was rejected for these 10 job items. As reported in Table 5, there were four correlations of job items, as satisfiers and dissatisfiers, that were statistically significant, indicating that for these job items the bipolar continuum theory was supported. These job items were promotion, recognition, responsibility, and growth. The nonsignificant correlations of the remaining 14 job items indicated that the measures of satisfaction and dissatisfaction are not opposites of a bipolar continuum. Herzberg's dual continua theory of job attitudes was supported by these 14 job items.

Null Hypothesis No. 4 stated that there is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by rural school principals at the elementary school level. As reported in Table 4, there were significant differences between the mean satisfaction and mean dissatisfaction scores for nine of the 18 job items. The null hypothesis was rejected for those nine job items. As reported in Table 5, there were three correlations of job items, as satisfiers and as dissatisfiers, that were statistically significant, indicating that for these job items the bipolar continum theory was supported. Those job items were working conditions,

employee benefits, and home life. The nonsignificant correlations of the remaining 15 job items indicated that the measures of satisfaction and dissatisfaction were not opposites of a bipolar continuum. Herzberg's dual continua theory of job attitudes was supported by those 15 job items.

Null hypothesis No. 5 stated that there is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by rural school principals at the secondary school level. As reported in Table 4, there were significant differences between the mean satisfaction and mean dissatisfaction scores for 12 of the 18 job items. The null hypothesis was rejected for those 12 job items. As reported in Table 5, there were three correlations that were statistically significant, indicating that for those job items the bipolar theory of job attitudes was supported. Those job items were security, growth, and work group. The nonsignificant correlations of the remaining 15 job items indicated that the measures of satisfaction and dissatisfaction were not opposites of a bipolar continuum. Herzberg's dual continua theory of job attitudes was supported by these 15 job items.

A comparison, by groups, for job item mean difference is presented in Table 4. The comparison of results indicated that urban school principals at the secondary school level and rural school principals at the secondary school level did not differ much in their reporting of

certain job items as a source of job satisfaction and as a source of job dissatisfaction. Urban school principals at the secondary school level reported significant differences between mean satisfaction and mean dissatisfaction scores for 10 of the 18 job items. Rural school principals at the secondary school level reported significant differences for 12 of the 18 job items. The two groups reported similarly for mean comparisons with 10 significant mean differences and six nonsignificant mean differences.

For the majority of the 18 job items, the two groups reported nonsignificant correlations. Urban school principals at the secondary school level reported 14 nonsignificant correlations. Rural school principals at the secondary school level reported 15 nonsignificant correlations. The two groups reported similarly for 12 nonsignificant correlations and one significant correlation. Herzberg's theory that satisfaction and dissatisfaction are not opposite ends of a bipolar continuum was supported by the majority of job items as reported by these two groups.

A comparison of results between rural and urban school principals at the elementary school level revealed more differences than at the secondary school level. Rural elementary school principals reported significant differences between mean satisfaction scores and mean dissatisfaction scores for nine of the 18 job items. The urban elementary school principals reported significant differences between mean scores for 13 of the 18 job items. Data analysis revealed that

rural elementary school principals exhibited greater frequency in viewing job items as uncomplementary than did urban elementary school principals.

Rural elementary school principals reported 15 nonsignificant correlations. Urban elementary school principals reported 15 nonsignificant correlations. The two groups reported similarly for 14 nonsignificant correlations and two significant correlations. Herzberg's theory that satisfaction and dissatisfaction are not opposite ends of a bipolar continuum was supported by the majority of job items as reported by rural elementary school principals and urban elementary school principals.

A summary of mean comparisons, for all groups reporting, revealed significant differences between the mean satisfaction and the mean dissatisfaction scores, indicating that satisfaction and dissatisfaction were not complementary.

Certain job items did differ as a source of job satisfaction among school principals. This finding substantiated the report by Friedlander (1964) who stated that, for the majority of job items (12 out of 18), satisfaction with the job item differed significantly from dissatisfaction with the lack of or negative aspect of the same job item. The current investigation reported similar results. In each group, with the exception of rural elementary school principals, the majority of job item mean comparisons reported statistically significant differences at the .05 level. The

null hypothesis for each group was rejected for the majority of job items. For rural elementary school principals, the null hypothesis was rejected for nine of the 18 job items.

The comparison of groups in Table 4 indicated agreement in the reporting of results. The five groups were in total agreement, regarding the statistical significance of mean difference, for six job items. Those job items were challenging assignments, relations with co-workers, achievement, responsibility, work itself, and use of best abilities. The five groups were in total agreement regarding the statistical nonsignificance of employee benefits, home life, and management policies. There was majority agreement (three or four out of five) in reporting statistical significance for six job items. Those job items were recognition, relations with supervisor, technical supervision, security, growth, and work group. Merit increases was reported by four groups as statistically nonsignificant. There were two job items which the five groups failed to report a majority of agreement for statistical significance. Those job items were promotion and working conditions.

A summary of statistically significant correlations for each of the 18 job items by groups is presented in Table 5. Employees benefits was the only job item reported by the majority of the groups with a statistically significant correlation. Only for this job item is the assumption of a bipolar continuum supported by the majority of the groups.

Six of the job items, as reported by all five groups, did not reveal a statistically significant correlation. These job items were challenging assignments, relations with supervisor, relationship with co-workers, work itself, management policies, and use of best abilities. Data analysis for these items supported the theory of dual continua for job attitudes by all five groups. The remaining 11 job items were reported by no more than two groups as a statistically significant correlation. This finding partially supported the two-factor theory of job attitudes. These job items were promotion, recognition, technical supervision, merit increases, achievement, working conditions, responsibility, security, growth, home life, and work group.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The review of the literature indicated widespread use of the Motivation-Hygiene Theory as a theoretical framework for job enrichment programs in business, industry, and government. Results of these programs indicated an improvement in worker absenteeism, turnover, productivity, monetary savings, and morale. Implications of use for educational systems was evident.

The problem was to determine if certain job items differed as a source of satisfaction and as a source of dissatisfaction among school principals. More specifically, the study was designed to answer the following questions:

1. Do certain job items differ as a source of job satisfaction and as a source of job dissatisfaction among principals as a group?
2. Do rural and urban school principals at the secondary school level differ in their response to certain job items as a source of job satisfaction and as a source of job dissatisfaction?

3. Do rural and urban school principals at the elementary school level differ in their response to certain job items as a source of job satisfaction and as a source of job dissatisfaction?

The sample consisted of 108 school principals. Groups included in the sample were rural elementary school principals, rural secondary school principals, urban elementary school principals, and urban secondary school principals. Data were collected through use of the Friedlander Questionnaire. Part-one was designed to measure the respondent's reaction to 18 job items as a source of satisfaction. Part-two was designed to measure the respondent's reaction to the same 18 job items as a source of dissatisfaction. Instructions were modified to request the respondent to think of a specific satisfying and dissatisfying experience in the present job.

The *t*-test for correlated data was used to test for significance between the satisfaction and dissatisfaction mean scores for each of the 18 job items. Pearson product-moment correlations were calculated to determine the degree of relationship between each job item as a satisfier and as a dissatisfier. The following null hypotheses were tested at the .05 level of significance.

$H_0 1$. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by school principals.

H_0^2. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by urban school principals at the elementary school level.

H_0^3. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by urban school principals at the secondary school level.

H_0^4. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by rural school principals at the elementary school level.

H_0^5. There is no statistically significant difference between mean ratings on job satisfaction and job dissatisfaction by item as reported by rural school principals at the secondary school level.

Interpretation of Data

The data analysis revealed significant statistical differences between the means of satisfaction and dissatisfaction scores. For the majority of the 18 job items, satisfaction and dissatisfaction measures were not complementary. The results supported Friedlander's conclusion which stated: "Respondents who find certain aspects of the job particularly important to their satisfaction may not find the lack of or

negative aspect of this same characteristic particularly important to their dissatisfaction" (1964, p. 391). The results of the current study were supportive of earlier investigations by Friedlander (1964), Maas (1968), Starcevich (1971), and Jamann (1974), which reported that satisfaction and dissatisfaction were, for the most part, not complementary.

A comparison of the results, by group, indicated that job items did differ as a source of job satisfaction and as a source of job dissatisfaction among school principals; but, the groups did not differ significantly in their reporting of certain job items as a source of job satisfaction and job dissatisfaction. With the exception of rural elementary school principals, the null hypothesis was rejected for the majority of the 18 job items. For the total group, there were 14 reported mean differences between satisfaction and dissatisfaction scores that were statistically significant. With the exception of rural elementary school principals, a comparison of subgroups revealed similar results. Rural secondary school principals reported 12 significant mean differences, urban elementary school principals reported 13 significant mean differences, and urban secondary school principals reported 10 significant mean differences. Rural elementary school principals reported nine significant mean differences.

Results of measuring the relationship of job items as satisfiers and dissatisfiers supported Herzberg's theory that these two measures were not opposites of a bi-polar continuum. Each of the groups reported at least 12 or more nonsignificant correlations, indicating that satisfaction and dissatisfaction were unrelated. The total group reported 13 nonsignificant correlations, rural elementary school principals reported 15 nonsignificant correlations, rural secondary school principals reported 15 nonsignificant correlations, urban elementary school principals reported 15 nonsignificant correlations, and urban secondary school principals reported 14 nonsignificant correlations. The results supported Friedlander's conclusion which stated: "Generally, to the extent that these items are important to satisfaction, lack of these may or may not be important to dissatisfaction" (1964, p. 390). The results of the current investigations were supportive of earlier studies by Maas (1968), Starcevich (1971), and Jamann (1974).

Conclusions

The purpose of the study was to test the applicability of the Herzberg Motivation-Hygiene Theory to school principals through use of the Friedlander Questionnaire. Specifically, the problem was to determine if certain job items differed as a source of satisfaction and dissatisfaction among rural and urban school principals at the elementary and secondary school levels. Conclusions derived from the major findings of the

study were formed within the limitations of the current reported studies. The following conclusions emerged from the investigation.

Certain job items differed as a source of job satisfaction and dissatisfaction among school principals, as a total group. These items were promotion, challenging assignments, recognition, relations with supervisor, relations with co-workers, technical supervision, achievement, working conditions, responsibility, security, growth, work itself, and use of best abilities. The subgroups reported similar findings. Of the subgroups, results of rural secondary school principals were more similar to the total group. The conclusion that satisfaction and dissatisfaction are not complementary appeared to be a valid interpretation of the available data.

Herzberg's theory that satisfiers and dissatisfiers were two separate continua was substantiated by the current study. It was found, for the most part, that the two measures were unrelated. Thirteen nonsignificant correlations between satisfaction and dissatisfaction scores were reported by the total group. These 13 job items lend predominant support to the dual continua theory. The review of related research, also, substantiated the Herzberg theory.

Based on the statistical treatment of data for the current study, the Friendlander Questionnaire was found to be

an adequate instrument in testing the Herzberg theory. It was found to be adequate in measuring job satisfaction and job dissatisfaction among rural and urban school principals at the elementary and secondary school levels.

Recommendations

The following recommendations were presented as a result of the investigation.

Further validation of the Friedlander Questionnaire could be determined by using Herzberg's semi-structured interview method and the questionnaire with the same sample.

Although the current investigation substantiated the two-factor theory of job satisfaction, job dissatisfaction among rural and urban school principals at the elementary and secondary school levels, there were indications that differences did exist; particularly, with rural elementary school principals. Additional research is recommended in the areas of cross-cultural and cross-disciplinary settings and work environments.

The investigation by Schmidt (1976) supported the earlier studies by Herzberg that there were not significant relationships between demographic characteristics and the theory. However, other studies differed in their findings. Additional research is recommended in this area.

Implications of the Herzberg Motivation-Hygiene Theory for school management was evident from the current

study. Greater attention should be given to the use of motivators for intrinsic reinforcement. A review of the literature revealed the absence of job enrichment programs in education. Further research regarding the applicability of job enrichment programs in educational systems is recommended.

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APPENDICES

APPENDIX A

LETTERS OF INTRODUCTION, FRIEDLANDER QUESTIONNAIRE, FOLLOW-UP LETTER

Dear School Administrator:

An important contribution to the study of school administration is knowledge derived from relating the significance of tasks and job design to motivation. Information of this kind has been a significant contribution to both job development and job evaluation.

The Motivation-Hygiene Theory developed by Frederick Herzberg has served as the theoretical framework for job enrichment programs in business, industry, and government. Such prominent organizations as American Airlines, AT&T, Ford Motor Co., General Foods, and IBM have successfully developed programs based on this theoretical framework.

As a graduate student at the University of Oklahoma I am conducting this study to test the use of Herzberg's theory to school principals. Principally, this study is to determine what factors affect job satisfaction and job dissatisfaction among school principals. Approval to conduct this study was obtained from a doctoral committee at the University of Oklahoma. The sampling includes school principals at the elementary and secondary school levels, and between urban and rural school principals. Use of school principals from the Oklahoma City Public Schools was approved by the Research & Evaluation Unit of the Oklahoma City Public Schools.

Enclosed is a two-part questionnaire. I need each of you to complete and return the instrument to me. A stamped envelope is provided for your return correspondence. Your responses will remain confidential. Do not sign your name to the instrument or the return envelope.

Instructions are included as part of the questionnaire. You need only to make appropriate check marks. Approximate time to complete the questionnaire is 15 minutes. Please complete and mail to me the questionnaire today!

Your willingness to participate in this study is deeply appreciated.

Respectfully,

Gary K. Walker

Gary K. Walker
University of Oklahoma

Dear School Administrator:

An important contribution to the study of school administration is knowledge derived from relating the significance of tasks and job design to motivation. Information of this kind has been a significant contribution to both job development and job evaluation.

The Motivation-Hygiene Theory developed by Frederick Herzberg has served as the theoretical framework for job enrichment programs in business, industry, and government. Such prominent organizations as American Airlines, AT&T, Ford Motor Co., General Foods, and IBM have successfully developed programs based on this theoretical framework.

As a graduate student at the University of Oklahoma I am conducting this study to test the use of Herzberg's theory to school principals. Principally, this study is to determine what factors affect job satisfaction and job dissatisfaction among school principals. Approval to conduct this study was obtained from a doctoral committee at the University of Oklahoma. The sampling includes school principals at the elementary and secondary school levels, and between urban and rural school principals. You were selected based on a random sampling from 2,059 persons employed as school principals in Oklahoma.

Enclosed is a two-part questionnaire. I need each of you to complete and return the instrument to me. A stamped envelope is provided for your return correspondence. Your responses will remain confidential. Do not sign your name to the instrument or the return envelope.

Instructions are included as part of the questionnaire. You need only to make appropriate check marks. Approximate time to complete the questionnaire is 15 minutes. Please complete and mail to me the questionnaire today!

Your willingness to participate in this study is deeply appreciated.

Respectfully,

Gary K Walker

Gary K. Walker
University of Oklahoma

PERSONAL DATA

The following information will be used to classify data for statistical analysis. Please check the appropriate blank which accurately describes you.

Sex

_____ Male
_____ Female

Number of years employed as a school principal (including this year)

_____ 1-5 yrs.
_____ 6-10 yrs.
_____ 11 yrs. & over

Current position of employment

_____ Elementary School Principal
_____ Assistant Elementary School Principal
_____ Middle School Principal
_____ Assistant Middle School Principal
_____ Junior High School Principal
_____ Assistant Junior High School Principal
_____ High School Principal
_____ Assistant High School Principal

Education (check the degree you currently possess)

_____ Masters
_____ Ed.D.
_____ Ph.D.

INSTRUCTIONS:

You are asked to think of a time when you felt exceptionally satisfied about your present job. Below is a list of some factors which may have contributed to your satisfied feelings at the time. Keep this time in your mind as you read the list of eighteen factors. You are asked to report how important was each of these factors in the particular experience you are recalling. Indicate the importance by placing an X in one and only one of the four columns to the right of the eighteen factors.

		This factor was not present	This factor was present but was not important	This factor was fairly important	This factor was of major importance
1.	I felt there was a good chance I'd be promoted.	1 ( )	2 ( )	3 ( )	4 ( )
2.	I received a particularly challenging assignment.	1 ( )	2 ( )	3 ( )	4 ( )
3.	A job I did received recognition as being a particularly good piece of work.	1 ( )	2 ( )	3 ( )	4 ( )
4.	The working relationship I had with my supervisor was very good.	1 ( )	2 ( )	3 ( )	4 ( )
5.	The working relationship I had with co-workers at my level was very good.	1 ( )	2 ( )	3 ( )	4 ( )
6.	I was working under a supervisor who really knew his job.	1 ( )	2 ( )	3 ( )	4 ( )
7.	I was expecting (or received) a merit increase.	1 ( )	2 ( )	3 ( )	4 ( )
8.	I had a real feeling of achievement in the work I was doing.	1 ( )	2 ( )	3 ( )	4 ( )
9.	I had exceptionally good working conditions and equipment.	1 ( )	2 ( )	3 ( )	4 ( )
10.	I was given increased responsibility in my job.	1 ( )	2 ( )	3 ( )	4 ( )
11.	I felt secure in my job.	1 ( )	2 ( )	3 ( )	4 ( )
12.	I was getting training and experience on the job that were helping my growth.	1 ( )	2 ( )	3 ( )	4 ( )
13.	The company improved an employee benefit program that was of importance to me.	1 ( )	2 ( )	3 ( )	4 ( )

		This factor was not present	This factor was present but was not important	This factor was fairly important	This factor was of major importance
14.	I like the kind of work I was doing.	1 ( )	2 ( )	3 ( )	4 ( )
15.	My job situation changed in such a way as to improve my home life.	1 ( )	2 ( )	3 ( )	4 ( )
16.	I was working in a group that operated very smoothly and efficiently.	1 ( )	2 ( )	3 ( )	4 ( )
17.	Management policies that affected my work group took into consideration the personal feelings of employees.	1 ( )	2 ( )	3 ( )	4 ( )
18.	The job required the use of my best abilities.	1 ( )	2 ( )	3 ( )	4 ( )

INSTRUCTIONS:

This part of the questionnaire is similar to Part I except that you are asked to think of a time when you felt exceptionally dissatisfied about your present job. Below is a list of some factors which may have contributed to your dissatisfied feelings at the time. Keep this time in your mind as you read the list of eighteen factors. You are asked to report how important was each of these factors in the particular experience you are recalling. Indicate the importance by placing an X in one and only one of the four columns to the right of each of the eighteen factors.

		This factor was not present	This factor was present but was not important	This factor was fairly important	This factor was of major importance
1.	I felt there was a poor chance I'd get promoted.	1 ( )	2 ( )	3 ( )	4 ( )
2.	I received few particularly challenging assignments.	1 ( )	2 ( )	3 ( )	4 ( )
3.	A job I did received little recognition as being a particularly good piece of work.	1 ( )	2 ( )	3 ( )	4 ( )
4.	The working relationship I had with my supervisor was very poor.	1 ( )	2 ( )	3 ( )	4 ( )
5.	The working relationship I had with co-workers at my level of work was very poor.	1 ( )	2 ( )	3 ( )	4 ( )
6.	I was working under a supervisor who really did not know his job.	1 ( )	2 ( )	3 ( )	4 ( )
7.	I was not expecting (or did not receive) a merit increase.	1 ( )	2 ( )	3 ( )	4 ( )
8.	I had little feeling of achievement in the work I was doing.	1 ( )	2 ( )	3 ( )	4 ( )
9.	I had exceptionally poor working conditions and equipment.	1 ( )	2 ( )	3 ( )	4 ( )
10.	I was not given increased responsibility in my job.	1 ( )	2 ( )	3 ( )	4 ( )
11.	I felt insecure in my job.	1 ( )	2 ( )	3 ( )	4 ( )
12.	I was not getting training and experience on the job that were helping my growth.	1 ( )	2 ( )	3 ( )	4 ( )

		This factor was not present	This factor was present but was not important	This factor was fairly important	This factor was of major importance
13.	The company did not introduce an employee benefit program that was of importance to me.	1 ( )	2 ( )	3 ( )	4 ( )
14.	I disliked the kind of work I was doing.	1 ( )	2 ( )	3 ( )	4 ( )
15.	My job situation changed in such a way as to aggravate my home life.	1 ( )	2 ( )	3 ( )	4 ( )
16.	I was working in a group that operated with discord and inefficiency.	1 ( )	2 ( )	3 ( )	4 ( )
17.	Management policies that affected my work group did not take into consideration the personal feelings of employees.	1 ( )	2 ( )	3 ( )	4 ( )
18.	The job did not require the use of my best abilities.	1 ( )	2 ( )	3 ( )	4 ( )

April 10, 1979

Dear School Administrators:

I wish to thank those of you who returned the questionnaire recently mailed to you regarding job attitudes of school principals. Use of your valuable time spent in completing the questionnaire is appreciated.

If you have not found the time to complete the questionnaire or have not mailed the materials to me, please do so. Your contribution is vital to the project. A high percentage of returns will increase the validity of the report.

Hopefully, the completed report will provide useful information in the training and preparation of school administrators, and in the development of job design and job evaluation.

I am grateful for your willingness to participate in this project. If you wish to receive a report concerning the results, please advise by including a note of request with your return correspondence.

Sincerely,

Gary Walker

Gary K. Walker
2616 N.W. 16
Oklahoma City, OK 73107

GKW:mes

APPENDIX B

APPROVAL LETTER

Oklahoma City Public Schools
900 North Klein
Oklahoma City, Oklahoma 73105

March 13, 1979

Mr. Gary Walker
1808 N. Rockwell #235
Bethany, OK 73008

Dear Mr. Walker,

I am happy to inform you that your revised request to conduct a study in the Oklahoma City Public Schools has been approved. Members of your screening committee were:

Dr. Betty Williams, Director of Elementary Schools
Mr. Vern Moore, Director of Middle and Fifth Year Centers
Mr. Wayne Francis, Assistant to the Director of High Schools and Adult Education

Please feel free to contact this office, if you feel there is a need for further clarification of this matter. Good luck with your study.

Sincerely,

Maxie Wood

Maxie Wood
Senior Research Associate
Research and Evaluation Unit
Oklahoma City Public Schools

MW/jld

APPENDIX C

TABLES OF MEAN DIFFERENCES AND CORRELATIONS BETWEEN SATISFACTION AND DISSATISFACTION SCORES

Table 6

Means, Standard Deviations, and Correlations Between Sources of Job Satisfaction and Sources of Job Dissatisfaction Total Group

	Satisfaction		Dissatisfaction		Difference	
Job Item	M	SD	M	SD	X-Y	r
1. Promotion	2.009	1.037	1.760	1.013	.249*	.31*
2. Challenging assignments	2.944	.946	1.917	1.015	1.027*	.12
3. Recognition	2.898	.937	2.194	1.089	.704*	.17
4. Relations with supervisor	3.046	1.017	1.898	1.168	1.148*	.10
5. Relations with co-workers	2.991	.952	1.704	1.035	1.287*	.04
6. Technical supervision	2.639	1.072	1.787	1.111	.852*	.16
7. Merit increases	1.528	.891	1.380	.817	.148	.21*
8. Achievement	3.333	.897	2.519	1.188	.814*	.22*
9. Working conditions	2.296	.998	1.870	1.006	.426*	.11
10. Responsibility	2.769	.982	1.824	1.066	.945*	.19
11. Security	2.898	1.013	1.565	.920	1.333*	-.10
12. Growth	2.991	.962	1.852	1.075	1.139*	.14
13. Employee benefits	1.463	.932	1.611	.965	- .148	.34*
14. Work itself	3.357	.726	2.176	1.159	1.181*	.01
15. Home life	1.815	1.095	1.769	1.038	.460	.21*
16. Work group	2.796	1.021	2.000	1.102	.796*	-.17
17. Management policies	2.463	1.080	2.176	1.151	1.312	-.06
18. Use of best abilities	3.185	.888	1.963	1.067	2.118*	.13
M	2.647		1.886		.761*	
SD	.604		.265			

N = 108

*p .05.

Table 7

Means, Standard Deviations, and Correlations Between Sources of Job Satisfaction and Sources of Job Dissatisfaction Urban Elementary School Principals

	Satisfaction		Dissatisfaction		Difference	
Job Item	M	SD	M	SD	X-Y	r
1. Promotion	1.630	.742	1.741	1.059	- .111	.02
2. Challenging assignments	2.704	1.104	1.704	.953	1.000*	.32
3. Recognition	2.889	1.023	2.148	1.134	.741*	.15
4. Relations with supervisor	2.778	1.121	1.259	.447	1.519*	-.18
5. Relations with co-workers	2.704	.823	1.704	1.031	1.000*	.03
6. Technical supervision	2.556	1.050	1.519	.893	1.037*	.50*
7. Merit increases	1.259	.712	1.148	.602	.111	-.01
8. Achievement	3.444	.937	2.593	1.185	.851*	-.03
9. Working conditions	2.778	.892	1.704	.993	1.074*	.49*
10. Responsibility	2.481	1.014	1.444	.698	1.037*	.01
11. Security	3.148	.907	1.185	.483	1.963*	.19
12. Growth	2.741	.903	1.926	1.141	.815*	.06
13. Employee benefits	1.519	1.014	1.667	.961	.148	.58*
14. Work itself	3.704	1.542	1.963	.898	1.741*	.14
15. Home life	1.593	1.010	1.259	.447	.334	-.18
16. Work group	2.926	1.072	1.778	.843	1.148*	.02
17. Management policies	2.296	1.031	2.000	1.000	.296	-.11
18. Use of best abilities	3.185	.736	1.778	.892	2.293*	-.11
M	2.574		1.695		.879*	
SD	.681		.366			

N = 27

* α.05

*p .05

Table 8

Means, Standard Deviation, and Correlations Between Sources of Job Satisfaction and Sources of Job Dissatisfaction Urban Secondary School Principals

	Satisfaction		Dissatisfaction		Difference	
Job Item	M	SD	M	SD	X-Y	r
1. Promotion	2.214	1.031	1.964	.999	.250	.66*
2. Challenging assignments	3.071	.900	1.929	.979	1.142*	.01
3. Recognition	3.000	.861	2.286	1.049	.714*	.37*
4. Relations with supervisor	3.321	.819	2.107	1.197	1.214*	.34
5. Relations with co-workers	3.071	.858	1.536	.962	1.535*	.31
6. Technical supervision	2.714	.810	1.750	1.110	.964*	.17
7. Merit increases	1.286	.659	1.286	.535	0	.00
8. Achievement	3.571	.504	2.464	1.138	1.107*	-.03
9. Working conditions	2.036	.744	1.821	.983	.215	-.04
10. Responsibility	3.000	.981	1.893	1.056	1.107*	.50*
11. Security	3.000	.861	1.464	.838	2.162	.36
12. Growth	3.071	.663	1.821	.945	1.250	.55*
13. Employee benefits	1.642	1.062	1.571	.920	.071	.03
14. Work itself	3.571	.504	2.536	1.170	1.035*	-.16
15. Home life	1.607	.916	1.679	1.020	- .072	.22
16. Work group	2.643	.951	2.000	1.155	.643*	-.07
17. Management policies	2.286	1.049	2.183	1.239	.103	-.12
18. Use of best abilities	2.964	.999	2.071	1.052	.893*	.11
M	2.670		1.903		.767*	
SD	.678		.336			

N = 28

*$p<.05$.

Table 9

Means, Standard Deviations, and Correlations Between Sources of Job Satisfaction and Sources of Job Dissatisfaction Rural Elementary School Principals

Job Item	Satisfaction		Dissatisfaction		Difference	
	M	SD	M	SD	X-Y	r
1. Promotion	2.407	1.152	1.778	1.086	.629*	.21
2. Challenging assignments	3.148	.818	2.222	1.155	.926*	.08
3. Recognition	2.852	.989	2.519	1.189	.333	.13
4. Relations with supervisor	3.037	1.160	2.555	1.368	.482	.13
5. Relations with co-workers	3.074	1.141	2.222	1.188	.852*	.24
6. Technical supervision	2.630	1.812	2.222	1.281	.408	.36
7. Merit increases	1.630	.967	1.815	1.241	.185	.16
8. Achievement	3.296	1.103	2.555	1.251	.741*	-.35
9. Working conditions	2.185	1.145	2.333	1.074	.148	.46*
10. Responsibility	2.852	.949	2.148	1.167	.704*	.01
11. Security	2.889	1.186	1.778	1.013	1.111*	-.07
12. Growth	3.000	1.109	1.701	1.023	1.299*	-.10
13. Employee benefits	1.630	1.043	1.815	1.075	.185	.45*
14. Work itself	3.701	.656	1.778	1.121	2.580*	-.03
15. Home life	2.260	1.228	2.037	1.192	1.068	.52*
16. Work group	2.741	1.096	2.370	1.214	1.527	-.04
17. Management policies	2.630	1.185	2.519	1.087	.111	.07
18. Use of best abilities	3.148	1.027	2.037	1.224	1.924*	.36
M	2.730		2.136		.594*	
SD	.548		.298			

N=27
*α.05
*p<.05.

Table 10

Means, Standard Deviations, and Correlations Between Sources of Job Satisfaction and Sources of Job Dissatisfaction Rural Secondary School Principals

Job Item	Satisfaction		Dissatisfaction		Difference	
	M	SD	M	SD	X-Y	r
1. Promotion	1.769	1.302	1.538	.091	.231	.35
2. Challenging assignments	2.851	.925	1.808	.939	1.043*	.15
3. Recognition	2.846	.925	1.808	.895	1.038*	.01
4. Relations with supervisor	3.038	.916	1.654	1.056	1.384*	-.11
5. Relations with co-workers	3.115	.952	1.346	.752	1.769*	-.17
6. Technical supervision	2.654	1.263	1.653	1.056	1.001*	-.15
7. Merit increases	1.962	1.038	1.269	.533	.693*	.24
8. Achievement	3.000	.894	2.461	1.240	.539*	.36
9. Working conditions	2.192	1.059	1.615	.852	.577	-.14
10. Responsibility	2.731	.962	1.808	1.201	.923*	.06
11. Security	2.538	1.029	1.846	1.120	.692	-.48*
12. Growth	3.154	1.120	1.923	1.230	1.231*	.44*
13. Employee benefits	1.038	.196	1.385	.898	- .347	.09
14. Work itself	3.269	1.041	2.423	1.301	.846*	.21
15. Home life	1.808	1.132	2.115	1.143	.307	-.14
16. Work group	2.885	.993	1.846	1.120	1.039*	-.56*
17. Management policies	2.654	1.056	2.038	1.248	.616	-.14
18. Use of best abilities	3.462	.706	1.462	1.113	1.500*	-.02
M	2.608		1.805		.803*	
SD	.626		.328			

N=26

*α.05

*P<.05.