

INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International
300 North Zeeb Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 8HR

77-12,724

ABRAHAM, Yohannan T., 1939-
EMPLOYEE TENURE: A STUDY OF EMPLOYEE TURNOVER
AND RETENTION INVOLVING EMPLOYEE BACKGROUND,
JOB SATISFACTION, AND REASONS FOR STAYING.

The University of Oklahoma, Ph.D., 1976
Business Administration

Xerox University Microfilms, Ann Arbor, Michigan 48106

THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

EMPLOYEE TENURE: A STUDY OF EMPLOYEE TURNOVER AND RETENTION INVOLVING
EMPLOYEE BACKGROUND, JOB SATISFACTION, AND REASONS FOR STAYING

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
DOCTOR OF PHILOSOPHY

BY
YOHANNAN T. ABRAHAM
Norman, Oklahoma

1976

EMPLOYEE TENURE: A STUDY OF EMPLOYEE TURNOVER AND RETENTION INVOLVING
EMPLOYEE BACKGROUND, JOB SATISFACTION, AND REASONS FOR STAYING

APPROVED BY

Burt K. Scanlon

Robert M. Wilson

Jack A. Fuller

J. P. Herrick

ACKNOWLEDGEMENTS

The author is sincerely grateful to Professor Burt K. Scanlan, Dissertation Advisor, for his guidance, support, and encouragement during the course of this research. The prompt feedback given by Professor Scanlan at various stages of the dissertation has been a strong catalyst toward the completion of this study.

Grateful appreciation is also extended to Professor Roger M. Atherton for the special role which he played. It was Professor Atherton who introduced the author to the research problem and he has played an active role in all phases of this research.

The author wishes to thank Professors Jack A. Fuller, Theodore P. Herrick, and the Late Vernon Upchurch who in their respective roles as members of the Dissertation Committee have provided timely counsel and advice.

Professors L. Doyle Bishop, William H. Keown, Ronald B. Shuman, Donald A. Woolf, and Daniel A. Wren, either directly or indirectly, have been sources of inspiration and encouragement to this author.

Special thanks go to Mr. Russell Ash and Mr. Frank Couch, Plant Manager and Personnel Manager, respectively, of Kelsey Axle and Brake Division of Kelsey-Hays Company. The active support and whole-hearted cooperation of the Kelsey management and personnel of the Kelsey Company made this study possible.

The administrative support and encouragement provided by the author's employer, Southwest Missouri State University, are gratefully acknowledged.

Mrs. Michal Wren and Miss Nancy Harding provided outstanding secretarial assistance at various stages of this dissertation.

The author owes special tribute to the Late Mr. A. Lee Miller and Mrs. Doris Miller of Austin, Minnesota, whose act of kindness paved the way for his higher education. The prayerful vigil of the author's wife, Tessa, and children Susan Doris and John Lee provided the much needed fortitude. Finally, the author is thankful to his families, many friends, and colleagues for their support and encouragement.

Yohannan T. Abraham

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
LIST OF FIGURES	vii
 Chapter	
I. INTRODUCTION	1
Statement of Problem	3
Statement of Purpose	6
Research Questions	7
Scope and Limitations	9
Justification for the Research	13
Plan of Presentation	18
II. REVIEW OF LITERATURE	19
Individuals and Organizations	23
Research Activities in Employee Turnover	39
Studies Using Job Satisfaction Inventories to Predict Turnover	43
Weighted Application Blanks: A Natural Offspring of Biographical Data	48
A Postlude to Weighted Application Blanks	61
Summary and Conclusions	65
III. RESEARCH METHODOLOGY	66
Special Exclusions	67

Chapter	Page
III. RESEARCH METHODOLOGY (Continued)	
Part I: Analysis of Biographical Data and Development of Weighted Application Blank	69
Sample and Procedures	70
Items to be Analyzed	74
Determining Item Weights	75
Cross-Validation of the Weights	82
Validity Generalization	87
Part II: Job Satisfaction Survey	87
Survey Instrument	88
Research Questions	90
Sample and Procedures	91
Data Analysis	92
Part III: Reasons for Staying Survey	97
Survey Instrument	97
Research Questions	98
Sample and Procedures	98
Data Analysis	99
Tentative Expected Findings	99
Summary and Conclusions	101
IV. RESULTS OF THE STUDY	102
Introduction	102
Results: Part I - Analysis of Biographical Data - Development of Weighted Application Blank and Double Cross-Validation	103
Items Analyzed	104
Determining Item Weights	104

Chapter	Page
IV. RESULTS OF THE STUDY (Continued)	
Cross-Validation	108
Validity Generalization	113
Discussion	115
Results: Part II - Job Satisfaction Survey	118
Job Satisfaction Areas Investigated	118
Survey Findings	119
Discussion	122
Results: Part III - Reasons for Staying Survey	128
Reasons for Staying Investigated	129
Survey Findings	130
Discussion	135
Synthesis of Results	137
V. SUMMARY AND CONCLUSIONS	140
Summary of the Study	140
Major Findings and Implications	143
Analysis of Biographical Data and Development of Weighted Application Blank	143
Job Satisfaction Survey	147
Reasons for Staying Survey	153
Conclusions	156
Recommendations for the Company	158
BIBLIOGRAPHY	165
APPENDICES	175

LIST OF FIGURES

FIGURE		Page
1-1	Selected Economic Indicators for the Seminole County	17
2-1	The Effects of Environmental Factors on Employees at Various Skill and Job Satisfaction Levels	22
2-2	Differences in the Characteristics of Formal Fit and Climate Fit in the Certain Manufacturing Task and the Uncertain Research Task	31
2-3	Summary of Studies Using Various Techniques for Predicting Labor Turnover	41
2-4	Summary of Relationships in Validation Studies Using Various Methods for Predicting A Criterion of Labor Turnover	42
2-5	Review of Validation Studies Using Biographical Data for Predicting a Criterion of Labor Turnover	46
2-6	Number of Motivational, Maintenance (Hygiene), and External Environmental Reasons for Staying Among 12 Employee Classifications	63
3-1	Analysis of Biographical Data and Development of Weights Work Sheet	76
3-2	Strong's Tables of Net Weights for Differences in Per Cents	80
3-3	Table of Assigned Weights Derived from Net Weights	81
3-4	Tilton's Estimation of Percentage Overlap Table	86
3-5	Traditional and Revised Weights for Direct Scoring of JDI items	94
3-6	JDI Expected Scores under Various Assumptions . .	96

Figure		Page
4- 1	Sample Structure Used in the Weighted Application Blank Study	105
4- 2	Analysis of Biographical Data and Development of Weights Work Sheet	106
4- 3	Summary of Weights Used in Scoring Application Blank Items	109
4- 4	Distribution of Total Scores on Weighted Application Blank for Long-Tenure as Compared with Short-tenure Employees	110
4- 5	Obtaining a Cut-Off Score by Using "Maximum Differentiation"	111
4- 6	Distribution of Total Scores on Validity Generalization of Weighted Application Blank	114
4- 7	Differentiation Achieved between Long- Tenure and Short-Tenure Factory Employees in Double Cross-Validation of a Weighted Application Blank	117
4- 8	Raw Scores of the Job Satisfaction Survey	120
4- 9	Summary of Job Satisfaction Survey	123
4-10	Summary of Job Satisfaction Survey (Graphical)	124
4-11	Overall Satisfaction With Job	127
4-12	Most Frequently Cited Reasons for Staying on the Job	131
4-13	Response Pattern to Motivational Reasons for Staying	133
4-14	Response Pattern to Maintenance Reasons for Staying	134
5- 1	JDI Scales Statistics for Female and Male Employees	150

EMPLOYEE TENURE: A STUDY OF EMPLOYEE TURNOVER AND RETENTION INVOLVING
EMPLOYEE BACKGROUND, JOB SATISFACTION, AND REASONS FOR STAYING

CHAPTER I

INTRODUCTION

One problem facing most organizations today is personnel turnover. In hiring new employees, personnel managers hope to recruit and train employees who will render long periods of productive service. For one reason or another, however, turnover remains a chronic problem, requiring considerable attention. The magnitude of the turnover problem is evidenced by a recent estimate which places the cost of turnover in American industry at eleven billion dollars a year. This estimate includes the costs of recruitment, selection, and training of employees (Augustine, 1972, p. 62-1).

It is not managerial insensitivity to the turnover problem, but its complexity that creates difficulty for many managers to face it squarely. Part of this complexity stems from the fact that while the problem is omnipresent, its causes are not necessarily universal. In other words, turnover in a particular organization has its own unique set of factors. Because of this, there is no standard prescription available to deal with turnover on an across the board basis. Each situation must be dealt with as if it were unique.

The stated or assumed reasons for employee turnover are often not the real ones. For instance, an individual may say he is quitting his job because of the hours of employment, but the real reason may be that the work is not really challenging. Consequently, it is necessary to go below the surface and identify the real reasons so that the problem, rather than its symptoms, is analyzed.

Referring to the broad managerial responsibilities of personnel administration, Wendell French (1974, p. 115) suggests that in addition to selecting, utilizing, and developing the most qualified people and the most appropriate technology, management should (1) create an organizational environment in which non-productive and costly defensive behavior (such as absenteeism and turnover) is minimized and (2) create an organization in which people have an opportunity to give expression to their higher needs through successful accomplishment. French's views imply that employee turnover is a result of organizational imperfections characterized by such things as nonsupportive leadership, poor job design, and lack of opportunity for growth and development. While this may be true in many instances, it is also possible that turnover is an a priori phenomenon. In other words, there may be many factors in an individual's make-up that predestine subsequent job behavior regardless of organizational characteristics. Minimizing absenteeism and turnover may first require an examination of the predeterminative variables which may then be followed by a modification of organizational policies and environmental factors. Thus, it is imperative that all factors which influence individual behavior on the job be examined and understood.

Statement of Problem

Employee turnover can exist even in organizations where most employment variables appear to be operating at an optimal level. For example, a firm may experience a serious turnover problem even though tasks may require no abnormal effort, the wage structure is better than average for the area, management exhibits a genuine concern for the welfare of its employees, the firm provides an open channel of communication to maintain harmonious relations with its employees, the working conditions appear to be comfortable and adequate, and the overall personnel policies appear to be relatively good.

One possible explanation for the above inconsistency is due to individual attributes of employees. These include such things as biographic and demographic information of a person's total background consisting of age, place of residence, education, previous experience, and family responsibilities as evidenced by marital status and number of dependents. One or more of these factors could relate to length of tenure, level of job satisfaction, productivity, and career advancement. Better personnel selection could be achieved if a pattern of relationships can be identified between individual background and subsequent job behavior.

Statement of Purpose

The purpose of this research is three-fold:

1. The study is intended to explore and investigate the differences between long-tenure and short-tenure employees with respect to their biographic-demographic background and to identify those attributes that seem to encourage long tenure. (Research Questions I and II located

in the following section address this part of the research.)*

The underlying rationale for this part of the research is based on the assumption that unique characteristics can be attributed to employees who either stay with their employers or leave the company. The identification of these factors can enable an organization to strengthen its selection methods so as to maximize the number of potentially long-tenure employees and minimize the number of potentially short-tenure applicants. This study examines one means of accomplishing the minimization of short-term employment through weighted application blank and analyze its effectiveness.

2. The study also attempts to determine the extent of job satisfaction expressed by present employees. For each decision to select an employee there is an implicit assumption that the relationship will be a lasting and pleasant one. It is commonly believed that the degree of job satisfaction affects an employee's tenure in the organization. Therefore, clearer understanding of job satisfaction levels of present personnel can provide better perception of the motives behind their decision to remain with the company. The Cornell Job Descriptive Index (JDI) will be administered to measure satisfaction with job. This instrument measures satisfaction with five major aspects of job, namely, work, supervision, pay, promotion, and co-workers. (Subquestions A, B, C, D, and E of Research Question III deal with these issues.)

*The decision to examine research questions rather than to test formal hypotheses was necessitated by the exploratory/investigatory nature of this study.

3. Although a positive relationship may exist between job satisfaction and employee tenure, this is not a universal phenomenon since other factors also contribute to employee turnover. For example, it has been shown that long tenure is possible even if employees show no positive attitude toward their jobs. A job satisfaction survey, therefore, can provide only partial answers to reasons for turnover. The third purpose of this study is to search for additional reasons why employees continue to remain with a particular company. The survey instrument Why Do You Stay With Your Company? will be administered to present employees. This instrument examines three specific areas of reasons for staying: motivational (job content), maintenance (job environment), and external environmental reasons. (The respective research questions applicable to this part are subquestions F, G, and H of Research Question III.)

This triadic investigation should provide a better understanding of turnover and tenure than would be the case if only one area was examined in isolation.

Research Questions

- I. To investigate the difference between long-tenure and short-tenure employees in terms of their respective backgrounds. The present application blank will be used as a source of data.
- II. To develop a weighted application blank using the biographical information found in the application blanks of the long-tenure and short-tenure groups and to determine whether the weighted application

blank could have predicted turnover with both statistical significance and practical importance.

III. To investigate whether the present employees show a positive attitude (satisfaction) toward their jobs, and to explore the possible reasons for their continued presence in the organization as outlined in the following subquestions:

- A. To investigate whether the current employees are satisfied with their work.
- B. To investigate whether the current employees are satisfied with their supervision.
- C. To investigate whether the current employees are satisfied with their pay.
- D. To investigate whether the current employees are satisfied with their promotions.
- E. To investigate whether the current employees are satisfied with their co-workers.
- F. To investigate whether the current employees remain with the company for motivational reasons.
- G. To investigate whether the current employees remain with the company for maintenance reasons.
- H. To investigate whether the current employees remain with the company for external environmental reasons.

Justification for the Research

One thrust of this research centers around the analysis of biographical data as found in the application blanks and the development of a weighted application blank which could serve as a useful tool in separating potentially long-tenure and short-tenure employees. There are several studies which support the usefulness of the weighted application blank in predicting a number of success criteria, including employee tenure. In spite of this, only a few organizations are reported to use weighted application blanks as part of their selection procedures.

Use of Unweighted Application Blank in Employee Selection

The unweighted application blank is a universally used instrument and there exists a great deal of similarity in the items covered in application blanks used in selecting employees of a given occupational category. It is a well recognized fact that these instruments contain a wealth of information. However, many times the application blank is used very superficially, especially in hiring blue-collar workers (French, 1974, p. 270).

Because of the universality of its use, the unweighted application blank is a familiar item both to the applicants and to the personnel manager. In terms of the cost of design and production, the application blank is perhaps one of the least expensive of the several selection tools used today.

Most applicants view the application blank as a means of providing information about themselves and feel comfortable about completing it without any feeling of pressure or tension that might arise if certain screening tests were administered. The applicant knows that the employer

may, if so inclined, verify the contents of the application blank. Thus, of all the sources a manager may use to gather information about a potential employee, the application blank perhaps provides the most accurate and the least expensive information.

Utility of Weighted Application Blank in Employee Selection

A case for using the weighted application blank can be made on the basis of several observations and findings. In requesting information on application blanks there is an implicit assumption that such data will enable the manager to predict subsequent job behavior (French, 1974, p. 270):

In general, it would appear that the application blank has considerable "face validity" (obvious correctness or correctness on the surface) in that relevant past performance is probably a good predictor of future performance. It would be reasonable to assume, however, that the majority of firms in the U.S. have not performed statistical studies to discover to what extent the various items on the application blanks do indeed predict success.

Thus, analysis of application blank items can reveal certain items that are better predictors than others. Once these items are identified, weights may be statistically assigned to them. Subsequent application blanks may be scored routinely for selection purposes. The administrative expense is very nominal relative to the potential benefits. Likewise, the technique, once worked out, does not require extensive training to administer. A properly developed weighted application blank enhances the usefulness of an already known and existing selection instrument to a much higher level.

Job Satisfaction, Reasons for Staying and Employee Tenure

The weighted application blank findings are to be corroborated with the analysis of job satisfaction and the reasons for staying with

the company. A careful survey of the literature on weighted application blanks, job satisfaction, and reasons for staying did not show any instance where all these factors have been considered in one setting. This study sets itself apart from previous studies by examining not only the background data which separate short-tenure and long-tenure employees but also the issue of job satisfaction and the reasons for staying with a firm.

Heretofore, studies using weighted application blanks to reduce turnover have dealt primarily with developing and validating the weights. While this in itself is a healthy sign as far as the efforts directed at reducing turnover are concerned, this author shares the feelings expressed by Flowers and Hughes (1973, p. 49):

Many companies spend a great amount of time and money investigating the causes of employee turnover--for example, through programs of exit interviews. Usually the intent behind such studies is to find out why people leave, the idea being that if a company can identify the reasons for termination, it can work to hold terminations, and turnover, down.

The overemphasis on reducing turnover, though inadvertently, may have resulted in gross neglect of another key issue, that is, the reasons for employees' staying with an organization. The reason for this neglect is perhaps the tacit assumption that: (1) those who continue their membership do so because they are satisfied with the work, the organization, and the job environment; and (2) the ones who terminate do so because they are dissatisfied with the work, the organization, and the job environment. Consequently, many studies are designed to identify the negative elements in the work environment which allegedly contributed to the turnover via exit interviews or post-employment surveys. Such assumptions are not true in all cases (Flowers and Hughes, 1973, p. 49):

The question of turnover rate looms large for management, and companies have traditionally focused considerable attention on why employees leave. However, the reasons why employees stay are equally or more important to a company that seeks to maintain a motivated, productive work force. After all, some people stay in their jobs for reasons that have nothing to do with their jobs or with the company, and such employees may lack the motivation to do more than they absolutely must to stay afloat. On the other hand, employees with high motivation may leave for reasons unrelated to their work, reasons which the company could act to neutralize. . . . From the viewpoint of a company's policies on employment and turnover, the reasons why people stay in their jobs are just as important as the reasons why they leave them.

It would seem reasonable to assume that turnover in a particular firm is due to low satisfaction with the job. But this does not need to be true in all cases. According to the highlights of the Flowers-Hughes (1973) study:

1. Low skill employees feel bound principally by benefits, family responsibilities, the difficulty of finding another job, personal relationships with co-workers, loyalty to the company, and simple financial pressures.
2. Moderate skill employees feel roughly the same, but they seem somewhat less sensitive to environmental factors. Loyalty to the company, however, was cited more frequently.
3. Managers offer quite a different profile. They stay mainly for reasons related to their jobs themselves and community ties; the difficulty of finding another job, family responsibilities, and company loyalty exert relatively less influence on them.

With these revelations, it behooves one to go beyond just looking at what type of people stay on a job and what type of people leave the job. It is also necessary to examine the feelings of those who stay with the firm so as to find out whether they are satisfied with their jobs and therefore stay on their jobs. If not, it is imperative that management know the reasons for their staying so that it can better direct its resources in its attempts to reduce turnover and obtain increased commitment from personnel. For these reasons both the level of satisfaction and the reasons for staying with the firm are examined.

Although this research is addressed to a particular firm, it might prove to be of use in other similar situations as well. The state of Oklahoma is constantly seeking out industries to locate in various parts of the state. Industries, in turn, are in search of locations where favorable conditions prevail. The availability of information regarding the type and quality of labor force in a particular area can provide guidelines to potential investors in their manpower planning, employee training programs and other personnel practices. As an adjunct to this, the employer may be called upon to develop the local talent to the point where it can become productive. Consequently, the awareness of the peculiarities of a given labor market is essential to designing jobs, training programs, orientation programs, and supervisory selection.

In summary, it is expected that this research will result in both theoretical and practical contributions to the field of management. From an academic-theoretical point of view, the research is an integrated study. Instead of looking at three crucial issues in isolation, this study looks at all in one setting which enables one to deal with the totality of the problem. The finding of this research can provide the impetus for further research and understanding of employee behavior.

From a practical standpoint, the research will have an immediate impact on the company. Assuming that the weighted application blank is found to be valid, the utility of an existing selection device is improved. This would mean some tangible benefits to the firm in terms of better manpower management and reduced personnel costs. The firm can direct its attention to other crucial issues instead of engaging in a constant battle to maintain a stable workforce. It can tailor its motivational

efforts with increased understanding and realize greater effectiveness.

A weighted application blank developed in conjunction with an examination of the level of satisfaction and reasons for staying provides a better tool in dealing with the questions of turnover and employee retention than would be the case if a weighted application blank were developed without also examining these other related, but often neglected and very important areas. Beyond this, as best as can be determined from the literature, this study represents a first in terms of the integrated analysis of employee turnover. The review of literature presented in the following chapter supplements and expands on the foregoing remarks regarding the need for and the relevance of this study.

Scope and Limitations of the Research

Several studies have been carried out in the past dealing with employee turnover and job satisfaction (Taylor and Weiss, 1972; Ross and Zander, 1957; Brayfield and Crockett, 1955). Several researchers (Nevo, 1976; Robinson, 1972; Novack, 1970; Fleishman and Berniger, 1969; Schuh, 1967a and 1967b; Durnette, et al., 1960) have advocated the use of weighted application blank in attempts directed at reducing turnover. Since the firm in this study does not presently use a systematic analysis of application blank data to predict turnover, a weighted application blank will be developed from the information available in the application blanks of its present and former employees. The weighted application blank can then be used to predict the potential tenure of job applicants at the time of employment interview. The underlying reason is the assumption that there should be identifiable differences between the long-tenure and short-tenure groups in their respective backgrounds.

While the weighted application blank is useful in predicting a number of success criteria such as performance on the job, accident rate, length of service, absenteeism and other employee behaviors, length of service is the focal point of this study. Since the study was conducted among routine manufacturing employees, the findings will be applicable primarily to this type of occupational grouping.

Weighted application blanks are known to suffer from decreases in their predictive power over extended periods of time. This would warrant periodic review and revalidation of the weights so as to maintain the effectiveness of the instrument. Several studies dealing with weighted application blanks have been criticized for using the same sample both to develop the weights and to validate the weights, as this practice can result in overestimating the validity of the weighted application blank. Likewise, there has not been any consistency in the manner in which the results have been reported, making any direct comparison somewhat of a problem. In this study, separate weighting groups and validation groups will be used and the findings will be reported using the Percent Overlap measure, a method claimed to be more meaningful for this type of study.

There is a widespread assumption that those who maintain their organizational membership do so because they are satisfied with the job and the job environment. More specifically, long tenure connotes satisfaction with the job. This possibility will be explored by investigating the job satisfaction of present employees and their reasons for staying with the company. In the Flowers-Hughes study cited elsewhere, it was suggested that employees may remain with a company for motivational, maintenance, or external environmental reasons as well as a combination of these reasons. To an employer committed to having a motivated work

force, it is essential to know what causes the employees to stay with the firm in order to provide the kind of reinforcement that will help improve employee morale and motivation. The multiple orientation of this study should bring into closer focus the factors that are relevant to the high turnover that might exist in a particular situation. The two surveys dealing with satisfaction with job and reasons for staying were conducted among the present employees. The Job Descriptive Index measures satisfaction with various dimensions of the job rather than with the job as a whole. The survey instrument used to determine the reasons for staying with the company contains three sets of questions dealing with motivational, maintenance, and external environmental reasons with eleven, nine, and forty questions respectively in each set. On the surface it appears heavily loaded with external environmental reasons as opposed to having a balanced distribution of the three sets of reasons. However, the instrument is reported to possess validity. This, plus the relevancy of the issues addressed to by the questionnaire favored the use of the instrument Why Do You Stay At Your Company?

Since the various parts of the research deal with different aspects of a related issue and each part is measured in a different way no direct comparison of the findings will be possible. At the same time it is expected that the various parts of the study will elucidate and illuminate each other.

For the sake of clarity certain methodological and technical limitations relative to the type and composition of samples used, age of the organization, and timing of the survey are described later on where they are apt to be more appropriate.

Locale of Study

The setting for the study was a manufacturing firm located near Oklahoma City where labor turnover has been a serious problem. The company began its operations in early 1971 with a handful of employees. By the end of 1974 its payroll carried approximately one hundred low-skill manufacturing employees and twenty managerial and clerical personnel. In spite of its several efforts to deal with the problem, the company continued to experience severe absenteeism and turnover as supported by the following data, provided by management:

<u>1974</u>	<u>Turnover</u>	<u>Absenteeism</u>
May	32%	8%
June	16%	8%
July	26%	10%
August	24%	9%
September	30%	5%

It could be argued that the situation faced by this particular branch was a transitional one commonly experienced by newly started organizations. However, the parent company has had similar operations started in other parts of the country where such has not been the experience. The above 5-month data on turnover may not indicate a long-term trend either. At any rate it is understandable why management would be alarmed and really concerned about the turnover and absenteeism statistics.

Several factors may be offered to explain the situation. Flowers and Hughes (1973, p. 54) concluded that turnover and satisfaction with job may not necessarily be related, especially at different skill levels:

Low skill employees feel bound (to a company) primarily by benefits, family responsibilities, the difficulty of finding another job, personal friendships with co-workers, loyalty to the company, and simple financial pressures.

It is also worth noting that the firm is located in a rural community where, according to company management, most of the people have been on welfare one time or another. Vital statistics gathered by the Bureau of Business Research at the University of Oklahoma are given in Figure 1-1 which shows selected comparative data for the county in which the plant is located and for the state of Oklahoma. While this information does not deal specifically with the city in which the plant is located, the figures representing the county can be interpreted as fairly good indicators of local conditions which appear to be substandard in relation to the state.

One would think that employee turnover at this particular plant should be at a minimum because of the substandard local economy. However, experience of the firm has been contrary to what would seem logical. One possibility is that the turnover here is not organizationally induced but predetermined by the attributes of the employees coming into the organization. Those who remain with the company perhaps do not stay because they are excited about the job or the job environment but because they have to, due to external environmental pressures. Individuals who have less pressure put on them by their external environment would tend to leave their jobs sooner than those who have more responsibilities externally as long as the latter view the company as a vehicle to satisfying their various needs. This observation appears to have face validity. For example, preliminary interviews with a number of plant employees revealed a strong consensus that those who

Figure 1-1

Selected Economic Indicators for the Seminole County

Economic Factors	County	State
1970 median family income	\$4,563	\$7,725
Unemployment (range from 1967-71)	6.5%-6.3%	4.2%-5.8%
Per cent of families under poverty level	24.2%	15.0%
Per cent of population receiving public assistance payments	11.06%	9.09%

Source: Bureau of Business Research, The University
of Oklahoma.

left the company were mostly young people with no real responsibility beyond that of providing for their own livelihood. It is understandable that those who fall in the above category may not develop a strong commitment to a job or an organization as long as they can find the means to maintain themselves.

Plan of Presentation

This study is organized into five chapters. The general theme of the research, statement of problem, statement of purpose, research questions, justification for the research, scope and limitations of the research, and the setting of the study have been presented in this chapter. In Chapter II the literature relevant to the research study is reviewed. The research methodology is discussed in detail in Chapter III. The results of the study appear in Chapter IV and the conclusions from the study appear in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

In this chapter the topic of turnover is discussed briefly. This is followed by a review of some of the recent writings on organizational effectiveness, organization design, organization structure, communication within organizations, and the roles individuals play in many facets of organizations. The present body of literature supports the strong interdependence found among the foregoing variables and the impact they have on employee turnover and vice versa. Several studies dealing with employee turnover and retention are also compared and contrasted.

Turnover is an inescapable problem every employer will face at one time or another. Some reasons that cause turnover are within the control of the manager, and some are not; turnover, likewise, may result from both avoidable and unavoidable factors (Augustine, 1972, p. 62-3):

The list might include but is not limited to better opportunity elsewhere, lack of challenge, lack of promotional opportunities, unfair or unequal treatment, poor supervision, interpersonal relationships, unsatisfactory pay, unpleasant working conditions, inability to perform, moving, return to school, pregnancy, illness, retirement, and death.

The employer has little control, if any, on turnover resulting from illness, pregnancy, retirement, death and the like. However, the employer can influence turnover resulting from many of the other factors cited above.

Augustine (1972, p. 62-3) brings to focus the current state of

the turnover problem and what can be done about it:

Considerable time, effort, and money are poured into attracting and selecting employees, but all too often too little of the same are directed toward keeping them.

Some employers brush the problem aside and take comfort in the fact their problem is not worth worrying about because their competition has a turnover rate twice as high. Another typical response is that it is a complex problem and nothing much can be done about it.

If we are sincere about reducing turnover we must first recognize and admit that it is a soluble, though admittedly, complex problem. Recognizing that the stated reasons for terminations are often not the real reasons, we have to develop techniques to get at the real reasons, and efforts are therefore directed at the problem and not the symptoms of the problems.

Avoidable type of turnover is an employee behavior that is undesirable from the organization's viewpoint. In fact, most organizations would like to believe that these problems will not arise when employee selection decisions are made. The roots of turnover problem may be traced to on-the-job or off-the-job causes. For an employer faced with such problems the job is to identify the true reasons behind the problem and to take appropriate corrective steps. According to Sirota and Wolfson (1973, p. 123), employees are the best source of information about the causes of turnover. At the same time, both Lopez (1975) and Augustine (1972) point out that the reasons given for terminations (voluntary or involuntary) often are not the real reasons.

As Harris (1976, p. 306) states, "[i]f the sources of worker problems [turnover, for example] can be identified, solutions usually become visible almost simultaneously. In many instances problems are generated by actions and decisions made by the employing organization itself." This would be consistent with a neglect on the part of management with respect to its responsibility which, according to French (1974, p. 115), includes:

(1) to create an organizational environment in which nonproductive and costly defensive behavior [such as turnover and absenteeism] is minimized, and (2) to create an organization in which people have an opportunity to give expression to their higher needs through successful accomplishment.

Turnover attributable to one or more of the foregoing factors are organizationally-induced turnover or due to several other factors.

Harris (1976, p. 307) sums up this in the following passage:

As the organization creates conditions that (1) are inconsistent with the needs and expectations of the worker, (2) are unnecessarily restrictive, (3) are limited in reward structure, or (4) otherwise inhibit the actions and development of workers, problems will develop. The effect will be to encourage the development of poor attitudes and sometimes poor performance, aggression, hostility, indecisiveness, inappropriate responses, destructiveness, absenteeism and other behaviors [turnover] that may become problematic.

While there is a great deal of truth in what Harris says, it is only part of the story, because not all turnover is necessarily organizationally-induced. This idea is a key issue in a recent study by Flowers and Hughes (1973) which looked at the complement of turnover--that is, employee retention. According to these authors, some people stay on their jobs for job-related (motivational) reasons, others for maintenance (job environment), others for external environmental reasons, and yet another group for a combination of these reasons.

One of the areas of inquiry in the Flowers-Hughes study dealt with the effect of environmental factors on employees at various skill levels and job satisfaction levels. Figure 2-1 depicts their findings. The conclusions based on their findings are summarized below:

1. Low-skill employees feel bound principally by benefits, family responsibilities, the difficulty of finding another job, personal friendships with co-workers, loyalty to the company, and simple financial pressures.

Figure 2-1

The Effects of Environmental Factors on Employees
at Various Skill and Job Satisfaction Levels

Reasons for Staying	Skill Level			Job Satisfaction Level		
	Very Low	Low	High	Very Low	Low	High
I wouldn't want to rebuild most of the benefits that I have now if I left the company	72%	64%	26%	76%	63%	44%
I have family responsibilities	69	55	46	76	73	44
I have good personal friends here at work	57	45	34	35	45	38
The company's been good to me and I don't believe in jumping from company to company	57	59	41	24	39	58
I'm working to make ends meet and I don't want to take the risks in a new job	57	36	8	59	52	21
I wouldn't like to look for a job on the outside	52	29	13	35	39	20
I'm a little too old for starting over again	46	25	14	41	34	20
I wouldn't like to start all over learning the policies of a new company	39	30	3	35	27	17
I like to live in this area	30	31	58	35	28	57
Difficult to find a job	58	42	47	59	53	42

Source: Flowers, Vincent and Hughes, Charles. "Why Employees Stay?" Harvard Business Review (July-August, 1973), p. 55.

2. Moderate-skill employees feel roughly the same, but they seem somewhat less sensitive to environmental factors. Loyalty to the company, however, was cited more frequently.

3. Managers offer quite a different profile. They stay mainly for reasons related to their jobs themselves and community ties; the difficulty of finding another job, family responsibilities, and company loyalty exert relatively less influence on them.

It is clearly evident that the people at different levels attach varying amounts of importance to the environmental (external) factors. Likewise, the effect of environmental factors for employees with different degrees of job satisfaction is also shown in Figure 2-1. According to Flowers and Hughes (1973, p. 55),

[t]hese data indicate that very dissatisfied employees continue to stay because of financial considerations, family responsibilities, lack of outside opportunities, age, and to some extent, "corporate enculturation" (they wouldn't want to look for a job or have to learn new policies). Such reasons for staying are self-defeating and hardly could be considered right. These turn-offs have not yet affected turnover statistics, but still they may be having just as severe, or even a more severe, effect on the company. These employees see themselves as so locked in by the environment that they have little alternative but to stay; and, therefore, the possibility of reduced productivity or behavior antagonistic to the organization is great.

Thus, it seems that "the reasons people stay are not necessarily the opposite of the reasons why people leave" (Flowers and Hughes, p. 56). Such reasoning is not too unrealistic when one looks at some of the recent developments in organization and management theories.

Individuals and Organizations

Over the past three-quarters of the century, especially during the latter half of that period, a great deal has been written on the role individuals play in organizational effectiveness. As times changed, so did

the point of focus and the emphasis on the ingredients of organizational effectiveness.

The classical writers believed in the concept of "economic-rational" man, implying that with proper job design and the right kind of incentive, human resources utilization would lead to maximum productivity. The early industrial psychologists, therefore, dealt strictly with proper selection and training of personnel. Taylor (1911, p. 36) in his Principles of Scientific Management, emphasized with respect to acquiring human resources to "scientifically select and then train, teach, and develop the workmen, whereas in the past he chose his own work and trained himself as best as he could." However, the "invisible hand" did not move many organizations along the path offered by its proponents.

Thanks to the serendipity at the Hawthorne works, it was soon found that the economic-man concept did not fully explain individual behavior. The Human Relations movement introduced the "social man" concept pointing out "that man is socially motivated in his organizational life" (Schein, 1965, p. 56). This suggested a new approach to management so that a "happy family atmosphere prevails at the work place" (Scanlan, 1973, p. 273). Contrary to expectations, research has proven that "employees in highly productive work groups were no more likely than employees in the low-producing groups to be satisfied with their jobs" (Kahn, 1960, p. 277). Brayfield and Crocket (1955, p. 421) likewise pointed out that satisfaction on the job does not "imply strong motivation to outstanding performance . . . production may be only peripherally related to many of the goals toward which the industrial worker is striving."

It is perhaps this inconclusive state of the art in understanding human behavior that led psychologists such as Maslow, McGregor, and Argyris

to emphasize "man's inherent need to use his capacities and skills in a mature and productive way" (Lawrence and Lorsch, 1969, p. 64). Schein calls this "the self-actualizing man" concept. The suggested approach to management is to design jobs "in which people can exercise their full range of capabilities so as to give them a sense of accomplishment. . . . The manager's role is supportive rather than authoritarian" (Scanlan, 1973, p. 273). While this is ideally sound, Schein points out certain limitations:

There is clear evidence that such needs (higher order needs) are important in the higher levels of organizational members like managers and professionals on the staff. It is not clear how characteristic these needs are of the lower-level employee, although many of the problems which were interpreted to be examples of thwarted social needs could as easily be reinterpreted to be instances of thwarted needs for challenge and meaning (Schein, 1965, p. 59).

Students and practitioners, thus, find themselves besieged with ideas about improving organizational effectiveness. Each of the ideas mentioned above assumes a normative posture and suggests a "one best way" approach. The majority of such arguments today places emphasis on the "self-actualizing man" concept. McGregor's (1960) Theory X and Theory Y concepts and his preference for Theory Y assumptions about man and Argyris' (1965) "Immaturity-Maturity" continuum suggest that

[m]an can be basically self directed and creative at work if properly motivated, and, therefore, management based on the assumptions of Theory Y will be more profitable for the individual and the organization (Hersey and Blanchard, 1972, p. 53).

Similarly, Likert's (1961, 1967) preference for the System 4 type of organization and the stated purpose of Grid Training and Development program (Blake, 1964, p. 10) toward reaching 9,9 on the concern for task and concern for people scales imply one best way of organizing and managing.

The dichotomy evident in the classical-neoclassical assumptions about human beings is essentially the same distinction McGregor (1960) pointed out in his Theory X-Theory Y construct. The brief review thus far may be concluded by summarizing the two assumptions:

Theory X assumes that people dislike work and must be coerced, controlled, and directed toward organizational goals. Furthermore, most people prefer to be treated this way so they can avoid responsibility.

Theory Y - the integration of goals - emphasizes the average person's intrinsic interest in his work, his desire to be self-directing and to seek responsibility, and his capacity to be creative in solving business problems. (Morse and Lorsch, 1970, p. 61)

McGregor, Likert, Argyris, among others, make a strong case in favor of Theory Y assumptions even though McGregor himself pointed out that both assumptions have proved to be useful in some situations while in other cases both have suffered failure as well.

Where does this put the manager? Is he to assume one position or the other or both? Lawrence and Lorsch, in response to diagnosis and action for organizational development, make these remarks (Lawrence and Lorsch, 1969, p. 65):

Accepting any one of them at the expense of the others could have a profound effect on one's diagnosis of the situation and on subsequent action plans and implementation steps. Not only do they provide conflicting views in what they consider, but they also leave untouched major areas and issues which our systematic approach indicates would be relevant to consider. . . . They (the various approaches) fail to recognize that the predispositions of different individuals may vary.

It is this very inconsistency that exists in the traditional theories which led Schein (1965, p. 60) to say that "[o]rganization and management theory has tended toward simplified and generalized conceptions of man."

In response, Schein offers the "complex man" concept, which instead of negating the contributions of the early theorists, supplants them

by offering an integrated systems view of the individual. The underlying theme in the complex man concept is illustrated in the following passage (Lawrence and Lorsch, 1969, pp. 65-66):

. . . The individual's system operates so as to maintain its internal balance in the face of the demands placed upon it by external forces. In essence, this internal system develops in response to the individual's basic need to solve the problems presented by his external environment. For the infant, the problems which must be solved are the essential ones of securing food, warmth, etc., and relating to parents and siblings. For the older child, the problems become more complex, dealing with a wider array of others - teachers, playmates, peers in school, etc., and more complex objects, intellectual knowledge, more complicated toys, etc. This same problem-solving need is evident in adults in organizational life. In this setting the problems posed may consist of dealing with superiors, subordinates, or peers, and of performing specific tasks. But this basic problem-solving need, or what White [1963, pp. 24-43] has termed a need for a sense of competence or mastery, is the same.

The significance of human resource utilization in measuring organizational effectiveness is well recognized by students of management. Gross (1965, pp. 195-215), in citing the activities of an organization which determine its performance, includes satisfying the varying interests of people and groups, meaning in part "the interest of employees is served to the extent that they are satisfied with what they receive in exchange for their efforts" (Gibson, et al., p. 26). Price identified morale as an intervening variable that affects organizational effectiveness. Morale is defined as the extent to which the motives of individual members are satisfied (Gibson, et al., p. 26). Similarly, Caplow, in his study of organizational effectiveness, included voluntarism as one of the four variables affecting the same. Voluntarism closely parallels the other two variables identified earlier and is defined as the "organization's ability to provide satisfaction for individuals and the desire of members to continue their participation" (Caplow, 1964, p. 123). Numerous other studies have also

identified the crucial roles played by individuals in organizational effectiveness (Seiler, 1967; Georgopoulos and Tannenbaum, 1957; Mott, 1972; Fiedlander and Pickle, 1968).

Inasmuch as the individuals play an indispensable part in organizational effectiveness, an increased awareness about the nature of man, his motives, drives, and needs are all the more important to organizations and individuals. Herzberg (1959, p. ix) stresses the need for this increased awareness in the following passage:

To industry, the payoff for a study of job attitudes would be increased productivity, decreased absenteeism, and smoother working relations. To the individual, an understanding of the forces that lead to improved morale would bring greater happiness and greater self-realization.

Herzberg also makes the assumption other behavioral scientists have made with respect to the self-actualizing man concept; however, the passage is quoted here strictly to add emphasis to the need for understanding human behavior.

A number of studies have been carried out in recent years to get a better insight into organizational functioning. The works of Woodward (1965), Burns and Stalker (1961), Lawrence and Lorsch (1967), Fiedler (1969), among others, point out what might sound rather redundant and simplistic: there is no such thing as the "one best way" to designing organizations and managing organizational resources, including human resources; the best approach is dependent upon the situation at hand. Burns and Stalker suggest that the "beginning of administrative wisdom is the awareness that there is no one optimum type of management system" (Kast and Rosenzweig, 1973, p. 308).

Jay Lorsch (1973, p. 309) has this to say on organizational structure:

Our understanding of organizations as systems is new and it is growing rapidly. The ideas which are presented here will certainly be modified and improved. But as crude as they are, they represent better tools than the principles which have been relied on in the past. These ideas clearly move us in a new and promising direction -- that of tailoring the organization to its environment and to the complex needs of its members.

Based on his extensive studies on leadership, Fiedler (1973, p. 310) makes this observation:

The results show that we cannot talk about simply good leaders or poor leaders. A leader who is effective in one situation may or may not be effective in another. Therefore, we must specify the situation in which a leader performs well or badly.

Morse and Lorsch (1970, p. 62), based on their research, stress these additional dimensions:

. . . the appropriate pattern of organization is contingent on the nature of the work to be done and on the particular needs of the people involved [and] the most productive organization [by implication, the most effective organization] is the one that fits the needs of its task and people in any particular situation.

It would seem that today the students of management have a better perspective about the human resources input in organizational pursuits. However, no progress comes about without its price and in this case, the price is in the form of added complexity. One of the areas of this complexity deals with the question of what type of individual fits in a particular organization. Stated differently, effective organizational performance in a particular situation is dependent upon:

1. The appropriateness of the organization pattern to the task to be performed, that is the degree of "fit" between the organization characteristics and the task to be performed, and

2. The appropriateness of the organization-task fit to satisfying the needs and wants of the people so that the sense of competence derived

from mastering the members' respective environments motivate them to effective performance.

"Fit" as used in this case consists of two elements: (1) formal fit, and (2) climate fit. "Formal fit" is the fit between the task to be performed and the formal practices used by the unit to get the task done; "climate fit" is the fit between the kind of task being worked on and the perception orientation that had developed among the individuals in a functional unit. Morse and Lorsch studied a more effective and a less effective organization of the same kind each from two industries, one engaged in the certain task of manufacturing and the other in the uncertain task of scientific research. The differences in the formal fit and the climate fit between the two effective organizations are reproduced in Figure 2-2.

In the case of the more effective manufacturing plant with the certain task, both the formal fit and the climate fit parallel that of the Theory X assumptions; in the case of the more effective research laboratory engaged in the uncertain task, the Theory Y construct seems to prevail. Given these findings, which one of the styles should a manager choose? To explain this dilemma, the researchers offer the additional dimension of the fit between the individual and the organization-task set. This process is explained by what White calls "the need for a sense of competence or mastery" (White, 1963, pp. 24-43). Schein, in introducing the complex man concept, recognized the complexity of an individual and the factors that influence his motivation to contribute to organizational goals. Recalling a previous citation (Lawrence and Lorsch, 1969, p. 65), "the individual's system operates so as to maintain its internal balance in the face of the demands placed upon it by external forces." In other words, every indivi-

Figure 2-2

Differences in the Characteristics of Formal Fit and Climate Fit
in the Certain Manufacturing Task and the Uncertain Research Task

Characteristics	Certain Manufacturing Task	Uncertain Research Task
<u>Formal Fit:</u>		
1. Pattern of formal relationships and duties	Highly structured, precisely defined	Low degree of structure, less well defined
2. Pattern of formal rules, procedures, controls, etc.	Pervasive, specific, uniform, comprehensive	Minimal, loose, flexible
3. Time dimensions incorporated in formal practices	Short-term	Long-term
4. Goal dimensions incorporated in formal practices	Manufacturing	Scientific
<u>Climate Fit:</u>		
1. Structural orientation	Perceptions of tightly controlled behavior and high degree of structure	Perceptions of low degree of structure
2. Time orientation	Short-term	Long-term
3. Goal orientation	Manufacturing	Scientific
4. Distribution of influence	Perceptions of low total influence, concentrated at upper levels	Perceptions of high total influence, more evenly spread out among all levels
5. Character of subordinate relations	Low freedom vis-a-vis superiors to choose and handle jobs, directive type of supervision	High freedom vis-a-vis superiors to choose and handle projects, participatory type supervision
6. Character of colleague relations	Perceptions of much similarity among colleagues, high degree of coordination of colleague effort	Perceptions of much difference among colleagues, relatively low degree of coordination of colleague effort
7. Top executive's "managerial style"	More concerned with task than people	More concerned with task than people

Source: Adapted from Morse, John J. "Organizational Characteristics and Individual Motivation" in Contingency Views of Organization and Management (edited by Fremont B. Kast and James E. Rosenzweig). Chicago: Science Research Associates, Inc., 1973, p. 219 and p. 223.

dual has a need to master the environment of which he is a part including the task environment. The sense of competence comes as a result of the perceived satisfaction from mastering the environment. Using this framework, Morse attempted to determine the fit between the organization-task set and the individual via projective tests which asked the participants: (1) to write creative and imaginative stories in response to six ambiguous pictures, and (2) to write a creative and imaginative story about what the employee would be doing, thinking, and feeling "tomorrow" on the job. The results of these projective tests, according to Morse, showed significantly higher feelings of competence in the two successful firms where the fit between organization and task was also found to be good. The less effective firms in both industries indicated lower-fit on all counts. Their findings support the idea that those analyzing organizations and prescribing solutions to problems of organizational design and management should not only seek a fit between organization and task, but also between task and people and between people and organization. To the practitioner, the implication is that he should tailor the organization to fit the task and people in order to achieve both effective performance and to create a higher sense of competence. At the same time, these writers quickly and appropriately point out that

[t]he problem of achieving a fit among task, organization, and people is something we know less about. . . . We need further investigation of what personality characteristics fit various tasks and organizations (Morse and Lorsch, 1970, p. 68).

This is a legitimate concern not only because of the novelty of the concept but also from a methodological point. Most of the contingency theorists have dealt at length with organization structure. For instance, Burns and

Stalker (1961, pp. 119-125) described two types of managerial systems in a continuum. On the one end, the mechanistic form of organization is suggested as appropriate to fairly stable conditions and is characterized by a high degree of task specialization; precise definition of responsibilities and administrative procedures; reliance on administrative hierarchy to provide coordination, control, communication; strong emphasis on company loyalty and subordination; reliance on vertical interaction between superiors and subordinates; and little consideration for group process and informal organization. The organic form, on the other hand, is seen suitable to volatile conditions and is characterized by a reliance on the relevance of special knowledge and experience to the overall mission of the organization; interaction of a vertical, diagonal, and lateral nature; expertise to be the basis of influence in authority, control, and communication; and emphasis on consensus in decision making, commitment to organizational task and its survival, and work team effectiveness and its development.

Woodward's findings (1965, p. 39) showed a tendency for these two types of organizations to be associated with differing forms of technology. The gist of her findings appear below (Lorsch, 1969, p. 329):

1. Firms using similar technical methods have similar organizational structures.
2. Those firms which were most successful in their industry showed organizational characteristics which approximated the median of the organizations in their industry, the implication being that there is a relationship between successful performance and the organizational structure of companies within each industry.
3. There is a tendency for organizations to adopt a structure

consistent with the requirements of their technology.

Leavitt makes this observation on the patterns of communication in organization (Lorsch, 1969, p. 329):

Thus for programmed repetitive tasks, centralized communication structures seem to operate most efficiently, but with some human costs. For more novel, ill-structured tasks more wide open communications nets with larger numbers of channels and less differentiation among members seem to work more effectively.

Therefore, if organization structure and communication patterns can vary according to tasks and technology, it is conceivable that for a given type of organization characteristics with its appropriate tasks and technology, the type of individual suitable for the overall mission can also vary. These individuals possess different wants and drives, and certain organizations and task structures attract certain types of personalities. In the final analysis, "[i]f it makes sense to the individuals involved, given their needs and their jobs, they will find it rewarding and motivating" (Morse, 1970, p. 68).

It is no secret that organizations attract and keep people who perceive the work environment as being able to fulfill one or more of their needs. However, the decision a manager makes with respect to accepting either a Theory X or Theory Y approach to managing human resources may backfire. This happens when the manager accepts some universal prescription without really being cognizant of the unique characteristics of his human resources. Such blind acceptance of one or the other styles of leadership seems to be the prevailing pattern in most organizations. Most of the leadership development programs attempt to offer some panacea. As Fiedler (1973, p. 229) observes:

We spent at least several billions of dollars a year on leadership development and executive recruitment in the United States. Leaders are paid 10, 20, and 30 times the salary of ordinary

workers. Thousands of books and articles on leadership have been published. Yet we still know relatively little about the factors that determine a leader's success or failure.

Fiedler, based on his extensive studies, points out the factors that determine a leader's influence over his group in order of importance to be (1) leader-member relations, (2) task structure, and (3) the position power of the leader. If this is the case, then organizations would be well advised to attempt to understand the factors that influence leader-member relations.

Hemphill (1949, p. 3), along the same lines, states:

Both laymen and scientists agree that if we can understand the selection and training of leaders [and those led by them], we can begin to take adaptive steps toward controlling our own social fate [and the organization's fate].

The same underlying theme is found in Morse's suggestion (Morse, 1970, p. 68):

Managers can help this process by becoming more aware of what psychological (and perhaps other) needs seem best to fit the tasks available and the organizational setting, and by trying to shape personnel selection criteria to take account of these needs.

Another significant development in recent times that has sharpened the understanding of the individual-organization fit is the Minnesota Theory of Work Adjustment model, developed by Dawis and Lofquist (1969). The Theory of Work Adjustment premises that the individual seeks a correspondence between himself and his environment. The authors define "correspondence" to mean "the individual fulfilling the requirements of the work environment [satisfaction] and the work environment fulfilling the requirements of the individual [satisfactoriness]" (Dawis and Lofquist, 1969, p. 45).

An individual relates to his work environment, to his home en-

vironment, to his church environment, to his school environment and so on. The systems concept clearly points out the interdependence and interactions which exist in the various environments. Consequently, the slightest disturbance in any one environment effects the other environments as well. With a major part of the adult individual's active time spent on earning a living, the work environment constitutes a major environment to the individual. Therefore, the basic assumptions of the Theory of Work Adjustment is restated to read that the individual seeks a correspondence between himself and his work environment. Work adjustment is the continuous and dynamic process by which the individual seeks to achieve and maintain correspondence with his work environment (Massie, et al., p. 117).

Organizational requirements call for individuals with varying skills, talents, and training. Every organization expects its employees to fulfill certain specific requirements as members of the organization. The individual who comes into the work environment for the first time attempts to fulfill those requirements. At the same time, the individual also expects the work environment to satisfy certain requirements so that he can relate to his other environments as well. Thus, if the newcomer finds correspondence between his input to the work environment and the work environment's contribution to enable him to relate to his other environments, then he maintains his membership. Whenever this correspondence is disturbed, it is possible the individual may leave the work environment, assuming that correspondence cannot be established some other way. Parenthetically, this corresponds closely to what Flowers and Hughes (1973, p. 50) had to say on the subject of why employees stay:

Employees tend to remain with a company until some force causes them to leave. The concept here is very like the concept of inertia in the physical sciences: a body will remain as it is until acted on by a force.

Continued membership in the work environment can only strengthen and stabilize the correspondence, because in order to continue membership, the individual must find reinforcers to the correspondence.

Dawis and Lofquist (1969) offer these additional refinements to their theory. "Satisfaction" refers to the perceived fulfillment of the individual's requirements by the work environment; "satisfactoriness" is the measured fulfillment of the work environment's requirements by the individual. If stability in correspondence causes a person to maintain his organizational membership, then it follows that job tenure is a function of correspondence between the individual and his work environment. Massie, et al. (1975, p. 118) make several propositions of which two have direct bearing to this study:

The probability that an individual will be forced out of the work environment is inversely related to his satisfactoriness [and] the probability that an individual will voluntarily leave the work environment is inversely related to his satisfaction.

As far as the first proposition is concerned, involuntary separation is a function of the measured performance of a worker as observed by his supervisor. In most blue collar types of jobs, as in this study, performance evaluation is not too serious a problem as quantity, quality and speed of performance can be measured, and action can be taken where needed. As to the second proposition, which states that the individual's tenure with an employer is dependent upon the degree of perceived fulfillment of the individual's requirements by the work environment, few yardsticks exist to enable the manager to arrive at any ready-made answers.

A number of simplified observations can be made from what has been

said thus far:

1. Every organization, even those within a given industry, has its own environment, personality, and character that are unique.

2. Every individual, likewise, has a unique environment, personality, and character.

3. Not every organizational environment is conducive to attracting and keeping individuals from any environment. This poses a problem of establishing correspondence between the individual and the organization. There is no universal approach which offers a panacea to similar organizational ills.

4. Consequently, every organizational ailment calls for a diagnosis of as many relevant variables as possible before prescription is suggested. Any solutions arrived at without such a diagnostic approach is tantamount to treating the symptoms.

An overriding theme in the several passages cited up to this point is the necessity for some kind of correspondence between the individual job holder and the organization in order for stable relationships to continue. Dunnette (1966, p. vii) sums up this with respect to selection and utilization of human resources:

. . . Wise decisions about people demand knowledge of their individuality and knowledge of how each person's special talents may be most accurately recognized and most wisely utilized. Learning about people systematically and scientifically is the only avenue toward the effective conservation of human talent. Personnel selection and job placement are not ends in themselves; they are followed by possibilities of job design, individual counselling, and career guidance, the removal or modification of organizational constraints, and the possible use of specialized training procedures. But individual diagnosis must always be the crucial first step, undergirding and directing all subsequent personnel decisions. . . . Society's primary goal should be to conserve human talent; the path to this goal is best mapped by making informed and wise personnel decisions at each juncture.

Every selection process goes through more or less the same series of steps involving preliminary interview, completion of application blanks, employment tests, reference and background checks, employment interview, physical examination, and employment decision. Each of these steps is designed to elicit information from the potential employee so that the decision maker's intuition is sharpened with some solid data, and a better decision is made with respect to the individual. In spite of this seemingly systematic approach to selection process, employee turnover remains a perennial problem. The question invariably is "what is it that went wrong?" Is it that a poor decision was made in the first place with respect to selection and/or placement, or is it that something else had developed subsequent to hiring which led to the separation? It is possible that any one or both these could have been the case. It is probably this fact that has led researchers to examine the area of employee turnover and to come up with factors uniquely related to each case, because in all the studies mentioned earlier there is the assumption that only certain types of individuals fit in any given organization.

Research Activities in Employee Turnover

In an extensive review of the literature, Allen Schuh (1967a) brought together several studies relating to employee turnover. A complete review of all the various studies is not within the scope of this research. Therefore, some of these studies are only briefly mentioned; the ones that are directly pertinent to this research are treated at length. Schuh has grouped these studies on employee turnover into seven classifications of predictors of job tenure. These classifications and

some of the studies reviewed by Schuh, as well as some others not included in Schuh's review, are cited in Figure 2-3.

In Figure 2-4 Schuh's review is brought together to show the number of studies in each classification and the number and types of relationships observed in each group. A total of seventy-nine studies were reviewed. In eight studies intelligence tests were used; in ten, aptitude tests; nine studies each used interest inventories and special techniques; in fourteen, personality tests; in twenty-two, biographical data; and in seven, job satisfaction inventories. Positive, negative, zero, and/or curvilinear relationships were observed in these studies (Schuh, 1967a, p. 135):

A positive relationship indicates a trend for the high scores to remain on the job for a longer period of time. A negative relationship indicates a trend for the low scores to remain on the job for a longer period of time. A curvilinear relationship indicates a trend for the middle scores to exhibit the greatest or lowest frequency of turnover.

A closer look at the summary presented in Figure 2-4 reveals that biographical data and job satisfaction inventories scored high among the variables most predictive of tenure. The relationships observed in the other classifications (interest, aptitude, intelligence and personality inventories) showed less frequent relationships with predicting tenure. One tentative conclusion here would be that both biographical data and job satisfaction inventories are far better predictors of tenure. The following statement by Glueck (1974, pp. 193-199) bears out the less than commendable performance shown by the various types of employment tests in general, and psychological tests in particular.

Testing is a controversial area, disliked by some but used in selection by most larger and middle-sized organizations. . . . To be effective, tests need to be validated by the employing organization. . . . Few organizations have the personnel, time or money to develop tests from scratch. Instead, they often will purchase and use tests developed elsewhere.

Figure 2-3

Summary of Studies Using Various Techniques
for Predicting Labor Turnover

Technique	Reference
Intelligence Tests	MacKinney & Wolins (1959); Robins & King (1961); Scholl & Bellows (1952); Shott (1963); Bills (1923); Brown & Ghiselli (1947); Snow (1927); Kriedt & Gadel (1953).
Aptitude Tests	Vincent & Dugan (1962); MacKinney & Wolins (1960); Shott (1963); Kriedt & Gadel (1953); MacKinney & Wolins (1959).
Interest Inventories	Bolanovich & Goodman (1944); Mayeske (1964); Robbins & Kind (1961); Tiffin & Phelan (1953); MacKinney & Wolins (1960); Boyd (1961); Bolanovich (1948); Kriedt & Gadel (1953).
Personality Tests	Robbins & King (1961); MacKinney & Wolins (1960); Cleland & Peck (1959); Cuadra & Reed (1957); Vincent & Dugan (1962); Hedberg & Baxter (1957); Butterfield & Warren (1962); Sinaiko (1954); Wickert (1961).
Biographical Data	Black & MacKinney (1963); Brown & Ghiselli (1947); Buel (1964); Cleland & Peck (1959); Dornon (1970); Dunnette, <u>et al</u> (1960); Dunnette & Maetzold (1955); Fleishman & Berniger (1960); Kerr (1947); Kirchner & Dunnette (1957); Kriedt & Gadel (1953); Livingstone (1955); MacKinney & Wolins (1959); Mandell, <u>et al</u> (1956); Minor (1958); Mosel and Wade (1951); Nevo (1976); Novack (1970); Robinson (1972); Sawatsky (1951); Scholl & Bellows (1952); Scott & Johnson (1968); Schuh (1967); Schwab (1974); Shott, <u>et al</u> (1963); Tiffin, <u>et al</u> (1957); Wernimont (1962); Wickert (1951).
Job Satisfaction Inventories	Giese & Ruter (1949); Kerr (1948); Ross and Zander (1957); Webb & Hollander (1956); Weitz & Nuckols (1953); Weitz & Nuckols (1955); Wickert (1951).
Special Techniques	Argyle, <u>et al</u> (1958); Bengé (1925); Evan (1963); Fleishman & Harris (1962); Hovland & Wonderlic (1939); Kriedt & Gadel (1953); McMurry (1947); Sawatsky (1951); Shott, <u>et al</u> (1963); Telly (1967); Van Zelst (1952).

Figure 2-4

Summary of Relationships in Validation Studies Using Various Methods
for Predicting A Criterion of Labor Turnover

Relationships Observed	Intelligence Tests		Aptitude Tests		Interest Inventories		Personality Tests		Biographical Data		Job Satisfaction Inventories		Special Techniques	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
	Positive	3	30	3	23	9	15	4	9	78	86	10	100	9
Negative	2	20	1	8	5	8	9	20	2	2	0	0	2	13
Zero	3	30	8	61	30	48	32	69	6	7	0	0	3	19
Curvilinear	2	20	1	8	0	0	1	2	5	5	0	0	2	12
Not reported	0	0	0	0	18	29	0	0	0	0	0	0	0	0
Total Relation- ships Reported	10	100	13	100	62	100	46	100	91	100	10	100	16	100
Number of Studies Reported	8		10		9		14		22		7		9	

Source: Adapted from Schuh, Allen. "The Predictability of Employee Tenure: A Review of the Literature." Personnel Psychology, 20, Spring 1967, pp. 133-152.

With respect to the current status of such testing, French (1974, p. 281) observes:

It is not clear at this writing [1974] how much the overall level of testing has diminished, if at all, as a result of the Civil Rights Act. . . . [T]he use of tests has probably diminished somewhat because some testing practices have come under fire for allegedly discriminating against minority groups, and because of the enforcement of EEOC guidelines on testing.

Perhaps the biggest problems with psychological testing have to do with validity and reliability. Other problems with these types of tests include qualifications of those using the tests, interpretation of tests, shortage of competent personnel to interpret the test, and cost of administering and interpreting the tests. The art of psychological testing being in a state of flux with respect to the efficiency of personality tests in employment decisions, the use of such devices to predict turnover should be undertaken with extreme caution.

Studies Using Job Satisfaction Inventories to Predict Turnover

No negative or zero relationships were reported in studies dealing with the use of Job Satisfaction Inventories for predicting employee turnover. In other words, ". . . it is concluded that tenure (or influences to remain in a worker-position relationship) is positively related to the worker's level of expressed satisfaction" (Schuh, 1967a, p. 147). One problem is that to predict turnover the job satisfaction questionnaire must be administered prior to employment. Obviously a person cannot express satisfaction with a job he is about to get into unless that individual has held similar positions elsewhere. It is perhaps this inherent difficulty with job satisfaction surveys which has precluded their widespread use for predicting employee turnover.

Secondly, the conclusion that job tenure is positively related to job satisfaction cannot be accepted without some reservation.. At least in the case of low-skill manufacturing employees where productivity is usually measureable, job tenure is a function of the employee's ability to maintain at least the minimum performance acceptable to the organization. Therefore, it may be more appropriate to state that job tenure is positively related to acceptable performance (productivity). Kahn (1960, p. 275) concluded that satisfaction does not consistently correlate with productivity. "Employees in highly productive work groups were no more likely than employees in the low-producing groups to be satisfied with their job . . ." (Kahn, 1960, p. 277). Therefore, it stands to reason that if satisfaction does not always imply productivity then satisfaction does not always have to imply tenure either. This is true because a person's continuation on a job is subject to periodic performance evaluation and acceptability of its outcome--satisfactory productivity.

Among the studies reviewed by Schuh, the latest one using Job Satisfaction Inventories was carried out in 1957, perhaps an indication of their declining popularity. Pallone, Hurley, and Rickard (1971) reviewed some 113 studies relating job satisfaction to fifty-two variables. These studies were conducted during the period 1968-69. According to these reviewers (Pallone, et al., 1971, pp. 11-28):

. . . none of the investigations reported in 1968-69 considered job satisfaction in relation to absenteeism, automation, intellectual factors, morale, physical disabilities, segregation, tenure, or work shifts, each of which had previously enjoyed some share of research attention. [Emphasis added.]

There were eight studies in the area of labor turnover, none of which dealt with using job satisfaction inventories for predicting turnover: Aven, 1968; Balyeat, 1968; Downs, 1969; Gogoluikhin, 1969; Howell, 1968;

Hulin, 1968; Mikes, 1968; Slemer, 1967.

There have been several other studies which attempted to predict turnover. In terms of the predictors used these include presence of peers in company, training program and grade point average (Evan, 1963); supervising behavior (Fleishman and Harris, 1962); human relations dimensions of foremanship, degree of training of foreman, and workgroup (Argyle, Gardner, and Cioffi, 1958); and perceived inequity (Telly, 1967).

Studies Using Biographical Data to Predict Turnover

In contrast to what has been said regarding the several studies relating turnover to various predictors, the use of biographical data possesses considerable support. Only two out of the twenty-one studies using biographical data failed to find at least one item related to tenure (Schuh, 1967a, p. 145). The summary provided in Figure 2-4 shows that 86 per cent of the variables out of a total ninety-one variables indicated positive relationships; that is, they were able to predict turnover.

These twenty-one studies are presented in tabular form in Figure 2-5. Included in this table are the name(s) of the authors, the type of employee groups, criteria with respect to turnover, relationships observed, number of participants in each study, and whether or not these studies have been replicated. The majority of these studies were concerned with turnover among female clerical and allied categories. The rest of them dealt with bus drivers, seasonal workers, hospital ward attendants, salesmen, and certain production workers.

Any tool or device used in various phases of the employment selection process is only effective to the extent of their validity and

FIGURE 2-5 Review of Validation Studies Using Biographical Data for Predicting a Criterion of Labor Turnover

Reference	Description	Criterion	Relationship	N	Replication
Black & MacKinney (1963)	Female: a. clerks; b. stenographers; c. secretaries	Number of mo. on the job	a and b Zero; c, 1 item Positive (age, $r = .49$)	493	Yes
Brown & Ghiselli (1947)	Bus drivers	L more than 20 mo.; S less than 20 mo.	Positive: (age, $r = .21$); Zero (education)	247	No
Buel (1964)	Female clerical	a. L more than 3 yrs., S less than 9 mo.; b. L more than 1 yr., S less than 1 yr.	Positive: 13 items (a. $r = .49$; b. $r = .33$)	224	Yes
Cleland & Peck (1959)	Ward attendants	L more than 10 yrs.; S less than 6 mo.	Positive: 1 item (father's occupation)	51	No
Dunnette, Kirchner, Erickson, & Banas (1960)	Female office workers	L more than 19 mo.; S less than 9 mo.	Positive: ($r = .61$; $.38$)	163	Yes
Dunnette & Mactzold (1955)	Male seasonal farm workers	Judged as good or poor with respect to tenure by the employment manager	2 curvilinear (age and weight); 9 Positive; 1 Negative	964	Yes
Fleishman & Berniger (1960)	Female clerical and secretarial	L more than 2 yr.; S less than 2 yr.	Positive: ($r = .57$)	205	Yes
Kerr (1947)	Factory workers	a. 3 mo. separation-rate; b. 13 week separation rate	Positive: (a. 3 items; b. 11 items)	a. 7 b. 53	Yes
Kirchner & Dunnette (1957)	Female clerical	L more than 19 mo.; S less than 9 mo.	Positive: $r = .42$; 1 item curvilinear (education)	138	Yes
Kriedt & Gadel (1953)	Female clerical	L more than 12 mo.; a. S less than 3 mo.; b. S less than 12 mo.	Positive: (a. $r = .37$; b. $r = .29$)	358	No

Source: Allen J. Schuh, "The Predictability of Employee Tenure: A Review of the Literature," Personnel Psychology 20 (Spring, 1967): 140-141.

Figure 2-5 (Continued)

Livingstone (1955)	Male route salesmen	L more than 2 yr.; S less than 2 yr.	Positive: ($r = .83$)	259	Yes
MacKinney & Wolins (1939)	Female clerical	a. fired, b. quit, c. currently employed	a. Zero; b. 1 Positive, 1 Negative; c. 1 Positive	49	No
Mandell, Duckworth, Leonard & Lehr (1955)	a. professional, technical, and administrative; b. clerical	On force vs. separated	a and b Positive	175	Yes
Minor (1958)	Female clerical	L more than 42 mo.; S less than 9 mo.	Positive: 11 items ($r = .44$)	449	Yes
Mosel & Wade (1951)	Female sales clerks	a. L more than 1 yr.; S less than 6 mo. b. L more than 6 mo.; S less than 6 mo.	a. 10 Positive; 2 curvilinear (age, dependents); b. Positive ($r = .41$)	439	Yes
Sawatsky (1951)	Production, service and machine operators in a factory	12 mo. turnover rate	Zero	29	No
Scholl & Bellows (1952)	Female production workers	a. L more than 1 yr.; S less than 1½ yr. b. L more than 6 mo.; S less than 6 mo.	a. $R = .46$; b. $R = .53$	a. 150 b. 200	No
Shott, Albright & Glennon (1963)	a. male and b. female office workers	L more than 1 yr.; S less than 1 yr.	Positive (a. $r = .48$; b. $r =$.36)	561	Yes
Tiffin, Parker & Habersat (1947)	Male semi-skilled workers	L more than 9 mo.; S less than 3 mo.	Positive (4 items)	87	No
Wernimont (1962)	Female clerical	L more than 19 mo.; S less than 5 mo.	Positive ($r = .39$)	414	Yes
Wickert (1951)	Female telephone operators and Service Representa- tives	"on force" vs. separated	Zero	697	Yes

¹ A positive relationship indicates a trend for the high scorers to remain on the job for a longer period of time. A negative relationship indicates a trend for the low scorers to remain on the job for a longer period of time. A curvilinear relationship indicates a trend for the middle scorers to exhibit the greatest or lowest frequency of turnover.

² The criterion used to designate the members of the long tenure group.

³ The criterion used to designate the members of the short tenure group.

reliability. The evidence presented thus far with respect to using biographical data for predicting turnover would indicate reasonable validity and reliability. There are also some down-to-earth facts with respect to the feasibility of using biographical data. As Novack (1970, p. 419) says,

[i]n every selection situation, there is usually a standardized procedure that is followed. . . . [O]rdinarily it moves from the least expensive to the most expensive eliminator, that is, from the application blank to the physical exam.

Unfortunately the application blank containing a wealth of vital information is used in a perfunctory manner to establish the initial rapport in an interview. Once the applicant is hired, the application blank ends up in the personnel file and remains buried there. In spite of several studies identified in this review, very few organizations have made any serious attempts to use the biographical data more effectively (Glueck, 1974, p. 418):

Studies indicate, however, that although most organizations use application blanks, fewer than a third of the larger organizations have utilized the more effective weighted application blanks or biographical information blanks.

In comparing the predictive accuracies of biographical data and psychological tests such as intelligence tests, interest inventories, and personality tests with regard to job proficiency, Asher (1972, p. 255) found that biographical data possessed "substantially higher validities." This would suggest a strong possibility that biographical data could be equally effective in predicting employee turnover and "that serious attention be devoted to the 'hard' data on biographic inventories in order to improve selection effectiveness" (Flippo, 1976, p. 143).

Weighted Application Blank: A Natural Offspring of Biographical Data

Schuh's review of literature dealing with prediction of employee

tenure included twenty-one studies using weighted application blanks. In nineteen of these studies one or more biographical items were found to possess a predictive relationship. This is indicative of one of the major uses of biographical data in the form of weighted application blanks. The usefulness of weighted application blanks becomes clearer when the increasing emphasis placed ^{on} employee selection methods and decisions are contrasted with the state of the art which existed a few years ago. With the turnover loss to the magnitude of eleven billion dollars annually, any entrepreneur/manager will be anxious to minimize the selection and placement mistakes which at least in part would account for the large turnover.

Selection methods in the early part of the century primarily depended upon crude and pseudoscientific methods. It was not uncommon to require applicants to submit their applications in their own handwriting (graphology), to evaluate the applicant's photograph (physiognomy), and to depend on letters of recommendation. The interview part of the selection process was not that systematic either. In certain cases phrenology (shape of skull) and the theory of pigmentation (blonde-brunette theory) were also in vogue (Flipppo, 1976, pp. 137-138). Managers of yesteryear (and perhaps of even today) assumed that a person's handwriting and facial characteristics were indicative of potential job behavior. Likewise there was a great deal of weight given to letters of recommendation without being considerate about the obvious limitations of such methods. And, finally there were personnel managers who even relied on what the stars have to foretell (astrology) about the potential employee.

While the influence of these pseudosciences is still around,

selection methods have made a lot of progress in the past few years. Today better measures of job success are available, interview methods are more standardized, forms for obtaining background information are standardized, and the telephone interview is taking the place of recommendation letters. Additionally, a number of employment tests are also used in the selection process. At the same time, the eclectic approach to dealing with organizational problems has brought about a great deal more understanding of the complexity surrounding these issues. This increased awareness has eased to some extent at least the difficulty involved in predicting various employee behavior. Now there is a great deal more standardization and quantification of information and the influence of behavioral and mathematical sciences makes behavior prediction a great deal more manageable through increased understanding. Thus, selection methods have moved over time from a "black magic" approach to a more scientific approach. In summary, the selection process today is moving toward standardization, quantification, and understanding.

The weighted application blank as a method of selecting successful employees embraces the three above qualities requisite of any good selection system. The utility of the weighted application blank is evident when the following factors are considered. First of all, it is a systematic approach to determining the personal factors significant to various occupational groups. This method offers both economy and speed in screening large numbers of employees. This is particularly beneficial to organizations whose payrolls include large numbers of employees in similar occupational categories. Similarly the technique is applicable when interviewing large numbers of applicants who seek limited number of positions and also in situations where the turnover rate is unusually high.

Research to date supports this as an effective device for selecting sales personnel, factory workers, clerical and secretarial personnel, seasonal employees, supervisors, managers, and engineers. These occupational categories in general have large numbers of employees across a wide range of industries and there exists the possibility that a weighted application blank suitable in selecting a specific occupational group throughout a given industry can be developed.

Recent public policies with respect to hiring and related personnel practices have been very disturbing to many organizations. The Civil Rights Act of 1964 as amended in 1972 and the various Executive Orders and antidiscriminatory legislations have made discrimination in one form or the other illegal except in the case of sex or religion provided they constitute Bona Fide Occupational Qualifications. It is not unlikely that other aspects of the individual's background will come under scrutiny in the future. When challenged, it falls upon the employer to demonstrate the validity of whatever practice may have been followed. A weighted application blank, properly validated, may sometimes spare the pain employers may have to suffer when called upon to justify a particular personnel action.

The applicability of biographical information in reducing turnover as well as predicting various kinds of employee behavior is supported by a number of studies. In a study involving clerical employees in banks, the use of weighted application blank "permitted correct identification of 80% of the short-tenure employees at the expense of rejecting 30% of the long-tenure employees" (Robinson, 1972, p. 282). Rosenbaum (1976, p. 97) found this device effective in reducing internal theft by scheduling differential surveillance of potentially high-risk employees.

Barukh Nevo (1976, p. 106) in a study among 390 male and 524 female military personnel in Israel concluded that personal data can predict success of men and women in the army. In another study it was found that age, weight, marital status, age at marriage, number of children, class standing, activities in college, father's occupation, rank in military, and ten-year goals taken together helped to predict job success (Kessler and Gibbs, 1975, p. 55). In a hospital setting, Novack (1970, pp. 419-423) found the weighted application blank effective in reducing turnover among such occupational groups as secretarial, junior secretarial, houseman, female dietary aide, and male nursing attendant. Scott and Johnson (1967, pp. 393-395) in a study among permanently employed unskilled workers determined that twelve of the nineteen variables proved to differentiate the long-tenure and short-tenure groups. Additionally, WAB has been shown to be effective in predicting sales success (Tanofsky, 1967, pp. 59-63), in screening of engineers to predict the probably success of new job applicants (Hoose, 1963, pp. 127-129); and in reducing turnover among secretarial and clerical employees in a university (Fleishman and Berniger, 1960, pp. 39-46). The Minnesota Mining and Manufacturing Company was able to predict female clerical employees turnover using the weighted application blank (Kirchner and Dunnette, 1957, pp. 206-208), as did the Prudential Life Insurance Company (Kreidt and Gadel, 1953, pp. 338-340). These are but a few of the over 200 references to weighted application blanks found in the literature.

Appendix B provides a comprehensive listing of personal history items found to be predictive of job success. The various studies cited

in the preceding paragraphs and elsewhere identify one or more of these personal data possessing predictive capability with respect to various employee behaviors. The fact that data on several of these items are found in the application blank itself provides a starting point to examine what personal characteristics are important indicators of job behavior in a given situation.

On the subject of organizational effectiveness, a study by Morse (Morse in Kast and Rosenzweig, 1973, p. 214) revealed that "the most productive organization [by implication, the most effective organization] is the one that fits the needs of its task and people in any particular situation." This implies that the organization has to be cognizant of its environment and the complex needs of its members. Such awareness does not come from following some universal principles, but by carefully studying the particular organizational system and its components. The problem cited here deals with employee turnover. The root of the problem can be better understood by examining the background of the particular individuals concerned, their needs, their dispositions, and their biases. In effect, this is analyzing a unique situation and attempting to identify the compounding variables relevant to the situation.

In the study by Morse (1970) on organizational effectiveness, three variables were examined and found to form a "fit." To clarify this point further, effective organizational performance in a particular situation is dependent upon the degree of fit between organizational characteristics, the task to be performed, and the employees' sense of competence.

Morse identified the sense of competence motivation as the crucial variable that determined effective performance under different types of task-organization situations. Sense of competence motivation provides an element of correspondence between the individual and the organization-task situation. It affects the compatibility of the individuals in terms of their willingness to stay with the company. This research is not designed to replicate the Morse study, but one point of issue needs consideration. This has to do with the way the sense of competence motivation was measured by Morse and his colleagues. The participants were asked to write creative and imaginative stories in response to six ambiguous pictures and to write creative and imaginative stories about what they would be doing, thinking, and feeling "tomorrow" on the job (Morse, 1970, p. 66).

The suitability of projective tests as was the case above is questionable for a number of reasons. For instance:

. . . reliability [of projective tests] has been generally low, especially since interviewers and clinicians are differently trained in the technique. Most validity studies have not been overly supportive, either (Glueck, 1974, p. 226).

In a situation where a company favored high Wonderlic scores to predict low turnover, Ruda and Albright (1968, p. 31) after studying 1,034 applicants found that high scores on weighted application blanks were predictive of low turnover for both blacks and whites while high Wonderlic scores were found to be predictive of high turnover for whites and not for blacks. Though this is a good example of the incorrect use of employment tests, it also serves to illustrate the effectiveness of weighted application blanks over psychological tests such as the Wonderlic Personnel Test in predicting turnover.

Likewise, the cost of administering and evaluating psychological tests can be prohibitive. They require considerable time and create problem in administering the same to low-skill employees with limited education. Morse used higher level personnel, the number of whom is far less than the number of operative employees in most organizations. The analysis of biographic data and the development of weighted application blank in particular is essentially one of identifying the proper fit of individuals who might perform well in a given organization-task environment. It would, therefore, appear safe to say that the use of weighted application blank is a better and/or at least more economical method of identifying the right "fit" individuals for a particular organization than is the use of projective tests.

Clearly, it is evident by now that the weighted application blank has wider application in diverse organizational settings for a wide variety of occupational categories and for several success criteria. It is particularly suitable where large number of criterion groups exist so that application processing is expedited, at the same time introducing a scientific approach to the process. A cost-benefit analysis seems to reveal that the cost of the approximately 100 hours or so it takes to develop the instrument will be offset in a short period of time by way of improved selection decisions (England, 1971, p. 5).

The weighted application blank is not to be taken as a panacea to the selection problem. The weighted application blank does have certain shortcomings (Schuh, 1967a, p. 145). For example, the ability of predictors to remain constant over time is of particular concern as it is not feasible economically or practically to collect data on large number of new employees and to develop new weights. If indeed the weights

do not maintain their stability over time, there arises a need for reweighting the application blank periodically. Such problems with stability existed in six of the studies shown in Figure 2-5. These are the ones by Black and MacKinney (1963; Buel (1964); Dunnette, et al. (1960); Fleishman and Berniger (1960); Minor (1958); and Wernimont (1962). These cross-validation studies indicated "rather consistent decrease in predictability, regardless of the number of replications made" (Schuh, 1967a, pp. 145-146), but "predictions still remained at statistically significant levels" (Taylor and Weiss, 1972, p. 123). One explanation given for this decrease in predictive power over time is due to the changes induced in the labor market by a constantly changing economy (Schuh, 1967a, p. 146).

Recently, Roach (1971, p. 157) in a second cross-validation of weighted applications for predicting tenure of clerical employees arrived at this conclusion: "There was a large decrement in the predictive efficiency of the instrument between the initial and second cross validation samples." Such a finding could definitely cast doubts on the effectiveness of weighted application blanks. Rather than stopping at that point, however, Roach (1971, p. 160) took it a step further to note that:

Examination of specific items which lost predictive power and review of company history suggests that changes in labor market conditions, manpower needs, and personnel policies may be contributing factors to the loss of efficiency.

In a study designed to compare the effectiveness of job satisfaction inventories with biographical data to predict individual turnover, Taylor and Weiss (1972, p. 123) noted that:

. . . satisfaction data alone were most stable predictors of termination. Satisfaction also showed the highest "total" and "leave" hit rates in both the development and cross-validation groups. Based on the number of predictors used the biographical items would be expected to hold up better in cross-validation than the satisfaction data, but in these analyses the opposite result was obtained.

Lest the foregoing conclusion cause any hasty judgment with respect to the reliability and validity of biographic data in predicting turnover, the following remarks by Taylor and Weiss (1972, p. 130) are worth noting:

One possible explanation for the failure of the biographical items to be stable predictors of tenure outcomes might be in the variables included in this study. Some of the factors England (1969) has found to be often effective in weighted application blank prediction, such as data on previous jobs, club memberships and location of residence, were not included in this study.

Given the above, the conclusions drawn by Taylor and Weiss are at best termed tentative. It would appear that if one were to draw any definitive conclusions with respect to the supremacy of job satisfaction inventories to predict turnover over the weighted application blank, more systematic research is necessary. That tenure is a function of satisfaction has been supported by a number of studies. Brayfield and Crockett (1955, pp. 396-424) found that tenure and absenteeism were related to satisfaction. Similar findings were reported by Vroom (1964) and Hulin (1968). The Minnesota Theory of Work Adjustment also posits that voluntary turnover is a function of job satisfaction (Dawis, Lofquist, and Weiss, 1968, p. 23). However, there exists a number of problems which must be overcome before one can compare the effectiveness of job satisfaction data over the biographical data in predicting turnover or suggesting the use of job satisfaction inventories to predict turnover. These problems are drawn together very succinctly by Taylor and Weiss (1972, p. 124):

There are important differences between the studies using biographical data and those using job satisfaction as predictors of termination which make direct comparisons of the efficacy of the two sets of predictors difficult from existing studies. Biographical data are generally collected on the application blank prior to the hiring decision. On the other hand, job satisfaction data are obtained from employees some time after they are hired. This could lead to greater restriction of range for the studies using [job]

satisfaction data, as those who are most dissatisfied and hence would leave most quickly would be less likely to be included in the sample. An additional difference, which makes direct comparison of the results difficult, is that the results of weighted application blank predictions are often reported in terms of hit rates and individual predictions (Blum and Naylor, 1968; Scott and Johnson, 1967) while the results of studies using job satisfaction as a predictor generally report their results in terms of correlations or group differences (Vroom, 1964; Hulin, 1966).

In their own study designed to compare the effectiveness of job satisfaction and biographical data in predicting turnover, Taylor and Weiss collected all the data at the same time from employees currently employed. Their findings would have been more significant and meaningful if the same results were to be observed from data collected prior to the hiring of these employees.

Notwithstanding its shortcomings, the weighted application blank still remains a powerful tool in predicting turnover. At the same time, it is also perhaps one of the least expensive of the selection devices used. The information required to develop the weighted application blank is found in the nearest personnel files. As England (1971, p. 5) points out:

Development of weights for the application blank does not need to be a long, expensive, complicated process requiring the services of a specialized consultant. There is no reason why the job cannot be undertaken successfully by any trained member of the company's personnel department staff once he has learned the fundamentals of the technique. No complicated statistical formulas need be involved --just simple arithmetic and a fair amount of clerical aptitude. Ordinarily the process for one type of job can be completed and ready for trial use in as little as 100 working hours, with possibilities of reduction in hiring costs which may repay many times over the original investment in research.

To overcome some of the problems associated with the weighted application blank, Schuh (1967a, p. 148) makes these suggestions:

Reweight the entire application blank every three years or sooner, or conduct frequent item validity analyses and reweight the individual items according to the trends present in the data. By using this synthetic validity model, the problem of gathering large numbers of employees for reweighting the entire blank every three years is instead reduced to that of retaining a smaller holdout group for cross-validation of the systematically re-evaluated form.

The point about cross-validation is extremely important. In fact, England (1971, p. 47) noted two difficulties with respect to providing any general estimates of degrees of validity of the weighted application blank. These are:

(1) many reported studies base their estimates of validity on the same groups which were used in weighting items and undoubtedly overestimate the actual validities, and (2) validity data are reported in such a variety of ways (correlation coefficients, mean difference tests and overlapping of high and low criterion groups) that it is difficult to combine them in summary form.

The first difficulty can be handled by working only with those studies which report validity data based on separate samples from those which were used in the development of item weights. [With respect to the second question, the] conclusion reached on the basis of available evidence is that the WAB technique produces substantial validity coefficients. It would seem likely that this adaptation of the widely used application blank could be used profitably by a great many more organizations than is currently the case.

England (1971, p. 47) reports that thirty-eight studies have used separate samples to validate the weighted application blank and thirty-six of these showed the WAB to be significantly predictive of the criterion where used with new groups," indicating that 95 percent of the studies showed positive results. Twenty-seven of the thirty-eight studies reported the results in terms of correlation coefficients which varied from .19 to .83 with a median value of .42. Incidentally, these validity coefficients rank at par with or better than the prediction ceiling found with testing in general. Flipppo (1976, p. 157) notes that:

Many years of experience have shown that validity coefficients [of devices used to predict various job behavior] seldom exceed .50, and are higher in predicting training success than job success. 'Taking all jobs as a whole . . . it can be said that by and large the maximal power of tests to predict success in training is of the order of .50, and to predict success on the job itself is of the order of .35' [Ghiselli, 1966, p. 125]. The range of validity coefficients discovered by Ghiselli in a survey of published research was from .27 to .59 for training criteria and from .16 to .46 for job success criteria. Over the years, there has been little movement toward greater validities.

In future projects involving development of weighted application blanks researchers would want to insure that the type of difficulties observed by England is not perpetuated. This can be accomplished relatively easily. In the first place, researchers could make provision for hold-out or independent groups on which the weights established can be cross-validated so that more realistic validity data can be made available. Also, in order to facilitate comparison of various studies, validation data could be reported in some standard fashion. Marvin Dunnette (1966, p. 146) did a commendable job of looking at various validation measures and drew this conclusion:

Although all these measures [mean differences, multiple correlation, percentage overlap, point biserial correlation, etc.] give similar information, perhaps the best is the overlap measure, 0 [percentage overlap]. It is interpretable directly as the degree of separation between two groups and thus yields an extremely useful index of a test to identify different categories of job behavior. The point biserial coefficient is not so easily interpreted; it gives one only a rough notion of the magnitude of relationship between a test and categorical assignments based on job behavior observations. The difference between means is meaningless unless compared with the standard deviations of the two distributions; and once this is done, the overlap coefficient might just as well be computed.

This study utilizes the percentage overlap measure in a cross-validation involving a hold-out group and the details of this technique are presented in Chapter III. Given the objective support presented with respect to the percent overlap (0) measure, this technique could serve as

the standard measure for validation purposes.

Assuming that the two difficulties mentioned earlier are overcome, it would be possible to take the weighted application blank a step further toward determining the generality of item predictions. If certain items consistently predict behaviors such as job success or tenure within given job classifications, the utility of the weighted application blank would definitely increase. Furthermore, it could lead to including those items of generality in application blanks across large occupational categories.

A Postlude to Weighted Application Blanks

Traditionally, weighted application blanks have been used primarily to predict turnover. Assuming that the researcher was able to ascertain that the instrument has predictive power, the project invariably came to an end. This is perhaps precipitated by the popular assumption that those who leave must not have been happy with the job and/or the job environment while those who decided to stay are happy with the job and its environment. In fact, there are several studies that support this assumption. Brayfield and Crockett (1955); Herzberg, et al., (1957); Hulin (1966); Taylor and Weiss (1972); and Vroom (1964 and 1966) have concluded that turnover was related to satisfaction. That this is not a universal phenomenon was demonstrated in a recent study (Flowers and Hughes, 1973) which was discussed in the early part of this chapter. This study focused on the reasons why employees tend to stay with an organization. These authors have developed a profile of four types of employees that may stay with an organization and do so for a variety of reasons, not all of which are necessarily contributing to the organizational goals. The four types are the

turn-overs, the turn-offs, the turn-ons, and the turn-ons-plus (Flowers and Hughes, 1973, pp. 51-52) and their characteristics are described below:

The turn-overs are dissatisfied with their job, have few environmental pressures to keep them in the company, and will leave at the first opportunity. While employees seldom start out in this category, they often end up here, having experienced a gradual erosion of their inertia. Consider, for example, an employee who a few years ago was highly motivated, had three children in college, and was close to being vested in the company retirement plan. Today, his children are graduated, he is vested, and he has lost interest in his job. His inertia to stay has been greatly weakened, and he may shortly become a turnover statistic.

The turn-offs are prime candidates for union activities; they can easily generate employee-relations and productivity problems, and conceivably industrial espionage and sabotage. These employees are highly dissatisfied with their jobs and stay for mainly environmental reasons. For example, they may feel they are too old to start over again, or that they are financially dependent on the company benefit programs; or they may believe that they can't get a job on the outside. Employees trapped in this category have two alternatives: (1) they can look for outside help (for example, from unions or the EEOC); and (2) they can change their behavior and either "do exactly what they are told and no more" or decide to "get even with the company."

The turn-ons are highly motivated and remain with the company almost exclusively for reasons associated with the work itself. This is most desirable from the company's viewpoint because these employees really want to stay and are not locked in by the outside environment. However, if managerial actions reduce job satisfaction (even temporarily), turnover may rise dramatically. Since the inertia of the turn-ons is not strengthened by environmental factors, it is therefore not strong enough to make them stay without continual job satisfaction.

The turn-ons-plus are the most likely to stay with the company in the long run. These employees stay for job satisfaction plus environmental reasons. Even if job satisfaction temporarily declines, they probably stay. The word "temporarily" is a key one, for if job satisfaction drops permanently, these employees become turn-offs. This transformation will not raise the turnover statistics, but it will increase frustrations and affect work performance.

The various reasons for staying have been grouped into three categories: motivational (job satisfaction), maintenance (hygiene), and environmental (external pressures). Their findings summarized in Figure 2-6 shed new light which both the theoretician and practitioner should not

Figure 2-6

Number of Motivational, Maintenance (Hygiene), and External Environmental Reasons for Staying Among 12 Employee Classifications

Employee Classifications		Job-Related Reasons										External Reasons										
		10	9	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	9	10	
SKILL:	Low-skill production								*	*	*	!	!	!	!	!	!	!				
	Mod-skill production				+	+	+	*	*	*	*	!	!	!								
	Clerical/administrative				+	+	+	+	*	*	*	!	!	!								
	Managers/professionals	+	+	+	+	+	+	+	*	*	*	!										
RACE:	Low-skill (white)						+	*	*	*	*	!	!	!	!	!						
	Low-skill (black)																					
PAY:	Salary		+	+	+	+	+	+	*	*	*	!										
	Wage				+	+	*	*	*	*	*	!	!	!								
TENURE:	Less than 5 years	+	+	+	+	+	*	*	*	*	*											
	More than 5 years				+	+	+	+	*	*	*	!	!	!								
EDUCATION:	College degrees		+	+	+	+	+	+	*	*	*	!										
	No college degrees				+	+	*	*	*	*	*	!	!	!								
		10	9	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	9	10	

Legend: + represents Motivational Reasons for Staying
 * represents Maintenance (Hygiene) Reasons for Staying
 ! represents External Environmental Reasons for Staying

Source: Adapted from Flowers, Vincent and Hughes, Charles. "Why Employees Stay?" Harvard Business Review (July-August, 1973), p. 53.

overlook. Out of the ten most frequently cited reasons for staying, low-skill manufacturing employees identified seven external reasons and three maintenance reasons and no motivational reasons. Contrast this with the managers and professionals who cited six motivational, three maintenance, and only one external reason for staying. In between, the moderate-skill manufacturing and clerical personnel ranked with an almost equal distribution of the three reasons. These findings suggest the fact that across the board assumptions about employee behavior can definitely be misleading. In addition, the Flowers-Hughes study also emphasizes the need for a firm that wants to keep its employees to look also at the reasons for their retention and continuation. The effect could be a shift from the traditional and habitual emphasis on reducing turnover toward that of managing the more positive employee retention. The good that can come from such a shift in emphasis is well stated in the following passage (Flowers and Hughes, 1973, pp. 59-60):

If managers reinforce the right reasons for employees staying and avoid reinforcing the wrong reasons, they can not only improve traditional turnover statistics but set goals for retention. However, they must begin to understand and respect employees as individuals with values that differ from their own.

As a prerequisite to the development of a program to manage retention, certain difficult questions must be answered:

Why do employees stay?

What are their values for working and for living?

What are their ages, sexes, marital statuses, and so on?

What are the right and wrong reasons for employees staying in their jobs?

How dissatisfied is dissatisfied?

. . . In seeking balance, then, it would be useful for a company to review all benefit, pay, location, and other environmental factors, as well as job satisfaction, to determine whether people are staying for the right or wrong combinations of reasons - always keeping in mind what is right and wrong to management may not have the same degree of rightness and wrongness to the employee.

Ultimately, rightness and wrongness, whatever their specific definitions for individuals in a given company, will require the provision of a work environment that is broadly compatible

with the employees' personal goals and their values for working and living. Managers need to recognize that the "average employee" is only a concept, and develop personnel programs, policies, and procedures that are responsive to the disparate values of employees.

Summary and Conclusions

The review of literature presented in this chapter looked at a number of related areas. First of all, it focused on the problem of turnover and the implications thereof to organizations. An attempt was made to relate this to the areas of organizational effectiveness, organization design and structure, communication, and the ever present roles individuals play in shaping up the organization's end results. It was observed that there must exist a correspondence between the individual and the organization which would foster a mutuality of interest and pursuit of common goals. Use of biographical data in the form of weighted application blanks has been suggested as an effective means of controlling turnover by reducing the lack of fit among the internal, external, and/or individual variables which can cause turnover. Stated differently, this can help reduce the probabilities of turnover resulting from improper matching of individuals to task and organization. This in turn can lead toward building a stable work force. Finally, the need to look at not only turnover but to look also at the reasons why employees stay was brought out. This has a very direct implication for management. In effect, the positive element of manpower retention management becomes an integral part of the strategy in human resources management.

CHAPTER III

RESEARCH METHODOLOGY

This research consists of three separate but closely related areas of enquiry. The purpose of Part I is to examine the difference between the long-tenure (active) and short-tenure (inactive) employees with respect to their biographical backgrounds and the impact of the same on their tenure. An additional purpose is to develop a weighted application blank to be used as a predictive device in separating potentially long- and short-tenure employees at the time of employment interview. The underlying rationale is that an applicant's background can be predictive of future job performance/behavior and, therefore, systematic analysis, quantification, and validation of such predictive factors can improve the selection process and help reduce excessive employee turnover. Research Questions I and II deal with Part I of the research.

Research Question III has two major components to it. While these are very closely related, there are differences in the methodology involved. In order to maintain clarity and good organization, the two issues are examined separately in Part II and Part III.

Part II examines the level of job satisfaction expressed by the present employees of the company. Five major aspects of the job will be surveyed. These include Work, Supervision, Pay, Promotion, and Co-Workers. The purpose of this part is to determine whether those

employees who have maintained their membership with the organization are also satisfied with the foregoing aspects of the job. This is predicated on the theory that long tenure is but one of the desirable features in employee-employer relations. Equally important is the attitude of the employee toward the work and the whole organization, for there is considerable agreement among scholars that usually positive attitude toward one's work results in more effective performance, a goal every organization would like to maximize. Consequently, this part of the study should provide a better insight about the employees' disposition toward their jobs and their organization.

Part III of the research is designed to find the missing link between Part I and Part II. That is, if the long-tenure employees were not really satisfied with the major aspects of their jobs, what possible explanation can be given for their continuation with the company? In this part of the research, the reasons for their staying with the company will be examined. Flowers and Hughes (1973, p. 49-60) identified three possible reasons for employees staying on a job: (1) motivational, (2) maintenance, and (3) external environmental. Knowing what causes the employees to remain on the job can be of immense help to any organization, as it would help develop more appropriate strategies aimed at motivating employees.

The three parts of this research view the problem of employee turnover from a number of avenues. It is believed that the combined effort will enhance our understanding of this crucial problem. The research methodology associated with each part is presented separately in the following pages.

Special Exclusions. Information pertaining to the sample and

procedures used is discussed in each part of the research. However, a point of clarification is necessary due to the fact that there is a difference between the sample mix used for Part I and for Parts II and III of the research.

The sample used for Part I included those current employees with ninety days or more of service and the former employees, both as of the time the data were collected. As for Parts II and III, all current employees were used. The original intent was to use the same group of current employees for Parts II and III. With this in mind, a question to indicate length of service was included in the survey instrument. Ten out of the ninety-five participants did not give this information, hence it was decided to include all current employees in Parts II and III. This dissimilarity in the sample structures could raise a methodological issue as to how one can generalize from the whole population (all employees) to a specific population (long-tenure with ninety days or more of service). However, the seventy-six long-tenure employees included in Part I are a part of the ninety-five employees used in Parts II and III, and it can be assumed that some of the nineteen current employees with less than ninety days of service will eventually become long-tenure employees. Thus, any generalization to be made with respect to the long-tenure employees based on the responses of all current employees would appear reasonable.

Another point which needs clarification is the original plan of surveying the former employees to determine their attitude toward their jobs and to find out their reasons for having stayed with the company. This would have permitted a more meaningful analysis of the situation. However, certain practical constraints such as time and financial

resources as well as certain amount of pessimism about getting back a statistically acceptable number of the survey instruments precluded the inclusion of the former employees in the latter parts of the research.

Part I: Analysis of Biographical Data and
Development of Weighted Application Blank

The purpose of this section is to systematically analyze and determine the the application blank item responses characteristic of long-tenure and short-tenure employees and to develop a weighted application blank which could be used to predict turnover of potential employees. It is assumed that certain personal background data can predict subsequent behavior on the job and that this information can be of utility in the form of a weighted application blank to improve selection of employees. The rationale, theoretical foundation, and support to this part come primarily from the works of England (1961, 1971) and Dunnette (1966).

Perhaps the classical work dealing with the development and the use of weighted application blanks was authored by Welsch, Paterson, and Stone (1952). It was titled How to Develop a Weighted Application Blank (out of print). England has since revised this publication [1961, 1971] and the method described therein has been widely used in developing weighted application blanks (Schuh, 1967a and 1967b). The approach in this study of identifying the differentiating elements in the background of the long- and short-tenure groups and developing a weighted application blank is basically the same as the one suggested by England.

Marvin Dunnette (1966) treats at length the subjects of strategies and statistics of validation of employment tests and instruments. The validation techniques used in this study find their support in Dunnette's work.

The research questions applicable to this part of the research

are restated below:

Research Question I: To investigate the differences between long-tenure and short-tenure employees in terms of their respective backgrounds.

Research Question II: To develop a weighted application blank using the biographical information found in the application blanks of the long-tenure and short-tenure groups and to determine whether the weighted application blank could have predicted turnover with both statistical significance and practical importance.

The primary source of information for the biographical data was the application blanks on file with the company. The firm maintains two sets of personnel files: one for the present employees (the active group) and the other one for the former employees (the inactive group).

Weighted application blanks are developed to relate applicants' characteristics to various success criteria such as productivity, absenteeism, advancement, and job tenure. In this study, the criterion is job tenure; therefore, the weighted application blank is intended to predict with a greater degree of accuracy the potential for an applicant to remain with the firm.

Sample and Procedures

Once the criterion is chosen, the next step is to identify two criterion groups, in this case, the active and the inactive group. England (1971, p. 11) recommends "that these two groups be as large as possible

and that no study be undertaken without, at the minimum, seventy-five in each of the two groups." In addition, the active group must be representative of the type of employees desired in the future (in this case, those who would stay with the company), and the inactive group must be representative of the type of employees to be avoided in the future (those who would not stay with the company).

The company studied has been in operation only since 1971 and did not have a reservoir of current and former employees from which to draw large samples. Therefore, the criteria for selecting the active group included (1) to provide for at least the minimum seventy-five required from those currently employed, and (2) to insure that those chosen would be the senior-most individuals in the organization satisfying the first criterion. Since the management had pointed out that if it could get a person to stay beyond the ninety-day probationary period, that person did not pose a major turnover statistic, it was hoped that those selected to make the active group will have had at least ninety days of service with the company. Eighty-two employees who met the above criteria were initially identified to form the active group.

The second criterion group represented the inactive employees. Once again, a requirement was to provide for at least the minimum seventy-five. Secondly, individuals in this group must have had the least amount of service with the company, and none should have had ninety days service or more. Those fitting these criteria numbered 128.

In the company where this study was conducted, new hirees are placed, as a matter of policy, in the final assembly area and then gradually promoted as operators in sub-assembly areas. This policy is followed on the assumption that it will enable the new employee to become familiar

with the whole product and the component parts of the same before that person is assigned to isolated sub-assembly operations. The management pointed out that most of the terminations took place within the first thirty days of employment, so few of the former employees had worked in any other department. Conversely, almost all the employees currently employed had gone through the above mentioned induction process. The proposed weighted application blank will be used to screen future applicants at the initial hiring stage.

The application blank used for hiring employees in the plant is presented in Appendix A. This is very similar to the application blanks used by organizations to hire operative workers. The information appearing on the application blanks was entered manually on accounting work sheets. A total of eighty-two active and 128 inactive applications were processed. Not every one of these applications was complete in all respects, due to a change in management policy on gathering potentially discriminatory information under the Equal Employment Opportunity Commission (EEOC) guidelines (Flipppo, 1976, p. 165; Chruden and Sherman, 1976, pp. 122-125). For example, information on marital status, number of dependents, and ethnic background was missing in a number of instances. Information on ethnic background was readily available from other records maintained by the firm. As for marital status and number of dependents of active employees, a simple form was distributed to all employees then on the payroll with a request to furnish the above information. Every one of such forms was returned and the information therefrom was gathered to complete the data on the active group.

The process of obtaining information on marital status and number of dependents was not as easy for the inactive group. The most expedient

way to get this information was to approach these individuals via telephone. Up to three attempts were made to contact those individuals in the inactive group whose applications were incomplete. These contacts were made over a four-day period between the hours of 4:00 and 6:00 p.m. No attempt was made to contact those who could not be reached after the third time. Some individuals refused to give information; in a few instances the telephone service was discontinued. As a result, the original number of 128 inactive employees was reduced to ninety-seven. The net samples came to seventy-six in the active and ninety-seven in the inactive groups.

Another requirement in developing the weighted application blank is to have a weighting group and a hold-out group in each criterion group. The weighting group is used to determine the difference between the groups and to arrive at the weights; the hold-out group is used to validate the weighted application blank and to determine the cut-off point separating potentially long-tenure and short-tenure employees. This procedure is recommended (England, 1971, p. 30) because:

A considerable amount of evidence suggests that it can be very misleading to develop a set of empirical weights which differentiates two groups and then to evaluate the weights on the same groups. Weighted application blank analysis is not recommended unless provision can be made for checking results on different samples than were used in determining the item weights.

The recommended scheme is to maintain a 2:1 ratio between weighting group and hold-out group with a minimum of twenty-five in the hold-out group. In this study, hold-out groups were formed by drawing together every third application blank from each group. The remaining two-thirds constituted the weighting groups. The sample structure, thus, consisted of the following:

	<u>Weighting Group</u>	<u>Hold-out Group</u>	<u>Total</u>
Active	50	26	76
Inactive	63	34	97

At this point a legitimate question may be raised with respect to the employees who were not included up to this point. These employees and any subsequent additions, to make a total of at least thirty, are to be used in a more rigorous cross validation study (usually referred to as validity generalization). Since this group is independent of the original sample, the findings will indicate how well the results obtained in the first study apply to it.

Items to be Analyzed

Since the information is drawn from the application blank (Appendix A), the items to be analyzed must come from that document. Appendix B (England, 1971, pp. 16-20) has a list of personal history items found to be predictive of job success, in this case, job tenure. A comparison of the items in the application blank with the items in Appendix B and an examination of the information in each case showed that the following items would warrant consideration:

- Place of residence
- Age
- Weight
- Height
- Friends at place of employment
- Education
- Trade School Training
- Previous Experience

Marital Status

Number of dependents

Ethnic background

Sex

Since the last two items - ethnic background and sex - might be interpreted as discriminatory under the EEOC guidelines, these items were not included in this study. The responses to the above items along with the name and social security number of the individuals were punched on IBM data cards for tabulation purposes.

Determining Item Weights

The first step in the process of determining item weights is to record the names and responses from the application blanks of all persons in the respective weighting groups. This is a simple matter of transferring information from the application blanks to the work sheet used for developing the weights. A sample format of this work sheet is presented in Figure 3-1. In some cases, however, the responses do not lend themselves to direct analysis, such as in the case of age, weight, experience, education, and similar continuous variables. These are better handled by using one of three types of classifications (England, 1971, pp. 21-22).

1. Equal frequency class: This classification divides the responses of the combined weighting groups into four or five classes with approximately equal number of individuals in each class.

2. Equal interval class: In this case, the responses are classified into equal intervals.

3. Maximum weight class: This is a trial-and-error method to determine what response categories or interval limits best bring out dif-

Figure 3-1

Analysis of Biographical Data and Development of Weights Work Sheet

Response Category	Number of		Percentage of		Percentage Difference	Net Weight	Assigned Weight
	Active	Inactive	Active	Inactive			
1	2	3	4	5	6	7	8

LOCATION:

Local
Out of town

AGE:

Under 22
22 - 26
27 - 35
Over 35

WEIGHT:

Under 126
126 - 150
151 - 175
176 - 200
Over 200

HEIGHT:

61" - 66"
67" - 72"
Over 72"

EDUCATION:

Under 12
12 - 13
Over 13

FRIENDS:

Yes
No

TRADE SCHOOL:

Yes
No

EXPERIENCE:

None
1 - 2
3 - 5
Over 5

Figure 3-1 (Continued)

Analysis of Biographical Data and Development of Weights Work Sheet

Response Category	Number of		Percentage of		Percentage Difference	Net Weight	Assigned Weight
	Active	Inactive	Active	Inactive			
1	2	3	4	5	6	7	8

MARITAL:

Single

Married

Single w/
dependentsDEPENDENTS:

Can't answer

None

1 - 3

4 - 5

Over 5

ferences between groups.

Responses to age and weight were classified using the equal frequency class method, responses to height were classified using the equal interval class method. The method of maximum weight was used in the case of education, experience, and number of dependents. A number of trials indicated that those in the "12-13" category in education fared well in terms of tenure while those in the "under 12" and "over 13" categories contributed heavily to the turnover statistics. Likewise, in regard to experience, those with no experience and those with three or more years experience tended to stay while those in the "1-2" category had a higher rate of turnover. On the question of number of dependents, except for the "can't answer" and "none" categories, the trials indicated a strong pattern favoring those in the "1-3" category more so than those with "4-5" and "over 5" categories.

The "can't answer" category represented those individuals who were single and without dependents. Counting them for the purposes of developing a weight for dependents would have resulted in penalizing and/or favoring them twice.

Once the items were identified and responses categorized, the next step was to determine the difference, if any, in the responses of the active and inactive groups. This was done by tabulating the number responding in each group by response category and calculating the corresponding percentages. The number responding in each category, by active and inactive, the total responding in each category and the percentages of number responding by active and inactive would appear in the format shown in columns 2, 3, 4, 5, and 6 respectively in Figure 3-1.

The procedure then calls for determining the difference in the

percentages responding in active and inactive to arrive at the net weights. This is found by subtracting the value in column 6 from the value in column 5 in Figure 3-1. The net differences thus arrived at will appear in column 7, Figure 3-1. Since these differences themselves do not provide a direct answer to the question of the predictability of various application blank item responses, these differences need to be translated in a more meaningful manner. A frequently used method is to refer to one of the three tables developed by Strong (1926) to assign weights for differences in percentage responses (England, 1971, p. 27). These tables were used in this study, and they are presented in Figure 3-2. In Figure 3-2, Table A is used when both percentages are between 8 and 92; Table B is used when both percentages are between 3 and 7 or 93 and 97; and Table C is used when one percent is between 0 and 2 or 98 and 100. The net weights assume the same sign as the differences in percentage.

Calculation of weights may stop at this point. In fact, this has been true in several previous studies (Novak, 1970; Schuh, 1967b; Fleishman and Berniger, 1960). Since the net weights usually are large and have both positive and negative values, actual scoring of application blanks can be somewhat cumbersome and may introduce possibility of error in application of weights. "It is recommended, therefore, that the net weights be converted to assigned weights with smaller positive values to simplify scoring" (England, 1961, p. 23). A table of assigned weights derived from net weights (England, 1971, p. 28) is given in Figure 3-3. It appears from the way England describes this approach that two assumptions have been made:

1. That the distribution would be normal; and
2. That one third each of the observations would fall on either

Figure 3-2

Strong's Tables of Net Weights for Differences in Per Cents

Part A		Part B		Part C	
(To be used when both per cents are between 8 and 92)		(To be used when one per cent is between 3 and 7, or 93 and 97)		(To be used when one per cent is between 0 and 2, or 98 and 100)	
Diff. in Per Cents	Net Weight	Diff. in Per Cents	Net Weight	Diff. in Per Cents	Net Weight
69	27	69	27	69	28
68	26	68	26	68	27
67	25	67	25	67	26
66	24	66	24	66	25
65	23	64 - 65	23	65	24
64	22	63	22	63 - 64	23
62 - 63	21	62	21	62	22
61	20	60 - 61	20	60 - 61	21
60	19	58 - 59	19	59	20
58 - 59	18	57	18	57 - 58	19
56 - 57	17	55 - 56	17	55 - 56	18
54 - 55	16	53 - 54	16	53 - 54	17
52 - 53	15	50 - 52	15	51 - 52	16
50 - 51	14	48 - 49	14	49 - 50	15
48 - 49	13	45 - 47	13	46 - 48	14
45 - 47	12	42 - 44	12	43 - 45	13
42 - 44	11	39 - 41	11	40 - 42	12
39 - 41	10	35 - 38	10	36 - 39	11
36 - 38	9	31 - 34	9	32 - 35	10
33 - 35	8	27 - 30	8	28 - 31	9
29 - 32	7	23 - 26	7	24 - 27	8
24 - 28	6	19 - 22	6	19 - 23	7
21 - 23	5	15 - 18	5	15 - 18	6
16 - 20	4	11 - 14	4	11 - 14	5
12 - 15	3	7 - 10	3	7 - 10	4
8 - 11	2	4 - 6	2	4 - 6	3
3 - 7	1	2 - 3	1	2 - 3	2
0 - 2	0	0 - 1	0	1	1
				0	0

Source: Stead, William H. and Carroll L. Shartle and Associates. Occupational Counseling Techniques: Their Development and Application. New York: American Book Company, 1940, p. 255.

Figure 3-3

Table of Assigned Weights Derived from Net Weights

Net Weight	Assigned Weight
- 4 or less	0
3,2,1,0 or -1,-2,-3	1
4 or more	2

Source: George England. Development and Use of Weighted Application Blanks (Dubuque, Iowa: Wm. C. Brown Company Publishers), 1961, p. 25.

end, and the other one-third would fall in the middle of the distribution. Thus, it is possible to use the simplified assigned weights of 0, 1, and 2, respectively, for the lower, middle, and upper thirds. The foregoing scheme was utilized in this study, and the assigned weights corresponding to the net weights appear in column 8 of the weighting work sheet. Those items, if any, with the same assigned weight for every response category do not differentiate between long- and short-tenure groups, and therefore, will not be included in scoring the application blank.

As to the method of using the weights, the personnel manager may simply score those items on the application blank by using the weights developed. In order to decide on the acceptability of a given applicant for employment, it is necessary to determine a cut-off point, a score below which an applicant may not be hired and above which an applicant may be hired. The procedure involved in establishing the cut-off point is discussed in the next section on Cross Validation of the Weights.

Cross Validation of the Weights

The purpose of cross validation is to determine the validity of the predictive device. It involves applying the weights on some similar group and examining their statistical significance and practical importance. As Dunnette (1966, p. 153) points out:

It is far more important to know the stability of the magnitude of the relationships and particularly the stability of the figures in expectancy charts or cutting scores based on the relationship. Such matters are best handled by cross-validation [which] simply involves checking our findings on another group of persons. Usually the second group is comprised of persons who were randomly set aside or "held out" from the major group.

For this reason, one out of every three of the active and inactive groups was set aside to form the hold-out groups. The application blanks in these cases are to be scored and analyzed for the following purposes:

1. To evaluate the distribution of the total scores in each group so as to develop a cutting score. If the difference between the two groups are found to be statistically significant and practically useful (the criteria to be discussed later), individuals above the cutting score may be hired while those scoring below the cutting score may not be hired.

2. To determine the statistical significance and practical importance of the weighted application blank in its ability to predict potential turnover.

The optimum cutting score should place the maximum number of persons according to their scores in their respective hold-out groups. To determine the cutting score, the method of "maximum differentiation" was used which would assign the maximum number of active and inactive candidates to their respective groups. This was done by calculating the percentage of employees in each group reaching or exceeding each score point in the range of scores 0 to 12. The difference between the percentages of the two groups was calculated and each score point was examined to identify the point of maximum difference. This point would constitute the cutting score. As a guideline in selection decision, the manager may hire those applicants scoring above the cut-off point and reject those scoring below the cut-off point.

The next most important step calls for validating the weights and the cutting score in terms of their power to predict turnover. Dunnette (1966, pp. 125-159) treats at length the subject of statistical

validation and the requirements for test validation as they affect personnel selection. The primary purpose of the weighted application blank in this case is to provide a predictive device that will separate the long-tenure and short-tenure employees early enough so that regret at a later time is minimized. Therefore, in dealing with statistical analysis, in addition to determining whether or not something is statistically significant, it is also necessary to pose the question as to the practical importance or the value of the predictor. As Dunnette (1966, p. 155) observes:

Unfortunately, many psychologists appear to build their theoretical castles on the quicksand of merely rejecting the null hypothesis, apparently gaining satisfaction from reporting statistically "significant" relationship. When large numbers of subjects are used, nearly all comparisons of means yield "significant" differences and nearly all correlations are "significantly" different from zero.

While a number of measures might indicate the ability of the weighted application blank to separate potentially long- and short-tenure employees, one method that is considered perhaps the best is the overlap measure (O) (Dunnette, 1966, p. 146):

It is interpretable directly as the degree of separation between two groups and thus yield an extremely useful index of the power of a test to identify different categories of job behavior. The point biserial coefficient is not easily interpreted; it gives one only a rough notion of the magnitude of relationship between a test and categorical assignments based on job behavior observations. The difference between means is meaningless unless compared with the standard deviations of the two distributions; and once this is done, the overlap coefficient might just as well be computed.

Briefly, the Percent Overlap measure tells how effectively the predictor can separate groups characterized by different job behavior outcomes. When considering the distributions of scores for two groups, the lesser the amount of overlap between the two groups, the more powerful the

predictor. Complete overlap would indicate the predictor to be very ineffective, while no overlap would indicate the predictor to be very effective in separating the active and inactive groups. Very seldom do the two extremes occur in this type of situation. The level of overlap where the predictor is both statistically significant and practically important is determined by calculating the ratio of the difference between the means of the two groups to the average of the two standard deviations. Mathematically, ratio (R) is:

$$R = \frac{D}{SD_{av}}, \text{ where } R = \text{ratio}$$

D = difference between the means ($M_2 - M_1$)

SD_{av} = average of the two standard deviations

$$\frac{(SD_2 + SD_1)}{2}$$

Once the ratio is calculated, the corresponding percentage overlap is found by referring to Tilton's Estimation of Percentage Overlap Table (Figure 3-4). The value obtained "can be regarded as a theoretical value approximating the percentage overlaps to be expected when the same test is used in future situations with similarly constituted groups" (Dunnette, 1966, p. 144).

Since the overlap, O , is a percentage, direct interpretation is possible. If O is high, the ability of the predictor to separate the potential high and low turnover groups is low and vice versa. Specifically (Dunnette, 1966, p. 149):

. . . if strictly used as a measure of relationship, the overlap coefficient may be interpreted roughly as follows: Values above 80 per cent show little, if any, useful relationship; the accuracy of classification is too low. Values between 50 per cent and 75 per cent denote fairly good separation between two groups and usually denote a practically useful relationship. Values below

Figure 3-4

Tilton's Estimation of Percentage Overlap Table*

DIFFER- ENCE* $SD_{av.}$	PERCENT- AGE OVER- LAP, O	DIFFER- ENCE* $SD_{av.}$	PERCENT- AGE OVER- LAP, O	DIFFER- ENCE* $SD_{av.}$	PERCENT- AGE OVER- LAP, O
0.000	100%	0.880	66%	1.948	33%
0.025	99	0.908	65	1.989	32
0.050	98	0.935	64	2.030	31
0.075	97	0.963	63	2.073	30
0.100	96	0.992	62	2.116	29
0.125	95	1.020	61	2.161	28
0.151	94	1.049	60	2.206	27
0.176	93	1.078	59	2.253	26
0.201	92	1.107	58	2.301	25
0.226	91	1.136	57	2.350	24
0.251	90	1.166	56	2.401	23
0.277	89	1.197	55	2.453	22
0.302	88	1.226	54	2.507	21
0.327	87	1.256	53	2.563	20
0.353	86	1.287	52	2.621	19
0.378	85	1.318	51	2.682	18
0.403	84	1.349	50	2.744	17
0.429	83	1.381	49	2.810	16
0.455	82	1.413	48	2.879	15
0.481	81	1.445	47	2.952	14
0.507	80	1.478	46	3.028	13
0.533	79	1.511	45	3.110	12
0.559	78	1.544	44	3.196	11
0.585	77	1.578	43	3.290	10
0.611	76	1.613	42	3.391	9
0.637	75	1.648	41	3.501	8
0.664	74	1.683	40	3.624	7
0.690	73	1.719	39	3.762	6
0.717	72	1.756	38	3.920	5
0.744	71	1.793	37	4.107	4
0.771	70	1.831	36	4.340	3
0.798	69	1.869	35	4.653	2
0.825	68	1.908	34	5.152	1
0.852	67				

* Difference = Difference between means = $M_2 - M_1$

$$SD_{av.} = \text{Average of the Standard Deviations} = \frac{SD_2 + SD_1}{2}$$

*Source: Dunnette, Marvin D. Personnel Selection and Placement. California: Wadsworth Publishing Company, Inc., 1966, p. 143.

45 per cent suggest a highly useful relationship, the accuracy of classification is high and the test or measure may be used with confidence that it is a valid indicant of the behavior against which it has been compared.

In this study, it is hypothesized that the weighted application blank so developed will have the power to separate the two groups.

Validity Generalization

Besides examining the statistical significance and practical importance of the findings, it is also a task of the researcher to examine the stability of the relationship. A validity generalization will be carried out by applying the weights on a group of fifteen applications from each of the active and inactive employees who were excluded from the initial sample and/or hired subsequently. Biographic data on these individuals were to be furnished by the company after the study got under way. The application blanks will be scored using the weights established and those below the cutting score will be classified as "potential short-tenure" and those above the cutting score will be classified as "potential long-tenure." Turnover data on these employees will be compared with the predicted outcome. The percentage overlap measure will be used to determine the effectiveness of the weighted application on the second validation group.

Part II: Job Satisfaction Survey

The purpose of this part of the research is to evaluate the level of job satisfaction expressed by the employees currently on the payroll. There is a widespread assumption that employees who stay on a job are implicitly satisfied with the job. Job satisfaction in this case "refers to the positive or negative aspects of an individual's

attitude toward his job or some features of the job" (Gibson, et al., 1973, p. 449). A recent study pointed out that satisfaction and job tenure are not positively related in all situations and at all skill levels (Flowers and Hughes, 1973, pp. 49-60). If this were true, the standard assumption about the positive relationship between long-tenure and job satisfaction needs reexamination. The action-decisions aimed at reducing turnover will call for more tailor-made approaches than some of the generally accepted practices. More light could be shed in this direction by also examining the reasons why these employees stay with the company. Therefore, in addition to examining the level of job satisfaction, in Part III of this study the reasons for staying with the company were examined. With these two additional insights to supplement the weighted application blank findings, it is expected that the findings of this study will make both theoretical and practical contributions of real significance.

Survey Instrument

The Cornell Job Descriptive Index, frequently identified by its acronym JDI, was chosen for this part of the research. A sample of this instrument is presented in Appendix C. The criteria applied in favoring the JDI over other job satisfaction inventories were as follows:

1. The instrument must be able to measure various elements rather than the global measure of job satisfaction so that specific aspects of the job and its environment could be studied and analyzed. The JDI measures satisfaction with the Work (content), Supervision, Pay, Promotions, and Co-Workers. While these are not exhaustive of the various aspects of

any job, they deal with some of the major aspects of the job. Herzberg, (1959) in his motivation-hygiene concept, identifies factors on the job that account for job satisfaction and job dissatisfaction. Motivating factors include achievement, recognition for accomplishment, challenging work, increased responsibility, and growth and development. These might be restated as factors inherent in what one does in his job. Factors that cause job dissatisfaction include company policy, supervision, working conditions, interpersonal relations, money, status and security. These make up the environment in which one works. Both sets of factors are essential in any work situation.

Flowers and Hughes (1973) look at the work situation from a different angle--the reasons for people staying on a job. They cite motivational (job content), maintenance (hygiene), and external environmental reasons. The first two sets of reasons deal with the motivating and maintenance factors in Herzberg's two-factor theory.

The Likert Instrument for Determining the Organizational Profile has these major elements of enquiry: leadership process, character of motivational forces, character of communication process, character of interaction-influence process, character of decision making process, character of goal setting or ordering, character of control process, and performance goals and training (Gibson, et al., 1971, pp. 258-272). The above instrument which is more extensive also deals with essentially the same areas of job satisfaction as the Job Descriptive Index and the concepts advanced by Herzberg, Flowers, Hughes, and others.

The five areas which the Job Descriptive Index measures can be considered as relevant areas of job satisfaction. The management was particularly concerned about the feelings of its employees with respect

to their supervision, work, and pay.

2. The plant management rated the overall educational level of its employees at about eleven years and expressed concern about the ability of its employees to complete such instruments. The focus was on an instrument that did not require a high verbal level to answer and at the same time was both valid and internally consistent. On all these counts the Job Descriptive Index was favored. The JDI does not ask the respondent to make abstractions or respond to long sentences with several qualifications; it asks the participants to respond to words or phrases descriptive of specific aspects of the job.

The items in each of the five areas of job satisfaction have internal consistency reliabilities ranging from .80 to .88 (Smith, 1974, p. 278; Cox and Stickney, 1975, p. 2). With respect to the applicability of the JDI to measure job satisfaction, Smith (1974, p. 279) notes that:

Thus far, the JDI has been administered to over two thousand employees in more than twenty different companies in a number of different types of communities and geographic locations in the United States. The JDI scales have shown substantial relationship to individual, company, and community characteristics.

According to Vroom (1964, p. 100) the JDI "is without doubt the most carefully constructed measure of job satisfaction in existence today."

The JDI likewise is one of the most frequently used instruments (Glueck, 1974, p. 60).

3. Since the employees were to be released of their duties to participate in the survey and the amount of time available was limited, the instrument was not to require a great deal of time to complete. The JDI takes between fifteen and twenty minutes to complete.

Research Questions

The following research questions will be examined in this part:

Research Question III(A): To investigate whether the current employees are satisfied with their work.

Research Question III(B): To investigate whether the current employees are satisfied with their supervision.

Research Question III(C): To investigate whether the current employees are satisfied with their pay.

Research Question III(D): To investigate whether the current employees are satisfied with their promotions.

Research Question III(E): To investigate whether the current employees are satisfied with their co-workers.

Sample and Procedure

The sample for this part of the study consisted of all plant employees (100 per cent participation) in the company on November 27, 1974. The Cornell Job Descriptive Index was administered to the workers on the above date. This date was chosen after consultation with the plant management as it was expected to have all employees present on this day lest they lose their holiday pay for the following two days. There was one hundred per cent attendance on the day the instrument was administered.

The seventy-three employees in the first shift were relieved of their duties at 2:45 p.m. in order to provide them ample time to complete the instruments before closing at 3:30 p.m. The second shift employees,

numbering twenty-two, were made available at the beginning of that shift at 4:00 p.m. The instrument was administered to a total of ninety-five employees.

The respondents were requested to provide certain biographic and employment data as outlined on the third page of Appendix D. They were also requested to offer any comments about the survey and/or any other aspects of their jobs. Instructions on completing the questionnaire were read to the respondents. An overhead projector and transparencies were used to illustrate the manner in which one could complete the survey instrument. The writer personally administered the instrument to the workers in both shifts. No one from management was present during these periods.

Data Analysis

The JDI measures satisfaction with five major aspects (scales) of the job: (1) Work, (2) Supervision, (3) Pay, (4) Promotions, and (5) Co-Workers (Appendix C). Each of these scales is intended to elicit responses to various dimensions of the job. On the Work scale, the job holder describes his/her job as "fascinating," "routine," "satisfying," "boring," "good," and in other similar descriptive phrases. Three of these scales--Work, Supervision, and Co-Workers--have eighteen descriptive phrases each. The other two scales--Pay and Promotions--have nine descriptive phrases each. These phrases deal with favorable and unfavorable attributes of the various aspects of the job. The responses to each of these phrases could be "yes," "no," or "?" "Yes" to a positive item (fascinating) and "no" to a negative item (frustrating) indicate a favorable attitude. A "?" to any item means either that the item does not describe that aspect of

the job, an indifference to the item, or that the person could not decide. Responses to surveys using the above method are usually scored using the traditional weights shown in Figure 3-5. The developers of the JDI have statistically determined that the revised weights shown in Figure 3-5 would improve the distribution of scores (Smith, 1969, pp. 79-80) and have recommended the use of the revised weights. In order to maintain comparability with the observations made heretofore by the authors of the JDI, the revised weights will be used in this study.

Scoring the JDI was carried out by entering manually on the completed questionnaire the values according to the revised weights. These values were then key-punched on IBM data cards for further tabulation. Items for which no response was given were treated as "?" and hence a weight of "1" was given, consistent with the practice employed by the authors of the JDI. Scores were then summed by computer. In the case of the scores on Pay and Promotions, the total scores are doubled as suggested by the authors so that all five variables have the same theoretical maximum scores which are comparable.

When analyzing and interpreting the scores in this type of survey the researcher may want to use one of a number of possible bases for comparison (Smith, et. al., 1969, p. 81). The theoretical maximum score possible is 54 on each scale, if all positive items are endorsed in the affirmative and all the negative items are endorsed in the negative. Or it may be that the points of indifference may be used. The indifference point is 18, the score possible if a person were to answer each item with a question mark. The statistically expected scores from a balanced attitude resulting in equal probabilities of endorsing favorable and unfavorable items would be 27 each in the five scales. Likewise, the authors

Figure 3-5
 Traditional and Revised Weights for
 Direct Scoring of JDI Items*

Response	Weights	
	Traditional	Revised
Yes to a positive item	3	3
No to a negative item	3	3
? to any item	2	1
Yes to a negative item	1	0
No to a positive item	1	0

*Source: Patricia Cain Smith, et al. The Measurement of Satisfaction in Work and Retirement. (Chicago, Illinois: The Rand McNally & Co.) 1969, p.79.

of the JDI have empirically established equated neutral points of 26, 22, 20, 33, and 32, respectively, for Work, Pay, Promotions, Supervision, and Co-Workers scales. These different expected scores under various assumptions are summarized in Figure 3-6.

This part of the study is concerned with determining whether the employees surveyed are satisfied or dissatisfied with the various dimensions of their jobs. Given the empirically equated neutral points, it is possible to say that if workers on the average score below the neutral point in any given scale, they are dissatisfied with that part of the job and if they score above the neutral point, they are satisfied with that part of the job. This is consistent with the approach taken by the authors of the JDI. Thus, the equated neutral points were the basis of comparison in this study. The raw scores in each scale were grouped into positive (above the equated neutral point), neutral (equal to the equated neutral point), and negative (below the equated neutral point). The number of individuals in each group was then converted to percentages of people responding in each category.

An overall measure of satisfaction was determined to show the effect the negative areas had on the positive areas in terms of overall job satisfaction. The rationale is that it is possible for a person to be dissatisfied with part of the job but at the same time have some degree of overall satisfaction with the job (House and Wigdor, 1967, pp. 368-369; Cox and Stickney, 1975, p. 2). The interpretation will be strictly on the basis of the percentages in positive, negative, and neutral categories.

Since the entire population participated in this survey, any finding would be significant, hence no attempt was made to test the statistical significance of the findings. Consequently, the findings to be

Figure 3-6

JDI Expected Scores under Various Assumptions*

Scale	Maximum Score	Expected Scores under Assumption of		
		Indifference	Balanced Attitude	Equated Neutral Point
Work	54	18	27	26
Pay	54	18	27	22
Promotions	54	18	27	20
Supervision	54	18	27	33
Co-Workers	54	18	27	32

*Adapted from Patricia Cain Smith, et al. The Measurement of Satisfaction in Work and Retirement. (Chicago, Illinois: The Rand McNally Company), 1969, p.81.

reported in connection with this survey will be enumerative than inferential.

Part III: Reasons for Staying Survey

This part of the research focuses on the reasons cited by the current employees of the company for staying with the company. The rationale behind this lies in the recent study conducted by Flowers and Hughes (1973) which is treated at length in the chapter on "Review of Literature."

In Part II of this study, the level of job satisfaction expressed by the current employees was examined. It was also pointed out earlier that job satisfaction and job tenure may not be related positively in all situations. It is not certain at this point whether this phenomenon is true in this case. Knowing the reasons for staying, namely motivational, maintenance, and/or external environmental, additional illumination can be shed on the job satisfaction survey findings and provide a more complete analysis of the problem.

Survey Instrument

A survey instrument developed by Flowers and Hughes in collaboration with M. Scott Meyers was chosen for this part of the study. This instrument, entitled Why Do You Stay At Your Company? is presented in Appendix D. In deciding on using this instrument, it was not a choice as to this one over another similar instrument. As best as could be determined, this was the only instrument of this type available at the time it was administered. There was another choice, that of developing a similar instrument, but it was not within the scope of this research.

The findings revealed by its developers in their study appeared quite relevant to the problem at hand. Under these circumstances, it was decided to administer this instrument also.

This instrument has sixty items dealing with three types of reasons for staying with the company: (1) motivational, (2) maintenance, and (3) external environmental. These have been defined in Chapter I. There are eleven items dealing with motivational reasons, nine items dealing with maintenance reasons, and forty dealing with external environmental reasons for staying with the company. A breakdown of the questions by question number and by types of reasons appears in Appendix E. Each statement has three possible responses: "strongly agree," "mildly agree," and "do not agree."

Research Questions

The research questions dealing with this part of the study are:

- | | |
|--------------------------|--|
| Research Question III(F) | To investigate whether the current employees remain with the company for motivational reasons. |
| Research Question III(G) | To investigate whether the current employees remain with the company for maintenance (hygiene) reasons. |
| Research Question III(H) | To investigate whether the current employees remain with the company for external environmental reasons. |

Sample and Procedures

The sample and procedures used to collect data for this part

of the study were the same as in Part II. The survey instrument Why Do You Stay At Your Company? was administered to the participants.

Data Analysis

The responses to the sixty questions (reasons) were key-punched on IBM data cards for tabulation purposes. These were then summarized by the number and percentages of responses to each question.

For purposes of this study characterized by its exploratory/investigative nature, the top ten reasons for staying with the company most frequently cited by the employees will be examined. Each of these reasons will be examined in the light of the findings in Parts I and II of this study. In addition, the findings will be compared and contrasted with the Flowers-Hughes (1973, p. 53-54) findings which showed that

. . . low-skill manufacturing employees stay primarily for maintenance or environmental reasons, many relating to the nonwork environment. Seven of their top ten reasons relate to the external environment - for example, "I wouldn't want to rebuild the benefits that I have now" and "I have family responsibilities." Their two outstanding reasons for staying that relate to the internal environment are fringe benefits and job security.

As in the case of the Job Satisfaction Survey, the entire population took part in this survey also. Given this, plus the exploratory nature of this study, no attempt was made to determine the statistical significance of the findings. Therefore, the findings relative to this part of the study will be purely enumerative instead of inferential.

Tentative Expected Findings

The tentative findings drawn here are predicated on three factors: the review of literature presented in the preceding chapter, the organizational variables identified to this point, and the

observations made by a randomly selected group of thirteen employees in a basically nondirective interview held at the plant prior to the formal commencement of this research. The subjects were briefed on the purpose of the interview which was to find out the problem behind the heavy turnover and absenteeism. A wide range of reasons were cited: difficult and boring job, placement of new workers at the final assembly stage which is a machine-paced operation, lack of understanding on the part of the supervisors, expecting too much from new employees, lack of cooperation among supervisors and the various departments, overtime policy, safety regulations, pay, and poor orientation. These employees were also complimentary about the informal atmosphere in the plant, management's attitude toward them, and the better than average wages. On balance, the foregoing factors paint a picture contrary to what appeared on the surface at first.

It is expected that the research will lead to identifying background information having the potential to separate long-tenure and short-tenure employees prior to employment and to the development of a weighted application blank having both statistical significance and practical utility. It is further expected that the differentiating characteristics will center around such factors as age, marital status, number of dependents, education, and prior experience (Research Questions I and II).

In the area of job satisfaction (Research Questions III: A, B, C, D, and E) the anticipated outcome is for the employees to show less satisfaction with their work, supervision, pay, and promotions, and relatively higher satisfaction with their co-workers. Given that job satisfaction and job tenure are not necessarily positively related in

situations, and also given the possibility that people (especially low-skill manufacturing employees) may continue on their jobs in spite of low satisfaction with the same, these employees are likely to favor external environmental reasons for their staying rather than motivational and/or maintenance reasons (Research Questions III: F, G, and H).

Summary and Conclusions

This chapter has set forth in detail the research methodology for this study. For the sake of clarity and order, the research is divided into three parts. However, these do have a common bond in that they are aimed at discovering a number of factors that can influence employee turnover and retention.

The three parts of the research are brought together in Chapter IV in the form of results and findings. These are analyzed and interpreted to provide an integrated view of the situation.

CHAPTER IV

RESULTS OF THE STUDY

Introduction

This study was designed with three broad purposes:

1. To investigate/explore the difference between long-tenure and short-tenure employees with respect to their biographic-demographic backgrounds and to identify those attributes characteristic of long-tenure employees. Based on this, a weighted application blank was developed and cross-validated for the company which served as the source of data for this study.
2. To investigate/explore the level of job satisfaction of those employees who have continued their membership with the company.
3. To investigate/explore the reasons most frequently stated by these employees for their staying with the company.

The main thrust of this three-pronged investigation was to establish the fact that there are significant differences in the biographic make-up of people who tend to quit and those who stay on a job. An additional dimension was to examine the possibility that those who continued to stay with the company did not do so for reasons of satisfaction with the job and the job environment but for external environmental pressures such as family responsibilities, lack of opportunity elsewhere, low education, age, and other local interests.

This investigation was carried out in a three-part research study. Part I dealt with analysis of biographic data, development of weighted application blank and double cross-validation of the weighted application blank. Part II of the research focused on the level of satisfaction expressed by those who stayed on their jobs. The Cornell Job Descriptive Index (JDI) was used for this purpose. Satisfaction with five aspects of the job were examined: Work, Supervision, Pay, Promotions, and Co-Workers. In Part III, the reasons cited by the current employees for their continuing on the job were investigated, using the survey instrument Why Do You Stay at Your Company? This relatively new instrument was developed by Flowers and Hughes (1973) and was used in their study involving 406 employees in three plants. In this project, it was used to determine whether the current employees stayed with the company for Motivational, Maintenance (Hygiene), and/or External Environmental reasons. The results of this multi-faceted study are presented and discussed in this chapter.

Results: Part I - Analysis of Biographical Data -
Development of Weighted Application Blank
and Double Cross-Validation

The sample for this part of the study consisted of a total of 203 former and current employees in a manufacturing plant. The former employees were classified as Inactive, and the current employees were classified as Active. The total sample was divided into three groups: (1) weighting group, which was used to analyze the differences in the biographical backgrounds and to develop the weighted application blank; (2) hold-out group, a group set aside at the beginning to validate the weights; and (3) a second validation group, made up of both active and inactive employees who were hired over a period of time subsequent to

the commencement of the study. The composition of the 203 in the sample is presented in Figure 4-1.

Items analyzed. In order to determine the difference between active and inactive groups with respect to their biographic and demographic characteristics as given in the respective application blanks, the following items were analyzed:

Place of residence

Age

Weight

Height

Friends at place of employment

Education

Trade School training

Previous employment

Marital status

Number of dependents

Determining item weights. The next step was to record the respective responses to the specific items listed in the preceding section and to determine the difference, if any, between the active and inactive employees' biographic/demographic data. This was done by tabulating the number of responses in each group by response category, calculating the respective percentages, and taking the difference between active and inactive percentage responses. These values--number of responses by active and inactive in each response category, their respective percentages, and the percentage difference--are presented in columns 2, 3, 4, 5, and 6, respectively, in Figure 4-2. The net weight and the assigned weight for each item response category are presented in columns 7 and 8 of the

Figure 4-1

Sample Structure Used in the Weighted Application Blank Study

Employee Category	Weighting Group	Hold-Out Group	Second Validation Group	Total
Active	50	26	15	91
Inactive	64	33	15	112
Total	114	59	30	203

Figure 4-2

Analysis of Biographical Data and Development of Weights Work Sheet

Response Category	Number of		Percentage of		Percentage Difference	Net Weight	Assigned Weight
	Active	Inactive	Active	Inactive			
1	2	3	4	5	6	7	8
<u>Location:</u>							
Local	30	45	60.0	70.3	- 10.3	-2	0
Out of town	20	19	40.0	29.7	10.3	2	2
<u>Age:</u>							
Under 22	9	17	18.0	26.6	- 8.6	-2	0
22 - 26	10	21	20.0	32.8	- 12.8	-3	0
27 - 35	15	14	30.0	21.9	8.1	2	2
Over 35	16	12	32.0	18.8	13.2	3	2
<u>Weight (lbs.):</u>							
Under 126	3	5	6.0	7.8	- 1.8	-1	1
126 - 150	12	15	24.0	23.4	.6	0	1
151 - 175	15	24	30.0	37.5	- 7.5	-1	1
176 - 200	13	14	26.0	21.9	4.1	1	1
Over 200	7	6	14.0	9.4	4.6	1	1
<u>Height:</u>							
61" - 66"	14	19	28.0	29.7	- 1.7	0	1
67" - 72"	31	35	62.0	54.7	7.3	1	1
Over 72"	5	10	10.0	15.6	- 5.6	-1	1
<u>Education:</u>							
Under 12	17	27	34.0	42.2	- 8.2	-2	0
12 - 13	33	31	66.0	48.4	17.6	4	2
Over 13	0	6	0.0	9.4	- 9.4	-4	0
<u>Friends:</u>							
Yes	31	44	62.0	68.8	- 6.8	-1	1
No	19	20	38.0	31.2	6.8	1	1
<u>Trade School:</u>							
Yes	41	55	82.0	85.9	- 3.9	-1	1
No	9	9	18.0	14.1	3.9	1	1
<u>Experience:</u>							
None	6	1	12.0	1.6	10.4	4	2
1 - 2	9	31	18.0	48.4	-30.4	-7	0
3 - 5	17	19	34.0	29.7	4.3	1	1
Over 5	18	13	36.0	20.3	15.7	4	2

Figure 4-2 (Continued)

Response Category	Number of		Percentage of		Percentage Difference	Net Weight	Assigned Weight
	Active	Inactive	Active	Inactive			
1	2	3	4	5	6	7	8
<u>Marital:</u>							
Single	9	21	18.0	32.9	-14.9	-3	0
Married	34	40	68.0	62.5	5.5	1	1
Single w/ dependents	7	3	14.0	4.7	9.3	3	2
<u>Dependents:</u>							
Can't answer	9	21					0
None	8	13	20.0	30.0	-10.0	-2	2
1 - 3	26	22	63.0	51.0	12.0	3	2
4 - 5	6	4	15.0	9.0	6.0	1	1
Over 5	1	4	2.0	9.0	-7.0	-4	0

same figure. Those items with the same assigned weight in each category do not differentiate the two groups and hence must be disregarded (England, 1971, p. 28). Examination of Figure 4-2, column 8 reveals that weight, height, friends at place of employment, and trade school training have the same weight in their respective response categories. The usable part of Figure 4-2 is presented in Figure 4-3, which shows that location, age, education, prior experience, marital status, and number of dependents are the ones that possess potential discriminative ability. That these items do or do not possess such ability must be determined by applying the weights on the "hold-out" groups. This is discussed in the next section on cross-validation.

Another look at Figure 4-3 will indicate that if an individual was to score the maximum possible on each variable, the total score would be 12. If the individual were to score the minimum on each item, it would be 0. Thus, the scores range from 0 to 12.

Cross-Validation. The hold-out groups consisted of twenty-six active and thirty-three inactive employees. The weights established were applied to the application blank data of these employees, and total scores were computed in each case. The distribution of the total scores is presented in Figure 4-4.

In accordance with the procedure outlined in Chapter III, page 83, the method of maximum differentiation was used to determine the cutting score, the first step in the cross-validation process. The result is shown in Figure 4-5. By definition, the cutting score would be at the point of greatest differentiation between the long-tenure and short-tenure employees. This point is delineated in Figure 4-5. The cutting score is 5. It can be tentatively concluded that applicants scoring

Figure 4-3

Summary of Weights Used in Scoring Application Blank Items

Item Response Category	Assigned Weight
LOCATION	
Local	0
Out of town	2
AGE	
Under 27 years	0
27 years and over	2
EDUCATION	
Under 12 years	0
12 and 13 years	2
Over 13 years	0
EXPERIENCE	
None	2
1 - 2 years	0
3 - 5 years	1
Over 5 years	2
MARITAL STATUS	
Single	0
Married	1
Single with dependents	2
NUMBER OF DEPENDENTS	
Can't Answer	0
None	0
1 - 3	2
4 - 5	1
Over 5	0

Figure 4-4

Distribution of Total Scores on Weighted Application Blank
for Long-Tenure as Compared with Short-Tenure Employees
(Each ! represents one employee)

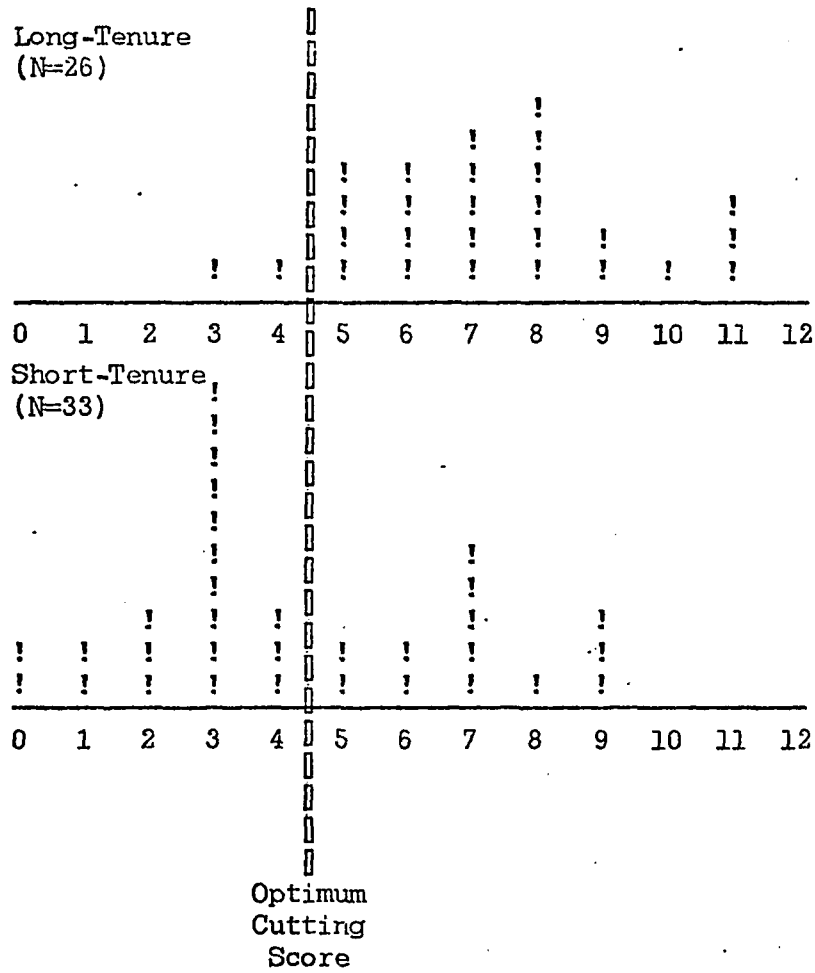


Figure 4-5

Obtaining a Cut-Off Score by Using "Maximum Differentiation"

Total Score	Percentage of subjects at or above a Given Score		
	Percentage of Active Employees A	Percentage of Inactive Employees B	Index of Differentiation (A minus B)
12	0	0	0
11	11	0	11
10	15	0	15
9	23	9	14
8	42	12	30
7	62	27	35
6	77	33	44
5	92	39	53
4	96	48	48
3	100	79	21
2	100	88	12
1	100	94	6
0	100	100	0

5 or more points would tend to stay and those scoring below 5 points would tend to quit. Having satisfied this initial objective, the follow-up question dealt with the statistical significance and practical usefulness of this finding. Accordingly, the Percentage Overlap Measure, O , was determined. It will be recalled from Chapter III that the Overlap Measure tells how effectively the predictor can separate groups characterized by different job behavior outcomes. The less the overlap between the two groups, the more effective the predictor is in separating the two groups and vice versa. In order to obtain the Percentage Overlap, O , the size of the overlap was determined by calculating the ratio of the difference between the means of the two groups to the average of the two standard deviations as follows:

$$R = D/SD_{av} \quad \text{where, } R = \text{Ratio}$$

$$D = \text{Difference between the two means } (M_1 - M_2)$$

$$SD_{av} = \text{Average of the two standard deviations } (SD_1 + SD_2)/2$$

The mean score and the standard deviation for the active hold-out group were $M_1 = 7.2$ and $SD_1 = 2.09$, respectively; for the inactive hold-out group, these values were $M_2 = 4.3$ and $SD_2 = 2.55$. Substituting these values in the equation to determine the ratio, R , of the difference between the means of the two groups to the average of the two standard deviations, results in $R = 1.25$, as illustrated below:

$$R = (7.2 - 4.3)/[(2.09 + 2.55)/2]$$

$$= 2.9/2.32$$

$$= 1.25$$

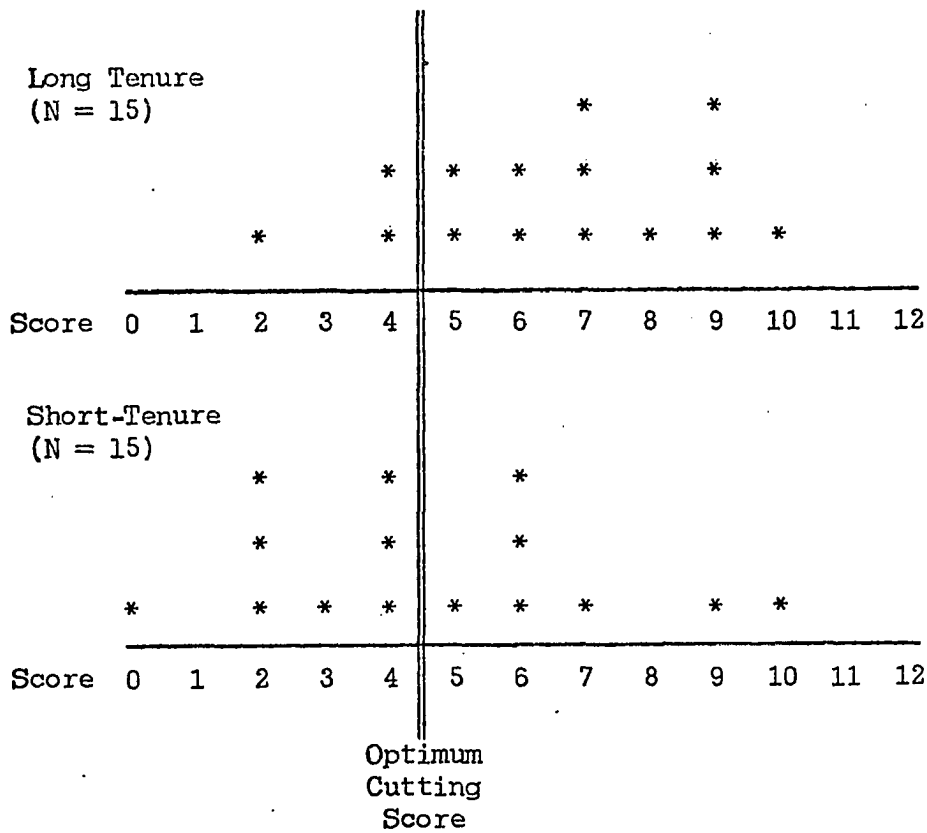
Given $R = 1.25$, the Percentage Overlap, O , from Tilton's Table (Figure 3-4) is $O = 53$. Values of O above 80 per cent show little useful

relationship, values below 45 show a highly useful relationship, and values between 50 and 75 denote a fairly good separation between the two groups and usually denote a practically useful relationship (Dunnette, 1966, p. 149). The findings in this cross-validation of $O = 53$ suggests a fairly good separation between the two groups as well as a practically useful relationship. It can be concluded that the weighted application blank at this stage possesses a high degree of validity for predicting tenure.

Validity generalization. It was stated in Chapter III that if the validation study on the "hold-out" groups proved to be statistically significant and practically useful, a validity generalization would be attempted to determine the stability of the relationship. For this purpose, a group of thirty employees from those who were excluded from the original sample and those who were hired subsequently was used. This sample consisted of fifteen employees who were still with the firm and fifteen who had since terminated their employment with the company. These individuals were scored using the same weights established earlier. The distribution of the scores for the two groups is presented in Figure 4-6. Here again, the Percentage Overlap measure described earlier was used to determine the stability of the instrument in terms of its ability to predict tenure over time. This second cross-validation consisting of fifteen employees each in the two groups resulted in a ratio of the difference between the means of the two groups to be average of the two standard deviations, $R = .77$. Examination of Figure 3-4 reveals that $R = .77$ corresponds to an overlap coefficient of $O = 70$, which is within the 50 to 75 range of O -values stated to be indicative of good separation between the two groups and a practically useful relationship.

Figure 4-6

Distribution of Total Scores on Validity Generalization
of Weighted Application Blank
(Each * represents one employee)



Discussion. Both the initial cross-validation and the second cross-validation showed overlap coefficients of .53 and .70 respectively. Both of these values fall within the 50 - 75 range which according to Dunnette (1966, p. 149) would confirm the validity of the weighted application blank. However, here the value of the O increased from .53 to .70 in the second validation. This implies that the predictive ability of the weighted application blank has dropped over time, but still remained at a statistically significant and practically useful level. The reason as to why this drop occurred can be attributed to a number of factors. An examination of these factors could involve another extensive study which is beyond the scope of this research. More will be said about this drop in validity in later parts of this chapter.

The research questions dealing with Part I of this study are as follows:

Research Question I: To investigate the difference between long-tenure and short-tenure employees in terms of their respective backgrounds. The present application blank will be used as a source of data.

Research Question II: To develop a weighted application blank using the biographical information found in the application blanks of the long-tenure and short-tenure groups and to determine whether the weighted application blank could have predicted turnover with both statistical significance and practical importance.

With respect to Research Question I, the results indicate that there are important differences between the long-tenure and short-tenure employees. In this case, the differentiating items were found to be place of residence, age, education, prior experience, marital status,

and number of dependents. This finding is quite consistent with the findings in two other reported cross-validation studies where the subjects were production workers. In both of these studies, it was found that "age, location of residence, marital status, number of dependents, previous work experience, and training record" were found to have predictive power (England, 1971, p. 51).

With respect to Research Question II, the weighted application blank developed was determined to possess statistical significance and practical usefulness in both the initial and subsequent cross-validations. In spite of a drop in the validity as evidenced by a change in the overlap coefficient of .53 to .70, the instrument still withstood the two tests of validity and utility. A weighted application blank of the type developed in this study could have prevented the high rate of turnover which the firm under study was experiencing. The results of both validation studies are represented in Figure 4-7. Using "5" as the cutting score, in the initial validation study it showed the instrument could have predicted 92 per cent of the long-tenure and 61 per cent of the short-tenure outcomes. The double cross-validation indicated that the weighted application blank could have predicted eighty per cent of the long-tenure and fifty-three per cent of the short-tenure. On the two criteria of statistical significance and practical importance, the use of a weighted application blank would have been a valuable selection instrument.

Figure 4-7

Differentiation Achieved between Long-Tenure and Short-Tenure
Factory Employees in Double Cross-Validation of a
Weighted Application Blank

	Initial Cross Validation		Validation Generalization	
	Long Tenure	Short Tenure	Long Tenure	Short Tenure
Would have been hired (above cutting score)	92%	39%	80%	53%
CUTTING SCORE = 5	-----			
Would have been rejected (below cutting score)	8%	61%	20%	47%

Results: Part II - Job Satisfaction Survey

The Cornell Job Descriptive Index (JDI), a job satisfaction survey instrument, was administered to all of the ninety-five plant employees at the company. The primary purpose of this survey was to investigate whether those employees who maintained their organizational membership were satisfied with their jobs.

Job Satisfaction Areas Investigated

The Job Descriptive Index is designed to examine satisfaction with five major aspects (Work, Supervision, Pay, Promotions, and Co-Workers) of a job. In this survey all five areas were examined. It was expected that the employees will show less satisfaction with their Work, Supervision, Pay, and Promotions and show relatively more satisfaction with their Co-Workers. These assumptions were made on the basis of the comments made to this writer by several of the employees during an interview in the embryonic stages of this study. The workers who were interviewed indicated favorable attitude toward their fellow-workers but had mixed- to negative feelings about their work, supervision, and compensation. A brief explanation of the job factors is given below:

1. **Work.** The respondents describe their feelings or attitudes toward various dimensions of their work itself, either as positive, negative, or neutral. Some of the dimensions include the structure of the job, the physical and mental requirements of the job, the immediate working conditions, and the hazards involved in the job.

2. **Supervision.** In this area, the participants describe their experience and perception about the supervisor's technical, administrative, and human relations skills as well as the supervisor's attitude.

3. Pay. Employee feelings and perceptions about compensation are examined in this area. The primary foci are on perceived equity in compensation, adequacy of the amount to meet employee needs, and income security.

4. Promotions. This scale examines the experience and perception of employees about equity in promotion, opportunity for promotion, and frequency of promotions.

5. Co-Workers. Employee attitude toward fellow-workers is the point of focus in this area. Responses consist of the individual's feelings toward co-workers' competence, sense of responsibility, loyalty to group, support, intelligence, and interpersonal relations.

Survey Findings

Raw scores of the job satisfaction survey are presented in Figure 4-8. These show each individual's score on each scale out of a maximum of fifty-four points possible in each case if a person were to show complete satisfaction with each aspect of the job. These individual scores may be used for individual employee counselling purposes, an elaborate discussion of which is not within the scope of this study. For purposes of this study, these raw scores were grouped into three categories: those scored (1) above the neutral point (positive), (2) at the neutral point (0), and (3) below the neutral point (negative). The neutral point (or the equated neutral point) was empirically determined by the developers of the JDI to be the basis for separating the participants into the satisfied and dissatisfied categories (Smith, et al., 1969, p. 81). The number of individuals falling in each category under each scale was then converted to a percentage of the total participants. These results are summarized below by the areas investigated:

Figure 4-8

Raw Scores of the Job Satisfaction Survey

ID#	W O R K	SUPERVISION	P A Y	PROMOTION	COWORKERS
101	19	40	30	18	42
102	20	40	22	34	34
103	24	50	6	36	54
104	29	48	12	42	52
105	24	45	10	0	54
106	15	21	2	6	41
107	14	14	10	8	49
108	28	46	30	50	48
109	21	48	24	42	27
110	20	35	10	26	13
111	11	39	20	18	48
112	42	48	38	44	51
113	40	45	6	18	51
114	48	45	24	18	54
115	9	22	2	2	26
116	18	24	36	12	33
117	44	28	20	0	38
118	2	48	8	4	49
119	29	45	36	42	52
120	33	42	38	36	54
121	13	38	20	20	41
122	43	46	14	32	54
123	26	40	14	46	30
124	43	30	24	24	34
125	2	34	26	2	31
126	45	33	12	26	38
127	25	26	10	50	37
128	30	48	32	26	52
129	32	40	32	32	34
130	28	48	42	48	54
131	6	39	6	6	45
132	18	42	6	18	39
133	36	50	30	36	27
134	17	31	16	40	37
135	14	44	6	34	43
136	34	46	24	42	42
137	30	42	12	42	45
138	45	49	12	54	30
139	27	42	0	6	38
140	36	52	8	14	47
141	33	48	12	38	48
142	33	45	12	42	52
143	23	44	18	8	43
144	37	51	6	22	22
145	13	39	12	0	54
146	31	40	8	8	42

Figure 4-8 (Continued)

ID#	W O R K	SUPERVISION	P A Y	PROMOTION	COWORKERS
147	43	49	38	36	51
148	18	29	6	18	28
149	38	49	2	18	41
150	40	54	22	24	33
151	40	49	8	18	48
152	45	37	24	8	54
153	39	54	24	0	54
154	18	54	0	6	39
155	34	13	18	12	36
156	35	48	32	34	54
157	26	27	16	34	48
158	23	33	24	20	48
159	1	25	18	0	44
160	28	43	22	30	17
161	39	30	14	28	38
162	39	42	6	12	52
163	42	51	6	42	54
164	16	45	16	10	54
165	35	41	22	32	47
166	36	43	6	42	48
167	20	27	14	14	24
168	43	20	42	54	54
169	32	51	36	48	54
170	7	34	36	10	54
171	33	43	28	24	54
172	26	34	6	0	43
173	48	54	18	48	51
201	44	52	42	46	52
202	21	31	14	34	38
203	31	50	10	24	45
204	29	22	14	26	41
205	30	40	8	40	50
206	35	32	22	42	42
207	27	38	12	22	44
208	4	30	20	2	22
209	18	42	24	42	54
210	24	49	24	48	30
211	42	47	30	32	48
212	26	19	0	0	54
213	28	40	26	24	51
214	27	42	18	30	38
215	44	42	18	54	44
216	12	19	0	10	57
217	16	42	28	26	19
218	27	37	34	20	41
219	42	54	2	22	52
220	33	33	28	18	33
221	24	32	14	28	30
222	22	54	36	6	41

1. Work. Fifty-eight per cent (58%) of the employees showed positive attitude and thirty-eight per cent (38%) showed negative attitude toward their work, and the remaining four per cent (4%) were at the neutral point.

2. Supervision. In this area, seventy-four per cent (74%) of the employees were satisfied, twenty-two per cent (22%) were dissatisfied, and three per cent (3%) remained at the neutral point.

3. Pay. Thirty-five per cent (35%) of the employees showed satisfaction while sixty per cent (60%) showed dissatisfaction. The remaining five per cent (5%) fell in the neutral category.

4. Promotions. Those showing satisfaction amounted to fifty-eight per cent (58%) with thirty-nine per cent (39%) in the negative and three per cent (3%) in the neutral categories.

5. Co-Workers. Of the ninety-five employees surveyed, eighty-four per cent were satisfied with their fellow-employees. The remaining sixteen per cent (16%) were dissatisfied with their co-workers.

The foregoing findings are presented in tabular form in Figure 4-9 and in graphical form in Figure 4-10.

Discussion

The research questions related to this part of the study and the corresponding findings are discussed in this section.

Research Question III(A) To investigate whether the current employees are satisfied with their work.

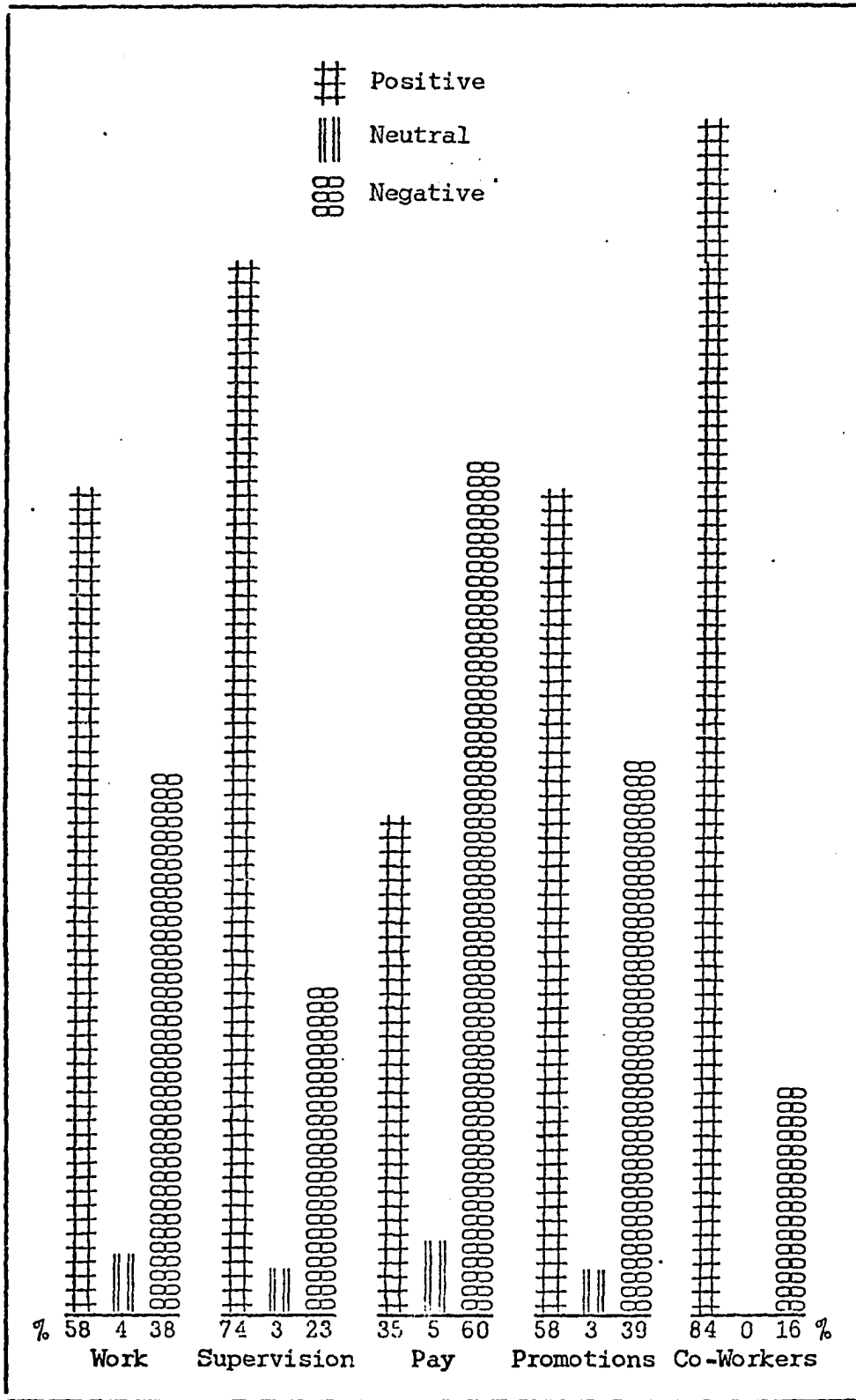
With respect to employee satisfaction with work itself, the positive attitude or satisfaction expressed by fifty-eight per cent of the employees is indicative of general satisfaction with their work.

Figure 4-9

Summary of Job Satisfaction Survey

Satisfaction Scale	Number and Percentages of Responses					
	Positive		Neutral		Negative	
	#	%	#	%	#	%
Work	55	58	4	4	36	38
Supervision	70	74	3	3	22	23
Pay	33	35	5	5	57	60
Promotions	55	58	3	3	37	39
Co-Workers	80	84	0	0	15	16

Figure 4-10
 Summary of Job Satisfaction Survey



The results do not support the presupposition that these employees were dissatisfied with their work.

Research Question III(B): To investigate whether the current employees are satisfied with their supervision.

Supervision was also predicted to be a low-satisfaction area. The seventy-four per cent positive responses to this area implies very good satisfaction with supervision and therefore the research assumption is not substantiated.

Research Question III(C): To investigate whether the current employees are satisfied with their pay.

The sixty per cent responses in the negative category confirms the expectation that the employees were dissatisfied with their compensation.

Research Question III(D): To investigate whether the current employees are satisfied with their promotions.

The responses to promotions were also expected to be unfavorable. The findings here do not support this as evidenced by the fifty-eight per cent of the employees who showed positive attitude toward their experience with promotion and/or perception about promotion opportunities.

Research Question III(E): To investigate whether the current employees are satisfied with their co-workers.

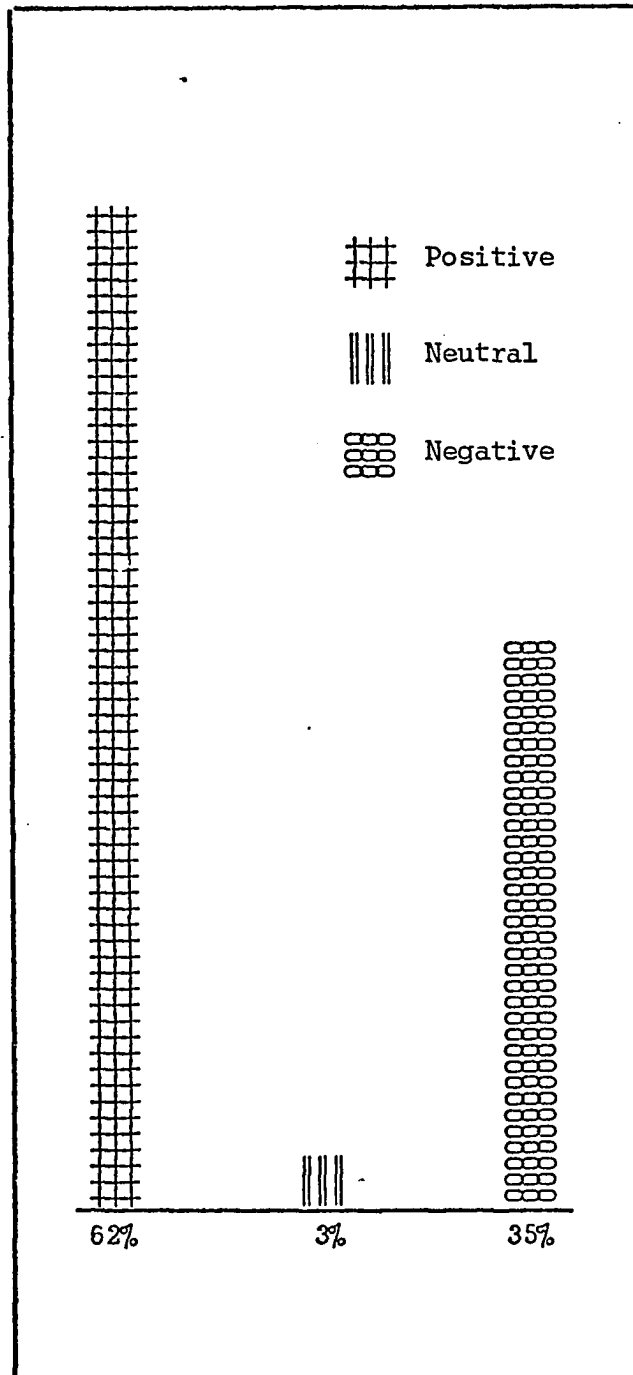
The employees showed an overwhelmingly high satisfaction with their co-workers. While it was expected that satisfaction with co-workers would be favorable, the eighty-four per cent favorable response was unexpected.

In summing up this section, the only area of dissatisfaction was with Pay in which case sixty per cent of the employees showed dissatisfaction. This would mean that most of these employees do not perceive they are compensated equitably and adequately. At the same time these employees indicated relatively high level of satisfaction with Supervision (74%) and Co-Workers (84%) and relatively low level of satisfaction with Work (58%) and Promotions (58%).

Responses to the individual job scales reveal employee disposition toward each of these job dimensions. Such revelations can be extremely useful in pinpointing the problem areas. It is not uncommon to find situations where employees may show an overall satisfaction or dissatisfaction with the job as a whole even though their attitude toward the various aspects of the job may not follow a particular pattern. House and Wigdor (1967, pp. 368-369) observed that "it is possible for an individual to dislike part of his job, but still have an overall acceptability or positive attitude." Cox and Stickney (1975, p. 2) using the same premises measured the overall job satisfaction in a survey conducted among police officers. While it was not initially planned to measure the overall satisfaction in this study, it would be in order to examine the employee attitude toward their job as a whole. Overall satisfaction was determined by calculating the means of the positive, neutral, and negative response percentages in each of the five job dimensions. Accordingly, sixty-two per cent (62%) of the employees showed satisfaction with their jobs while three per cent (3%) remained neutral and thirty-five per cent (35%) indicated dissatisfaction with the job. These results are presented graphically in Figure 4-11. Based on these findings, it is indicative that the employees have a positive

Figure 4-11

Overall Satisfaction with Job



disposition toward their jobs though the sixty-two per cent might be considered relatively low.

Results: Part III - Reasons for Staying Survey

This part of the research was designed to explain the anticipated negative findings in the job satisfaction survey discussed in Part II. The same individuals who participated in the Part II survey took part in this survey also. The job satisfaction survey showed that fifty-eight per cent of the workers were satisfied with their Work and Promotions while seventy-four per cent were satisfied with their Supervision and eighty-four per cent were satisfied with their Co-Workers. The only area of dissatisfaction was Pay in which case sixty per cent of the employees responded negatively. It was assumed that these employees would be dissatisfied with their Work, Supervision, Pay, and Promotions and they would be satisfied with their Co-Workers. The findings support the assumptions with regard to Pay and Co-Workers. The overall measure of job satisfaction showed that sixty-two per cent of the employees were satisfied with their jobs. The expectation was to find the opposite with respect to job as a whole.

The premise was that the employees who stayed with the company did so for reasons other than satisfaction with the job or the job environment. This premise differs from the traditional assumption that there is a positive relationship between job satisfaction and job tenure. The plan was to explain this expected departure from traditional assumptions by looking into the reasons why these employees stayed with the company. Even though the findings in the job satisfaction survey would lead one to believe that the employees stayed because of the overall satisfaction or acceptability of the job, the reasons cited by them do not strongly

support the traditional argument.

Reasons for Staying Investigated

A survey instrument developed by Flowers and Hughes (1973) entitled Why Do You Stay At Your Company? was used in this study. This instrument contains sixty reasons for staying with an organization. These are classified into three types of reasons which are described below:

1. Motivational reasons. These are reasons exclusively associated with the work itself. Reasons of an intrinsic nature would be examples. For instance, the employee views the work as challenging, interesting, and looks forward to return to the job every day. The survey instrument has eleven motivational reasons for staying.

2. Hygiene or Maintenance reasons. These are reasons related to company environment. Included in this category are attractiveness to peers, supervisors, company policy, working conditions, fringe benefits, and job security. There are nine hygiene reasons included in the survey instrument.

3. External environmental reasons. These non-work related reasons force a person to stay on a job strictly for the monetary reward with very little commitment to the job or to the organization. The employee may have family responsibilities, community ties and other local interests which would preclude relocating, difficulty in finding other jobs due to lack of education or the necessary skills, and a number of similar reasons which keep the person bound to the only source of income available. Forty such reasons are considered in this section of the survey instrument.

Employees may stay on a job for any or all of the above reasons. To the employer, the reasons why employees stay are of crucial importance. The performance and behavior of an employee who is there for motivational reasons could be a lot different from that of an individual who is instrumentally there for external environmental reasons. In this study, the assumption was that most of the employees were there for external environmental reasons because of their background, the nature of the task, and other factors which were discussed elsewhere. This was to be investigated by looking into the top ten reasons for staying cited by these employees for staying with the company.

Survey Findings

The tally of responses to the entire survey is presented in Appendix F. Those parts of the survey results which are relevant to the discussion to follow are included in this section.

According to the plan of analysis for this part of the study, the top ten reasons for staying as evidenced by the magnitude of employee responses were examined. Since there were two reasons with the same percentage response and one of these constituted the tenth reason, the final analysis included the top eleven reasons for staying with the company. These are presented in Figure 4-12. The percentage of responses ranged from a high of eighty-two (82%) to a low of sixty-two (62%). Eight of the eleven reasons were external environmental, one was hygiene or maintenance reason, and the other two were motivational reasons. Among the top nine reasons, except for the sixth one - I like the amount of teamwork in my group - all were external reasons. These were:

(82%) I enjoy living in my present neighborhood.

Figure 4-12

Most Frequently Cited Reasons for Staying on the Job

Reason Number	Reason	Number of Responses (N =95)	Percentage of Responses	Type of Reason**
5	I enjoy living in my present neighborhood	78	82	E
22	I have family responsibilities	78	82	E
40	I have family and relatives in the area	71	75	E
8	I like to live in this area	70	74	E
59	I do not believe in jumping from company to company	67	71	E
21	I like the amount of teamwork in my group	64	67	M
29	I am working to make ends meet	62	65	E
20	The company is convenient to my home	60	63	E
38	I am working to save enough money to buy some things and I have not got there yet	60	63	E
11	I really enjoy working with my supervisor	59	62	H
13	I enjoy my job here	59	62	M

**Legend: E = External environmental reason

H = Hygiene (maintenance) reason

M = Motivational reason

- (82%) I have family responsibilities.
- (75%) I have family and relatives in this area.
- (74%) I like to live in this area.
- (71%) I do not believe in jumping from company to company.
- (65%) I am working to make ends meet.
- (63%) The company is convenient to my home.
- (63%) I am working to save enough money to buy some things
and I have not got there yet.

The tenth was a motivational reason--I enjoy my job here (62%), and the eleventh a maintenance reason--I really enjoy working with my group (62%).

The pattern of responses to the eleven motivational and the nine maintenance reasons are considered below for further analysis. The responses to these two categories of reasons appear in Figure 4-13 and Figure 4-14. The percentages of responses to motivational reasons ranged from a high of sixty-seven per cent (67%) to a low of twenty-four per cent (24%) agreeing. Well over half of the participants (56% to 76%) did not agree with eight of the eleven motivational reasons for staying. There were only three instances where over fifty per cent of the employees indicated agreement with motivational reasons for staying:

- (67%) I like the amount of teamwork in my group.
- (62%) I enjoy my job here.
- (52%) I like the amount of cooperation between work groups at
my company.

Similarly, fifty-four to eighty-four per cent (54% to 84%) of the employees did not agree with six of the nine maintenance reasons for

Figure 4-13

Response Pattern to Motivational Reasons for Staying

Reason Number	Reason	Number of Responses (N = 95)	Percentage of Responses
21	I like the amount of teamwork in my group	64	67
13	I enjoy my job here	59	62
6	I like the amount of cooperation between work groups at my company	49	52
17	I like the amount of information I get about how well my work group is doing	42	44
46	I am allowed to make good use of my abilities	42	44
9	I have a good opportunity here to ahead if I want to	37	39
31	There are not too many unnecessary rules to follow	31	33
48	My job is leading to the kind of future I want	30	32
42	I am paid fairly for the kind of work I do	29	31
32	I like the freedom I have to plan my own work	25	26
52	I have clear-cut objectives on which to base my work goals	23	24

Figure 4-14

Response Pattern to Maintenance Reasons for Staying

Reason Number	Reason	Number of Responses (N = 95)	Percentage of Responses
11	I really enjoy working with my supervisor	59	62
39	I am proud to work here	56	59
27	I can be sure of a job here as long as I do good work	51	54
35	I feel free to tell my supervisor what I think	44	46
24	I am informed about the objectives of my department	35	37
50	I am required to do just about the right amount of work	28	29
57	I like the company benefits	26	27
44	There's very little favoritism here	21	22
1	I like the working conditions	15	16

staying. The three reasons to which the affirmative response was given by over fifty per cent of the employees were as follows:

(62%) I really enjoy working with my supervisor.

(59%) I am proud to work here.

(54%) I can be sure of a job here as long as I do good work.

In conclusion it is apparent that the majority of employees remained with the company for reasons which are external to the job and the company.

Discussion

The three research questions applicable to this survey and the respective research findings are given below:

Research Question III(F) To investigate whether the current employees remain with the company for motivational reasons.

It is evident from the findings presented in the previous section and illustrated in Figure 4-13 that only three of the motivational reasons were strongly regarded by more than fifty per cent of the employees for their staying with the company. Well over fifty per cent of the participants did not agree with the remaining eight reasons for staying. Thus, it may be concluded that the employees are not attracted to the company for strong motivational reasons. This finding is consistent with the expected findings.

Research Question III(G) To investigate whether the current employees remain with the company for maintenance reasons.

The findings shown in Figure 4-14 reveal that over fifty per cent of the employees agreed with only three of the nine maintenance reasons for staying, implying that the majority of employees (54% to 84%)

did not consider themselves staying with the company for maintenance reasons. This finding is also in agreement with the anticipated outcome of this research question.

Research Question III(H) To investigate whether the current employees remain with the company for external environmental reasons.

The fact that an overwhelming majority of the employees (63% to 82%) agreed with eight of the top eleven reasons which were all external reasons suggests an affirmative answer to this question. In addition this also confirms the presupposition about the employees staying on their jobs for external environmental reasons, a major point of interest in this study.

Looking at this part of the study in its entirety, it is obvious that the majority of employees (63% to 82%) have favored external reasons for staying with the company. The main thrust of this enquiry was to explain why those who stayed with the company did so and to determine whether job satisfaction or external pressures influenced these workers to continue on their jobs. Given the sixty-two per cent who expressed satisfaction with their jobs and the sixty-three to eighty-two per cent who cited various external reasons for staying with the company, it can be concluded that the primary reason for staying was extra-occupational and that satisfaction with job probably played a relatively minor role in employee tenure in this case. This finding is very close to what Flowers and Hughes (1973, pp. 53-54) discovered - that low-skill manufacturing employees remain on the job primarily for maintenance or external environmental reasons. In this case, external environmental reasons ranked the top with eight out of the eleven reasons for staying.

Synthesis of Results

In this part of the chapter, the findings from the three separate parts of the research will be brought together. The implications of the findings, recommendations for the company, recommendations for future research, and concluding remarks will be covered in the next chapter, "Summary and Conclusions."

The research was undertaken to examine a serious employee turnover problem in a manufacturing facility located near Oklahoma City. Because of the large number of employees who had terminated their employment with the company in a relatively short period of time, it was suspected that there probably was a distinct pattern of differences in the background of the employees who stayed on their jobs (long-tenure) and the ones who terminated their jobs (short-tenure). These differences were predicted to center around such factors as the age of the individual, family responsibility, marital status, number of dependents, level of education, and the like. The raw data for the background analysis came from the application blanks of the two groups of employees. The biographical information gathered from the application blanks was used in determining the differences between the long-tenure and short-tenure employees and also to develop a weighted application blank for subsequent use in screening potential employees. The study confirmed that the employee's location of residence, age, education, prior experience, marital status, and number of dependents were crucial variables affecting job tenure. In addition, the weighted application blank was determined to possess both statistical significance and validity for selection screening.

It was also postulated that the employees who stayed with the company were not attracted to the firm because of an overwhelming liking

for the job they were doing but for reasons not related to the job and to the organization. Two surveys were conducted to investigate the above reasoning. One of these surveys consisted of a job satisfaction survey in which the Job Descriptive Index was used to examine the employees' satisfaction with their Work, Supervision, Pay, Promotions, and Co-Workers. The results showed satisfaction with Co-Workers, Supervision, Promotions, and Work, in descending order. Pay was the only area where a majority of the employees were dissatisfied. While the outcomes with regard to Co-Workers and Pay were the same as expected, in the case of Work, Supervision, and Promotions it was expected to find dissatisfaction by a majority of the employees. In an overall measure of satisfaction with the job as a whole, sixty-two per cent of the employees showed favorable disposition. This finding suggests that the long-tenure employees were satisfied with their jobs and might imply that their long tenure is accountable for the satisfaction they have expressed with their jobs. That this is only true in part becomes clearer when the findings from the second survey dealing with the reasons for staying are considered. Rather high percentages of employees (63% to 82%) agreed with various external reasons for staying with the company. At the same time relatively small percentages of employees (24% to 67%) cited various motivational reasons for staying. Similarly, the percentages of employees who checked maintenance reasons for staying ranged from sixteen per cent to sixty-two per cent. With respect to both motivational and maintenance reasons there were only three reasons in each case where more than half of the employees showed agreement.

In the light of the foregoing findings it would appear that the employees who stay with the company come from a background characterized

by family responsibilities and that they mainly stay for reasons which are unrelated to their work. Specifically, they view their jobs only instrumentally as vehicles which enable them to respond to the demands of the external environment.

The next chapter deals with the implications of the findings, recommendations for the company and for further research and concluding notes.

CHAPTER V

SUMMARY AND CONCLUSIONS

This chapter contains a summary of the study, the major findings and their implications, and concluding remarks including certain specific recommendations for the company.

Summary of the Study

This research was primarily aimed at the problem of employee turnover in a manufacturing plant. Its focus was in part on the former and current employees in one instance, and the current employees in two other instances. The first part of the research was designed to investigate the pattern of discriminating characteristics between employees who tend to remain on their jobs and those who tend to leave their jobs. This was accomplished by analyzing the biographic-demographic information contained in the application blanks of these employees. The same data were used to develop a weighted application blank which would serve as a screening device in future selection so as to minimize turnover.

The second and third parts of the study had as their major objectives to examine the disposition of current employees with respect to their jobs and their ties to the organization. There are both practitioners and theoreticians who hold to the theory that there is a positive relationship between job satisfaction and job tenure (Glueck, 1974, p. 644). At the same time, there is evidence which suggests that

job tenure is not necessarily a function of job satisfaction, especially among low-skill manufacturing employees (Flowers and Hughes, 1973, p. 49). In view of these conflicting observations, it is understandably difficult to draw any conclusions without closer examination of a situation involving turnover problem. The latter two parts of this study were designed to examine the extent to which the employees who stayed with the company were satisfied with their jobs and to explain why they might remain in their jobs even though their level of satisfaction with the job might be on the low end.

Oftentimes, when organizations study turnover problems, there is a tendency to look at the issue in an isolated manner. In several of the studies where biographical data have been used to predict and/or control turnover, the researchers have satisfied themselves by looking into the biographical data alone (Schuh, 1967a). This tends to overlook the interrelated nature of the several variables which affect employee behavior, including turnover and decisions to stay. Flowers and Hughes (1973, p. 49) made these observations about typical turnover studies:

Many companies spend a great amount of time and money investigating the causes of employee turnover. Usually the intent behind such studies is to find out why people leave--the idea being that if a company can identify the reasons for terminations, it can work to hold terminations, and turnover, down.

These authors point out some of the inherent weaknesses of such short-sighted approaches. Most of the time organizations look at only the termination side of the issue. "If a company wants to keep its employees, then it should also study the reasons for retention and continuation, and to work to reinforce these" (Flowers and Hughes, 1973, p. 49). The authors also question the argument that positive relationship between job

satisfaction and job tenure. According to these writers (Flowers and Hughes, 1973, p. 49):

[t]his approach [of examining only the termination side] also tends to assume a perfect correlation between job dissatisfaction and turnover. Many a company works for low turnover because it thinks a low rate implies that its employees are pleased with their jobs--and, a fortiori, productive.

In their study which went beyond the customary termination analysis, Flowers and Hughes found that job tenure is not positively related to job satisfaction at all skill levels and concluded that low-skill manufacturing employees remain on their jobs for reasons external to the job and to the organization.

Drawing on their works, this study was designed to take a step beyond the analysis of biographical data and the development of weighted application blank to reduce turnover. This was carried out by examining the level of satisfaction with job as expressed by the current employees and further, by investigating the reasons cited by these employees for staying with the company. The well known Cornell Job Descriptive Index was used to measure the level of satisfaction with job, and a second instrument entitled Why Do You Stay At Your Company? developed and used by Flowers and Hughes in their study was used to determine the reasons for staying with the company.

This three-pronged study should bring into sharper focus the issue of employee turnover and enlighten both the practitioner and the theoretician. It is hoped that this will pave the way for further research in this twin issue of employee turnover and employee retention. The major findings and implications of each of the three parts of the study are discussed in the next section.

Major Findings and ImplicationsAnalysis of Biographical Data and
Development of Weighted Application Blank

The purposes of this part of the study were to investigate the differences between long-tenure and short-tenure employees with respect to their biographic-demographic background and to identify those attributes which seem to encourage long tenure. Based on this analysis a weighted application blank was developed for the company.

The study confirmed the assumptions about identifiable differences in the background of long-tenure and short-tenure employees. In the two previously reported studies (England, 1971, p. 51) employing cross-validation and/or hold-out groups, the following items were found to be predictive of tenure of production workers:

Age

Location of residence

Marital Status

Number of dependents

Previous work experience and training record

In this study, ten variables were examined. Of these, the following six were found to be capable of separating long-tenure and short-tenure employees:

Age

Location of residence

Marital status

Number of dependents

Previous work experience

Level of education

It is interesting and encouraging to note that the findings in this study identified the same variables as in the other reported studies dealing with production workers. An additional variable - level of education - was also found to be an important determinant of job tenure in this case. One possible conclusion here would be that there is a generality of the variables that account for turnover among production employees. The implication would be that in future studies of this nature researchers might focus on these variables as potential discriminators of long-tenure and short-tenure production workers.

Further examination of the results of this part of the study described in Chapter IV and illustrated in Figure 4-3 reveals that individuals with the following profile are most likely to stay with this organization:

Age:	27 years or older
Location of residence:	Out of town
Marital status:	Single with dependents
Number of dependents:	1 to 3
Previous work experience:	None or over 5 years
Level of education:	12 to 13 years

Conversely, individuals with the following attributes will be the least likely to stay:

Age:	Under 27 years
Location of residence:	Local
Marital status:	Single
Number of dependents:	None or over 5
Previous work experience:	1 to 3 years
Level of education:	Under 12 or over 13 years

Several observations can be made in regard to the foregoing personality profiles of the long-tenure and short-tenure employees. Each of the variables is discussed briefly here:

1. Age: Individuals who are twenty-seven or older were found to stay longer on their jobs. It is common to assume that older people are more mature, have greater sense of responsibility, and therefore, would tend to be more stable employees. The U.S. Department of Labor in a recent study revealed that those in the twenty-five to thirty-four age group change jobs 4.8 times on the average in their life time while those in the twenty to twenty-four age group change their jobs 6.6 times in their life time (Augustine, 1972, p. 62-1).

2. Location of residence: When job opportunities are limited or nonexistent in local communities, people tend to look elsewhere for employment. The fact that they have to find employment in a place away from home would tend to tie a person more to a job for fear of having to look for other jobs or having to relocate in order to obtain a new job. It is possible that out-of-town employees who are favored in this case may have come to this town seeking jobs due to lack of opportunity in their own communities.

3. Marital status: With the increasing number of female-headed families--thirteen per cent of all families in 1975 (Blackman, 1976, p. 1), it is not surprising to note that with respect to the relationship between marital status and job tenure, single employees with dependents are favored over single and married individuals.

4. Number of dependents: The study revealed that individuals with none or more than five dependents were the least favored while those with one to three were favored more than the ones with four or five.

Employees with no dependents may not have the responsibility to provide for the support of anyone else and consequently this group may find no compelling reasons to stay committed to a job. While the age of the dependents was not taken into account, it is reasonable to assume that the highly favored group have young children totally dependent on their parents for their support, making it a necessity for the income-producer to stay on the job. As to why those with over five dependents tended to leave, it is a puzzling issue. Possibly they find the income not adequate to meet their needs and hence seek greener pastures.

5. Previous work experience: It is interesting to note that people with none or with five or more years of prior experience are more likely to be long-tenure than those in between. For the first-timers, there is usually a desire to make the best out of the new found opportunity and consequently they would make more effort to keep the job. Those with over five years of experience probably realize the difficulties involved in jumping from company to company and the effect it may have in obtaining new jobs. Those in between might be prone to move from job to job or may not have had enough time to prove themselves during the times they were employed.

6. Level of education: The biographical data analysis indicated that individuals with twelve to thirteen years of education were less likely to quit their jobs than those with less than twelve or more than thirteen years of education. A high school diploma is perceived as a symbol of achievement by many people. Those who realize this goal can be viewed as people with a commitment to a purpose. Those with less than a high school education could possibly fall in the drop-out type category for reasons of lack of interest and/or commitment. Such personality

traits are apt to manifest in the individual's occupational life also.

There are possibly two reasons for those with thirteen years staying on the job. These people probably had some one-year vocational-technical training after high school. Or it is possible that they might have attempted to pursue a college career but perhaps after facing one or more obstacles in their educational path, decided to pursue some occupational path instead.

The nature of the job and the skill requirements are perhaps less of a challenge to people who have had more than thirteen years of education. It also stands to reason that these individuals may have viewed the job as an instrument in finding another job and/or a temporary job to pull them through the summer months when they were not in school.

The weighted application blank is a direct result of the biographical data analysis and provides a useful tool for employee selection. The instrument makes no decisions for the manager; it enables the manager to use the same in conjunction with other tools and techniques to make a better decision in selecting personnel. The weighted application blank does not supplant but subsumes the existing system employed in employee selection. Finally this instrument is not a substitute for effective management; rather it is designed to sharpen the manager's intuitions.

Job Satisfaction Survey

The area of job satisfaction is probably one of the most widely researched ones. In this study the survey had one mission-- that is, to determine the extent to which job satisfaction was a determinant of job tenure.

Of the five job-related variables examined by the Job Descriptive Index described in earlier chapters, the employees demonstrated a positive attitude toward their Work, Supervision, Promotions, and Co-Workers. The only area of negative disposition was in the case of Pay. The degree of satisfaction expressed with each scale, when rank-ordered, would be Co-Workers (84%), Supervision (74%), Work (58%), Promotions (58%), and Pay (35%). This would indicate that if the firm were to engage in corrective steps with respect to employee dissatisfaction areas, its immediate concentration ought to be in the area of pay even though the firm claims to pay the highest wages in the community. The two other areas that would seem to warrant concern are work and promotion. Fifty-eight per cent of the employees showed positive attitude toward each of these aspects of their jobs. While this is encouraging, it is far from satisfactory. At the same time, the areas of co-workers and supervision both of which had fairly highly favorable responses, should not be neglected. Every attempt should be made to maintain and/or increase the disposition toward these two areas.

Since this part of the study dealt with the entire work force in the plant, the findings reported here are quite significant as far as the company itself is concerned. If one were to make assumptions to the effect that the plant work force is a sample of the population universe, the findings also have general implications. Smith, et al. (1969, pp. 79-82) reported that

[f]or both men and women rank orders of satisfaction are identical: Co-Workers, Supervision, Work, Pay and (notably last) Promotions when based on raw means; or Co-Workers, Work, Supervision, Pay and Promotions when based on deviations from the equated neutral points.

The Smith, et al. findings are based on a study of over 2,500 female and

male employees across twenty-one plants. Findings in this study are presented in Figure 5-1 to show the raw means and the deviations of means from the equated neutral points. The rank orders of satisfaction based on raw means are Co-Workers, Supervision, Promotion, Work, and Pay. The difference between the conclusions drawn by Smith, et al. and this study when based on raw mean scores is in the ordering of Pay and Promotions. In the Smith findings, these were fourth and fifth respectively; here they were fifth and fourth respectively. When the deviations from the equated neutral points are considered, the Smith, et. al. findings showed Co-Workers, Work, Supervision, Pay, and Promotions; in the present study, the order is Co-Workers, Supervision, Promotions, Work, and Pay.

In both studies Co-Workers ranked first. In the Smith findings Promotions ranked last; in this study, Pay ranked last. The reason for this difference is perhaps due to the fact that most of the employees in the present study in their short period of employment with the company have experienced some advancement or perceived that their opportunities for advancement were fairly good. It will be recalled that the company has been in operation for only a little over two years as of the time the data were collected, and as a matter of policy the company promoted employees from final assembly areas to sub-assembly operations.

By way of general conclusions, satisfaction with Co-Workers ranked highest. Such was the case in a recent study among police officers (Cox and Stickney, 1975, p. 3). In the same study the area of Promotions ranked last, a fact in concert with the Smith findings. Satisfaction with the remaining job scales follow about the same order. Findings here suggest that the two areas requiring immediate attention would be Pay and

Figure 5-1

JDI Scale Statistics for Female and Male Employees (N=95)

Scale	Equated Neutral Point	Raw Scores		Difference of Mean from Equated Neutral Point
		Mean	Standard Deviation	
Work	26	28.00	11.60	2.00
Supervision	33	39.85	9.96	6.85
Pay	22	18.17	11.28	-3.83
Promotion	20	25.16	15.69	5.16
Co-Workers	32	42.86	10.12	10.86

Promotions. The reason that pay is one of the frequently cited areas of dissatisfaction might be found in one of the basic assumptions about people: man is a wanting animal. It is either that the individual is struggling to make ends meet or that the individual perceives the money incentives as means of satisfying some of the higher level needs.

Promotion likewise is consistent with the aspirations of people to advance and to grow in their occupational life. In most established organizations, there is always a limit to the number of higher positions that will become vacant so that those at the lower echelons could be promoted. Furthermore, an organization cannot afford to follow too strictly a policy to promote from within lest it becomes a home for a lot of deadwood or it simply may not have the talent available from its present inventory of personnel. It is conceivable, therefore, that in this company promotion may turn out to be a problem area in the long run. As was pointed out in the first chapter, this firm might be viewed as an organization moving through a transient stage during which time a disproportionately higher number of employees get promoted. Once the organization achieves stability in its manpower requirements, the frequency of promotion is apt to go down. The implication for management would be to prepare for such contingencies by introducing other incentives designed to retain employees whose aspirations for advancement may never be realized otherwise. One avenue would be to provide for sub-steps within a given job classification whereby a person could move in a career path; other alternatives might be to provide opportunity for employees to acquire various skills through on-the-job training so that the problem of boredom is minimized by enabling individuals to perform at different phases of the operation. This can be combined with wage increases, the effect of which would be almost the same as promotions.

Of interest for possible future research would be the relevance of community characteristics to job satisfaction and job tenure. This was not one of the focal points of enquiry in this study, though mention was made in the introductory chapter that economically the community ranked below the state in which it is located. It was also pointed out that a good number of the local population at one time or another have been recipients of public welfare programs. Blood and Hulin (1967) and Hulin and Blood (1968) suggested that workers coming from "communities which should foster integration with middle-class norms would structure their jobs differently than alienated [from middle-class norms] workers" (Blood and Hulin, 1967, p. 284). According to these writers, those who integrate with middle-class norms tend to

have personal involvement with their jobs and aspirations with their occupations. Their goals are the type of upward mobility, social climbing goals, generally associated with the American middle class (Blood and Hulin, 1967, p. 284).

On the other hand, the alienated workers

can be described as involved in their jobs only instrumentally; that is, the job is only a provider of means for pursuing extra-occupational goals. The concern of these workers is not for increased responsibility, higher status, or more autonomy. They want money, and they want it in return for a minimal amount of personal involvement (Blood and Hulin, 1967, p. 285).

The alienation process is characterized as a lack of socialization to middle-class norms. Accordingly,

where a segment of society exists which holds non-middle-class norms and which is large enough to sustain its own norms, the members of that sub-culture will become socialized to the norms of that sub-culture. . . . persons separated from middle-class identification by low educational attainment or low occupational status and living in ghettos, slums, and highly industrialized communities would develop and sustain a distinct norm system (Blood and Hulin, 1967, p. 285).

On the surface the foregoing remarks appear to have bearing in this

case also. The rural character of the community, its relatively low economic status, the low of level of education, and the relatively high per cent of its population receiving public assistance connotes a community that fosters middle-class norms. Based on the findings of Blood and Hulin (1967) this plant might serve as an appropriate setting where job enrichment programs may be undertaken to resolve the problem. Job enrichment has been proposed as one developmental program the firm might undertake. These comments and/or observations are primarily personal opinions of this writer, based, of course, on the writings of earlier writers. However, the implications of the preceding remarks become clearer as the findings from the reasons for staying are examined. Meanwhile, further investigation of the community variables and their relevance to satisfaction on the job and turnover ought to be a worthwhile area deserving examination.

Reasons for Staying Survey

In spite of the positive attitudes expressed toward Co-Workers, Supervision, Work, and Promotions, when it came to responding to the Why Do You Stay At Your Company? questionnaire, large numbers of the employees strongly agreed with non-work-related reasons for staying. Out of the top eleven reasons cited, eight had to do with external environmental reasons. These were:

1. I enjoy living in my present neighborhood (78%)
2. I have family responsibilities (78%)
3. I have family and relatives in the area (71%)
4. I like to live in this area (70%)
5. I do not believe in jumping from company to company (67%)

6. I am working to make ends meet (62%)
7. The company is convenient to my home (62%)
8. I am working to save enough money to buy some things and I have not got there yet (60%)

These reasons clearly indicate that the employees view their jobs only as a means of maintaining what Dawis and Lofquist (1969) would call a "correspondence" with their non-work environment. Taking into consideration the relatively low percentage of the ninety-five employees who cited motivational reasons for staying with the company, it seems reasonable to agree with Blood and Hulin (1967, p. 285) that "the job is only a provider of means for pursuing extra-occupational goals. . . . They want money, and they want it in return for a minimal amount of personal involvement." In balance, the findings in this part of the study confirm the Flowers and Hughes (1973, p. 49) observations, one of the premises on which this part of the study was based:

After all, some people stay on their job or with the company for reasons that have nothing to do with their jobs or with the company, and such employees may lack the motivation to do more than they absolutely must to stay afloat.

This means that the majority of the employees in this firm might fit in the "turn-offs" category which in extreme cases is typified by high levels of dissatisfaction with their jobs and remaining on the job strictly for external environmental reasons. Given the low skill level of these employees, the findings highly corroborate with the findings of the Flowers-Hughes study in which low-skill employees felt bound to the job/company mainly by benefits, family responsibilities, the difficulty of locating another job, personal friendships, community ties, and financial pressures.

Just as in the second part of this research, all the plant employees participated in this part of the study. Given the similarity of the findings in this study with that of the Flowers-Hughes findings with respect to low-skill manufacturing employees and the underlying concepts in the Blood and Hulin "Integration [with]-Alienation [from] middle-class norms" continuum, a tentative generalization can be made to the effect that blue-collar manufacturing employees are primarily tied to their jobs/company for extraoccupational reasons. This supposition has several implications to management. For one thing, it is difficult to draw any general notions about why employees stay or leave. As Flowers and Hughes (1973, p. 49) observe, "one individual will stay in a job under conditions that would cause another to start pounding the pavements." Stated differently, the reasons people quit their jobs are not always the opposite of the reasons why people stay on their jobs. Therefore, attempts directed at correcting the reasons for quitting the job may not be effective on those who decide to stay on the job, nor will they motivate them.

Secondly, any standard assumptions that job tenure connotes satisfaction with the job needs reexamination. This study and previous studies cited elsewhere show contrary evidence at least in these selected cases. Even though the employees showed moderate levels of satisfaction with their jobs, their primary reasons for staying were different from job-related reasons. The problem for the company then boils down to finding ways in which the employees can be made to perceive their respective roles in the organization in a more meaningful way. To put it precisely, the problem is one of maintaining a work force that is also committed to the cause for which the organization stands. It is of greater magnitude for this organization because of the relatively small

labor market which supplies its required manpower. Likewise, the homogeneous nature of the labor supply is also a constraining factor. It might mean that the firm may have to engage in some developmental programs designed to cause a change in the attitude of its current and potential employees. Investments in such programs would probably pay back in a relatively short period of time through stable work force, improved morale, commitment and hopefully increased productivity.

Conclusions

The study for the most part has confirmed the assumptions on which the research was based. The one major exception was the positive attitude (satisfaction) expressed by the workers toward their Work, Supervision, and Promotion, as this was not anticipated. At the same time the findings from the reasons for staying survey suggest that there are reasons far removed from satisfaction with any part of the job that caused the employees to remain on their jobs.

The study confirmed the fact that there are significant differences in the biographical data of employees who tend to stay on their jobs and those who tend to leave their jobs. It was concluded that the weighted application blank developed on the basis of these biographical differences can be an effective selection device in screening out potential short-tenure employees.

It was also concluded that low-skill manufacturing employees, in this case, are attracted to their jobs for more non-work-related than work-related reasons. This seems to be far more prevalent than what is really recognized by managers, the implication being that management should examine both the reasons for leaving the job as well as the reasons for staying on the job before allocating resources to any employee

developmental projects.

Certain factors surrounding the study may raise some questions about the findings and the conclusions drawn here. For instance, the firm has been in operation for a relatively short period of time and as such the findings may be considered atypical because the firm may have been in a transient stage prior to achieving stability in operations and manpower needs. This may be a legitimate concern in this instance; however, the parent organization has similar operations in other parts of the country where it had not experienced the same type of problems.

Secondly, the focus on a single organization may suggest that the study was too narrow in scope. At the same time, it is conceivable that this firm is a part of the gestalt whole and as such the findings have wider implications.

The survey instruments used for collecting data for Parts II and III of the study were administered on the day before a four-day Thanksgiving holiday. This date was chosen in anticipation of one hundred per cent participation by the employees as they would have had to work on that day in order to be eligible for the holiday pay. As was expected, all ninety-five of the plant employees were present. In spite of the good intentions behind the above decision, it is possible that the mood of the employees on that particular day may have been unusual because of the impending holiday weekend and hence the responses might be interpreted as being non-representative of the true feelings.

Finally, no attempt was made to determine the cost of turnover to the company. Likewise, no effort was made to distinguish between voluntary and involuntary turnovers, primarily due to incomplete records. Even with these possible limitations, the findings indicate a number of

developmental steps as outlined in the next section.

Recommendations for the Company

Since this study focused on the problem of a specific organization, the following recommendations are made to the company for consideration and possible action:

1. Use of Weighted Application Blank: This instrument appears to have the predictive ability. It is suggested that the company continue using this along with its other selection devices. Together, the various systems can enable the personnel department to arrive at a better decision about its potential employees.

The cut-off score of 5 was the point where the original study sample was found to be different. However, as labor supply conditions change, the firm may want to raise or lower the cut-off score one or two points so that the weighted application blank is responsive to the changing conditions. Providing for such flexibility is an accepted practice in the use of weighted application blank.

In addition, a constant vigil must be maintained on this instrument's predictive ability over time. As economic conditions change or company policies change, it is entirely possible that some of the differentiating aspects may not be valid any more. Therefore, at least for a period of one year in the first instance and then every two or three years the item validity must be determined so that the instrument is more representative of the changing conditions.

2. Wages: The job satisfaction survey indicated a large percentage of employees showed negative attitudes toward this area. While it is true that most people would like to have more money at any given

time, the seemingly high dissatisfaction with Pay would warrant consideration. Two specific steps the company might take would be to conduct a job evaluation, and secondly, to carry out a wage survey. These enquiries would probably reveal matters that are not obvious and enable the company, if need be, to come up with a wage structure which would be perceived as more equitable by the employees.

3. Supplementary Compensation (Fringe benefits): Should it be decided to conduct a wage survey, it would seem in order and timely to also conduct a fringe benefit survey. A fresh look at the total compensation package might call for some realignment of benefits and other compensations in a more equitable and more meaningful manner to the employees in terms of their specific needs. Often times organizations in deciding on a fringe benefit package institute programs without really examining the needs of the clientele to be served by such programs. This is not to cast any doubts on the program the company presently has, as this area was not specifically looked into in this study and therefore, this writer is not in a position to comment on its effectiveness.

4. Work: Only fifty-eight percent of the employees showed positive attitudes toward Work. This seems to indicate only moderate satisfaction with Work. One way to improve this situation might be to try to place employees in work areas in which they feel more comfortable and areas, therefore, in which they can perform more competently.

5. Promotions: This is another area where again only fifty-eight percent of the employees expressed favorable attitudes. As was discussed elsewhere, the area of Promotion was ranked the last in several other studies. A general implication is that while employees would like to move ahead in their careers, basic economic and organizational limita-

tions preclude many from getting much higher in the organizational hierarchy. While no organization would be in a position to provide openings for everyone who would like to advance, it might consider setting up a title "ladder" in the form of various levels within a given job classification. This approach can introduce more status perceptions in the job-holder's mind. Such titular advances may be supplemented with some nominal wage increase also.

6. Reasons for Staying: When one looks at the large percentage of employees who indicated external environmental reasons for staying on their jobs, whatever satisfaction these employees may have expressed with the various aspects of their jobs appears to be very superficial. This type of reasoning and the rather highly negative disposition shown toward Pay suggest that the amount of compensation these employees receive does not enable them to maintain correspondence with their non-work environments. To these employees the job itself is not the motivating factor in holding on to the job, rather the anticipated reward for doing the job which will help them satisfy their other environmental demands. This is definitely not an unusual phenomenon as most working people consider the monetary compensation as a means of acquiring other needs in life. What is different in this case is the dissassociation with the job and the consequent noncommitment to the goals of the organization. Here again, some of the recent studies suggest this to be a pattern among low-skill manufacturing employees.

To an organization desirous of increased performance effectiveness, the indifferent and apathetic employee is a burden rather than an asset. The net effect of such unhealthy situations can be debilitating as far as the organization's survival and growth are concerned. It is

true that this type of problem is prevalent across all kinds of organizational settings; however, there is no reason that it be accepted as an immutable given. What possibly can be done by an organization to change the situation? Perhaps the experiences of other companies are worth examining.

Job Enrichment. This is a developmental program designed to increase employee motivation and morale. Texas Instruments is one organization that has successfully implemented this plan-do-control type of enrichment program even to the operative levels within the organization (Gibson, et al., 1975, pp. 163-164). Unlike the traditional approach of delegating the planning and controlling functions to management and the doing function to the operative employees, the job enrichment technique calls for a redesigning of the job in a manner that will allow everyone to be responsible for certain amounts of planning and controlling of one's performance in addition to simply carrying out orders from higher-ups. The areas to be covered might include work scheduling, personnel assignment, quality control and inspection, personnel selection and related activities. Gaines Dog Food Company, located in Topeka, Kansas, is another organization that has found such an approach useful in its operations (Newman, 1973). The idea is to get the employees actively involved in certain planning and controlling functions of their respective jobs aimed at increasing their commitment to their jobs. It will call for an educational and adaptation process, both for the management and for the employees.

Flexible working hours. Along the same lines of job enrichment, the rural-agrarian nature of the community might favor adaptation to a flexible working hours program. Flexible working hours has been known

under various labels such as "flexible hours" and "flextime." Basically, there are two approaches to this program. In the first approach, employees may have shorter work weeks with longer working days, for example, a four-day, forty-hour week. The other approach allows employees to work the usual number of hours but have a choice of starting times, called "flexible hours." Glueck (1974, p. 81) makes this observation about flexible working hours:

I think that jobs offering routine work with no special need for particular services everyday would adapt best to these systems. Further, those who see work instrumentally (as only a means to make a living) or see it as unpleasant probably prefer longer hours of more concentrated work (see Poor, 1970).

This kind of program has been in operation for a number of years in several European countries. Here at home some of the firms that have adopted various forms of this concept include Hewlett-Packard, Scott Paper Company, Control Data Corporation, Sandoz-Wander, Occidental Life of California, and Industrial National Bank of Providence. Among government agencies, The Social Security Administration's national headquarters and certain city governments have also been experimenting with flexible hours concepts (Swart, 1974, pp. 20-23).

Two conditions in this specific case seem to favor such an approach. On the one hand, the routine nature of the job is conducive to this type of program, as suggested in the passage taken from Glueck. Secondly, the rural-agrarian background would possibly suggest that the employees may have other responsibilities such as farming as well as the necessity of having to transport children to school and to pick them up. If this is the case, a flexible working hours program can enable the employees to attend to their non-work responsibilities which they consider

important and also maintain their jobs. To the employees, a change to this type of program might represent a genuine concern on the part of management for the welfare of its employees.

Creche. At the early stages of this study, during an informal interview with some of the employees, certain female and male employees suggested that the company might provide a nursery for children so that working mothers with children would not have to worry about arranging for babysitters. The idea of company-provided creches or nurseries has been in operation in many parts of the world for a number of years. In the United States this is an emerging idea, and Texas Instruments is one firm that does offer such facilities for its employees. This writer believes that the company can attract and keep a number of competent female employees with dependents if some provision is made in this area. This seems especially a relevant and timely issue in view of some of the findings in a U. S. Department of Labor Study. Blackman (1976, p. 1) in summarizing this study, reports the following:

A growing proportion of women are single, divorced and not remarried. In 1975, almost 40 per cent of women ages 20 to 24 were single, compared to 28 per cent in 1950.

The number of female headed families has increased by 73 per cent since 1960 to 7.2 million. They now comprise 13 per cent of all families.

.....
Between 1950 and 1974, the number of women in the labor force nearly doubled, while the number of men increased by one-fourth.

These recommendations place a heavy burden on the part of the company. Given the community setting, the background of the employees, their level of motivation, the local economic conditions and related matters, it is this writer's sincere belief that any positive change in the attitudes of the workers will have to find its beginning through

company-sponsored programs.

The overall implication suggests no acceptance of a universal pattern, rather a custom-made enquiry for every organizational ill. Finally, the findings in this study are certainly not conclusive in any sense of the word. Instead, they have clarified some of the suppositions, earlier findings, and added some more light to the mysteries around us. At the same time, they invite more intense enquiry in the form of continued research so that the mysterious black box - the human mind - becomes clearer in the never-ending pursuit of attempting to manage the human resources so vital to the survival of every organization.

Suggestions for Further Research

Of immediate usefulness will be a follow-up research based on the data utilized in this study. This can be directed toward relating methodologically job satisfaction and reasons for staying as expressed by the employees who were with the company for ninety days or more when these data were collected. This will provide a truly integrated study because of its multifaceted approach.

BIBLIOGRAPHY

- Argyris, C. Integrating the Individual and the Organization. New York: Wiley, 1964.
- Augustine, Joseph. "Personnel Turnover." In Joseph Famularo (ed.) Handbook of Modern Personnel Administration. New York: McGraw-Hill, 1972.
- Behling, Orlando and Chester Schriesheim. Organizational Behavior. Boston: Allyn & Bacon, 1976.
- Beach, Dale S. Personnel: The Management of People at Work. New York: Macmillan, 1975.
- Burns, T. and G. Stalker. The Management of Innovation. London: Tavistock, 1961.
- Caplow, Theodore. Principles of Organization. New York: Harcourt, 1964.
- Chruden, Herbert J. and Arthur W. Sherman, Jr. Personnel Management. Cincinnati, Ohio: Southwestern, 1976.
- Davis, Rene and Lloyd Lofquist. Adjustment to Work: A Psychological View in a Work-Oriented Society. Englewood Cliffs, N.J.: Prentice-Hall, 1969.
- Donnelly, Jr., James H., James L. Gibson, and John M. Ivancevich. Fundamentals of Management. Dallas, Texas: Business Publications, 1975.
- Dunnette, Marvin D. Personnel Selection and Placement. Belmont, California: Wardsworth, 1966.
- England, George W. Development and Use of Weighted Application Blanks. Dubuque, Iowa: Wm. C. Brown Company, 1961.
- England, George W. Development and Use of Weighted Application Blanks (Revised edition). Minneapolis, Minnesota: Industrial Relations Center, University of Minnesota, 1971.
- Famularo, Joseph J. Handbook of Modern Personnel Administration. New York: McGraw-Hill, 1972.

- Fiedler, Fred. "Style or Circumstance: The Leadership Enigma." In Fremont E. Kast and James E. Rosenzweig (ed). Chicago: Science Research Associates, 1973.
- Fleishman, Edwin A. and Alan R. Bass. Studies in Personnel and Industrial Psychology. Homewood, Illinois: Dorsey, 1974.
- Flippo, Edwin B. Principles of Personnel Management. New York: McGraw-Hill, 1976.
- French, Wendell. The Personnel Management Process. Boston: Houghton Mifflin, 1974.
- Gellerman, Saul W. The Management of Human Relations. Hinsdale, Illinois: Dryden, 1966.
- Gellerman, Saul W. The Management of Human Resources. Hinsdale, Illinois: Dryden, 1976.
- Gibson, James L., John M. Ivancevich, and James H. Donnelly, Jr. Organizations: Structure, Processes, Behavior. Dallas, Texas: Business Publications, 1973.
- Glueck, William F. Personnel: A Diagnostic Approach. Dallas, Texas: Business Publications, 1974.
- Habbe, Stephen. Following Up Attitude Survey Findings: Studies in Personnel Policy 181. New York: National Industrial Conference Board, 1961.
- Harris, Jr., O. Jeff. Managing People At Work. New York: Wiley, 1976.
- Haynes, W. Warren; Joseph L. Massie and Marc J. Wallace, Jr. Management Analysis, Concepts, and Cases. Englewood Cliffs, N.J.: Prentice-Hall, 1975.
- Hemphill, John K. Situational Factors in Leadership. Columbus, Ohio: Bureau of Educational Research, Ohio State University, Monograph #32, 1949.
- Hersey, Paul and Kenneth H. Blanchard. Management of Organizational Behavior. Englewood Cliffs, N.J.: Prentice-Hall, 1972.
- Herzberg, Frederick. Work and the Nature of Man. New York: World, 1966.
- Herzberg, Frederick; Bernard Mausner and Barbara Snyderman. The Motivation to Work. New York: Wiley, 1959.
- Hoppock, R. Job Satisfaction. New York: Harper, 1935.
- Kast, Fremont E. and James E. Rosenzweig. Contingency Views of Organization and Management. Chicago: Science Research Associates, 1973.

- Lawrence, Paul R. and Jay W. Lorsch. Developing Organizations: Diagnosis and Action. Menlo Park, California: Addison-Wesley, 1969.
- Lawrence, Paul R. and Jay W. Lorsch. Organization and Environment: Managing Differentiation and Integration. Boston: Harvard, 1967.
- Levitan, Sar A.; Garth L. Mangum and Ray Marshall. Human Resources and Labor Markets. New York: Harper, 1976.
- Likert, Rensis. New Patterns of Management. New York: McGraw-Hill, 1961.
- Likert, Rensis. The Human Organization. New York: McGraw-Hill, 1967.
- Lopez, Felix M. Personnel Interviewing: Theory and Practice. New York: McGraw-Hill, 1975.
- Lorsch, Jay W. and Paul R. Lawrence. Studies in Organization Design. Homewood, Illinois: Richard D. Irwin, 1970.
- McGregor, Douglas. The Human Side of Enterprise. New York: McGraw-Hill, 1960.
- Mott, Paul E. The Characteristics of Effective Organization. New York: Harper, 1972.
- Pigors, Paul; Charles A. Myers and F. T. Malm. Management of Human Resources. New York: McGraw-Hill, 1973.
- Scanlan, Burt K. Principles of Management and Organizational Behavior. New York: Wiley, 1973.
- Schein, E. Organizational Psychology. Englewood Cliffs, N.J.: Prentice-Hall, 1965.
- Seiler, John A. Systems Analysis in Organizational Behavior. Homewood, Illinois: Richard D. Irwin, 1967.
- Shao, Stephen P. Statistics for Business and Economics. Columbus, Ohio: Merrill, 1967.
- Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.
- Sikula, Andrew F. Personnel Administration and Human Resources Management. New York: Wiley, 1976.
- Smith, P. C.; L. M. Kendall and C. L. Hulin. Measurement of Satisfaction in Work and Retirement. New York: Rand, 1969.
- Stead, W. H.; C. L. Shartle, and Associates. Occupational Counselling Techniques. New York: American Book Company, 1940.

- Taylor, Frederick W. Principles of Scientific Management. New York: Harper, 1911.
- Trewatha, Robert L. and M. Gene Newport. Management: Functions and Behavior. Dallas, Texas: Business Publications, 1976.
- Turner, A. N. and Paul R. Lawrence. Industrial Jobs and the Worker: An Investigation of Response to Task Attributes. Boston: Harvard, 1965.
- Woodward, Joan. Management and Technology. London: Her Majesty's Stationery Office, 1958.
- Wren, Daniel A. The Evolution of Management Thought. New York: Ronald, 1972.

Articles

- Argyle, M.; G. Gardner and F. Cioffi. "Supervisory Methods Related to Productivity, Absenteeism, and Labor Turnover," Human Relations, XI (1958): 23-40.
- Ash, P. "The SRA Employee Inventory - A Statistical Analysis," Personnel Psychology, 7 (1954): 337-360.
- Asher, James J. "The Biographical Item: Can It Be Improved?" Personnel Psychology, 25 (Summer 1972): 255.
- Baehr, M. E., and G. B. Williams. "Prediction of Sales Success From Factorially Determined Dimensions of Personnel Background Data," Journal of Applied Psychology, 52 (April, 1968): 98-103.
- Barrett, Leonidas and Gerhard Lang. "Weighted Application Blank and Pre-Selection in the Prediction of Job Tenure," Journal of Industrial Psychology, 1 (1963): 1-6.
- Behling, O. C. "The Meaning of Dissatisfaction with Factory Work," Management of Personnel Quarterly, 3(2), (1964): 11-16.
- Benge, E. J. "An Index for Predicting Labor Turnover," Journal of Personnel Research (1925): 359-365.
- Black, B. B. and A. C. MacKinney. "Validity Information Exchange," Personnel Psychology, XVI (1963): 173-180.
- Blackman, Ann. "Census Bureau Reports Women's Status," Springfield Daily News (Springfield, Missouri), April 27, 1976: 1-2.
- Blood, M. R. and Hulin, C. L. "Alienation, Environmental Characteristics, and Worker Responses," Journal of Applied Psychology, 51 (1967): 284-290.

- Boyd, J. B. "Interests of Engineers Related to Turnover, Selection Management," Journal of Applied Psychology, VI (1961): 143-150.
- Brayfield, Arthur and Walter H. Crockett. "Employee Attitudes and Employee Permacance," Psychological Bulletin (September 1955): 396-428.
- Brown, C. W. and E. E. Ghiselli. "Prediction of Labor Turnover by Aptitude Tests," The Journal of Applied Psychology, XXXVII (1953): 9-13.
- Brummet, R. L.; W. C. Pyle and E. G. Flamholtz. "Human Resource Accounting in Industry," Personnel Administration, 32 (July-August, 1969): 34-46.
- Buel, W. L. "Biographical Data and the Identification of Creative Research Personnel," Journal of Applied Psychology, 49 (1955): 318-321.
- Buel, W. D. "Voluntary Clerical Turnover: The Concurrent and Predictive Validity of a Weighted Application Blank," Journal of Applied Psychology, 48 (1964): 180-183.
- Butterfield, E. C. and S. A. Warren. "The Use of the MMPI in the Selection of Hospital Aides," Journal of Applied Psychology, XLVI (1962): 34-40.
- Butterfield, E. C. and S. A. Warren. "Prediction of Attendant Tenure," Journal of Applied Psychology, XLVII (1963): 101-103.
- Carlson, Robert and Eugene Mayfield. "Evaluating Interview and Employment Application Data," Personnel Psychology, 20 (Winter, 1967): 441-460.
- Cheek, Logan. "Cost Effectiveness Comes to the Personnel Function," Harvard Business Review, 51 (May-June, 1973): 96-105.
- Cleland, C. C. and R. F. Peck. "Psychological Determinants of Tenure in Institutional Personnel," American Journal of Mental Deficiency, LXIV (1959): 876-888.
- Dalton, M. "Worker Response and Social Background," Journal of Political Economy, 55 (1947): 323-332.
- Dekar, A. "Absenteeism: A Fact of Life," Personnel Journal, 48 (November, 1969): 881-888.
- Dornon, J. M. "Identification of Long-Tenure Hourly Factory Workers Using a Weighted Application Blank," Experimental Publication System, 8 (1970): 282.

- Dunnette, M. D. and J. Maetzold. "Use of a Weighted Application Blank in Hiring Seasonal Employees," Journal of Applied Psychology, XXXIX (1955): 308-310.
- Evan, W. M. "Peer-Group Interaction and Organizational Socialization: A Study of Employee Turnover," American Sociological Review, XXVIII (1963): 436-440.
- Fiedler, Fred E. "Style or Circumstance: The Leadership Enigma," Psychology Today (March 1969): 38-43.
- Fleishman, E. A. and J. Berniger. "One Way to Reduce Office Turnover," Personnel, XXXVII (1960): 63-69.
- Fleishman, E. A. and E. F. Harris. "Patterns of Leadership Behavior Related to Employee Grievances and Turnover," Personnel Psychology, XV (1962): 43-56.
- Flowers, Vincent and Charles Hughes. "Why Employees Stay?" Harvard Business Review (July-August, 1973): 49-60.
- Friedlander, Fl. "Comparative Work with Value Systems," Personnel Psychology, 18 (1965): 1-20.
- Gaudet, F. J. "Labor Turnover: Calculation and Cost," American Management Association Research Study 39 (1960).
- Gerstenfeld, Arthur. "Employee Absenteeism: New Insights," Business Horizons (October, 1969): 51-57.
- Ghiselli, E. E. and R. P. Barthol. "The Validity of Personality Inventories in the Selection of Employees," Journal of Applied Psychology, XXXVII (1953): 18-20.
- Gross, Bertram M. "What Are Your Organization's Objectives? A General Systems Approach to Planning," Human Relations, 18 (August, 1965): 195-215.
- Hedberg, R. and B. Baxter. "A Second Look at Personality Test Validation," Personnel Psychology, X (1957): 157-160.
- House, Robert J. and Lawrence A. Wigdor. "Herzberg's Dual-Factor Theory of Job Satisfaction and Motivation: A Review of the Evidence and a Criticism," Personnel Psychology (Winter, 1967): 368-369.
- Hovland, C. I. and E. F. Wonderlic. "Prediction of Industrial Success from Standardized Interviews," Journal of Applied Psychology, 23 (1939): 537-546.
- Hulin, C. L. "Effects of Community Characteristics on Measures of Job Satisfaction," Journal of Applied Psychology, 50 (1966): 280-285.

- Hulin, C. L. "Job Satisfaction and Turnover in a Female Clerical Population," Journal of Applied Psychology, 50 (1966): 280-285.
- Hulin, C. L. and M. R. Blood, "Job Enlargement, Individual Differences and Worker Responses," Psychological Bulletin, 69 (1968): 41-55.
- Hulin, C. L. and P. C. Smith. "A Linear Model of Job Satisfaction," Journal of Applied Psychology, 49 (1965): 209-216.
- Jennings, Ken. "When a Quit is not a Quit," Personnel Journal, 50 (December, 1971): 927-932.
- Katzell, R. A.; R. S. Barrett and T. C. Parker. "Job Satisfaction, Job Performance and Situational Characteristics," Journal of Applied Psychology, 45 (1961): 65-72.
- Kephart, N. C. "Visual Skills and Labor Turnover," Journal of Applied Psychology, 32 (1948): 51-55.
- Kerr, W. A. "Labor Turnover and Its Correlates," Journal of Applied Psychology, 32 (1948): 275-281.
- Kessler, Clemm C. and George J. Gibbs. "Getting the Most From Application Blanks and References," Personnel, (January-February, 1975): 53-62.
- Kilbridge, M. D. "Do Workers Prefer Larger Jobs?" Personnel, 37 (5), (1960): 45-48.
- Kilbridge, M. D. "Reduced Costs Through Job Enlargement," Journal of Business, 33 (10), (1960): 357-362.
- Kirchner, W. K. and M. D. Dunnette. "Applying the Weighted Application Blank Techniques to a Variety of Office Jobs," Journal of Applied Psychology, XLI (1957): 206-208.
- Kriedt, P. H. and M. S. Gadel. "Prediction of Turnover Among Clerical Workers," Journal of Applied Psychology, 37 (1953): 338-340.
- Likert, R. "Measuring Organizational Performance," Harvard Business Review, 36 (March-April, 1958): 41-50.
- Likert, R. "How to Increase a Firm's Lead Time in Recognizing and Dealing with Problems of Managing Its Human Organization?" Michigan Business Review, 21 (January 1969): 12-17.
- Lipsky, David B. "Interplant Transfer and Terminated Workers: A Case Study," Industrial and Labor Relations Review, 23 (January 1970): 191-206.
- Lyons, Thomas F. "Turnover and Absenteeism: A Review of Relationships and Shared Correlations," Personnel Psychology, 25 (Summer, 1972): 271-281.

- Maslow, A. H. "A Theory of Human Motivation," Psychological Review, 50 (1943): 370-376.
- Mayeske, G. W. "The Validity of Kuder Preference Record Scores in Predicting Forester Turnover and Advancement," Personnel Psychology, XVII (1964): 207-210.
- McConnell, John J. "An Assessment Center Program for Multi-Organizational Use," Training and Development Journal, 26 (March, 1972): 6-14.
- McMurry, R. N. "Validating the Patterned Interview," Personnel, 23 (1947): 253-272.
- Mulutinovich, Jugoslav S. and Angelos A. Tsaklanganos. "The Impact of Perceived Community Prosperity on Job Satisfaction of Black and White Workers," Academy of Management Journal (March 1976): 49-65.
- Minor, F. J. "The Prediction of Turnover of Clerical Employees," Personnel Psychology, 11 (1958): 393-402.
- Morse, John J. and Jay W. Lorsch. "Beyond Theory Y," Harvard Business Review (May-June, 1970): 61-68.
- Mosel, J. N. and R. R. Wade. "A Weighted Application Blank for Reduction of Department Store Clerks," Personnel Psychology, 4 (1951): 177-184.
- Myers, M. Scott and Vincent S. Flowers. "A Framework for Measuring Human Assets," California Management Review (Summer, 1974): 5-16.
- Nevo, Barukh. "Using Biographical Information to Predict Success of Men and Women in the Army," Journal of Applied Psychology, 61 (1976): 106-108.
- Novack, Stanley R. "Developing an Effective Application Blank," Personnel Journal, 49 (May 1970): 419-423.
- Odiome, George. "Evaluating the Personnel Program," In Joseph Famularo (ed.) Handbook of Modern Personnel Administration. New York: McGraw-Hill, 1972.
- Pallone, Nathaniel J.; Robert B. Hurley and Fred S. Rickard. "Emphasis In Job Satisfaction Research: 1968-1969," Journal of Vocational Behavior, 1 (1971): 11-28.
- Perla, George. "What is Your People Flow Score?" Personnel Journal, 48 (May, 1969): 331-336.
- Porter, L. A. "Study of Perceived Need Satisfaction in Bottom and Middle Management Jobs," Journal of Applied Psychology, 45 (1961): 232-236.
- Pyle, William. "Monitoring Human Resources - On Line," Michigan Business Review 22 (July, 1970): 19-32.

- Randall, C. "Is Your Personnel Operation Worth Its Cost?" Personnel Administrator, 10 (May-June, 1967): 24-28.
- Roach, Darrell. "Double Cross-Validation of Weighted Application Blanks Over Time," Journal of Applied Psychology, 55 (1971): 157-160.
- Robinson, David D. "Prediction of Clerical Turnover in Banks by Means of a Weighted Application Blank," Journal of Applied Psychology, 56 (1972): 182.
- Ross, I. C. and A. Zander. "Need Satisfaction and Employee Turnover," Personnel Psychology, 10 (1957): 327-338.
- Ruda, Edward and Lewis Albright. "Racial Differences on Selection Instrument Related to Subsequent Job Performance," Personnel Psychology, 22 (Summer 1969): 109-116.
- Schuh, Allen. "The Predictability of Employee Tenure: A Review of the Literature," Personnel Psychology, 20 (Spring, 1967): 133-151.
- Schuh, Allen. "Application Blank and Intelligence as Predictors of Turnover," Personnel Psychology, 20 (Spring, 1967): 59-63.
- Schwab, Donald P. and Richard L. Oliver. "Predicting Tenure With Biographical Data: Exhuming Buried Evidence," Personnel Psychology, 27 (Spring 1974): 125-128.
- Scott, Richard D. and Richard W. Johnson. "Use of Weighted Application Blank in Selecting Unskilled Employees," Journal of Applied Psychology, 51 (1967): 393-395.
- Shott, G. L.; L. E. Albright and J. R. Glennon. "Predicting Turnover in an Automated Office Situation," Personnel Psychology, 16 (1963): 213-219.
- Smith, P. C. "Individual Differences in Susceptibility to Industrial Monotony," Journal of Applied Psychology, 39 (1955): 323-329.
- Sukov, Marvin. "Creative Retirement," Geriatrics, 26 (July, 1971): 83-87.
- Swart, J. Carroll. "What Time Shall I Go to Work Today?" Business Horizons (October, 1974): 19-26.
- Taylor, Kenneth E. and David J. Weiss. "Prediction of Individual Job Termination from Measured Job Satisfaction and Biographical Data," Academic Press (1972): 123-132.
- White, R. "Ego and Reality in Psychoanalytic Theory," Psychological Issues, Monograph No. 11 (1963): 24-43.
- Worthy, J. C. "Organizational Structure and Employee Morale," American Sociological Review, 15 (1950): 169-179.

- Wortman, Max. "Corporate Industrial Relations Research: Dream or Reality?" Academy of Management Journal (June, 1966): 127-135.
- Zdep, S. M. and H. B. Weaver. "The Graphanalytic Approach to Selecting Life Insurance Salesmen," Journal of Applied Psychology, 51 (June, 1967): 295-299.

Unpublished Materials

- Cox, Myron K. and Frank A. Stickney. "An Exploratory Organizational Analysis of Job Satisfaction in a Small Municipal Police Department," Presented at the Southwest Academy of Management Conference, December, 1975.
- Kendall, L. M. Canonical Analysis of Job Satisfaction and Behavioral, Personal Background, and Situational Data. Unpublished Doctoral Dissertation, Cornell University, 1963.
- Mann, F. C. A Study of Work Satisfaction as a Function of the Discrepancy Between Inferred Aspirations and Achievement. Unpublished Doctoral Dissertation, University of Michigan, 1953.
- Scherling, Steven A. Cognitive Personality and Leadership Behavior of Vocational Rehabilitation Agency Supervisors. Unpublished Doctoral Dissertation, University of Oklahoma, 1974.
- Telly, Charles S. Inequity and Its Relationship to Turnover Among Hourly Workers in the Major Production Shops of a Large Aerospace Firm. Unpublished Doctoral Dissertation, University of Washington, 1967.

Television Broadcast

- Newman, Edwin. "First Tuesday: March, 1973," National Broadcasting Company (March 6, 1973).

APPENDICES

APPENDIX A

APPLICATION BLANK USED TO COLLECT BIOGRAPHICAL DATA

DATE :

(PLEASE PRINT) (PLEASE PRINT)

NAME: LAST FIRST MIDDLE POSITION DESIRED HOME PHONE NO.

ADDRESS: STREET CITY STATE ZIP CODE CITIZEN OF U.S. DATE OF BIRTH SOCIAL SECURITY NO.

PHYSICAL DISABILITIES OR DEFECTS? YES - EXPLAIN: NO WEIGHT: LBS. HEIGHT: FT. IN. HAVE YOU EVER RECEIVED WORKMEN'S COMPENSATION? YES - NATURE OF INJURY: NO EMPLOYER(S)

APPLIED BEFORE AT KELSEY-HAYES? YES NO RELAT. CASH

FRIENDS OR RELATIVES EMPLOYED AT K/H NAME RELATIONSHIP NAME

SKILLS: MANUAL TYPING _____ W.P.M. ELECTRIC TYPING _____ W.P.M. SHORTHAND SPEED _____ W.P.M. OTHER MACHINES YOU OPERATE _____

EVER CONVICTED OF A CRIME? YES - EXPLAIN (DATE & PLACE) NO PREVIOUSLY EMPLOYED BY KELSEY-HAYES? YES - WHERE? NO WHEN?

U.S. MILITARY SERVICE FROM TO BRANCH SERIAL NO. DISABILITY: MONTHS IN HOSP. TYPE OF DISCHARGE: SPECIAL TRAINING IN MILITARY

IN EMERGENCY NOTIFY: NAME ADDRESS PHONE

SERVED AN APPROVED APPRENTICESHIP COURSE? YES WHERE TRADE FROM TO COMPLETED YES NO

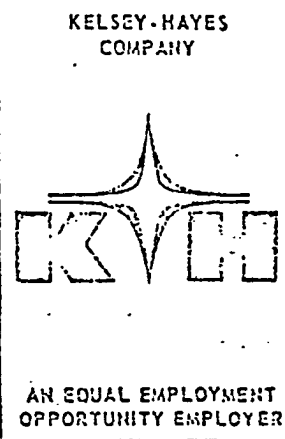
LEVEL OF EDUCATION	NAME AND ADDRESS OF SCHOOL	CIRCLE LAST YR. COMPLET	COMPLETED OR FINISHED	DATE LEFT OR GRADUATION	DEGREE
LAST ELEMENTARY SCHOOL		1 2 3 4 5 6 7 8	<input type="checkbox"/> YES <input type="checkbox"/> NO		
LAST HIGH SCHOOL		9 10 11 12	<input type="checkbox"/> YES <input type="checkbox"/> NO		
COLLEGE OR UNIVERSITY		1 2 3 4 5 6	<input type="checkbox"/> YES <input type="checkbox"/> NO		
TECH., VOCATIONAL, MILITARY OR OTHER		1 2 3 4	<input type="checkbox"/> YES <input type="checkbox"/> NO		

GIVE THREE REFERENCES - NOT FORMER EMPLOYERS, RELATIVES OR EMPLOYEES OF KELSEY-HAYES COMPANY

	NAME	STREET ADDRESS	CITY AND STATE	PHONE NO.
1				
2				
3				

LIST ALL ORGANIZATIONS OF WHICH YOU ARE NOW OR HAVE BEEN A MEMBER EXCLUDING ORGANIZATIONS, THE NAME OR CHARACTER OF WHICH INDICATES RACE, RELIGIOUS CREED, COLOR OR NATIONAL ORIGIN OF ITS MEMBERS. ATTACH SUPPLEMENTAL SHEET IF ADDITIONAL SPACE IS REQUIRED.

1		3
2		4



177

APPLICATION CONTINUED ON BACK

APPLICATION CONTINUED FROM FRONT

RECORD OF EMPLOYMENT

ATTACH SUPPLEMENTAL SHEET IF ADDITIONAL SPACE IS REQUIRED FOR COMPLETE RECORD. STATE HOW EMPLOYED OR ENGAGED SINCE LEAVING SCHOOL, INCLUDING MILITARY SERVICE. LIST PRESENT POSITION FIRST AND WORK BACKWARDS. ACCOUNT FULLY FOR YOUR TIME. GIVE COMPLETE DETAILS.

	FROM		TO		NAME OF FIRM, COMPANY OR EMPLOYER	ADDRESS OF EMPLOYER		JOB TITLE OR KIND OF WORK DONE BY APPLICANT	TYPE OF EMPLOYMENT		REASON FOR LEAVING
	MO.	YR.	MO.	YR.		NO. & STREET	CITY AND STATE		DAILY	PER	
A											
B											
C											
D											
E											
F											
G											
H											

DETAIL BELOW IN CORRESPONDING BLOCK, EXPERIENCE IN EACH OF ABOVE POSITIONS.

A	
B	
C	
D	
E	
F	
G	
H	

I hereby represent that each answer to a question herein and all other information otherwise furnished is true and correct. I further represent that such answers and information constitute a full and complete disclosure of my knowledge with respect to the question or subject to which the answer or information relates. I understand that any incorrect, incomplete, or false statement or information furnished by me is cause for rejection of the application or separation from the company's service if I have been employed. I authorize investigation of all statements contained in this application and I give my consent to be physically examined, photographed and fingerprinted. I hereby authorize my former employers to give any information regarding my employment with them, and, in addition, to furnish any other information they may have concerning me. In the event that I am employed by the Kelszy-Hayes Company I agree to comply with all of its orders, rules and regulations.

DO NOT WRITE BELOW THIS LINE				APPLICANT'S SIGNATURE		DATE	
APPLICATION REVIEWED BY A DATE	INTERVIEWED BY A DATE (PERSONNEL DEPT)	INTERVIEWED BY A DATE (EMPLOYING SUPERVISOR)	TESTED	PHYSICAL EXAMINATION			
			<input type="checkbox"/> YES DATE _____	<input type="checkbox"/> YES DATE _____			
			<input type="checkbox"/> NO	<input type="checkbox"/> NO			
Hired DATE	NOTIFIED TO REPORT	STARTING DATE	SHIFT	STARTING TIME	GAUGE NO.	CATEGORY	JOB TITLE
	BY _____ DATE _____ TIME _____					<input type="checkbox"/> HOURLY <input type="checkbox"/> SALARY <input type="checkbox"/> SALARY (UNIT)	

REJECTED BY _____ DATE _____

REASON:

ATTACH PHYSICAL EXAMINATION TEST RESULTS AND ANY OTHER SUPPORTING INFORMATION

APPENDIX B

PERSONAL HISTORY ITEMS FOUND TO BE
PREDICTIVE OF "JOB SUCCESS"

Personal History Items Found To Be
Predictive of "Job Success"

PERSONAL

1. Age
2. Age at hiring
3. Marital status
4. Number of years married
5. Dependents, number of
6. Children, number of
7. Age when first child born
8. Physical health
9. Recent illnesses, operations
10. Time lost from job for certain previous period (last 2 years, etc.)
11. Living conditions, general
12. Domicile, whether alone, rooming house, keep own house, etc.
13. Residence, location of
14. Size of home town
15. Number of times moved in recent period
16. Length of time at last address
17. Nationality*
18. Birth place*
19. Weight and height
20. Sex

*Some items may violate fair employment practice legislation.

BACKGROUND, GENERAL

21. Occupation of father
22. Occupation of mother
23. Occupation of brothers, sisters, other relatives
24. Military service and rank
25. Military discharge record
26. Early family responsibility
27. Parental family adjustment
28. Professionally successful parents
29. Stable or transient home life
30. Wife does not work outside home

EDUCATION

31. Education
32. Educational level of wife
33. Educational level of family, relatives

34. Education finances--extent of dependence on parents
35. Type of course studies--grammar school
36. Major field of study--high school
37. Specific courses taken in high school or college
38. Subjects liked, disliked in high school
39. Years since leaving high school
40. Type of school attended, private/state
41. College grades
42. Scholarship level, grammar school and high school
43. Graduated at early age compared with classmates

EMPLOYMENT EXPERIENCE

44. Educational--vocational consistency
45. Previous occupations (general type of work)
46. Held job in high school (type of job)
47. Number of previous jobs
48. Specific work experience (specific jobs)
49. Previous selling experience
50. Previous life insurance sales experience
51. Total length of work experience (total years, months)
52. Being in business for self
53. Previous employee of company now considering application
54. Seniority in present employment
55. Tenure on previous job
56. Employment status at time of application (employed, unemployed)
57. Reason for quitting last job
58. Length of time unemployed
59. Previous salary earned, or salary earned at present employment

SKILLS

60. Ability to read blueprints
61. Does repair work on own car
62. Amount of previous training for applicant job
63. Amount of previous training for any other job
64. Possesses specific skills required for job
65. Number of machines that a person can operate

SOCIOECONOMIC LEVEL--FINANCIAL STATUS

66. Financial responsibility
67. Number of creditors
68. Number of accounts with finance companies
69. Number of accounts with stores
70. Amount loan as a proportion of total income
71. Monthly mortgage payment
72. Highest pay received
73. Debts
74. Net worth
75. Savings
76. Amount of life insurance carried

- 77. Amount of other insurance carried
- 78. Kinds of and number of investments
- 79. Real estate owned (own home, etc.)
- 80. Owns automobile
- 81. Make, age of auto owned
- 82. Owns furniture
- 83. Has telephone in home
- 84. Minimum current living expenses
- 85. Salary requests, limits set for accepting job
- 86. Earnings expected (in future, 2 yrs., 5 yrs., etc.)

SOCIAL

- 87. Club memberships (social, community, campus, high school)
- 88. Frequency of attendance at group meetings
- 89. Offices held in clubs
- 90. Experience as a group leader
- 91. Church membership

INTERESTS

- 92. Prefer outside to inside labor
- 93. Hobbies
- 94. Number of hobbies
- 95. Specific type of hobbies, leisure time activities preferred
- 96. Sports
- 97. Number of sports active in
- 98. Most important source of entertainment

PERSONAL CHARACTERISTICS, ATTITUDES EXPRESSED

- 99. Willingness to relocate or transfer
- 100. Confidence (as expressed by applicant)
- 101. Basic personality needs (5 types) as expressed by applicant in reply to question on application blank
- 102. Drive
- 103. Stated job preferences

MISCELLANEOUS

- 104. Time taken for hiring negotiations between applicant and company
- 105. Former employer's estimate of applicant
- 106. Interviewer's estimate of applicant's success, based on health, social personality, relationships, etc.
- 107. Source of reference to company for job application
- 108. Has relatives or acquaintances presently working for company
- 109. Number of character references listed
- 110. Availability for entire season of work stated
- 111. Availability--can start immediately, can't start immediately
- 112. Manner of filling out application blank (Time taken, method used, way information stated, etc.)
- 113. Restrictions on hours available for duty

APPENDIX C
JOB DESCRIPTIVE INDEX

JOB DESCRIPTIVE INDEX

Given below are a number of words describing five major aspects of your work, such as WORK, SUPERVISION, PAY, PROMOTIONS, and CO-WORKERS.

Please circle Yes if the item (word or words) describes a particular aspect of your job.

Please circle No if the item does not describe that particular aspect of your job.

Please circle ? if you cannot decide.

Example: Let us look at the first item under WORK.

Fascinating Yes No ? (If you think your work is fascinating).

Fascinating Yes No ? (If you think your work is not fascinating).

Fascinating Yes No ? (If you cannot decide).

WORK

Fascinating ----- Yes No ?
 Routine ----- Yes No ?
 Satisfying ----- Yes No ?
 Boring ----- Yes No ?
 Good ----- Yes No ?
 Creative ----- Yes No ?
 Respected ----- Yes No ?
 Hot ----- Yes No ?
 Pleasant ----- Yes No ?
 Useful ----- Yes No ?
 Tiresome ----- Yes No ?
 Healthful ----- Yes No ?
 Challenging ----- Yes No ?
 On your feet ----- Yes No ?
 Frustrating ----- Yes No ?
 Simple ----- Yes No ?
 Endless ----- Yes No ?
 Gives sense of
 accomplishment ----- Yes No ?

PAY

Income adequate for normal expenses ----- Yes No ?
 Satisfactory profit sharing ----- Yes No ?
 Barely live on income ----- Yes No ?
 Bad ----- Yes No ?
 Income provides luxuries ----- Yes No ?
 Insecure (not steady) ----- Yes No ?
 Less than I deserve ----- Yes No ?
 Highly paid ----- Yes No ?
 Underpaid ----- Yes No ?

PROMOTIONS

Good opportunity for advancement --- Yes No ?
 Opportunity somewhat limited ----- Yes No ?
 Promotion on ability ----- Yes No ?
 Dead-end job ----- Yes No ?
 Good chance for promotion ----- Yes No ?
 Unfair promotion policy ----- Yes No ?
 Infrequent promotions ----- Yes No ?
 Regular promotions ----- Yes No ?
 Fairly good chance for promotion --- Yes No ?

SUPERVISION

Asks my advice ----- Yes No ?
 Hard to please ----- Yes No ?
 Impolite ----- Yes No ?
 Praises good work ----- Yes No ?
 Tactful ----- Yes No ?
 Influential ----- Yes No ?
 Up-to-date ----- Yes No ?
 Does not supervise enough Yes No ?
 Quick tempered ----- Yes No ?
 Tells me where I stand -- Yes No ?
 Annoying ----- Yes No ?
 Stubborn ----- Yes No ?
 Knows job well ----- Yes No ?
 Bad ----- Yes No ?
 Intelligent ----- Yes No ?
 Leaves me on my own ----- Yes No ?
 Lazy ----- Yes No ?
 Around when needed ----- Yes No ?

CO - WORKERS

Stimulating ----- Yes No ?
 Boring ----- Yes No ?
 Slow ----- Yes No ?
 Ambitious ----- Yes No ?
 Stupid ----- Yes No ?
 Responsible ----- Yes No ?
 Fast ----- Yes No ?
 Intelligent ----- Yes No ?
 Easy to make enemies ----- Yes No ?
 Talk too much ----- Yes No ?
 Smart ----- Yes No ?
 Lazy ----- Yes No ?
 Unpleasant ----- Yes No ?
 No privacy ----- Yes No ?
 Active ----- Yes No ?
 Narrow interests ----- Yes No ?
 Loyal ----- Yes No ?
 Hard to meet ----- Yes No ?

Copyright, 1961, Patricia C. Smith
 27xi74YTA

APPENDIX D

WHY DO YOU STAY AT YOUR COMPANY? .

WHY DO YOU STAY AT YOUR COMPANY?

There could be a number of reasons for your staying at your company. Many of these are listed below. You may strongly agree with some, mildly agree with others, and may not agree with some at all.

Please check column (1) if you strongly agree with a reason for your staying.
 Please check column (2) if you mildly agree with a reason for your staying.
 Please check column (3) if you do not agree with a reason for your staying.

Example: Let us look at the first statement below and say that we strongly agree with that reason for staying with the company. When this line is filled, it will look like this:

(1) (2) (3)

1. I like the working conditions -----

	(1) <u>Strongly</u> <u>agree</u>	(2) <u>Mildly</u> <u>agree</u>	(3) <u>Do not</u> <u>agree</u>
1. I like the working conditions -----	[]	[]	[]
2. I am close to becoming vested in our retirement plan or other plans like stock options -----	[]	[]	[]
3. I wouldn't want to rebuild most of the benefits that I have built up like vacations and sick leave if I left the company -----	[]	[]	[]
4. My family would be reluctant to leave this area ----	[]	[]	[]
5. I enjoy living in my present neighborhood -----	[]	[]	[]
6. I like the amount of cooperation between work groups at my company -----	[]	[]	[]
7. I wouldn't like to start all over learning the policies of a new company -----	[]	[]	[]
8. I like to live in this area -----	[]	[]	[]
9. I have a good opportunity here to get ahead if I want to -----	[]	[]	[]
10. If I were to leave here I might have difficulty getting a fair price for my house -----	[]	[]	[]
11. I really enjoy working with my supervisor -----	[]	[]	[]
12. I have or will soon have children in college -----	[]	[]	[]
13. I enjoy my job here -----	[]	[]	[]
14. It might be difficult to find the kind of job I want outside the company -----	[]	[]	[]
15. I'm a little too old to start over again -----	[]	[]	[]
16. I'm in the process of completing my education -----	[]	[]	[]
17. I like the amount of information I get about how well my work group is doing -----	[]	[]	[]
18. Compared to other areas, the cost of living here is good -----	[]	[]	[]

Please continue on next page.

WHY DO YOU STAY AT YOUR COMPANY? / Page 2

	(1) <u>Strongly</u> <u>agree</u>	(2) <u>Mildly</u> <u>agree</u>	(3) <u>Do not</u> <u>agree</u>
19. The traffic and congestion might be worse at another company location -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. The company is convenient to my home -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I like the amount of teamwork in my group -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I have family responsibilities -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I wouldn't like to look for a job on the outside ---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I am informed about the objectives of my department-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. There is a chance companies may reject my employment application -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I have financial investments here -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I can be sure of a job here as long as I do good work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. It would be costly to relocate -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I'm working to make ends meet -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. I don't want to take the risks involved in a new job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. There are not too many unnecessary rules to follow -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. I like the freedom I have to plan my own work -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. I couldn't afford the additional costs of parking, food, or dress required by some companies -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. I wouldn't want to spend the time or energy required by a new job -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I feel free to tell my supervisor what I think -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. I need the work experience for my career that my company offers -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. I have good personal friends here -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. I'm working to save enough money to buy some things and I haven't got there yet -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I am proud to work here -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. I have family and relatives in the area -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. I was raised in the area and wouldn't want to leave-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. I am paid fairly for the kind of work I do -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Moving and relocating would be too much trouble ----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. There's very little favoritism here -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. I have outside interests or activities I would not want to give up -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. I am allowed to make good use of my abilities -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. I might not get the needed insurance coverage I have now -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. My job is leading to the kind of future I want -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please continue on next page.

WHY DO YOU STAY AT YOUR COMPANY? / Page 3

	(1) <u>Strongly</u> <u>agree</u>	(2) <u>Mildly</u> <u>agree</u>	(3) <u>Do not</u> <u>agree</u>
49. I enjoy the sports and recreation activities in this area -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. I am required to do just about the right amount of work -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. My job skills are specialized and I might not find many other companies who could use them -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. I have clear-cut objectives on which to base my work goals -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. I get paid more here than I probably would anywhere else -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. I am a very important factor in the success of my group and it would be unfair if I left -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. I do not yet have the "credentials" required by my profession -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. The local tax rates are good where I live -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. I like the company benefits -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. I wouldn't like to take my children out of the school they are in -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. I do not believe in jumping from company to company -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. I have the opportunity to travel to interesting places -----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Adapted from "Why Do You Stay at Your Company?" questionnaire provided by Dr. Vincent Flowers, North Texas State University, Denton, Texas.
27xi74YTA

GENERAL INFORMATION (Optional)

Please check the department you work in:

- Axle Division 1
- Brake-line 2
- Hub and Drum 3
- Maintenance 4
- Quality Control 5
- Sub-Assembly 6
- Other 7

My age: 9
Years

Sex: Male A
Female B

Present salary: \$ per hour (C)
or \$ per year (D)

Ethnic background:

Am. Indian E
Caucasian F
Negro G Other H

How long with Kelsey-Hays? 8
Years Months

*Soc. Sec. No. I

*This is to help me study and determine the usefulness of the present methods of selection, recruitment, and promotion of personnel. I promise not to reveal your identity; however, if you would prefer not to identify yourself, it is o.k. with me. THANK YOU EVER SO MUCH FOR YOUR COOPERATION IN CARRYING OUT THIS STUDY.

If you have any comments regarding any part of this study or any other aspects of your job, please feel free to write them on the other side of this questionnaire.

APPENDIX E
REASONS FOR STAYING

REASONS FOR STAYING

MOTIVATIONAL REASONS FOR STAYING

<u>No.</u>	<u>Statement</u>
6	I like the amount of cooperation between work groups at my company.
9	I have a good opportunity here to get ahead if I want to.
13	I enjoy my job here.
17	I like the amount of information I get about how well my work group is doing.
21	I like the amount of teamwork in my group.
31	There are not too many unnecessary rules to follow.
32	I like the freedom I have to plan my own work.
42	I am paid fairly for the kind of work I do.
46	I am allowed to make good use of my abilities.
48	My job is leading to the kind of future I want.
52	I have clear-cut objectives on which to base my work goals.

MAINTENANCE/HYGIENE REASONS FOR STAYING

1	I like the working conditions.
11	I really enjoy working with my supervisor.
24	I am informed about the objectives of my department.
27	I can be sure of a job here as long as I do good work.
35	I feel free to tell my supervisor what I think.
39	I am proud to work here.
44	There's very little favoritism here.

No. Statement

50 I am required to do just about the right amount of work.

57 I like the company benefits.

EXTERNAL ENVIRONMENTAL REASONS FOR STAYING

- 2 I am close to becoming vested in our retirement plans or other plans like stock options.
- 3 I wouldn't want to rebuild most of the benefits that I have built up like vacations and sick leave if I left the company.
- 4 My family would be reluctant to leave this area.
- 5 I enjoy living in my present neighborhood.
- 7 I wouldn't like to start all over learning the policies of a new company.
- 8 I like to live in this area.
- 10 If I were to leave here I might have difficulty getting a fair price for my house.
- 12 I have or will soon have children in college.
- 14 It might be difficult to find the kind of job I want outside the company.
- 15 I am a little too old to start over again.
- 16 I'm in the process of completing my education.
- 18 Compared to other areas, the cost of living here is good.
- 19 The traffic and congestion might be worse at another company location.
- 20 The company is convenient to my home.
- 22 I have family responsibilities.
- 23 I wouldn't like to look for a job on the outside.
- 25 There is a chance companies may reject my employment application.
- 26 I have financial investments here.
- 28 It would be costly to relocate.

<u>No.</u>	<u>Statement</u>
29	I'm working to make ends meet.
30	I don't want to take the risks involved in a new job.
33	I couldn't afford the additional costs of parking, food, or dress required by some companies.
34	I won't want to spend the time or energy required by a new job.
36	I need the work for experience for my career that my company offers.
37	I have good personal friends here.
38	I'm working to save enough money to buy some things and I haven't got there yet.
40	I have family and relatives in the area.
41	I was raised in the area and wouldn't want to leave.
43	Moving and relocating would be too much trouble.
45	I have outside interests or activities I would not want to give up.
47	I might not get the needed insurance coverage I have now.
49	I enjoy the sports and recreational activities in this area.
51	My job skills are specialized and I might not find many other companies who could use them.
53	I get paid more here than I probably would anywhere else.
54	I am a very important factor in the success of my group and it would be unfair if I left.
55	I do not yet have the "credentials" required by my profession.
56	The local tax rates are good where I live.
58	I wouldn't like to take my children out of the school they are in.
59	I do not believe in jumping from company to company.
60	I have the opportunity to travel to interesting places.

APPENDIX F

TALLY OF RESPONSES TO "WHY DO YOU STAY AT YOUR COMPANY?"

TALLY OF RESPONSES TO "WHY DO YOU STAY AT YOUR COMPANY?"

<u>REASON</u>	<u>STRONGLY AGREE</u>		<u>MILDLY AGREE</u>		<u>DO NOT AGREE</u>	
	#	%	#	%	#	%
1. I like the working conditions	15	16	61	64	19	20
2. I am close to becoming vested in our retirement plans or other plans like stock options	4	4	16	17	75	70
3. I wouldn't want to rebuild most of the benefits that I have built up like vacations and sick leave if I left the company	41	43	19	20	35	37
4. My family would be reluctant to leave this area	42	44	20	21	35	35
5. I enjoy living in my present neighborhood	78	82	12	13	5	5
6. I like the amount of cooperation between work groups at my company	49	52	35	37	11	12
7. I wouldn't like to start all over learning the policies of a new company	37	39	24	25	34	36
8. I like to live in this area	70	74	17	18	8	8
9. I have a good opportunity here to get ahead if I want to	37	39	27	28	31	33
10. If I were to leave here I might have difficulty getting a fair price for my house	31	33	12	13	52	55
11. I really enjoy working with my supervisor	59	62	30	32	6	6

<u>REASON</u>	<u>STRONGLY AGREE</u>		<u>MILDLY AGREE</u>		<u>DO NOT AGREE</u>	
	#	%	#	%	#	%
12. I have or will soon have children in college	19	20	12	13	64	67
13. I enjoy my job here	59	62	27	28	9	9
14. It might be difficult to find the kind of job I want outside the company	44	46	20	21	31	33
15. I am a little too old to start over again	20	21	17	18	56	61
16. I'm in the process of completing my education	10	11	12	13	73	77
17. I like the amount of information I get about how well my work group is doing	42	44	26	27	27	28
18. Compared to other areas, the cost of living here is good	21	22	44	46	30	32
19. The traffic and congestion might be worse at another company location	53	56	27	28	15	16
20. The company is convenient to my home	60	63	27	28	8	8
21. I like the amount of teamwork in my group	64	67	24	25	7	7
22. I have family responsibilities	78	82	12	13	5	5
23. I wouldn't like to look for a job on the outside	37	39	21	22	37	39
24. I am informed about the objectives of my department	35	37	31	33	29	31

<u>REASON</u>	<u>STRONGLY AGREE</u>		<u>MILDLY AGREE</u>		<u>DO NOT AGREE</u>	
	#	%	#	%	#	%
25. There is a chance companies may reject my employment application	22	23	23	24	50	53
26. I have financial investments here	19	20	15	16	61	64
27. I can be sure of a job here as long as I do good work	51	54	17	18	27	28
28. It would be costly to relocate	57	60	14	15	24	25
29. I'm working to make ends meet	62	65	22	23	11	12
30. I don't want to take the risks involved in a new job	34	36	27	28	34	36
31. There are not too many unnecessary rules to follow	31	33	37	39	27	28
32. I like the freedom I have to plan my own work	25	26	39	41	31	33
33. I couldn't afford the additional costs of parking, food, or dress required by some companies	39	41	27	28	29	31
34. I won't want to spend the time or energy required by a new job	20	21	19	20	56	59
35. I feel free to tell my supervisor what I think	44	46	35	37	7	7
36. I need the work or experience for my career that my company offers	33	35	23	24	39	41
37. I have good personal friends here	55	58	28	29	12	13

<u>REASON</u>	<u>STRONGLY AGREE</u>		<u>MILDLY AGREE</u>		<u>DO NOT AGREE</u>	
	#	%	#	%	#	%
38. I'm working to save enough money to buy some things and I haven't got there yet	60	63	17	18	18	19
39. I am proud to work here	56	59	32	34	7	7
40. I have family and relatives in the area	71	75	9	9	15	16
41. I was raised in the area and wouldn't want to leave	43	45	17	18	35	37
42. I am paid fairly for the kind of work I do	29	31	38	40	28	29
43. Moving and relocating would be too much trouble	43	45	26	27	26	27
44. There's very little favoritism here	21	22	38	40	36	38
45. I have outside interests or activities I would not want to give up	30	32	24	25	41	43
46. I am allowed to make good use of my abilities	42	44	29	31	24	25
47. I might not get the needed insurance coverage I have now	27	28	22	23	46	48
48. My job is leading to the kind of future I want	30	32	26	27	39	41
49. I enjoy the sports and recreational activities in this area	43	45	31	33	21	22
50. I am required to do just about the right amount of work	28	29	41	43	26	27

<u>REASON</u>	<u>STRONGLY</u> <u>AGREE</u>		<u>MILDLY</u> <u>AGREE</u>		<u>DO NOT</u> <u>AGREE</u>	
	#	%	#	%	#	%
51. My job skills are specialized and I might not find many other companies who could use them	18	19	23	24	54	57
52. I have clear-cut objectives on which to base my work goals	23	24	37	39	35	37
53. I get paid more here than I probably would anywhere else	32	34	16	17	47	49
54. I am a very important factor in the success of my group and it would be unfair if I left	12	13	32	34	51	54
55. I do not yet have the "credentials" required by my profession	26	27	40	42	29	31
56. The local tax rates are good where I live	26	27	40	42	29	31
57. I like the company benefits	26	27	37	39	32	34
58. I wouldn't like to take my children out of the school they are in	45	47	11	12	39	41
59. I do not believe in jumping from company to company	67	71	17	18	11	12
60. I have the opportunity to travel to interesting places	8	8	15	16	72	76