

TESTING EMPLOYEE MOTIVATION BASED ON HERZBERG'S
MOTIVATION-HYGIENE THEORY IN SELECTED
THAI COMMERCIAL BANKS

By

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CHAPTER I

INTRODUCTION

A bank is a financial institution which is organized and administered with the objective of earning a profit, appropriate to the capital invested, by providing useful banking service. According to The Bank Management (1960), the dual purposes of banking are to provide needed banking services and to earn an appropriate return on the capital investment. A bank's obligation to the public is many-sided. These are: to provide needed services in an acceptable manner; to contribute to the economic welfare of its region and of the nation; to give the community financial counsel and leadership; and to participate in worthwhile and constructive community activities.

Commercial banks, in terms of aggregate assets, are the most important type of financial institutions to fill the credit needs of most business firms. According to Reed (1963), commercial banks have been referred to as "department stores of finance," a definition which has been favored by commercial bankers since it implies that they provide a wide variety of financial services demanded by the public and consequently, places them in a stronger competitive position.

Since the organizations cannot run themselves, individuals do. Hitt and his associates (1979, p. 13) stated that ". . . central to many managerial successes and failures are the people who are supervised. . . ." Therefore, the successful operation of the commercial bank is

determined by how well the personnel understand their duties and their relationship with those above and below them. In addition, each person in the bank, from the new employees to the top executive, should be motivated to develop himself and to exert his best effort. Cummings and Schwab (1973) described that employees need some minimal ability to complete a task, no matter how motivated they are. On the other hand, no matter how skilled employees are, they will not perform effectively if they are not motivated.

According to Hitt and his associates (1979) employees who are not motivated to perform productively may react in one or more of the following ways: (1) fight the organization, (2) leave the organization, (3) develop interests away from the job, and (4) allow skills to deteriorate. To be efficient and effective in managing the commercial bank, it was stated in The Bank Management (1960) that:

Management has the role of formulating sound and flexible policies, building a competent and well-trained organization to carry out these policies over a long period of time, motivating and stimulating individuals in ways to bring out the best in them in all phases of life, creating an attitude that will make people want to work well as a group, and creating for the bank a spirit and a character that will live (p. 169).

Thus, employee motivation is an important subject for management to understand because the increased motivation of the employee has positive results for the bank.

Statement of Problem

In Thailand, there are many financial organizations including commercial banks. Commercial banks are the heart of Thai financial system. They hold the deposits of many individuals, governments, and industrial business units. They make funds available through their

lending and investing activities to borrowers---individuals, industrial companies, business firms, and governments. In processings, they facilitate both the flows of goods and services from producers to consumers and the financial activities of governments.

In managing commercial banks, one of the most important and necessary factors administrators and managers deal with is employee motivation. Motivation of employees is an important subject for managers to understand. Motivation is not the only factor that affects performance, but it is a major determinant of performance. In addition, there is a relationship between employee motivation and productivity, even though the relationship is indirect. Therefore, it is vital to the organization for managers to understand why employee motivation is necessary and know how to enhance motivation among employees. Specifically for this study, there is need for information concerning what factors most contribute to employee motivation in this research population.

Purpose of the Study

This study was designed to examine the employee motivation based on Herzberg's (1959) Motivation-Hygiene theory in selected Thai commercial banks. The purpose of the study was to identify those factors which contributed to job satisfaction and job dissatisfaction in a population of Thai employees.

Herzberg's two-factor theory of motivation was selected by the researcher to test the employee motivation in this study. It is also called the dual-factor theory and the motivation-hygiene theory of motivation. His theory assumed two sets of factors which are related to

motivation. The first set is termed variously motivation factors, intrinsic factors, job content factors, or satisfiers; and the second is termed hygiene factors, extrinsic factors, job context factors, maintenance factors, or dissatisfiers.

The motivation-hygiene theory states that job satisfaction is primarily related to one set of factors (motivation factors) and that job dissatisfaction is primarily related to a separate set of factors (hygiene factors). Herzberg concluded that these separate groups of items are not on a continuum, that is, that the absence of motivation factors will not cause job dissatisfaction, nor will the absence of hygiene factors cause job satisfaction. Herzberg's identification of these two distinct groups represents a basic change in the concept of motivation, but closely parallels the psychological concept of "intrinsic and extrinsic" sources of motivation. In addition, Herzberg also developed a model, a method for testing the theory (Allen, 1967).

In his original study, Herzberg used two levels in analyzing data: (1) first-level factors which he defined as an objective element of the situation in which the respondent finds a source of good or bad feelings about the job (equated to feeling of satisfaction and dissatisfaction), and (2) second-level factors which he defined as the respondent looking at himself, trying to figure out what in his own need and value systems led to his attitude towards his job at the time of the events being described (Herzberg et al., 1959). In this study, the researcher used only first-level factors. Thus, this study is not as complete as Herzberg's original study. It will, however, provide a new knowledge base regarding employees in a Far Eastern Culture which Herzberg did not study.

Objectives of the Study

To accomplish this study, the specific objectives of the study are stated as follows:

1. To describe sources of job satisfaction and job dissatisfaction within the bounds of Herzberg's motivation-hygiene theory.
2. To identify factors which contribute to job satisfaction and job dissatisfaction of Thai employees of selected commercial banks.
3. To make comparisons between Thai respondents and normed groups in the United States (Herzberg's data) on the ranks of factors of job satisfaction and job dissatisfaction.
4. To identify the difference in how male and female employees of selected Thai commercial banks rank factors of job satisfaction and job dissatisfaction.
5. To identify the difference in how supervisors and non-supervisors of selected Thai commercial banks rank factors of job satisfaction and job dissatisfaction.

Hypotheses to Be Tested

There are eight hypotheses which were tested in this study. These hypotheses are indicated below and will be introduced again at the time they are tested.

- H₁: For employees of selected commercial banks in Thailand and normed groups in the United States, no significant correlation exists on the rank of factors of job satisfaction.
- H₂: For employees of selected commercial banks in Thailand and normed groups in the United States, no significant correlation

exists on the rank of factors of job dissatisfaction.

H₃: Among Thai commercial bank employees, there is no significant difference between job satisfaction and job dissatisfaction for the motivation factors.

H₄: Among Thai commercial bank employees, there is no significant difference between job satisfaction and job dissatisfaction for the hygiene factors.

H₅: Among Thai commercial bank employees, there is no significant correlation in how male employees and female employees rank factors of job satisfaction.

H₆: Among Thai commercial bank employees, there is no significant correlation in how male employees and female employees rank factors of job dissatisfaction.

H₇: Among Thai commercial bank employees, there is no significant correlation in how supervisors and non-supervisors rank factors of job satisfaction.

H₈: Among Thai commercial bank employees, there is no significant correlation in how supervisors and non-supervisors rank factors of job dissatisfaction.

Definition of Terms

There are several items which are used in this study and which have special meaning when used in connection with the motivation-hygiene theory. To avoid possible misinterpretation, the operational definitions of terms used in this study are defined as follows.

Job Satisfaction is the way a person feels about the job relating to the tasks and performance of the job situation (Herzberg et al.,

1959). Furthermore, it refers to the good feeling an employee has about the work situation.

Job Dissatisfaction is the status of an individual's morale and job attitude at any particular time resulting mainly from the environmental conditions or other affective factors surrounding the job (May, 1978).

Incident(s) is an event or series of events reflected by the employee based on the perceived "high" or "low" feelings resulting from successful or unsuccessful job behavior (Herzberg et al., 1959).

Satisfier is a factor in an employee's surroundings that fulfills his or her needs and expectations and causes a favorable attitudinal affect on behavior (synonymous with motivator) (Herzberg et al., 1959).

Dissatisfier is a factor in an employee's surroundings that does not fulfill his or her needs and expectations and causes an unfavorable attitudinal affect on behavior (synonymous with hygiene) (Herzberg et al., 1959).

The Theory refers to Herzberg's motivation-hygiene theory: a theory about job attitudes which attempts to identify those factors of work that lead to satisfaction (i.e., motivation) and dissatisfaction (i.e., hygiene) with a particular job (Cremer, 1979).

Motivation Factors refer to Herzberg's six motivation factors which are used in this study. These are factors that lead to positive job attitudes because they satisfy the individual employee's need for self-actualization in his or her work. These factors are: achievement, recognition, advancement, work itself, possibility of growth, and responsibility. Motivation factors are related to job content (Allen, 1967).

Hygiene Factors refers to Herzberg's 10 hygiene factors which are used in this study. These are factors that are associated with negative job attitudes because they meet the needs of the individual employee for avoiding unpleasant work situations. These factors are: company policies and administration, supervision-technical, interpersonal relations (with supervisor, peers, and subordinates), salary, job security, personal life, working conditions, and status. These factors are also associated with the individual's relationship to the context or environment in which he does his work (Allen, 1967).

First-Level Factors of Job Attitude refer to objective elements of the situation in which the respondent finds a source for his or her good or bad feelings about the job, a description of the objective occurrence during the sequence of events, with special emphasis on those identified by the respondent as being related to his or her attitudes. These first-level attitude factors are identified in the following categories as Cremer (1979) stated:

1. Recognition

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

2. Achievement

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

3. Possibility of Growth

This category includes the likelihood of an individual's being able to move upward within his organization as well as to advance his own skill in his profession.

4. Advancement

This category is used only when there is an actual

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

5. Salary

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

6. Interpersonal Relations

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

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

7. Supervisor-Technical

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

8. Responsibility

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

9. Company Policy and Administration

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

10. Working Conditions

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

11. Work Itself

This category is used when the actual performance of the job or its component tasks are considered a

source of good or bad feelings about it. (The duties of a position can include an opportunity to carry through an entire operation, or they can be restricted to one minute portion of it.)

12. Factors in Personal Life

This category refers to situations in which some aspect of the job affects the worker's personal life in such a way that the effect is a factor in the respondent's feelings about his job (e.g., family and personal problems stemming from working overtime).

13. Status

This category refers to the situation in which there is some sign of status as a factor in the subject's feelings about his job (e.g., having a secretary in the new position, being allowed to drive the institution's car, etc.).

14. Job Security

This category refers to the objective signs of the presence or absence of job security (e.g., tenure and organization stability) . . . (pp. 4-8).

Scope and Limitations of the Study

The scope of this study is limited to questionnaires completed by the employees of four selected head offices of commercial banks incorporated in Thailand. The questionnaire was designed in such a fashion that respondents answered two separate questions: a question on factors or sources contributing to their job satisfaction and a question on factors or sources contributing to their job dissatisfaction.

The limitations of the study were as follows:

1. The study was limited to the employees of four selected largest commercial banks in Bangkok, Thailand. Thus, a sample of employees from smaller banks and other cities might not be covered as a pattern of responses which would be significantly different from the responses found in this study.

2. The study was limited to the use of only the first-level factors as defined by Herzberg; the second-level factors were not considered.
3. The study was limited by the instrument's ability to yield data that was reliable.

Assumptions of the Study

It is assumed that although Herzberg's original study involved settings in business and industry in the United States, the Herzberg motivation-hygiene theory is appropriate for use in different countries and cultural settings such as Thailand. Therefore, for this study, motivation factors and hygiene factors are the same as those used by Herzberg. It is also assumed that the study respondents have understood the questionnaire and reported their perceptions and attitudes accurately.

Organization of the Study

The following outline is presented as an overview of the organization of this study.

Chapter I contains an introduction, statement of the problem, purpose and objectives of the study, hypotheses to be tested in the study, definitions of terminology, scope and limitations of the study, assumptions and organization of the study.

Chapter II contains a review of the research literature directly related to Herzberg's motivation-hygiene theory. It is divided into four sections: Herzberg's original study, those studies that use Herzberg's methodology and support the theory, those studies that use

different methodology but support the theory, and those studies that challenge Herzberg's theory.

Chapter III deals with the methodology of the study. It is divided into seven areas: selection of subjects, development of the questionnaire, translation of the questionnaire, pilot study, instrument reliability, collection of the data, and description of analysis of the data.

Chapter IV deals with the presentation and analysis of the data from the findings of the study.

Chapter V contains a brief summary, conclusions, and recommendations for further study.

CHAPTER II

REVIEW OF THE RELATED RESEARCH LITERATURE

An Overview

The number of motivational studies directly related to the motivation-hygiene theory have been increasing rapidly since Herzberg's original study was published in 1959. These studies represent attempts to replicate Herzberg's findings and to extend the generality of motivation-hygiene theory by demonstrating this applicability. There are several replications of the original study which use Herzberg's methodology. Additionally, there are a lot of studies which have attempted to test the theory by using other research designs, methodologies, and evaluation procedures. The results of these studies have not given unequivocal support to the motivation-hygiene theory. Although the theory has received some empirical support, there have also been some challenges to Herzberg's methodology and his findings.

As presented in this chapter, the research literature review has been conducted with the view toward summarizing Herzberg's original study and the studies directly relevant to the motivation-hygiene theory. The purpose of the summary studies is to present the findings of the original study and the related research studies chronologically, categorized into four sections: (1) Herzberg's original study; (2) those studies that use Herzberg's methodology and support the theory;

(3) those studies that use different methodologies but support the theory; and (4) those studies that challenge Herzberg's theory.

Herzberg's Original Study

The original study by Herzberg, Mausner and Snyderman (1959) involved 203 male engineers and accountants selected from a number of industrial companies in the Pittsburgh, Pennsylvania area. These two groups were selected by Herzberg because a pilot study had found that professional and managerial respondents were more articulate in describing work experiences than clerical and production groups. In a semi-structured interview procedure, each of these subjects was asked to describe an incident which caused him to feel exceptionally good or exceptionally bad about his particular job. The technique of "critical incidence" developed by Flanagan (1954) was the methodological approach taken by the team members in conducting the interviews, in order that the subject would not be led into a direction of response.

In addition to describing the job-related incidents ("first-level" factors) which caused them to feel high or low, the subjects were asked to explain their reasons for these feelings. These latter descriptions of the individual's needs which were activated by the objective events were termed "second-level" factors. Although the original study proceeded on both of these levels, greater significance was attributed to the more objective first-level factors than to the more subjective second-level factors.

Herzberg, Mausner and Snyderman (1959) associated terms with the objective incidents. These terms were the job factors. There were 16

different job factors, six were classified as motivators and 10 were classified as hygiene factors.

The findings of the study revealed that the accountants' high feelings were related to motivators in 78 percent of the responses to the high questions, and that hygiene factors contributed to high feelings in only 22 percent of the responses. Low feelings were related to hygiene factors 62 percent of the time, while motivators were related to low feelings only 38 percent of the time. Thus, for the accountants, motivation factors were concluded to be primarily related to high feelings, and hygiene factors were concluded to be primarily related to low feelings.

Similarly, the findings in the study of engineers revealed that their high feelings were associated with motivators in 79 percent of the responses to the high questions, and the hygiene factors contributed to high feelings only 22 percent of the time. Low feelings were associated with hygiene factors 67 percent of the time, while motivation factors were associated with low feelings only 33 percent of the time. Thus, for the engineers, motivation factors were concluded to be related to high feelings, and hygiene factors were concluded to be related to low feelings.

These conclusions form the basis of the Herzberg motivation-hygiene theory. For both the accountant and engineer respondents, achievement was the number one motivation factor which strongly related to job satisfaction. Other significant motivation factors in the direction of job satisfaction were recognition, work itself, responsibility, and advancement. There were five hygiene factors that were predominantly related to job dissatisfaction: company policies and administration,

supervision, interpersonal relations with supervisors, interpersonal relations with peers, and working conditions. Company policies and administration clearly comprised the dominant hygiene factor with respect to job dissatisfaction for both the engineer and accountant respondents.

Studies that Use Herzberg's Methodology and Support the Theory

Schwartz, Jenusaitis, and Stark (1963) used techniques adapted from the Herzberg study to obtain data on job satisfaction from 111 male supervisors selected from 21 electrical and gas utility companies in Middle Atlantic and New England states. The findings of their study largely concur with the motivation-hygiene theory: achievement and recognition were the motivation factors occurring most often in association with pleasant work experiences, and company policy and administration were predominantly related to unpleasant work experiences. Age, education, job classification, and personality characteristics of the subjects appeared to have no effect upon the findings.

Myers's (1964) extensive study of the Texas Instruments Company in Dallas, Texas, was an exact replication of the original study. The sample population for the study consisted of 50 scientists, 55 engineers, 50 manufacturing supervisors, 52 female hourly assembly workers, and 75 male technicians. Two variations from the original Herzberg methodology were introduced. First, Myers accepted only one factor per sequence of events, as was permitted in the original study. Secondly, he excluded two of the original hygiene factors: personal life and interpersonal relations with subordinates. The results from

all five different occupations clearly supported the Herzberg theory: motivation factors were strongly related to job satisfaction, while hygiene factors were mainly associated with job dissatisfaction.

Clegg (1964) investigated 58 county agricultural administrators of the Cooperative Extension Service of the University of Nebraska to determine the validity of the motivation-hygiene theory when applied to geographically dispersed respondents. The subjects averaged 40 years in age and 12 years in tenure. All of them had a college degree. Each participant was requested to supply three positive and three negative incidents, and then to rank these incidents according to their importance. Clegg then chose only the most important high and low incidents for analysis. The same 16 job factors were used, but Clegg added two additional hygiene factors--interpersonal relations with clientele and interpersonal relations with members of the extension board. Again, the findings confirmed the theory. Achievement and recognition, two significant motivator factors, were mainly related to job satisfaction. Six hygiene factors--company policy and administration, working conditions, interpersonal relations with subordinates, interpersonal relations with supervisors, supervision, and personal life--were significantly associated with job dissatisfaction. Of the two added hygiene factors, only interpersonal relations with members of the extension board was a significant source of job dissatisfaction. Thus, Clegg's study supports positively the generality of the motivation-hygiene theory.

Saleh (1964) studied 85 pre-retiree supervisors between the ages of 60 and 65 years old selected from 12 different firms in Cleveland, Ohio. Saleh limited the participants' responses to only one category answer to

the satisfaction and dissatisfaction questions. Because each participant was near retirement, the sampled events extended over a lifetime. It was found that when subjects looked back upon an earlier time in their careers, their responses agreed with the theory: the motivation factors provided satisfaction and hygiene factors determined dissatisfaction. But when subjects looked forward to the time remaining to retirement, it was found that the theory was not supported: the hygiene factors were the dominant factors in response to the satisfaction questions. Saleh explained this change of attitude in view of the change of job structure: for pre-retirees, choosing more attainable sources on the job--the hygiene factors--was more satisfying than choosing those less attainable--the motivation factors. The conclusion indicated that age might be a limiting factor in order to test the generality of the Herzberg theory.

Herzberg (1965) tested the generality of his 1959 study by using subjects of a different cultural heritage than those of the original study. The subjects were 139 supervisors representing a broad cross-section of Finnish industry. The respondents' mean age was 36 years with a range of from 23 to 62 years. They were requested to fill out a translated version of the same questionnaire that Schwartz, Jenusaitis, and Stark (1963) had used. The findings of the study of Finnish supervisors agreed with those of the original study. The motivation factors that occurred most frequently in the high questions were responsibility, achievement, and work itself. Supervision, company policy and administration, working conditions, and interpersonal relations with peers were the four hygiene factors mentioned in association with the low questions.

A replication of the Herzberg study was undertaken by Gendel (1965). The participants were 119 housekeeping workers employed at two Cleveland Veterans Administration hospitals. Approximately 90 percent of these participants were Negroes. The results of this study confirmed the motivation-hygiene theory. Advancement, recognition, and responsibility were significant motivation factors. Significant hygiene factors related to low questions were company policy and administration, supervision, salary, working conditions, and interpersonal relations with peers.

Perezal (cited in Herzberg, 1966) conducted a replication of Herzberg's study with 78 engineers employed at the Locomotive Works in Budapest, Hungary. The findings of the study were in basic agreement with the Herzberg theory. The significant motivation factors were work itself, achievement, recognition, and responsibility. Company policy and administration, and supervision were the two significant hygiene factors.

Walt (cited in Herzberg, 1966) conducted an exact replication of the original study. The respondents were 50 high-level professional women employed by the United States government installations. The respondents averaged 45 years of age, and nearly one-half had earned a graduate degree. The results of the study agreed with the motivation-hygiene theory. Achievement, work itself, responsibility, and recognition were the most significant factors associated with job satisfaction.

Allen (1967) tested the generality of the theory with another occupation group. The sample population consisted of 1014 commercial bank employees of the three largest commercial banks in a western state. These subjects included 210 supervisors and 804 non-supervisors. Allen

used a questionnaire instead of the interview procedure. The chi-square statistical test was used in analyzing the data. The findings of this study supported the generality of the motivation-hygiene theory: motivation factors were related to the high question, while hygiene factors were associated with the low question. The studies of Anderson (cited in Herzberg, 1966), and DeHority (1968) also indicated the same results as Allen's study.

Another replication of the original study was the study of Davis and Allen (1970). The subjects were 700 employees of the three largest banks in a western state. This study utilized the same methodology as the earlier Allen study (1967), and emphasized the duration of high and low feelings. The findings of the study indicated that the high feelings were generally of longer duration than the low feelings. Both advancement and recognition for achievement were primarily associated with responses to the high question and long-run feelings. Salary was mainly related to low question responses and was a cause of long-run feelings.

Schwab and Heneman (1970), used the story-telling method to inquire into two aspects of the Herzberg theory: analysis and interpretation of individual responses, and reliability of response classification using Herzberg's procedure. The respondents were 85 first and second level supervisors. The results confirmed the original study and other subsequent studies using the story-telling method. However, the conclusions indicated that the motivation-hygiene theory was inadequately predicting individual responses to favorable or unfavorable events. Ty's (1974) study, using the story-telling method, also showed results which supported the original study.

Acakian (1971) studied the factors relating to job satisfaction and dissatisfaction of faculty members in institutions of higher education. The findings of the study supported the Herzberg two-factor theory. It was indicated that there were significantly more faculty members who emphasized the job-content than those who did not emphasize the job-content factors for satisfying job situations. But for job dissatisfaction, there were significantly more faculty members who emphasized the job-context factors than those who did not emphasize the job-context factors.

Crabbs (1973) conducted a study to assess the generality of Herzberg's motivation-hygiene theory using employees of the Panama Canal Company. Questionnaires were administered to 408 employees of the Maintenance Division. Each respondent was asked to explain an incident when he felt particularly good (satisfied) and another when he felt particularly bad (dissatisfied) about his job with the Panama Canal Company. The findings confirmed and strongly supported the motivation-hygiene theory. All six motivation factors were found to be mainly related to the job satisfaction. Only five hygiene factors (company policy and administration, supervision-technical, interpersonal relations-supervisor, working conditions, and status) were found to be strongly associated with the job dissatisfaction.

Nicholson (1974) collected data from 20 elementary and 20 secondary public school principals to determine which job factors produced job satisfaction and which produced job dissatisfaction. The analysis of these responses resulted in the findings that, as a group, the subjects were highly achievement oriented and received satisfaction from motivator factors associated with achievement and recognition. The

researcher believed that appropriate autonomy and authority must be provided the principal in order for the motivation factors of recognition and achievement to improve the growth of high positive job satisfaction. It was further concluded that, as far as school officials are concerned, certain hygiene factors must always be provided not necessarily to produce high morale, but to avoid the element of dissatisfaction which is on yet another continuum.

Taylor's study (1976) was designed to test experimentally whether there were indeed two forms of anxiety (motivator anxiety and hygiene anxiety). The investigator used a written survey questionnaire structured on the critical-incident concept to collect data from employees of the Ogden Air-Logistics Center, Hill Air Force Base, Utah. The conclusions of the study indicated support for the states of motivator anxiety and hygiene anxiety. It was also concluded that the relationships between the two continua of motivator factors and hygiene factors and the two anxiety states were parallel.

Using Herzberg's motivation-hygiene theory as a model for the study, Lawrence (1979) attempted to determine the relevancy of this theory when applied to a population of elementary supervisors, and to identify factors which contribute to job satisfaction and job dissatisfaction of supervisors. The respondents of the study were 40 elementary supervisors selected from listings in the 1977-1978 Virginia Educational Directory. The data were obtained through taped, personal interviews. Each respondent was requested to recall a positive incident and a negative incident which affected his/her job attitude. Achievement and recognition were found to be identified as statistically significant satisfiers. None of the Herzberg hygienes were found to be

statistically significant dissatisfiers. Thus, the motivation-hygiene theory is partially supported by this investigation.

Backer (1979) conducted a study to determine whether the motivation-hygiene theory may be justifiably applied to Black and White groups from differing occupational levels. The subjects consisted of 1274 unskilled, 341 semi-skilled and 167 skilled Black employees together with 355 White skilled employees and 29 White employees of management level. The subjects were employed by 30 industrial, mining, and commercial organizations situated in the four provinces of South Africa and Transkei. All respondents were asked to explain critical incidents associated with happy and with unhappy feelings at work. It was indicated that job satisfaction of the White managers, White skilled workers and Black skilled workers was related largely to the motivators. The satisfaction of the Black semi-skilled workers was related to motivators and hygiene factors—in approximately the same proportion. The satisfaction of the Black unskilled workers was related mainly to hygiene factors. It was further indicated that the dissatisfaction on all job levels were caused largely by hygiene factors.

Page (1980) studied those factors which contributed to job satisfaction and dissatisfaction in a population of secondary school counselors and determined the relevancy of Herzberg's motivation-hygiene theory when applied to this population. The sample of the study was 45 counselors selected from a list of 95 counselors. They were representative of the population of 11 schools from eight municipalities of Lower Fairfield County, Connecticut. The data were gathered through taped personal interviews within the confines of Herzberg's semistructural interview. The results of the study indicated that no significant

hygiene factors were identified; whereas, three motivators were determined to be significant: achievement, recognition, and work itself.

Studies Using Other Methodologies that Support Herzberg's Theory

Black (1962) studied the motivation of 81 physically disabled male employees of an electronics subcontractor. The analysis of the study was performed using six factors including achievement, need, self-acceptance, job satisfaction, attendance, quality of production, and quantity of production. The first three factors were termed independent variables and were considered as motivation factors in the Herzberg two-factor theory; whereas the latter three factors were termed dependent variables. The findings of the study indicated that industrial performance was positively correlated with need achievement, but not self-acceptance (the combination of these two factors correlated relatively high with industrial performance). It was also found that job satisfaction correlated positively with industrial performance only under conditions of need achievement and self-acceptance. The scoring of the need achievement test was also found to be a significant variable. Thus, the results of the study confirm the operation of motivation factors of the two-factor theory.

Hamlin and Nemo (1962) studied 69 subjects divided equally in three groups: a group of 23 schizophrenic patients, a group of 23 improved schizophrenic patients, and a control group of 23 University of Illinois students. The study used a 20-item forced-choice activity questionnaire analyzed on a choice-motivation scale to determine the subjects'

motivation pattern. It was found that positive mental health depended to a major degree on developing an orientation toward self-actualization, achievement, responsibility, and goal-direct effort--motivation factors. It was further concluded that improved schizophrenics obtained higher motivator and lower hygiene scores than the unimproved. College students obtained higher motivator and lower hygiene scores than the two groups of schizophrenics. Thus, the results of the study supported the motivation-hygiene theory.

Using a sample of 24 improved and 24 unimproved schizophrenic patients and a control group of 20 nurses aids in the Danville, Illinois Veterans Administration Hospital, Sandvold (1962) conducted a follow-up study to the Hamlin and Nemo investigation. The researcher measured the subjects' scores on the Hamlin and Nemo choice-motivator scale both before and after the performance of the effortful tasks. Changes in the subjects' verbal responsivity were also measure by means of the Thematic Apperception test. It was found that relating effort to a meaningful purpose was of importance in the development of a subject's motivator set along a continuum ranging from very important at the higher pathological level (unimproved schizophrenia), to moderately important for improved schizophrenics, to little importance for the normal subjects in the control group. The assignment of effortful tasks related to some purpose resulted in improvement of the subjects' motivator orientation and verbal responsivity for all groups. The findings supported Herzberg's mental health two-factor concept.

Friedlander (1963) employed a questionnaire with three position-occupation groups (engineers, supervisors, and salaried employees) of 200 employees each selected from a large midwestern manufacturing

company. The respondents' mean age was 39 years old and their mean monthly salary was 738 dollars. The questionnaire provided three measures or tests from the responses to 39 questions. Seventeen questions measured the importance of various items to the subject's source of satisfaction, another 17 questions measured the actual satisfaction of the subject with the same items, and the last five questions measured the subject's overall satisfaction. It was shown that three factors emerged from the data analysis: (1) social and technical environment (made up of hygiene-like factors), (2) intrinsic self-actualizing work aspects (made up of motivator-like factors), and (3) recognition through advancement. The researcher interpreted the third factor as drawing from both the motivator factor (promotion and recognition) and the hygiene factor (merit increases). Therefore, the motivation-hygiene theory was supported by the first and second factors, but not by the third factor.

A study by Rosen (1963) was another study using a different methodology that lent support to the two-factor theory. The subjects were 94 research and development personnel from various occupational positions, educational levels, and areas of specialization. The respondents were asked to perform a rating of importance of 118 items as related to desire to leave their present job positions. The results of the study indicated that many of the most important items, causing the individual to seek other employment, were similar to Herzberg's motivation factors. It was also identified that white-collar workers associated varied complex and demanding jobs with job satisfaction while blue-collar workers tended to associate these qualities with low job satisfaction.

Friedlander and Walton (1964) studied 82 engineers and scientists employed by the U.S. Naval Ordnance Test Station, China Lake, California. The study used semi-structured interviews to ask respondents to describe the most important reasons keeping them in the organization, and to identify factors that would cause them to leave the organization. The findings of the study pointed out that reasons for remaining in an organization differed from those for leaving. Reasons for remaining on the job were closely related to job-content factors, whereas reasons for leaving were more associated with job-context factors. Thus, this study supported the motivation-hygiene theory.

In testing the generality of the motivation-hygiene theory, Lodahl (1964) interviewed 52 male auto assembly workers and 29 female electronics assembly workers about job satisfaction and job dissatisfaction. The data obtained from a content analysis were subjected to factor analysis. The results indicated that affective components were the primary sources of job dissatisfaction, and the major sources of job satisfaction were instrumental components. It was further concluded that satisfaction factors and dissatisfaction factors were on different continua because there was no causal relationship between these two factors.

The study conducted by Haywood and Dobbs (1964) tested motivator seekers who were approach-oriented and preferred to favor tension-producing situations, while hygiene seekers were found to be avoidance-oriented and preferred to avoid tension-producing situations. The sample in this study consisted of 100 eleventh and twelfth grade students in public high school in Nashville, Tennessee. Each respondent was asked to perform a rating of 11 tension-inducing situations. The

researchers measured the respondents' attitudes toward tension-inducing situations by the S-R Inventory of Anxiousness. In addition, they used the Hamlin and Nemo choice-motivator scale to classify the respondents' motivational patterns. It was identified that respondents who were high in motivator orientation were high in approach behavior, whereas those high in hygiene orientation were high in avoidance behavior. Thus, the findings of this study support Herzberg's two-factor mental health concept.

Halpern (1966) studied a sample of 93 male college graduates working in different occupations. Subjects were asked to perform ratings of satisfaction with four motivators (achievement, work itself, responsibility, and advancement), four hygiene factors (company policy, supervision, co-workers, and working conditions), and overall job satisfaction on the best-liked job. It was found that respondents were well satisfied with both the motivator and hygiene aspects of their jobs. However, the results of the study partially supported the motivation-hygiene theory since Halpern found that the motivators contributed significantly more to overall satisfaction than did the hygiene factors. Lindsay, Marks, and Gorlow (1967); Lahiri and Srivastva (1967); and Weissenberg and Greenfield (1968) reported the same results.

A study conducted by Schwarz (cited in Herzberg, 1966) investigated the sources of job motivation of 373 third-level supervisors in a large multi-unit corporation. This study emphasized on-the-job performance rather than on-the-job attitudes. Each respondent was requested to identify a recent time when (1) an incident happened that made him feel particularly well-satisfied about his job and stimulated him to

contribute more, and (2) an incident happened that frustrated his efforts to work effectively. It was found that achievement and recognition for achievement were the dominant motivation factors related to the high question; whereas, company policy and administration was the major hygiene factor associated with the low question.

Hahn (cited in Herzberg, 1966) employed a questionnaire to obtain data from 800 Air Force officers selected from commands in the United States and Europe. The results indicated that self-actions were the major sources of job satisfaction in responding to the high question. According to Herzberg, the category of self-actions was similar to the job factor achievement and responsibility. A major source of dissatisfaction was action of supervisors and job context that responded to the frustration question.

In testing the Herzberg theory, Gibson (cited in Herzberg, 1966) analyzed the data from an extensive morale survey conducted by a large Midwestern manufacturing firm. The respondents were more than 1700 employees from four separate plants and 10 different departments. The survey consisted of the usual assortment of objective-type morale items. Two open-ended questions at the end of the questionnaire provided applicable data. The results of the analysis indicated that for male respondents, achievement and work itself were the significant motivation factors, whereas company policy and administration, and supervision were the dominant hygiene factors. For the female employees, the significant motivation factors were work itself, achievement, recognition, and responsibility. However, they failed to respond to the negative questions in adequate numbers to permit the identification of statistically significant hygiene factors.

Fantz (cited in Herzberg, 1966) performed a study with 30 rehabilitation patients at the Highland View Rehabilitation Hospital in Cleveland, Ohio. The 19 male and 11 female patients, averaging 43 years of age with a range of from 21 years to 65 years, fell into professional, skilled, semiskilled, and clerical occupational classifications. The study was an exact replication of the original Herzberg study in terms of the interview procedure for obtaining data. Rather than Herzberg's 16 job factors, the study modified Maslow's (1943) six hierarchical needs to record major factors in six events described by the respondents. Each respondent was asked to explain two satisfying incidents and two dissatisfying incidents from his hospital experience and one satisfying incident and one dissatisfying incident from his previous job experience. The results of the study supported the motivation-hygiene theory: motivation factors were mainly related to the satisfying events while the hygiene factors were primarily associated with the dissatisfying events. The same findings were presented in the study of Schmidt (1974).

Fine and Dickman (cited in Herzberg, 1966) developed a satisfaction questionnaire containing 27 items to measure the relative importance of various working conditions in terms of satisfaction and productivity. Ten of the 27 items were categorized as satisfiers and the remaining 17 items as dissatisfiers. The sample was made up of five different groups of employees representing high to low occupational levels: senior engineers and physicists, associate engineers and physicists, technicians and technical aides, and secretarial and clerical workers. Each respondent was asked to rank the items for satisfaction and for immediate influence on productivity. The findings of the study, for all

five occupational groups, confirmed the motivation-hygiene theory. Achievement, recognition, and work itself were motivation factors ranked high in terms of job satisfaction and influence on productivity. Job context factors were ranked low for both job satisfaction and influence on productivity.

Zdravomyslov and Yadov (cited in Herzberg, 1966) conducted a study on a sample of 2,665 workers under 30 years of age employed in different heavy and light industries in the Leningrad area. The stated purpose of this investigation was to "provide information to be used in the proper education of Soviet youth to the Soviet attitude to labor (p. 162)." The investigators used an attitude questionnaire to interview the workers and a work-performance rating to obtain data from employees' supervisors. The attitude questionnaire was designed to indicate the overall satisfaction of the workers with their job, their trade and the social value of their work. The investigators compared the level of satisfaction expressed by each respondent with his performance on the job. The Soviet investigators pointed out that the highest positive effective factor on job attitudes and job performance of workers was work itself. Those workers with the highest skills reported the highest satisfaction and the best performance. They also indicated that the social value of the work itself and other context factors had relatively low influence. It was further concluded that the most effective and most important attitudinal factor in terms of job performance was satisfaction with the kind of job. Thus, this study presented results similar to those in American studies, and supported the Herzberg theory.

In testing the Herzberg theory, Wernimant and Dunnnette (cited in Herzberg, 1966) constructed two questionnaires, one worded in a positive

manner and the other in a negative manner, each made up of 50 pairs of items with a motivation factor and a hygiene factor in each pair.

Thirty students in introductory psychology at the University of Minnesota were requested to perform a rating of these items for social desirability. The sample of the study consisted of 50 accountants and 88 engineers. The respondents were asked to think of a time when they felt exceptionally good (or bad) about their jobs, either present or past, and then select the item which best described why they felt good (or bad). Afterward, the respondents were requested to double-check those items that were most important to their feelings of job satisfaction and dissatisfaction. The investigators identified that in the first part of the study, motivator factors were found to be more important than hygiene factors; and in the latter part of the study motivation factors were mainly related to good job feelings, while hygiene factors were primarily associated with bad feelings.

Bloom and Barry (1967) used a 40-item work attitude questionnaire consisting of 20 motivator and 20 hygiene items to determine whether or not the motivation-hygiene theory could describe the work attitudes of Negro blue-collar employees. The subjects were 85 Negro, male, blue-collar workers employed by the plants and grounds department of a large southern state university. Subjects were asked to rate each item on a five-point Likert-type scale. The data of this study were compared with comparable data from 117 white, blue-collar employees of the plants and grounds department of a large southern state university in the Malinovsky-Barry (1965) study. Some similarities as well as substantial differences were found. Hygiene factors were found to be more important to the Negroes than to the whites. Bloom and Barry concluded that the

motivation-hygiene theory could not adequately describe job satisfaction and dissatisfaction among the Negro low-status workers. The results of this study were not inconsistent with Herzberg's assertion that hygiene needs must be substantially met before motivator needs become fully operative; therefore, the motivation-hygiene theory was partially supported by this study.

Wolf (1967) studied 347 employees, consisting of 85 regular employees and 264 college student summer-hire employees, in a large manufacturing plant. Wolf employed a semi-structured interview with the regular employees and a 10-item open-ended questionnaire with the student employees. The data were factor analyzed using Herzberg's factors but excluding two factors--possibility of growth and interpersonal relations with subordinates. The results of the study provided partial support for the predictions of the two-factor theory. It was demonstrated that motivator factors were the major sources of satisfaction with the job itself; whereas, hygiene factors were related to both job satisfaction and dissatisfaction.

Meltzer and Ludwig (1968) attempted to expand motivation knowledge in terms of the relationship of work satisfaction to personality characteristics by comparing a group of work-motivated employees with a non-motivated group in terms of memory optimism, autonomy, work competence, and interpersonal competence. The 143 interviewees were employed in a paper converting industry in upstate New York. The investigators selected the 24 work-motivated subjects from the 143 employees as a result of having mentioned work experiences as pleasant memories during an interview; and selected the 24 control group subjects from the remaining 119 employees by equating them to the work-motivated

group in terms of age and job level. Then, the investigators conducted a structured interview with each respondent. The findings indicated that the work-motivated subjects were more likely to be memory optimists and rated higher on work adequacy. The work-motivated group also rated significantly higher in terms of autonomy and more favorably on interpersonal competence. It was concluded that the work-motivated subjects, as evidenced by their expressed feelings of ego involvement, were identified by better performance, better adjustment, and a more optimistic outlook on their past. Therefore, this study partially confirmed the two-factor theory in that intrinsic factors were related to work-motivation.

Using a sample of 84 registered nurses in a state hospital, Kosmo and Behling (1969) tested the proposition that the traditional bipolar and the Herzberg two-factor theories of work motivation should be synthesized. The investigators divided the sample into four groups based upon different combinations of high and low perception of motivator and hygiene factors. The analysis of these responses resulted in the finding that higher levels of overall job satisfaction related to the higher levels of perceived motivators. The respondents who perceived both high levels of motivator and hygiene factors were significantly more satisfied than those who perceived low motivator and hygiene levels. Higher levels of overall job satisfaction were found to be related to higher levels of perceived hygiene factors when the motivation factors were at a high level; but, at low motivator levels, there was no significant difference in satisfaction level. It was further concluded that, for the high motivator-low hygiene group in comparison with the low motivator-high hygiene group, no significant

difference in level of satisfaction existed. Although, the findings did not support the synthesis of the traditional and the Herzberg theories, the investigators identified that the two approaches were measuring fundamentally distinct parts of the individual's view of and relations with his ambience. Therefore, this investigation partially supported the Herzberg two-factor theory.

Soliman (1970) conducted a study with 98 respondents comprising both teachers from a public school system and workers from a mental health institute. He used the Herzberg method of interviewing and the Job Descriptive Index in obtaining data from the respondents. The results of the study indicated that the motivators became more powerful sources of satisfaction than the hygiene factors when the organization adequately provided for the satisfaction of all kinds of needs. When the environment deprived employees of all kinds of needs, however, the hygiene factors became more powerful sources of dissatisfaction than the motivation factors.

Wernimant, Toron, and Kopell (1970) attempted to establish the differentiation between personal overall satisfaction and work motivation by comparing the sources of these two states of being. The researchers asked the subjects to first rank 17 variables according to their importance in stimulating the employee to work harder at his job and secondly, to rank these same variables with regard to their contribution to personal satisfaction on the job. The finding of the study was that there was no content-context dichotomy. The researchers concluded that the terms motivator and satisfier were different and could not be used interchangeably. However, the Herzberg motivation-hygiene theory was partially supported by the finding of no

content-context dichotomy, because no such distinction should result from a study oriented solely to the satisfaction continuum.

Nishikawa (1971) tested the Herzberg theory that job satisfaction should be determined only by motivators and job dissatisfaction only by hygiene factors. Nishikawa used 80-item questionnaires to obtain data from Japanese blue-collar workers and a group of middle supervisors in four different manufacturing companies. Findings of the study were mixed with regard to the Herzberg dual-factor theory. It was found that the results from the middle supervisor group supported the motivator hypothesis, while those from the blue-collar group supported the hygiene hypothesis. The supported factors were responsibility, salary, working conditions, personal life, company policy and administration, and status. The fully non-supported factors were possibility of growth, achievement, advancement, and job security. Work itself, supervision-technical, and interpersonal relations were three factors that were supported by the results of one group but opposed by those from the other group.

A sample of 200 engineers and 153 assemblers was used in a study by Armstrong (1971). The respondents were asked to perform ratings of their job satisfaction, the importance of job content and context factors, and overall job satisfaction. The study found that the job content factors made a relatively greater contribution to overall job satisfaction than the job context factors, and overall job satisfaction. The study found that the job-content factors made a relatively greater contribution to overall job satisfaction than the job context factors regardless of occupational level. For ratings of job factor importance that were a function of occupational level, it was indicated that job

content factors were most important for engineers; whereas job context factors were most important for assemblers.

Using both the traditional forced-choice structured-item and the Herzberg free-choice critical incident techniques, Aebi (1972) tested the applicability of the Herzberg motivation-hygiene theory of job satisfaction to faculty and administrators in 15 private church-related liberal arts colleges in 11 states. A sample of 250 faculty members was surveyed, and the two top administrators in each of the 15 colleges were also surveyed. The researcher pointed out that the motivation-hygiene theory was supported more consistently by free-choice than by forced-choice methodology. Work itself was found to be the greatest source of satisfaction, while working conditions were found to be the greatest source of dissatisfaction. It was further concluded that the Herzberg theory was more applicable to faculty than to administrators. Thus, the findings of the study support the two-factor theory.

Bowman (1977) studied 325 certified teachers teaching in six-director high school districts in Missouri to (1) examine the status of teacher performance evaluation in relation to Herzberg's motivation-hygiene theory, and (2) analyze which practices in teacher performance evaluation were contributors to job dissatisfaction as compared to those found in the military and in industry. The investigator used a mailed questionnaire to collect the data. The conclusions of the study indicated that the job factor "performance evaluation" apparently could be considered a job dissatisfier in the same context as Herzberg has theorized other job factors to be dissatisfiers.

May's study (1978) was designed to investigate the Herzberg motivation-hygiene theory relating to job satisfaction and

dissatisfaction of academic personnel at selected small liberal arts colleges. Questionnaires were administered to 497 academic personnel. Each respondent was requested to recall an incident or sequence of events, and then indicate the importance attributed to each of the 16 factors as sources of satisfaction or dissatisfaction. The findings indicated that work itself, achievement, and interpersonal relations-subordinates were the three highest ranking factors for the satisfying experiences. It was also found that the four most important dissatisfiers for the academic personnel were lack of achievement, policy and administration, lack of recognition, and personal life.

Studies that Challenge Herzberg's Theory

Lopez (1962) conducted a study to test the hypothesis that both role and personality consensus measures between supervisors and subordinates are positively related to job satisfaction and performance. The investigator was employed by the Port of New York Authority for this study. Based on the findings of the investigation, it was believed that, in the traditional or highly structured organization, the motivator recognition was not associated with job satisfaction. Thus, the result of this study did not confirm the hypothesis and did not support the Herzberg motivation-hygiene theory.

Friedlander (1965) employed a 14-factor questionnaire with 1,468 civil service employees from three status levels (low, middle, and high general service rankings) and two occupational levels (white- and blue-collar workers) to measure the importance of various job characteristics to job satisfaction and job dissatisfaction. The findings of the study indicated that the white-collar workers derived job satisfaction from

motivator factors, while the blue-collar workers derived job satisfaction from hygiene factors. It was concluded that white- and blue-collar workers derived job satisfaction from different sources. The motivation-hygiene theory was not confirmed by this conclusion. Centers and Bugental (1966) also presented the same results as Friedlander.

To examine the relationship of satisfiers and dissatisfiers to productivity, turnover and morale, Gordon (1965) obtained data from 683 full-time life insurance agents of a large national life insurance company. The respondents were requested to rate their degree of satisfaction and dissatisfaction on a 54-item questionnaire. Then, a comparison of overall job satisfaction and job dissatisfaction with productivity was obtained. The study found that the subjects who were highly satisfied with motivation factors did not have greater overall job satisfaction than those who were highly satisfied with hygiene factors. It was further indicated that subjects who were highly dissatisfied with hygiene factors were not less satisfied than those who were dissatisfied with motivators and with self-reported productivity. The findings do not support the Herzberg unidirectional aspect.

Ott (1965) performed a study with 350 telephone operators to test the generality of the motivation-hygiene theory. A 115-item job attitude questionnaire was administered to the subjects and their responses were factor analyzed. Five main factors were extracted from the analysis: two factors which contributed most to job satisfaction were primarily related to supervision; two factors which contributed most to job dissatisfaction were related to supervision and customers; and one factor contributed to both job satisfaction and dissatisfaction. It was also found that subjects of one cultural background associated

jobs characterized as varied, complex and demanding with high job satisfaction; whereas, subjects of a different cultural background associated such job features with job dissatisfaction. The conclusions drawn from the study were that the sources of job satisfaction and dissatisfaction were not independent and that the motivation-hygiene theory was not general in terms of different occupations. Ott's study offers no support for the motivation-hygiene theory.

Malinovsky and Barry (1965) designed a 40-item work attitude survey consisting of 20 motivator and 20 hygiene items to measure work attitudes of 117 male maintenance men and watchmen at a southern state university. The results of the study were derived by a factor analysis of data. The researchers found that the job attitudes of the respondents were separated into two relatively independent sets of variables--comparable to Herzberg's motivation and hygiene variables. The study found that both sets of variables of job attitudes were positively related to overall job satisfaction. The findings of the study do not confirm the predictions of the motivation-hygiene theory.

Burke (1966) conducted a study to test the assumption that motivators and hygiene factors represent unidimensional attributes. The sample of the study was 187 college students, comprising 139 males and 48 females, enrolled in an introductory industrial psychology course. The subjects were asked to rank 10 Herzberg job characteristics, containing five motivators and five hygienics, in order of importance to themselves. The study found a high degree of agreement among preferences of females and males. The findings clearly pointed out that motivators and hygienics were neither unidimensional nor independent constructs. Conclusions drawn from the findings indicated that for this

study, there was not a unidimensional aspect to the motivation and hygiene factors, and that the Herzberg motivation-hygiene theory might be an oversimplified representation of job satisfaction. Thus, the two-factor theory is not supported by Burke's study.

Another study was conducted by Wernimont (1966) with 50 accountants and 82 engineers from various midwestern companies. The respondents were administered both forced-choice and free-choice item questionnaires were administered by the respondents in which they were asked to describe past satisfying and dissatisfying job situations. Items in these questionnaires were developed to test Herzberg's motivation and hygiene factors. Both groups of respondents selected more motivator items as describing both satisfying and dissatisfying types of job situations. It was found that both motivators and hygiene factors were sources of job satisfaction and job dissatisfaction. The investigator concluded that both motivation and hygiene factors could be sources of job satisfaction and dissatisfaction, but motivation factors were stronger. Therefore, the satisfaction variables from this study are not unidirectional in their effects and are contrary to the predictions from the dual-factor theory. The same findings were reached in the studies of Waters and Waters (1969) and Ritter (1979).

In testing the Herzberg two-factor theory, Ewen, Smith, Hulin, and Locke (1966) employed a forced-choice method to gather data from 793 blue-collar male employees from various jobs. The intrinsic factors were found to be associated more strongly with both job satisfaction and dissatisfaction than the extrinsic factors. The researchers concluded that the dichotomy of "satisfiers" and "dissatisfiers" was not an accurate way of representing job satisfaction and job dissatisfaction

variables in job situations. They also suggested that the functioning of "intrinsic" and "extrinsic" factors should be used instead of the ones proposed by Herzberg. This study is nonsupportive of the Herzberg theory. Graen (1966), in a similar study, indicated the same results and also gave the same suggestions.

Singh and Baumfartel (1966) studied 340 non-supervisory employees at a large commercial aircraft overhaul base in the midwest to evaluate the contributions of age, length of service, and education to worker attitudes, motivations, and organizational relationships. The investigators collected data from the subjects by using a questionnaire to determine demographic information and the importance of job factors on a five-point Likert-type scale. Two job factor indices used in the analysis were advancement motivation and stability motivation. Age and formal education were found to be significant determinants of the importance of various job-related motivations. It was further indicated that advancing age reduced the respondent's desire to get ahead in the company job structure; whereas higher levels of formal education achieved during youth induced a perservering effect upon the respondent's desire to get ahead. These findings are not supportive of the two-factor theory.

Graen (1966) used the factor analysis method to develop psychometric measures of the dimensions postulated by Herzberg. The sample of the study consisted of 153 professional engineers, specialized in design and development, drawn from two electronics firms in the Minneapolis-St. Paul area. The researcher developed a 96-item questionnaire from Herzberg's 16 job factors. The results of the study reflected that items from a single dimension ended up in different factors, while items

from different dimensions ended up in the same factor. Items were not found to be homogeneous grouped in the factor-analytic or correlational sense.

Dunnette, Campbell, and Hakel (1967) performed a study with a sample of 133 store executives, 89 sales clerks, 44 secretaries, 129 engineers and research scientists, 49 salesmen, and 92 army reserve and employed adults enrolled in a supervisory course. The authors employed factor analysis of Q-sorts of two sets of 36 statements which were equated with social desirability for highly satisfactory and unsatisfactory job situations. Achievement, responsibility, recognition, and supervisor human relations were found to be the most important satisfiers and dissatisfiers. It was also indicated that, for some respondents, a satisfying job situation resided in the job content dimensions; for others, in the job context; and for some of the other respondents, in combinations of both dimensions. The same pattern held true for dissatisfying job situations. The authors concluded that some factors caused job satisfaction and also caused job dissatisfaction. This conclusion provides no support for the Herzberg theory.

Hulin and Smith (1967) gathered data from 670 home-office employees of a large international corporation in Montreal, Canada by using a questionnaire which elicited subjects' satisfaction with work done, promotional opportunity, and pay. The researchers analyzed the responses by using the Cornell Job Description Index and the General Motors Faces Scale. The subjects were also asked to rate the desirability of six imaginary work situations on an anchored graphic scale. The finding of the study indicated that two motivation factors, work done and promotional opportunity, and one hygiene factor, pay, were

all related to both job satisfaction and job dissatisfaction. It was also found that the male subjects' responses supported the traditional bi-polar concept, while responses from females were less supportive of the traditional motivation concept. The researchers concluded that the Herzberg two-factor theory was method-bound and had little relevance to worker behavior.

Hinrichs and Mischkind (1967) conducted a study to test the Herzberg hypothesis concerning the motivator-hygiene effect on overall job satisfaction, and to observe subjects' perceptions of factors which influenced their overall satisfaction, both positively and negatively. The subjects were 613 engineering technicians performing service work in a large national company. The authors used content analysis of open-end responses that identified the factors which were influential in creating positive or negative job attitudes with responses to overall satisfaction scale. The findings of the study indicated that the proportion of content factors that contributed to job dissatisfaction became larger as the respondents' level of overall job satisfaction declined. The study also found that the respondents' past job attitudes were not necessarily indicative of their present job attitudes. These findings do not support the Herzberg motivation-hygiene theory.

Another study testing the Herzberg two-factor theory was conducted by Hinton (1968). He developed 14 job factors encompassing both work and school situations and used undergraduate college students to gather three sets of data at six-week intervals. The data gathered were factor analyzed and coded. It was found that across repeated measures the data were inconsistent. Hinton concluded that the Herzberg two-factor theory was neither reliable nor valid.

Fridlander and Marquies (1969) attempted to demonstrate the feasibility of predicting employee satisfaction from the organizational climate of his workplace and from his work values. The conclusion showed that for an employee to maximize his satisfaction with different areas of his work, he must have various mixes of climate components (job context). This conclusion is nonsupportive of the two-factor theory.

Locke (1973) maintained that the Herzberg two-factor theory confused two levels of analysis: events (what happened) and agents (who made it happen). He conducted a study with samples of white-collar and blue-collar employees. Each respondent was asked to describe satisfying and dissatisfying job incidents. The researcher used a classification system involving events and agents to categorize the job incidents. Based on the findings of the study, it was indicated that the same categories of events led to both job satisfaction and dissatisfaction within each job level. It was believed that different agents were responsible for these events and that the Herzberg two-factor theory was not the most appropriate method to analyze job satisfaction data.

Morgan's study (1974) was designed to ascertain the factors which physical education and athletic personnel from selected small, liberal arts colleges perceived as influencing feelings of job satisfaction and dissatisfaction. The respondents were 197 full-time physical educators and coaches. Each respondent was asked to recall a satisfying and a dissatisfying sequence, and also to rate each of 16 factors with respect to their importance in each of the sequences. Achievement, work itself, and interpersonal relations-subordinates were found to be satisfiers, while policy and administration, achievement, and personal life were dissatisfiers. It was concluded that all factors in this investigation

were multidimensional. Thus, this study demonstrated very little support for the Herzberg dual-factor theory.

Cremer (1979) studied a sample of 10 mid-level managers to test the generality of Herzberg's motivation-hygiene theory. The subjects were asked to submit to two 45-minute interviews each, in which they discussed their present job and what about the job satisfied and dissatisfied them. The study found that the subjects' satisfaction and dissatisfaction with their present jobs differed significantly from what might be predicted by the motivation-hygiene theory. The subjects at both study sites were both satisfied and dissatisfied with motivation and hygiene factors, and the unidimensionality of the satisfier and dissatisfier factors was not substantiated by the study. Therefore, the results of Cremer's study failed to confirm the generality of Herzberg's motivation-hygiene theory.

Summary

In this chapter, a research literature review has been presented with a view toward summarizing Herzberg's original study and 74 studies directly relevant to the motivation-hygiene theory. The results of all 74 reviewed studies have been mixed.

From the research literature review, it appears that when the methodology used closely resembled the Herzberg approach, the results tended to support Herzberg's motivation-hygiene theory. Of the twenty-one studies using Herzberg's methodology which were reviewed, all supported or were in basic agreement with the theory. When the methodology did not follow Herzberg's methodology, the results did not tend to support the generalizability of the motivation-hygiene theory.

Thirty-one of reviewed studies which used a modified form of the Herzberg methodology or a different approach, support or partially support the theory. Twenty-two of the reviewed studies did not support Herzberg's theory. Therefore, it is concluded that methodology may be influencing the results of studies involving Herzberg's motivation-hygiene theory.

CHAPTER III

METHODOLOGY

The purpose of this study was to identify those factors which contributed to job satisfaction and job dissatisfaction in a population of Thai employees. To achieve this purpose, seven steps of methodology were included in this study: (1) selection of subjects, (2) development of the response form or questionnaire, (3) translation of the questionnaire, (4) establishment of a pilot study, (5) testing of instrument reliability, (6) collection of the data, and (7) analysis of the data.

Selection of Subjects

For this study, the researcher collected data from four selected head offices of banks incorporated in Thailand, all of which were located in Bangkok, Thailand. A sample of 440 employees consisting of supervisors and non-supervisors, male and female, and all age groups was randomly selected for the study. All of these 440 employees were chosen as the follows:

1. For each commercial bank, 10 departments including the accounting department and nine other departments were randomly selected.
2. For each department, 11 employees comprising 10 employees (most of them were non-supervisors) and the department head

(supervisor) were randomly selected.

Thus, 110 employees from each commercial bank were randomly selected as respondents for this study.

Development of the Questionnaire

A questionnaire was developed to collect the data necessary for an analysis of the problem. The questionnaire for this study was organized into three parts: (1) general background information, (2) satisfaction, and (3) dissatisfaction.

General Background Information

General background information, part one of the questionnaire, was a synthesis of the questionnaires employed by Allen (1967) and Crabbs (1973). This part was designed to obtain data related to the job position, sex, age, marital status, the highest educational degree level, and total number of years working experience of each employee. A total of seven items were included in this part.

Satisfaction

Satisfaction, part two of the questionnaire, was developed by selecting 29 items with positive meanings from Herzberg's (1959) 16 job factor categories. The purpose of this part was to gather data related to sources of job satisfaction or factors which motivated employees to have high feelings, enthusiasm, and satisfaction in their job situation.

Dissatisfaction

Dissatisfaction, the last part of the questionnaire, was developed

by selecting 29 items with negative meanings from Herzberg's (1959) 16 job factor categories. This part was designed to collect data related to sources of job dissatisfaction or factors which made employees have low feelings, and dissatisfaction in their job situation.

All of the 58 items from parts two and three of the questionnaire were also classified by Dr. Ivan Chapman in the Department of Sociology, Oklahoma State University to clarify the positive or negative meanings of each item as motivation or hygiene factors and also to make the questionnaire complete. In addition, the researcher added an open-ended question as a thirtieth item in both part two and part three of the questionnaire to let the respondent list factors other than the above 29 items which caused him or her to experience job satisfaction and dissatisfaction. Also, each respondent was asked to indicate the strength of his or her feelings in the incident of job satisfaction and dissatisfaction on the thirty-first item in both part two and part three of the questionnaire.

Translation of the Questionnaire

For the convenience of the Thai commercial bank employees who responded to the questionnaires, the initial draft of the questionnaire was translated from English to the Thai language by the researcher with the assistance of Dr. Suporn Panrat-Isara, in the Department of Occupational and Adult Education, Oklahoma State University. In addition, the translated questionnaire made the study more meaningful because the Thai version was more understandable than English to the Thai employees. Then these questionnaires, in both English and Thai, were given to five instructors who acted as translators to read and

comment on their understanding of the questionnaire. As a result of these comments, the questionnaire was rewritten to a simple vocabulary level of Thai language, which would permit Thai employees to more clearly understand the questionnaire. Copies of the complete translated questionnaire were distributed to the respondents of this study.

Pilot Study

A pilot study was conducted prior to the actual collection of data to pretest the questionnaire for this study in order to: (1) determine an overall impression of the questionnaire, (2) evaluate the appropriateness of the format of the questionnaire, (3) determine the effectiveness of instruction and comments, and (4) determine the clarity of meaning of questionnaire items.

The pilot group consisted of 10 supervisors and 20 non-supervisors from a selected Thai commercial bank. The researcher made a personal visit to the bank to provide an initial understanding of the procedure for administering the questionnaire and the purpose of the pretest. As the result of the pilot study, several necessary changes were included in the final questionnaire and the process for the collection of the data.

Instrument Reliability

Bartz (1982) indicated that one important characteristic of any measuring device was its reliability. That is, the measurements obtained from any instrument are consistent or repeatable. One commonly used technique for obtaining split halves in order to determine internal consistency is the odd-even method which was used with the results from

the pilot group in this study. With this method, each respondent had two scores--a score on the odd-numbered items in the questionnaire and a score on the even-numbered items. The scores were then placed in the familiar X and Y columns of the Pearson correlation method. These odd and even scores were then statistically analyzed through the use of the Pearson correlation coefficient procedure. The basic formula used was:

$$r_{oe} = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

where r_{oe} is the coefficient of correlation between the two halves of the questionnaire. However, r_{oe} is not the reliability coefficient, because reliability is directly related to the length of the questionnaire. Thus, it was necessary to correct for the effective length of the questionnaire by using the Spearman-Brown formula:

$$r_{tt} = \frac{2r_{oe}}{1 + r_{oe}}$$

where r_{tt} is the reliability coefficient of the entire questionnaire. The application of these two formulas to the data obtained from the pilot study resulted in a reliability coefficient of +0.93 for the job satisfaction part of the questionnaire (Appendix D) and of +0.89 for the job dissatisfaction part of the questionnaire (Appendix E).

Collection of the Data

The researcher collected the data for the study from four selected head offices of commercial banks all of which were in Bangkok, Thailand. Permission to gather data and the actual data gathering procedure were accomplished by the following four steps:

1. Sending an introductory letter to the personnel manager of each commercial bank (Appendix A).
2. Telephoning the personnel manager of each bank.
3. Making a personal visit to each commercial bank to discuss this study with its personnel manager.
4. Performing the actual data collection.

The purpose of the first three steps was to describe what the study involved and to solicit the personnel manager's permission to gather data in his bank. However, there was a limitation in collecting the data from the four banks which were used in this study; the researcher could not hand out the questionnaire directly to the subjects of this study because of the working systems of each bank. For efficiency and effectiveness, the personnel manager of each bank gave permission to the researcher to obtain data by working with the assistant personnel manager. The actual procedure of data collection was as follows:

1. On June 7 and 8, 1982, the researcher made the first visitation to each bank, discussed the study with the assistant personnel manager, randomly selected 10 departments, and using employee lists, randomly selected 10 employees from each department. For effectiveness and comfort, the assistant personnel manager suggested that the researcher give the questionnaires to her for further distribution to the department head or supervisor of each of the 10 selected departments. The supervisor of each department then handed out the questionnaires to the 10 employees who were randomly selected as respondents for this study.

2. One week later, the researcher telephoned the assistant personnel manager of each bank to make an appointment. On June 17, 1982, the researcher made a second visit to each bank and gave the outline of instruction (Appendix B) and the questionnaire (Appendix C) to the assistant personnel manager.
3. After completing the questionnaire, each employee was asked to put it in the envelope provided and return it to the supervisor of the department. The supervisor of each department included his or her own completed questionnaire with the employees' questionnaires and returned them directly to the assistant personnel manager.
4. On July 9, 1982, the researcher made the third visitation and collected all completed questionnaires from the assistant personnel manager.

Analysis of Data

All collected questionnaires were screened for completeness. Only questionnaires which contained answers to all three parts of the questionnaire were included in the analysis. The criteria in Appendix F, which were developed by Herzberg and used in his original study, were used to evaluate the questionnaires of this study. Each of the responses to the job satisfaction and the job dissatisfaction questions was coded according to Herzberg's 16 job factors into motivation and hygiene categories as shown in Figure 1. A frequency and percentage was computed for each job factor.

MOTIVATION CATEGORIES

Achievement
Recognition
Advancement
Work Itself
Possibility of Growth
Responsibility

HYGIENE CATEGORIES

Company Policy and Administration
Supervision-Technical
Interpersonal Relations-Supervisor
Interpersonal Relations-Peers
Interpersonal Relations-Subordinates
Salary
Job Security
Personal Life
Working Conditions
Status

Figure 1. Motivation and Hygiene
Categories Used to
Code Responses

The percentage of respondents listing each factor was assumed to be a measure of its relative importance to all of the job factors for both the satisfaction and dissatisfaction sequences. All job factor percentages were ranked in order of their relative importance for both the satisfiers and the dissatisfiers. The percentages and the rankings of 16 job factors from this study were then compared with those of Herzberg's data in the original study as shown in Table I. Hypothesis One and Hypothesis Two were tested by using Spearman Rank-Order Correlation.

The frequencies, percentages, and ranks of job factors, which Thai respondents indicated to be factors of job satisfaction and job

dissatisfaction, were determined. Hypothesis Three and Hypothesis Four were tested by using Single-Classification Analysis of Variance.

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

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

Hypothesis Five through Hypothesis Eight were concerned with how male and female employees, supervisors and non-supervisors rank factors of job satisfaction and job dissatisfaction. Therefore, the frequency

and the ranking of the relative importance of each factor as satisfier and dissatisfier of 16 factors were also compared for male and female respondents, and for supervisors and non-supervisors. Then, Hypothesis Five through Hypothesis Eight were tested by using Spearman Rank-Order Correlation.

It must be noted that all hypotheses of this study were tested at the .05 level of significance. All data of this study were compiled through the use of the SAS Program of the Oklahoma State University Computer Center at Stillwater, Oklahoma.

Summary

This chapter has reviewed the procedures, materials, and methodology utilized in planning, administering and evaluating this study. Mention was made of the random selection of subjects, the development and translation of the questionnaire, the pilot study, the odd-even (split halves) method of reliability results of +0.93 for job satisfaction and of +0.89 for job dissatisfaction, the collection of the data from the commercial bank employees of four selected head offices of banks in Bangkok, Thailand, and the statistical treatment used in analyzing the data.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

As previously mentioned, this study was concerned with testing employee motivation in selected Thai commercial banks and was based on Herzberg's motivation-hygiene theory. A description of the study participants, descriptive data about the questionnaires used, the procedures for collection of the data, and the design for analysis of the data were presented in Chapter III. This chapter presents respondent and demographic data and the analysis of the data.

Respondents

A total of 440 questionnaires were distributed to gather data from employees of four selected commercial banks in Bangkok, Thailand. These 440 questionnaires were divided into four equal groups, one for each selected bank. Thus, a total of 110 questionnaires was sent to each bank. There were 385 respondents, which represented an 87.5 percent return completed rate for the 440 questionnaires. Twenty questionnaires (4.55 percent) were returned incompleted and were not included in the analysis. Table II shows the number of questionnaires sent and returned completed and the percentage of the questionnaires returned completed for each commercial bank.

TABLE II
QUESTIONNAIRES SENT AND RETURNED COMPLETED

Bank	Number Sent	Number Returned	Percentage Returned
Bank 1	110	92	83.64
Bank 2	110	83	75.45
Bank 3	110	102	92.73
Bank 4	110	108	98.18
TOTAL	440	385	87.50

Demographic Data

In Table III through Table XI, demographic data concerning the respondents are presented.

Table III shows that 199 of the 385 respondents who completed the questionnaire indicated their sex as male. The 186 remaining respondents were females.

Table IV contains information regarding the ages of the respondents. The respondents in this study were typically in the 25 to 39 year age groups, with 309 (80.26 percent) of the respondents checking these age groups. The largest age group was the 30 to 39 age group with 197 (51.17 percent) of the respondents falling within this category. One respondent indicated his age was over 55 years old.

TABLE III
DISTRIBUTION OF RESPONDENTS BY SEX

Sex	Number of Respondents	Percentage
Male	199	51.69
Female	<u>186</u>	<u>48.31</u>
Total	385	100.00

TABLE IV
DISTRIBUTION OF RESPONDENTS BY AGE

Age in Years	No. of Respondents	Percentage
Under 25	32	8.31
25 - 29	112	29.09
30 - 39	197	51.17
40 - 49	38	9.87
50 - 55	5	1.30
Over 55	1	0.26
Total	385	100.00

Table V indicates the marital status of the respondents. The respondents were predominantly married employees. There were 209 (54.29 percent) married and 173 (44.93 percent) single respondents. Three respondents indicated their marital status as neither married nor single by checking the "other" item.

TABLE V
DISTRIBUTION OF RESPONDENTS BY MARITAL STATUS

Marital Status	No. of Respondents	Percentage
Married	209	54.29
Single	173	44.93
Other	3	.78
Total	385	100.00

Table VI contains data regarding the highest educational level of the respondents. The respondents represent a moderately educated group with 56.88 percent of them indicating a college degree; 43.12 percent of the respondents indicated less than a Bachelor's degree level of education.

The respondents were predominantly non-supervisory personnel from four selected Thai commercial banks. Table VII shows that 242 (62.86

percent) of the total 385 respondents indicted their job position as non-supervisors, while 143 respondents were supervisors.

TABLE VI
DISTRIBUTION OF RESPONDENTS BY EDUCATIONAL LEVEL

Education Level	No. of Respondents	Percentage
High School	123	31.95
Associate Degree	43	11.17
Bachelor's Degree	199	51.69
Master's Degree and Above	<u>20</u>	<u>5.19</u>
Total	385	100.00

TABLE VII
DISTRIBUTION OF RESPONDENTS BY JOB POSITION

Job Position	No. of Respondents	Percentage
Supervisor	143	37.14
Non-supervisor	<u>242</u>	<u>62.86</u>
Total	385	100.00

Table VIII contains data regarding the length of tenure at the respondents' bank as reported on the questionnaires. The length of employment ranged from less than three months to over 10 years. Over 30 percent (123) of the respondents had worked at their bank more than 10 years. Only four respondents indicated that they had worked in their position for less than three months.

TABLE VIII
DISTRIBUTION OF RESPONDENTS BY
LENGTH OF EMPLOYMENT AT BANK

Length of Employment	No. of Respondents	Percentage
Under 3 months	4	1.04
3 - 11 months	23	5.97
1 - 5 years	114	29.61
6 - 10 years	121	31.43
Over 10 years	<u>123</u>	<u>31.95</u>
Total	385	100.00

Table IX contains information on the number of promotions received by the respondents during their careers in their banks. It is noteworthy that almost 40 percent of the respondents, 152 in number, received two or more than two promotions as they expected during their career. However, approximately 40 percent of the respondents, 156 in

number, indicated that they had never received any promotion while they were working at their banks.

TABLE IX
DISTRIBUTION OF RESPONDENTS BY NUMBERS
OF PROMOTIONS RECEIVED

No. of Promotions Received	No. of Respondents	Percentage
None	156	40.52
One	77	20.00
Two	83	21.56
More than Two	<u>69</u>	<u>17.92</u>
Total	385	100.00

Table X indicates the strength of respondents' feelings of satisfaction as reported on part two of the questionnaire. The respondents reported a relatively moderate strength of feelings of satisfaction, with over 70 percent indicating the moderate level of feelings. Only 5.97 percent of the respondents indicated they had low feelings of satisfaction.

Table XI provides information about the strength of the respondents' feelings of dissatisfaction as reported on part three of the questionnaire. Forty-seven percent of the respondents indicated that

they had moderate feelings of dissatisfaction. Only 52 respondents (13.51 percent) indicated they had high feelings of dissatisfaction.

TABLE X
DISTRIBUTION OF RESPONDENTS BY STRENGTH
OF FEELING OF SATISFACTION

Strength of Feeling	No. of Respondents	Percentage
Low	23	5.97
Moderate	278	72.21
High	<u>84</u>	<u>21.82</u>
Total	385	100.00

TABLE XI
DISTRIBUTION OF RESPONDENTS BY STRENGTH
OF FEELINGS OF DISSATISFACTION

Strength of Feeling	No. of Respondents	Percentage
Low	149	38.70
Moderate	184	47.79
High	<u>52</u>	<u>13.51</u>
Total	385	100.00

Analysis of Overall Responses

Table XII presents the frequency, percentage, and rank of each factor appearing in the satisfying sequences for Thai respondents. The factor that was ranked by Thai respondents as the greatest source of job satisfaction was interpersonal relations-supervisor. This factor was selected by 286 out of 385 respondents (74.29 percent). The second highest ranking factor was recognition, with 248 respondents (64.42 percent) rating this factor. Ranking third and fourth were the factors of interpersonal relations-peers and work itself, with 247 respondents (64.16 percent) and 223 respondents (57.92 percent), respectively. Company policy and administration ranked fifth in the satisfying sequence with 218 respondents (56.62 percent). The sixth ranking factor was achievement with 211 respondents (54.81 percent). Only 11 respondents (2.86 percent) indicated the factor of responsibility to be a source of job satisfaction and it was ranked last.

Herzberg indicated the six most important motivation factors contributing to job satisfaction were as follows: achievement, recognition, advancement, work itself, possibility of growth, and responsibility. In this study, the six motivation factors identified by Herzberg were ranked by the Thai respondents as follows: sixth, second, eighth, fourth, eleventh, and sixteenth, respectively, in the satisfying sequences.

Table XIII indicates the frequency, percentage and rank of each factor appearing in the dissatisfying sequences for Thai respondents. The respondents in this study indicated that work itself was the greatest source of job dissatisfaction. This factor was selected by 188 out of 385 respondents (48.83 percent). Ranking second and third were

the factors of salary and company policy and administration, with 182 respondents (47.27 percent) and 178 respondents (46.23 percent), respectively. One hundred and fifty-four of the respondents (40.0 percent) rated the factor of recognition as the fourth ranking source of job dissatisfaction. The fifth and sixth ranking factors were interpersonal relations-supervisor and supervision-technical with 147 respondents (38.18 percent) and 140 respondents (36.36 percent), respectively. Personal life ranked last in the dissatisfying sequences with only eleven out of 385 respondents (2.86 percent).

TABLE XII

OVERALL FREQUENCY, PERCENTAGE, AND RANK OF EACH FACTOR APPEARING
IN THE SATISFYING SEQUENCE FOR THAI RESPONDENTS (N=385)

Factor	Frequency	Percent	Rank
Interpersonal Relations-Supervisor	286	74.29	1
Recognition	248	64.42	2
Interpersonal Relations-Peer	247	64.16	3
Work Itself	223	57.92	4
Company Policy and Administration	218	56.62	5
Achievement	211	54.81	6
Salary	196	50.91	7
Advancement	181	47.01	8
Supervision-Technical	156	40.52	9
Interpersonal Relations-Subordinates	123	31.95	10
Possibility of Growth	122	31.69	11
Working Conditions	113	29.35	12
Job Security	107	27.79	13
Status	87	22.60	14
Personal Life	78	20.26	15
Responsibility	11	2.86	16

TABLE XIII
OVERALL FREQUENCY, PERCENTAGE, AND RANK OF EACH FACTOR APPEARING
IN THE DISSATISFYING SEQUENCE FOR THAI RESPONDENTS (N=385)

Factor	Frequency	Percent	Rank
Work Itself	188	48.83	1
Salary	182	47.27	2
Company Policy and Administration	178	46.23	3
Recognition	154	40.00	4
Interpersonal Relations-Supervision	147	38.18	5
Supervision-Technical	140	36.36	6
Possibility of Growth	118	30.65	7.5
Achievement	118	30.65	7.5
Interpersonal Relations-Peers	106	27.53	9
Responsibility	92	23.90	10
Advancement	78	20.26	11
Working Conditions	75	19.48	12
Status	74	19.22	13
Interpersonal Relations-Subordinates	45	11.69	14
Job Security	29	7.53	15
Personal Life	11	2.86	16

Figure 2 presents a comparison of percentages for factors in the satisfying and dissatisfying sequences. It appeared that most of motivation factors and hygiene factors were more important as satisfiers than dissatisfiers for the Thai commercial bank employees.

Testing the Hypotheses

The Spearman Rank-Order Correlation Coefficient was used to test Hypotheses One and Two at the 0.05 level of significance.

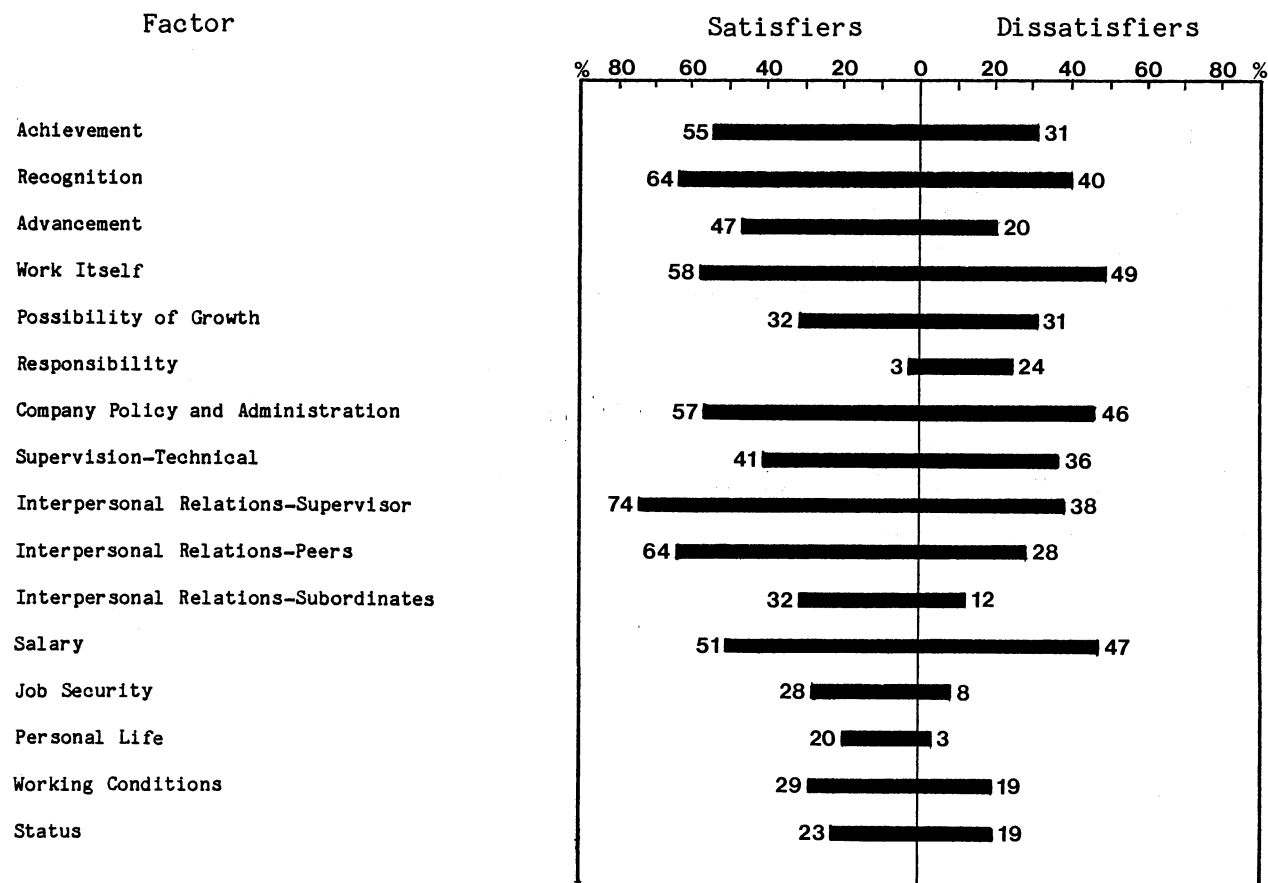


Figure 2. Comparison of Percentages for Factors in the Satisfying and Dissatisfying Sequences

H₁: For employees of selected commercial banks in Thailand and normed groups in the United States, no significant correlation exists in the rank of factors of job satisfaction.

The frequencies, percentages, and ranks of 16 factors of job satisfaction as indicated by Thai respondents (from Table XII) were compared with those of the United States normed groups (from Table I) as shown in Table XIV. The computation of the Spearman Rank-Order Correlation Coefficient yielded a Spearman rho value of 0.3485. The tabled Spearman rho value for 16 paired rankings is 0.506 at the 0.05 level of significance. The computed Spearman rho was found to be less than the tabled Spearman rho value; therefore, Hypothesis One is not rejected. The data necessary for the testing of this hypothesis is also presented in Table XIV.

H₂: For employees of selected commercial banks in Thailand and normed groups in the United States, no significant correlation exists in the rank of factors of job dissatisfaction.

This hypothesis was also tested by the Spearman Rank-Order Correlation Coefficient. Table XV contains a comparison of responses by Thai respondents and United States normed groups on the rank of 16 factors of job dissatisfaction, and includes the computation of the Spearman Rank-Order Correlation Coefficient. The calculated Spearman rho value was 0.8228. The tabled Spearman rho value for 16 paired rankings is 0.506 at the 0.05 level of significance. It was indicated that the calculated Spearman rho value was greater than the tabled Spearman rho value. The result evidenced that Hypothesis Two is rejected.

TABLE XIV

SPEARMAN RANK-ORDER CORRELATION OF THAI RESPONDENTS AND U.S. NORMED GROUPS (HERZBERG'S DATA) ON FACTORS OF JOB SATISFACTION

Factors	U.S. Normed Groups (N=228)		Thai Respondents (N=385)			d_i	d_i^2
	%	Rank	Freq.	%	Rank		
Achievement	41	1	211	55	6	- 5	25
Recognition	33	2	248	64	2	0	0
Work Itself	26	3	223	58	4	- 1	1
Responsibility	23	4	11	3	16	-12	144
Advancement	20	5	181	47	8	- 3	9
Salary	15	6	196	51	7	- 1	1
Possibility of Growth	6	7.5	122	32	11	- 3.5	12.25
Interpersonal Relations- Subordinates	6	7.5	123	32	10	- 2.5	6.25
Status	4	9.5	87	23	14	- 4.5	20.25
Interpersonal Relations- Supervisor	4	9.5	286	74	1	8.5	72.25
Interpersonal Relations- Peers	3	12	247	64	3	9	81
Supervision-Technical	3	12	156	41	9	3	9
Company Policy and Administration	3	12	218	57	5	7	49
Working Conditions	1	15	113	29	12	3	9
Personal Life	1	15	78	20	15	0	0
Job Security	1	15	107	28	13	2	4

$$d_i^2 = 443$$

$$\rho = 1 - \frac{6d_i^2}{N^3 - N} = 1 - \frac{6(443)}{4096 - 16}$$

$$= .3485(\text{ns})$$

TABLE XV

SPEARMAN RANK-ORDER CORRELATION OF THAI RESPONDENTS AND U.S. NORMED GROUPS (HERZBERG'S DATA) ON FACTORS OF JOB DISSATISFACTION

Factors	U.S. Normed Groups (N=228)		Thai Respondents (N=385)			d_i	d_i^2
	%	Rank	Freq.	%	Rank		
Company Policy and Administration	31	1	178	46	3	-2	4
Supervision-Technical	20	2	140	36	6	-40	16
Recognition	18	3	154	40	4	-1	1
Salary	17	4	182	47	2	2	4
Interpersonal Relations- Supervisor	15	5	147	38	5	0	0
Work Itself	14	6	188	49	1	5	25
Advancement	11	7.5	78	20	11	-3.5	12.25
Working Conditions	11	7.5	75	19	12	-4.5	20.25
Possibility of Growth	8	9.5	118	31	7.5	2	4
Interpersonal Relations- Peers	8	9.5	106	28	9	.5	.25
Achievement	7	11	118	31	7.5	3.5	12.25
Responsibility	6	12.5	92	24	10	2.5	6.25
Personal Life	6	12.5	11	3	16	-3.5	12.25
Status	4	14	74	19	13	1	1
Interpersonal Relations- Subordinates	3	15	45	12	14	1	1
Job Security	1	16	29	8	15	1	1

$$d_i^2 = 120.5$$

$$\rho = 1 - \frac{6d_i^2}{N^3 - N} = 1 - \frac{6(120.5)}{4096 - 16}$$

$$= .8228^*$$

*Significant at .05 level.

In order to determine the motivation factors in the relationship between job satisfaction, an analysis of variance was performed. Therefore, Hypothesis Three was tested by using Single-Classification Analysis of Variance.

H₃: Among Thai commercial bank employees, there is no significant difference between job satisfaction and job dissatisfaction for the motivation factors.

The computed F value for testing the overall motivation factors in the relationship between job satisfaction and dissatisfaction was 30.73. With 1 and 768 degrees of freedom, the F tabled value at the 0.05 level is 3.92. It was indicated that the computed F value was greater than the F tabled value. Therefore, Hypothesis Three is rejected. A summary of computed data in the testing of the hypothesis is presented in Table XVI.

TABLE XVI
ANALYSIS OF VARIANCE DATA OF OVERALL MOTIVATION FACTORS
FOR THE RELATIONSHIP BETWEEN JOB SATISFACTION AND JOB
DISSATISFACTION AS INDICATED BY THAI RESPONDENTS

Source	DF	Sum of Square	Mean Square	F value
Model	1	79.8753	79.8753	30.73*
Error	768	1996.0779	2.5991	
Total	769	2075.9532		

*Significant at 0.05 level

The motivation means of both job satisfaction and job dissatisfaction were shown in Table XVII. It was found that the motivation mean of job satisfaction was 2.58 while the motivation mean of job dissatisfaction was 1.94. Therefore, the motivation mean of job satisfaction was found to be greater than the motivation mean of job dissatisfaction.

TABLE XVII
SUMMARY OF MOTIVATION MEANS FOR JOB SATISFACTION
AND JOB DISSATISFACTION

	Satisfaction	Dissatisfaction
Motivation Mean	2.5870	1.9429

Table XVIII presents the results of analysis of variance for each motivation factor, testing the relationship between job satisfaction and job dissatisfaction. It was found that the only calculated F value of possibility of growth was not significant at the 0.05 level. The computed F values of achievement, recognition, advancement, and responsibility were all significant at the 0.0001 level and work itself was significant at the 0.05 level. It was indicated that achievement, recognition, advancement, and work itself were more important as satisfiers than dissatisfiers. However, the respondents in this study

considered the factor of responsibility to be a source of job dissatisfaction rather than of job satisfaction.

TABLE XVIII

FREQUENCY AND ANALYSIS OF VARIANCE DATA OF EACH MOTIVATION FACTOR FOR THE RELATIONSHIP BETWEEN JOB SATISFACTION AND JOB DISSATISFACTION

Motivation Factors	Satisfaction (N=385)	Dissatisfaction (N=385)	ANOVA Test	
	Frequency	Frequency	F Value	Level
Achievement	211	118	48.68	.0001
Recognition	248	154	48.79	.0001
Advancement	181	78	66.93	.0001
Work Itself	223	188	6.43	.05
Possibility of Growth	122	118	0.10	ns
Responsibility	11*	92*	81.90	.0001

*The frequency of Responsibility for job satisfaction is less than that for job dissatisfaction which is opposite from the other five motivation factors.

H₄: Among Thai commercial bank employees, there is no significant difference between job satisfaction and job dissatisfaction for hygiene factors.

Single-Classification Analysis of Variance was also used to test hypothesis four. Table XIX contains information regarding the computation of the analysis of variance of overall hygiene factors which yield an F value of 91.28. With 1 and 768 degrees of freedom, the computed F

value was significant at the 0.05 level. The result indicates that Hypothesis Four is rejected.

TABLE XIX
ANALYSIS OF VARIANCE DATA OF OVERALL HYGIENE FACTORS
FOR THE RELATIONSHIP BETWEEN JOB SATISFACTION
AND JOB DISSATISFACTION AS INDICATED BY
THAI RESPONDENTS

Source	DF	Sum of Square	Mean Square	F Value
Model	1	505.6831	505.6831	91.28*
Error	768	4254.5974	5.5398	
Total	769	4760.2805		

*Significant at 0.05 level.

Table XX presents the hygiene means of job satisfaction and job dissatisfaction, which were 4.18 and 2.56 respectively. It was found that the hygiene mean of job satisfaction was greater than the hygiene mean of job dissatisfaction.

The findings of an analysis of variance for each hygiene factor in testing the relationship between job satisfaction and job dissatisfaction is shown in Table XXI. The calculated F values of three hygiene factors were found to be non-significant at the 0.05 level. These factors were supervision-technical, salary, and status. It was found

that the computed F values of company policy and administration, and working conditions were significant at the 0.05, level while the computed F values of the five remaining hygiene factors were significant at the 0.0001 level. Seven hygiene factors were identified by Thai respondents to be more important as satisfiers than dissatisfiers. These seven hygiene factors were company policy and administration, interpersonal relations-supervisor, interpersonal relations-peers, interpersonal relations-subordinates, job security, personal life, and working conditions.

TABLE XX
SUMMARY OF HYGIENE MEANS FOR JOB SATISFACTION
AND JOB DISSATISFACTION

	Satisfaction	Dissatisfaction
Hygiene Mean	4.1844	2.5636

H_5 : Among Thai commercial bank employees, there is no significant correlation in how male employees and female employees rank factors of job satisfaction.

The Spearman Rank-Order Correlation Coefficient was used to analyze the correlation in ranking the factors of job satisfaction between male and female employees (Hypothesis Five). The computed Spearman rho value

TABLE XXI

FREQUENCY AND ANALYSIS OF VARIANCE DATA OF EACH HYGIENE FACTOR FOR
THE RELATIONSHIP BETWEEN JOB SATISFACTION AND JOB DISSATISFACTION

Hygiene Factors	Satisfaction (N=385)	Dissatisfaction (N=385)	ANOVA Test	
	Frequency	Frequency	F Value	Level
Company Policy and Administration	218	178	8.39	.05
Supervision-Technical	156	140	1.40	ns
Interpersonal Relations- Supervisor	286	147	117.21	.0001
Interpersonal Relations- Peers	247	106	119.92	.0001
Interpersonal Relations- Subordinates	123	45	49.16	.0001
Salary	196	182	1.02	ns
Job Security	107	29	58.30	.0001
Personal Life	78	11	61.43	.0001
Working Conditions	113	75	10.27	.05
Status	87	74	1.33	ns

or testing the difference was 0.9551. With 16 paired rankings, the tabled Spearman rho value at the 0.05 level of significance was 0.506. Thus, the computed Spearman rho value is significant at the 0.05 level and the hypothesis is rejected. The frequencies and ranks of 16 factors of job satisfaction indicated by male and female employees, including the result of computed Spearman rho values, are shown in Table XXII. It was found that male respondents ranked some factors which contributed to their job satisfaction the same as female respondents did. That is, they ranked interpersonal relations-supervisor, recognition, and interpersonal relations-peers as the first, second, and third rankings, respectively. Furthermore, both male and female respondents also ranked personal life and responsibility as the fifteenth and sixteenth ranking factors of job satisfaction. There were 11 factors, however, which male respondents ranked differently than female respondents did.

H_6 : Among Thai commercial bank employees, there is no significant correlation in how male employees and female employees rank factors of job dissatisfaction.

Using the Spearman Rank-Order Correlation Coefficient to test Hypothesis Six, it was found that the calculated Spearman rho value was 0.9382, as presented in Table XXIII. The tabled Spearman rho value for 16 paired rankings is 0.506 at the 0.05 level of significance. The computed Spearman rho value was found to be greater than the tabled Spearman rho value. The result indicates that Hypothesis Six is rejected. Table XXIII also shows the frequencies and ranks of 16 factors of job dissatisfaction as identified by male employees and female employees. The first three factors of job dissatisfaction identified by male respondents were company policy and administration,

TABLE XXII
SPEARMAN RANK-ORDER CORRELATION OF MALE AND FEMALE RESPONDENTS
ON FACTORS OF JOB SATISFACTION

Factors	Male (N=199)		Female (N=186)		d_i	d_i^2
	Frequency	Rank	Frequency	Rank		
Interpersonal Relations- Supervisor	148	1	138	1	0	0
Recognition	128	2	121	2	0	0
Interpersonal Relations- Peers	126	3	120	3	0	0
Company Policy and Administration	122	4	96	6	-2	4
Work Itself	121	5	102	4	1	1
Achievement	111	6	100	5	1	1
Salary	110	7	86	8	-1	1
Advancement	94	8	87	7	1	1
Supervision-Technical	82	9	74	9	0	0
Possibility of Growth	75	10	47	12	-2	4
Job Security	70	11	37	14	-3	9
Interpersonal Relations- Subordinates	63	12.5	60	10	2.5	6.5
Working Conditions	63	12.5	50	11	1.5	2.25
Status	47	14	40	13	1	1
Personal Life	45	15	33	15	0	0
Responsibility	6	16	5	16	0	0

$$d_i^2 = 30.5$$

$$\rho = 1 - \frac{6d_i^2}{N^3 - N} = 1 - \frac{6(30.5)}{4096 - 16}$$

$$= .9551^*$$

*Significant at the 0.05 level.

salary, and work itself; whereas, female respondents considered work itself, salary, and recognition, respectively, to be the first three factors contributing to their job dissatisfaction. However, both male and female respondents selected the same ranking for the last three factors of job dissatisfaction. These factors were interpersonal relations-subordinates, job security, and personal life.

H₇: Among Thai commercial bank employees, there is no significant correlation in how supervisors and non-supervisors rank factors of job satisfaction.

The Spearman Rank-Order Correlation Coefficient was used to determine the correlation between how supervisors and non-supervisors in Thai commercial banks rank factors relating to their job satisfaction. Table XXIV presents a comparison of frequencies and ranks of 16 factors of job satisfaction as indicated by supervisors and non-supervisors. Table XXIV also presents the results of the computed Spearman rho value which was 0.6949. With 16 paired rankings, this computed Spearman rho value was significant at the 0.05 level. Thus, Hypothesis Seven is rejected. From Table XXIV, supervisors indicated that interpersonal relations-superiors, work itself, interpersonal relations-peers, and interpersonal relations-subordinates, respectively, were the four greatest sources of job satisfaction. Non-supervisors identified the first four ranking factors of job satisfaction as follows: interpersonal relations-supervisor, recognition, interpersonal relations-peers, and achievement, respectively. Responsibility was ranked by both supervisors and non-supervisors as the last ranking factor relating to job satisfaction.

TABLE XXIII
SPEARMAN RANK-ORDER CORRELATION OF MALE AND FEMALE RESPONDENTS
ON FACTORS OF JOB DISSATISFACTION

Factors	Male (N=199)		Female (N=186)		d_i	d_i^2
	Frequency	Rank	Frequency	Rank		
Company Policy and Administration	106	1	72	5	-4	16
Salary	99	2	83	2	0	0
Work Itself	95	3	93	1	2	4
Recognition	80	4	74	3	1	1
Supervision-Technical	77	5	63	6	-1	1
Interpersonal Relations-Supervisor	74	6	73	4	2	4
Possibility of Growth	63	7	55	8	-1	1
Achievement	57	8	61	7	1	1
Interpersonal Relations-Peers	56	9	50	9	0	0
Responsibility	48	10	44	11	-1	1
Status	46	11	28	13	-2	4
Working Conditions	39	12	36	12	0	0
Advancement	33	13	45	10	3	9
Interpersonal Relations-Subordinates	24	14	21	14	0	0
Job Security	17	15	12	15	0	0
Personal Life	7	16	4	16	0	0

$d_i^2 = 42$

$$\rho = 1 - \frac{6d_i^2}{N^3 - N} = 1 - \frac{6(42)}{4096 - 16}$$

$$= .9382^*$$

*Significant at the 0.05 level.

TABLE XXIV
SPEARMAN RANK-ORDER CORRELATION OF SUPERVISORS AND
NON-SUPERVISORS ON FACTORS OF JOB SATISFACTION

Factors	Supervisors (N=143)		Non-Supervisors (N=242)		d_i	d_i^2
	Frequency	Rank	Frequency	Rank		
Interpersonal Relations- Supervisor	107	1	179	1	0	0
Work Itself	97	2	125	7	-5	25
Interpersonal Relations- Peers	94	3.5	153	3	.5	.25
Interpersonal Relations- Subordinates	94	3.5	29	15	-11.5	132.25
Recognition	90	5	157	2	3	9
Company Policies and Administration	88	6	130	5	1	1
Achievement	80	7	131	4	3	9
Advancement	70	8	111	8	0	0
Salary	67	9	129	6	3	9
Working Conditions	56	10	57	12	-2	4
Supervision-Technical	55	11	101	9	2	4
Possibility of Growth	53	12	69	10	2	4
Status	46	13	41	13	0	0
Job Security	45	14	62	11	3	9
Personal Life	39	15	38	14	1	1
Responsibility	3	16	8	16	0	0

$d_i^2 = 207.5$

$$\rho = 1 - \frac{6d_i^2}{N^3 - N} = 1 - \frac{6(207.5)}{4096 - 16}$$

$$= .6949^*$$

*Significant at the 0.05 level.

H_8 : Among Thai commercial bank employees, there is no significant correlation in how supervisors and non-supervisors rank factors of job dissatisfaction.

The above hypothesis was tested by using the Spearman Rank-Order Correlation Coefficient. The frequencies and ranks of 16 factors of job dissatisfaction identified by supervisors are compared with those of non-supervisors in Table XXV. The calculated Spearman rho value for testing the correlation coefficient difference was 0.8449, as shown in Table XXV. The tabled Spearman rho value for 16 paired rankings is 0.506 at the 0.05 level. The computed Spearman rho value was greater than the tabled Spearman rho value; therefore, Hypothesis Eight is rejected. It was found that the four highest ranking factors identified by supervisors as sources of job dissatisfaction were company policy and administration, work itself, recognition, and interpersonal relations-supervisor, respectively. The non-supervisors considered salary, work itself, company policy and administration, and recognition, respectively, to be the four most important factors contributing to their job dissatisfaction. Job security and personal life were the last ranking factors of job dissatisfaction indicated by supervisors. The non-supervisors pointed out that personal life was the last ranking factor associated with job dissatisfaction.

Summary

Respondents and demographic data and the results of the Spearman Rank-Order Correlation and Single-Classification Analysis of Variance used to test the hypotheses of the study are presented in this chapter. The first and second hypotheses were tested by using the Spearman

TABLE XXV
SPEARMAN RANK-ORDER CORRELATION OF SUPERVISORS AND
NON-SUPERVISORS ON FACTORS OF JOB DISSATISFACTION

Factors	Supervisors (N=143)		Non-Supervisors (N=242)		d_i	d_i^2
	Frequency	Rank	Frequency	Rank		
Company Policies and Administration	77	1	101	3	-2	4
Work Itself	63	2	125	2	0	0
Recognition	57	3.5	97	4	.5	.25
Interpersonal Relations-Supervisor	57	3.5	90	5	1.5	2.25
Supervision-Technical	55	5	84	7	-2	4
Salary	54	6	127	1	5	25
Achievement	41	7	77	8	-1	1
Responsibility	34	8.5	58	11	2.5	6.25
Interpersonal Relations-Peers	34	8.5	72	9	.5	.25
Advancement	32	10	45	13	3	9
Possibility of Growth	29	11	88	6	5	25
Interpersonal Relations-Subordinates	27	12	18	15	-3	9
Working Conditions	21	13	54	12	1	1
Status	11	14	63	10	4	16
Job Security	5	15.5	24	14	1.5	2.25
Personal Life	5	15.5	6	16	-.5	.25

$d_i^2 = 105.5$

$$\rho = 1 - \frac{6d_i^2}{N^3 - N} = 1 - \frac{6(105.5)}{4096 - 16}$$

$$= .8449^*$$

*Significant at .05 level.

Rank-Order Correlation. The first hypothesis was not rejected in that no significant correlation existed on the rank of factors of job satisfaction for employees of selected commercial banks in Thailand and normed groups in the United States. The second hypothesis was rejected in that there was a significant correlation on the rank of factors of job dissatisfaction for Thai commercial bank employees and United States normed groups.

Single-Classification Analysis of Variance was used to test the third and fourth hypotheses. The third hypothesis was rejected in that there was a significant difference between job satisfaction and job dissatisfaction for the motivation factors among Thai bank employees. It appears that the motivation mean of job satisfaction was greater than the motivation mean of job dissatisfaction. The fourth hypothesis was also rejected in that among Thai respondents, there was a significant difference between job satisfaction and job dissatisfaction for the hygiene factors. The hygiene mean of job satisfaction was found to be greater than the hygiene mean of job dissatisfaction.

Hypothesis Five through Hypothesis Eight concerned how male and female employees, supervisors and non-supervisors rank factors of job satisfaction and job dissatisfaction. These four hypotheses were tested by using Spearman Rank-Order Correlation. It was found that Hypothesis Five through Hypothesis Eight were all rejected because significant correlations were found. The results indicate that significant correlations exist between male and female employees, and between supervisors and non-supervisors when ranking the factors of job satisfaction and job dissatisfaction.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Statistical findings related to the demographic data and the eight major hypotheses of the study were reported in the previous chapter. The present chapter presents a summary of the study, a summary of the findings, conclusions from the findings, recommendations, and recommendations for further study.

Summary of the Study

This study was designed to test employee motivation in four selected Thai commercial banks based on Herzberg's motivation-hygiene theory. The purpose of the study was to identify those factors which contributed to job satisfaction and to job dissatisfaction in a population from Thai respondents. In addition, the results of Thai respondents were compared with the United States normed groups (Herzberg's data from the original study) in order to describe the similarities and the differences in factors of job satisfaction and job dissatisfaction.

A questionnaire was developed to obtain data from employees of four selected commercial banks in Bangkok, Thailand. The sample consisted of 440 employees, made up of 110 employees from each bank. There were 385 (87.5 percent) respondents who completed the questionnaire. The respondents were asked to check 29 positive meaning items which caused

them to feel satisfied about their job and also to check 29 negative meaning items which caused them to feel dissatisfied about their job. Each respondent was also requested to describe selected demographic data including sex, age, marital status, education level, job position, length of employment at the bank, numbers of promotions received as he or she expected during his or her career, strength of feeling regarding job satisfaction and regarding job dissatisfaction.

There were eight hypotheses which were tested in this study. These hypotheses were indicated as the following:

- H₁: For employees of selected commercial banks in Thailand and normed groups in the United States, no significant correlation exists on the rank of factors of job satisfaction.
- H₂: For employees of selected commercial banks in Thailand and normed groups in the United States, no significant correlation exists on the rank in factors of job dissatisfaction.
- H₃: Among Thai commercial bank employees, there is no significant difference between job satisfaction and job dissatisfaction for the motivation factors.
- H₄: Among Thai commercial bank employees, there is no significant difference between job satisfaction and job dissatisfaction for the hygiene factors.
- H₅: Among Thai commercial bank employees, there is no significant correlation in how male employees and female employees rank factors of job satisfaction.
- H₆: Among Thai commercial bank employees, there is no significant correlation in how male employees and female employees rank factors of job dissatisfaction.

H₇: Among Thai commercial bank employees, there is no significant correlation in how supervisors and non-supervisors rank factors of job satisfaction.

H₈: Among Thai commercial bank employees, there is no significant correlation in how supervisors and non-supervisors rank factors of job dissatisfaction.

The third and fourth hypotheses were tested by using Single-Classification Analysis of Variance. The Spearman Rank-Order Correlation was used to test the significant correlation of the six remaining hypotheses which were the first and second hypotheses, and the fifth through the eighth hypotheses.

Summary of Findings

Following is a summary of the test results for each of the eight hypotheses.

The first hypothesis was not rejected in that significant correlation in the rank of factors of job satisfaction did not exist between employees of selected commercial banks in Thailand and normed groups in the United States. Thus, the factors of job satisfaction identified by Thai respondents did not vary significantly from the United States normed groups' factors of job satisfaction.

The second hypothesis was not accepted because a significant correlation was found to exist between the rank of factors of job dissatisfaction identified by Thai respondents and those factors ranked by the United States normed groups. Therefore, it was found that for employees of selected commercial banks in Thailand and normed groups in

the United States, there is a significant correlation in the rank of factors of job dissatisfaction.

The third hypothesis was not accepted because a significant difference was also found to exist between the two group means of the motivation factors for job satisfaction and job dissatisfaction. The motivation mean of job satisfaction was found to be significantly greater than the motivation mean of job dissatisfaction. In addition, it was also found that four out of six motivation factors were more important as satisfiers than dissatisfiers for Thai respondents. These factors were achievement, recognition, advancement, and work itself.

The fourth hypothesis was not accepted because the result of the analysis of variance was significant. Therefore, there is a significant difference indicated by Thai respondents between job satisfaction and job dissatisfaction for the hygiene factors. The hygiene mean of job satisfaction, however, was found to be significantly greater than the hygiene mean of job dissatisfaction. It was also found that seven hygiene factors were identified by Thai respondents to be more important as satisfiers than dissatisfiers. These seven factors were company policy and administration, interpersonal relations-supervisor, interpersonal relations-peer, interpersonal relations-subordinates, job security, personal life, and working conditions.

The fifth hypothesis was not accepted in that, among Thai commercial bank employees, there was a significant correlation in how male employees and female employees ranked factors of job satisfaction. Interpersonal relations-supervision, recognition, interpersonal relations-peers, company policy and administration, and work itself were ranked respectively as the five greatest factors of job satisfaction for

male employees. Female employees indicated that the five highest ranking factors contributing to their job satisfaction were as follows: interpersonal relations-supervisor, recognition, interpersonal relations-peers, work itself, and achievement.

The sixth hypothesis was not accepted because a significant correlation existed in how male and female employees ranked factors of job dissatisfaction. The five highest ranking factors related to job dissatisfaction as identified by male employees were company policy and administration, salary, work itself, recognition, and supervision-technical; whereas female employees ranked work itself, salary, recognition, interpersonal relations-supervisor and company policy and administration as their five top ranking factors of job dissatisfaction.

The seventh hypothesis was also not accepted because a significant correlation was found to exist between the ranking factors of job satisfaction identified by supervisors and non-supervisors. The supervisors indicated that their five greatest sources of job satisfaction were interpersonal relations-supervisor, work itself, interpersonal relations-peers, interpersonal relations-subordinates, and recognition. It was found that interpersonal relations-supervisor, recognition, interpersonal relations-peers, achievement and company policy and administration, respectively, were the five most important factors contributing to the job satisfaction of non-supervisors.

The last hypothesis was also not accepted in that among Thai commercial bank employees, there was a significant correlation in how supervisors and non-supervisors ranked factors of job dissatisfaction. It was found that the five highest ranking factors associated with the supervisors' job dissatisfaction were company policy and administration,

work itself, recognition, interpersonal relations-supervisor, and supervision-technical; while salary, work itself, company policy and administration, recognition, and interpersonal relations-supervisor, respectively, were considered by non-supervisors to be the five greatest sources of job dissatisfaction.

Conclusions

The following conclusions are drawn as a result of this study:

1. Since the findings of this study indicate that four out of six motivation factors are significantly more important as satisfiers than dissatisfiers, this seems to indicate that the motivation factors are mainly related to job satisfaction for Thai commercial bank employees. These results support and are in basic agreement with Herzberg's motivation-hygiene theory regarding sources of job satisfaction. However, the findings of this study indicate that the respondents considered seven out of ten hygiene factors to be significant satisfiers, rather than dissatisfiers. This data does not match the data collected from studies done with United States population. Thus, it appears that, for the employees of selected Thai commercial banks involved in this study, only partial support can be expressed for the Herzberg motivation-hygiene theory.
2. The four motivation factors relating to Thai commercial bank employees' job satisfaction are achievement, recognition, advancement, and work itself.
3. The seven hygiene factors identified as satisfiers by Thai respondents are company policy and administration,

interpersonal relations-supervisor, interpersonal relations-peers, interpersonal relations-subordinates, job security, personal life, and working conditions.

4. Responsibility is the only motivation factor which was significant as a dissatisfier rather than satisfier for Thai respondents.
5. The factors of job satisfaction ranked by Thai commercial bank employees did not vary significantly from the United States normed groups' ranking of factors of job satisfaction. It appears that the motivation factors are mainly related to job satisfaction for both the Thai respondents and the United States normed groups.
6. A significant correlation was found to exist in factors of job dissatisfaction identified by Thai respondents and the United States normed groups. It appears that the United States normed groups considered the hygiene factors to be dissatisfiers, but the Thai respondents indicated the hygiene factors to be satisfiers.
7. Among Thai commercial bank employees, the five greatest sources of job satisfaction are interpersonal relations-supervisor, recognition, interpersonal relations-peers, work itself, and company policy and administration.
8. Among Thai commercial bank employees, the five highest ranking factors for job dissatisfaction are work itself, salary, company policy and administration, recognition, and interpersonal relations-supervisor.

9. The factors of job satisfaction ranked by male employees are significantly correlated from the ranking of factors indicated by female employees. However, it was found that both male and female employees rank interpersonal relations-supervisor, recognition, and interpersonal relations-peers as the three most important factors of job satisfaction.
10. A significant correlation was found to exist between male employees' and female employees' ranking of factors of job dissatisfaction. Company policy and administration, salary, and work itself were the three highest ranking factors of male employee job dissatisfaction while the three most important dissatisfiers for female employees were work itself, salary, and recognition.
11. There is a significant correlation between supervisors' and non-supervisors' ranking of factors of job satisfaction. The supervisors indicate that interpersonal relations-supervisor, work itself, and interpersonal relations-peers are the three most important satisfiers; whereas, the three greatest satisfiers for non-supervisors are interpersonal relations-supervisor, recognition, and interpersonal relations-peers. Both supervisors and non-supervisors ranked the same first and third factors contributing to job satisfaction.
12. The factors of job dissatisfaction ranked by supervisors varied significantly from non-supervisors' ranking of factors of job dissatisfaction. The four highest ranking job dissatisfaction factors for the supervisors are company policy and administration, working itself, recognition, and

interpersonal relations-supervisor. The non-supervisors consider salary, work itself, company policy and administration, and recognition as the four greatest sources of job dissatisfaction.

Recommendations

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

1. To improve the effectiveness of management in commercial banks, especially in Thailand, administrators and managers should utilize the findings of this study and focus additional attention on Herzberg's motivation-hygiene theory for improving employee motivation. Specifically they might examine the factors presented in Table XII as they were found to be applicable to this specific population.
2. Administrators and managers of commercial banks should incorporate some of Herzberg's ideas relating to sources of job satisfaction and sources of job dissatisfaction found in this study into the management, employee training and education programs in order to assist managers in motivating employees to work effectively.

Recommendations for Further Study

As a result of this study, the following recommendations regarding further study are made.

1. Despite the fact that a number of motivational studies directly related to Herzberg's motivation-hygiene theory have been

conducted since Herzberg's original study was published in 1959, there are still many divergent findings and conclusions. Additional studies in several areas are needed to clarify the controversy.

2. As the sample used in the present study was limited to employees from the four largest commercial banks in Bangkok, Thailand, a replication of this study with employees at other banks in other parts of the country or world should be accomplished in order to have a higher degree of generalization or to discover if different results occur.
3. Additional research should be conducted to determine the influence of demographic data such as sex, age, educational level, income, etc., on factors of job satisfaction and on factors of job dissatisfaction.
4. A replication of this study using different methodology for data collection and analysis, with a similar population of commercial bank employees, might be made. This sort of study may help to further clarify and to further validate the findings.

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APPENDIXES

APPENDIX A

INTRODUCTORY LETTER SENT TO THE
PERSONNEL MANAGERS



Oklahoma State University

COLLEGE OF EDUCATION
RESEARCH AND PROJECTS

STILLWATER, OKLAHOMA 74074
GUNDERSEN HALL
(405) 624-6508

408 Classroom Building

May 17, 1982

To Whom It May Concern:

Miss Chirarak Sithiphand, a doctoral candidate in the Department of Occupational and Adult Education at Oklahoma State University, Oklahoma, USA, is doing her dissertation research under my direction. Her research is directed to the study of employee motivation in Thai commercial banks. She is in need of your assistance to complete this research.

Objectives of the research are: (1) to describe the relationship of employees in their work environment in Thai commercial banks, (2) to describe sources of job satisfaction and job dissatisfaction within the bounds of Herzberg's two factor theory, and (3) to identify sources of motivation which may enhance the ability for management to motivate employees of commercial banks in Thailand.

The results will be of value to the participating banks in general by identify the motivator and hygiene factors which cause employees to have job satisfaction and dissatisfaction. Managers and supervisors will benefit in understanding how better to motivate employees to perform high quality work in an efficient way.

The accompanying "Questionnaire and Instructions" will be used to help obtain information about why employees want to work sometimes and why they do not want to work at other times.

Miss Sithiphand will be visiting your office soon to describe the assistance she needs and to answer any questions you may have concerning this research. I am hopeful that you will be able to participate in this study, and thank you in advance for your assistance with this research. Your efforts are appreciated.

Sincerely,

John L. Baird, B.S., M.S., Ed.D.
Director of Research
Associate Professor of
Occupational and Adult Education

/vp

APPENDIX B

OUTLINE OF INSTRUCTIONS GIVEN TO
EACH RESPONDENT

OUTLINE OF INSTRUCTIONS GIVEN TO RESPONDENTS

We would like to invite you to participate in the study which is used as a doctoral dissertation at the Oklahoma State University, Oklahoma, USA. This study will indicate why sometimes you want to work, and conversely, why you do not desire to work at other times.

In answering the questionnaires, your name is not used and the information given by you will be kept strictly confidential. No person at any bank will be permitted to see any completed questionnaires.

Meaning of Some Words. In this study, some words may be used in a different way than you use them.

1. Strongly motivated, enthusiastic, or satisfaction mean when you have good or high feelings about your job at a time when you really want to work. However, these words do not mean that you are happy, because sometimes you may want to work but you are not happy.

2. Dissatisfaction means when you have bad or low feelings about your job at a time when you do not want to work. This word is used only for times when you are unhappy and at the same time you do not want to work.

3. Incident, or situation refers to an event, or one thing that made you want to work (satisfaction), or made you not want to work (dissatisfaction). It could occur where you work or any other place of this bank. The incident might have occurred on the job you have now or on any other job that you have had with the bank.

4. Job means everything in both you do for the bank and this bank does for you.

Instructions

1. Take the page with the word "SATISFACTION" at the top. Read the directions carefully. Think of something that occurred on the job you have or any other job you have had with this bank that made you feel good about your job. Now look from the 95-item list and check only the item(s) that made you feel good in the blank space provided in front of the items. If you have specific things which are not included in 95-item, please specify them in the last item.

2. After you have checked about your good feelings, turn to the next page. Please read the directions at the top of the page carefully, and then read and understand each question before you answer. You are required to answer all the questions. Do not skip any. Your answers will explain in detail about you just before the event occurred that you stated on the front pages.

3. After finishing steps (1) and (2), take the page with word "DISSATISFACTION" at the top. Do the same way as you did on the "SATISFACTION" page, but this time think of something that occurred and made you feel bad about your job. Then turn to the next page and answer all of the questions. These answers will show about you just before the event occurred which made you feel bad.

4. After finishing steps (1), (2), and (3), collect all the pages, and place them on the table near the exit before you leave.

Thank you for your cooperation. Your efforts are appreciated.

APPENDIX C

QUESTIONNAIRE

PART I

GENERAL BACKGROUND INFORMATION

For each of the following questions, please check the item corresponding to your status.

1. Please check one: (a) Male (b) Female
2. How old are you? (a) Under 25 (b) 25 - 29
(c) 30 - 39 (d) 40 - 49
(e) 50 - 55 (f) Over 55
3. Your marital status: (a) Married (b) Single (c) Other
4. The highest level of your education: (a) High School Graduate (b) Associate Degree
(c) Bachelor's Degree (d) Master's Degree or Above
5. Are you a supervisor? (a) Yes (b) No
6. How long have you been working in this bank? (a) Under 3 months (b) 3 - 11 months
(c) 1 - 5 years (d) 6 - 10 years
(e) Over 10 years
7. Have you received as many promotions as you expected during your career in this bank? (a) None (b) One
(c) Two (d) More than Two

PART II

SATISFACTION

Please study the following statements and check all of the factors that caused you to feel strongly motivated and enthusiastic about your job which could have occurred on your present job or on other jobs you have held at this bank.

- _____ 1. Seeing results of work.
- _____ 2. Work praised.
- _____ 3. Idea accepted by company.
- _____ 4. Received advancement.
- _____ 5. Varied job.
- _____ 6. Creative (challenging) job.
- _____ 7. Opportunity to do a whole job--all phases.
- _____ 8. Growth in skills, or in status (advancement).
- _____ 9. Allowed to work without supervision.
- _____ 10. Effective organization of work.
- _____ 11. Beneficial personnel policies.
- _____ 12. High company status.
- _____ 13. Supervisor competent.
- _____ 14. Supervisor delegated work well.
- _____ 15. Friendly relations with supervisor.
- _____ 16. Supervisor went to bat for you with management.
- _____ 17. Supervisor willing to listen to suggestions.
- _____ 18. Supervisor gave credit for work done.
- _____ 19. Cooperation of people you worked with.
- _____ 20. Liked people you worked with.
- _____ 21. Good working relationship with subordinates.

- _____ 22. Received wage increase.
- _____ 23. Amount of salary.
- _____ 24. Wages compare favorably with others doing similar or same job.
- _____ 25. Tenure or other objective signs of job security.
- _____ 26. Community and other outside situations.
- _____ 27. Work in social surroundings.
- _____ 28. Good physical surroundings.
- _____ 29. Having a given status.
- _____ 30. Other (Please specify) _____

31. How strong was/is your feeling of satisfaction?
- (a) Low
- (b) Moderate
- (c) High

PART III

DISSATISFACTION

Please study the following statements and check all of the factors that caused you to feel dissatisfied about your job which could have occurred on your present job or on any other job you have held at this bank.

- _____ 1. Not seeing results of work.
- _____ 2. Work blamed or critized.
- _____ 3. Good idea(s) not accepted.
- _____ 4. Failed to receive expected advancement.
- _____ 5. Routine job.
- _____ 6. Too easy job.
- _____ 7. Too difficult job.
- _____ 8. Lack of opportunity for growth.
- _____ 9. Lack of responsibility.
- _____ 10. Harmful or ineffective organization of work.
- _____ 11. Harmful personnel policies.
- _____ 12. Low company status.
- _____ 13. Supervisor incompetent.
- _____ 14. Supervisor tried to do everything himself.
- _____ 15. Supervisor did not support you with management.
- _____ 16. Supervisor unwilling to listen to suggestions.
- _____ 17. Supervisor withheld credit.
- _____ 18. Lack of cooperation on the part of your co-workers.
- _____ 19. Did not like people you work with.
- _____ 20. Poor working relationship with subordinates.
- _____ 21. Did not receive expected wage increase.

- _____ 22. Amount of salary.
- _____ 23. Wages compare unfavorably with others doing similar or same job.
- _____ 24. Lack of objective signs of security (i.e., company instability).
- _____ 25. Family problems.
- _____ 26. Poor physical surroundings.
- _____ 27. Too much work.
- _____ 28. Too little work.
- _____ 29. Not having a given status.
- _____ 30. Other (Please specify) _____

- 31. How strong was/is your feeling of dissatisfaction?
 - (a) Low
 - (b) Moderate
 - (c) High

APPENDIX D

ODD-EVEN RELIABILITY COMPUTATIONS FOR JOB
SATISFACTION INSTRUMENT

THE ODD-EVEN METHOD

FORMULA USED:

$$1. \text{ Correlation Coefficient: } r_{oe} = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

Where: r_{oe} = the coefficient of correlation between the two halves;

$\sum XY$ = summation of the two halves;

$(\sum X)(\sum Y)$ = summation X times summation Y;

$\sum X^2$ = summation of squared scores for X (odd);

N = the number of items;

$\sum Y^2$ = summation of squared scores for Y (even);

$(\sum X)^2$ = summation X, quantity squared;

$(\sum Y)^2$ = summation Y, quantity squared.

$$2. \text{ Spearman-Brown: } r_{tt} = \frac{2r_{oe}}{1 + r_{oe}}$$

Where: r_{tt} = the reliability coefficient of the entire test.

COMPUTATIONS

$$r_{oe} = \frac{30(879) - (120)(130)}{\sqrt{30(868) - (120)^2} \sqrt{30(998) - (130)^2}}$$

$$= \frac{26370 - 15600}{\sqrt{11640} \sqrt{13040}}$$

$$r_{oe} = .8742$$

$$r_{tt} = \frac{2(.8742)}{1 + .8742}$$

$$= .9329$$

APPENDIX E

ODD-EVEN RELIABILITY COMPUTATIONS FOR JOB
DISSATISFACTION INSTRUMENT

THE ODD-EVEN METHOD

FORMULA USED:

$$1. \text{ Correlation Coefficient: } r_{oe} = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

Where: r_{oe} = the coefficient of correlation between the two halves;

$$2. \text{ Spearman-Brown: } r_{tt} = \frac{2r_{oe}}{1 + r_{oe}}$$

Where: r_{tt} = the reliability coefficient of the entire test.

COMPUTATIONS

$$r_{oe} = \frac{30(447) - (103)(84)}{\sqrt{30(549) - (103)^2} \sqrt{30(434) - (84)^2}}$$

$$= \frac{13410 - 8652}{\sqrt{5861} \sqrt{5964}}$$

$$r_{oe} = .8048$$

$$r_{tt} = \frac{2(.8048)}{1 + .8048}$$

$$= .8918$$

APPENDIX F

FACTORS USED TO CODE RESPONSES INTO
MOTIVATION AND HYGIENE CATEGORIES

FACTORS USED TO CODE RESPONSES INTO THE
MOTIVATION AND HYGIENE CATEGORIES

01 Achievement:

1. Successful completion of a job, or aspect of it.
2. Th having of a good idea--a solution to a problem.
3. Made money for the company.
4. Vindication--demonstration of rightness to doubter or challengers.
5. Failure in job, or aspect of it.
6. Seeing results of work.
7. Not seeing results of work.

02 Recognition:

1. Work praised--no reward.
2. Work praised--reward given.
3. Work noticed--no praise.
4. Work not noticed.
5. Good idea(s) not accepted.
6. Inadequate work blamed of critized--no punishment.
7. Inadequate work blamed or critized--punishment given.
8. Successful work blamed or critized--no punishment.
9. Successful work blamed or critized--punishment given.
10. Credit for work taken by supervisor or other.
11. Idea accepted by company.

03 Advancement:

1. Received unexpected advancement.
2. Received advancement (expected or expectation not mentioned).
3. Failed to receive expected advancement.
4. Demotion.

04 Work Itself:

1. Routine.
2. Varied.
3. Creative (challenging).
4. Too easy.
5. Too difficult.
6. Opportunity to do a whole job--all phases.

05 Possibility of Growth:

1. Growth in skills--objective evidence.
2. Growth in status (advancement)--objective evidence.
3. Lack of opportunity for growth--objective evidence.

06 Responsibility:

1. Allowed to work without supervision.
2. Responsible (for his own efforts).
3. Given responsibility for the work of others.
4. Lack of responsibility.
5. Given new responsibility--no formal advancement.

07 Company Policy and Administration:

1. Effective organization of work.
2. Harmful or ineffective organization of work.
3. Beneficial personnel policies.
4. Harmful personnel policies.
5. Agreement with company goals.
6. Disagreement with company goals.
7. High company status.
8. Low company status.

08 Supervision - Technical:

1. Supervisor competent.
2. Supervisor incompetent.
3. Supervisor tried to do everything himself.
4. Supervisor delegated work well.
5. Supervisor consistently critical.
6. Supervisor showed favoritism.
7. (Situations involving staff employees included here.)

09 Interpersonal Relations - Supervisor:

1. Friendly relations with supervisor.
2. Unfriendly relations with supervisor.
3. Learned a great deal from supervisor.
4. Supervisor went to bat for him with management.
5. Supervisor did not support him with management.
6. Supervisor honest.
7. Supervisor dishonest.

09 Interpersonal Relations - Supervisor (Continued):

8. Supervisor willing to listen to suggestions.
9. Supervisor unwilling to listen to suggestions.
10. Supervisor gave credit for work done.
11. Supervisor withheld credit.

10 Interpersonal Relations - Peers:

1. Like people he worked with.
2. Did not like people he worked with.
3. Cooperation of people he worked with.
4. Lack of cooperation on the part of his co-workers.
5. Was part of a cohesive group.
6. Was isolated from the group.

11 Interpersonal Relations - Subordinates:

1. Good working relationship with subordinates.
2. Poor working relationship with subordinates.
3. Good personal relationship with subordinates.
4. Poor personal relationship with subordinates.

12 Salary:

1. Received wage increase (expected or expectation not mentioned).
2. Received unexpected wage increase.
3. Did not receive expected increase.
4. Received wage increase less or later than expected.
5. Amount of salary.
6. Wages compare favorably with others doing similar or same job.
7. Wages compare unfavorably with other doing similar or same job.

13 Job Security:

1. Tenure or other objective signs of job security.
2. Lack of objective signs of security (i.e., company instability).

14 Personal Life:

1. Family problems.
2. Community and other outside situations.
3. Family needs and aspirations salary wise.

15 Working Conditions:

1. Work isolated.
2. Work in social surroundings.
3. Good physical surroundings.
4. Poor physical surroundings.
5. Good facilities.
6. Poor facilities.
7. Right amount of work.
8. Too much work.
9. Too little work.

16 Status:

1. Signs or appurtenances of status.
2. Having a given status.
3. Not having a given status.

APPENDIX G

OUTLINE OF INSTRUCTIONS AND QUESTIONNAIRE

(THAI VERSION)

แบบสอบถามเพื่อการศึกษาเกี่ยวกับพนักงานของธนาคาร

เรามีความยินดีขอเรียนเชิญท่านเข้ามีส่วนร่วมในการทำวิทยานิพนธ์ของปริญญาเอก
ณมหาวิทยาลัย โอคลาโฮมา สเตท สหรัฐอเมริกา วัตถุประสงค์ในการทำวิจัยนี้ เพื่อ
แสดงให้เห็นว่า ทำไมในบางครั้งท่านจึงมีความต้องการทำงาน แต่ในบางครั้งกลับไม่ต้อง
การทำงาน

ในการตอบแบบสอบถามนี้ ท่านไม่ต้องระบุชื่อ รายละเอียดของท่านจะถูกเก็บรักษา
ไว้เป็นความลับ

ความหมายของศัพท์ ในการวิจัยนี้ ศัพท์บางคำอาจมีความหมายแตกต่างไปจาก
ที่ท่านเคยใช้

ก. แรงจูงใจ, ความกระตือรือร้น, ความพอใจ หมายความว่า เวลาที่ท่าน
มีอารมณ์ดีและความรู้สึกพร้อมที่จะทำงาน อย่างไรก็ตามศัพท์พวกนี้ไม่ได้หมายความว่า ท่าน
มีความสุขในการทำงาน เพราะบางครั้งท่านมีความต้องการทำงานแต่ไม่มีความสุข
ในงานชิ้นนั้น

ข. ความไม่พอใจ หมายความว่า เมื่อท่านอารมณ์ไม่ดีหรือมีความรู้สึกไม่
พร้อมที่จะทำงาน ศัพท์คำนี้จะถูกใช้เมื่อเวลาที่ท่านไม่มีความสุข และขณะเดียวกันท่าน
ไม่ต้องการทำงาน

คำแนะนำ แบบสอบถามนี้แบ่งออกเป็น ๓ ส่วน คือ

ส่วนที่ ๑ รายละเอียดของผู้ตอบแบบสอบถาม

ส่วนที่ ๒ หัวข้อ " ความพอใจ "

ส่วนที่ ๓ หัวข้อ " ความไม่พอใจ "

กรุณาตอบแบบสอบถามทั้ง ๓ ส่วน โปรดอ่านและทำความเข้าใจรายละเอียดของ
หัวข้อก่อนตอบคำถามแต่ละส่วน เมื่อท่านตอบคำถามทั้ง ๓ ส่วนเรียบร้อยแล้ว กรุณาพับ
แบบสอบถามทั้งหมดและใส่ซองที่แนบมา ปิดผนึก และนำส่งต่อให้กับหัวหน้าแผนกของท่าน
ขอกราบขอบพระคุณ ท่านอย่างสูงที่ให้ความร่วมมือในการทำวิจัยครั้งนี้

ส่วนที่ ๑ รายละเอียดของผู้ตอบแบบสอบถาม

ใน ๘ คำถามต่อไปนี้ เป็นรายละเอียดเกี่ยวกับตัวท่าน โปรดอ่านคำถามให้เข้าใจ
ก่อนตอบคำถามทุกข้อ กรุณาอย่าข้ามหรือว่างเว้นคำถาม

โปรดเลือกคำตอบที่ตรงกับความเป็นจริงของท่าน

- | | | |
|-----------------|-----------------|----------------------------|
| ๑. เพศ | (ก) ชาย | (ข) หญิง |
| ๒. อายุ | (ก) น้อยกว่า ๒๕ | (ข) ๒๕ - ๒๙ (ค) ๓๐ - ๓๔ |
| | (ง) ๔๐ - ๔๔ | (จ) ๔๐ - ๔๔ (ฉ) เกิน ๔๔ ปี |
| ๓. สภาวะการสมรส | (ก) แต่งงานแล้ว | (ข) โสด (ค) อื่น ๆ |

๔. ระดับการศึกษาสูงสุดของท่าน (ก) มัธยมศึกษาตอนปลาย
 (ข) อนุปริญญา (ค) ปริญญาตรี (ง) ปริญญาโท หรือ สูงกว่า
๕. ท่านมีตำแหน่งเป็นหัวหน้าหน่วยงาน (ก) ใช่ (ข) ไม่ใช่
๖. ระยะเวลาที่ท่านทำงานในธนาคารแห่งนี้ (ก) ต่ำกว่า ๓ เดือน
 (ข) ๓ - ๑๑ เดือน (ค) ๑ - ๕ ปี (ง) ๖ - ๑๐ ปี
 (จ) มากกว่า ๑๐ ปี
๗. ในระหว่างที่ท่านทำงานที่ธนาคารแห่งนี้ จำนวนครั้งที่ท่านได้รับการเลื่อนตำแหน่งตามที่ท่านคาดคิดว่าท่านสมควรได้รับการเลื่อนตำแหน่งนั้น ๆ
 (ก) ไม่เคย (ข) ๑ ครั้ง
 (ค) ๒ ครั้ง (ง) มากกว่า ๒ ครั้ง

ส่วนที่ ๒ "ความพอใจ"

โปรดกากะบาทเฉพาะข้อ ที่ท่านเห็นว่าเป็นสาเหตุ หรือเป็นแรงจูงใจที่ทำให้ท่านเกิดความพอใจหรือกระตือรือร้นในการทำงานในธนาคารแห่งนี้ โดยสามารถเลือกตอบได้มากกว่า ๑ ข้อ

๑. เมื่อได้เห็นผลงานที่ทำได้แล้ว
๒. การได้รับค่าตอบแทนจากงานที่ทำ
๓. เมื่อหัวหน้างานยอมรับฟังความเห็นของท่านบ้าง
๔. ท่านเห็นความก้าวหน้าในการทำงาน
๕. ท่านได้มีโอกาสได้ทำงานอย่างเต็มความสามารถ
๖. งานที่ท่านอยู่เป็นงานที่ท้าทายความสามารถ
๗. ท่านมีอำนาจในการทำงานหรือสั่งงานได้เต็มที่
๘. งานที่ท่านนั้นเป็นงานซึ่ง เปิดโอกาสให้ท่านก้าวขึ้นไปในตำแหน่งที่สูงขึ้น
๙. งานที่ท่านอยู่ไม่มีหัวหน้างานโดยตรง
๑๐. ท่านทำงานอยู่ในหน่วยงานที่มีประสิทธิภาพในการทำงานสูง
๑๑. ธนาคารมีนโยบายจ่ายเงินปันผลให้แก่พนักงาน
๑๒. ธนาคารแห่งนี้มีความมั่นคง
๑๓. ท่านมีหัวหน้างานที่มีความสามารถสูง
๑๔. หัวหน้างานของท่านแบ่งหน้าที่รับผิดชอบได้อย่างเหมาะสม
๑๕. ท่านเข้ากับหัวหน้างานได้เป็นอย่างดี
๑๖. หัวหน้างานให้ความช่วยเหลือเมื่อท่านมีปัญหา
๑๗. หัวหน้างานยินดีรับฟังคำแนะนำของท่านบ้าง
๑๘. ท่านได้รับความเชื่อถือและไว้วางใจจากหัวหน้างาน จากผลงานที่ผ่านมา
๑๙. การได้รับความร่วมมือเป็นอย่างดีจากเพื่อนร่วมงาน
๒๐. ท่านชอบเพื่อนร่วมงาน
๒๑. ท่านได้รับความร่วมมือจากลูกน้องหรือผู้ใต้บังคับบัญชาเป็นอย่างดี

๒๒. เมื่อท่านได้รับเงินเดือนเพิ่มอย่าง เป็นที่พอใจ
๒๓. พอใจในเงินเดือนที่ได้รับ
๒๔. รายได้หรือผลตอบแทนจากการทำงานในธนาคารแห่งนี้เป็นแรงจูงใจเมื่อเปรียบเทียบกับแห่งอื่น
๒๕. ท่านรู้สึกว่างานที่มั่นคง
๒๖. สภาพแวดล้อมของชุมชนและสังคมในธนาคารจูงใจให้อยากทำงาน
๒๗. งานที่ท่านทำส่งผลให้ท่านมีฐานะทางสังคมสูงขึ้น
๒๘. สถานที่ทำงานเป็นแรงจูงใจ
๒๙. ท่านทำงานอย่างมีค่าแห่งแน่นอน
๓๐. สาเหตุอื่นๆ นอกเหนือจากนี้ (กรุณาระบุเป็นข้อๆ)

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๓๑. ระดับความพอใจหรือกระตือรือร้นในการทำงานของท่าน

(ก) น้อย (ข) ปานกลาง (ค) สูง

ส่วนที่ ๓ "ความไม่พอใจ"

โปรดกากะบาทเฉพาะข้อที่ท่านเห็นว่าเป็นสาเหตุหรือเป็นแรงผลักดันที่ทำให้ท่านเกิดความไม่พอใจในการทำงานในธนาคารแห่งนี้ โดยสามารถเลือกตอบได้มากกว่าหนึ่งข้อ

๑. เมื่อท่านไม่เห็นผลงานที่ท่านทำไปแล้ว
๒. ผลงานถูกตำหนิหรือวิพากษ์วิจารณ์เกินกว่าเหตุ
๓. เมื่อท่านเห็นว่าความเห็นนั้นก็แต่ไม่เป็นที่ยอมรับ
๔. ไม่ได้เลื่อนตำแหน่งตามที่คาดหวังไว้
๕. งานที่ท่านทำเป็นงานซ้ำซาก, น่าเบื่อ
๖. งานง่ายเกินไป ท่านไม่มีโอกาสได้ใช้ความสามารถอย่างเต็มที่
๗. งานที่ท่านทำเป็นงานยุ่งยากเกินไปและเกินความสามารถของท่าน
๘. งานที่ท่านทำนั้นไม่เปิดโอกาสให้ท่านก้าวขึ้นไปรับตำแหน่งที่สูงขึ้น
๙. งานไม่เปิดโอกาสให้ท่านรับผิดชอบเต็มที่
๑๐. งานที่ท่านทำเป็นงานที่ล้าหลังล้าสมัยหรือท่านเห็นว่าหน่วยงานที่ท่านทำอยู่นั้นขาดระบบงานที่มีประสิทธิภาพ
๑๑. ท่านเห็นว่านโยบายทางด้านการบุคลากรของหน่วยงานทำให้ท่านประสบความยุ่งยาก
๑๒. ความไม่มั่นคงของธนาคาร
๑๓. การมีหัวหน้างานที่ขาดความสามารถ
๑๔. หัวหน้างานรวบอำนาจ
๑๕. หัวหน้างานไม่ช่วยเหลือปกป้องท่านเมื่อท่านมีปัญหาเกี่ยวกับหน้าที่การงาน

๑๖. หัวหน้างานไม่ชอบรับฟังข้อ เสนอแนะของท่าน
๑๗. หัวหน้างานไม่ให้ความไว้วางใจหรือเชื่อใจในตัวท่าน
๑๘. ผู้ร่วมงานไม่ให้ความร่วมมือเท่าที่ควร
๑๙. ท่านไม่ชอบเพื่อร่วมงาน
๒๐. ลูกน้องหรือผู้ใต้บังคับบัญชาไม่ยอมให้ความร่วมมืออย่างเต็มที่
๒๑. เมื่อท่านไม่ได้รับรายได้หรือผลตอบแทนตามที่ท่านคาดหวังไว้
๒๒. ท่านเห็นว่าเงินเดือนค่าเงินไปสำหรับท่าน
๒๓. รายได้หรือผลตอบแทนจากงานที่ท่านทำในธนาคารแห่งนี้ค่าเงินไปเมื่อเทียบกับบุคคลอื่นที่ทำงานในระดับเดียวกันกับท่าน
๒๔. ท่านมอง เห็นถึงความไม่มั่นคงของกิจการของธนาคารแห่งนี้
๒๕. ปัญหาครอบครัว เป็นอุปสรรคในการทำงานของท่าน
๒๖. สถานที่ทำงาน เป็นอุปสรรคต่อการทำงานของท่าน
๒๗. ความไม่พอใจเกิดจากงานมากเกินไป
๒๘. ความไม่พอใจเกิดจากงานน้อยเกินไป
๒๙. งานของท่านไม่มีค่าแห่งที่แน่นอน
๓๐. สาเหตุอื่น ๆ นอกจากนี้ (กรุณาระบุเป็นข้อ ๆ)
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๓๑. ระดับความไม่พอใจในการทำงานของท่าน
- (ก) น้อย (ข) ปานกลาง (ค) สูง

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VITA

Chirarak Sithiphand

Candidate for the Degree of

Doctor of Education

Thesis: TESTING EMPLOYEE MOTIVATION BASED ON HERZBERG'S MOTIVATION-HYGIENE THEORY IN SELECTED THAI COMMERCIAL BANKS

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