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THE STUDY OF
RETENTION AND LEADERSHIP:
A PROCESS MODEL OF TURNOVER.

BY

WILLIAM P. SHINE

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education
University of San Diego

April 1986

Dissertation Committee

Joseph Rost, Ph.D., Director

Phillip Hunsaker, D.B.A.

Edward Kujawa, Ph.D.

James M. Burns, D.B.A.

Leadership/Retention Model

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DEDICATION

To my Higher Authority as I believe in Him,
for giving me the ability to complete this program.

To all the people I have been blessed
to interact with throughout my life.

To my parents, brothers and sisters,
my wife Sally and our children.

To my teachers, friends,
co-workers and fellow students.

To those I've taught and
those I've learned from.

To each of you - THANK YOU - and GOD BLESS!

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ACKNOWLEDGEMENTS

This research would not have been completed without the support and cooperation of many individuals. To my wife Sally and our children, my friends, co-workers, respondents and fellow students a special thanks for your time and interest.

My committee members, Dr. Joseph C. Rost, Dr. Phillip Hunsaker, and Dr. Edward Kujawa are to be thanked for their direction and challenging insightful questions.

The staff at the University of San Diego Copley Library always provided cheerful, cooperative and empathetic service and assistance.

The faculty and staff of the School of Education and the School of Business at the University of San Diego were quite helpful as well as pleasant. Their understanding and cooperation in revising their policies to enable me to pursue my course of studies is appreciated. I hope we have pointed the way for other doctoral students.

Dr. Joseph C. Rost deserves special appreciation not only for his role as chairman but for stretching our minds to better understand and practice leadership.

Thanks to Dr. Phillip Hunsaker who as a fellow student many years ago, provided unspoken understanding, interest and encouragement.

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To Dr. Edward Kujawa, many thanks for your unselfish support of myself and other students. My thanks also to Dr. William P. Foster, my academic advisor for his sage counsel and encouragement.

Many of the luminaries in the study of retention were contacted via mail. My sincere thanks to those individuals for their response and their suggestions. Since each of these individuals contributed to my knowledge they certainly deserve acknowledgement from one who has benefitted from their publications.

A special thank you to:

Dr. Michael A. Abelson, Texas A & M University
Dr. Trevor Bain, University of Alabama
Dr. Arthur G. Bedeiau, Auburn University
Dr. James A. Breaugh, University of Missouri
Dr. Angelo S. Denisi, University of South Carolina
Dr. Jeff Ellis, Boston College
Dr. George Graen, University of Cincinnati
Dr. Jon Howell, New Mexico State University
Dr. Gary L. Kreps, Rutgers University
Dr. Thomas W. Lee, University of Washington
Dr. Bruce M. Meglino, University of South Carolina
Dr. William Mobley, Texas A & M University
Dr. R. F. Morrison, Navy Personnel Research Center
Dr. Kevin W. Mossholder, Auburn University

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Dr. Richard Mowday, University of Oregon

Dr. Dwight R. Norris, Auburn University

Dr. M. M. Petty, University of Alabama

Dr. James Price, University of Iowa

Dr. Joseph Raelin, Boston College

Dr. Ed Roseman, Management Consultant

Dr. Daniel Spencer, University of Kansas

Dr. Stephen Stumpf, New York University

Dr. Jeremiah Sullivan, University of Washington

Dr. Mary Suszko, University of Missouri

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ABSTRACT

The Study of Retention and Leadership: A Process Model of Turnover.

The purpose of this research was to examine the effect on retention due to the involvement, interaction, and initiatives of leaders. As an ethnographic case study it contrasted the leadership behaviors of three chief executive officers of a medium sized electronics firm. Several conceptual models from the literature were compared and evaluated in order to construct a model of the turnover process with leadership as one of the contributory variable.

Extensive use was made of biographic data, archives, interviews, and surveys of present and former employees. Individuals throughout the organization and the chief executive officers were personally interviewed. Leadership initiatives (programs) were evaluated concerning their effect on the retention of professional employees. The primary focus was on the retention of recently hired engineering college graduates.

This research confirmed some of the more salient correlates of turnover identified in prior studies. This investigation also contradicted other reported correlates of turnover from the literature. Leadership in this

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research, and the initiatives fostered by leaders, were shown to have a positive effect on retention, and were negatively correlated with turnover.

A conceptual model of the turnover process was presented which incorporated major paradigms from previous researchers. The model included leadership as a variable in turnover. The conceptual model was enhanced by a more pragmatic systems approach to retention, and a mnemonic to reinforce both the conceptual model and the practical schema.

It is recommended that research be conducted to determine if the causes of intra organizational transfers are the same that result in involuntary turnover. Another area suggested for investigation is the success of organizational interventions after employees' intention to search/quit are known.

Leadership/Retention Model

A Study of Retention and Leadership:

A Process Model of Turnover.

CHAPTER I

STATEMENT OF THE ISSUE

Importance

The importance and effect of employee turnover on organizations and individuals has been well documented since the early 1900s. Cornog (1957), Hartshorne (1940), Pearce (1954), Pettman (1973), and Price (1977) provided excellent historical summaries of the early literature on the subject of turnover.

Turnover is a multi-faceted issue as evidenced by the terms most often used in discussing the subject: attrition, quit rate, exodus, dropout, transfer, withdrawal, burnout, absenteeism, tardiness, role rejectors, survival, wastage, mobility, exits, migration, and retired at work. The majority of these terms have a negative connotation. This study will focus on the positive side of turnover and that is retention.

The importance of retention is borne out by the plethora of journal articles and publications addressing the many faces of the issue. Though the literature is

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extensive and the issues are many, one determinant of turnover is too seldom mentioned. That variable is leadership. The effect of leadership and the initiatives fostered by leadership and their resultant impact on retention are virtually absent from the data base.

Retention or turnover is often considered an individual phenomenon. A cursory review of the literature coupled with a brief period of imaginative thought expands the retention issue. Like economics, it is pervasive and touches almost every aspect of our lives. Some initial citations are provided prior to the review of the literature to substantiate that statement and to emphasize the importance of this subject relative to cost, the individual, the organization, values, causes, control, and leadership.

Cost

The dollars and cents cost of turnover should interest the accountant, the economist and those interested in the colloquial bottom line. According to Bluedorn (1982) the United States Air Force spent \$2.4 billion per year for replacement pilot training. Cawsey and Wedley (1979) indicated an average cost of turnover of \$4,000 per employee. Even considering inflation that figure is quite low and does not include the hidden costs identified by Cherlin (1981). He stated that \$10,000 per employee was

considered low. His example of one au revoir luncheon where 200 employees were half drunk in the middle of the day at a cost of \$17,000 to the firm is not unusual. The last day's goodbyes and work disruption were other examples of his hidden costs.

Hall (1981), in his study of five Hi-Tech manufacturing firms in California, identified average costs of turnover for each firm of \$1,446,600 per annum. Ivancevich (1985) claimed that even though turnover costs can be estimated, too often the antecedent cost of absences, which he estimated as high as \$26 billion in the United States, are ignored. Some turnover, claimed Janoff (1976), could reduce a firm's unemployment tax. He also estimated the replacement cost of one entry level engineer at \$25,000. That figure closely parallels Traum's (1975) cost of turnover equivalent to the average salary of employees in a particular group.

Replacement costs are also of significance to the Navy. In announcing re-enlistment bonuses of \$24-\$36,000, the Secretary of the Navy, John Lehman said the Navy planned to spend \$9.3 million on bonuses alone. In the San Diego Evening Tribune, ("Pilots Offered", 1985), he quoted a cost of \$1 million to train a replacement pilot.

Savings can also result from some turnover. Bluedorn (1982) identified an annual savings of close to \$300,000

for a public utility firm simply by increasing turnover by one percent. He attributed this saving to the loss of undesirables and the increased productivity of stayers. The cost figures point out the importance of the economic aspects of retention. Smith and Watkins concluded in 1978 that "the magnitude of turnover costs is seldom known. The extent of this problem may never be discovered unless objective measurements are completed" (p. 46). Based on current research available that statement holds true today.

Individual

Though seemingly obvious, the effect of turnover on an individual merits some attention. Baysinger and Mobley (1983) stressed that turnover is essentially an individual behavioral phenomenon. Mobley (1982a,b) addressed some of the consequences of not being able to withdraw from a particular job. Those consequences ranged from apathy, absenteeism, and poor quality work up to actual sabotage against the employer. He also stated that turnover can be psychologically healthy for an individual and be a personal catalyst for growth and development.

The deviant/adaptive behaviors of Raelin (1983) are further examples of the effect of turnover on the individual. Stratten and Flynn (1980) discussed the individual psychological effects and the cost of not moving

which included psychosomatic illness, ulcers, heart attacks, and even suicides. So whether an individual leaves or stays in a particular position, turnover or retention can have a significant effect on that person.

Organization

As reported by Bluedorn (1982) organizations in the fast food business welcomed turnover as it maintained their youthful image and lowered the average cost of labor. Janoff (1976), T. Martin (1980b), Parden (1981), and Raudsepp (1982b) identified many items that are controllable by the organization and that can affect turnover rates. They included salaries, overtime, fringe benefits, career planning, recognition, advancement, training, selection, and supervision. Poor communications, increased workload on stayers, and decreased organizational effectiveness were identified by Price (1977), in addition to lost production and added costs of training replacements. Each of these items adds to the importance of turnover to the organization.

Mobley (1982a) stressed the positive effects of infusing new and innovative ideas and people into the organization. The availability of more promotional opportunities and the loss of poor performers were other positive outcomes, per Mobley. Stratton and Flynn (1980) agreed with Mobley that some turnover is natural and

healthy for organizations. The low performance level and poor job attitudes of people who intended to quit but did not were some of the negative consequences for the firm in Spencer and Steers (1980).

Based on these comments, retention and/or turnover should be of equal, if not more, interest to organizations as well as to individuals.

Values

The so called new breed of workers have different value systems than their parents. Bekiroglu and Gonen (1981), Goodard (1983a), and Roseman (1981) discussed this implication and pointed out that the new value workers expected more from their employers than in the past. In addition, due to increased education they make more demands and want to be involved in decision making. Goodard also stated that machines still receive more attention than humans.

The migrant manager concept has replaced loyalty to the corporation and dedication to one's superior. Tuckel and Siegel (1983) arrived at this migrant manager concept from their survey of business chief executive officers. This is somewhat contradictory to Fayols 12th principle of management, as presented by Bluedorn (1982). Bluedorn claimed that the attitude of stability or tenure of personnel was still prevalent. Lewis (1979) studied the

comparative quit rates of men and women and documented employer bias against women.

Causes

The causes or determinants of turnover have received much attention in the literature. Some of these writings will be mentioned to again highlight the importance of turnover and the breadth of the topic.

The stability of lateness patterns of telephone operators related to turnover was of interest to Adler and Golan (1981). Arnold and Feldman (1982) focused on job satisfaction, tenure, and the cognitive/affective orientation of members of the accounting profession in Canada. Absenteeism of bank employees and that of pet food manufacturing employees drew the attention of Gupta and Jenkins (1982). Poor selection and assignment, insufficient job information, poor training and supervision were emphasized by Janoff (1976). Larson and Fukami, in their 1984 study of nurses and transportation workers, examined the ease of movement of employees as related to turnover. Price and Mueller (1981), along with T. N. Martin (1980a), suggested that more emphasis be given to the intent to stay/leave as opposed to stayers/quitters. Martin also investigated the contribution theory of March and Simon (1958) via a path analysis in his study of a service oriented business.

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Raudsepp's (1982b) study of young engineers attributed turnover to unrealistic expectations, lack of initiative, immaturity, and improper use of talents. "Trigger events" such as a poor merit review, being passed for promotion and internal organizational conflict caused employees to quit per Roseman (1981).

Mobley is one of the more prominent writers on turnover. He grouped the determinants of turnover under economic, organizational, individual demographics, and work/non work related items in his 1982 publications.

Another of the luminaries in this field of investigation is Price (1977). He identified 19 correlates or indicators to which turnover can be related. Pay, communication, and integration (socialization) were some of his key indicators. Spencer and Steers (1980) studied the work attitudes of employees in a major midwestern hospital. They found that job satisfaction and rated job performance were correlated to turnover.

An economist might focus on the effect turnover has on Gross National Product. The human resource planner certainly would be interested in occupational types, equal opportunity considerations, and tenure of employees. A sociologist would find the work group size and communication patterns worthy of study. Job dissatisfaction, commitment, and behavioral intentions

would be likely subjects for the psychologist to study. Physical and mental conditions related to turnover were mentioned previously. This brief discussion on causes of turnover at least demonstrates the extent of possible causes and the breadth of potential areas for investigation and the importance of the subject matter.

Control

In addition to the causes of turnover much of the literature addressed ways to control turnover. Cash bonuses, supervisory training, and job posting were acclaimed by Acuff (1981). Dear, Weisman, and O'Keefe (1985) proposed contracts for professional employees. Bluedorn (1982) cited his study at Merrill-Lynch where turnover was decreased from 8% above the industry average for brokers to 11% below the average. Identification and reward of high performers via revised compensation practices caused the change in turnover according to Bluedorn. Horrigan's (1979) investigation of the impact on training of data processing specialists indicated that the turnover rate for those undergoing training was 10% versus 45% for employees not exposed to training.

Kagerer (1979) suggested using lower entry level positions to support professionals. Like Kushell (1979), he emphasized giving the employees what they really want. Roseman (1981) described that as recognizing employees self

interests. The realistic job previews touted by Wanous (1978) are similar to the social information processing of new employees described by O'Reilly and Caldwell (1981), as is the organizational socialization of Stumpf and Hartman (1983) and the undoing of the educational process of new hires of Brief (1985).

In a study of new college graduate engineers Stratton and Flynn (1980) reported that the initial job given to a new employee was directly related to turnover. They also stressed the need for communications and career discussions. Caldwell and O'Reilly (1985) highlighted the importance of information sources on job choice and subsequent turnover.

Since turnover is a visible and upsetting behavior that organizations frequently have inadequate information on the causes and consequences, management may react with incorrect, ineffective, and inappropriate policies. Thus the importance of turnover, once again, should be clear to the leaders of any organization and of interest to scholars in a variety of disciplinary studies.

Leadership

The subject of leadership will be discussed throughout this dissertation. In order to show the importance of turnover as related to leadership, a few introductory citations should make that connection.

Leadership/Retention Model 1.1

In 1985 Vecchio failed in his attempt to relate turnover to leadership. His study employed the vertical dyad linkages and assumed that the quality of leader member exchanges would predict turnover. He attempted to replicate a study by Graen, Liden and Hoel (1982) and obtained mixed results. Rostky (Gordon, 1984) claimed that engineers become increasingly disenchanted with their profession unless executives begin to manage them with the proper leadership.

Howell and Dorfman (1984) documented the impact of leadership on performance and commitment and showed that leader behavior had the most direct effect on the psychological state of subordinates. They also stated that commitment and satisfaction were more consistent with the popular imagery of leadership than was worker performance.

According to Hunt and Larson (1977) one of the leader's roles was that of controller of motivational antecedents and that prior to any motivationally driven activity the leader had to set goals or objectives to arouse mutual interest and motivation. The leader had to verbalize and make clear the images, visions, and mission prior to any individual motivational response. Galagan (1984) stressed the leader's role in changing visions to realities. Peters and Waterman (1982) stated that the organization's culture included the values of leaders. Earlier, Gouldner (1950)

wrote in the same vein that leaders are inseparable from the environment. Lipham (1983) asserted that the leader sets the mission and tonem which inspired commitment. Burns (1978) and Byrt (1978) wrote that leadership was inseparable from the followers' needs and goals, and that leaders facilitated the satisfaction of needs.

Leadership behavior was effective to the extent that it influenced subordinate expectancies and satisfaction per Falbe (1984), Lord, Foti, and DeVoder (1984), and Wynne and Hunsaker (1975). These authors also indicated that the leaders greatest impact on subordinate performance was via path clarification to rewards and that the leader clarified subordinates attitudes and expectancies. Kellerman (1984) emphasized the multidisciplinary perspectives required for the proper study of leadership.

These few references concerning motivation, needs, commitment, and leadership should relate leadership and retention and serve to further stress the importance of this research.

Purpose

This study will examine the impact of chief executive officer leadership on retention of professional employees. The study will examine that impact via the involvement, interaction, and initiatives of leaders. The importance of

this study has particular significance for potential leaders. If a leader can influence retention of professional employees, a significant cost savings can be realized. Recruiting, training, and replacement costs should be minimized. If a leader's impact on retention is positive, both the organization's and the individual's goals should be more readily achieved. If this study proves fruitful, it will identify some positive initiatives that can be employed to improve retention, and it will also contribute to the field of organizational theory and the study of leadership.

Historically, the problem of turnover has been focused on hourly workers. This study intends to address those professional employees who are more difficult to recruit, whose salaries are higher, and who have a definite bearing on the future of any organization.

The American Electronics Association (1982) forecasted a shortage of engineering graduates, particularly those with United States citizenship. That is an important factor for this research as security clearances are normally required in the defense industry and citizenship is a usual prerequisite for clearances.

If the predictions of the American Electronics Association are true, then competition for engineering graduates will become more critical. Recruiting will be

more difficult due to the forces of supply and demand. The shortages will place a burden on business leaders to focus on retention as opposed to recruitment, since retention can be more cost effective. The burden on business leaders is to develop more creative programs, to address the multi causes of turnover, and to develop controls to improve retention of engineering graduates.

Retention is an issue for the present with results for the future, and it can mean the very survival of high technology firms which require a constant influx of new engineering graduates.

As a participant observer I have been fortunate to be heavily involved in the recruiting, socialization, retention, counseling, and development of new engineering graduates. That role has provided an insight which has not been evidenced in any of the literature on turnover. The direct access to the chief executive officers accompanying that role has also enabled me to observe first hand the impact of leadership behavior on retention of professional employees.

Objectives of the Study

The major objective of this research is to examine the turnover of professional employees. This research will utilize the case study approach to investigate the causes of turnover, the influence of the chief executive officers

on turnover and to evaluate several programs which were implemented to improve retention. The time period investigated spans close to seven years. That period includes the approximate equal tenure of two of the chief executive officers plus that of a recently appointed chief executive officer.

The specific objectives of this research are:

1. To investigate the impact of chief executive officers on the retention of professional employees employed by the firm from 1979 through 1985.
2. To determine the effect of leadership initiatives on the retention of newly hired college graduates, particularly those hired during the middle years of this study.
3. To construct a model of retention with leadership as a contributory variable.

This triadic investigation should provide a better understanding of retention than would be the case if only one area were examined.

Several initiatives (programs) were instituted with their stated purpose of improving the retention of newly hired engineering graduates. This research will identify those programs and provide recommendations for their utility in reducing turnover.

As a participant observer this researcher has also had

the opportunity to interact on a daily basis with several levels of management and staff personnel. That interaction allowed the researcher to observe the differences in leadership and management. Those observations fulfill an additional purpose of this study and that is to expand the investigation of the impact of chief executive officer leadership on retention to other potential leaders in the organization.

To summarize, the objective of this study is to ascertain if leadership is a determinant of retention and if it is, to include leadership in a model of retention.

Definition of Terms

The following definitions will help to clarify and limit the scope of this investigation:

1. Professional employees are those salaried employees, primarily college graduates, hired into the company during the time span to be investigated. Emphasis will be placed on graduates with technical degrees hired in the research and engineering department.

2. Retention is the specific number or percentage of professional employees hired during the time period under study who remained on the payroll of the company.

3. Turnover is the specific number or percentage of

professional employees hired during the time period under study who have voluntarily left the employ of the company. Individuals on leaves of absence for educational or medical reasons are excluded as are retirees.

4. Initiatives are any of the several programs, interventions, goals or policies that can be ascribed to the chief executive officers of the firm under study.

5. Chief Executive Officer is that individual designated as Vice President and General Manager with the highest level of authority over the local operating unit under study.

6. Leadership "is the reciprocal process of mobilizing by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers" (Burns, 1978, p. 425).

Limitations of the Study

While this case study may be specific to an organization, it may not meet the scientific paradigm for generalizability but it does have applicability to many organizations and several disciplines. This study is limited to the analyses of data obtained from several sources pertaining to a particular organization. As such,

the generalizability of the findings may well be limited to that firm. Retention and turnover, as pointed out in the introduction, are important to any organization. The question of leadership also has widespread implications.

Also, this case study cannot be replicated simply due to maturational (individual career growth and development) and temporal (passage of time) effects. That lack of replication alone does not obviate the utility of a case study dealing with this important topic. The limitations of this study are those which the reader cares to impose. This researcher believes the findings of this investigation will be useful to any serious student or practitioner interested in leadership, retention, or in initiatives to reduce turnover.

The effects of general economic conditions and those of competition will be excluded from this study. During the time period to be discussed the firm maintained its position as a leader in the industry. Despite changes in the national economy, the nation's budget for defense spending did not change to any significant degree and thus the firm's sales, profits, and growth rates were relatively stable over the seven years under study. Thus, these two variables, though important, are generally excluded.

One economic factor that has some bearing on retention is the Housing Affordability Ratio which is based on the

minimum income to qualify for housing loans. Ratios for 1978 through 1984 are included in Appendix A and will be referred to in this study.

Other high technology firms in the area did not have sufficiently large enough engineering staffs for them to be considered viable competitors for technical professionals. In addition there was no other local firm producing the same or similar major product lines as the company discussed in this research.

There are several government reports on retention and turnover, many of these studies were conducted by the United States Navy Personnel Research and Development Center and dealt with retention of Navy personnel. These reports were reviewed but not cited in this study due to their limited focus, since retention of military personnel was not directly applicable to this research. Those reports are identified in Appendix B to aid future research on military personnel turnover.

Organization of the Dissertation

Chapter I highlights the importance of this study and indicates the purpose, objectives, and definitions of specific terms.

Chapter II contains the review of the literature which supports some of the methodologies employed in the study.

The literature review also provides a knowledge base which enhances this study for the reader by placing this research in the context of prior research.

Chapter III outlines the research design and methodology which is followed by Chapter IV wherein the data are analyzed and the results are presented.

Chapter V summarizes the conclusions, recommendations, and posits a model of retention, including leadership. This chapter includes recommendations for additional study on retention. The appendices contain relevant data employed in the conduct of this research.

Leadership/Retention Model

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The literature review followed a typical pattern of research. Sources were obtained from the several bibliographies and references collected during the researcher's course of study. An initial query with eight keyword descriptors resulted in 32 references from University Microfilms International via their Datrix Direct dissertation database search. Only two of those references were worthwhile and one is cited in this research. The American Society of Personnel Administration library search services provided further potential sources. These sources and those acquired through the library services of the National Management Association, were of minimal value to this study.

Computer search services of the Educational Resources Information Center (ERIC), the National Aeronautics and Space Administration (NASA), the Department of Defense (DOD), and the Department of the Navy Personnel Research and Development Center were also accessed and identified additional sources of information. The latter source provided a wealth of information concerning retention studies of military personnel (see Appendix B).

Several prominent authors and professors were contacted by mail and their interest and positive responses were quite helpful. I was encouraged and gratified to receive advice, unpublished papers, further contacts, and copies of published works from these recognized authors, professors, and researchers, concerned with organizational theory, human behavior, and retention. Appendix C includes a typical letter of request, a sample reply, and acknowledgement to document these correspondences. Those respondents are individually identified on the acknowledgement page of this dissertation.

The various guides to periodic literature provided direction for the review of newspapers, microfilms, journals, periodicals, books, and abstracts in the libraries of the University of San Diego, San Diego State University, University of California at San Diego, and the company's internal library. Inter library loans also tapped pertinent sources at campus libraries throughout California.

The initial review and codification of the literature material brought out the enormity and the complexity of turnover, let alone leadership. Those considerations demanded that this research be focused on the retention of professional employees as affected by the leadership dimension. That demand was driven by this researcher's

interest, time limitations, and the countless variables related to turnover and leadership.

In addition to the traditional methods of literature review, the writer attended several conferences, seminars, and professional meetings where the topics of retention and/or leadership were presented with variable results.

This review is organized to discuss the literature on turnover, case studies, and interviews. The section on turnover is presented under the following headings:

(a) background, (b) costs, (c) models, (d) leadership implications, and (e) symptoms and other effects.

Turnover

Background

The works of Cornog (1957), Hartshorne (1940), Pearce (1954), Pettman (1973), and Price (1977) summarized turnover research from the early 1900s and provided excellent historical perspectives on turnover. Price codified the immense literature on turnover. His systematic arrangement of substantive findings and procedures represents a cornerstone upon which to build future research. Mobley's (1982a) landmark work included a process model of turnover, somewhat similar to that of Rice, Hill and Trist (1950). Mobley's sequential process focused on the individual's decisions, and more

specifically, the intention to quit as a precursor of turnover. He emphasized both the positive and negative aspects of turnover and related them to the individual, the organization, as well as to society. The positive effects included loss of marginal performers, increased growth opportunities for the individual, the organization, and the blossoming of entrepreneurs for the benefit of society. The negative consequences focused on costs, decreased efficiency, decline in morale, and disruption of the work environment. Mobley's (1982a) integrating perspective enveloped the causes, consequences, and control of employee turnover. Rice et al. (1950) described an employment process which included three mandatory phases leading to retention:

1. The period of induction crisis, during which a number of casualties result from interaction between the engaging company and the entrant group;
 2. The period of differential transit, during which those who have survived learn the ways of life of the company and discover how far they have any place in it;
 3. The period of settled connection, when those who have survived the first two periods take on the character of quasi-permanent employees. (p. 359)
- Price (1977) critiqued this process as well as the

authors for not providing data to confirm the existence of a turnover process. Price claimed that the survivor subjects in the Rice et al. study did not pass through the three phases. He also pointed out that many survivors bypassed one or more of the stages. Other survivors could have passed through the process in a reverse manner which negated the sequential supposition of Rice et al. Hedberg's (1960) discussion of the process centered on the variables that intervene between determinants and turnover and was more acceptable to Price.

Costs

The costs of turnover were discussed by Boylen (1980a), Cawsey and Wedley (1979), Hall (1981), and Raudsepp (1982b). In 1981 Cherlin claimed the cost of one employee lost to turnover exceeded \$10,000. Allen and Higgins (1979), and Traum (1975) cited even higher costs due to recruiting, training, organizational unrest, and the opportunity costs lost while out-processing employees.

Although these authors have highlighted most cost factors, they have not properly accounted for many hidden cost items. Few have addressed costs associated with the looking stage, the time spent after an employee decides to leave but prior to formal resignation. Most authors deemed the time spent counseling would be terminators was unquantifiable. Gaudet (1960), and Pearce (1954) presented

the best reviews describing the costs of turnover. Gaudet preferred the replacement cost method which ignored the many intangible costs items later described by Roseman (1981). Significant savings were attributed to properly managed turnover by Dalton and Todor (1982). Bluedorn (1982) employed the familiar marginal utility/marginal cost curve from economics to determine an acceptable rate of turnover. The high cost of turnover was implicit in Staw's (1980) work along with the premise that turnover must be reduced. A cost formula to determine the economic impact of turnover was proposed by Smith and Watkins (1978).

Bekiroglu and Gonen (1981) claimed that a one percent change in either absenteeism or turnover for American industries equaled seven million dollars annually. In addition to obvious cost items they included underutilization of facilities and resources, administrative expenses, fringe benefits, and lost production. Relocation costs and the stress on the individual and the family caused by relocating replacements for employees who quit were discussed by Tavernier (1980). The dollar loss of training wasted on people who leave was estimated at \$3.5 billion for United States firms by Tosti (1983).

McGarrell (1984) demonstrated a benefit to cost ratio of 8:1 and increasing to 14:1 due to an orientation program

targeted toward retention at Corning Glass Works. He claimed that a 17% decrease in voluntary terminations of people with less than three years service resulted in a savings of \$1,341 million versus a cost of \$171 million.

The problem of turnover costs remains a crucial area for future research. Only when all the cost elements are identified and quantified will we be able to truly assess the cost impact of turnover. Based on the literature review and present research efforts, the true costs of turnover may never be completely quantified due to the apparent lack of interest throughout the business sector.

Models

The base from which most of the recent conceptual models of turnover were constructed is that of March and Simon (1958). Their "Decision to Participate" involved two separate yet overlapping elements: (a) the desirability of movement, and (b) the ease of movement. With the inclusion of these concepts March and Simon were probably the first to integrate labor market (economic) conditions and individual behavior. Though there have been few empirical assessments of their model, it has been the springboard for subsequent conceptual work since 1958. The numerous publications since then attest to the importance and the impact of conceptual approaches to the study of turnover.

Mobley's (1982a) model of turnover, with roots from

March and Simon, is considered to be the current standard of comparison. Michaels and Spector (1982) attempted, as many researchers have, to apply Mobley's model without success. The dissatisfaction of employees and subsequent turnover was emphasized by Price (1977), and Price and Mueller (1981). Bluedorn (1982) found no such positive correlation in five empirical tests he conducted on Price's propositions. Sayles' (1979) model of shifts in administrative patterns was inappropriately applied to turnover by Grampon (1971). The cohort analyses suggested by Lowman and Sneider (1980) was readily applied to determine turnover, but it ignored too many of the determinants.

Sheridan and Abelson (1983) criticized the simplistic linear models of sequential cognitive stages. They overcame that simplicity with an overly complex presentation of Cusp's catastrophe model which described discontinuous behavior patterns leading to termination. Pegels (1981) viewed turnover as a process and proposed a Markov chain method of analysis. His process included various states which employees passed through, with each state having several vector possibilities up to and including turnover. His model is more useful for manpower planning and allocation than it is as a predictor of turnover. Gligg and Manning (1985) suggested that we look

at turnover much as we do adult development. They based their claim on a study of 900 engineers that identified specific stages related to age that engineers progress through during their careers.

Due to the writings of Price (1977), Porter and Steers (1973), and Mobley (1982a), there has been much focus on the antecedents or determinants of turnover. Arnold and Feldman (1982) indicated that the four most powerful predictor variables were: (a) job tenure, (b) job satisfaction, (c) perceived job security, and (d) intention to search. They also implied that these four variables could be ascertained using lost cost attitude surveys but did not substantiate that assertion. The disproportional emphasis on determinants, and the neglect of the consequences of turnover were decried by Dalton and Todor (1979). Staw and Oldham (1978) also criticized that disproportionality. Dalton, Todor and Krackhardt (1982) reported that the consequences of turnover have been drastically overstated.

Szilagyi's (1979) composite model summarized several prior constructs. He claimed that job satisfaction influenced by reward systems, job characteristics, organizational practices, and interpersonal relations were the major components of any turnover model. Lowman and

Sneider (1980) presented a very similar approach. E. G. Thomas (1983) maintained that turnover rates were directly related to economic cycles. Roseman's writings in 1980 (a,b,c,d) and 1981 provided advice on how to identify possible quits and turn them around. Raudsepp (1982b) wrote in a similar vein to the engineering profession. The plea for realistic job previews has been the main theme of Wanous (1973, 1977, 1978). Suszko and Breaugh carried this theme forward in 1985. Wanous' 1977 article was of interest since he addressed the assimilation of newcomers into organizations.

The literature review uncovered over 70 publications and articles that discussed models of turnover in some manner. The following section of the literature review will reference authors not cited above to demonstrate the extensive interest in the conceptual approach to better understand turnover.

Abelson's (1984) study of nursing personnel differentiated between organizational controllable and uncontrollable leavers, and concluded that the predictive ability concerning turnover improved by 100% when those that leave for reasons uncontrollable by the organization (death, medical, etc.) were excluded. He extended his individual model to include an organizational view of turnover in conjunction with Baysinger (1984) which

enveloped organizational and environmental attributes. In 1985 Abelson addressed the effect on nurses' turnover due to shift assignments and marital status.

Baysinger and Mobley (1983) reviewed several conceptual models of turnover including (a) sociological theory, (b) met expectations and commitment, (c) expectancy theory, and (d) equilibrium of inducements and contributions. The influence of Baysinger's economic approach and Mobley's individual level of analysis were merged into focusing on the individual, the economic, and the organizational level of research.

Blau and Kahn (1983) tested the "exit-voice" model of Freeman on white male union members. Their conclusion that unions were more responsive to older workers appeared rather obvious. The exit-voice model assumed that the union, rather than the individual, conveyed average worker preferences to management. Their study also concluded that collective bargaining reduced permanent separations as compared to nonunion workers. They both sidestepped the issue of layoffs as opposed to terminations, which is a characteristic normally associated with collective bargaining agreements.

Farrell and Rusbult (1981) studied the effect of turnover on job commitment. Their use of the investment model expanded its application from romantic involvements,

and combined elements of the exchange theory and interdependence theory to turnover. Commitment, per Farrell & Rusbult, whether romantic or job related, was a function of rewards, costs, investments, and alternatives. Their claim that the investment model could be applied to the study of turnover was not substantiated in their writings. Too many intense organizational commitments can result in turnover according to Reichers (1985) in his thorough review and reconceptualization of organizational commitment.

Farris (1971) developed a predictive model of turnover in his study of electronic engineers and pharmaceutical researchers. He compared both high and low performers and predicted turnover based on the responses to an anonymous attitude questionnaire. One of his conclusions provided an unbiased opinion of his study " the ability to predict turnover is far from perfect " (p. 326).

Greenhalgh (1980) criticized the growth in the volume of turnover literature and the lack of in-depth, complex research methods. His life cycle of employment and decision to participate/contribute model included the three stages of Rice et al. (1950) of (a) induction, (b) differential transit, and (c) settled connection. Though Greenhalgh requested more complex research and claimed that our understanding of turnover was broad but lacked depth,

his linear model was rather simplistic and not well supported. He did, however dispute the assumed constancy of the turnover phenomenon.

Jackofsky's (1984) conceptual model integrated job performance in a basic process model of turnover. She segregated the so called voluntary quits of poor performers that were tantamount to dismissals from true voluntary terminations. She predicted a curvilinear relationship between performance and turnover. Her relatively recent conceptual model needs empirical assessment to determine the significance of job performance in the prediction of turnover. That conclusion was reached by Mossholder, Norris and Bedeian (1985) in their recent test of Jackofsky's model on operative employees in a medium sized electronics manufacturing plant. Jackofsky's conceptual model appears to have more utility than the all encompassing, post hoc model of Susan Jackson (1983). Her model proposed "to describe the effect of participation in decision making on perceived influence, role conflict, role ambiguity, personal and job related communications, social support, emotional strain, overall job satisfaction, absenteeism, and turnover intention" (p. 3). One might ask, "What else is left?"

According to the contribution/inducement theory, employees will exhibit greater turnover if they perceive a

decrease in their net balance of inducements compared to contributions. T. N. Martin (1980b) tested this theory of March and Simon (1958) and included the individual decision process he attributed to Mobley (1982a) as well as the organizational dimensions he credited to Price (1977). After testing his causal process model of turnover, Martin concluded that it is more pragmatic to study intent to leave. His methodology was somewhat flawed but he explained that by stating that the theory of turnover is still unfolding and in need of additional refinement.

Michaels and Spector (1982), and Mitchell (1981) supported the importance of intention to quit in their test of the Mobley, Griffeth, Hand & Meglino (1979) model. Michaels and Spector focused on mental health facility employees whereas Martin (1980a) tested employees of a services oriented business. They used the Mobley et al. (1979) article as a base since it provided an excellent comparison of relevant studies, an updated review of the literature, and detailed discussions of the multitude of variables that can effect turnover.

In a study of over 1,000 nurses in seven hospitals, Price and Mueller (1981) used a similar model to that of Mobley et al. (1979). They focused on intent to stay as opposed to intent to quit and paraphrased intent to stay as

commitment. Intention, whether to stay or quit, is the last stage of the cognitive state described by Raelin (1983) in his model of deviant/adaptive career behavior of professionals which concludes with turnover.

Seybolt (1983) theorized a work-role design model to be used to investigate facets of employee's work roles at different points in their careers and hopefully predict turnover. His model was defined in terms of three concepts (a) company policies, (b) on the job interactions, and (c) the job itself. The author suggested to focus on turnover intentions but neglected to state how. This model, though reportedly tested on 647 female nurses, is lacking in practicality of implementation.

In his 1982 article Spencer investigated the relationship between employee relations practices and retention in his study of 129 hospitals. He stated that employee turnover is less in organizations that provide more mechanisms for voice to employees. Voice mechanisms included in his model were (a) suggestion systems, (b) grievance procedure, (c) ombudsman, (d) survey (e) feedback, (f) counseling, (g) management meetings, and (h) question and answer programs. Performance reviews of high and low performers were employed in another study of hospital employees by Spencer and Steers (1981). Although they based their conclusions on rated job performance, they

still claimed their study supported prior models that dealt with actual job performance and turnover. DePasquale and Lange (1971) studied job-hopping MBA's and pointed out the relationship to turnover with infrequent performance reviews.

Stumpf and Dawley (1981) suggested that multiple criteria be incorporated in any model of human performance and withdrawal behavior. As a minimum they would include absenteeism, performance, voluntary and involuntary turnover. They critiqued the "intention" aspects of other models as variables which are unlikely to be available to managers, researchers, or personnel specialists.

Stumpf and Hartman (1983) pointed out the limitations of their model which extended from exploration activities to entry and socialization to job attitudes, and intentions. Intention to quit also predicted further exploration and turnover behavior in their longitudinal study of college graduates who availed themselves of on-campus placement services.

Szilagyi's (1979) composite model was used to study 3000 employees in manufacturing, insurance, and retail outlets. He implied that managers can be alerted to potential turnover by close examination of employee behavior. His model and conclusions are somewhat suspect due to the paucity of references and citations as well as

the failure to present a documented method of analysis. His claim of 87 and 91 percent accuracy in predicting stayers and leavers is just that!

Organizational demographics as well as individual characteristics and their relational aspects were linked together in the study of management turnover completed by Wagner, Pfeffer and O'Reilly (1984).

The matching of individuals and organizations and the results of realistic job previews in reducing turnover were described in Wanous's model (1978). He also stressed the difference between socialization (after entry) and realistic job previews prior to entry in an organization.

Watson (1981) evaluated job satisfaction as a variable in the Steers and Rhodes (1980) model of attendance. He concluded that it was not a major factor in explaining variations in absenteeism and subsequent turnovers. Smulders (1980) argued for the use of an absence model as opposed to an attendance model in organizational research.

A test of the Wanous model by Zahavia and Baumeister (1981) resulted in small but statistically insignificant results which the authors reported as consistent with similar studies in industrial settings. Their recommendation was to focus any intervention on the critical initial employment period rather than realistic job previews. Youngblood, Mobley, and Meglino (1983)

reached similar conclusions in their study of 1,445 Marine Corps enlistees. Their study, not suprisingly, used the major integrative variables from Mobley et al. (1979) model of the turnover process which included the familiar behavioral intention emphasis of Mobley.

The conceptual approaches, or models, discussed are but indicative of the many faces of the issue. Testing and replication of several of the paradigms yielded inconclusive and conflicting results, as reported by the authors.

This researcher agrees with the conclusion reached by Baysinger and Mobley (1983) that the development of a conceptual framework combined with research at the individual and the organizational level may hold the key to a fuller understanding of the turnover phenomenon.

Leadership Implications of Turnover

This leadership review focused on publications that also discussed turnover or retention and were pertinent to this study. That approach obviated the development of a Stogdill (1974) compendium which could only be accomplished by he and Bass (1981). More importantly that approach established practical limits on this research.

Abraham's (1976) literature review of turnover was quite comprehensive. He addressed the positive work climate and the leadership impact on turnover. In somewhat

of a turnabout for him, Bass (1985) stressed the importance of charisma for transformational leaders. Kuschell (1979) supported the importance of work climate as did Wolcott in his 1973 ethnography. They both stressed the effect of leadership on turnover. In fact, Abraham concluded that "the positive element of retention becomes an integral part of the leadership strategy in human resource management" (1976, p. 65). In his 1964 article Schein emphasized a similar approach specifically directed to retention of college graduates. He suggested an induction strategy to overcome the insecurity of the leaders, managers, and supervisors of new graduates and thus improve retention. The feelings of insecurity on the part of the supervisors were attributed to the challenge posed by the highly educated and ambitious new graduates. The college graduates naturally felt insecure simply due to the newness and anticipation of their first job.

Bryson and Kelley (1978) pointed out the relevance of the political perspective. They described the individual, processual, and structural environmental variables that resulted in the top leader emerging from a dominant coalition. These political features of leadership were also addressed by Rost (1982). These authors implied that leadership is a more complicated and political process than one might believe. McMurry (1973) discussed the political

tactics that top executives used to stay in power, even if they were Machievellian in nature and involved alliances and deals. McMurry's emphasis on power was more aligned to mismanagement and had little to do with leadership. His concept of power is diametrically opposite that of Burns (1978) who describes both power and leadership as relationships with followers.

Mobley et al. (1979) pleaded for a more detailed study of leader member exchange as opposed to the generalized supervisor effect as did Wynne and Hunsaker (1975). Levinson (1981) clearly differentiated between leadership and management. The seven myths of leadership of Brache (1983) however, continued to confuse management with leadership. Each of his leadership myths began with "management."

Bennis (1984) attempted to clarify the competencies of leaders as opposed to managers. In his earlier work in 1976 Bennis decried the dearth of leadership. His experiential writing stressed the values of leaders. His scale of leadership indicated that the best leaders are not noticed, the next best received honor and praise, the next fear, and the next hate. Bennis stated in his 1976 work that a leader serves best by departing. Those familiar with his background will recognize his personal commitment in that statement.

Burns (1978) very aptly dismissed the great man theory of leadership. Sonja Hunt (1984) discussed the role of leadership in the construction of reality. Karmel (1978) suggested that the purpose of leadership research be explicit and without it we are faced with definitional confusion. Karmel took the Ohio State Leadership Studies to task and criticized the instruments (LBDQ-Leader Behavior Description Questionnaire; LOQ-Leadership Opinion Questionnaire; SBDQ-Supervisory Behavior Description Questionnaire) used by the researchers and the subsequent limiting impact the model has had on leadership research. Sgro, Worchel, Pence, and Orban utilized these same instruments in their 1980 study of military cadets. They also included elements of contingency models, exchange theories, and the vertical dyad linkages in their studies. Interpersonal trust was a key element in a subordinate's perception of a leader according to their conclusions.

The key role of a leader via vertical dyad linkages which established the environment for instrumentality and equity theories was presented by Dansereau, Cashman, and Graen (1973), and Graen and Schiemann (1978). They compared average leadership style and its homogeneity assumptions to the vertical dyad linkages which assumed a leader's behavior was dependent upon relationships with particular members. Dansereau, Graen, and Haga (1975)

supported this vertical dyad linkage and explained that the degree of latitude allowed by the leader could predict subsequent subordinate behavior. They viewed leadership as an exchange relationship. Their attempt to demonstrate a key distinction between leader and supervisor in the exchange theory was a bit superficial. They stated leadership was influence without authority, whereas supervision was influence based on authority. Their unstated assumption was that leaders had to be in positions of authority before they could selectively employ the vertical dyad chain theory of linkages. They ignored the possibility of leadership without the entrapments of position as did McMurry (1973). Leaders, according to McMurry were measured by the degree of pomp and circumstance, evidence of status, power, and material success with which they surrounded themselves.

Graen and Ginsburgh (1977) in another study of the task/member/leader coupling claimed that leadership exchanges were predictive of job perceptions and resignations. In their study of university employees they wrote of leadership treatment as attention, support, sensitivity, information source, and enabling self-determination. Job resignations per these authors represented a failure of the subsystem. In their vertical dyad they equated the immediate supervisor to a leader.

One flaw in their study, in this researcher's opinion, was that employees were considered established with less than four years of tenure. One valid conclusion by Graen and Ginsburgh was that behavior intention had more predictive power if it were more specific and closer to the actual behavior.

The impact of Graen and his leader-member exchange emphasis was evidenced in a study of systems analysts in a public utility company. He, along with Liden, and Hoel (1982), again indicated that the leader-member exchange was a stronger predictor of turnover than was the average leadership style. They supported Mobley's (1982a) process of withdrawal and suggested that more detailed study of leader-member exchange was in order. Barbara Intriligator (1983) criticized the major theories of leadership as being gender specific to the exclusion of females. She suggested that the social exchange theory to determine leader effectiveness held the most promise for including women. Izraeli and Izraeli (1985) found no sexual bias in their study of evaluation of leaders.

The focus of many leadership models on group level processes was debated by Griffin (1979). He asserted that the focus should be on the individual. His report on the path goal theory of leadership attempted to show that a leader's behavior was the moderating variable between task

congruence, satisfaction, performance, and turnover. Griffin stated that leaders were more effective by making rewards available that were contingent upon performance. Although he described leadership behavior as directive, supportive, participative, and achievement-oriented, this study, and his 1980 study of hourly workers, equated supervisor to leader.

Griggs (1982) reported on the 8% turnover at Tandem as opposed to the 23% industry average. He attributed the low turnover to intrinsic awards and the people oriented style of leaders. The flexible benefits package, daily use of the swimming pool, weekly beer parties, and a six week sabbatical every four years for each employee surely had some effect!

Howell and Dorfman (1984) described leadership as an influence process wherein one has the ability to influence another to act in a way desired by the first. They continued that leadership was only one source of influence on attitudes and behavior and could explain why leadership variables could only account for a small portion of variance in most empirical studies. In their detailed study of turnover of hospital professionals and nonprofessionals, they concluded that the path goal influence process was less effective in dealing with professionals. Their study was of interest due to the

inclusion of leader substitutes, such as group cohesiveness, professionalism, and task feedback. One valid point they did bring out was that clarification of expectations by the leader was important.

In a study of 325 professionals in a research and engineering organization, Katz and Tushman (1983) identified the importance of boundary spanning supervisors to the benefit of younger engineers. Per Katz and Tushman young employees benefited from socialization and the developmental roles of boundary spanning supervisors. They likened boundary spanning supervisors to gatekeepers who controlled information and had informal networks and linkages to many sources in an organization. Their report compared the retention rates of young engineers of 85% for boundary spanning supervisors to 62% for typical functional supervisors. Promotion rates for young engineers reporting to these gatekeepers was three times that of those reporting to non-gatekeeping supervisors. Their advice to young engineers was that it is critically important to become an integral part of an organization's communication and information processing networks. They also suggested to learn the customs and norms of a company in one's early career stages. Their study should be of interest to researchers of project, matrix, and functional organizations.

The quality of dyadic exchanges was a critical variable to other outcomes such as performance and turnover. This was the conclusion of Liden and Graen (1980) in their report of the vertical dyad linkage which they stated did not assume a single leadership style. This report was but another which displayed Graen's focus on the vertical dyad exchange process.

The behavior of formal leaders was an important mechanism for sending information as described by Morris and Sherman (1981). Leadership behavior, to them, was the most underresearched component in commitment and turnover. No significant correlation with turnover and leader-member exchange was found by Vecchio (1985). He attempted to replicate the findings of Graen et al. (1982) in his study of bank tellers. Turnover as Vecchio viewed it may be due to employees being attracted away rather than driven away. Another important statement of Vecchio was that the leader-member exchange concept may only apply to high level employees.

Pfeffer (1977a) discussed the ambiguity of leadership. Fiedler and Leister (1977) related leader intelligence to group task performance. Leadership behavior related to motivation, satisfaction and turnover is enveloped under the contingency style of leadership discussed by Silver (1983). The path goal theory of House and Mitchell (1976)

has parallel implications. The educational role of leadership in reducing turnover was highlighted by Morphet, Johns and Keller (1982) and supported by Sinetar (1981). The training of managers by leaders in the retention process as proposed by Decker (1982), was but another view of a leader's educational role. West and Marks (1980) viewed educational leaders as leaders of leaders. Sheehy's (1981) mentor relationships were but another form of education by leaders. Burns (1978) indicated that leaders make followers into leaders and the leaders and followers exchange roles.

Employee satisfaction, improved environment and hence reduced turnover were attributed to leadership by Dittrick and Carrell (1979), Graen and Ginsburgh (1977), Griffin (1980), Scott and Taylor (1985), and Weiner and Mahoney (1981). Dansereau et al. (1973) used their instrumentality and equity theory to predict the relationship of leadership and subsequent turnover of managers. Graen et al. (1982) emphasized the role of the leader in the withdrawal process of employees. They claimed that leadership exchange was a good predictor of turnover. Gibson, Ivancevich, and Donnelly (1976) pointed out that official leaders were not necessarily the real leaders. James Hunt (1984) discussed both the contingency style of leadership and its implications for turnover in organizations.

Although we have a nebulous and ambiguous concept of leadership, many authors stressed the importance of leadership and its impact on satisfaction, culture and environment, and hence retention.

The literature on turnover is indeed extensive and the issues are many. Despite the references cited above the one determinant of turnover that has not been adequately explained is leadership. Too many of the writings noted simply equated leadership to management and more frequently to supervision. Few of the authors provided a definition of leadership. Many of them used the term leader or leadership to provide an aura of mystique or acceptability to their studies. The impact of leadership on retention is still a determinant worth further research. This study will investigate that phenomenon and attempt to add a true or accurate leadership dimension to a conceptual model of retention.

Symptoms and Other Effects

The symptoms or indicators of turnover have not been ignored in the literature. The withdrawal syndrome, highlighted by on-the-job-retirement, tardiness, and absence was discussed by Adler and Golan (1981), Stumpf and Dawley (1981), and Waters and Roach (1979). Their rather focused and limited theories were succinctly disputed by Clegg (1983). He properly took them to task for ignoring

many determinants of turnover. Price (1977) identified at least 25 variables classified as (a) demographic, (b) analytical, and (c) process variables. Individual personal factors and perceptions related to absenteeism and turnover were presented in Spencer and Steers (1980). Block (1979) claimed that turnover was positively related to the employee's level of education. Boylen (1980b) contradicted that position and stated that continuing education obviated turnover.

Other behavioral aspects of turnover were discussed by Bernadin (1977). He claimed that withdrawal behavior was predictable from personality characteristics, and he applied the polar hypothesis of anxiety levels of Porter and Steers (1973) to predict turnover. Bernadin also presented a very thorough and detailed statistical analysis to lend credence to his conclusions. Mobley (1982a) highlighted the withdrawal behavior of employees who intended to quit. By contrast, Mowday (1981) was concerned with the attitudes of stayers, those who intended to but did not quit. Deviant and adaptive behaviors of professionals due to conflicting expectations resulted in a state of learned helplessness according to Raelin (1983). Employee lateness, absenteeism, and performance as related to turnover were well documented by Adler and Golan (1981),

Smulders (1980), Spencer and Steers (1981), and Stumpf and Dawley (1981).

Turnover can have positive effects for the individual, the organization, and society. Bluedorn (1982), as well as Dalton and Todor (1979), brought out the positive features of losing employees (at least those not desired). Gaudet (1960), and Gellerman (1974) also concluded that turnover was not necessarily all negative. Dalton, Krackhardt, and Porter (1981) continued with the positive effects of turnover and highlighted both the functional as well as the dysfunctional implications. Mobley (1982 a,b) illustrated this side of turnover with several cases of positive impact, or outcomes, for individuals, organizations, and society. Stratton and Flynn (1980) further explored the social and psychological effects of turnover as did Mobley et al. (1979), while Smith (1979) dwelt on the opportunity structure and sex considerations of turnover. Farrell and Rusbult (1985) and Spencer (1982) stressed the importance of the employee's voice (input) to retention. Spencer along with Steers (1981), related performance to job satisfaction and then to turnover.

Job satisfaction and performance as related to retention has been well researched. Bardo and Ross (1982) used job satisfaction to predict turnover. Goddard (1983a,b) identified three general factors in this area

that resulted in turnover (a) inability to do the job, (b) dissatisfaction with the job, and (c) dissatisfaction with pay. According to Sheridan and Abelson (1983) turnover decreased as satisfaction increased for low rated performers whereas turnover was unchanged with an increase in satisfaction for high performers. In their study of leavers/stayers they found that rated job performance was an important factor in the turnover process and that demographics were weakly related to turnover. However, Spencer and Steers (1980) concluded that personal characteristics were highly related to absenteeism and subsequent turnover as was work experience. Stumpf and Dawley (1981) arrived at similar conclusions in their study of bank tellers.

The source of employee recruitment interested both Breaugh (1981a,b), and Raudsepp (1982a). The former claimed that college placement offices and newspapers were poor sources to attract new employees. In his study of young engineers he attempted to prove that the source of recruitment was strongly related to performance, absenteeism work attitude, and turnover. Raudsepp (1982b) stressed recruitment follow through which included a good orientation program and planned early career guidance. Poor communication concerning early job performance also resulted in turnover according to Raudsepp. Brecker (1981)

discussed similar problems encountered during the crucial first year on the job.

Managers and leaders, received some attention in the literature concerning the symptoms and effects of turnover. In their outmoded pre/post World War I studies Brissendeau and Frankel (1922) blamed the instability of labor on mismanagement. Ivancevich (1985) indicated that leadership style was a determinant of both absenteeism and turnover. Katz and Tushman (1983) discussed the formal and informal aspects of leadership as they affected retention. In his study of technical specialists Parden (1981) stated that specialists were reluctant to stay where there were frequent changes in leadership. He also called for improvement in the effectiveness of technical managers to improve retention. Pascarella (1984) described disgruntled and malcontent managers as 45-54 years old in key management positions and that 42% of them had intentions of quitting.

In 1973 Veiga presented a mobility phase matrix developed from a study of 1,243 middle managers. His matrix identified some of the forces that affected managers' mobility throughout their careers. Those forces included family, corporate maturity, and mid-career crises.

Barriers to the mobility of managers were described as "golden fetters" by Drucker (1985). He cynically equated

benefits to serfdom and the subsequent loss of freedom due to self-interest in stock options, pension plans, and delayed compensation arrangements.

The intent to leave has often been discussed in the more recent writings on turnover. Arnold and Feldman (1982) in their discussion of turnover variables wrote of the individuals' cognitive/affective orientation and intent to change. Kovach (1977) viewed the size of organizations, job satisfaction and intent to leave as they were reflected in turnover. Smaller organizations provided more socialization and task rewards for new employees, concluded Kovach. The March and Simon (1958) perceived ease of movement concept following intent to change was found to be significantly related to turnover of nurses and transportation workers by Larson and Fukami (1984).

The variables related to turnover are probably equal to the thousands of articles on the subject. P. R. Martin (1985) discussed family separation and career management issues in the retention of Navy pilots. T. N. Martin (1980 a,b) elaborated on the contribution/inducement theory and like others stated the best predictor of turnover is intent to leave. He criticized management for wasting time at the exit stage, and suggested continual interface with employees concerning career planning and management by objectives.

O'Reilly and Caldwell (1981) stressed the social information process in early employment. They also described how the initial job choice was made and how that related to commitment and tenure. Price & Mueller (1981) added intent to stay to Price's (1977) original model of turnover and stated that though age and length of service were good predictors of turnover, it was not age but routinization, participation, communication, integration, and kinship that predicted turnover. Pettman (1973) provided an earlier review of similar factors affecting turnover.

Raelin's (1983) reality shock on entry for professionals was due to the lack of preparation for the real world of work in many technical educational programs. Inflated expectations resulted in a state of learned helplessness for professionals in his study. Raelin, also described many adaptive behaviors of employees after they experienced his cognitive states (conflicting expectations, identification, confusion, and intention). Outside interests, rationalization, chronic illness, and inflated imaginary job offers were some methods of adaptation he described as part of his dissonance theory. Some of these adaptive behaviors were due to the trigger events of Roseman (1981), and resulted in turned off employees as he termed them. Roseman cautioned against ignoring

involuntary quits and using the umbrella of pay to hide the real reasons for turnover. In their path analysis from exploration to commitment to turnover, Stumpf and Hartman (1983) stated that exploration and acceptance of employment were central to the understanding of turnover. These items were the first two included in their cyclical process which were followed by socialization, satisfaction, commitment, and exploration once again. Training was a better predictor of turnover than were any individual variables (race, sex, age, education) as determined by Wanous, Stumpf, & Bedrosian (1979). They also wrote that the extensive list of correlates of turnover confounded any rank ordering of importance and that they changed from study to study.

Adler & Golan (1981) found no progressive relationship to withdrawal in their study of lateness, absenteeism, and intent to leave of telephone operators. Nicholson and Johns (1985) provided an excellent description of the absence culture and psychological contracts along with an interesting typology of absence cultures. Bekiroglu and Gonen (1981) suggested more involvement and participation to retain the new breed of graduates. Unintended consequences of intention to quit, including the possibility of being fired were presented by Bowen (1982). He, like Roseman (1980 a,b) advised early recognition of

the intent to search. E. G. Thomas (1983) attempted to prove that turnover reflected the economic recession and forecasted fewer voluntary quits accompanied by greater staff reductions. His brief article inferred too much from small percentage changes in national employment levels.

This section of the literature review conveyed the extensive approaches that have been used to study turnover from conceptual, empirical, and qualitative viewpoints. It also underlined the importance of the subject and its applicability to many disciplinary areas of study.

Case Studies

Much of the literature related to turnover stressed the importance and need for case studies to provide facts which would lead to theories and models. The real world of practicality may well provide the link from theory, to construct, to paradigm, to practice. If this researcher can provide hypothetical frameworks to elicit further research, then this study will be successful.

Bacharach and Mitchell (1981) as well as Crozier (1964) indicated that the case study is best suited for exploratory research. Rist (1981) proposed ethnographic research to add to studies on policy making due to the variation, complexity, and divergence of the policy making process. McCall and Simmons (1969) stressed the need for

analytical descriptions of complex social organizations. Hartman and Hedblom (1979) emphasized the use of qualitative research and the various techniques employed in data collection. Foster (1983), Allen Lee (1985) and Winkler (1985) also supported ethnographies and case studies as viable research techniques. Goode and Hatt (1952) stressed the accuracy of observations and attempted to dispell the issue of qualitative versus quantitative research. Quantitative investigation asks what--but seldom why? Taylor (1977) indicated that the qualitative researcher who is known and trusted by the organization can effectively ask the why questions.

According to Filstead (1970) the complexity of many quantitative investigations precluded understanding by ordinary practitioners. Bacharach (1982) supported case studies as they enabled the researcher to further explain concrete events and they provided an historical perspective which led to a better understanding of organizations. He also indicated that the methodology was more appropriate to preliminary investigations which could lead to theories to be tested via more precise methods. In 1964 Crozier also stated that the case study was best suited to exploratory research. Locke (1981) described case studies as interpretations of experiences.

Lawler, Nadler, and Cammann (1980) highlighted the use of interviews, questionnaires, and archives. Pfeffer (1977b) and Campbell (1976) spoke of naturalistic inquiry, which Rist (1981) described as viewing social systems as they are. Both concepts are similar to that employed by Tikunoff and Ward (1980) in their discussion of observing behavior in a normal environment.

Morgan and Smircich (1980) stated that qualitative research is a process as opposed to a specific technique and that research from within an organization is superior to that using outside observers. Jauch, Osborn, and Martin (1980) claimed that it is more difficult to hide real conditions from a case writer. They also suggested content analysis to enhance the value of case studies. Hummel-Rossi and Griffiths (1984) provided specific recommendations to address the questions of generalizability and reliability. They claimed that the inclusion of factors capable of being reproduced in other organizations added to the generalizability of a case study. They recommended the involvement of other researchers to improve the validity of in-depth multiple observations.

The dichotomy on the use of case studies was debated by Argyris (1980), Berger (1983), and Yin (1981). Argyris decried the use of case studies in management development programs, yet he concluded executives were a rich source of

information concerning real or imaginary factors that inhibit or facilitate double-loop learning. Berger (1983) viewed Argyris's statement as a sweeping generalization and requested a more scholarly critique to include citations of sources other than Argyris alone. Yin (1981) chastised Miles critique of the use of qualitative analysis in public schools. Yin, as did Cutler (1971), wrote of case studies as the observation of contemporary phenomenon in real life context.

The complexities of multiple data collection (interviews, documents, archives) were addressed by Faulkner (1982). The interaction with and description of leadership in Levinson (1972) was surely not a description of quantitative research. Crozier (1964) pointed out that the case study was best suited for exploratory research. That position was quite similar to that of Bacharach (1982).

Rost (1984) requested a new definition of leadership based on performance, practice, and grounded theory. This case study will add to that grounded theory. Leadership initiatives depend heavily on influence and politics to achieve objectives. The use of influence was presented as part of Rost's (1981) political Model IV. This study will examine how influence was used in initiating programs and

policies to reduce turnover. Titus (1950) lamented that one key word was missing in discussing the art of leadership, and that word was politics. Rost (1982) elaborated on the political aspects of leadership. Where best to describe political leadership--but in action via the case study!

The arguments for qualitative research have been well documented in the literature by Jackson and Morgan (1982) and Stake (1978), as well as many other authors. The intent of this research is to use the in-depth, narrative, descriptive features of the qualitative method of analysis to examine the impact of leadership on retention.

Interviews

As this study will place much emphasis on interviews as a data source, the basis for that decision should be based on experience and supported by the literature. This researcher has been trained in interviewing techniques and has conducted thousands of interviews including employment interviews, exit interviews, follow-up interviews, on-campus recruiting interviews, and performance interviews. Several authors, Bingham and Moore (1959) included, supported interviews as feasible means of revealing attitudes. Dexter (1970) stated the interview was a preferred strategy. Gordon (1980) added that

interviews were a major source of information for the researcher. Stewart and Cash (1974) had a rather clever explanation of interviewing and likened it to kissing:

Everyone is qualified

the objectives are not very clear

it is so good there is no need to evaluate. (p. 181)

They could have added: the outcomes may be unexpected and dangerous!

Downs, Smeyak, and Martin (1980) claimed interviewing was the most accurate data gathering instrument even though the costs were higher. They also pointed out the advantages of probing, the use of nonverbals, and the flexibility accorded the researcher. Guba and Lincoln (1981) emphasized that the evaluator (interviewer) was a valid instrument and, better yet, the most responsive instrument. They also stressed the importance of the nonverbal aspects of interviewing and provided a rather academic classification of nonverbals. Other support for the interview method from Guba and Lincoln included the immediacy of data processing which they referred to as "procesual immediacy" (p. 142). Judson (1954) noted that he gained vital information in half-hour, face to face interviews, because of their practicality and flexibility.

Cicourel (1964) argued for the behavioral, humanistic

approach versus meta-methodology as proposed by Hyman (1955) and others. Guba and Lincoln (1981) supported Cicourel's position and indicated that naturalistic inquiry is best served by the nonstandardized interview. They claimed it was a knowledge base on which to expand the scientific methods. Gordon (1980) described various types of interviews: free-wheeling, directed, expressive, elite, subjective, nondirected, and focused. Other authors that stressed the focus needed in interviews were Bingham and Moore (1959), Dexter (1970), and Downs et al. (1980). All of the authors consulted noted the skills required of the interviewer.

Benjamin (1969) proposed some basic questions for every interview. He brought out the importance of listening, understanding, interpreting, evaluating, and probing to gather data. Brush (1979) described the majority of interviewers as unsophisticated, uncommitted, and untrained. Dexter (1970) emphasized the value of the individual's dignity and the utility of courtesy during interviews. The art of questioning in interviews was described by Raudsepp (1982a). Gordon (1980) cautioned prospective interviewers to be alert to, observe, and interpret nonverbal reactions in interviews.

In addition to factual data, interviews revealed attitudes, feelings, and hopes per Kahn and Cannell (1957).

Their view was supported by Bingham & Moore (1959) when they stated interviews were the most feasible means for revealing attitudes. Patton (1980) wrote in a like manner indicating that qualitative interviews allowed for the expression of one's feelings and how one understood the perceived conditions. Arnold, Feldman and Purbhoo (1985) cautioned against incorrect assumptions due to socially desirable responses.

In-depth interviews were employed by Stern (1981) to confirm survey results in his retention study of managers. McGarrell (1984) based a successful orientation program, which reduced turnover by 69%, on data derived from interviews. The importance of interviews to career exploration were pointed out by Brush (1979) and Stumpf, Austin, and Hartman (1983). They further suggested that practice interviewing can lead to improved self-esteem. In counselling activities, Okun (1976) highlighted the helping aspects of interviewing. Lahiff (1976) presented an interesting force field analysis of communications in exit interviews. He suggested a desirable exit interviewer have knowledge of the work performed by an individual, not be responsible for providing a recommendation for the individual, and have enough experience and status to recognize significant information and to initiate remedies for problems encountered.

Though the authors agreed on many points, there were signs of controversy. Cicourel (1964) criticized Hyman's (1955) approach. Dexter (1970) accused Cicourel of making bricks with little straw. Kahn and Cannell (1957) supported Guba and Lincoln's (1981) position that the interviewer was a valid instrument. The behavioral versus the scientific method was bantered about throughout the readings. Despite the controversies and cautions, interviewing is still one of the most commonly used techniques for research, and it has tremendous potential in qualitative research. The previous citations provide the justification for the use of interviews.

Summary

This literature review substantiates the importance of this study, the plethora of variables and the interdisciplinary nature of the topic. The literature review provides support for the qualitative case study. The inclusion of models follows the example of recognized authorities in the field. Concepts and ideas once formed lead to consequences. The practicality and realism of any era is molded by the ideas of bold free-thinkers with vision and with the ability and willingness to communicate that vision. This researcher is bold enough to believe that leadership can be included in a model of retention.

The literature revealed few reported studies specifically devoted to the leadership and retention of professional employees. There were no studies that employed the combination of research methods used in this study.

Leadership/Retention Model

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

The importance and the need for case studies to provide facts which could lead to theories and models was emphasized throughout the literature. The real world of practicality may provide the link from theory, to construct, to practice, as discussed by Foster (1984).

Theories, concepts, and ideas which are based on factual case studies have no value except to the individuals involved until they are stated or disclosed. They then become but another link in that continuous chain: from facts, to theory, to hypothesis, to research, to application, and new theory. This cycle, according to Cohen and Smith (1976), leads to an enhanced understanding of real life activities. If this research can provide hypothetical frameworks to encourage further research, then this study will have proven to be beneficial. The methodology which follows was used to satisfy the objectives of this research.

The Site

The major location in which this research was carried out was a medium sized, high technology firm in Western

United States with over 3000 employees. Included in that number were approximately 550 professional employees as identified in this study. The firm was one operating unit of an international corporation. In addition to a central facility there were three other facilities which supported the firm's local operations. These facilities were located within a 15 mile radius of the central location which housed the chief executive officer, staff members and approximately 90% of the professional employees.

The human resources of the firm included hourly employees, represented by appropriate bargaining units relative to their crafts. Salaried non-exempt employees comprised approximately 5% of the work force and with the hourly represented employees accounted for 60% of the work force. Professional and management personnel constituted the remaining 40% of the human resources.

The Sample

Three subsets of the professional employees were studied in this investigation. The three chief executive officers who directed the firm's local operating unit during the time span covered by this research comprised the first of these subsets. They are identified as CEO A, B, and C in this study.

The second subset of professional employees included approximately 300 new college graduates that were hired into the firm throughout the several years covered by this investigation.

The remainder of the initial sample included 35 professional employees who served under each of the three chief executive officers. These individuals were selected from a complete listing of professional employees. The criteria for selection were that their hire dates fell during the tenure of the first chief executive officer and that they were still employed by the firm at the onset of this study. Based on these service criteria, a separate listing of 250 professional employees was prepared.

Using this list of 250 names, 35 professional employees were selected using the procedures outlined by Borg and Gall (1983) and the random number tables from Horowitz (1981). The number of professional employees (35) was judged to be an adequate sample size to meet the objectives of this study. These individuals are identified in the study as staff professionals.

The total sample included three chief executive officers, 300 recently hired college graduates, and 35 staff professionals. During the conduct of this study random interviews were completed with other individuals from within the firm, from other operating units, from corporate

headquarters, and with other business associates. These documented interviews added another 15 individuals to the sample. These fortuitous encounters are described under other interviews in the data gathering section.

Data Gathering

The information necessary for this research was drawn from several sources. The methods of data acquisition are presented in this chapter, followed by the analyses in the next chapter.

Demographic Data

These data were gathered for the recently hired graduates included in the sample. Information collected included: (a) date of hire, (b) degree, (c) university, (d) sex, (e) date of termination (if applicable), and (f) reason for termination. Also noted in the demographics were: (g) recruiting source, (h) starting salary, (i) supervisor's name, (j) department number, (k) phone number, (l) religion, (m) marital status, (n) prior work experience, and (o) interviewer.

The importance of demographic data during the initial collection phase became clearly evident. After some exposure to the literature many of the documents used to gather this type of information had to be rereviewed to add other potentially important elements. Acuff (1981)

suggested that demographic information be provided to supervisors as a means to control turnover. Due to the early termination of college graduates Breaugh (1981a) did not recommend on-campus recruiting as a source of new hires. Age and tenure were often cited in the literature as having direct relationships to turnover (Greenhalgh, 1980; Horvath, 1982; Mobley, 1982a; Mowday, 1981; Steers & Rhodes, 1980; and Youngblood et al., 1983). These sources were but a few that caused me to update and expand the demographic information in case it became a critical element as this study progressed.

The demographic information was collected from several source documents: (a) employment applications, (b) resumes, (c) weekly start/term lists, (d) on campus interview notes, (e) offer letters, and (f) summary reports of college offers, accepts, and starts. These data were initially tabulated manually and subsequently entered into a mini computer for data storage, retrieval, and analysis.

Exit Interviews

One of the firm's standard procedures required that an exit interview be conducted prior to the termination date of professional employees who voluntarily quit. A standardized form was used to collect information relative to the employee's attitude, feelings, suggestions and criticisms of the total work environment. The form was also used to

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denote the stated reason(s) for termination and the individual's supervisor's comments.

These exit interview notes were on file, yet had never been reviewed nor evaluated either due to the lack of interest or resources. These archival data for the years 1981 through 1984 were obtained from the Employment Manager. There were 95 documented exit interviews available. Each of these original documents was reviewed to ascertain (a) length of service, (b) reason for leaving, (c) supervisor's comments, and (d) interpreted reason for leaving (based on the interviewer's comments). A summary chart was prepared for each year, and the researcher's observations were noted for each interview. There were no exit interviews available for the years prior to 1981. A search of departmental memos and packing receipts indicated those exit interview documents had been sent to a remote record storage facility. A two day search of archive boxes failed to locate the exit interviews for prior years. Appendix D includes a facsimile of the pre-termination interview format.

Following a personal review and perusal of the available exit interviews they were segregated into new college graduates and professional employees categories to aid the tracking of college hires. This was accomplished by matching names of terminated engineers with a listing of college graduates for each year. The hire date and hiring

code for each individual was also noted to verify the proper identification of a new college hire.

Pertinent data elements from these exit interviews were extracted and compiled into a computer file for subsequent analyses using the Statistical Package for the Social Sciences (SPSS). A code number was assigned to each entry in lieu of individual names and termination codes were utilized to identify reasons for leaving. Other input factors included: age, sex, length of service, performance, potential, grade point average, department, termination date, and an interviewer identifier code.

Some authors (T. N. Martin, 1980b; Mobley, 1982a; and Wanous, 1973) considered exit interviews a waste of time and an inadequate source of data. Lahiff (1976) claimed that exit interviews represented an important source of information if they were properly conducted and documented. Wanous (1973) preferred realistic job previews to exit interviews. The 1984 research report from the Bureau of National Affairs shows that 80% of all firms in all industry groups still use exit interviews. Goddard (1983b) and Half (1983) provided suggestions on how to conduct exit interviews in a positive probing manner. Lipsett (1980) emphasized the importance of tracking exit interview data to identify problem departments and supervisors. Mandt (1980) urged caution, while Roseman (1980d) employed a standardized

check list to provide counseling and insure good will during exit interviews.

Follow-up Interviews

In June of 1981 this researcher initiated a series of follow-up interviews with recently hired college graduates. The interviews were conducted four to six months after an individual's start date and were informal and unstructured. The follow-up interviews were planned and scheduled ahead of time as Downs et al. (1980) suggested. These authors and Guba and Lincoln (1981) urged that notes be recorded immediately following the interviews. The interviews focused on major items per Dexter (1970) and Gordon (1980), and the topics were somewhat controlled as Gordon recommended, yet the interviews still maintained the indirection suggested by Judson (1954). The setting of the interviews, the informality, careful listening, and the probing features as discussed by Downs et al., Raudsepp (1982b), and Stewart and Cash (1974) were appropriately considered.

The interviews started in 1981 and have been carried out periodically through December, 1985. The purpose of the interviews was to evaluate the firm's recruiting, orientation, and socialization processes. The follow-up interview program started out rather ambitiously to interview each newly hired college graduate. Due to the

time and costs associated with the interviews, the plan was quickly changed to sample the population of new graduates and to focus on engineering personnel as they represented the majority of hiring efforts.

A listing of new college starts was extracted from the employment department's weekly start/termination reports. Individuals who had been employed for three months or longer were identified by name, start date, department, supervisor, and phone number and were scheduled for an interview. Since these follow-up interviews were conducted sporadically over several years, the process for each year is described.

1981. Candidates for interviews during 1981 were selected as just described. This researcher conducted the first set of interviews commencing in June of that year. Interviewees were contacted by telephone by the secretarial staff and scheduled for a 30 minute interview. Three interviews were scheduled for each morning and afternoon with a 30 minute interval between interviews. That time was established to allow for late arrivals, interviews longer than 30 minutes, and to provide time for documentation and summarizing notes immediately after the conference.

The 1981 follow-up interviews were conducted at a neutral site and were unstructured in nature. Several suggested topics for discussion were listed on a chalkboard and included items such as: relocation, first assignment,

tuition, benefits, campus interview, group acceptance, living accommodations, recreation association, recruiting suggestions, and plant visits. Prior to each interview the individual's employment folder was reviewed to ascertain school, degree, interests and activities, family location, and other items which insured some familiarity with that person's background.

During the interviews cryptic notes were taken which were transcribed into a log book and later typed with the date, time, and code number for each interview noted. The 48 follow-up interviews in 1981 accounted for 68% of the new college graduates in that year. Results from these interviews are discussed in the data analysis section of this investigation.

1982. Three additional sets of follow-up interviews were completed in 1982 and employed the basic procedure described for 1981. The first two groups were completed by this researcher and included 47 individual interviews. Due to time constraints another interviewer was trained to complete the last 22 of the interviews scheduled for the year. The purpose of the second interviewer was to evaluate interviewer technique, researcher bias, effect of interviewer gender, and determine if similar information was being obtained.

The second interviewer was familiar with the process and had scheduled all prior interviews and typed the interview notes. Training of this interviewer included observation and making notes of five actual interviews and conducting another five interviews which were observed and critiqued by this researcher. That critique included an evaluation and discussion of written notes and summaries. This second interviewer felt more comfortable with a structured interview and a standard format. Appendix E depicts the form used for the last 22 interviews in 1982. The total of 69 interviews represented 92% of the new college graduates hired into research and engineering for that year.

1983. The second interviewer completed 20 more follow-up interviews in the fall of 1983. These interviews were scheduled personally by that interviewer. The format used for the last group of interviews in 1982 was employed to maintain a similar structured approach. The selection of candidates was changed in an effort to evaluate information gathered during the 1982 interviews. From the 69 interviewees in 1982, twenty were identified via a random number selection process and scheduled to be reinterviewed. The follow-up interview program which began in 1981 received less attention during 1983 due to personnel reassignments and the reinterviews of 1982 graduates was substituted late in the year to maintain some focus on turnover.

1984. Budget decreases and personnel changes impacted the program of follow-up interviews in 1984. In order to continue this program and insure the flow of information from new graduates, a third interviewer was appointed. This interviewer was selected from among three graduate students in San Diego State University's Management and Information Systems Program who desired to fulfill an internship requirement for their degree. Three applicants were interviewed by this researcher and the firm's Manager of Training and Development. The selected interviewer was briefed on the task, given the results of previous interviews, and was provided with a listing of new college graduates for the year 1984. The interviewer was responsible for the selection of candidates and the method to be used during the interviews. The procedure was reviewed and approved.

The third interviewer randomly selected 23 names from the list of college starts and personally contacted and scheduled each person for an interview. The standard format (Appendix E) was used for notekeeping during the interviews. These notes were transcribed and summarized following each interview. Interviews were scheduled for 30 minutes and were conducted in a private office normally used for visiting high officials. The number of interviews (23) was constrained by the intern's academic and part time work

schedule. These 23 interviews represented 20% of the engineering college graduates for 1984.

1985. In order to increase the reliability of observations recorded during the follow-up interviews a fourth interviewer was used in April of 1985. The selection scheduling, setting, format, and procedure was identical to the 1984 approach. The interviewer was chosen in the same manner and from the same source as in 1984. Thirty interviews (27% of the new graduates for 1985) were scheduled and completed. The work and course schedules of this intern also limited the number of interviews.

The results of the follow-up interviews for each of the years will be presented in the analysis section. A recap of the 223 follow up interviews conducted is shown in Table 1. The percent of total column indicates the percentage of total college graduates hired during the specific year, who were interviewed. For those hired in 1985 follow-up interviews are still being conducted at the request of the Vice President of Engineering. As of December 1985 I have completed an additional 33 interviews.

Insert Table 1. about here

Table 1.

Summary of Follow-up Interviews

Year	Number	% of Total	Interviewed
	Interviewed	Hired	By
1981	48	68	Researcher
1982	69	92	Researcher (47)
			Staff (22)
1983	20 ^a	-	Staff
1984	23	20	Intern
1985	63	50	Intern (30)
			Researcher (33)

Note. Number interviewed represents new college engineering graduates hired during the year shown. Percentages of total hired is the percentage of all college engineering graduates hired in the year indicated.

^aRepeat interviews from 1982 graduates.

Staff Interviews

Thirty-five professional staff members who worked for the firm during the tenure of the three chief executive officers were interviewed by this researcher. The purpose of these interviews was to compare and contrast the leadership behavior of the chief executive officers. These interviews were informal and unstructured and were conducted at various times during the work day, at lunch, and after work hours.

The length of the staff interviews varied from ten to thirty minutes. They were unscheduled and were conducted as time and circumstance permitted. Some of these interviews were conducted in the staff members' offices, others in the rest area, some in the executive dining room and still others while traveling. The researcher utilized any opportune meeting to elicit information, feelings, and attitudes of the staff members. Each staff member was apprised of the purpose of my questions and were given the option to reply or not. There were some hesitant and suspicious replies. Only two refused to respond due to fear of jeopardizing their positions. Interview notes were transcribed as soon as possible after each of the interviews.

The hierarchial positions of the staff members ranged from vice-presidents, directors, managers, section heads to

senior engineering personnel. Typical of the questions asked were: "How do you compare CEO A, B, and C?" "Weren't you here when CEO was here?" Depending on the replies, the interviews were continued in a similar probing vein.

Other Interviews

This sample included 15 random or chance interviews that were completed during the course of this study. The interview process and locations were similar to that outlined for the staff interviews. The subjects ranged from the company barber, security personnel, staff members from other divisions, to corporate office representatives. Although these subjects were peripherally involved with the chief executive officers I felt that they could add interesting sidelights to the observation of the chief executive officers' leadership styles. These interviews began as informal conversations which were redirected to discussions concerning the CEOs. Notes from each of the random interviews were recorded for further review and analysis.

Retention Data

Prior to August 1984, turnover statistics were prepared quarterly by the firm. A simple percentage figure was reported to show the percent of professional employees who had voluntarily terminated. If that figure compared well with the industry and national averages, everything was

considered normal. The turnover figure was derived from the employment section's start/term listings and from a comparison of computerized reports of hires and terminations for each quarter and each year.

Due to an increased emphasis on hiring and retaining recent college graduates, in 1984 the reporting of turnover was drastically revised. The focus of the turnover reports was changed to retention. Retention statistics reported included: (a) age, (b) tenure, (c) performance/potential codes, (d) hiring codes, (e) critical skills lost, (f) reasons for voluntary terminations, and (g) actions taken to improve retention. These retention records and turnover reports were made available for review and analysis. Listings of new college hires were also obtained for the years 1979 through June of 1985. The reports and name lists were used to identify voluntary terminations and to develop statistical data on turnover.

Retention data were also collected from other operating units of the firm, from the Bureau of National Affairs Reports (1982, 1983, 1984, 1985), from the American Electronics Association (1982), the American Association of Engineering Societies (1984), and the American Society for Personnel Administration ("Job Turnover", 1983).

Survey Questionnaire

A brief questionnaire was prepared and mailed to ex-employees who voluntarily terminated during 1984. The names and addresses of 42 former employees were acquired from inactive employment files. An initial mailing was completed on February 2, 1985 which included a letter, a stamped return envelope and the questionnaire (see Appendix F). On February 20, 1985 an additional 22 questionnaires were posted due to the slow responses to the first mailing. The 22 names were selected from the list of 1983 voluntary terminations and their addresses were also furnished by the employment department.

Each of the envelopes was coded to enable comparisons of the questionnaire information with coded exit interviews if they were available for the specific individual. This coding was also used to determine if the individual had been included in the follow-up interviews.

Telephone Contact

A graduate student at the University of San Diego established direct communications with former employees. I provided the names and addresses of the 64 employees who were mailed questionnaires to the graduate student. He developed a questionnaire which this researcher approved (see Appendix G). The questionnaire included topics concerning (a) reason for leaving, (b) would they return,

(c) type of present position, and (d) did they feel the exit interview results were used. The graduate student attempted to contact the 64 former employees in the early evening hours using this researcher's office. He recorded each telephone contact and responses to the ten item questionnaire on the form developed for that purpose. These responses were later compared to exit interview and follow-up interview data if they existed for the specific individual contacted via telephone.

Other Documents

Various other documents, internal to and specific to the firm under study, were collected and analyzed throughout the course of this investigation. Confidentiality and the possible exposure of company business plans precluded the precise listing of these documents in the reference list. Included in this category of other documents were: annual reports, operating plans, strategic plans, recruiting goals, a corporate wide longitudinal study of retention, a corporate staff officer's report on turnover causes at each division, a comparison report on competitors' turnover rates, and reports identifying critical skills projections.

The documents mentioned were also supplemented with numerous internal reports and memoranda. Information from these documents was used in conjunction with and to supplement other data sources for analysis.

Leader Initiatives

In 1981, CEO B asked this researcher to develop a new engineering college graduate retention program. A letter from Chief Executive Officer B dated September 25, 1981 was the catalyst which initiated that assignment. The letter is paraphrased in Appendix H. As a direct result of that memo a proposed program specifically directed at new graduates was prepared by this researcher. That program included 35 separate activities which are identified in this study as leader initiatives. Appendix I contains a summary of the initial proposals that were reviewed personally with Chief Executive Officer B and the Vice President of Human Resources. The format of one of the presentation charts is also included in Appendix I. Those initial proposals, or leader initiatives contained many suggestions from the literature, from personal experience, and items identified in the follow-up interviews or mentioned in exit interviews. They were directed at: (a) orientation, (b) socialization, (c) communication, (d) feedback, (e) recognition, (f) supervision, and in summary, (g) retention. Following the review with Chief Executive Officer B, the majority of these proposals were implemented (see Appendix I). In 1985, Cohen indicated that Drucker's first law was that everything degenerates into work if anything worthwhile is to happen. These leader initiatives certainly degenerated into work!

Leader Information

A multiplicity of sources were utilized to collect information on the three chief executive officers. Personal experience, exposure and interaction with the chief executive officers was but one source. The exit, staff, follow-up and other interviews were other sources. Division notices, chief executive officers' memos and directives provided further information. Interviews with each of the chief executives gave additional insights.

Chief Executive Officers B and C were interviewed by this researcher for approximately thirty minutes in their offices after the normal work day. Chief Executive Officer A declined to schedule a personal face to face interview, but did consent to a telephone interview which lasted 47 minutes.

The stated purpose of these interviews was to determine their views on leadership and management, college hiring, and turnover. The interviews were basically unstructured and informal which allowed the chief executive officers to do most of the talking. Cryptic notes taken during these interviews were immediately transcribed after each interview. Originally I had planned to tape these interviews but felt it would be an imposition on the CEOs and would limit their responses. Rather than carefully couched phrases I hoped for free open replies not limited by

the threat of a permanent recording. Some typical questions during these interviews included: "When you came to this company, how did you get management to follow your leadership?" "How did you improve employee communications?" "How important is the issue of turnover to this division?" "How do you plan to face the increasing demand for engineering graduates?" Replies to these and other questions were noted for later evaluation and comparison to those of the other chief executive officers.

Attitude Survey

In April of 1985 permission was received to conduct an attitude survey of the research and engineering department. Likert's (1967) Profile of Organizational Characteristics had been previously used at another division of the corporation and was recommended for use by that division. The results of the 1985 survey, not associated with this researcher's activity, were made available for use since it purported to identify the leadership style of the organization.

The survey was conducted by two Management Information Sciences graduate students from San Diego State University under the supervision of an engineering director. These students were selected from six volunteers recommended by their professor. Each student was interviewed by this researcher, the Manager of Training and Development and the

responsible Engineering Director. A 10% random sampling of the representative populations was conducted to select survey participants. The 57 item questionnaire was piloted using six subjects from the three major populations at large. Based on the pilot study, seven of the original Likert questions were revised to reflect the specific character of the organization and space was included for additional comments. The survey was administered to 94 participants in four separate sessions, three on one day and the last session three days later, due to the separate location of the facility. The revised version of survey is included in Appendix J.

A computer program was designed to analyze the data using these discriminators (a) years of service, (b) payroll status, (c) age group, (d) department, (e) test session, (f) group composite scores, and (g) total composite scores.

Participant Observer

As a full time participating member of the firm, I had established interpersonal relationships and rapport with other members of the organization. Items not planned for in the original research design which were germane to this research were uncovered and included in the investigation (attitude survey, telephone contact, other interviews). The personal relationships, and the participant observer's

involvement and insights, helped meet the criteria of validity discussed by Guba and Lincoln (1981).

Models

My original research design included the review of conceptual models of turnover, and the selection of appropriate models for comparison and contrast. That review process was part of the methodology, thus the selected models are described here.

In order to construct a model of retention other models were fully evaluated. The literature review revealed over 70 supposed models of turnover. Five of these models were selected for comparison, critique, and evaluation. The selection of the five models was based on (a) the literature review, (b) the number of references to the particular author(s), (c) the applicability of the model to a number of professions, and (d) the interest it picqued in this researcher.

The five models provided the data base on which to construct a model of retention to include leadership. The models selected were: Jackofsky (1984), Mobley, Griffeth, Hand and Meglino (1979), Price (1977), Raelin (1983), and Szilagyi (1979). In addition, since the March and Simon (1958) model was described by Mobley (1982a) as the first integrative model of the turnover process, it was included

for background. Each of these models will be described in this section and will be evaluated and compared in the analysis section.

Most conceptual frameworks were built on prior constructs, thus the description of the models will follow a chronological sequence. Models facilitate an overall systems approach to the study of turnover as opposed to the emphasis on individual determinants too often found in the literature. Models also enhance our understanding of the complexity and the number of determinants associated with turnover. That understanding can improve strategies for dealing with and managing turnover. Conceptual models constitute the framework for interpretation of the turnover process and point out new areas for investigation and research.

March and Simon

In their 1958 treatise on organization theory the authors discussed the movement from consideration of the human as a machine to a cognitive being. They provided literally hundreds of tenets for organizational research including many aspects of turnover. Their basic model of turnover was one of the earliest and most influential, integrative models of turnover.

Central to the March and Simon model was the "decision to participate" which they attributed to Barnard (1968).

The decision to participate was also described as a theory of motivation and organizational equilibrium. Greenhalgh (1980) elaborated on the decision to participate to include being committed and actualizing that commitment in behavior. March and Simon indicated that the employee had three choices (a) stay and produce, (b) stay and not produce, or (c) leave.

The two major elements of their decision to participate model were the perceived desirability of movement and the perceived ease of movement. The desirability portion of this model is depicted in Figure 1.

Insert Figure 1. about here

Job satisfaction and perceived possibility of internal transfer were the two major components in their perceived desirability of movement presentation. They indicated that job satisfaction was the key determinant. This satisfaction was derived from their inducement/contribution theory, which later writers termed investment or the human capital model (Block 1979). Another determinant of job satisfaction was the employee's self image which was a collage of income, advancement, participation, rewards, supervisor interfaces, stability of interpersonal job relationships, and the

Figure 1. Major factors affecting the perceived desirability of movement. Copyright (1958) by John Wiley and Sons. Reprinted by permission of the publisher and authors (March & Simon).

individual's perception of job compatibility with other roles.

The size of the organization, per March and Simon, was the single most important factor which affected the individual's perception of possible intraorganizational transfer. The transfer possibilities were also affected by the individual's status and visibility within the organization.

The other major element of the March and Simon model is depicted in Figure 2 as the perceived ease of movement. The number of potential jobs available to individuals for which they are qualified and willing to accept had the most impact on perceived ease of movement according to March and Simon (1958).

They asserted that the most accurate single predictor of turnover was the state of the economy. In Figure 2, March and Simon accounted for economic factors in the Level of Business Activity block. Personal characteristics of participants that affected perceived extraorganizational alternatives included (a) age, (b) sex, (c) tenure, (d) salary, (e) social status and (f) area of specialization.

Insert Figure 2 about here

Visibility features of this portion of the model applied to both the individual and organizations. Organizational visibility for the individual depended upon the type of product, prestige and image of the firm, location, and major contracts. Individual visibility to external organizations was based on one's professional contacts, occupation status, interaction with other organizations, specialization, and reputation both internal and external to the current organization.

In summary the March and Simon model added organizational and group determinants to individual behavioral characteristics in the perceived desirability of movement portion of their model. The perceived ease of movement integrated the level of business activity (economics) into their turnover model.

Price (1977)

The determinants and intervening variables included in Price's model are outlined in Figure 3. It appears to be a relatively straightforward and readily understandable model, one that many practitioners would glance at and quickly forget due to their "I know that" assumption. The importance of Price's model is that it integrated organizational, environmental, and individual variables. The causal model was based on a synthesis of the literature and depicted the determinants of turnover.

Insert Figure 3 about here

Price included the five determinants or independent variables (pay, integration, instrumental communication, formal communication, and centralization) under organizational characteristics or variables. His intervening variable of opportunity represented the environment exterior to the organization and included supply and demand (economic) considerations. Individual psychological and behavioral characteristics were accounted for in his intervening variable of satisfaction.

Price hypothesized that successively increasing amounts of pay, integration, instrumental communication, and formal communication would probably produce lower amounts of turnover. Successively increasing amounts of centralization would probably produce increasing amounts of turnover. The positive and negative signs associated with these independent variables indicated their relationship with retention.

Pay, according to Price included salary, fringe benefits, and anything of financial value to the individual such as prerequisites. Participation in primary relationships within the organization led to an affective feeling of

Figure 3. Relationships between the determinants, intervening variables and turnover.
 Copyright (1977) by Iowa State University Press, Ames, IA. Reprinted with permission of the publisher and author (Price).

belonging and contributing, which comprised his integration variable. Instrumental communication was described as task related, informal, gossip, and one to one discussions. Officially transmitted communication, conferences, postings, and public addresses were used to describe the formal communication block in the model. The concentration of power in an organization equated to centralization and had a negative effect on satisfaction and turnover. Pay was identified as an economic determinant whereas the other four determinants were non economic.

The intervening variable of satisfaction was similar to March and Simon's (1958) inducement/contribution concept. Price explained satisfaction as a positive, affective orientation to the organization. Opportunity, the other intervening variable exterior to the organization, was the availability of alternative roles in the environment.

Szilagyi (1979)

A composite model which incorporated current thinking on turnover at that time was used by Szilagyi as a guide in his article on controlling turnover was presented by Szilagyi. The composite model is illustrated in Figure 4. The three basic parts of his model were (a) Job Satisfaction, (b) Individual Characteristics, and (c) Turnover Intention which subsumed external job opportunities.

Insert Figure 4 about here

Four concepts were shown to influence job satisfaction. These concepts included:

1. Job characteristics.
2. Interpersonal Relations.
3. Organizational Practises.
4. Reward System.

The descriptors of each of these concepts presented by Szilagyi are fairly clear and require no explanation.

Individual characteristics constituted the second major portion of his model which included sub elements of (a) age, (b) tenure, (c) education, and (d) growth needs. The last major section of this model was identified as Turnover Intention which if increased led to a decline in performance, and increased absenteeism. These latter items moved the individual closer to the actual act of turnover. The time period from the precursor (job dissatisfaction), to intent, to actual turnover occurred over several months as Szilagyi assumed. Turnover intentions could be strengthened by the availability of external job opportunities which also increased job dissatisfaction in this conceptual model. Szilagyi's model though clearly presented and readily

understood by anyone familiar with employee turnover will be evaluated along with the other models.

Mobley, Griffeth, Hand, and Meglino (1979)

In 1977 Mobley conceptualized a cognitive behavioral process model of turnover. He envisioned a system of intermediate linkages or feedback loops in the process of turnover from dissatisfaction, to thoughts of quitting, to search and evaluation, to intention to quit, and ultimately to turnover. March's and Simon's (1958) model provided the conceptual base for Mobley's intermediate linkages' model. Intention to quit was identified as the one variable which immediately preceded turnover. Mobley also added the dynamic dimension of changes over time as opposed to the somewhat static features of prior models. He concluded that longitudinal studies were superior to cross sectional investigations to account for the effect of time on the individual's cognitive and behavioral changes.

In conjunction with Griffeth, Hand, and Meglino (1979), Mobley developed an expanded model of the turnover process. Their model not only included elements from previous models but it also captured the complexity of the turnover process. Figure 5 graphically portrays that complexity and encompasses individual, organizational, and environmental variables. Like Mobley's 1977 model the primacy of

intention to quit was also featured in the Mobley et al. expanded model.

Insert Figure 5 about here

Four determinants of intent to search/quit were outlined as: (a) job satisfaction, (b) expected utility of internal alternatives, (c) expected utility of alternatives external to the organization, and (d) nonwork values or contingencies. These four determinants are numbered on Figure 5 for the sake of clarity. The time dimension from Mobley's (1977) work was accounted for in this expanded model by the two blocks in the lower right hand corner of the figure (Immediate vs. Delayed Gratification and Impulsive Behavior).

Examples of organizational, individual, and economic characteristics were itemized in the three uppermost sections of the model. As the authors wrote, it is doubtful if any single study could evaluate the multiplicity of the variables depicted in their expanded model.

Mobley et al. (1979) posited that job satisfaction was highly individualized, and heavily dependent upon individual perception. The new orientation, and the many faceted aspects of perception and satisfaction added to the

difficulty of understanding and studying job satisfaction per the authors. They also claimed that uniform policies and procedures did not account for individual differences in work values.

Their discussion of expected utility of internal alternatives focused on the future orientation of the individual concerning organizational changes and a multitude of individual values. The expected utility of alternatives external to the organization was also based on individual work values and the attractiveness of external opportunities. The authors suggested to counteract that attraction by providing comparative survey information on pay, benefits, and the alternatives to employees.

Nonwork values received more attention in the Mobley et al. (1979) model than was evidenced in the prior models. The possibility of one's central values not being work related was emphasized by their examples of dual careers, leave policies, flexible hours, overtime, family and spousal influence, and outside interests. They downplayed the effect of these items by stressing the lack of research and the need for future investigations of central values.

One option for employees, per March and Simon (1958), was to stay and not produce. This alternative was addressed in the expanded model in the lower left hand corner by including Alternative Forms of Withdrawal Behavior. These

behaviors resulted from an employee being constrained from quitting due to lack of external alternatives or by nonwork values (spouse, children, medical, etc.). Absenteeism, apathy, poor performance, and tardiness were types of withdrawal behaviors described. These behaviors were temporary in nature if the constraint(s) to quitting were removed.

Perceptions of organizational, economic/labor market, occupational, and individual variables were the precursors of job satisfaction and the utility of both present and future alternatives according to the authors.

Mobley et al. (1979) expressed the need for future research and evaluation to better understand turnover. They claimed that the multiple determinants required multiple strategies and not the limited focus exhibited by too many researchers. The importance of satisfaction, future expectations, and nonwork values was evident in their paradigm. The very nature of satisfaction, expectations, and values brought the importance of the individual to the forefront in their process model of turnover and stressed the need for interdisciplinary investigations.

Raelin (1983)

This model was of particular interest as it dealt with the deviant/adaptive behaviors of professionals in large organizations. Raelin (1983) focused on the individual

professional at work in a large organization. He assumed that professionals would have problems with socialization in large organizations due to a mismatch of organizational goals and values with those of the individual professional. The cosmopolitan nature of professionals, described by Raelin, led to a basic conflict in expectations with a large organization. His model is presented in Figure 6.

Insert Figure 6 about here

Central to his conceptual model were Conflicting Expectations or expectational incongruities which he identified as the intervening construct between the antecedents, or precursors, and the midterm outcomes and the subsequent result of conflicts. The precursors highlighted by Raelin included: (a) individual, (b) organizational and job characteristics along with, (c) job information. These antecedents interacted with each other, with conflicting expectations and with the mid-term outcomes. The directional lines in Figure 6 were used by Raelin to depict this interaction.

Individual characteristics which Raelin accounted for in his model included: occupation, education, age, sex, tenure, experience, values, personality, family

Figure 6. A model of professional deviant/adaptive behavior.
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responsibilities, aspirations, and work ethic.

Organizational characteristics he described were: type, mission, structure, technology, leadership, environment, climate, division of labor, politics, hierarchy of authority, and size. The organizational characteristics provided a structural framework for his job characteristics. Items he related to job characteristics which described the actual conditions of the job included: skill variety, task identity, task significance, autonomy, feedback, job challenge, job level, stress, advancement opportunities, and co-worker relations. Raelin's job information covered both internal and external positions that were available, attractive, and known by the individual that would meet the individual's expectations.

Raelin based his intervening construct of conflicting expectations on several themes from prior research which were: (a) role conflict (strain), (b) tolerance theory, (c) learned helplessness, (d) dissonance theory, and (e) cosmopolitan versus local orientation.

Role conflict resulted from incompatible demands, undue pressure or from pressure to conform. Tolerance theory assumed one would resolve organizational incongruencies by learning to live with the situation. Raelin provided examples of people developing their protective living space in response to a mis-match of form and space desired, with

that provided by the organization. Staff burnout, performance deficiencies, and expectation of future failures were possible outcomes of conflicts which Raelin termed a state of learned helplessness. Cognitions psychologically opposed to each other resulted in a state of dissonance which required resolution. This resolution could be via rationalization or re-interpretation of values as explained by Raelin's dissonance theory. He differentiated between the cosmopolitan nature of the professional and the local orientation of quasi-professionals. The latter were more loyal to, and more fully integrated and socialized in the organization. They also used the organization as their basic point of reference.

Raelin theorized that cosmopolitan professionals were expected to be most conflicted in large organizations as they had little loyalty, were poorly integrated, and their point of reference was associated with professional groups. He characterized these professionals as committed to and identified with their profession. Their adherence to codes of ethics and standards of conduct coupled with their expertise and desire for autonomy distinguished them from quasi-professionals. They derived their stimulation, recognition, and support from professional associations and not from the organization. Raelin postulated three major midterm outcomes from conflicting expectations as (a)

cognitive state, (b) deviant/adaptive behavior, and (c) career dissatisfaction. He described the cognitive state as an awareness and integration of conflict by the individual. His initial step in the cognitive state was one of confusion caused by disruption in cognition due to conflict. Confusion to a professional demanded the need to make sense and to fill the lacunae caused by disruption. The identification phase of the cognitive state led to normalizing the setting and accounting for the discrepant behavior associated with conflicting expectations. Once the confusion was eliminated and the problem identified the last step in this cognitive state could be broached. Raelin called that step intention. Intention consisted of an evaluation of the precipatory activity, relating it to past and future actions which resulted in a revised cognitive state.

Raelin's model contrasted career dissatisfaction with job dissatisfaction. The former was more intense and enduring and it had more long term implications than job dissatisfaction. Career dissatisfaction not only reinforced deviant/adaptive behaviors but it was also used by Raelin as a good predictor of turnover. Some examples of career dissatisfactions are disinterest in professional work, business, and routinization.

The third midterm result in this model was called Deviant/Adaptive Behavior. These behavioral implications

were due to the need for some action to resolve the dissonance arising out of conflicting expectations. Raelin defined two general categories of deviant coping responses as property (theft) and production (counter productive). His model stressed deviant behavior related to production as it was more pervasive than theft and professionals were less prone to engage in property deviances.

Raelin assumed a continuum from adaptive to deviant behaviors, and arranged the behaviors by the degree of seriousness or harm to four career elements of management, job, self, and career. Examples of his adaptive behaviors for the four career elements are (a) retreat to technology (management), (b) bootlegging (job), (c) outside interests (self), and (d) professional allegiance (career). Some of the deviant behaviors specified on Raelin's continuum were (a) disclosure of company proprietary information (management), (b) poor performance (job), (c) mental and physical illness (self), and (d) internal inactivity (career). Raelin concluded that if the individual did not leave the organization the midterm outcomes extended into the long term and became more aggravated and serious in nature and even led to actual sabotage. Raelin's model was temporarily suspended by turnover until it recycled in another setting.

Jackofsky (1984)

As in most of the models of turnover, Jackofsky has retained several elements credited to previous researchers. Her model depicted in Figure 7 included the desirability and ease of movement from March and Simon (1958).

Insert Figure 7 about here

The intentions to quit block was attributed to Locke (1969) and Mobley (1977). The organizational job and personal characteristics segment of the model is quite similar to those same characteristics in the March and Simon model (1958). Labor market (economic) effects are also influences of the March and Simon model.

Three portions of the model particularly identified with Jackofsky are the inclusion of job performance, involuntary job turnover, and her treatment of job satisfaction as part of the desirability of movement. Her psychological process model lays the conceptual foundation for the integration of job performance into turnover models. Jackofsky differed from March and Simon in the parallel consideration of desirability and ease of movement. They assumed a sequential pattern from dissatisfaction to desirability to ease of movement.

Figure 7. Integration of job performance in process model of turnover. Copyright: Academy of Management Review. Reprinted with permission of the Academy of Management Review and the author (Jackofsky).

Jackofsky hypothesized that desirability or ease of movement could be the motivational force behind the decision to leave.

Organizational withdrawal was a major premise in March's and Simon's (1958) work. Jackofsky was a bit more comprehensive by including total job turnover which included both inter and intra organizational movement. She also expanded on the nonvolitional aspect of turnover and claimed that involuntary turnover added to the completeness of issue. The dependent variable in Jackofsky's concept is both inter and intra organizational turnover. Prior studies were critized for excluding internal movement which could well mask the same conditions that caused external movement. The author also argued that the exclusion of involuntary turnover had similar implications. She claimed that forced terminations too often were identified as voluntary quits for convenience or by mutual agreement of the parties involved.

Jackofsky labeled three partial determinants of turnover as (a) desirability of movement, (b) ease of movement, and (c) intentions to quit. Job performance was shown to impact both the desirability and ease of movement and affect involuntary turnover. The basis for including job performance in this model of turnover was the author's presentation of a curvilinear relationship between job

performance and probability of turnover. Low performers were pushed out of the organization and had low probabilities of ease of movement either in or out of the organization. Jackofsky's curvilinear relationship of turnover and performance was also used to explain that low but adequate performers stayed with the organization due to low ease of movement or lack of alternatives. High performers with high ease of movement demonstrated high probabilities of turnover as reported by Jackofsky.

Emphasized by the author were the job performance implications on both voluntary and involuntary turnover. Poor performance, not dealt with by company action, led to expectation of action and thence to Jackofsky's forced voluntary turnover with no individual volition.

The author demonstrated that the inclusion of job performance enabled identification of subgroups by performance. Performance subgroups enhanced investigations dealing with job satisfaction as related to desirability of movement and withdrawal. Jackofsky claimed that job performance established a boundary variable that was more useful than exit interviews for codification of terminations. Job performance groupings, also obviated the need for attitude surveys of all employees which masked important relationships of high performers.

Jackofsky's conceptual model is based on the constructs of March and Simon (1958), Price (1977) and Mobley et al. (1979). It includes total job turnover (voluntary and involuntary), accounts for internal and external movement, and focuses on job performance. Jackofsky envisioned that empirical validation of hypotheses derived from the model would lead to development of more precise models and a better understanding of the process of turnover.

These six models provide a conceptual base for the analyses of the other research methods in this study. They also form part of the overall data collected on turnover to be compared and evaluated. I believe these models encompass the regnant constructs of the majority of the models discussed in the literature.

Limitations of the Methodology

The generalizability of any case study is immediately suspect simply because it is organizationally specific. The high technology firm in question is typical of many similar operations in the industry, in the same geographic area and throughout the United States. The discipline mix and the emphasis on hiring recent college graduates are also typical characteristics of the industry. Previous turnover rates for this firm track well with other firms

and other operating units. Turnover and retention were demonstrated by the literature review to be fairly widespread and generalized throughout the United States and were not peculiar to any type of organization nor to any specific occupation or profession.

The reliability and validity concerns may also be limiting factors in this research. The heavy dependence on interviews and their attendant reliability and validity were adequately supported and addressed in the literature review. This researcher has been trained in interviewing techniques, and has conducted literally thousands of interviews including employment interviews, exit interviews, follow-up interviews, on campus recruiting, and performance interviews. In addition guest lectures on interviewing techniques were presented by this researcher at four local universities. That experience background should help eliminate much of the personal bias and add to the reliability of this study. The use of multiple interviewers, as suggested in the literature review, should also improve the validity of observations.

Other limitations of the methodology employed included limited access to archival data from earlier years which were stored in a remote site with controlled access. Exit interviews were not conducted for all voluntary terminations, thus some other reasons for leaving may have

been lost. The questionnaire survey of former employees was limited by the availability of correct names, addresses, and telephone numbers.

The vast number of documents reviewed for this study was somewhat limiting from a logistics viewpoint. The extreme breadth of the literature related to turnover and leadership had to be constantly focused to insure relevancy to this case study. The concurrent demands of full time work certainly added the constraint of time as another limiting factor.

Due to the methodology employed the majority of the data was that expressed by employees. That information is perceived by them to be factual as their interpretation of the environment. Their perceptions may be erroneous in other eyes but to them they are facts--valid facts. The multiplicity of the data gathering methods should improve the reliability and validity of the observations but may also be a limitation due to the enormity of the information collected. This case study cannot be replicated due to the maturation (individual career growth and development) and temporal (passage of time) effects. The methodology, however, could be replicated and improved on in similar settings. In summary, care has been taken throughout this research to protect both individuals and the firm from identification. Reliability, validity, generalizability,

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and repeatability were recognized at the outset as possible limitations and received serious consideration throughout.

CHAPTER IV
DATA ANALYSES AND RESULTS

Introduction

The data gathering methods outlined in Chapter III produced a multitude of information for analysis. Rather than explain each data element in isolation, the information collected will be reviewed and evaluated as it pertains to specific subjects. Organizing the analyses in this manner provides a guide to assist the reading in the review of this rather lengthy chapter. The organization guide shown in Table 2 identifies the major data elements from Chapter III and relates them to general areas of this research.

Insert Table 2 about here

The site selection was a given, or apriori, condition for this case study. Although there was a certain degree of freedom available in the sample selection, the sample could be described as one of convenience. The sample can also be considered somewhat limited or fixed due the nature of this case study.

Table 2

Organization of Data Analyses

<u>Data Element</u>	<u>Related Area</u>
Demographics	Recruiting, hiring and reporting phase.
Follow-up Interviews	Orientation.
Exit Interviews	Termination and Follow-up activities.
Survey Questionnaire	
Telephone Contacts	
Retention Data	Turnover history.
Leader Information	Evaluation of CEO's leadership behaviors.
(1) Written Correspondence	
(2) Staff Interviews	
(3) Other Interviews	
(4) Personal Interviews	
(5) Leader Initiatives	
(6) Attitude Survey	
Participant Observer	Researcher's Role
Models	Evaluation of Models

Demographics

Several authors highlighted the importance of demographic information. Blau (1985) studied the withdrawal behavior of nurses, and found a significant relationship with marital status and number of dependents to absenteeism. Neiner and Owens (1985) stated that biodata is traditionally viewed as being long on prediction but relatively short on understanding. As pointed out in the literature review, age and tenure were significantly related to turnover.

The demographic data collected in this study was of no particular significance in and of itself. Some of the information documented (age, date of hire, phone, department number and supervisor) proved useful in completing other portions of this study. Names and phone numbers were helpful in scheduling follow-up interviews. An employee's start date became the benchmark for retention data. The hiring code used to identify new college hires, and the occupation code used to identify engineers were helpful for tracking purposes.

The demographic information did serve as a basic source of knowledge and as an input to other data bases. Each portion of the demographics collected is discussed to evaluate its relative importance to this investigation.

Date of Hire

The importance of an employee's date of hire should be obvious. It basically confirms the acceptance of employment, and it is the foundation of all subsequent information relative to tenure, payroll, vacation accrual, sick leave, tuition eligibility, and a host of other benefits which are dependent upon the actual start date. The hire date also enabled the researcher to determine the number of hires for a specific time frame, and was useful in the development of retention statistics as well as analyzing the makeup of the engineering work force. Figures 8 and 9 provide some interesting clues concerning the composition of the engineering department.

Insert Figures 8 and 9 about here.

Over 50% of the engineers have less than five years of service. Almost 80% have been employed with the company less than ten years. The age distribution of the engineering population should and does parallel that of tenure. Thirty-seven percent of the engineers are under 30 years of age and just under 50% are below 35 years old.

These figures are indicative of the emphasis placed on hiring recent college graduates, and they also very subtly

point out the problem of turnover. The older, longer tenured employees are in the minority because too few of the new college hires have been retained by the company.

In Figure 8 the histogram of age distribution points out the possibility of over one fourth of the engineering work force being eligible for early retirement (at age 55). The figures also depict a relatively poor ratio of midlevel experienced engineers with ten to fifteen years of experience (age group from 35-45).

Degree

Recording the level and type of degree proved to be of little value in the study of retention. There was no correlation evident between the type of degree and turnover and retention.

The emphasis of pre-established recruiting goals could have been used to predict the distribution of both the type and level of engineering degrees. Three percent of the new college hires had doctoral degrees. Twenty-one percent had masters' degrees and three percent received dual degrees. The remainder of the college hires, 83% had bachelors' degrees (total exceeds 100% due to dual degrees).

The various disciplines or types of degrees also reflected the recruiting goals which were identified each year at the start of college recruiting activities (typically in the late fall). The firm in this study was a

high technology organization and depended heavily on the expertise of electrical engineers and computer science personnel. The population mix of engineers in this firm has remained very stable since 1979 and is depicted in Table 3 along with the comparative attrition rates for each category of engineers from 1979 through 1984.

A review of Table 3 indicates that the percent of voluntary quits reflects the total population in each discipline. Although no firm conclusions can be drawn from the level or type of degrees, a few interesting sidelights can be noted.

Insert Table 3 about here

The firm's requirements for chemical engineers was very minimal. From 1979 through 1984 there was a 100% turnover of the seven new college hires with chemical engineer degrees. I interviewed and made employment offers to all seven of the chemical engineers and also conducted their exit interviews. Their average length of service was just over eight months and ranged from a minimum of three months to a maximum of 15 months. The longer tenured employee was also a family friend, thus it was rather easy to discover that individual's real reason for quitting.

Table 3

Population Mix of Engineers and Comparative Attrition
Rates 1979-1984

Engineering Population Mix

<u>Engineering</u> <u>Type</u>	<u>% of Engineering</u> <u>Population</u>	<u>% of Voluntary</u> <u>Terminations</u>
Electrical	39	49
Computer Science	35	13
Mechanical	14	19
Other	12	19

Note. Engineering type includes bachelors, masters and doctoral degreed engineers.

Not suprisingly the stated reasons for leaving were masked by the exit interviewer's typical comments of "other employment," "more money," or "moved." The chemical engineers were tracked via their employment records, follow-up interviews, and exit interviews. These documents confirmed my personal knowledge that their real reasons for leaving were all job related. Each of these individuals indicated a wide disparity between their actual work and that described to them during the prehire interviews when they visited the plant. Three of the chemical engineers, during their exit interviews, suggested hiring lower paid technicians or people with an associate degree. The chemical engineers' stated job objectives on their resumes also did not equate to the type of work assigned by their supervisors. The 100% turnover of the chemical engineers bears out the importance of realistic job previews. The turnover could have been prevented by a thorough job description which would have precluded the hiring of engineers for lower level, less challenging jobs. The tasks previously given to the chemical engineers are now carried out by technicians specifically trained in the area of chemical sampling and analyses.

Though the recording of degree information was of minor importance to this study, it did highlight one area of improper hiring and assignment. It also is saving the

company at least \$10,000 per year due to the salary differential between a technician and a graduate engineer.

The percentage of voluntary terminations for computer science engineers does not compare to the percent of computer science engineers in the population (13% vs. 35%). I investigated that inconsistency, and determined that computer science or software engineers are better prepared to be productive shortly after hire than are other engineers assigned to design tasks. The computer science majors also have a clearer understanding of the type of work they are hired to do and thus their expectations are more realistic. These conclusions were confirmed by supervisors, of software and hardware engineers in their departments.

Sex

The gender of each college hire was used to determine the percentage of female engineers hired and to ascertain if their voluntary quit rate were different then that of their male counterparts. Table 4 lists the percentage of female engineers hired and the percentage of voluntary female quits for the years shown.

Insert Table 4 about here

Table 4

Female Percent of Engineers Hired and
Percent Voluntary Quits

<u>Year</u>	<u>% of Total Hired</u>	<u>% of Voluntary Quits</u>
1979	21	7
1980	4	0
1981	10	18
1982	29	0
1983	13	14
1984	23	11

A review of Table 4 does not indicate any significant disproportionality between the percentage of female engineers hired and those that voluntarily terminated. The percentage of female quits in 1981 appeared a bit high so the individuals were identified and their reasons for terminating investigated. One of the women was transferred and promoted to another division, yet was coded as a voluntary quit. Another left to be married and was rehired within three months. A third engineer was also married and moved to Texas where her husband was employed. Her reason for leaving was noted as money on her exit interview form. The fourth voluntary quit left to return to teaching. Despite good progress and good performance reviews, she felt the challenge of her work was beyond her capabilities. Rather than cope with her own feelings of inadequacy, she quit to return to teaching where she felt more comfortable. The net loss for the year 1981 could be reduced to two voluntary quits with a change in the percentage lost from 18 to 9 percent. That figure is more in line with the percentages for the other years.

The understanding and explanation of the reasons for these voluntary quits demonstrates the usefulness of a participant observer in the study of turnover. Without personally being involved in both the hiring and termination process, the true facts in these cases would

have been difficult to discover. One other point to make is that two of the female engineers left to be married, the other two were already married. In hiring female engineering graduates the possibility of turnover due to pending marriage should be considered.

Termination

Demographic information relative to the date and reason for termination was collected for each of the voluntary quits. These data were used to compute the length of service and to identify the major reasons for leaving.

Source

I documented the recruiting source of each of the college graduates hired from 1979 through 1984. The purpose was to identify the effectiveness of college recruiting, determine the response from various universities and to ascertain if there were any relationships between recruiting source and retention.

The corporation classified the colleges at which it recruited into three types (a) major universities, (b) combined universities, and (c) individual universities. The major universities consisted of prominent universities throughout the United States. Their selection was based on several criteria which included:

1. Admission requirements

2. Type of research activities
3. Number of full time professors
4. Student to professor ratio
5. Laboratory facilities
6. Enrollment
7. Engineering enrollment
8. Minority population
9. Types of degrees awarded
10. Accreditation

Recruiting at the major universities was conducted by permanent team members representing the major operating units of the corporation. Recruiting costs and advertising expenses were borne by the corporation. Each year we established specific targets to acquire approximately 50% of the new hires from these universities for each operating unit. After the campus visits the recruiters distributed the resumes and applications of potential candidates to each division for review and follow-up.

Combined colleges are those schools where two or more operating units of the company opted to jointly recruit. These schools were identified using the same criteria for major universities. The cost of recruiting at combined schools was shared equally by the participating divisions as were the resumes and applications of the candidates.

Individual universities are those at which one division conducted recruiting activities, paid the expenses incurred and kept the recruiting papers for internal use by that division. In summary the potential on campus recruiting sources were 25-30 major universities, 120-130 combined colleges, and 5-10 individual schools.

Other sources of college recruitment were mail in applications and walk-in candidates who submitted their applications in person. These two sources accounted for less than one percent of the college graduates hired during 1979-1984. A detailed review of the recruitment sources shown in Table 5 and subsequent terminations did not reveal any significant relationships. A summary of the recruitment sources is provided in Table 5.

Insert Table 5 about here

The number of voluntary quits and the low number of hires from any particular university precluded any meaningful conclusions. Two of the major, local universities with engineering colleges did provide a large number of the new college hires. Many of these graduates had worked part time during summer months or as co-op students and were hired full time upon graduation. These

Table 5

Recruitment Sources

Recruiting Year	Number of Universities	Repeat Sources	Repeat Sources as % of Total
1979	14	3	21
1980	15	3	20
1981	28	11	39
1982	24	8	33
1983	39	15	38
1984	36	17	47

Note. The number of universities identifies the different sources for college hires. Repeat sources are those universities from which graduates were hired in the prior year.

local graduates provided a readily accessible supply. They were easier (and cheaper) to schedule for in plant interviews. There was little, if any, relocation expense involved in their hiring and their socialization into the community had already been completed.

The turnover of these local graduates however belied the relative ease of hiring. Thirty of the 65 local graduates hired from 1979 through 1984 subsequently left. The apparent cost savings attributed to local recruiting were quickly lost due to turnover within two years from the date of hire.

That trend warranted a closer look at the reasons for terminations. Four of the 30 leavers provided an interesting cultural consideration. They were all of Vietnamese backgrounds and their families lived in various locations outside of the immediate area. In the exit interviews each of them stressed satisfaction with their work, salary and environment. Each of them also emphasized the closeness of their families and the strong pressure to move closer to their relatives. This same familial affinity is apparent with many of the Vietnamese engineers still employed with the firm.

The reasons for leaving as derived from the exit interviews for the other locally hired terminators were well disguised under the labels of "other employment" and

"no reason stated " [italics added]. This points out the need for trained personnel to conduct pre-termination interviews if we are ever to understand the problem of turnover.

The sources of recruitment were driven by the selection of particular universities (major, combined, and individual), and the results of the driving function are reflected in the number of different universities represented by the new college hires.

One other conclusion can be made from the detailed review of the sources of college hires. It appears that once graduates from a specific college are hired they are followed by one or more students from the same school in the next recruitment period. This was particularly evident in the recruiting results from schools in which the firm had no previous success. The number and particularly the percentage of repeat sources in Table 5 bears this point out. Evidently after one brave soul experiences the problems of relocating from the East or Midwest to Southern California, others are influenced to follow. This domino effect could also be attributed to the use of recent graduates in actual on campus recruiting and featured in the films and company brochures used for recruiting.

In summary, the recruiting source simply reflects the focus of recruiting efforts. There does not appear to be

any relation of source to turnover. The one possible exception is the hiring of local graduates who may eventually leave to broaden their exposure to other areas. However, that conclusion is tenuous as eight of the local graduates who terminated in the 1979-1984 period were employed by firms located within ten miles of the company discussed in this study.

Salary

The salaries of new college hires were difficult to obtain from available records provided. For some years very accurate records were available. To reconstruct starting salaries for new graduates, particularly engineers was a hopeless task. Much of the documentation consisted of pencilled notes, some of which were not dated. Other documents included many non-engineering graduates who were designated as engineers simply because of their department numbers. The dilemma could have been cleared up by examining individual employment records and noting starting salaries. In my opinion that was not worth the effort due to my intimate knowledge of how starting salaries were established.

Base salaries were established corporate wide by type of degree. Additions to the base accounted for (a) university attended, (b) grade point average, (c) class standing (by top 10% and by quartile), (d) applicable

experience, (e) potential for advancement, and (f) personal qualifications. Typically, each division attempted to maximize their offers to remain competitive both within the corporation and with external competition. Divisions also could match a higher offer by another division simply to preclude internal competition within the corporation for the same resources.

To establish a common base I reviewed the college hiring acceptance logs for the years 1979-1985 and identified engineering graduates by their degrees. I was then able to arrive at the average engineering starting salary offers for each of the pertinent years. The College Placement Council's salary surveys were available for comparison from 1980 through 1984. Information from the 1985 Engineering Administrative Conference (Ohrtman 1985) was also used to compare new graduate starting salaries for 1984 and 1985. The College Placement Council (CPC) annual salary surveys include salaries reported by individual students to their respective placement offices and also those reported from participating firms throughout the United States. CPC new graduate starting salaries tend to be slightly inflated as they report multiple offers received by individuals instead of the actual salary accepted.

Table 6 shows the starting salaries for new graduates from the three sources. A dash line indicates the information for that year was not available.

Insert Table 6 about here.

The starting salary (\$27.4) from the Engineering Administration Conference (Ohrtman, 1985) is an average of 3900 offers reported by 39 competing firms on a national basis. The second figure in 1985 (\$27.7) is the average of 2200 offers tendered by 15 companies in the far Western part of the United States, which are more direct competitors since they are in the same region. The starting salaries for masters' degrees in 1984 and 1985 reported by the Engineering Administrative Conference are averages of over 400 offers nationally reported by the 39 participating companies.

Comparing the salaries in Table 6 it is readily apparent that this firm's salaries are lower than the CPC annual survey salaries for each year at the bachelor level. They are also lower than their direct competitors' salaries in 1984 and 1985. One surprising note to me is that the salary differential shown is as low as it is. From personal knowledge I know that offers in the adjacent

Table 6

Comparative Engineering Salary Offers 1980-1985

<u>Year</u>	<u>This Firm</u>	<u>College Placement</u>		<u>Engineering</u>
		<u>Council</u>	<u>Conference</u>	<u>Administrative</u>
1980	21.7	22.5	--	
1981	23.0 BS ^a 26.5 MS ^b	24.8	--	
1982	25.0	25.4	--	
1983	25.7	26.4	--	
1984	25.8 BS ^a 31.0 MS ^b	27.2	26.2, 22.2 ^c 29.5, 31.0 ^c	
1985	27.2 BS ^a 33.0 MS ^b	--	27.4, 27.7 ^d 31.6, 31.7 ^d	

Note. All figures in thousands of dollars.

^aBachelor of Science.

^bMaster of Science.

^cNational average for degree level in 1984.

^dWestern regional average offers for 1985.

county have consistently been \$1500 to \$2000 above this firm's offers to bachelor candidates. That difference undoubtedly compensates for the long congested freeway drives to and from work and the smog. However, a closer review of the Engineering Administrative Conference data confirmed that differential as fact. The average salary figures for 1984 and 1985 were skewed due to a large number (762) of lower offers from outside of the California area. From the salary information available and the acceptance rates, particularly in the later years, I conclude that the starting salaries have been competitive.

There were indications in this research that individuals based the decision to quit on perceived low salaries. I determined the average starting salaries of voluntary quits to assess those implications. The average starting salaries of voluntary quits for the period 1979-1980 are presented in Table 7.

Insert Table 7 about here

A glance at these figures compared to those in Table 6 would lead one to assume that the lower paid (poorer performers) were leaving. Once again, inaccurate records available result in misinformation. Those who voluntarily

Table 7

Average Starting Salaries of Voluntary Quits

<u>Year of</u> <u>Termination</u>	<u>Average Starting</u> <u>Salary (\$1000)</u>
1979	19.5
1980	20.3
1981	20.6
1982	22.6
1983	24.2
1984	22.5

terminated were often miscoded as engineers, thus lowering the average starting salary figures. The starting salaries of over 50% of the terminations in 1984 were not documented. Those that were included a mix of engineers with other lower paid classifications. Thus, the comparison of salaries for stayers and leavers is inconclusive.

The housing affordability index (Appendix A) and the average salary offers of new graduates (Table 6) clearly show that new graduates could not afford to buy a home. Unless the graduates had two incomes to support their style of living they were forced to rent. As renters they had the mobility (ease of movement) which could lead to turnover.

In my position I have access to the present and past salary data on all the engineering personnel. Using that access, all of the missing information could have been obtained. Rather than abuse that responsibility I opted to use the information as provided by the Employment Manager as though I were an outside researcher. That option gave a much more realistic picture of the problems encountered in archival investigations. It also stayed within the bounds of integrity to use previously approved sources of information.

The salary information though lacking in several respects does show that starting salaries were competitive. They were lower than national averages for engineers and lower than the average in the local market. The starting salaries were not conducive to the establishment of long term commitments (or socialization), as the new graduates could not afford to buy homes. Even assuming fairly large and consistent salary increases, it would take several years before new college graduates could consider permanent housing. Starting salaries result in an unsettled temporary feeling, enhance mobility, and may well be one of the initial factors leading to intent to search.

Supervisor

Krackhardt, McKenna, Porter, and Steers (1981) claimed that the behavior of supervisors had a direct effect on employee turnover. By identifying the supervisor of new college hires, I felt it possible to determine if any particular supervisor had a higher turnover rate than others. This assumption proved to be an exercise in futility. Due to several organizational changes, promotions and demotions, department transfers, and incorrect department number assignments, it was not possible to single out any supervisor as having a higher attrition rate.

During the seven years under discussion there were several supervisory changes. The exit interviews and the college hire acceptance logs identified the supervisor of the terminating employee and the supervisor of the new graduates. A comparison of the present listing of supervisors and a review of the termination tab runs indicates at least a 60% change in supervision. There were 14 quits, 19 promotions, 19 demotions, and 17 transfers in supervisory positions. To make supervisors responsible and accountable for turnover appears to be rather difficult in a dynamic organization.

While on the subject of supervision only ten of the engineering college graduates hired since 1979 have been promoted to a first line supervisory positions. The obvious message from the firm is to be patient. The received message by the new graduates probably equates to limited promotional opportunities. Neither of these are conducive to retention.

Department Numbers

This piece of demographic data was useful in locating new graduates to invite them to various orientation and social programs. It was also helpful in arranging follow-up interviews. Termination listings for each year were scanned to count the number of departments from which

employees terminated and also the number of terminations per department. Table 8 summarizes these findings.

Insert Table 8 about here

During this study 12 new department numbers were activated, eight were cancelled, three departments were combined and two were split into separate functions. One department repeated with the highest number of quits, two in 1979 and five in 1984. The low numbers seemed innocuous but they did merit some attention. The repeating department had a 100% change in the three levels of supervision in 1984. In fact one of those terminating in 1984 had been the department manager! He did leave voluntarily but Jackofsky (1984) would label that as a forced, voluntary turnover. Three of the terminations in 1984 averaged only 1.4 years of service and resigned due to the type of work. The fifth person was a seasoned veteran with 16 years of continuous company service. The unrelenting demands of schedule forced him to compromise his quality of work, and he resigned to accept a position with a smaller firm located just two blocks away.

Department numbers served only as tracking guides and offered no clue as to turnover causes. The terminations

Table 8

Number of Different Departments and Highest Number of
Quits from One Department.

Year	Number of Departments	Highest Number of Quits from One Department.
1979	7	2 ^a
1980	24	7
1981	16	6
1982	17	4
1983	13	4
1984	17	5 ^a

^a Department repeated with highest number of terminations.

were widely dispersed throughout most of the engineering organization. Frequent department number changes made it difficult to isolate any department as better or worse than others concerning retention.

Religion

I thought religion might provide some clue to retention. The Protestant work ethic may have been the root of that assumption. Several graduates from Brigham Young University were employed, and the university's alumni have a proclivity for helping one another to become members of the local community. Valparaiso University and Notre Dame were well represented among the new college graduates as were the University of San Diego, the Catholic University in Washington, D.C., and Loyola Marymount University. These colleges have a definite religious culture and religious studies are part of the graduation requirements.

As I reviewed thousands of resumes, and conducted hundreds of in-plant interviews, I became quite aware of the outside interests and activities of many applicants that were church or religious oriented. As each new graduate accepted our offer of employment I made notations as to any inferred religious affiliation, activity, or interest. This searching for another possible clue to retention was abandoned very quickly. Attending a

particular college was no guarantee of any particular religious belief. Awards and scholarships from church sponsored organizations were not limited to members of the congregation. Graduates from the many other public universities also could profess a belief in any of the religions or cults they chose. In relating religion to retention I did not have a prayer of a chance!

Marital Status

From 1979 through 1984 the firm was fortunate to hire three pairs of married engineering couples. These two for one bargains reduced recruiting and relocation costs. Two of the three pairs are still employed with the firm. The wife of the third couple terminated after two years of service.

Twenty-two other engineers were married prior to accepting the firm's offer of employment. Only three of those new graduate married engineers subsequently terminated. Seven engineering new graduates married other engineering graduates within the firm. All seven of these couples are still actively employed.

The turnover rate for married couples (3 out of 22) over the six years is 13.6%. Turnover for the engineering couples married prior to hiring is 16.6% over the same time frame. It appears that married couples exhibit more stability than singles. Many of them have dual incomes and

are better able to meet the housing affordability requirements. Several of the couples have young children which further ties them to schools and children's activities. Their mobility and ease of movement are somewhat restricted due to family obligations.

Marital status is an illegal question to ask on employment applications so how did I know the marital status? Emergency names and phone numbers provided by the applicants is one clue. Several of the married engineers also wear wedding bands. Information required to establish medical and insurance benefits also can indicate marital and dependent status. Social activities are also opportunities to meet the better half, be they male or female.

From the limited sample of married couples I conclude that they have a greater tendency to stay with their initial employer after graduating from college. The trauma of moving and the search for roots undoubtedly has some influence.

Married couples where only one of them is an engineering graduate hired by the firm do present a few other problems. Often I was asked to help find employment for the spouse. The firm's policy basically precludes hiring relatives which made the task even more challenging. Through contacts with other firms, schools and hospitals we

were able to find employment for the other spouse in 10 of the 12 instances where help was requested.

Relocation expenses for married couples are a bit higher than those for single persons. That minor increase is readily offset by the stability of employment exhibited by the couples. In summary, the hiring of married couples leads to less turnover and hence better retention rates.

Prior Experience

From the records provided on college graduates hired from 1979 through 1984 there was no fool proof way to determine the prior work experience of the individuals. I reviewed the starting salaries I had reconstructed to see if that would provide some insight. Any relevant work experience caused adjustments to the base salary of engineering graduates. Prior engineering type of work was awarded from \$5 to \$20 per month of experience to a maximum \$200.00. The majority of the graduates had at least three months of summer work. Many others had been co-op students and were credited with up to two and one half years of experience. If the relevant experience were with this firm, an additional \$10 per month was credited. My assumption was that starting salaries of engineers with prior experience would be higher than others. That assumption is true but simply looking at starting salaries and trying to ferret out work experience was not feasible.

Too many other variables went into the determination of each graduate's salary. Using salary alone I could not separate the influence of the type of degree, the university, grade point average or personal characteristics.

My interest in previous experience as related to retention was to question if that exposure to industry reduced the common, unrealistic expectations and hence reduced turnover. The data available on new graduates prior work experience did not satiate my interest nor did it provide an answer to the question. The relationship of prior work experience to retention remains a viable area for further investigation.

Interviewer

During the recruiting process an applicant is often influenced by the person conducting the interview. Most of the graduates hired during the performance of this study were interviewed a minimum of three times by representatives of the firm. The average number of interviews per candidate was closer to five or six. If more than one department expressed interest in a student, the number of interviews approached nine or ten.

The initial interview was typically completed on campus and lasted 25-30 minutes. The company representative in over 90% of the interviews was an

engineer who either volunteered to go recruiting or was conscripted for the cause. During 1979 and 1980 the recruiting assignment was based on who was available. The recruiters had no training nor were they aware of any recruiting goals. The accept rate in 1979 and 1980 (15%) reflected this lackadaisical approach to recruiting. In 1981 engineering recruiters were selected well ahead of time and were given a minimum of four hours of instruction by myself. In 1982 that training was expanded to three full days of interviewing skills, techniques and practice. The change in accept rate to 54% attests to the effectiveness of recruiter selection and training.

If the on campus interviewer recommended a plant visit, the candidate was invited to the plant for further interviews. The in-plant interviews were scheduled by a college relations representative, with a minimum of three engineers in the interested department and a luncheon interview with another engineer.

Normally the luncheon interview was with a recent graduate from the candidate's college or from the potential employing department. If a second department were interested in the applicant, three more interviews were completed within that department.

In 1979 and 1980 the interviewee was notified of the results of the in-plant interviews some four to eight weeks

later. In 1981 I was able to institute a same day offer policy so that the candidate had an offer letter in hand at the end of the day. This practice increased the acceptance rate.

I have explained the interview process and the number of interviews to substantiate an obvious conclusion. Trying to relate the interviewer to retention or turnover is far fetched.

First of all, there are too many interviewers. Secondly, to find out which of the several interviewers influenced the candidate one way or another would take a crystal ball. Thirdly, the records available would challenge Scotland Yard to track any possible tie from recruiter to retention.

The only valid conclusions from this piece of demographics are that trained recruiters do a better job at selecting and selling candidates and that immediate offers elicit a higher percentage of accepts.

Grade Point Average

While in the process of data collection, grade point averages were added to the demographic section of this report. Grade point average (GPA) supposedly represents how well a student performed in a particular area of study, at an insitutuion of higher learning. GPA has a significant impact on the starting salaries of engineering

graduates. Top ten percent class standing equates to an addition of 22% to the base salary. Top quartile and top half class standings, receive 19% and 12% on top of their base salaries respectively.

GPA can be considered as an indicator of expected performance as the higher the GPA, the higher the performance of that person should be. GPAs for all of the graduates were reviewed to compare the average of stayers versus leavers as shown in Table 9.

A separate analysis of exit interviews pertaining to GPA, using the Statistical Package for the Social Sciences (SPSS), indicated an average GPA of 3.0 for those college graduates who were voluntary quits between 1981 and 1984. It appears that there is no significant difference in the GPA of stayers as contrasted to leavers. This is not surprising because the firm had very specific goals to recruit in the top half of the graduating classes, and to actively pursue top quartile students.

Insert Table 9 about here

Some caution must be exercised when considering GPA. From my own research of 34 major universities, the GPA needed to be considered among the top 10% of the class in

Table 9

Grade Point Average for Stayers/Leavers.

Year	GPA	GPA
<u>Hired</u>	<u>Stayers</u>	<u>Leavers</u>
1979	3.1	3.1
1980	3.1	3.1
1981	3.0	3.1
1982	3.0	2.8
1983	3.2	3.0
1984	3.0	2.9

Note. GPA is based on 4.0 maximum. Grades from universities grading on a 6.0 or 5.0 scale were converted to a common 4.0 base.

1984 ranged from 3.1 to 3.8. In addition there has been much concern about grade point inflation at several colleges. Many universities do not publish quartile breakdowns, but the information can be derived from overly helpful deans and professors, zealous secretaries, cooperative placement officers, and sometimes the students themselves. The reliability of the latter source is somewhat suspect. Pass/fail grading in vogue at some universities also casts a dim light on GPA. The 1984 GPA quartile comparison for four major universities shown in Table 10 displays the non comparability of GPA when used in isolation. The universities are considered representative of the Mid-west, far West, the South, and the Eastern part of the United States. A GPA of 2.7 places a student in the third quartile at one university, whereas that same GPA would be in the first quartile at another school.

The review of GPA shows that the stayers and leavers have essentially the same grade point averages. The GPAs of both the stayers and leavers reflect the focused recruiting efforts of the firm. No conclusions relative to retention can be made from the comparison of grade point averages.

Insert Table 10 about here

Table 10

1984 Grade Point Average Quartile Comparison

<u>University</u>	<u>Top 10%</u>	<u>Quartile</u>		
		<u>1st</u>	<u>2nd</u>	<u>3rd</u>
East	3.6	3.3	2.8	2.2
South	3.0	2.7	2.5	2.0
Midwest	3.7	3.4	3.0	2.7
Far West	3.1	2.9	2.6	2.0

Note. Grade point average is based on 4.0 maximum.
Grade point averages from universities using a 6.0
or 5.0 base were converted to a 4.0 base.

Age and Tenure

The literature review pointed out the inverse relationship of age and tenure with turnover. These two factors were added to the collection of demographic facts for all the new engineering graduates who left the firm voluntarily. Average age and average length of service were computed for the years 1980 through 1984. Those averages are shown in Table 11.

The average length of service is fairly consistent for the years shown. Information for 1979 was not available. The average years of service was expected to be greater than one year. Since the firm paid relocation expenses for graduates outside of the county, it required that a promisory note be signed. The note states that if an individual voluntarily quits prior to one year of service, they would be responsible for all relocation expenses. Even though the average relocation costs for new graduates fell between \$2500-\$4000, it represented a large sum to engineers just starting their first job. The promisory note almost assured one year of service. Many engineering colleges advise their seniors to work two three years to gain experience, and then move on to another company. The time required to search for employment alternatives, to interview, accept and resign, surely requires more than a few months. These three factors account for the spread

from 1.6 to 2.1 average years of service. These data also agree with several studies in the literature review.

Insert Table 11. about here

The average age of terminators for 1982, 1983, and 1984 were slightly on the high side. I reviewed the tab runs of voluntary quits for these three years and adjusted the figures to account for a few outliers. The adjusted averages are shown for each of the three years in Table 11. In 1982 one new graduate who terminated after 3.2 years of service was a former Vietnamese Army Captain. He immigrated to the United States, finished his degree, and applied for citizenship. That process took several years thus he was considerably older than most new college graduates.

In 1983 there was a similar situation with another Vietnamese engineer over 38 years of age. In that same year a 38 year old female engineer who had embarked on a second career also quit after two years of employment. A third engineer who left was 35 years old. He had worked as a technician for several years prior to completing his degree in the evening. These three people caused the average age to be slightly higher in 1983.

Table 11.

Average Age and Years of Service for Terminated New Graduates.

<u>Year</u>	<u>Average</u>	<u>Average Years</u>
<u>Terminating</u>	<u>Age (Years)</u>	<u>of Service</u>
1980	25.3	1.9
1981	26	2.0
1982	28.0, 26.6 ^a	1.6
1983	29.1, 25.4 ^a	2.1
1984	28.5, 26.5 ^a	2.1

^aAdjusted averages as explained in the text.

The average age of voluntary terminations in 1984 was also a bit higher than expected. One new graduate who quit was a 48 year old Ph.D. recipient. Two other engineers, age 41 and 34, had also struggled many years to complete their bachelor studies. The fourth outlier in this year was a 35 year old Chinese Master's graduate. He finished his initial baccalaureate degree in Formosa and after working for several years he received a student visa to complete his advanced degree in the United States. These four engineers caused the average age of terminators in 1984 to be above normal.

The investigation of age and years of service provide support for prior research findings. Younger less tenured employees are more prone to quit than are their older long service co-workers.

Performance/potential

As part of the firm's annual review process each employee is rated on both past performance and potential for advancement. The first line supervisors determine these ratings which are then adjusted to meet an arbitrary, normal distribution. (The arbitrary distribution is not documented but is well known and almost mandatory within a very small tolerance band).

Before presenting the performance potential ratings of voluntary new grad quits, I will explain these codes. The

explanations are my own but are basically synonymous with those utilized by the firm. Present performance for each engineer is rated using one of the following numerical indicators:

- (1) exceptional
- (2) outstanding
- (3) above average
- (4) average
- (5) marginal
- (6) unsatisfactory
- (0) unrated

The future performance of each engineer is assessed by designating one of these potential letters:

- (Q) qualified for advancement to several levels
- (C) capable of advancement to next level
- (T) necessary skill
- (A) well placed
- (I) ineffective

To provide a numerical equivalent for an analysis of potential ratings I assigned a value of 1 for Q, 2 for C, 3 for T, and so on. The average performance/potential ratings were then determined for the voluntary quits for the years shown in Table 1.2. In the performance indicators there were no terminations coded unsatisfactory (6), so I assigned that numerical value to those unrated (0). The

value of six was arbitrary but it did maintain a numerical rank ordering of the performance codes since the unsatisfactory rating was unused.

Insert Table 12 about here

A similar analysis using the Statistical Package for the Social Sciences (SPSS) covering terminations from January 1981 through August 1984 yielded an average performance of 2.5 and a potential of 2.2. These results differ from those in Table 12. In that program no numerical value was assigned to a zero performance code thus the average is lower. The treatment of potential codes in that analysis accounted for only 4 indicators and again would yield a lower average number. Despite the slight numerical difference, the indicated results are quite comparable.

The performance averages for 1980 through 1984 show that the firm was losing new graduates who were considered to be average to above average in completing their tasks. The potential ratings for that same period indicate the firm lost employees who had potential for advancement or were considered to possess some necessary skill.

Table 12

Average Performance/Potential Ratings of Voluntary Quits.

Ratings of Voluntary Quits		
<u>Year</u>	<u>Performance</u>	<u>Potential</u>
1979	2.5	2.0
1980	3.7	2.5
1981	3.7	3.2
1982	3.3	2.7
1983	3.2	2.5
1984	3.2	2.7

Note. Maximum performance/potential equals 1.0.

Based on my knowledge of the performance/potential code distribution in the total engineering department, a performance rating of three covered 55% of the engineering population. A potential code of two (c) is representative of 45% of the engineers. In the first year or two of employment new graduates are normally rated as 0/A. The 0 shows that the new hire had an insufficient time on board for a more proper evaluation. The A was a rather nebulous potential rating to show proper placement. These last two practices reserved the higher ratings for more experienced engineers. These higher ratings also had an effect on recommended salary increases. The new graduates were not hurt by the 0/A rating as they automatically received two new hire salary adjustments during their first six to eighteen months of employment.

From the performance/potential review, I believe the company lost some average performing new hires who definitely showed potential for advancement to the next higher level. That conclusion is also supported by the grade point average analysis and by the firm's recruiting focus. If you hire in the top half of the graduating class and your terminations come from that same group, it follows that leavers must be average to above average when compared to other engineers.

The relevance of performance/potential ratings of voluntary terminations to turnover or retention is not obvious from the data reviewed due to the manipulation and forced distribution of the codes.

Summary

The collection and analysis of demographic information is a necessary and time consuming part of ethnographic research. No substantive conclusions could be drawn from many of the demographic elements. Collectively, they provided the framework for this investigation.

The archival data and records available point out some particular problems with the firm's record keeping. Several pieces of information were hand written, some almost illegible, others were not dated and there were gaps or missing or unknown information in other records.

As a participant observer I was able to reconstruct some of the demographic information. This role led to a more thorough understanding and explanation of the data. My personal involvement precluded some possible faulty conclusions that could be made based solely on numerical values presented in the tables.

The weak relation of the demographics to turnover agrees with the conclusion of Sheridan and Abelson (1983). Breugh (1981 a,b) hypothesized that college campus recruiting was a poor source of hiring. I disagree with

his position based on the acceptance rates and the quality of the graduates as indicated by their grade point averages. The demographics show no relation of sex to turnover in contrast with the writings of Lewis (1979) and Smith (1979).

The performance ratings observed in this analysis show no support of the relationship of performance to turnover as pointed out by Spencer and Steers (1980, 1981). This is probably due more to the limitations of the performance rating system and the low average tenure of the voluntary quits. The stage process of quitting likened to adult development by Gligg and Manning (1985) is not evidenced in the demographics again due to the limited tenure of the terminated engineers.

Mobley (1982a) and Price and Mueller (1981) claimed that age and tenure were good predictors of turnover. The demographic data concerning age and tenure of the new graduate quits support their position. The demographics provided the base for analysis of the other methodologies used in this research. The demographics showed no significant relationship with turnover or retention.

Follow-up Interview Evaluation

To critically evaluate a program which was self initiated four years ago and still continues to this day is

a challenging chore. Fortunately, other people were trained to continue this program and their reported observations constitute the major portion of this analysis.

The follow-up interviews commenced in 1981 to evaluate college recruiting practices for which I was responsible. The results of these initial follow-up interviews demonstrated their value as a means of communication and feedback. Rather than attempt an all encompassing synopsis, the follow-up interviews are presented for each year, followed by a summary evaluation.

1981 Interviews

The 48 interviews completed in 1981 represented close to 70% of the graduates hired. The interviews were very positive and indicated general satisfaction with the company and with the recruiting process. In-plant interviews were described as the best organized and most professional the candidates encountered compared to those of other firms.

The few problems that were identified were corrected immediately at the direction of the Vice President of Engineering. Complaints concerning time charging resulted in two half-day instructions for new graduates. Two individuals expressed personality clashes with their supervisor, and both were reassigned the following week. Many of the new graduates had not met their department

managers and questioned who their supervisor was. Two weeks later each manager turned in a signed roster showing the name and date of their personal discussion with each new hire. Credit unions and the tuition assistance program were mentioned often during these 1981 interviews. Three months later the amount of prepaid tuition was increased, and the firm became associated with a local credit union for the employees' benefit.

1982 Interviews

Although two interviewers carried out the interviews during 1982, the results were quite consistent. Positive feedback continued on the recruiting process (plant visits, travel, relocation, orientation, and work assignment).

Communications, or the lack thereof, received the majority of the criticisms. Management's response to this information was again very timely. New bulletin boards were installed throughout the plant, and weekly departmental meetings were encouraged. Orientation programs and social mixers for new graduates, staff members, and supervisors received much more emphasis.

A new engineering building was put on line in 1982 and many of the comments concerning desks, phones, lights, air conditioning, and work space were fed back to department supervisors and facilities engineering for almost immediate correction.

1983 Interviews

An evaluation of this set of follow-up interviews is best provided by a quote from the interviewer's cover letter:

Overall, this group appears to be well satisfied with work assignments, challenge and environment. Dissatisfaction with communications, bulletin boards, and group meetings, which was so prevalent last year, appears to be minimum.

Positive comments on the General Manager and Staff Orientation, socials and overall recruiting efforts were evidenced in a majority of the interviews.

(Interview Report, September 9, 1983)

1984 Interviews

The follow-up interviews in 1984 were unique in that it was the first time an external interviewer was utilized to conduct the interviews. The interviewer's summary of generalized comments from these interviews is depicted in Table 13 as it was submitted.

Insert Table 13 about here

Table 13

Summary of Generalized Comments, 1984 Follow-up Interviews.

Positive Responses	Item	Negative Comments
16	Response time to resume	7
6	Travel accomodations	1
14	Department interview (realistic information)	9
9	Benefits package	1
10	Choose company for job content	0
13	Adequately oriented as new employee	10
9	Supervison feedback	12 ^a
14	Work environment	9

^aNegative feedback is largely directed to lack of direction and personal performance.

A summary report of the interviewer's evaluation of the follow-up interviews conducted in 1984 included the following comments:

The majority [sic] of those interviewed recognized the benefits of [the company] as more extensive than other organizations. However, most do not recognize the benefits as a supplement to their direct salary. This in turn has compounded the difficulty of adjustment, for many of those relocated from the Midwest and East, to the higher cost of living [here]. Subsequently, there were repeated comments to the attractiveness of [the] benefits and the salary being either the lowest or among the lowest offered, without any association between the two. In reference to the low salaries there were also frequent comments to the raises which appear to be based on something other than the merit of their work.

It was rare that an interviewee did not comment on or speak at length to the issue of lack of communication either between departments, supervisors and employees or amongst employees. For the most part, their comments centered on lack of feedback to personal performance of work and/or a variety of communication snafus between departments.... The problem of acronyms was mentioned only a few times.

The negative remarks toward communication were often followed equally with either hopeful comments to change or growing indifference. While several indicated the level of feedback and communication within and between departments to be adequate, those who spoke highly of their department's inner feedback and communication displayed higher personal and job satisfaction. (Interview Report, 3 December 1984)

A very strong emphasis on communications and feedback surfaced during this set of interviews which was in direct contrast to the interviews in 1983.

1985 Interviews

The follow-up interviews early in 1985 were also completed and evaluated by an academic intern. The intern's report provided an independent evaluation though it appeared to be influenced by the 1984 report. A summary of the intern's report for 1985 included these comments:

Communication is a broad category in which there are many areas that were often mentioned in the interviews. The first area focuses on communication within the department themselves. Other than their own specific area, very few of the employees felt they knew what was going on in their departments. When department meetings were mentioned, most of the employee stated that they felt regular meetings to

discuss the work in the department would help improve communication

A second area which was also mentioned was the feedback and review process. Even though many felt the feedback from their supervisor was adequate, quite a few stated vagueness about their job duties. This uncertainty also applies to the review process. Most of the employees interviewed were not really sure when their formal review was supposed to be.

A third problem with communication centers on information. Many of those interviewed were unclear of the company structure and where they fit in. No one ever explained to them where they can go with the company. This could be done at the formal review to give the new hire a goal to work towards in the company.

Many of those interviewed complained of the lack of a formal training program at [the company]. Most expressed frustration as they tried to jump into their jobs as if they had been working for months. Others spoke of having to read hundreds of pages of technical material they did not understand. This problem can also be linked to the uncertainty of job duties and priorities that were mentioned before.

One of the problems [the firm] seems to have is

retaining the college graduate engineers. [The firm] is seen as a good company to get three to five years experience and then move on to other companies.

There are many possibilities for this problem. One of them is the salary range offered at [the firm]. For the most part, those interviewed felt [the firm] offered them lower salaries on the average than other companies. Even though there are many bonuses to working [here], such as benefits package, etc., these are not linked in the employee's mind. (Interview Report, May 5, 1985)

Summary

It is difficult to infer any relationship of the follow-up interviews with turnover. They are an excellent means of communication and feedback. They demonstrated top management's responsiveness by correcting problems immediately. The follow-up interviews also improved management's credibility with the employees. Many of the employees felt the interviews showed that the company cared and provided them a voice outside of their direct line supervisors.

One interview on June 6, 1982 started out with "Since you will probably be doing my exit interview in a few months I may as well be truthful" (Interview No.1, 6-14-82). As of this writing he is still employed by the

firm and has been promoted twice. From that instance alone there is at least some hint of an interaction between the follow-up interviews and retention.

As further testimony to the utility of follow-up interviews, I was asked to conduct such interviews with the college graduates hired in the Fall of 1985. Thirty-three interviews were completed in December 1985 and unfortunately the data derived duplicated the messages from prior follow-up interviews. Poor communications was a predominant complaint. Many recently hired engineers had to wait several weeks before receiving a meaningful assignment. There were many comments addressing the disparity between the actual work and that discussed during the in-plant interview. In fact four of these were so mismatched that transfers and reassignments were effected within a week after the follow-up interviews.

Another problem identified in the interviews was the possible long term (to the new hires), off site assignment of three months for many of the graduates. The Vice President of Engineering addressed the potential problem immediately. He held a meeting with all of the engineers involved and pointed out the importance of the task. He also stressed the benefits to the individual's career and the educational opportunity of the assignment. Chamber of Commerce hype material was also obtained from the specific

city and prominently displayed in the work area. All of the engineers on the task were co-located to enhance coordination. The length of the off site assignments was shortened and each engineer was to be allowed a number of return trips home depending on the duration of their stay away from home. The Vice President's actions culminated with a barbeque picnic, beer bust, and social for the engineers and their spouses and/or guests. The attitude and the approach to what had been viewed as an unpleasant assignment of the engineers were drastically changed.

Other problem areas surfaced in this most recent set of interviews have also received proper attention and thus reemphasize the importance of this mode of communication. The relationship of follow-up interviews to retention can only be one of judgement. They do seem to help identify and solve problems, communicate with, and hopefully retain the new graduates.

Exit Interviews Analysis

For the years 1981-1984 there were 95 documented exit interviews available. Each of these original documents was reviewed to ascertain the effectiveness of the exit interview process. A summary chart was prepared for each year and my observations were noted for each interview. There were no exit interview notes available for the years

prior to 1981. A year by year analysis of the available exit interviews is followed by a summary evaluation.

1981 Interviews

Of the 22 exit interviews, 15 were conducted by one interviewer. Performance rating was noted only once and that was for an employee rated marginal on an interview completed by a senior level staff member. The 22 exit interviews included four females and four individuals later identified as college graduate hires.

The reason for leaving as noted by the interviewer on the interview form (Appendix D) agrees with the stated reason for leaving on only five of the 22 interviews. The stated reason is my interpretation based on the other comments on each of the exit interview forms. That interpretation is also strengthened in many cases by my personal knowledge of the facts concerning the terminations. The interview notes for 1981 are rather sketchy and inadequate. The noted versus stated reasons do not agree and management was provided misleading and incomplete information as to why individuals left. Table 14 compares both noted and stated reasons from the 22 exit interviews in 1981.

Insert Table 14 About here

Table 1.4

Noted Versus Stated Reasons, 1981 Exit Interviewsa.

<u>Noted Reason</u> <u>by Interviewer</u>	<u>Stated Reason Inferred</u> <u>from Comments</u>
Other Employment (13)	Type of Work (8)
Miscellaneous (7)	Salary (6)
Salary (2)	Supervisor (4)
	Miscellaneous (4)

Note. Numbers in parenthesis indicate the frequency of that response.

My discussion with the prominent interviewer in 1981 brought out the fact that negative comments about specific supervisors were avoided as the interviewer considered the supervisors as friends. The interviewer did not want to hurt their feelings nor to get them into trouble.

Supervisors' comments appear on only one interview form and that happened to be for the marginal employee who was interviewed by a senior level staff member. Though the employee was identified as a voluntary quit, the exit interview clearly points out the termination as company initiated or involuntary termination of a long term (20 years) disgruntled employee.

The average length of service determined from the 1981 exit interviewees was 3.7 years. If the forced termination were excluded that average tenure is only 2.7 years.

Of the four college hires included in the 1981 voluntary quits, two cited salary as the reason for leaving. One quit to join her husband who was relocating and the fourth blamed the mismatch between her education and the type of work.

Another exit interview noted promotion as the reason for leaving yet the interviewer's notes state "He was asked to leave. I am not a political person and don't like political games or cliques."

The exit interview notes for 1981 contain seven negative remarks relative to supervision, three concerning the CEO. The noted reasons for leaving indicate 20 out of 22 could be considered as uncontrollable, whereas the stated (inferred) reasons indicate 18 out of 22 were controllable by the firm.

A comparison of the number of exit interviews (22) and a tab run of engineering voluntary terminations (33) shows that exit interviews were not done for one-third of the voluntary quits in 1981. That ratio should be slightly higher as two of the exit interviews reviewed were for non engineering personnel.

I was able to determine the performance/potential codes and age for twenty of those ex-employees who had been interviewed prior to their termination. Their average age at the time of termination was 34 years. Performance codes show an above average group of individuals had voluntarily left. The average potential of the terminators indicates that the group had potential for advancement to the next level.

From the 1981 exit interviews alone, I conclude that the process was ineffective. Supervisory comments were missing, performance/potential codes were not shown, age could not be readily determined and the true reasons for quitting were obscured by the umbrella of "leaving for

other employment" which was an obvious conclusion without the need for exit interviews.

By using other archival records I ascertained age and performance information. Also by scrutinizing the interviewer's notes, more factual reasons for leaving surfaced.

1982 Interviews

For this year 29 exit interviews were accumulated and reviewed. There were more exit interviews conducted than the number of voluntary engineering terminations shown on the employment departments' tab run! The majority of exit interviews were still completed by the same interviewer as in 1981. That individual received personal coaching on interview techniques by this researcher, and the exit interviews reflect the effect of that minimal training.

The 1982 exit interviews did include performance/potential ratings. The convenience of "other employment" still was used to note the reason for leaving on 24 of the 29 exit interviews. The paucity of overall notes was evidenced and there was no indication that the information from the exit interviews was used. Five different interviewers were used in 1982 to do the exit interviews. I was responsible for five of the exit interviews.

This group of 1982 voluntary quits, had an average age of 35.7 years. They averaged six years of service (4.3 years excluding three employees with 22, 21, and 20 years). Performance codes show an average rating as do the potential indicators.

Ten of the terminators expressed criticism of their supervisors and another three had caustic comments concerning the CEO. The majority of stated reasons for leaving were attributed to the type of work (11 out of 29) and salary (10 out of 29).

Seven of the 1982 terminations were later identified as college hires when they were first employed. The "other employment" phrase blanketed their reasons for leaving which were money and the type of work. This subgroup's average age was 29 years and their performance/potential ratings were average. The average tenure of the college hires who terminated in 1982 was slightly less than two years.

1983 Interviews

During the year 1983 I interviewed 11 of the 17 voluntary quits for whom exit interviews were available. There were five other engineers who left without exit interviews. Four interviewers were involved with exit interviews during 1983. The exit interview notes were more complete and thorough than any of the previous years. I had conducted a small seminar with all the interviewers to

review interviewing techniques and to stress the importance of the pre-termination interviews. The interviews were still conducted on the last day of employment as had been the practice in former years.

The discrepancy between noted and stated reason for leaving was still evident in the 1983 interviews. From the noted reasons one would assume nine people left for "other employment" contrasted with eight of them who stated money was their motivation for quitting. Average length of service for the 1983 quits was 2.6 years and the average age was 30.9 years. Fourteen college hires and four females were amongst the 1983 quits. The total group was above average in both performance and potential ratings.

The predominant interviewer during 1981 and 1982 completed only three of the exit interviews in 1983. Those three interview forms exhibit the same lack of information and inconsistencies observed from the exit interviews in 1981 and 1982.

The 1983 exit interviews contain much more detailed positive comments concerning individual supervisors and also reflect the supervisors' evaluations of each terminating employee.

1984 Interviews

For this year the employment section identified 40 voluntary engineering terminations. Only 27 exit

interviews were on file, thus the reasons for terminating are unknown for one-third of those leaving during 1984. Of the 40 voluntary quits one tab run lists 31 college hires, another identifies 23, and exit interviews were completed for 14 college hires who left in 1984. Somewhere between 40% and 45% of the new college hires left without their reasons for doing so being identified, because the firm's written procedure was not followed.

The 1984 leavers were rated above average in both performance and potential. The average age was 25.7 years and their average length of service equalled 2.8 years. Nine of the fourteen interviews conducted by a specific interviewer noted "money" as the reason for leaving. That interviewer subsequently resigned for that very reason and his interview notes do exhibit a definite dollar bill bias.

The major reason for leaving noted by the six different interviewers in 1984 was "other employment." My interpretation of the stated reasons for leaving identified "the type of work" as the cause celebre in 14 of the 27 exit interviews.

From the 1984 voluntary quits there were four criticisms directed at supervisors and an equal number specific to the CEO. There were no supervisory comments on any of the exit interviews for this year. One exit interview completed by the predominant interviewer from 1981

and 1982 simply stated "the employee was extremely upset." That statement points out the importance of a qualified interviewer to conduct exit interviews. Table 15 shows a comparison of some of the exit interview data for the years 1981-1984.

Insert Table 15 about here.

An independent analysis of the exit interviews for new college hires who eventually terminated was also carried out covering the period from January 1981 through August of 1984. The Statistical Package for Social Sciences (SPSS) software program was used to analyze the exit interviews of new college hires only. The results of that analysis compares favorably with those in Table 15.

The average age of 27.2 years from that analysis is slightly lower as the older more experienced engineering quits were excluded from the SPSS data base. Likewise the average years of service at 2.4 years tracks well. The average performance and potential ratings agree with those shown in Table 15. The analysis of the exit interview process and the detailed review of 95 original interview notes leads to some interesting conclusions.

Table 15

Exit Interviews Comparison, 1981-1984.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Number Documented	22	29	17	27
Average Age in years	34	35.7	30.9	25.7
Average Tenure in years	2.7	4.3	2.6	2.8
Number of Females	4	2	4	3
Number of College Hires	4	7	14	23
Performance/ Potential	Above Average	Average	Above Average	Above Average
Number of Interviewers	5	5	4	6
Predominant Reason for Quitting	Type of work	Money	Money	Type of work

Note. Data are for engineering personnel only.

During 1981 and 1982 a trained interviewer was not used. That interviewer was an employment representative and had no knowledge nor understanding of engineering tasks. That same interviewer withheld important information to remain friends with the engineering supervisors.

The exit interview format appears to be adequate for its purpose yet many areas of the documented interviews were blank. Supervisor's comments were almost totally ignored. The noted reason for leaving were conveniently described as "other employment."

The average age and average tenure of voluntary quits shows a disturbing trend toward younger employees, i.e., recently hired graduates. The number of college hires leaving has increased at least fivefold over the four years from 1981-1984.

The type of work and salary continue to be the most frequently stated reasons for terminations. Both of these factors are controllable to some degree by the firm.

The exit interview information is not given to the responsible supervisors. The forms were routed to the CEO, the Vice President of Engineering, and the Vice President of Human Resources. One copy of the exit interviews was maintained in a note book by the Employment Manager. Chief Executive Officer B was the only one of the three CEOs who

ever asked for a further explanation of any of the exit interview documents.

Summary

Analysis of the exit interviews confirms the relationship of age and tenure to turnover. Missing exit interviews show that the firm's policy is not being followed. There is no evidence that the information garnered during the exit interviews is being used. The real reasons for voluntary quits are being disguised under "other employment." Some people retire, others leave to get married, yet the majority leave for other jobs, and the real reason is not identified.

Of the college hires who terminated from 1981-1984, 63% of them mentioned the type of work during their exit interviews. The type of work comments included: lack of challenge, paper work, level of responsibility, no match with education and interest, and no assignment for several months.

No particular supervisor nor department could be singled out as having a higher attrition rate than any other. The performance/potential codes show average to above average engineers are leaving the firm. This would indicate that the firm is hiring capable college graduates and training them for the benefit of other firms.

The dates of the exit interviews coincide with the last day of employment for 95% of the interviews. That practice makes the information on the exit interviews rather questionable. It tends to be gathered in a last minute gesture of feigned interest. The interviewee certainly would be cautious not to burn any bridges and the interviewer would like to just get the job done. I have heard two of the interviewers take the format and follow it precisely during their so called probing interview. I seriously question the validity of the information derived from those exit interviews.

My only conclusion based on the exit interviews is that age and tenure are positively related to turnover.

Survey Questionnaire

Of the 42 original questionnaires mailed to the 1984 voluntary quits, one was returned marked "moved, no forwarding address." Twenty of the remaining questionnaires were completed, for a 49% return rate. That high response did not hold true for the second mailing of 22 questionnaires to 1983 quits. One of those was returned with no forwarding address. Only four valid responses were returned from the remaining 21 mailings to 1983 quits, representing a 19% return which is considered below normal.

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Of the total questionnaires returned I was able to match up 12 with corresponding exit interviews for individual respondents. Nine of the twelve showed agreement with the reasons for leaving as stated during exit interviews and as explained on the survey questionnaire.

Each of the returned survey instruments was tabulated on a spread sheet to compare individual responses to each question. Questions one and two concerned the initial orientation and explanation of duties, responsibilities, benefits and working conditions. Over 70% of the respondents gave a favorable answer to these two questions, which indicates that the initial orientation of new hires was adequate.

In answer to the question "Could anything have been done to prevent your leaving?", 60% of the ex-employees answered affirmatively. None of them elaborated on what could have been done, nor did the questionnaire ask for an explanation. That information probably would have been obtained with a more open ended question. A pilot survey would have also pointed out the problem.

The fourth question dealt with the specific reasons for leaving. Four of those reported are considered uncontrollable by the firm (family reasons) while the other twenty were categorized as organizational controllable

reasons. Management was cited by seven individuals, money by five, and lack of advancement by five people.

Typical responses to questions 4, 6, 7 and 11 are repeated in Appendix K to illustrate the encompassing aspect of the replies.

Based on the inputs to question five the former employees began their job search an average of three and one-half months prior to termination. With 24 returns, that equates to seven years of disinterested employees on the payroll carrying out their intent to search! Assuming an average yearly salary of \$28,000., the cost to the firm for this looking stage approaches \$200,000. That cost highlights the importance of the intent to quit phase included in the turnover models.

When asked to compare their present job to their prior position, 63% of the answers showed the new work was "substantially better," 33% stated it was "very similar" and 38% claimed "better pay" (percentages do not equal 100% due to multiple statements). One humorous ex-employee replied "My present job doesn't compare. I do not have one. I have been surfing on Kauai for the last three months and hope to be working soon."

Feelings concerning work at this firm were requested in the seventh question. The expressed feelings ranged from very negative, "wasted two years" to very positive, "very

beneficial." Favorable work experiences were reported on half of the returns and one fourth expressed negative reactions to their work experience. Management was also criticized by 20% of the former employees.

Surprisingly, almost half of returns reported that the general manager(s) did have an effect on the decision to leave (question seven). They explained that the General Manager set the tone, commitment, and direction of the organization and in that way affected their decision to leave. The other respondents stated that the General Manager had no effect on their decision to terminate.

The information gathered from the survey relative to any programs to improve working conditions (question nine) pointed out that one-fourth of the voluntary quits were unaware of any programs. The other 75% of the replies depicted an awareness of some of the programs. Only one program (tuition assistance) was actually identified in the returns. Participation in programs to improve working conditions (question ten) was acknowledged by 50% of the returns.

The last question (number 11) requested any other comments to make the firm a better place to work. The former employees were not bashful about their advice and criticism. "Train and screen your managers," "too many management titles," "get rid of the politicians," and

"develop a spirit of involvement and excitement" were recommendations by those who had terminated.

Appendix K, as mentioned previously, includes several of the responses to questions 4, 6, 7 and 11.

The post-exit questionnaires confirmed that many of the reasons for leaving were indeed, those that were stated in the exit interviews. The relationship of service to turnover was also verified. The former employees averaged 3.2 years of employment with the firm. The briefest tenure was one day and the longest was fifteen years. The one day employee left as both of his parents were seriously ill.

In total, the respondents criticized management, the lack of communications, lack of job challenge, lower salaries, and the inadequacies of the annual merit review system. A general lack of awareness, and hence a lack of participation in the programs designed to improve working conditions was prevalent throughout the replies.

The ex-employees also expressed much more caustic criticism in the questionnaire than was evidenced in those exit interviews that could be matched with the returned survey instruments. Of those ex-employees who returned the survey instrument, two had been encouraged to leave and two others terminated shortly before they would have been laid off. These four individuals were the most outspoken and acerbic in their comments.

The post-exit questionnaire was quite useful in this investigation. A pilot survey would have enhanced its utility and clarified some of the questions. Any analysis of this type of survey should also be done by an individual familiar with as many of the voluntary quits as possible (as was this case).

Telephone Contacts

Actual telephone discussions were held with 23 of the 64 individuals who were mailed post exit questionnaires. The graduate student assistant did not attempt to contact the 22 voluntary quits from 1983 due to conflicting work assignments.

Two of the leavers from 1984 refused any comment, 17 were not home and did not return the telephone messages and the 23 remaining replied to the questions asked per Appendix G. Exit interviews for 15 of the 23 were available for comparison. The graduate student's perception of the research results were summarized in his final report.

The predominant feeling I got in listening to these ex-employees was they were glad to be on the outside-literally, feelings of escape. The next most pressing perception was that [the company] provides a place to start but it doesn't reward staying on. People rejoined families and returned to old jobs once they

had been disillusioned by [the company]. Very few mentioned the traditional "value of sunshine" though several commented on the living cost. Overall, there was a high number of people who enjoyed their work and their co-workers, but could not overlook being passed in review, or a non-supportive manager, or not having their work recognized. Very few left "just for money." Almost everyone felt insulated from top management. Generally, policies and actions concerning personnel management were perceived as ineffective if not invisible. (Preliminary Report, December 1985).

From the 15 matched exit interviews available, I compared the responses to question one on the telephone contact questionnaire with the reasons for leaving noted on the exit interviews. Six of the respondents indicated the same reason in both documents. The phrase "other employment" was noted on seven exit interviews but was changed during the telephone discussion to (a) management, (b) type of work, (c) organization, or (d) job challenge. Once again the innocuous cloud of "other employment" shadowed the real reason(s) for leaving. The two remaining telephone contacts for whom exit interviews were compared changed their reasons for leaving from working conditions to money when queried on the phone.

With reference to the other questions asked during the telephone contacts Table 16 summarizes the replies. For the full statement of the questions in Table 16, see Appendix G.

Insert Table 16 about here

Some of the other replies to the first question concerning the primary reason for leaving this firm included (a) petrified organization, (b) restricted environment, (c) management style, and (d) personnel policies.

The telephone contacts indicated some 39% of the former employees had changed jobs again within one year (reference question eight). Over one half of the quitters claimed they would not return to this firm. A resounding 83% of the former employees doubted that the exit interview information was even reviewed, let alone used to improve things. Even though some 74% of the voluntary quits believed the interviewer understood their reasons for leaving, the catch all of "other employment" sufficiently clouded those reasons.

The influence of the direct supervisors had more bearing on individuals terminating than did the General Manager (questions five and six). The replies to question seven substantiated that conclusion. It appears that except

Table 16

Summary of Responses to Telephone Contact Questions.

<u>Question Number</u>	<u>% of Responses indicated</u>
2	65% gave a full explanation of reason for leaving during exit interviews.
3	74% felt the interviewer understood the reason for leaving.
4	83% believed the exit interview results were <u>not</u> reviewed nor used to improve things.
5	44% thought their supervisor had a direct influence on their leaving.
6	48% believed the General Manager directly influenced their supervisors.
7	66% felt the actions of the General Manager <u>did not</u> influence their decision <u>to leave</u> .
8	61% were in the same job they took when they left this firm.
9	78% thought others would be leaving for similar reasons.
10	52% stated they would not return to this firm.

in isolated incidences the General Manager was too far removed from the individual terminees to have any direct influence on their decision to quit.

The telephone contacts constituted a cross check on the exit interviews. They evoked a bit more criticism of the firm than was evidenced in the exit interviews, yet did not provide any other useful information. The telephone contacts were expensive and time consuming and were of little use in the understanding of turnover. They did help the graduate assistant complete a course requirement.

Four conclusions can be drawn from the analysis of the telephone contact responses. The first is that once employees voluntarily quit they will not return (question ten). Secondly, terminating employees view the exit interview process as meaningless (question three). The third conclusion is that approximately 40% of the leavers will change jobs again within a brief period of time (question eight). The fourth conclusion is that "trigger events" of Roseman (1981) do cause turnover.

Retention Data

Retention information on new college hires proved to be elusive and inconsistent. Accurate employment records (hiring codes) and termination data were difficult to obtain even for the most recent years. Documents available were

often hand written and evidenced many corrections. Totals and percentages did not agree. Individuals were coded as engineers simply because they were working in a research and engineering department. The reported number of college hires in some years varied as much as 100% between official reports and actual starts. In one year, the reported number of engineering college hires exceeded the total division hiring for that year by over 100 employees.

The documents reviewed for retention data included division quarterly reports, employment histories from both strategic plans and operating plans, special reports on college hire retention, start and termination listings, and summary reports on voluntary terminations. Despite the inconsistencies and the inaccuracies in the data they did provide some useful facts. Much of the data was personally reconstructed and corrected through a detailed investigation almost on a name by name basis. The retention data is presented in chronological order commencing with the first reports available from 1978.

1978

Table 17 summarizes the information contained in an interoffice memo from a senior industrial relations representative dated January 1978. The memo was addressed to the Corporate Office Manager of College Relations. The figures in Table 17 represent a bench mark for comparison

with later years. Two of the years in the table depict a loss of over 45% of the new college hires in less than four years.

Insert Table 17 about here

No other reports from 1978 pertaining to college hire retention were available to verify the information in that year. Of the 1976 new college hires 46% of them terminated within less than two years of service with the company. Despite the paucity of facts, a significant loss of engineering hires occurred well before acquiring four years of service.

1979

For this year, one college hire retention report was acquired from the employment section files. The report was in chart form and was prepared as backup data for the division's year end quarterly report to the corporate office. Table 18 includes the relevant figures for retention of engineering college hires as prepared by the Manager of Employment.

Insert Table 18 about here

Table 1.7

Percent of Engineering College Hires Remaining, 1978

Year of Hire	Number Hired	% Remaining after Years Shown			
		1	2	3	4
1973	19	89	79	74	53
1974	8	100	100	100	--
1975	20	80	55	--	--
1976	24	54	--	--	--
1977	25	96	--	--	--

Table 18

Year End Engineering College Hire Retention Report, 1979.

<u>Date of Hire</u>	<u>Number Hired</u>	<u>% Remaining at Year End.</u>				
		<u>1.</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
1974	6	100	100	100	67	33
1975	18	78	67	56	44	--
1976	21	76	57	33	--	--
1977	14	50	50	--	--	--
1978	13	54	--	--	--	--

A cursory comparison of Tables 17 and 18 reveals the inconsistencies between two official documents. The number of college hires differs for four of the years. The percentage of college hires remaining agrees for only those hired in 1974. The data for 1979 display a much more disturbing trend. That data indicate that well over 50% of the new graduates terminated employment between the second and third year of service. Of the 1974 hires, 100% remained after three years service but by the end of five years only 33% of the new hires for that year were still employed.

Though the reports for 1978 and 1979 disagree, the message from both years is obvious. There was a high turnover of engineering new college hires. As in 1978 there were no qualitative evaluations nor descriptive reports available to explain the reasons for terminations, nor was there any explanations of the discrepancies between the 1978 and 1979 reports.

1980

Two college hire retention reports were acquired for the year of 1980. One of them was so obviously incorrect that I had to assume it was from another division or it was reporting on a different set of facts. That report was also received as an official document from the Employment Manager and is included as Appendix L. The number of college hires from 1974 through 1980 are overstated for each

year, some in excess of 1000%! For the year 1980, The report in Appendix L claims 161 new college hires. The total division hiring for that year was only 121 which included 51 engineers with no indication of how many were new graduates. Rather than belabour the confusing facts in that report, I will discuss the second document received for 1980. That document was from the division's operating plan and the numbers reported appear to be more reasonable. They generally agree with the 1979 retention report and are shown in Table 19. The numbers also agree with those I reconstructed from my personal review of the weekly start lists for that year.

Insert Table 19 about here

Once again the relationship of turnover and tenure is readily apparent from Table 19, as it clearly depicts the high turnover of new graduates within the first three years.

1981

Documented retention reports for the year 1981 were not received for review. A one page comparison report on engineering college hire retention (prepared by myself in 1981) included the only division specific data on retention. The number of hires for each year was determined by

Table 19

Engineering College Hire Retention, 1980

Year and Number Hired		% Remaining after Years Shown					
		<1	1	2	3	4	5
1974	6	100	100	100	100	68	33
1975	18	94	78	67	56	44	44
1976	21	95	76	57	33	33	--
1977	14	100	50	50	50	--	--
1978	13	100	54	39	--	--	--
1979	19	100	100	--	--	--	--

reviewing weekly start lists for each year. Voluntary terminations were derived from the weekly termination lists for each of the years. Percentages from two other divisions were obtained via telephone from the Employment Managers at those divisions. Table 20 depicts the retention information available for 1981.

The average percent remaining column is not too meaningful due to the difference in size of the divisions (this Division 3,000 Division A 12,000, Division B 8,000). The number of college hires for each of the divisions was also in direct proportion to the total employment figures which cause the average percent remaining figure to be misleading.

Insert Table 20 about here

The retention statistics for the years through 1980 confirm the trend of high turnover within the first three to five years of service for new college hires.

1982

This was the first year for which seemingly more comprehensive documents were recovered. The first document (dated October 1982) was an interoffice communication to the CEO from the Vice President of Industrial Relations. This

Table 20

New College Hire Retention Comparison, 1981

Hire Year	% Remaining at Year End, 1980			
	This Firm	Division A	Division B	Average
1974	27	30	27	28
1975	45	25	37	36
1976	44	30	44	39
1977	46	35	51	44
1978	30	55	68	51
1979	76	80	70	75
1980	90	87	88	88

communique reported on a visit by the Corporate Director of Personnel to four of the divisions. He met with responsible personnel at each location to ascertain the reasons for engineering voluntary terminations. Engineers were separated into three categories (a) new college hires, (b) new experienced hires, and (c) long service (7 plus years) employees. Table 21 summarizes the top four reasons for voluntary terminations as interpreted by the Vice President of Industrial Relations, the Employment Manager, the Manager of Engineering Personnel and the Manager of Compensation. The reasons were not restricted to the time frame of the document but were rather generic in nature.

Insert Table 21. about here

Though 17 reasons were identified in the original document, only the top four reasons assumed for each category are presented. Due to the prominence of the lack of communication, the group was asked to elaborate on that reason. The lack of communication was interpreted to included (a) no downward communication, (b) inadequate one-on-one discussions, (c) poor program knowledge, (d) lack of performance feedback, (e) unavailability of upper

Table 21.

Reasons for Engineering Voluntary Terminations, 1982

Reasons	Assumed Rank by		
	College	Experienced	Long Service
	Hires	Hires	Employees
Lack of Communication	1	2	3
Job Challenge	2	1	1
Poor Supervisory Skills	3	-	-
Salary Compression	4	3	2
Lack of Responsibility	-	4	-
Career Growth	-	-	4

management, (f) no group or department meetings, and (g) no company newsletter.

The second document reviewed for the year 1982 was an eight page report (dated December 1982) summarizing the voluntary engineering terminations for that year. This document was prepared by the compensation section of industrial relations.

The first page of this document cited an 8% figure for voluntary engineering terminations. The major reason(s) for terminations was explained away by "Data not available. New exit interview form under consideration." [italics added]. New college hire quits were not identified but the major years of service grouping of terminations was reported as two to three years.

The second page of the report presented the three major reasons for termination as (a) other, (b) advancement, and (c) salary. This is somewhat inconsistent when page one claimed that the data were not available!

The remainder of the document consisted of a series of charts showing the breakdown of voluntary quits by respective departments, which effectively thinned out any responsibility for turnover.

This December 1982 summary also reported on the number of terminations per month, number of voluntary quits by

performance/potential ratings, by age, and by years of service. I compared the weekly and monthly termination lists with this document and observed that the number of voluntary terminations by month did not agree.

The 1982 documents evidenced some interest in the reasons for voluntary terminations. It was unusual that the December report basically ignored the existence of the October memorandum. The reasons for terminations also differed between the two documents, communication in one versus other, job challenge versus advancement, and supervisory skills as opposed to salary.

The 1982 reports paid little heed to the prior year summaries (despite their inaccuracies). The turnover of new graduates was virtually ignored. The retention statistics for 1982 did not present a true picture of the facts. It is no wonder that the data for 1982 did not picque management's curiosity.

The 1982 memoranda dramatically emphasize the importance of accurate and meaningful reports. This problem is not unique to this firm as evidenced from my experience and substantiated in the literature review (Dalton and Todor, 1979; Hall, 1981; Mobley, 1982a; Price, 1977; Smith and Watkins, 1978; and E. T. Thomas, 1981).

A single chart titled Engineering Retention History dated April 1982 depicted the percentage of college

graduates retained from the previous seven years. No indication of the source nor of the use of that chart was discovered. The message was very clear that the turnover of new graduates was quite severe and was obscured by the normal turnover of 3% as presented in the December report.

The chart indicated that 56% of the new graduates with less than five years tenure had terminated. Of those with less than four years service, 54% quit. Seventy percent of the college hires with three years or less experience selected other employment. Engineers with two years or less experience showed only a 24% turnover, whereas those with one year evidenced a 10% loss. The cost impact of retraining replacements for these engineers should have been cause for alarm. Even considering a minimal replacement cost the figures approach one quarter of a million dollars!

1983

The college hire retention history from 1982 was updated in July of 1983. Table 22 presents the turnover of new graduates hired during the years 1977 through 1981 and reflects the updated information.

Insert Table 22 about here

Table 22

College Hire Turnover, 1983

Year Hired	% Quit by		% Change	
	1982	1983	1982	1983
1977	54	71	17	
1978	70	90	20	
1979	24	52	28	
1980	10	44	34	
1981	4	19	15	

The turnover percentages for 1978 appear to be somewhat higher as compared to the other years. During that year the firm hired several experienced engineers in anticipation of winning a new contract. The contract was awarded to another firm and resulted in a reduction in force. Though new college hires were exempt from layoff many of them became uneasy. In addition there were few challenging work assignments available to the new graduates. These factors led to a somewhat higher turnover for the graduates hired in 1978.

The five years covered in Table 22 represent a 59% loss of college hires with less than five years of experience, which substantiates Mobley's (1982a) conclusion of the relationship of tenure (and age) to turnover.

1984

Three very useful documents were acquired which summarized all of the prior year records. Though some minor inconsistencies were still evident in the number of new hires for a given year, these documents focused on the turnover of new engineering graduates.

The first of the documents was a hand written report prepared for the Vice President of Human Resources. It showed the graduation year and the percentage of new hires remaining with the firm after successive years up to five years of service starting with the graduate new hires in

1974 through 1983. From that report I determined the average cumulative percent loss after each year of service for the 1974-1983 new hires. Those averages shown in Table 23 depict an approximate 18% loss of new hires per year following their graduation. Literally interpreted that constitutes a 50% loss of college hires within three years, and a 66% loss before the fifth year of employment.

Insert Table 23 about here

To compare those losses to other operating units I was fortunate to obtain average retention rates for the total corporation over the past ten years. Those averages display a similar trend as reported in Table 23.

The same report which contained the average five year retention rates also reported the five major reasons for voluntary quits as (a) salary, (b) advancement, (c) assignment, (d) area, and (e) supervision.

To compare these losses with other firms, I acquired information on the percent of engineering turnover for the first six months of 1984 from four competing corporations of comparable size. Although the six month percentages did not focus on new college hires, they do indicate that the turnover issue is not peculiar to this firm nor to the

Table 23

Average Five Year Retention Rates, 1974-1984.

Years After	Cummulative
<u>Graduation</u>	<u>Loss (%)</u>
1	16
2	38
3	50
4	61
5	66

corporation. Appendix M compares the plot of the six month average percent turnover for this corporation with four other firms. One corporation had a higher turnover rate, one was equal to this corporation, and two had lower percentage losses of engineers.

The third report obtained for the year 1984 was an interoffice memo to the corporate Vice President of Human Resources. That memo cited retention figures for the class of 1980 for this division and two other divisions. The memo also outlined a few suggested programs to improve retention of new graduates. The retention programs outlined were already in place at this firm, and were touted as the reason for the slight change in retention percentages (65% to 62%) between the third and fourth years depicted in Table 24.

Insert Table 24 about here

This firm and Division A had closely paralleled slopes to their retention curves but in the third year the slope of the retention curve evidenced a marked divergence. Programs that reportedly accounted for the change included (a) an initial orientation, (b) a no fault performance review within 60 to 90 days, (c) an in-depth engineering

Table 24

Percent of 1980 graduates remaining with the company.

Division	% of 1980 Grads Remaining After			
	1	2	3	4 Years
This firm	77	69	65	62
Division A	81	65	54	42
Division B	64	56	47	38

orientation, (d) engineering counseling at regular intervals, and (e) an engineering exit interview program. The 1984 retention data did receive some attention at the corporate level and similar programs were recommended for all of the operating units to address the problem of turnover. The effects of corporate level attention and corporate wide programs will not be known for several years.

The investigation of the available retention records highlighted a few problems. Records were missing and inadequate. The number of new college hires varied from report to report. No individual was assigned the responsibility for monitoring retention. The high turnover of new college graduates was masked by simply reporting a turnover figure for all engineers. That figure appears acceptable when compared to competing companies.

Retention data collection was further complicated by the lack of accurate information on voluntary quits. The percentage of turnover attributable to any specific department was low enough so as to cause little concern. Little attention was evidenced in the retention data concerning minority or female engineers. The focus of much of the data was on tenure or length of service. The reasons for turnover were not fully explored nor questioned in any of the documentation available.

Leader Information

To gather information on the three CEOs several data sources were used. Most of the sources included facts concerning all three of the CEOs and they will be evaluated first. The leader initiatives presented in Chapter III, and included in Appendix I, were more pertinent to the time in office of CEOs B and C. Those initiatives will be evaluated after the review of data sources common to the three CEOs. The attitude survey (Appendix J) was completed while CEO C was directing the firm. The analysis of the attitude survey follows the evaluation of the leader initiatives.

The sequence of presentation of the leader information evaluation and the relationship to the CEOs follows:

1. Written correspondence (CEO A, B, and C).
2. Staff interviews (CEO A, B, and C).
3. Other interviews (CEO A, B, and C).
4. Personal interviews (CEO A, B, and C).
5. Leader initiatives (CEO B and C).
6. Attitude survey (CEO C).

Written Correspondence

Several written documents were obtained which were signed, if not authored by the CEOs'. The memos cover the time frame from June 1979 through January 1986 which ensured a representative sampling of each of the CEOs' written directives, Division notices and other memos written by the

General Managers were collected from various sources. Twelve of these memoranda were signed by CEO A during the time span from June 1979 to March 1981. Twenty-nine similar documents signed by CEO B from April 1981 to October 1983 were reviewed. Notices with CEO C's approval spanned from June 1984 to January 1986 and accounted for 22 more documents. Each memo or notice was read and notations were made as to style, content, wording, and length. I had hoped to discern some differences in the CEOs based on their written communiques.

CEO A. The older memos (1979-1981) written by CEO A displayed a rather consistent pattern. They were cryptic, direct, and easily understood. None of the 12 written notices exceeded one page, and they contained one or two paragraphs at the most. Clearly evidenced in each message was "your responsibility" to comply. Admonitions appeared in four of the CEO's directives as "violations will result in disciplinary action" and "noncompliance will be reported to me for appropriate remedial or disciplinary action." No alternates had signed any of the memos from CEO A. The subject matter of the written notices ranged from season greetings, safety, security, visits, bulletin approvals, to telephone useage.

CEO B. The 29 notices attributed to CEO B were much longer than those of his predecessor. This group of memos

contained much more specific and detailed instructions and explanations. Flowery language and more complex sentence structure were evidenced in CEO B's directives. The range of subject matter was similar to the first set of notices, but they also included subjects such as Quality Circles, a Management Operating Council, and a General Manager's Quarterly Report.

CEO B's epistles contained many mixed messages of teamwork and togetherness along with the typical management exhortations of "compliance is expected," "will result in disciplinary action," and "no exceptions without my personal approval." Examples of extracted more positive terminology are:

Sense of caring for the individual.

Dedicated innovative efforts.

Can do attitude and demonstrated teamwork.

Foster a commitment to the principle and spirit of the program.

Enthusiastic support is greatly appreciated.

I am committed and I expect members of our team to be similarly committed.

Strengthen our positive performance.

Your cooperation is required and appreciated. (CEO B's memos, 1981-1983)

Like CEO A's memos, none of CEO B's memos were signed by any designated alternates.

CEO C. Twenty-two memos signed by CEO C were reviewed and compared to those of the prior CEOs. These written documents covered very similar subjects as the other notices. CEO C's style was very terse, direct, and left little possibility of misunderstanding as to who was in charge. His "or else" statements were included in each of his communiques. Typical of these admonishments were phrases such as:

I will track this program personally.

Where violations are found appropriate action will be taken.

You are going strongly in the wrong direction. Tell me your plans for getting back on track.

Your coopertion is expected. (CEO C's memos, 1984-1986)

One of CEO C's letters was an individual reply to an engineer thanking the person for submitting a rather extreme suggestion. Another memo included the first mission statement ever prepared for the firm. The 1985 division objectives were itemized in a letter from CEO C addressed to all employees. One of the primary objectives was the growth and development of personnel resources.

Summary. The 63 memos reviewed do reflect the personalities of the three CEOs and to a degree are indicative of their

management styles. CEO A was rather blunt and direct without mincing words. CEO B attempted to use his written correspondences to enlist support for various activities and to project a positive, upbeat image. CEO C's messages were very directive and commanding in nature and specified the consequences of noncompliance.

The written notices gave additional indications of the differences among the CEOs. The memos of CEO A and C appear to be typical management exhortations. Their memos seemed to depend on their office, or title, to almost demand compliance. There were no requests, no solicitations of support and few positive reassuring remarks.

CEO B used his written communiques more effectively. Several of his comments were more indicative of leadership as opposed to management. He wrote of spirit, positive performance, enthusiastic support, can do attitude, a sense of caring, commitment, and team members. These phrases are more visionary than concrete. They are more future and goal oriented, than present and fear focused. Through his written messages CEO B articulated and embodied ideals as suggested by Bennis (1984) and W. B. Martin (1985). His communiques contained both the lyrics and the melody of Levinson (1981, p. 327) and they made demands on people (Burns, 1978). I submit, that based on the sample of

written correspondences, that CEO B evidenced more leadership behavior than did the other two CEOs.

Staff Interviews

The 35 staff interviews were not as lengthy nor as thoroughly detailed as the exit interviews and the follow-up interviews were. These interviews did provide some very insightful and dichotomous descriptions of the three CEOs. I have elected to tabulate the descriptive phrases or one word comments from the staff interviews to provide a composite graphic of the CEOs. Prior to that tabular presentation, a physical description of the CEO's may help to understand some of the staff members' comments.

CEO A was a rather rotund man. He weighed approximately 250 pounds and was 5'10" tall. He was non-degreed and had progressed from the factory floor to become a General Manager at another division in the corporation. He was considered very down to earth, honest and approachable.

CEO B, a degreed engineer, was very tall, lean, and athletic. He was 6'4" in height and weighed 195 pounds. He also had progressed to become General Manager at another division, but his career path was in the engineering field and in a discipline more in line with the firm's technology.

CEO C is also a degreed engineer. He had progressed through various engineering positions to become a General

Manager at still another division in the corporation. His educational background was not aligned with the firm's technological thrust. He is 6'0" tall and weighs about 215 pounds.

Two interesting allegorical descriptions from the staff interviews also contrast the behavioral styles of the CEOs. One engineering director indicated that if you were charging up a hill and happened to trip, the CEOs' reaction would be as follows: "One would stop to help you, another would shoot you, and the other would kick you down the hill!" One of the firm's vice presidents had recently purchased a car and used that experience to describe the three CEOs. He likened one to a mechanic, one a car salesman, and the other to a loan officer.

Insert Table 25 about here

Table 25 presents the descriptions from the remaining staff interviews. Two of the 35 staff professionals refused to comment, compare, or evaluate any of the CEOs. One simply stated, "I'd rather not." The other said "I don't want to take the chance of getting any deeper into trouble."

The staff interviews point out a very common problem concerning CEOs. They are not held in universal esteem nor

<u>CEO A</u>	<u>CEO B</u>	<u>CEO C</u>
<p>Accessible, honest, production oriented. Attacked problems not people. Good old boy. Very even keel, working type, no pretenses. Fire fighter, impulsive, flit from subject to subject. Allowed staff freedom to do their job. Brought in own troops in key spots. Good with peers, people above. Corporate know how and influence. Choose own close friends. Corporation is his life.</p>	<p>Very personable, visible, a great symbol. Showy, suave, good image, impressive. Used symbols and set tough goals. Attacked people but would apologize. Little staff support, intelligent, lots of show, not enough depth. Improved communications and was heavily involved with new grads. Used conflict as a means to manage. Knew what was going on. Good front man, personable but used corporation as means to personal ends. Few close friends, aloof and status conscious.</p>	<p>Controlled access, formal, structured, workaholic, stern, budget conscious. Corporation is his life. Do it one way, little staff support, own team, strict control of details. Judgemental, textbook management style. Decisions at higher levels, wide span of control. Guide lines and policies were to be followed. Close friends with inner circle. Communication sources very directive.</p>
<p><u>Synopsis</u> Down to earth, hard worker, no frills, sincere, allowed organization to run itself, concerned with production versus long range planning.</p>	<p><u>Synopsis</u> Upbeat, positive, symbol, future outlook, engineering oriented. Caused people to think. Created positive upbeat environment. Rah rah type,</p>	<p><u>Synopsis</u> Strict, stern bottom line business approach. Details thoroughly controlled and explained. Financial focus.</p>
<p>Table 25 <u>Comments from Staff Interviews.</u></p>		

are they uniformly perceived by the members of an organization.

CEO A often visited areas where he felt more at home and comfortable. His expertise and experience were manufacturing or production oriented, and he managed those areas quite well, almost to the point of ignoring the other major functions (engineering, purchasing, etc.). Significant improvements in manufacturing, delivery schedules, and factory modernization were attributed to this CEO.

His term as the general manager at another division in the corporation was used to advantage. Competent employees from that division were offered transfers and promotions. He also maintained his political ties with influential people at the corporate office. Following his term as CEO he was assigned to an advisory or staff position in the corporate office, yet maintained his home and office locally.

Although the initial emphasis on hiring new graduates began during his regime, he had little to do with the new engineering hires. CEO A communicated well on an individual or small group basis, but he seldom addressed any large group of employees. His staff members were authorized, allowed, and expected to carry out their duties with little interference or help from the CEO. As a result the staff worked together in a cooperative and helpful manner.

CEO B made more use of communication channels. He was much more visible and relied on myths, symbols, and stories. He challenged and changed the organization. Often he retreated to poor management tactics but he did seem to be in a transition phase from management to leadership. His typical modus operandi was that of crisis management. The use of conflict was but another of his management tactics.

CEO B enjoyed the fanfare of large group presentations and was an excellent speaker. He began a series of breakfast meetings, quarterly presentations to all employees, and monthly meetings for all supervisors.

Although he came to this firm from another division he did not bring any of his prior subordinates with him, as did the other two CEOs. Rather than building a team and improving conditions in the firm, he was more interested in using his position as a stepping stone in his career. Following his term of office at this firm, he became the President and Chief Executive Officer of a much larger competing company.

Relative to retention CEO B was the only one of the three who showed any interest in the young college graduates. Under his direction several of the leadership initiatives were instituted. The leadership initiatives and the retention data will demonstrate CEO B's impact on retention.

The third CEO, like his predecessors, came to the firm from a similar assignment in another division. He brought with him several of his former key confidants and placed them in strategic positions within the firm (Controller, Director of Industrial Relations, Director of Management Information Systems, Chief of Security, and so on). Within three months of his arrival, four of his inherited staff members resigned.

CEO C takes immediate control of the important details by requiring his approval signature on documents previously authorized at much lower echelons. His staff meetings are endurance tests, often lasting into early evening hours. One of his staff jokingly mentioned a requirement to be the General Manager was to have a strong kidney.

Any changes in CEO C's decisions or policies are always accompanied by negotiation. He would approve a change in performance/potential rating (after much debate) for an individual, but it had to be accompanied by an offsetting change for another employee. He seldom praises without questioning the status or progress on some related issue. The communication avenues cleared by his predecessor (bulletin boards, quarterly meetings, breakfast discussions, newsletter, etc.) have been disannulled. His few attempts at communicating with large groups of employees were but one

way monologues. His presentation style does not compare to his predecessor.

The staff members under CEO C have displayed uncooperative and finger pointing behavior. Helpful attitudes have been replaced with cover your hind end, document everything and be prepared in case he asks "What if ...?". The management style throughout the organization has become one of concern and fear accompanied with apprehension, waiting for the other shoe to fall.

The purpose of CEO C's business like, formal, bottom line approach, and close attention to details is probably to build financial and schedule responsibility into the organization. He inherited these problems from CEO B who was more interested in his personal growth as opposed to the firm's.

The staff interviews definitely highlight the individual differences of the CEOs. Some of the interviewees had felt the ire of one of the CEOs and were particularly critical and ignored any accomplishments of that CEO.

The emphasis on symbols, goals, environment, and communications of CEO B and his involvement with the young college hires was apparent. CEO A was much more production and now oriented than were the other two. CEO C is very formal, strict, and businesslike. The bottom line and his

concern about his impression on the board of directors was evidenced in his exacting management of details.

It was interesting that none of the staff members used the term leader or leadership in describing the CEOs. This, despite two rather leading questions I asked: "Which of the three would you consider the better leader? How would you describe the leadership behavior of the three CEOs?"

The staff interviews provided little in-sight into the CEOs' effect on retention. The retention data will further explore this effect. The interviews were an excellent source of folklore and little known incidents concerning individual staff personnel and a particular CEO.

The use of signs, symbols, and speeches to elucidate and publicize goals by CEO B appears to be the only hint of leadership behavior deduced from the staff interviews.

CEO B appeared to be in a transitional phase between management and leadership, whereas A and B were ensconced in a particular style of management, one production oriented, the other bottom line focused.

Other Interviews

Fifteen other individuals were interviewed during the course of this study. I thought these random or chance interviews with individuals tangentially associated with the CEOs might add some insight into the leadership behavior of the CEOs.

Appendix N identifies the interviewees, the site and length of each interview, and which of the CEOs information was pertinent to. The diverse occupational backgrounds of the interviewees provided a wide angle view of the CEOs.

A consultant was retained by the firm to work with CEO B and his staff, and an interview with him was very informative. Four of the interviewees (number 5, 8, 12, and 15) were females and enlarged the predominantly male views of the CEOs to compare with the writings of J. Hunsaker (1985), Izraeli and Izraeli (1985), and Rice, Bender, and Vitters (1980). Rather than recount each of these interviews a comment or two from each respondent will sufficiently synthesize the interview notes.

Consultant. "Mr. [B] has made great strides in controlling his temper and focusing on problems and not people."

Guard. "Both Mr. [A] & Mr. [B] always say hello. Mr. [A] often left late at night and would stop and talk for a few minutes. Mr. [B] is always in a hurry and expects people to get out of his way."

Barber. "I really like old Mr. [A]. He liked to talk about all his problems and was very relaxed. Mr. [B] was always up tight and bitching about people. He even wanted me to cancel appointments to fit him in at his convenience."

I remember Mr. [C] from years ago, I'll bet he has the people scared to death."

President of another firm. "Boy! Mr. [B] has really changed things over there. You guys are sure getting a lot of young talent. Too bad we can't get him involved in our weekly CEO meetings. They would really help him. I guess Mr. [A] was relieved to get rid of all his headaches."

Security clerk. "Mr. [C] came into our secure area as though he owned the place. He didn't like it that I challenged him and made him have an escort. I'll probably get fired, but did what I was supposed to."

Executive recruiter. "I'm glad I don't work there anymore. Wait till Mr. [C] starts chopping heads. At least Mr. [A] was quite predictable and easy going. After the rah rah approach of Mr. [B] it will be interesting to see who leaves now."

Corporate staff member. "That division moved from being laid back with no discipline under Mr.[A], to very upbeat and taking long shots with [B]. Wait and see how quickly this guy [C] brings things to a grinding halt."

Vice president's wife. "Of the three I think Mr. [B] was much more sociable but I seldom saw his wife. Mrs. [C] is very nice and quiet, she almost has to be when he is around. Mr. [A] was pretty good, but he was always talking business."

Public information officer. "I had a lot of freedom under Mr. [A]. He just let me do my job and never bothered me. Mr. [B] wanted all the press releases to go through him and have his name or picture included. Mr. [C] doesn't see any need for this office, so I'll probably start looking around."

Engineering director. "I really was happy to get away from Mr. [C] when I transferred here. Mr. [A] respected my opinion and I started to grow again. Then when Mr. [B] got here I was pleased with the futuristic outlook. He really got us moving. Now that Mr. [C] was appointed as CEO I want you to help me transfer. It won't be long until he remembers me and does me in." (One year later this individual took early retirement and accepted a position with one of the firm's competitors.)

Factory worker. "I can remember Mr. [A] coming out on the floor and just gabbing away. He was always interested in what I was doing. He even tried to show me a quicker way to solder. We had a big laugh when I told him he wasn't certified. Now Mr. [B], I've never met him, but he sure has put a lot of pictures and charts around the place. It's almost like I need a pictorial aid to show me how to do my job."

Professional recruiter. "We could never get any interest from Mr. [A] in hiring college graduates. When the

new guy Mr. [B] came in you'd think it was a sin to be old and non-degreed. He surely changed this place though. I'm glad Mr. [C] was appointed CEO, he'll put a stop to this new way of doing things. He is tough and will do things the right way. I knew him 20 years ago."

Broker. "You people really turn the General Managers in and out very quickly. It's a good thing they don't seem to have any effect on the company stock. I knew Mr. [A] quite well and handled his personal investments and stock options. He gave me a few clues as to when to buy and sell just because of his own orders. Mr. [B] is a lot smoother. I'll bet he doesn't stick around very long."

College dean. "This new boss you have Mr. [B] is like a breath of fresh air. He is really interested in what we are doing and wants to be a partner in joint research efforts. I really enjoyed meeting him and pleased he is so supportive in hiring our graduates. He talks well but I don't see any results in terms of financial assistance to our programs."

Training and development manager. "Since Mr. [B] came on board we really increased our training budget. He always handed out our certificates and patted everyone on the back. Mr. [A] never cared about any of our programs. It's too bad that Mr. [C] cut our budget despite his stated goal of personnel development. We had made so much progress and now we are back where we were four years ago." (This individual

left to take up private consulting about three months after CEO C came on board).

Summary. These other interviews did not contradict the staff interviews. The interviews shed little light on the impact any of the CEOs had on retention. A few inferences can be drawn however. CEO A made little impact and allowed the division to wander without too much direction. CEO B seemed to add purpose and direction and goals. Under CEO C, either through the inactivity or the indecisiveness of individuals, the firm seemed to retreat and wait for his next move.

The human characteristics and down to earth behavior of the CEOs as managers were borne out by the interviews. There was no evidence of CEO A nor CEO C being described as a leader. The several comments from the other interviews described CEO B's leadership behavior. He was described as a breath of fresh air, futuristic, up beat, smooth, and willing to take risks. Positive changes in the organization were also ascribed to him. Based on these other interviews I conclude that CEO B exhibited more leadership behavior than his managerial counterparts.

I feel the CEOs missed many opportunities to imprint their styles on employees and other interested parties. My conclusion is that CEOs do not realize the importance of

everyday incidental contacts concerning their personal image or that of the firm.

The myths, symbols, and stories derived from these interviews were mostly attributed to CEO B. The others seemed more intent on managing than attempting to lead the organization. In retrospect it almost appears that each of the CEOs had a specific mission: The first to correct production and scheduling problems; the second to infuse enthusiasm, youth, vitality, and growth; and the third to bring budgets under control and improve profits. Within the framework of those missions or objectives, many of the comments from the various interviews are more readily understood.

Personal Interviews

The interviews with each of the CEOs were very difficult to schedule. Suspicious, protective secretaries who screened all calls had to be almost charmed into allowing me access. To overcome the overly protective gate keepers, I called CEO A well after normal quitting time and interviewed him on the telephone. CEO B was approached at a social for new college hires and was quite amenable to an interview after work. CEO C, whom I interfaced with 20 years ago on an important program, readily agreed to be interviewed.

I prepared a list of questions on ten subjects to be

covered in each interview in somewhat of a random order. These initial questions were supplemented by others which depended on the particular response of each CEO. My pre-interview questions were:

1. How would you describe your first year here?
2. When you come into a new division such as this, how do you get the existing management to follow your leadership?
3. There were several changes in your staff. Was that due to bringing in people with whom you have had prior experience?
4. Why do you feel you were chosen to head up this firm?
5. What does the future look like for us?
6. There were several problem areas when you took over the division. How did you address them?
7. What were (are) your goals for this division?
8. College hiring has received much emphasis of late. What are your feelings on that program? Do you believe we have any problem in keeping these new grads?
9. We've talked about management. Do you feel there is a distinction between leadership and management?
10. Although there must not be much of it, what do

you do in your free time?

The phraseology and tense of the ten questions were modified to suit each interviewee as related to their time in office. Brief notes were taken during the interviews and were transcribed immediately following each discussion. The CEOs' interviews are summarized individually, followed by my reaction, interpretation, and explanation. The niceties, nuances, and chit-chat that opened each discussion are omitted as they are not pertinent to this research.

The interview with CEO A was conducted after work hours via telephone due to the difficulty in arranging a mutually acceptable meeting time. In June 1985, Mr. A had been out of the general manager's position for almost four and one half years and was serving as a special assistant to the Corporate Vice President. He maintained a local office in a facility separate from the main plant. His replies to my questions, as reconstructed from my interview notes, follow.

My first year here was definitely a challenge. There were major problems that needed to be corrected very quickly. I commuted home on weekends so I could spend many long days and nights in the plant. Those first few months were very tiring. Once we moved here things improved quite a bit. That first year

seems a long time ago and I guess it is.

Getting the support of the existing management team wasn't very difficult. They were all very anxious to make a good impression. Maybe my reputation from [another division] had everyone on their toes. I pretty well let everyone know what I wanted during my first staff meeting. I probably stepped on a few toes by going out on the floor, but I had to know what was going on firsthand. The management team knew I was the boss so I had no problem getting them to accept my approach to things.

The shop problems here were very similar to those we faced at [another division] and I knew people there who solved them for me, so naturally I brought in good competent people and replaced those who were not cutting the mustard.

I've often thought about why I was selected for the job here and wondered why me? I was already a general manager, but I guess the challenge to get production here on schedule and to update the machine shop was a good opportunity. The team at [another division] had been through that, so when I accepted the challenge I brought a few key people with me.

The future in this division back then looked pretty good. We had some good, solid, long term

production contracts and a good foothold on the market. If we turned things around, and we did, I predicted then that we'd double our size. In retrospect I misjudged that growth because we've almost quadrupled in size and our sales have increased every year since I've been on board.

The main problem I had to address was convincing the corporate office to automate our factory. That took a few dollars, but it is still paying off. We had a good labor pool to draw on but had to retrain almost everyone we hired. Training people not only to do things but to do them right and consistently was a real challenge. Once people learned the importance of quality and were properly trained I could relax a bit. A third problem area was marketing. We had the production base, a good engineering department but we needed more customers. I spent a lot of time on the road bragging about how good we were. Finally we brought in a good experienced marketeer and turned that area around.

The goals I had for this division back then were quite simple. Improve production, get things on schedule, increase sales, develop a new product line and train our employees. My staff members knew their responsibilities and supported those goals so I let

them run with them. If you look back we did a damm good job.

Hiring of college graduates, as you know, just started heating up before I left. We hadn't done too well, but I could see the benefits of bringing new blood into the organization. We needed some sharp young minds to operate all the new equipment in the factory. If we challenge the college graduates we should have no problem keeping them.

I think management is really doing the task of carrying out their [sic] assigned duties. The true leaders in this place, like Mr. K, are the ones who go beyond their area of responsibility and find better ways of doing things. They aren't concerned with today's problems, but are worried about four to five years down stream. People like him do their jobs well but also are constantly looking for new challenges.

I have a lot more free time now but I still think most of it is spent on airplanes running between divisions. My golf game hasn't improved and I'm getting too old to bowl any better. I still enjoy a good book and a chess game now and then. Of course the Mrs. and I really enjoy travelling. In fact, she has us booked on another cruise this fall

and arranged a few side trips to see the grandchildren. (Interview Notes, June 20, 1985)

On September 15, 1983, I approached CEO B after a barbeque and picnic for recently hired graduates and requested a brief meeting with him. During the walk from the park area back to the plant I explained the purpose of the meeting and discussed this research with him. His first question was, " who approved the study?" He was satisfied that the Vice President of Human Resources had approved the subject as well as the sources to be used. CEO B was quite interested in what the previous General Manager had to say and was disappointed to learn I had not interviewed him as of that date. We proceeded to the CEO's office and after an exchange of pleasantries he said "Well get on with it." His responses to my questions follow.

In my first year there have been major improvements in some areas. For example, the first problem area which had to be addressed was contract performance, i.e., keeping our commitments to our customers. We needed executive action to put them on track. We didn't have the discipline for top management to become involved, especially in programmatic problems. When there was a problem, the answer too often was "go solve it yourself," not "we will go find the resources to solve the problem." Now we have

improved the corrective action and provided effective systems and procedures to insure strong programmatic performance.

My management style is challenge! Some people mistake it as intimidation because I've been trained by some masters. But when you come into a company where you know no one, you set up tight objectives; you take in the reins until you understand who really performs and who doesn't; and you challenge people. you ask a lot of questions; and you give a lot of action items to see who is disciplined, who meets their commitments and who doesn't.

I don't like to bring people in from the outside. Here, where we had the talent inside we used the. But there were just some areas where we needed people, and there were instances where we had people in the wrong jobs. The few people I have hired are team players, they are here to help. We have moved and I want movers and shakers. That's what I'm being paid to do, to lead this company. We are also moving people around, not for parochial interests of the immediate manager but for the good of the corporation, so the business can grow and we can meet our objectives.

I was selected to head up this division because

they [the board of directors] wanted someone who understands the business, who has a proven track record in winning, someone who is a leader, who has developed some product and knows what it takes to win. A businessman who knows how to effectively take risks. When you've been in the business for 27 years and can walk into your customer's office and look him in the eye and say "I'll meet that, just look at my track record. That's a winner!"

The future is bright. We are financially sound. Our programs are on track. We are in a growing market. We have adequate resources to achieve our goals. But we have not had adequate growth in the past. We must grow to provide opportunity for our employees and an adequate return on investment for our shareholders. Growth is our major challenge. We are just completing our strategic plan which will guide us in the future. We have strengthened our marketing by creating a marketing staff to support all of our team. Most importantly, we are performing on our existing contracts and emphasizing that we are indeed, The [name withheld] Division!

Some of the problems I have already touched on. As for communications we've continued our weekly communications breakfasts. At these breakfasts, so

far, almost 400 people have been through one to two hours of direct communication with me. We established action items to resolve issues brought up at the meetings, and we followed through on them. We also have had quarterly meetings. During these meetings I discuss our performance to our operating plan and goals. I have also had the opportunity to attend management club meetings. Each time I go to a facility I address as many of the groups as possible. Our newsletter has expanded to include a want ad and a for sale supplement between issues. We have added more attractive and up to date bulletin boards in all of our facilities. At each location, people are too worried about protecting their own "rice bowl." When everyone is worried only about his own "rice bowl," the team suffers. To be successful we must allocate precious people resources to those programs that meet our strategic objectives. This sometimes is in conflict with the "rice bowl" mentality.

You know I distributed our goals to every employee in this division and they were very clear. As of this quarter we are well on the way to achieving all of those goals. Quality has improved. We've won a major new program. Sales and profits are up, and we are meeting our schedule and cost

commitments through team work. That's what I referred to as saying "I'll meet that," and then doing it.

College hiring was one of the top goals for this year as well. We have brought in a very qualified group of graduates, and we must continue to challenge them. I've met almost every college hire personally and know how vital they are to our continued growth. We have to train supervisors to give the new grads the opportunity to grow. The programs [leader initiatives] I have approved will help to keep the new hires, but if we don't challenge and grow them, we'll have to find supervisors who can [challenge them].

People who can challenge others to achieve more than the guy next to them, they are the leaders. People who keep their commitments, improve our image, and adopt a win-win attitude are the winners, the leaders. Those who cannot meet these criteria have been ignored in some cases. In other cases we have found them positions for which they were better suited, doing tasks they can manage for the real leaders.

I'm a very aggressive tennis player, but my expectations far exceed my ability, and my wife is

an 'A' player. In fact, when it comes to tennis, I'm just known as her husband. With reference to that fish on the wall, that fish is a tarpon. If you want to talk about tenacity, the tarpon is the fish. I like to think of the tarpon as being very aggressive, and I like aggressiveness. It takes years to catch one. In fact some fishermen have never caught one. Normally it takes two hours to bring one in, but I hooked it in a very sensitive spot in its mouth. It still fought, but it was solidly hooked, we brought it in within 15 minutes. It was 6'2" and weighed about 120 pounds. I paid \$600 to get it mounted and shipped. It goes where I go, it's hanging here because I have no other place to put it. My wife won't have it in the house. (Interview Notes, September 15, 1983)

Prior to the interview with CEO B, I was aware of rumors that he would be leaving the division very shortly. Those rumors were widespread throughout the organization. The rumors started about three months before the interview, and people cited the CEO's actions as corroborating evidence as to the truth of the rumors. CEO B had recently allowed his staff much more leeway. He was disinterested in details which he previously relished. Staff meetings, once regular and lengthy, now were brief and irregular.

Due to the rumors and his observed actions, I asked one additional question: "Is there any truth to the rumors that you will be leaving this division very shortly?" CEO B smiled, shuffled and stated:

Well I haven't heard of a promotion yet, and I've only been here slightly over one and one half years. Although we've turned this place around, there is still plenty to do and I intend to do it.

(Interview Notes, September 15, 1983)

As a postscript, which can be interpreted from the manner and the indefiniteness of his reply, CEO B resigned one month later to become president of a much larger organization. Shortly after his departure, five key individuals from this firm were induced to join him.

The personal interview with the third CEO was completed on September 19, 1985. It was more difficult to schedule as his calendar was planned almost three months in advance. In addition, his secretary assumed the role of major-domo in limiting unsolicited access. CEO C was very friendly and relaxed at the end of a normal work day. He offered me a cup of tea (his trademark), and was very inquisitive as to the purpose, approval, and expectations from my research. For a few moments I thought I was being interviewed. The CEO finally began the interview with, "Well, let's hear your questions." I asked the same

general questions used in the meetings with the two other CEOs. The replies from CEO C were transcribed from my notes taken during the interview and are summarized below.

It has been a very difficult year, difficult but good. The next and the next and the next will be better.

Coming from [another division] as General Manager I was familiar with many of the management team here and had confidence in them. When I heard the general manager's job was available, I volunteered for it. I saw, and still see, that this division has a tremendous future. With a competent staff I really had no concern with their cooperation and support of my leadership.

Each of those individuals who left my staff were difficult to lose and even tougher to replace. They felt they had a better opportunity at [another division], and I reluctantly agreed. Their replacements have taken hold and are performing well.

That may be so [that I brought in people] but I've worked with each of these individuals and know they are competent dedicated people and have the same goals for the division as I do. The positions they filled are very key to the success of the division and to me.

As I said, I volunteered for this assignment because of the future I saw for this division. The challenge to deliver high quality products on or ahead of schedule, with adherence to strict cost control was one I felt I could meet. I've never been told why I was chosen, but I like to think it was due to my performance at [three other divisions], one as General Manager.

The future looks very good. Good because of what we have accomplished this past year and the foundation built by the dedication and resourcefulness of our employees. I am confident because I am immensely proud of each employee, their [sic] skills, their willingness to learn and grow, and the dedication shown to their jobs and this company.

We are making considerable progress in taking care of these and other concerns. Publications of the newsletter has been resumed, and the bulletin boards have been given a new look, and information is being posted on a timely basis. From all we've heard the newsletter has been missed. So in response to popular demand we brought it back. The parking and separate facilities are being looked at, but there are no obvious, immediate solutions.

My goals for the division haven't changed. Each staff member received a framed copy of those goals that you see there. They were widely distributed throughout the division, and I'm sure you have a copy. Personnel development is at the top of the list. There is no substitute for good people. People need to learn more, and strive for excellence in technical work. We need to be an efficient, high quality, low cost manufacturer to succeed. The only way we can achieve our goals is by developing people. The people come first on our list of objectives and on the job. Training, quality, schedule, sales, profits, cost and new programs [the other objectives] will follow. We are on target and the people made it happen, exceeding past high levels of productivity, quality and cost. Their efforts are greatly appreciated, and I'm sure we can achieve greater cost savings by the year end.

I am in full support of the college hiring program and want to be more involved in it. The new graduates are our future. The work, the challenge, and the opportunities are here so we have to see to it that college hires are given those opportunities, and that will ensure their commitment.

My management philosophy should be clear by now.

I don't like layer upon layer of supervision. I prefer a short, responsive hierarchy. Supervisory ratios, span of control and support labor are also of utmost concern. My leadership style is one of control and direction. Control, until individual managers can learn and take on their responsibility. The task of the leader is to direct the division, to set goals, objectives, future product lines, and to provide the resources to achieve them.

Since I've been back in [city omitted] I've dusted off the golf clubs and found my irons, or me, a bit rusty. The weather has been great for my early morning running. Besides that, my wife and I enjoy fishing and reading. The social activities take care of whatever free time is left. (Interview notes, September 19, 1985)

As an aid to further understanding the CEO interviews, my interface and relationship with each of them as a participant observer should be clarified. During each CEO's tenure I reported directly to one of the vice presidents who reported directly to the CEO. During the term in office of both CEO A and B my office was within 15 feet of theirs. When CEO C came on board I was physically located in another building about a five minute walk from his office.

I had incidental contact with CEO A for a few years prior to working at this division, and I worked for him for one year and three months. When I reported to this division, he was quite cordial and stated he was glad to have me on board. He informed me that several of his staff apprised him of my reputation and achievements, and he knew I would do well. The meeting was pleasant, quick, and informal. After that initial encounter, my only contact with CEO A was an occasional greeting as we passed each other in the hallways.

I was much closer to CEO B, as he was very interested in the college hiring program. He attended a Deans' dinner which I arranged at his Alma Mater. He was the only CEO of the three who read exit interviews and the follow-up interview reports. He asked me to counsel his son concerning a career change and luckily things turned out to the satisfaction of both of them (and me)! CEO B approved the majority of leader initiatives I presented. On two occasions he was honored by civic associations, and he asked my counsel and assistance with his presentation to the organizations. Both speeches were rehearsed in his car on the way to the ceremonies. Despite that association with CEO B, I have tried to present information on him in the same manner as for the other CEOs.

When Mr. B's appointment as CEO was announced, there was much consternation as to who he was, where did he come from and what was he like. A colleague from his former division provided me with a capsule description of the new CEO, along with the usual biographical data.

The third CEO and I had worked together in a technical capacity twenty years ago. The notification of his appointment was greeted with concern. Many of the staff were disappointed, worried, and seriously questioned the assignment, as CEO C had no prior experience in the division's product lines. In our first face to face meeting after his appointment, he was quite open and friendly. He remarked "I thought I recognized your name on the organization chart and wondered if it could be the same guy."

During his first few months in office, the Vice Presidents of Engineering and Human Resources and I spent hours with CEO C on a major reorganization of the engineering department. He questioned every name that was brought forth as a supervisory candidate. The span of control of each supervisor had to meet his tolerance band at each supervisory level. It ranged from twelve to one at the first line level, to 18 to 20 at the vice president level. Those lengthy, late discussions were held in a specially prepared chart room with limited access. The

present and proposed organization charts for the entire firm were enlarged and displayed on opposing walls. These detailed organization meetings enabled CEO C to quickly become acquainted (at least by name) with the personnel in his division.

Similar sessions were held with CEO C on the annual salary merit reviews. The Vice President of Engineering and I were questioned on each salary recommendation. Past performance, ranking, salary history, and current assignments had to be fully explained. If the distribution of performance and potential ratings were not to his satisfaction, we faced several hours of rework and several more hours of inquisitions. He left no doubt as to who was running this division. Since the two major discussions, I have maintained periodic contact with CEO C throughout the conduct of normal business.

Leader Initiatives

Appendix H (CEO B memo) was identified as the catalyst which led to the emergence of the leader initiatives outlined in Appendix I. Archival research certainly helps to uncover the documented facts. In response to a telephone request on May 26, 1981 I prepared a listing of 21 original programs related to retention. That request was from the Corporate Director of Personnel and the memo identifying 21 possible programs was forwarded on May 28,

1981. I had already implemented five of the proposals. Table 26 depicts the sequence of events after May 1981 which increased the number of programs to 35 and eventually culminated in a corporate wide development/retention notebook.

Insert Table 26 about here

Though it took over two years from the initial request to the formal documentation of retention programs, CEO B had approved and directed implementation of several of the 35 proposals presented to him in the fall of 1981. He concurred with the continuation of eight proposals (five of which I had already implemented). CEO B directed that eleven other programs be started, that eight be combined and commenced, and that further investigation be done on four suggestions. Four proposals were not approved.

From the 35 items 27 were immediately approved and subsequent authorization was given for one of those held for investigation. Due to CEO B's approval of 80% of the retention programs, they were labeled as leader initiatives.

The effect of these programs on turnover was impossible to quantify. The leader initiatives spanned the acquisition, recruitment, and retention phases of the new

Table 26

Development Sequence of Leader Initiatives After
Initial Proposal.

<u>Date</u>	<u>Activity</u>
September 15, 1981	35 retention proposals presented to CEO B.
September 25, 1981	CEO B requests implementation of retention program.
October 21, 1981	Memo prepared for Vice Presidents reply with status on specific items.
February 11, 1982	Status report to Vice President of Engineering on 17 items.
May 24, 1982	Status report to Vice President of Human Relations on 22 items.
August 5, 1982	Request from Corporate Director of Personnel for information on retention programs.
August 26, 1982	43 retention programs identified and submitted by this researcher on standard format (Appendix O).
September 25, 1983	Corporate Notebook of suggested retention programs distributed.

college hires assimilation into the organization. They stressed communication, socialization, feedback, supervisory training, orientation, career development, and recognition. Evaluation sheets completed by the participants in the various programs were all very positive and encouraging. In the follow-up interviews the programs were often referred to as "improving communications" and "bettering the working environment."

A true evaluation of each of the 28 approved programs would require an indepth, longitudinal study which is beyond the scope of this research. The impact of these programs on retention can be inferred from prior research on similar activities. The literature reports on positive results from orientation programs, job previews, performance reviews, communication methods, job rotation, and the like. Several recent studies have investigated one or more of the variables inherent in the leader initiatives and reported reduced turnover attributed to very similar programs. Those studies (Behling and Rauch, 1985; Blau, 1985; Caldwell and O'Reilly, 1985; Falbe, 1984; Howell and Dortman, 1984; Kreps, 1985; T. W. Lee, 1985; Meglino and Denisi, 1985; Meindl, Ehrlick and Dukerich, 1985; Naisbitt and Aburdene (Braue, 1985); Naughton and Ontcalf, 1985; Neiner and Owens, 1985; Parsons, Herold and Leatherwood, 1985; Reichers, 1985; and Suszko and Breaugh, 1985) covered

the period from initial inquiry, induction, indoctrination, to retention as did the leader initiatives in this research.

The positive effect of these leader initiatives on turnover or retention can also be assumed from the change in slope of retention graph shown on Figure 10 and the percentages previously noted in Table 24.

Insert Figure 10 about here

The retention graph for this firm for the 1980 college hires closely paralleled the curves for two other divisions in the first year. Concurrent with the implementation of several of the leader initiatives in 1981, the rate of change of the retention curve for this firm shows an abrupt departure from the slopes of the comparative curves. The retention graph also terminates at a much higher level than the other divisions. The cause of the change in the retention graph can be attributed to many variables but surely the scope and the number of leader initiatives had some effect. Like a shotgun blast it is difficult to identify the particular pellet that hit the target.

In summary, the leader initiatives or retention programs were directed at new college hires. Many of the

specific proposals also affected the longer service employees as well. Increased tuition prepayment, technical seminars, recruiter training, education week, open forums, reverse reviews, supervisory training, career development plans, bulletin boards, and eventually a company newsletter were not restricted to new graduates. The improvement in communications and the work environment were obvious results from these programs. As a participant and involved observer, I had the responsibility of moving the retention programs from approved proposals to reality. That task required the cooperation and involvement of several people at many levels in the organization from the CEO to Directors, to specialists, to new grads, to clerks, and even to the custodial staff.

CEO B resigned from the firm after one year and eight months in office in February, 1984 and a successor was not announced until June of 1984. During that period when the firm had an acting General Manager, the retention programs continued in force. Once the new CEO was permanently on board in November of 1984, the demise of several retention programs became evident. At that time I also changed positions in the firm and the responsibility for the ongoing programs was transferred to other individuals.

Under CEO C the publication of the company newsletter was dropped due to budget considerations. The editor of

the newsletter also had maintained the bulletin boards. With no newsletter and no editor the bulletin boards were essentially empty. Education Week (a series of lunch time talks by local university representatives), advanced degree recognition, management council, technical seminars, open forums, General Manager breakfast sessions, career planning, new employee orientation, job posting, reverse reviews, and other elements of the retention program fell into disuse, either due to financial pressures or the lack of a sponsor. The frequency of other programs was reduced from three or four times per year to once. In all, within one year 14 of the original 28 approved retention programs were affected to some degree, from cancellation to minimum useage.

However on September 3, 1985 a memo from CEO C reinstituted two of the programs with this paraphrased introduction:

In an effort to improve employee communications we have taken two steps:

1. Reactivated the [name omitted] newsletter.
2. Established information centers at key locations throughout our facilities where you can obtain up to date information. (Letter dated September 3, 1985).

The leader initiatives represent several low cost programs that did have a positive effect on retention. The

literature bears out that assumption and the retention percentages (Figure 10 and Table 24) also support that position. As a participant observer, (albeit involved and possibly biased) I also was aware of the positive effect these programs had. That awareness was heightened via follow-up, exit, and staff interviews.

Locke (1981) cautioned against wrong interpretations due to the author's predilection. Rice, et al. (1985) mentioned third variable interpretations that plague all research. Despite these admonitions, I conclude that there is a positive relation between retention and leader initiatives.

Attitude Survey

During July 1985, two graduate student interns from a local university conducted an attitude survey within the engineering department. The stated purpose of the survey was "to profile the perceived management style of the employees." In consultation with their professors the Likert's profile of Organizational Characteristics ("Profile of," 1985) was recommended as an instrument to capture the basic organizational characteristics. A pilot study (n=6) was administered in May, and eight questions in the Likert instrument was designed to measure eight organizational characteristics (a) leadership,

(b) motivation, (c) communication, (d) interaction, (e) decision making, (e) goal setting, (f) quality, and (g) performance. A special computer program was designed to analyze the data. Excerpts from the final report ("Profile of," 1985) relative to the leadership characteristic provide the interns' evaluation.

Employees identified the management style of their supervisors as benevolent-authoritative. A graphic illustration of the composite and textual representation of the overall means for [the leadership characteristic] can be found on pages 2-5 to 2-12 [which is Appendix P of this dissertation].

Thus the management style identified by the employees of the [firm] can be labeled System 2, benevolent-authoritative. Emphasis is placed on procedures and outcome. The primary objective is to accomplish prespecified goals with little concern for the human element. Performance is measured by end-result and thus, a high-pressure work environment is created and maintained via tight work standards, personnel limitations, tight budgets, and compliance based on fear. The presence of unfavorable attitudes, little confidence and trust, poor communication, and low levels of cooperation in System 2 enterprises can result in high absence and

turnover [emphasis added]. The leadership characteristic as it pertains to the firm is presented below.

1. Leadership:

* Quantitative Data

- $\bar{x} = 11.02$
- System 3
- Consultative

* Qualitative Data

- As long as the "old guard" is firmly entrenched, change will come slowly, if at all. Implementation is the key.
- Always laying off people, then waiting until business picks up to hire again, leads to training during busy times; organization often runs like a model shop, never time to do it right the first time but plenty of time to correct.
- Corporation care of employee needs and problems is also in need of improvement.
- Some decision makers know nothing about the work at lower levels.
- I perceive that top managers do not welcome a participatory management style.
- My personal feeling is that this division is

lacking in communication and trust at all levels.

- This is all well and good, but like so many such programs, it will fall flat because the information never gets to, or is ignored by, the people in a position to force some improvement in the situation.

* Interpretation of Data

- Two-way, equitable trust and confidence
- Subordinates talk about tasks to supervisors
- Supervisors don't consult subordinates concerning task problems.

The measurement and diagnosis of organizational characteristics is complex because every organization is in a continuous state of change. Examination must include objective quantified data as well as expressed perceptions and beliefs of employees. Both methodologies (quantitative and qualitative) are necessary to provide an accurate picture in order to improve the art of management. This study incorporated both forms of inquiry.

Future studies should be conducted utilizing multiple methodologies (e.g., interviewing, diaries, communication, audits, etc.) to generate a precise and comprehensive analysis of the organization.

Longitudinal studies should also be employed so as to monitor the effects of any changes made. Likert recommends yearly audits over a period of three to five years. Tracking of variations over time is important because transformation takes time and is not easily detectable. (pp. 3-4 to 3-10.)

The attitude survey appears to have been conducted in a scientific manner. The sample size (n=84) could have been larger although the interns had recommended a 10 percent sample size and it was approved by the engineering director. Random selection of the subjects were representative of the populations sampled (salaried, hourly, and non-exempt). The instrument had been used at another division by one of the professors who recommended it, and both professors attested to its validity and reliability. The survey was administered to four separate groups and required 90 minutes to complete. Data reduction, scoring, programming, and analyses were carried out efficiently.

The results of the attitude survey both qualitatively and quantitatively agree with information derived from the several other data sources. The definition of Likert's System 2 included in the final report ("Profile of," 1985) provides an excellent summary of the results.

System 2 is benevolent-authoritative. The leadership

style is somewhat like exploitative-authoritative, except manager [sic] tend to be more sensitive to their employees' needs. Upward communication is limited, employees tend to "yes" the boss, sideward communication is fairly poor due to competitiveness among fellow workers, and some inaccuracies of perception by superiors and subordinates are found.

(p. 3-2)

Evaluation of Leader Information

In 1985, Rost discussed the development of a new consensus that distinguishes between management and leadership. That development had its roots in Burns (1978) and is finally emerging beyond the trait and great theories of the past. The new consensus is not simply the relabelling of management theories, a la Blanchard, Zigarmi, & Zigarmi (1985), and several other contemporaries. The new consensus is more pragmatic and practical than the heroic and romanticized visions of Meindl, et al. (1985).

The new consensus has been humanized (Foster, 1983) in this research. That new general theory has been advanced by this grounded study of leadership in practice. The results of the data on leadership information in this chapter clearly distinguishes between leadership and management. The data, almost without interpretation, emblazon the message--there is a difference!

CEO A and C exhibited the management maintenance behavior of Weiner and Mahoney (1981). They surely met Adair's (1984) rather limiting definition of leadership (management) by providing the necessary functions to achieve a common task. That is far from leadership! Morphet et al. (1982) were right on target in the case of CEO A and C, by indicating the executive may not be a leader. Both CEO A and C displayed many of the behavior patterns common to both leaders and managers (Rost, 1985). They each had a management role and mission which they carried out quite well.

Based on the evaluation of the leader information I concluded that CEO B was in fact a leader. A brief review of the leader information elements will substantiate that conclusion. Through his written messages he interpreted words and symbols (Hunt, 1984). He was the linguist of Burns (1978), he articulated a mission (Bennis, 1976) and transcended management behavior to generate a positive force (W. B. Martin, 1985) within the firm.

The many interviews gave further testimony to CEO B's leadership behavior. He was self confident and had the strong convictions of House (Hunt and Larson), 1977). CEO B also was described as the cheerleader of Peters and Austin (1985) as he exhorted and uplifted the organization (Peters and Waterman 1982). Through the leader

initiatives, CEO B released creative talents (Haiman, 1950), he changed the culture (Schein, 1985) and was intellectually stimulating (Bass, 1985). The leader initiatives changed the agenda of (Peters and Waterman, 1982) and they energized followers to produce intended real change (Rost, 1985). CEO B was a social architect (Bennis, 1976) and through these initiatives he mixed with the young talent in the firm as suggested by Naisbitt and Aburdene (Braue, 1985).

CEO B, in his own words, used conflict (Burns, 1978) as his leadership style. He was a change agent with new ideas, programs, and vision similar, on a smaller scale, to Iacocca (1984).

Falbe (1984), and Weiner and Mahoney (1981) concluded that CEO leadership had a limited effect on an organization's performance due to the powerful intransigent organizational effects. Weiner and Mahoney claimed that established organizations often only require maintenance behaviors and not leadership. CEO A's task to improve production, and CEO C's, to contain costs were management maintenance functions.

Information extracted from the various data elements, and from researcher observations attest to the fact that each of the CEOs exhibited some behavior common to managers and leaders. Each of them practised the art of management

by walking around, suggested by Naisbitt and Aburdene in Braue (1985) and Peters and Austin (1985). The three of them promoted Kanter's (1983b) team concept and her emphasis on the importance of people as a resource. They each spent time and persisted in helping to steer the organization closer to a remote destination, per Cohen and March (1974). The CEO's displayed Bennis's (1984) four competencies of leadership (a) management of self, (b) attention, (c) meaning, and (d) trust as well as those described in a similar manner by Adair (1984), and later by Blanchard, et al. in 1985. Marrow's (1964) somewhat dated leadership styles could depict the CEOs' behavior as dominator, compromiser, and harmonizer (not necessarily in order). CEO A and C did things right as managers and CEO B did the right things as a leader. (Bennis, 1984, p. 16).

With reference to Burns' (1978) definition of leadership cited on page 16 of this dissertation as interpreted by Rost (1985) only CEO B met the three essential features of leadership: (1) intended real change, (2) mutual purpose, and (3) transforming motivation. Thus my conclusion that CEO B was a leader, as the leader information data indicated.

Participant Observer

The role of a participant observer was severely underestimated at the beginning of this research. Guba and

Lincoln (1981) discussed the dual nature of the role, not only as an observer, but also as an active responsible participant. My participation in the plethora of items reported on is self evident.

The educational benefits and insights provided by that role cannot be overstated. Seemingly well documented institutionalized procedures and processes were found to be inadequate in many respects. The disagreement between official documents was a disillusionment.

The magnitude of the task of a participant observer is a very ominous one. The responsibility to separate work from research, to avoid bias, to protect individuals and sources had to be kept constantly in mind. The access to meetings, memoranda, speeches, and verbal conversations was a privileged one, not to be violated.

Through my official full time position much of the missing and erroneous information uncovered could have been collected or corrected. That would have obviated the observer role and by-passed previously authorized sources of information.

Also as an active, involved and initiating participant, particularly with the leader initiatives, I had to be continuously alert to false assumptions, bias, and predilection. Mintzberg (1982) suggested, watch them

(leaders), talk to them, and talk to people around them. That has been done.

The interaction with each of the CEOs and their respective staff members, essentially as an insider, provided first hand knowledge of the problems faced by a chief executive officer. My input and impact on organizational changes, salary reviews, and leader initiatives had to be constantly isolated from this research. The presentation of data and descriptive materials throughout this document had to be balanced between investigative inquiry and propriety.

Through my role as a participant observer and my course of studies, I believe there is a difference between management and leadership. The following quotation from a paper I wrote in 1983 explains that difference.

Introduction: In discussions of leadership many people assume it is synonymous with management. Levinson (1981, P. 138) states it is not! Others conjure images of talismen, heroes, or great persons they perceive to be leaders including: movie stars, athletes, politicians, labor bosses, and even mobsters. Burns (1978, p. 442) dismisses these myths. In organizations managers, with their symbolic titles from supervisor to CEO, often presume they are leaders. Gibson, et al. (1976, p.11) point out that

official leaders are not necessarily the real leaders.

It is my intent to further explain the difference between management and leadership. I will show those differences by focusing on some key elements of leadership and by reference to several literature sources. The difference between management and leadership will also be demonstrated by citing a critical incident. That incident will show that a leader sometimes reverts to management, and that leaders do learn from their followers, per Burns (1978, p. 169). It will also underline the premise that leaders are not always leaders.

Rather than recount what leadership is not (and what management may be), I will focus on some of the positive aspects of what leadership is. I am sure the reader can readily make the transition from what it is, to what it is not.

Burns' (1978, pp. 425-426) definition probably best encapsulates the many attempts at defining leadership particularly transforming leadership. A form of that definition also summates the philosophy of the doctoral program of this University (Rost, 1983, p. 3).

Some comparisons: The value aspects of Burns' leadership are supported by Enochs (1981), Lippitt

(1982, p. 369), Simon (1976, p. 45), and Turner (1971, p. 94). These authors commingle the values of leaders and followers into mutually interlocking relationships. They also stress that the value systems of leaders help us with the distinction between leadership and management.

Another characteristic of leaders is their attitude toward ambiguity. Leaders expect and can deal with ambiguity which also sets them apart from many managers. Allison (1971), Edelman (1971), Barnard (1968), Cleveland (1972, p. 77), and Peters (1983) are among many authors who mention the ability to deal with ambiguity as one of the capabilities of leaders. Imagine a middle manager's frustration and frenzy over ambiguous directions, let alone those instructions that are supposedly clear.

Conflict that is often repressed by managers is welcomed and cherished by leaders. Burns (1978, p. 436) claims that leaders trigger conflict. He continues: "they excite it, confront and exploit it to embody and shape theirs' and their followers' values and goals." He is supported in his treatise by Allison (1971), Argyris (1973, p. 88) as well as Edelman (1971). See who accepts conflict and uses it as but another resource, and you will undoubtedly see

leadership in action.

Burns (1978, p. 427) elucidates the elevating capacity of leadership. That is the ability to transform followers' needs into wants on a higher level of mutual aspirations. It is almost a mystical act that defies description. However, Levinson (1981, p. 168), and Lippitt (1982) describe the transformation of values with the followers to higher levels. Enochs (1981) speaks of elevating motives, while Culbert (1974, p. 11) reasons it is raising the level of consciousness. Tannebaum and Schmidt (1983) also list the leader's ability to raise the level of motivation of followers. Argyris' (1971, p. 185) pyramid of values provides the framework for leaders to actualize their elevating capabilities. It is in this way Kierkegaard (Rogers, 1961, p. 181) implies leaders help followers "To be that which one truly is." Though seemingly mystifying, it appears that the prominent authors mentioned above do breathe reality into another concept of leadership, separate and distinct from management.

Power is too often equated with leadership. True, power is but an aspect of leadership, as Lippitt (1982) suggests, but it is in the exercise of power that we can perceive leadership, or simply management.

Kipnis (1976) provides an excellent review of the literature pertaining to power. Strum's work (1972) focuses on presidential power, whereas Bell's (1975) brief treatise clearly discriminates between power, authority, and influence. Leaders depend more on influence and expand it by sharing it, according to Kanter (1983a). Levinson (1981) and Bell (1975) discuss the influential relationships between leader and followers. Argyris (1957, p. 71) asserts that authority (power) is spontaneously accorded by followers. In summary, the power of leadership is not one of position, prestige, nor pronouncement. To me it is better defined as shared influence with followers. Managers wield power, while leaders integrate and share influence, unobtrusively as Cohen and March (1974) put it.

To continue this bifurcation would [be superfluous] and thus I am forced to tabulate many characteristics that apply more to leaders than to managers [Table 27]. That is not to imply that managers are void of these characteristics but that leaders exhibit more of them more often. Prior to that simplistic tabulation, I will discuss one other important feature of leadership which is futuristic.

Levinson (1981, p. 256) presents Erickson's generativity stage of leadership which provides direction, purpose, and meaning. The aspirations and achievements of Zander (1971) are future focused according to Hoyle (1981, p. 251). Marks' (1981, p. 255) design of the future incorporates Burns' (1978, p. 396) social transformation. The enhancement of Colliers' (1983) creative society, Lindblom's (1980) reconstructive leader, Erickson's (1964) transcendental leadership: purposive and goal oriented per Simon (1976, p. 4), all are ways to meet Burns' (1978, p. 461) followers enduring goals. The past is forgotten in the above, the present is ignored and the future is prominent, as it is for leaders.

The items presented are but a few of the characteristics one can use to separate leaders from managers. It is my contention, based on my readings and class discussion, that leaders display and use more of the attributes listed than do managers. The attached list [Table 27] expands those attributes and demonstrates that leadership as Burns (1978, p. 426) states is pervasive, widespread, bounded, limited and definitely uncommon! In summary, leadership is mutually elevating, moral, and a purposive relationship directed toward a common goal.

Insert Table 27 about here

A Critical Incident: The incident discussed is true and occurred in late July, 1983. I recount this incident to demonstrate that leaders are not always leaders and that they do learn from their followers. The CEO of our plant was touching the bases of Pascale (1983), and spending time as Cohen and March (1974) suggest. We had a discourse about keeping employees informed, and it revolved around a particular employee asking me why he was put on loan. I had previously investigated the matter and explained the situation to the employee's satisfaction. Since the individual did not report to me, the CEO wanted to know the supervisor's name. Despite my refusal to provide the name, the CEO recognized the department and surmised who the supervisor was. He immediately pointed his finger at one of the Vice Presidents and in bellicose tones said "I want that out of here! That happens too often!" My immediate reply to the CEO, in an equally loud and heated voice "Don't, don't you dare!" Fortunately I wasn't fired. Where the courage came from for that remark I know not, but

Table 27

Attributes of Leadership

Adaptive	Learn from followers.
Articulative.	Other oriented.
Decisions are value based.	Protect values.
Develop leaders.	Purposive and challenging.
Empathetic.	Reciprocal relationships.
Enhances followers capabilities.	Respect individuals dignity.
Exhibit and expect high standards.	Self actualized.
Future oriented.	Shared leadership and goals.
Goal Oriented.	Skilled generalist.
High morals.	Teacher, educator, mentor.
Humility	Transform needs, wants and values of followers.
Idealistic.	Unobstrusive.
Imaginative	Use influence more than authority and power.
Interdependent.	Utilize conflict.
Intellectual.	

it worked. The CEO immediately calmed down, and I was allowed to elaborate on the inappropriateness of his hastily conceived action and how it would destroy open communications. I pointed out the tremendous strides that this particular supervisor had made in dealing with recent graduates and how supportive he was of our mutual, long term goals (mine as well as the CEO's).

The CEO, whom I regard as a true transformational leader, lost his cool and leadership when he reverted to a management tactic "get him!" He regained his reciprocal leadership by listening and learning from a subordinate. He confronted conflict, mediated it, and then displayed Burns' (1978, p. 100) beginning of moral leadership by expressing true empathy and understanding of the supervisor's position. He was also at that moment an excellent mentor.

Conclusion: I have discussed a few characteristics of leadership to differentiate it from management. That section was concluded with a relationship definition of leadership. Other attributes which leaders display more often and to a greater extent are tabulated [in Table 26]. I may have fallen into the trait trap but if so, it may help the neophyte student of leadership. The critical incident demonstrated that leadership is human, reciprocal and

transient. Lippitt (1982, p. 112) indicates that leadership is a performing art and not a science, and Pascale (1983) claims we must master the art (of leadership) and the science of management. If we can accomplish that we can "muddle" through as Burns (1978) and Wrapp (1983) suggest. We can flow with solutions of Pascale (1983) and move from fixity to flowingness and though incrementally, meet Burns' (1978, p. 461) ultimate test: ".... of intended real change that meets peoples' enduring needs."

Following Burns' (1978, p.409) and Wrapp's (1983) metaphor I have muddled through this course and the readings and arrived at a vague understanding of leadership. I appreciate what it is, but more importantly what it will be for me. If the critical incident had occurred at another time, I probably would have acquiesced and provided the supervisor's name. In this instance I did not. This course has taught me to respect both the values and individualities of potential followers. At least in that way I hope to develop future leaders so that the hubris of management will be replaced by the humility of leadership. (Shine, 1983)

Models

An oft quoted phrase, "fools rush in where angels fear to tread" summarized my feelings as I approached the evaluation of the models of turnover. The models evaluated in this research are presented in Figures One through Seven and were discussed in Chapter III. The chronological order of presentation in that chapter is retained here.

March and Simon (1958)

This model has been a veritable springboard and benchmark for subsequent studies of turnover. From the roots of March and Simon, Greenhalgh (1980) investigated job security throughout individual career stages. Like March and Simon, Greenhalgh's work was theoretically based on Barnard's (1968) concept of the decision to participate/contribute to an organization. The very core of the March and Simon model is one's decision to participate.

Dreher's (1982) investigation of the role of performance as related to turnover used the March and Simon model as a starting point. Larson and Fukami (1984) reported on the strength of union and company commitment. The influence of March and Simon is evident in their work as it was earlier in Smith's (1979) study of internal opportunity structure and sex of workers.

Farris (1971) equated his "push" "pull" terminology to the desirability and ease of movement from March and Simon. Pettman (1973) concluded his evaluation of their model by agreeing with some and disagreeing with other hypotheses from March and Simon. Mobley (1982a) called their model the cornerstone and catalyst for subsequent studies on turnover. He concluded his evaluation of their model thusly:

The March and Simon model has contributed to the study of turnover by focusing attention on the need to assess both the economic-labor market and behavioral variables in studying the employee turnover process.
(p. 120)

The literature review highlighted the lack of sufficient empirical testing of the March and Simon model. The importance of feedback is ignored in the model, even though it is implicit in the authors' description. Their model is sound conceptually, but is difficult for a practitioner to employ in the control of turnover. As shown in Figures 1 and 2 the model is essentially open loop. Though it was described as an integrative model, it still was individually focused. The static model of March and Simon did not account for changes in perceptions overtime, nor did it account for the effect of the career stages of Greenhalgh (1980).

March and Simon added organizational and group determinants to the behavioral characteristics of the individual. Their level of business activity accounted for economic considerations, and they laid the conceptual base for others to contemplate, criticize, and enhance.

Price (1977)

His codification of the turnover literature was undoubtedly a more significant contribution than was his model shown in Figure 3, Chapter III. This causal model depicts how various determinants work to produce turnover. The model was originally presented as a tentative synthesis, combining several determinants of turnover from prior literature. Mobley (1982a) offered this brief evaluation of Price's model of turnover:

Price makes a positive contribution in attempting to integrate organizational variables such as the determinants, environmental variables such as opportunity, and individual variables such as satisfaction. One criticism of the model from an individual psychological perspective is its lack of specificity regarding how individuals perceive and evaluate the determinants and opportunity. The model must assume that the determinants are equivalently valued outcomes to employees--that individuals have knowledge of alternatives and are unconstrained in

pursuing them. These assumptions minimize individual differences in values, and perceptual and evaluative processes. However, Price does specify a number of individual demographic variables, such as age and tenure, that may be correlated with the determinants and intervening variables.

Five empirical tests of the Price model were reviewed by Bluedorn (1980). In all five tests, as well as Bluedorn's results, the hypothesized interaction between satisfaction and opportunity was not found. Further, the effects of the demographic variables were incompletely explained by the model. Bluedorn concludes that these tests support the treatment of opportunity as a predictor of satisfaction rather than as intervening between satisfaction and turnover. (p. 121)

Price identified five organizational characteristics as determinants of turnover ((a) pay, (b) integration, (c) instrumental communication, (d) formal communication, and (e) centralization). Four of these were non-economic. Pay, the economic determinant, did not include benefits, perquisites, and fringes which certainly have some relation to pay and are economic in nature.

The distinction between instrumental and formal communication as described by Price appears to be too

finite a separator of communication issues. Instrumental communication referred to the degree to which job information was provided to employees. While formal communication, as the term implies, included notices, postings, discussions, announcements, and conferences.

Price ignored the size effect of an organization in his model. He also assumed that individuals were free to leave (March's and Simon's [1958] ease of movement) and had the knowledge of opportunities available. No alternate path for dissatisfied (or satisfied) stayers was provided in the model.

The intervening variable of satisfaction, described as a positive affective orientation, is a difficult, individual, psychological state to determine. It is similar to the inducement/contribution concept found in March and Simon (1958).

Price and Mueller (1981) evaluated the original Price model and added intent to stay as an intervening variable between job satisfaction and turnover. In their test of the model they concluded that the determinants were not strongly related to turnover and that the determinants were independent of each other and not additive as previously assumed. Price included part time employees in the development of his conceptual model, thus complicating the pay determinant. Differences for part time versus full

time employees were not accounted for in the other determinants as well. Abelson and Baysinger (1984), Bluedorn (1982) and Dalton, et al. (1982) as well as Price and Mueller (1981) tested the original Price model and their results were inconclusive and mixed. Price was criticized by Dalton et al. as his codification resulted in a line of research that continues to grow in volume but not in depth.

Despite the limitations of Price's causal model, he provided a summary of previous investigations on turnover determinants which at least identified past generalizations and their relative importance for future researchers.

Szilagyi (1979)

Figure 4, Chapter III depicts Szilagyi's model of the turnover process. He focused on voluntary turnover for organizational reasons. "This kind of turnover can be attributed to problems with compensation, promotion, and advancement opportunities; supervisory relations; and job challenge and the like" (Szilagyi, 1979, p. 43).

He excluded individuals who were returning to school (despite the cause), people who moved, and those who left for personal reasons. The assumption underlying his exclusions appears to be that the true reasons for leaving are identifiable. I find that exclusion to be unacceptable. If this study excluded those leaving for

personal reasons, it probably would not have been undertaken.

Szilagyi identified four major concepts which influenced job satisfaction as (a) job characteristics, (b) interpersonal relations, (c) organizational practices, and (d) reward system. Individual characteristics moderated the influence of his four concepts on job satisfaction. The level of dissatisfaction induced thoughts toward the intention to leave which were augmented or limited by the possibility of employment in other organizations. As turnover intentions increased, performance declined and absenteeism increased. The effect of the change in performance and absenteeism also changed intent into actual turnover.

Szilagyi ignored organizational size as well as economic and environmental effects. External job opportunities were determined by analyzing want ads and contacting placement firms. His linear, one way process offered no alternative once the intention phase was reached. Neither time, nor career stage were recognized by the author in describing his model. The author claimed a 91% and 87% accuracy in classifying leavers and stayers in two study groups. This post facto analysis (once the answer was known, now find the clues) appears suspect to me.

On the surface Szilagyi's model seems clear, direct, and understandable. I feel his research findings have limited managerial value in controlling turnover. The author provided absolutely no references or citations, and did not suggest where additional documentation or analyses for his claims could be obtained. His one valid suggestion was to conduct cost/benefit analyses on any program to reduce turnover prior to its implementation. Szilagyi recommended that the prevailing managerial attitude be assessed before attempting to reduce turnover. This model originally attracted my attention due to its relative simplicity. After examining other models, Szilagyi's appears to be a repackaging of elements from March and Simon (1958), Price (1977) and other authors.

Mobley, Griffeth, Hand and Meglino (1979)

This model also evolved from the conceptual contributions of March and Simon (1958). The model maintains the intermediate linkages and feedback loops from Mobley's (1977) causal model. Both models are discussed in Mobley's (1982a) publication which summarized the importance of the Mobley et al. (1979) construct:

This model calls attention to the fact that satisfaction, future expectations, and both work and non work values must be diagnosed if turnover is to be understood and managed. (p. 132)

That quotation and the outline of the Mobley et al. model in Figure 5, Chapter III demonstrates the overall complexity and inclusiveness of the expanded model of the employee turnover process.

The model properly places emphasis on the individual's perceptions and not the policies, practices, procedures or perceptions of management. Mobley et al. stressed the multifaceted nature of individual perceptions and that management must be more sensitive to individual work values.

Several researchers (Cotton and Tuttle, 1986; Hom, Griffeth, and Sellars, 1984; T. W. Lee, 1985; Michaels and Spector, 1982; Mobley, Horner and Hollingsworth, 1978; and Mowday, Koberg and McArthur, 1984) have evaluated both the initial intermediate linkage model of Mobley (1977) as well as the expanded model. Although there were some minor disagreements, collectively the authors generally supported both models.

Cotton and Tuttle (1986) disagreed with Mobley (1977) concerning both pay and education being reliably related to turnover. Mowday et al. (1984) praised the expanded model as being the most comprehensive one yet developed. T. W. Lee (1985) voiced strong confidence in the general validity of the model. Michaels and Spector (1982) concluded:

However, the high degree of consistency between the

present findings and the pre-existing model upon which the current study was based lends credence to these results, which do suggest a possible causal chain from individual and organizational factors, through job satisfaction and commitment, through intention and finally to turnover. (p .58)

The Mobley et al. (1979) model incorporated elements from previous models and expanded the individual, organizational, and environmental factors. The static nature of prior constructs was changed by the dynamic implications of "impulsive behavior" and "immediate versus delayed gratification." The time dimension was also included in their discussion of satisfaction, "though present oriented, it does change." Besides the alternative forms of withdrawal behavior, internal movement and transfers were options other than turnover.

I believe the attractiveness and the strong points of their conceptual model include (a) the stress on cognitive behavior, (b) the individual focus and importance, (c) the consideration of work/nonwork values, (d) the centrality of job satisfaction, and (e) the interaction and feedback loops. The all encompassing aspects and the complexity are definite positive values, but those items obviate evaluation of the total model in any study, even in this era of high speed and high capacity computer facilities.

Mobley individually, and with other authors contributed immensely to the study and the understanding of turnover. Raelin (1983)

This conceptual model was selected for comparison as it dealt with professional employees in a large organization and I thought it might be applicable to this investigation. In addition, the cognitive state described by Raelin somewhat paralleled the human information processing concept discussed by Wynne and Hunsaker (1975). Raelin's model was described previously in Chapter III, Figure 6.

The foundation of Raelin's cognitive state may have been influenced by a much earlier conceptual treatise of Locke (1969):

Man's consciousness has three basic biological functions (i.e., potentialities for action):
(a) cognition, the identification of existents (e.g., things, objects, actions, etc.); (b) evaluation, the estimate of the beneficial or harmful relationship of perceived existents to oneself; and (c) the regulation of action. (p. 314)

Due to its focus on individual professionals and large size organizations, Raelin's model has limited application and generalizability. He identifies engineers as quasi-professionals based on their organizational

commitment as opposed to their professional allegiance. (As an engineer, I do not wholeheartly agree.) I believe Raelin's distinction is too limiting. The continuum of deviant/adaptive behaviors described by Raelin were observed and not tested. The observations (method, individuals involved, setting, duration, etc.) were not discussed in Raelin's presentation.

The author of this model was the only one of the six discussed who included leadership style and politics among his organizational characteristics. Raelin's paradigm, though depicted as unidirectional, included interaction among the precursor variables. He provided alternate paths to turnover via his behavioral coping responses. The extension of his mid-term results (cognitive state, career dissatisfaction, and behaviors) into longer term, more serious implications for those who intended to but did not quit is a positive feature of his conceptual presentation.

Raelin recommended frankness in pre-employment discussions on both sides followed by mentoring, performance feedback, and even toleration of adaptive behaviors after employment. One very sound piece of advice to professionals was to take charge of their own careers. I recommend that same approach to many engineers that I counsel and provide a mnemonic to reinforce that suggestion. Among other things one's career must revolve

around ME. M, it should provide enough money to meet one's standard of living as it varies over time. E, it should be enjoyable, something one desires and enjoys and not a job or career desired by one's parents, professors, or others.

In summary, Raelin's conceptual model is rather limited. It may well apply to specific professionals (doctors, lawyers, professors, etc.) and it deserves some empirical testing and research. The cognitive state in his model at least recognizes the individual as a thoughtful, reasoning human, as opposed to simply a reactive quitter. Raelin indicated other adaptive constructive alternatives to terminating for the individual such as (a) professional association, (b) research publications, (c) professional privileges, and (d) more autonomy.

Jackofsky (1984)

This conceptual model was presented by Jackofsky in an attempt to explain the link between performance and turnover as postulated by Mobley (1982b). Her model was a bit more encompassing since it included movement within an organization in job turnover. She also included individuals who quit due to low performance ratings and termed that action as involuntary dismissal, even though they might be coded as voluntary quits by mutual agreement.

The conceptual base of the integrative process model of Jackofsky can be traced to March and Simon (1958), and

Mobley et al. (1979). The influence of Locke (1969) relative to intentions is also evidenced in the author's work.

In a comparable study of performance and turnover, Wells and Muchinsky (1985) concluded "A literal interpretation of these results would suggest that one cannot predict if employees will voluntarily quit based on their level of performance." (p. 335). One of these authors' findings seemed rather obvious. Performance ratings of those individuals promoted were significantly higher than quits, which were higher than dismissed employees! In addition they pointed out that Jackofsky's theorizing is neither simple nor direct.

Mossholder, Norris and Bedeian (1985) tested Jackofsky's model and concluded that there may be a curvilinear relation between performance and turnover. They found some support for an interaction between job satisfaction and job performance in predicting turnover. These authors suggested further research on Jackofsky's hypotheses before arriving at any conclusions concerning performance and turnover.

In a review of 18 other studies McEvoy and Cascio (1985) found that five showed no relation between turnover and performance, eight demonstrated a negative relation,

and five pointed out a positive relation between performance and turnover.

Dreher (1982) studied the performance of leavers and stayers and arrived at no equivocal conclusions. Earlier, Spencer and Steers (1981) suggested that rated job performance was an important factor in turnover research. Martin and Bartol (1985) developed a complex performance-replaceability matrix to identify high performers, and suggested ways to reduce dysfunctional turnover (retain better performers) as theorized by Jackofsky.

Based on the inconclusive findings in previous studies (Dreher, 1982; McEvoy and Cascio, 1985; Spencer and Steers, 1981; and Wells and Muchinsky, 1985), repeated evaluations of Jackofsky's conceptual model are needed before its usefulness can be determined. The inclusion of internal job movement (promotions, transfers, etc.) complicates the study of voluntary quits. Her rationale for including job movement is that the causes of internal job change may well be the same as those for terminations.

I do not agree with the inclusion of transfers, and more particularly with promotions, in a process model of turnover. Both of these actions warrant further research, specifically the transfers. The reasons for internal transfers (job turnover) may well be precursors of

intentions to quit and could be another form of withdrawal. Due to Jackofsky's total job movement, I compared the number of internal transfers in this firm for 1985 to the number of voluntary quits. There were six times more intra-organizational transfers than voluntary terminations. Reasons for these transfers should be an interesting area for further research.

Another perceived problem with Jackofsky's model is the heavy reliance on rated job performance. As an experienced practitioner, I have seen the inattention, infrequency, and inadequacy of performance reviews, particularly annual reviews. Those inefficiencies have not changed in the past 20 years (Shine, 1965). Despite the problems with performance reviews and job performance ratings, I concur with Jackofsky's conceptual inclusion. It might lead to more emphasis on performance reviews and more frequent and accurate appraisals.

Jackofsky's model can be viewed as an updated version of March and Simon (1958), combined with the Mobley (1977) linkages, and enhanced by the inclusion of total job movement. Her current model is deserving of further research and testing.

Model Summary

In this Chapter, and in Chapter III, I have presented and evaluated six models of the turnover process. They

ranged in complexity from the skeletal founding framework of March and Simon (1958) to the all encompassing embodiment of Mobley et al. (1979). The rather limited focus of Raelin (1983) was offset by the immense codification and synthesizing of Price (1977). The eclectic and undocumented selection of Szilagyi (1979) was counterbalanced by the scholarly and conceptually based work of Jackofsky, properly credited to former luminaries. Only Raelin and Szilagyi mentioned leadership style specifically, and that was almost as an aside.

The models highlight the importance of constructs, paradigms, and conceptual thinking as evidenced by the litany of references to the authors (Szilagyi excluded).

The conceptual presentations and the accompanying descriptions of the models covered almost every conceivable determinant, precursor, antecedent, correlate, or cause of turnover. The positive and negative consequences of turnover to the individual, the organization, and to society received adequate attention. The deviant/adaptive coping behavior, and its negative implications were more than countered by the cognitive perceptions and values of the individual.

March's and Simon's (1958) contribution was the important conceptual base which led to further research. Price (1977) summarized previous studies and performed an

immensely important task of identification and codification. Szilagyi (1979) was included due to the simplicity and the original attractiveness of the model he pieced together. Mobley's (1977) linkages formed the framework for the Mobley et al. (1979) expanded model. In addition his 1982a publication is the current touchstone for any research on turnover. Raelin's (1983) model identified some previously unidentified and potentially serious consequences of the behavior of dissatisfied employees who stay as opposed to leaving. Jackofsky (1984) added refinement to the work of March and Simon (1958), Mobley (1982a), and Mobley et al. (1979). Her consideration of involuntary quits, transfers, and promotions pointed out rich areas for additional research.

Summary

The data presented in this chapter covered a myriad of investigations. The magnitude of information collected was in accord with the research design and methodology of Chapter III. Each data element was analyzed in this chapter as they related to specific areas of the investigation.

Some of the more prominent results that emerged from the data analyses are:

1. Chief Executive Officer leadership does have a positive impact on retention.

2. Leader initiatives and programs fostered and supported by CEOs do improve the retention of professional employees.

3. Current conceptual models of the turnover process do not explicitly include nor recognize the leadership dimension.

4. The role of participant observer is a demanding and difficult.

5. There is a difference between leadership and management.

The summary findings, conclusions, and recommendations are presented in Chapter V.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

Chapter I outlined the importance of this investigation and stated the purpose, objectives and limitations of the research. The literature review in Chapter II encompassed the many studies of retention and the few associated with leadership. The approved research design and methodology were itemized in Chapter III, and the data analyses and results were presented in Chapter IV. This chapter summarizes the findings, conclusions, recommendations, and final observations.

A model of retention, including leadership, is developed in this chapter. The model is based on prior constructs and includes schema for its application.

Objectives

The objectives of this study were:

1. To investigate the impact of chief executive officers on the retention of professional employees employed by the firm from 1979 through 1985.

2. To determine the effect of leadership initiatives on the retention of newly hired college graduates, particularly those hired during the middle years of this study.

3. To construct a model of retention with leadership as a contributory variable.

This chapter points out how those objectives have been met.

Summary Findings

The conclusions and implications of this research are related to the particular data elements presented in Chapter III. My findings pertinent to each data source and the contribution of those sources to achieving the objectives of this research follow.

Demographics

The analysis of the demographic information in Chapter IV underlined the extensive nature of the demographics recorded in the conduct of this study. The relatively weak relationship between turnover and demographics claimed by Sheridan and Abelson (1983) and others was supported by the analysis of the extensive amount of demographic information in this research. This research also substantiated the contentions of Mobley (1982a) and Price and Mueller (1981) that age and tenure were significantly related to turnover.

Contrary to the finding of Spencer and Steers (1980, 1981), no relationship of rated performance with turnover was found. Likewise, there was no difference in the grade point average of stayers/leavers. Though starting salaries were lower than competitors' offers, there was no discernable difference in the salaries of voluntary quits compared to individuals who stayed with the firm. The source of recruitment was studied, and one conclusion reached was that once a source of new college hires is tapped, additional hires will come from that institution the following year. These items (GPA, source, rated performance, and starting salaries) all essentially reflect the focus of the firm's recruiting efforts, that is, hire from the top 50% of the graduating class.

The recruitment source information and subsequent turnover of locally hired college graduates proved that the cost advantage of local hiring was quickly dissipated. Within a two year time span 30 out of 65 local hires (46%) had voluntarily quit.

Comparing the gender of the college hire voluntary terminations, no difference in the percentage of male versus female leavers was noticeable, which contrasts with some of Lewis' (1979) and Smith's (1979) conclusions.

Married engineers appeared to more quickly socialize, had less ease of movement, and were more able to afford

permanent housing costs due to dual incomes. That finding is based on a comparison of the turnover rates for married new college hires of 2.5% per year to 10% per year for their single counterparts.

The reported 100% turnover of chemical engineers discussed in Chapter IV emphasized the importance of Wanous' (1978) realistic job previews.

One interesting cultural sidelight derived from the biographic data was the familial ties of the oriental (specifically Vietnamese) engineers. The strong need to be with, or close to, their families was evidenced in the exit interviews.

Demographic data, exclusive of age and tenure, are important to the study of turnover but lend little to understanding it.

Follow-up Interviews

The process of follow-up interviews started in mid 1981 continues as of this writing. That fact alone should attest to their utility and importance. Though they represent a vital communication and feedback link, their impact on retention can only be assumed or inferred. The responsiveness of upper management to the problems surfaced during these interviews demonstrated their effectiveness as a corrective action device. The collective complaints directed at the lack of communication and feedback, no

meaningful assignment, and no formal training program served to identify some of the precursors of dissatisfaction and turnover.

My findings concerning the 223 follow-up interviews are:

1. They are a valid means of communication.
2. They serve to identify many problems not surfaced through the line organization.
3. They are an effective device for identifying problems.
4. They reinforce the employees' perceptions of a responsive caring management.

Exit Interviews

The analysis of the 95 available exit interviews correlated age and tenure with turnover. The prescribed exit interview process was not followed. Many engineers terminated without the benefit of an exit voice. The exit interviews were generally hastily conducted on the employee's last day. Reasons for quitting were obscured by the cliché of "other employment." The noted reasons for leaving do not agree with reasons given elsewhere on the exit interview forms, nor inferred from my interpretation of the exit interview reports.

Survey Questionnaire

A survey questionnaire was mailed to former employees. The findings from the responses to the questionnaire confirmed the reasons for leaving as discussed (but not noted) during the exit interviews. The intent to search of the voluntary quits preceded their intent to quit by an average of three and one half months. The former employees displayed a lack of awareness, and hence a lack of participation in the programs directed toward retention. Based on the answers to question seven (Appendix F), the lack of leadership behavior of the CEOs did influence the decision to quit of at least 15% of the 1984 voluntary terminations. The influence was further explained as the failure of the CEOs to set the tone, commitment and direction of the firm.

Telephone Contacts

The findings from the telephone contacts with former employees who terminated in 1984 are a bit dichotomous compared to the survey questionnaire replies. The direct supervisor, according to the telephone conversations, had more bearing on the decision to quit than did the CEO. Other findings from the telephone contacts include:

1. This firm was identified as a good place to start, gain experience, and then leave.

2. Former employees thought the exit interviews were a waste of time and that the results were not used.

3. Almost 40% of the quitters changed jobs again within one year.

4. Once employees quit, they will not return.

5. Trigger events (passed in review, little recognition, and isolated from top management) were the major causes of leaving.

From these telephone contacts alone, no direct relationship of CEO leadership with retention was evident.

Retention Data

Despite the seemingly large amount of data from the firm on retention, the records were too often incomplete, inconsistent, and inadequate. Reasons for termination were not explained. The high rate of turnover of college graduates was obscured by reporting all engineering turnover. Appendix M would indicate the turnover problem in this firm is no worse than that of other competitors. Retention statistics clearly revealed a significant loss of new college graduates within three to five years of service.

One objective of this research was to investigate the impact of chief executive officers on the retention of professional employees. Figures 1.1 and 1.2 depict the percent of new college hires remaining several years after

hire. Engineering graduates for the years 1975-1978 are shown on Figure 11. Graduates for the years 1979-1982 are indicated on Figure 12. Both Figures 11 and 12 are copies of charts as received by this researcher, the identification of the source of the charts has been removed. Despite the slight difference in scale on the abscissas the figures were still useful.

Insert Figure 11 and 12 about here

The negative slope of the curves in Figure 11 are much steeper than those in Figure 12. That indicates that the rate of change (% turnover) per year was much higher for the group of graduates from 1975-1978 than the group hired during 1979-1982. In addition the family of curves on Figure 11 tend to level out approximately at a 35% retention rate after five years. The curves on Figure 12 flatten out much sooner and at a much higher level (above 50% in three years).

I find that the difference between the two groups can be attributed to the impact of the CEO and the leadership initiatives. It is not coincidental that the curves in Figure 12 start to flatten out (decrease turnover) concurrent with the implementation of the leader

initiatives. That simultaneous occurrence will be further explained with the discussion of leader initiatives and Figure 13.

Other findings concerning retention data were:

1. No individual was assigned the responsibility for maintaining retention statistics.
2. Official reports were inconsistent and ignored the existence of previous documents.
3. The onerous task of detailed record keeping on turnover remains an unwanted orphan.

Leader Information

My findings from the various sources used to gather information concerning the leadership behavior of the CEOs are based on the grouping of the relevant data items presented in Chapter IV. Those items included (a) leader initiatives, (b) written correspondence, (c) staff interviews, (d) other interviews, (e) personal interviews, and (f) an attitude survey. The findings resulting from the analysis of each of those items follow.

Leader initiatives.

A brief recap of the leader initiatives is included in Appendix I. The invitation and honorary degree (Appendix Q), developed by this researcher, typify the low cost feature of these initiatives. The 36 items grew from the 21 initial suggestions prepared in 1981. The impact on

retention/turnover of these leader initiatives can best be described by referring to Figures 10, 11, 12 and Tables 24 and 28.

Insert Table 28 about here

The tables and figures all support the finding that the impact of CEO B, and the initiatives authorized by him, had a decided effect on the retention of new college hires. The radical change in the slope of the retention curve in Figure 10 is closely associated with the implementation of the leader initiatives. Figures 11 and 12 pictorially contrast the change in the rate of retention, and the leveling out of the percent retained for graduates employed during CEO B's term in office.

Figure 13 graphically portrays the data from Table 28 pertaining to the turnover rates for all engineers in the firm from 1979 through 1985. The cyclic change in turnover from 10.4%, to 4.9%, to 10% is positively related to the implementation of the leader initiatives and to CEO B's tenure. Though many of the programs presented in Appendix I commenced in mid 1981 their effect undoubtedly was delayed a few months, as illustrated in Figure 13 and Table 28.

Table 28

Engineering Attrition (Percentage)

<u>Year</u>	<u>%</u>
1979	8.0%
1980	10.4%
1981	9.3%
1982	6.7%
1983	4.9%
1984	9.6%
1985	10.0%

Insert Figure 13 about here

CEO B asked for suggested programs, and he had enough vision to realize the positive effect these programs could have. CEO B authorized the use of resources to implement the several programs, thus they were appropriately labeled as leader initiatives.

The impact of the leader initiatives on retention was very positive and served to satisfy two of the objectives of this research. The impact of CEO leadership, and the leader initiatives, improved the retention of new college hires. The ripple effect of the leader initiatives also improved the retention of experienced engineers. Those findings are substantiated by the percentages in Table 28 as portrayed in Figure 13.

Written correspondence. The various written notices, directives, and communiques from the CEOs were rather consistent in style. CEO A's correspondence were very blunt, direct, and almost presumptive that the recipient would understand the messages. CEO C, also direct and brief, continually phrased his messages in commanding conjunctives coupled with the consequences of noncompliance.

CEO B was more expansive in his essays. He stressed teamwork, commitment, positive performance, and care for the individual. His phraseology was typically upbeat, future oriented, and positive. Periodically he also incorporated veiled threats of the consequences of noncompliance.

All of the CEOs' memos bore a stamp of similarity, particularly in the opening sentences. I find that notices of appointments and promotions were conveniently styled after previously issued documents.

My findings concerning the review of the CEOs' written correspondence are:

1. They reflected the management style of the signatories.
2. They were not effectively used to disseminate the philosophy of the individual CEO.
3. Only CEO B's sentence structure and choice of words evoked any positive responses and feelings from employees.

Staff interviews. The 35 staff interviews provided little insight concerning retention. Based on these interviews, I find that the firm's CEOs were not universally esteemed nor perceived as leaders. No staff member described any of the CEOs as a leader, nor did any

of the staff use the term leadership in recounting their experiences with the CEOs.

Other findings from these staff interviews are: (a) staff members tended to be very cautious and guarded, (b) their comments on prior CEOs were much more polific and frank, (c) staff members expressed feelings for a particular CEO ranging from distrust and hate to acceptance and reverence.

Other interviews. The collage of fifteen other interviews gave no insight as to the CEOs' impact on retention. These interviews, like those of the staff members, simply added to the descriptive material of the behavioral styles of the chief executive officers.

CEO A practiced the art of walking around and could readily converse with employees in less prestigious positions. Descriptions of CEO B were more in line with leadership behavior than were those of A or C. The myths, symbols, the purpose and direction, his pat on the back, and his rah rah approach, as described by these other interviewees, are judged to be typical leadership behaviors. One additional finding from the other interviews is that the CEOs do not realize the impact of their incidental contacts on the perceptions of employees and others in the community.

Personal interviews. Findings from my personal interviews with each of the CEOs do not contradict any information or facts garnered from the analysis of the other data elements employed in this study. A few additional findings from these personal interviews are described as they pertain to the particular CEO.

CEO A practiced management by walking around (Peters and Waterman, 1982). He allowed his staff the freedom to carry out their responsibilities with little interference. His only comment on leadership was "True leaders go beyond their responsibility." CEO A stressed his management style in response to the two questions about leadership.

During his interview CEO B seemed to have a better grasp of the differences between management and leadership. He spoke of people who challenge others as leaders. CEO B equated the "movers and shakers" with leaders. He reported he was selected for the post of CEO because "They [the board of directors] wanted someone who is a leader." He stated that his leadership style was one of challenge. [One of the staff interviewees called this conflict]. CEO B's discussion of aggressiveness, the tale of the tarpon, and his expressiveness reflected his dynamic personality and his high level of energy. The interview with CEO B was in sharp contrast with the final interview with his successor.

When asked about the distinction between leadership and management CEO C replied:

My management philosophy should be clear by now

My leadership style is one of control and direction

The direction of the division is the task of the leader to set goals, objectives, future product lines, and to provide the resources to achieve them.

(Interview Notes, September 19, 1985)

The interview with CEO C was much more rigid and formal than the other CEO interviews. CEO C responded more directly to the questions asked and provided little elaboration.

Attitude survey. The attitude survey was incidental to this research and was not conducted by this researcher. The survey results were used to compare and contrast the data from the several other sources. Though the attitude survey was completed during CEO C's assignment as general manager, I believe the results are reflective of the firm's management style over the several years of this study.

The results of the attitude survey described "The leadership style as somewhat exploitative-authoritative." The attitude survey ("Profile of", 1985) also used Likert's definition to find that the firm could be characterized as

having (a) little concern for the human element, (b) a high pressure work environment, and (c) poor communications (pp. 3-6).

Findings from the attitude survey confirm many of the findings from the other data sources. Poor communications were identified throughout the several types of interviews. The high pressure work environment and the lack of concern for the human element were evidenced in the exit interviews, the follow-up interviews, the staff interviews and in the written correspondence. The interview notes from the personal interviews with the CEOs are also indicative of the high pressure work environment. The comments on schedule, cost, and quality, coupled with rather blunt admonitions, certainly resulted in a high pressure environment.

Summary. Other generalized findings resulting from the analysis of the leader information sources are:

1. There are many low cost programs that can be instituted to improve retention of professional employees.
2. Interviews with staff members and other parties, provide accurate descriptions of CEO behavior.
3. Written correspondence and other documents reflect the managerial and leadership philosophies of the CEOs.

4. The attitude survey, though independent from this research, corroborated other findings and correctly identified the predominant managerial style of the firm.

Conclusions

The conclusions arrived at from this research flow from the many data sources employed throughout the study. Based on my investigations and analyses, I present the following conclusions.

1. The leadership shown by the CEO's use of initiatives to improve retention of both newly hired and experienced professional employees was evident and had a positive effect on retention.
2. Younger people with less tenure are more likely to voluntarily terminate.
3. The critical zone for retention of new college hires falls between two and five years of employment.
4. Salary appears to be a secondary consideration in both the decision to participate and the intent to search.
5. Periodic, follow-up interviews are helpful in identifying and correcting problems that may result in turnover if left unresolved.
6. The true reasons for voluntary terminations are seldom discerned during pretermination interviews.

7. Organizational interventions following the individual's intent to search/quit decision are temporary and ineffective.

8. Demographic data lend little to the understanding of turnover.

9. The attitude survey correctly identified the management style of the firm and substantiated several other findings.

10. Former employees are more critical of the firm in survey responses than they are during exit interviews.

One other assumption is that leadership can and should be included in conceptual models of turnover/retention. To accommodate that conclusion and to satisfy the third objective of this research a model of the turnover process was developed.

Model

The conceptual models studied in this research were presented in Chapter III (Figures 1 through 7), and evaluated in Chapter IV. Several lesser models were cited in the literature review in Chapter III. Appendix R lists a representative sampling of studies which included various types of models related to turnover to illustrate the variety of investigative approaches.

Leadership as a determinant, precursor, antecedent, or even as a variable of turnover was absent from the various models. The third objective of this dissertation was to construct a model of retention with leadership as a major variable.

The Turnover Process

My conceptual model of the turnover process is shown in Figure 14. It includes the decision to participate of Barnard (1968). Features from March and Simon (1958) incorporated in the model include (a) the desirability and ease of movement, (b) job satisfaction, and (c) the employee's option to stay and produce/not produce.

Insert Figure 14 about here

The organizational characteristics envisioned by Price (1977), his intervening variable of satisfaction, and the environment external to the organization are prominent in this model of turnover. All of the elements from Szilagyi's (1979) combined process model of turnover are accounted for in the proposed model.

The complexity of the Mobley et al. (1979) expanded model of the turnover process is, unfortunately, inherent in my proposal. The primacy of intention to search and

intention to stay have not be ignored. The emphasis on satisfaction, withdrawal behavior, and individual values from the Mobley model are captured in my model.

I used Raelin's (1983) dissonance, individual characteristics, and his central theme of expectations. I considered his distinction of job versus career dissatisfaction to be too specific and limiting to include in this model.

The importance of job performance, touted by Jackofsky (1984), was enlarged to include performance evaluated by peers, self, and the organization. Her concept of involuntary turnover is subsumed in the satisfaction/dissatisfaction section of the proposed model.

The turnover process model has three major contributing elements:

1. The individual.
2. Leadership and the organization.
3. The environment.

The environment, in which both the individual and the organization operate, accounts for the multitude of variables external to the firm. The level of business activity, availability of jobs, social and recreational activities, educational institutions, community leadership, and housing costs are typical characteristics of the environment. Since the organization and its leaders are

part of the environment, there is an interaction between these two elements which tends to modify and adjust the characteristics over time.

The second major contributory element includes leadership and the organization. The leader of an organization influences both the environment and the individual, even though that influence may be very subtle. The leadership function has a more direct and important impact on the characteristics of the organization. The values, culture, image, policies, goals and objectives are prime organizational characteristics heavily influenced by the leader. In addition to the interaction with the environment, the organization (including the leader) interacts with the individual and over time, the characteristics of both are modified.

The individual is the third major component in the turnover process. Among the important individual attributes are (a) goals, (b) values, (c) skills, (d) education, and (e) avocations. Other individual modifiers include: family, finances, and both organizational and environmental visibility.

The decision to participate results from a cognitive process of self evaluation coupled with an attendant evaluation of the total perceived environment (including the organization). This evaluative phase includes the

development of expectations, be they realistic or otherwise.

The threefold evaluation of job performance entails (a) the prescribed organizational methods and procedures, (b) inputs from coworkers and peers, and (c) a personal assessment of one's contribution. If these three evaluations triangulate into positive feedback, they equate to job satisfaction. Any significant disparity will result in dissatisfaction. Job satisfaction leads to productive output and reinforces the individual's satisfaction. Satisfaction/dissatisfaction can also be induced by the characteristics or actions from the three major elements (individual, organization, and environment). In this time phase of the model, the expectations of the individual and the organization are congruent resulting in job satisfaction, productive output and met expectations.

Trigger events and dissatisfiers attributed to the individual, the organization, or to the environment can upset the delicate balance between satisfaction and dissatisfaction. Two resultants are the intent to search and the decision to stay and not produce. The latter option increases dissatisfaction which can result in involuntary turnover as a result of organizational action.

Dissatisfaction marks the beginning of the dissonance phase, which involves individual consciousness (cognition,

evaluation, and action), and the intent to search. Intent to search includes consideration of internal and external options. If the individual's intent to search is public knowledge, the organization may intervene in an attempt to retain valued employees. In my experience, intervention at this stage has temporary results and within a few months the search is intensified. If the employee decides to stay, without resolution of dissonances or dissatisfiers, typical withdrawal behaviors are adopted which reinforce the individual's dissatisfaction. The nonproductive efforts add to the individual's malcontentment. At this point, action by the firm can lead to involuntary turnover.

The intention to quit, which preceeds the act of quitting, is included in this process model due to the influences of Locke (1969) and Mobley (1977). Once again, organizational intervention at this juncture serves only to delay the act of quitting. The postponement of termination by the decision to stay leads to withdrawal symptoms and dissatisfied, nonproductive output. The final act of quitting is reached after the individual has evaluated the desirability and ease of movement options.

Based on the employee's perceptions, the employee selects one of these three options (a) retirement, (b) self-employment, or (c) the decision to participate in another organization. These choices evolve from the

cognitive evaluation of self and other opportunities, and the process is repeated at another location.

Although this model of turnover definitely displays the influence of prior researchers, several distinctive key features of it are:

1. Leadership is included as a driving force which shapes the organizational characteristics.
2. The interaction of organizational and community leadership is shown.
3. Self-employment and retirement are identified as employee options to other employment.
4. The delicate balance between satisfaction and dissatisfaction is emphasized.
5. The dynamic effect of time is accounted for by the interaction of the changing characteristics of the firm, the organization, and the individual. The three phases of expectations, met expectations, and dissonance are also time related.
6. Three important feedback routes, though not immediately obvious, are features of this model.
 - (a) The first route includes the three major contributory elements (the individual, leadership and the organization, and the environment), the cognitive evaluative process of the individual, the decision to participate, performance and job satisfaction. If the

innumerable source factors are positive, this continuous route persists until retirement.

(b) The second feedback route envelopes job dissatisfaction, intent to search, intent to quit, withdrawal behavior, and nonproductive output. If allowed to persist this negative loop can lead to serious consequences for the individual, the firm, and society. Psychomatic illness, deviant behavior, and low quality output are a few of the spinoffs from this self-reinforcing, negative feedback route. Forced or voluntary termination are the only means of exiting this second route.

(c) The third route of the turnover includes the act of quitting, a repeat of the evaluation circle from the first loop, the options of retirement, self-employment, or to join another firm. Once this third route is exited, the individual recycles back to the initial feedback route in the turnover process.

The proposed turnover process may not be novel nor unique. It does include the major features of published literature and adds the important consideration of the impact of leadership. As with the Mobley et al. (1979) model, this proposed model will also be difficult to test empirically. It may, due its complexity, confound the practitioners responsible for retention. To increase the

proposed model's application and utility, a systems approach from orientation to retention schema is added.

A Systems Approach

Figure 1.5 is a time phased diagram of the related elements in an overall systems approach to retention. An effective retention program includes four interacting segments:

1. Orientation.
2. Acquisition.
3. Retention.
4. Long-term development leading to retirement.

Leadership is an important feature of this systems approach. The end result or the purpose of retention is the achievement of the mutual goals of the leader, the individual, and the organization. Throughout the time phase from orientation to long-term tenure, leadership of an organization influences the variety of initiatives or programs identified under the four major segments (orientation, acquisition, retention, and long-term development).

Insert Figure 1.5 about here

On the left side of Figure 15, leadership behavior is shown to have an impact on the four major segments of the system and the attendant initiatives.

The abscissa in the system diagram is related to years of service and includes the mandatory phases from Rice et al. (1950) of (a) induction crisis, (b) differential transit, and (c) settled connection. Based on this research, a critical zone is shown between the second and fifth year. During that critical period this study has shown that approximately 50% of new college hires will have voluntarily terminated.

Each of the four major segments of this system are shown by the broken lines in Figure 15 to begin at an indefinite point before time zero, which is the actual start date of an employee. This implies that the systems approach to retention commences well before the decision to participate is reached. That implication was also shown in my model of turnover by the interaction between the leader and the organization with the individual before the decision to participate.

The leader's influence on an individual's decision to participate is associated with the firm's image, culture, values and finally with the merging of the mutual goals of the leader, the individual and the organization.

The programs listed under each of the four major segments are illustrative of those garnered from the literature review and include many of the leader initiatives from Appendix I. One common element in the four areas of orientation, acquisition, retention, and development is communication.

Orientation is a continuing process of proclaiming the organization's culture, image, values, and needs. It is a process not focused on specific employable resources, but at present and future customers. Customers in a very broad sense, include present and future employees, product consumers, taxpayers, government agencies, families, and in brief the environment. Orientation continues after employment with tours, presentations, publications and a host of similar activities to maintain the firm's positive image, so that when "[the firm] speaks, everyone listens!"

The acquisition segment begins well before a formal offer is tendered and accepted. Realistic job information, expectations, values and goals should be exchanged, explained, and amplified before time zero in this system. The act of hiring is simply a bench mark on this continuum.

Likewise, retention has its beginnings in advance of the start date or the decision to participate. Growth opportunities, challenge, training, development, and feedback interact with orientation and hiring both before

and after an individual joins the firm. As Figure 15 depicts, the retention efforts continue well beyond the critical zone.

The long-term development segment of this system approach is just that. It too has tentacles of entrapment reaching into the pre-employment period. Training and development, career plans, promotion and recognition are vitally important variables that influence the decision to participate.

The common theme in the systems approach from orientation to retention is leadership. Leadership behavior impacts the firm's approach to orientation, acquisition, retention and long-term development. The firm's leader influences all of the sub elements identified under the four major interactive segments. The long term goals are not simply those of the leader but are meshed with the individual's goals and those of the merged organization.

Orient, Acquire, Retain and Retire (OAR)

Figure 16 illustrates a mnemonic acronym that simplifies the conceptual model in Figure 14 and the system outlined in Figure 15 to an easily understandable portrayal of retention.

Insert Figure 1.6 about here

It should be obvious where the acronym OAR came from. The mutual goals of an organization are represented by the finish line. The environmental characteristics are depicted by the sun, the wind, the clouds, the water and the waves. The shell and the skiffs are indicative of organizational characteristics from my model of turnover. Leadership dimensions from that model are represented by the coxswain and the training, development, and coaching of the leader. The motley looking crew surely has a fair complement of the individual characteristics from the model.

The induction crisis is signaled by "Are you ready? Depart!" ("Etes-vous prêts? Partez!"). The apprehension, nervousness, and expectations of the crew are similar to those of an employee who has decided to participate.

Once a strong comfortable midcourse stroke is attained, the crew, the organization, and the leader reach a point of differential transit. The synchronous movements, the pleasant feeling of accomplishment, the communications (sent, received, and responded to) are

representative of job satisfaction and continued output (the second route in the model).

As the finish line is approached, hopefully in first place, the euphoria of victory dispells any of the nagging irritations endured throughout the course. Recognition is instantaneous from the competitors, the coxwain and fellow crew members. Mentor relationships can benefit teammates on the shore. The goal has been reached together--by the individual, the organization, the leader, and in spite of the environment. The program of Orientation, Acquisition, and Retention (OAR) has been accomplished. Any hint of dissatisfaction, intent to search/quit, and the race is terminated.

Summary

Major features of my model of the turnover process were highlighted with the discussion of that model. Other salient characteristics embodied in the process model are worth mentioning. The model is experientially based on the grounded theory of this research, yet it contains the conceptual influences of prior researchers. Alternative options to simply quitting are included as is the recognition of organizational interventions to deter voluntary terminations.

The importance of job performance as assumed by the individual, as perceived by peers, and as rated by the

organization adds another dimension to the model. The interaction of the individual, the leader and the organization, and the environment serve to highlight the importance of communication.

The recognition of the individual as rationale human beings is evidenced throughout the model. The cognitive evaluation of self and other opportunities and the feedback routes described previously are illustrative of the importance of the individual.

Expectations and met expectations are included to emphasize the need for realistic job previews. The reality of the work place is brought to life in the dissonance phase of my model. The practicality of the conceptual model is further demonstrated by the inclusion of marginal workers (i.e., those who are dissatisfied and produce just enough to get by and work to sustain their avocations).

Though the model was developed in this research it does have widespread applications. The model's utility is supplemented by the systems approach to retention and the presentation of OAR, Figure 16.

Recommendations

The extensive and complicated nature of the subject of retention has been verified by this investigation. There

are many conceptual models and theories that deserve further testing. The literature review established an updated foundation for the continued study of turnover and retention. The complexity of retention merged with the confusing difference between leadership and management. Both areas offer fruitful fields of research. Areas I recommend for future research were accompanied by a feeling of "I would like to know more about that." Those subjects recommended for future investigations are as follows:

1. Are the causes of internal organizational transfers the same that result in involuntary turnover?
2. Do college graduates with prior work experience tend to stay longer with a particular firm? A cohort analysis of those graduates with and without prior experience might prove useful.
3. What are the career effects on former CEOs who remain with the parent organization?
4. Do married, new college graduates have longer job tenure than their single counterparts?
5. What are the success or failure rates of organizational interventions after the employee's intentions to search/quit are known?
6. What programs, similar to the leader initiatives in this study, are more effective in retaining new college hires?

7. To what extent is the information collected during exit interviews used to effect changes?

Final Considerations

As this study concludes there are other observations, beyond the meeting of stated objectives, which should be voiced. The retention of professional employees, specifically new college hires, remains a problem to be addressed.

Throughout this dissertation, and my course of studies, I have wrestled with the problem of distinguishing leadership from management. I believe that case studies similar to this research can further refine the difference between leadership and management. Too many articles, with leader or leadership in their titles, were nicely disguised writings on management. Too few authors clearly defined leadership, and too many used the term leadership interchangeably and synonomously with management.

The importance of communication as a determinant of turnover was prevalent in the literature and was pervasive throughout the many data elements in this research.

Two final questions merit some consideration "What have I contributed?" and "How was the original problem resolved?" This grounded research culminated in the development of a theoretical yet practical model of the

turnover process which added leadership as a major determinant of retention/turnover.

The impact of CEO leadership and the initiatives fostered by that leadership were shown to have a positive effect on retention. I have also identified several programs which can have positive results on the retention of employees.

In conclusion, I feel I have benefitted from this research and acquired a greater appreciation and knowledge of two interesting complex subjects, retention and leadership. I hope to apply my knowledge to a better understanding of both topics.

Note

The following references in conjunction with Appendix B (military studies) and Appendix R (sampling of studies using models) are but another building block to add to the foundation established in the early 20th Century by previous researchers. It is my hope that future investigators can enhance this information through their interest and research efforts.

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APPENDIX A

Housing Affordability Ratio**Percentage of California households
able to purchase median-priced home**

First quarter 1985 - By region

Region	Median home price	Monthly mortgage payment	Minimum income	% Households able to purchase
California	\$112,531	\$953	\$38,120	34%
Sacramento	\$75,777	\$642	\$25,680	52%
Riverside/ San Bernardino	\$84,446	\$715	\$28,610	46%
San Diego	\$101,162	\$857	\$34,273	39%
Los Angeles	\$114,312	\$968	\$38,728	35%
Orange County	\$132,137	\$1,119	\$4,767	37%
San Francisco	\$136,253	\$1,154	\$46,161	31%
Santa Clara sub-region	\$141,095	\$1,195	\$47,802	35%

Source: Median home prices from California Association of Realtors Trends data.

Income from 1980 Census assumes 30% of income is used for principal and interest payments.

The affordability index: California

Year	Median home price	Interest rate	Monthly mortgage payment	Minimum income	% Households that can afford to buy
1978	\$69,800	9.58	\$473	\$18,920	45%
1979	\$82,880	10.92	\$627	\$25,080	35%
1980	\$98,040	12.95	\$865	\$34,600	24%
1981	\$106,040	15.12	\$1,081	\$43,240	17%
1982	\$110,020	15.38	\$1,036	\$41,440	22%
1983	\$112,592	12.85	\$985	\$39,400	28%
1984	\$112,472	12.49	\$960	\$38,400	33%
1st qtr. 1985	\$112,531	12.39	\$953	\$38,120	34%

SOURCE: Household income data is extrapolated from the 1980 Census.

Interest rate data is the Federal Home Loan Board effective rate on all loans closed on previously owned homes.

Median home prices are from California Association of Realtors Trends data and National Association of Realtors.

Source: The San Diego Union, July 7, 1985, p.F-28.

APPENDIX B

List of Government Reports Reviewed

- Abrahams, N. M., Neumann, I., and Githens, W. H. (1967, July). The navy activities preference blank as a predictor of reenlistment. Technical Bulletin STB 68-1. San Diego, CA: U. S. Naval Personnel Research Activity.
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APPENDIX B (Cont'd)

List of Government Reports Reviewed

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APPENDIX C

TYPICAL REQUEST LETTER

25 March 1984

Dr. William H. Mobley
Texas A & M University

Dear Professor Mobley,

I am a doctoral student at the University of San Diego. My dissertation deals with retention of professional employees. Since you are one of the prominent researchers on turnover, I would appreciate any suggestions or information concerning turnover or attrition.

Specifically I plan to research the impact of leadership on retention as that area seems to be somewhat ignored in the literature. I have read your book, Employee Turnover: Causes, Consequences and Control, and found it to be an excellent source of information.

In addition to my student role I am the Manager of Engineering Personnel for a medium size electronics firm. This may help to explain my professional, personal and academic interest in the subject matter.

With your expertise I believe your input, comments or suggestions would prove valuable.

Thank you for your interest and response.

Sincerely,

William P. Shine

WPS:sar

APPENDIX C (Cont'd)

SAMPLE REPLY

The Amos Tuck School of Business Administration
DARTMOUTH COLLEGE • HANOVER • NEW HAMPSHIRE • 03755

March 20, 1984

Mr. William P. Shine
3124 Mobley Street
San Diego, CA 92123

Dear Mr. Shine:

Your dissertation research on the retention of professional employees sounds very interesting. This is a group for which retention by the organization is very important but often problematic. Thus, I think you might find some very interesting and useful results.

Most of my own work in the area of turnover has been summarized in a recent book I published with Richard Steers and Lyman Porter (Employee-Organization Linkages. New York: Academic Press, 1982). I believe this would be the best single source for you to become familiar with our research. I have enclosed a brochure describing the book, which should be available in your library.

In addition, I am enclosing a paper I recently prepared dealing with the issue of how organizations can adapt to high employee turnover rates. Although focusing more on lower-level employees, it attempts to explore what organizations can do when increasing retention is not a feasible option. I hope it proves useful.

Good luck on your dissertation research.

Sincerely,

Richard T. Mowday
Visiting Associate Professor

APPENDIX C (Cont'd)

ACKNOWLEDGMENT

15 April 1984

Dr. J. L. Price
Department of Sociology
University of Iowa
Iowa City, Iowa

Dear Dr. Price,

Thank you for your prompt response to my inquiry on turnover and for the material you enclosed.

I was flattered to receive a response from one who is recognized as a leading authority on the subject. I will review the material you sent as thoroughly as your other publications.

I was impressed with the packaging of the Denver questionnaire and am considering a similar approach.

Thanks again for your interest, your input and your quick response. It is through your type of encouragement that sparks continued interest and research in the area of turnover.

Sincerely,

William P. Shine

WPS:sar

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APPENDIX D

Pre-Termination Interview

Name		Classification	
Dept. Name	Dept. No.	Supervisor's Name	Division Staff Member
Anniversary Date	Termination Date	Interview Date	Reason for Leaving
INFORMATION ON NEW EMPLOYER			
Company Name		Location	Salary - \$
Classification		Duties	
What specifically caused employee to decide to leave?			
Employee's feelings about his total work experience at [firm].			
Employee's feelings about [firm].			
			Would he/she return?
Employee's suggestions for improvements:			
Interviewer's comments and evaluation:			
Supervisor's comments:			
			Rating
Interviewer		Reviewed by	

APPENDIX E

RECRUITING FOLLOW-UP INTERVIEW FORMAT

(F) = Firm

- * Mail in _____ Campus _____
- * How did you find out about (F)? _____
- * Impression of (F) before interview _____

- * Comments on campus recruiting _____

- * How soon did you receive a response? _____

PLANT VISIT -

- * Welcome package _____ Comments _____

- * Travel and Accomodations _____

- * Orientation _____

- * Department Interviews _____

- * ATS Tour _____ Comments _____

REASONS FOR CHOOSING (F):

- * Salary _____ # of offers _____ High _____ Low _____
- * Benefits _____
- * Location _____
- * Family & Friends _____
- * Job Content _____

Leadership/Retention Model 400

APPENDIX E (Cont.)

FOLLOW-UP INTERVIEW FORMAT

REASONS FOR CHOOSING (F) CONTINUED -

(F) = Firm

* Company atmosphere _____

* Other _____

RELOCATION -

TRANSITION -

* Orientation. Do you feel you are adequately oriented? _____

* Knowledge of: _____ Benefits _____ Procedures (SPAM,
comments on Meet & Mix/New Hire Orientation) _____

WORK ASSIGNMENT -

* How soon were you given an assignment? _____

* Was the assignment challenging? _____

* Were you given adequate supervision and feedback _____

* Comments on the environment _____

Leadership/Retention Model 401

APPENDIX E (Cont.)

FOLLOW-UP INTERVIEW FORMAT

OVERALL COMMENTS -

* Good _____

* Bad _____

* Action Items _____

DATE: _____

APPENDIX F

Letter and
Survey Questionnaire

20 February 1985

Dear

Since leaving [Company X] I hope you have found continued opportunity and challenge. At present I am completing research for my doctoral dissertation concerning employee turnover. The research has company approval and is directed at promoting job satisfaction and understanding turnover. We will be contacting former employees via mail and/or telephone.

To assist me in completing my study will you please complete and return the enclosed questionnaire by March 10th. A self addressed envelope is enclosed for your convenience.

It is not necessary to sign the questionnaire, you may include any additional comments on a separate sheet of paper or if you wish to personally discuss the questionnaire feel free to call me at either number(s) listed below.

Your questionnaire will be combined and tabulated with others received and compared to information summarized from pre-termination interviews.

Thank you for your response and particularly your assistance in helping me to complete one phase of my dissertation.

Sincerely,

William P. Shine
(H)
(W)

APPENDIX F (Cont'd)

Reply
Post-Exit Questionnaire

DO NOT SIGN. ANSWER BY CHECKMARK WHERE CHOICE OF ANSWER BLANK IS OFFERED. IF MORE ROOM IS NEEDED FOR COMMENTS, PLEASE CONTINUE ON THE BACK OF THIS SHEET. THANK YOU FOR YOUR RESPONSE.

1. When you were first employed at [Company X] were the duties and responsibilities of your position clearly explained to you?

Yes _____ No _____ Uncertain _____

Comments: _____

2. Were the conditions of work, salary and other benefits clearly explained to you?

Yes _____ No _____ Uncertain _____

Comments: _____

3. Could anything have been done to prevent your leaving?

Yes _____ No _____ Uncertain _____

4. What specifically caused you to decide to leave?

5. Prior to your termination date, when did you start to search for alternate employment?

1 month _____ 3 months _____ 6 or more _____

6. How does your present job compare with your last job with us?

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APPENDIX F (Cont'd)

Reply
Post-Exit Questionnaire

7. What are your feelings about your work experience at Company X?

8. Did the General Manager(s) have any effect on your decision to leave?

Yes _____ No _____ Uncertain _____

Comments: _____

9. Were you aware of any program initiated during your employment at [Company X] to improve the working conditions? (i.e., newsletter, follow-up interviews, socials, tuition assistance, etc.)

Unaware of any _____ Aware of some _____ Uncertain _____

Comments: _____

10. Did you participate in any of the above programs?

Yes _____ No _____ Some _____

11. Add here any other comments you wish to make about your work at [Company X], your suggestions for making it a better place to work.

THANK YOU FOR YOUR COOPERATION.
PLEASE RETURN QUESTIONNAIRE IN ENCLOSED STAMPED ENVELOPE.

APPENDIX G

Telephone Contact Questionnaire

1. What was the primary reason you left [Company X]?
2. Did you give a full explanation of that reason in the exit interview?
3. Do you believe the interviewer understood the real reason you left?
4. Do you believe the exit interview results are used?
5. Do you feel your direct supervisor had a
 - a. direct influence
 - b. indirect influence
 - c. no influenceon your decision to leave?
6. Do you feel your manager or supervisor was
 - a. highly
 - b. influenced slightly
 - c. not affected at allby the actions of the General Manager?
7. Did those actions influence your decision to leave?
8. Are you in the position you took when you left [Company X]?
9. When you left, did you feel others would be leaving for reasons similar to yours?
10. In your exit interview, you indicated you would/would not return to [Company X]. Is that still true?

APPENDIX H

Paraphrased Chief Executive Officer B Memo

DATE: 25 September 1981
TO: Vice Presidents of Engineering and Human
Resources
FROM: General Manager
SUBJECT: New Engineering College Graduate Retention
Program.

The subject of retention of new engineering college graduates was discussed during the meeting with the Corporate Vice President last week. Each General Manager was asked to submit a plan to ensure retention of our new engineering graduates. During the session, the following comments were made relative to ensuring retention of new engineers:

1. The job challenge must be there.
2. A definitized career path must be made available.
3. The immediate supervisor must be committed to ensuring employee job satisfaction and that career path opportunities are made available to the employee. Regular counselling and feedback sessions must be an integral part of this program.
4. A systematic review of the new engineer's performance and professional growth opportunities afforded him must be made. Specific levels of management must participate in the review process to ensure program success.
5. Top management involvement is a critical element in the success of a retention program. Incentive compensation objectives and work plan objectives must be made to motivate the management team to meet the corporate objectives of new employee retention.
6. The employee must feel that he is sufficiently challenged and that professional growth paths are readily available. He must be particularly attuned to near term opportunities that will prepare him for first level supervisory or senior engineering roles in the division.

Leadership/Retention Model 407

APPENDIX H (Cont'd)

Paraphrased Chief Executive Officer B Memo

I would like to review your New Engineering College Graduate Retention Plan by 31 October. This plan will also be reviewed with the Corporate Vice President shortly thereafter. I envision that the plan would include a timetable for implementation as well as the various commensurate actions and initiatives that would ensure the program's success.

The challenge will be to motivate not only the new engineer, to the career opportunity at our corporation, but also the engineering management team at all levels to the importance of this program. Our recent initiatives in making our new graduates feel a part of our team is a step in the right direction. I look forward to working with you on this very important program.

Vice President &
General Manager

cc: Corp. Vice Presidents

APPENDIX I

LEADER INITIATIVES PROPOSED *

<u>PROGRAMS</u>	<u>IMPLEMENTED</u>	<u>COST</u>	<u>ACTION</u>	<u>DISPOSITION</u>
Orientation	Yes	4 Hrs. Indirect	HG/WPS	Continue
Socials	Yes	\$300./Event	WPS	Continue
Education Week	Yes	\$75./Event	WPS	Continue
Interviews	Yes	--	WPS	Complete
Recruiter Training	Yes	30 Hrs. Indirect	WPS/HG	Repeat each Recruiting Period.
Electronically Speaking	No	Min.	MJB	Start
Intern Swap	No	-	HG/WPS	Do Internally
Career Panel	No	-	MJB	Include in Electronically Speaking
Technical Seminars	No	-	JMJ	Do by end of year.
Check List	No	-	WPS	Do
Engineering Career Development	No	-	HG/WPS	Do
Division Newsletter	No	\$20-30,000/Yr.	KB/WPS	Investigate
Degree Recognition	No	Min.	CIA	Start in 1982
Mentor	No	TBD	CIA	Include in ECD
Adopt-a-grad	No	-	Staff	Include in ECD

* Status of Proposals as of May, 1981.

Leadership/Retention Model 408

APPENDIX I (Cont'd)

LEADER INITIATIVES PROPOSED *

<u>PROGRAMS</u>	<u>IMPLEMENTED</u>	<u>COST</u>	<u>ACTION</u>	<u>DISPOSITION</u>
Ombudsman	No	--	Staff	Include in ECD
Job Rotation	No	--	Staff	Include in ECD
Advisor	No	Min.	CIA	Include in ECD
Department Activities	No	--	Staff	Encourage via staff meetings.
Career Development	No	?	CIA	Do with ECD
Settling in Allowance	No	--	HEL/AL	Formalize
Tuition Refund	Partial	?	CIA/WPS	Do-input submitted to corporate.
Steering Committee	No	Min.	Engrg./HG	Implement
Credit Union	No	Min	LG	Start by end of year
Involve New Grads	No	NIL	HG/WPS	Do
Upward Reviews	No	Min.	WPS	Get Information
WPR (Work Progress Review)	No	Min.	WPS	Get Information
Supervisor Training	Yes	In Training Budget	HG/WPS	Expand

* Status of Proposals as of May, 1981.

APPENDIX I (Cont'd)

LEADER INITIATIVES PROPOSED *

<u>PROGRAMS</u>	<u>IMPLEMENTED</u>	<u>COST</u>	<u>ACTION</u>	<u>DISPOSITION</u>
Plant Tours	No	\$100.	Engrg./IR	Hold
Vacation/Sick Leave	No	?	HEL/WPS	Drop
Turkey	No	None	--	Drop
Retention Award	No	\$2-\$3K	--	Drop
Referral	No	\$1,000/Yr.	HEL/WPS	Hold for Corporate Review.
T-Shirts	No	TBD	KB	Available through Recreation Association
Retirement Award	No	Min.	CH	In effect.
Quality Circles	No	1 hr./week	WPS	Start
Service Awards	Yes	?	WPS	Revise

* Status of Proposals as of May, 1981.

Leadership/Retention Model 410

APPENDIX I (Cont.)

TYPICAL PRESENTATION FORMAT

FOLLOW-UP INTERVIEWS

INTERVIEW NEW GRADS AFTER START DATES TO ASSESS RECRUITMENT, INTERVIEWS, EMPLOYMENT, RELOCATION AND ASSIGNMENT.

PROVIDES:

INSIGHT INTO PROBLEM AREAS

RECOMMEND:

CONTINUE, EXPAND TO DEPARTMENT SUPERVISION TO IMPROVE COMMUNICATIONS

COST:

MINIMAL

IMPLEMENTATION:

STARTED 1981

DISPOSITION:

COMPLETE REMAINDER OF INTERVIEWS, SEND NOTE TO DIRECTORS RECOMMENDING THEY ALSO CONDUCT INTERVIEWS

APPENDIX J

ATTITUDE SURVEY

PROFILE OF ORGANIZATIONAL CHARACTERISTICS

This questionnaire was developed for describing the management system or style used a company or one of its divisions.

In completing the questionnaire, it is important that each individual answer each question as thoughtfully and frankly as possible. This is not a test, there are no right or wrong answers. The important thing is that you answer each question the way you see things or the way you feel about them.

Instructions:

On the line below each organizational variable (item), please place an N at the point which, in your experience, describes your organization at the present time. (N = now).

Treat each item as a continuous variable from the extreme at one end to that at the other.

1.	Total years with Company X.		1.	_____
	0-3 3-8 8-15 15-25 25+			
	1 2 3 4 5			
2.	Job Classification _____		2.	_____
3.	Department name/number _____		3.	_____
4.	Labor Grade _____		4.	_____
5.	Payroll Status (1) SAL (2) SNE (3) HRLY		5.	_____
6.	Age Group 20-25 25-30 30-40 40-50 50-55 55+		6.	_____

Organisational Variable	Profile of Organisational Characteristics (Cont'd)				
1. Leadership processes used					
a. Extent to which superiors have confidence and trust in subordinates.	Have no confidence and trust in subordinates.	Have condescending confidence and trust. such as master has in servant.	Substantial but not complete confidence and trust; still wishes to keep control of decisions.	Complete confidence and trust in all matters.	7
b. Extent to which subordinates, in turn, have confidence and trust in superiors.	Have no confidence and trust in superiors.	Have subservient confidence and trust. such as servant has to master.	Substantial but not complete confidence and trust.	Complete confidence and trust.	8
c. Extent to which superiors display supportive behavior toward others.	Display no supportive behavior toward others.	Display supportive behavior in condescending manner and situations only.	Display supportive behavior quite generally.	Display supportive behavior fully and in all situations.	9
d. Extent to which superiors behave so that subordinates feel free to discuss important things about their job with their immediate superior.	Subordinates feel completely free to discuss things about the job with their superior.	Subordinates feel rather free to discuss things about the job with their superior.	Subordinates do not feel very free to discuss things about the job with their superior.	Subordinates do not feel at all free to discuss things about the job with their superior.	10
e. Extent to which immediate superior in solving job problems generally tries to get subordinates' ideas and opinions and make constructive use of them.	Always gets ideas and opinions and always tries to make constructive use of them.	Usually gets ideas and opinions and usually tries to make constructive use of them.	Sometimes gets ideas and opinions of subordinates in solving job problems.	Seldom gets ideas and opinions of subordinates in solving job problems.	11

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Organisational
Variable

Profile of Organisational Characteristics (Cont'd)

2. Character of motivational forces
used within the department.

a. Underlying motives tapped.	Physical security, economic needs and economic needs, and moderate use of ego some use of the motives, e.g., desire for status.	economic needs and moderate use of ego motives, e.g., desire for status, affiliation, and achievement.	Economic needs and considerable use of ego, and other major ego and other major motives, e.g., desire for new experiences	Full use of economic, motives, as, for example, motivational forces arising from group goals.	12
b. Manner in which motives are used	Fear, threats, punishments, and occasional rewards.	Rewards and some actual or potential punishment.	Rewards, occasional punishments, and some involvement.	Economic rewards based on compensation system developed through participation; group participation and involvement in setting goals, improving methods, appraising progress toward goals, etc.	13
c. Kinds of attitudes developed toward organization and its goals.	Attitudes are strongly favorable and provide powerful stimulation to behavior implementing organization's goals.	Attitudes usually are favorable and support behavior implementing organization's goals.	Attitudes are sometimes hostile and counter to organization's goals and are sometimes favorable to the organization's goals and support the behavior necessary to achieve them,	Attitudes usually are hostile and counter to organization's goals.	14

Profile of Organizational Characteristics (Cont'd)					
Organizational Variable					
d. Extent to which motivational forces conflict with or reinforce one another.	Marked conflict of forces substantially reducing those motivational forces leading to behavior in support of the organization's goals.	Conflict often exists; occasionally forces will reinforce each other, at least partially.	Some conflict, but often motivational forces will reinforce each other.	Motivational forces generally reinforce each other in a substantial and cumulative manner.	15
e. Amount of responsibility felt by each member of organization for achieving organization's goals.	Personnel at all levels feel real responsibility for organization's goals and behave in ways to implement them.	Substantial proportion of personnel, especially at higher levels, feel responsibility and generally behave in ways to achieve the organization's goals.	Managerial personnel usually feel responsibility; rank and file usually feel relatively little responsibility for achieving organization's goals.	High levels of management feel responsibility; lower levels feel less; rank and file feel little and often welcome opportunity to behave in ways to defeat organization's goals.	16
f. Attitudes toward other members of the organization.	Favorable, cooperative attitudes throughout the organization with mutual trust and confidence.	Cooperative, reasonably favorable attitudes toward others in organization; may be some competition between peers with resulting hostility and some condescension toward subordinates.	Subservient attitudes toward superiors; competition for status resulting in hostility toward peers; condescension toward subordinates.		17

Organizational Variable	Profile of Organizational Characteristics (Cont'd)					
2. <u>Character of motivational forces used within the department (Cont'd)</u>						
g. Satisfaction derived	Relatively high satisfaction throughout the organization, membership in the organization, supervision, and one's own achievements.	Some dissatisfaction to moderately high satisfaction with regard to membership in the organization, supervision, and one's own achievements.	Dissatisfaction to moderate satisfaction with regard to membership in the organization, supervision, and one's own achievements.	Usually dissatisfaction with membership in the organization, with supervision, and with one's own achievements.		18
3. <u>Character of communication process</u>						
a. Amount of interaction and communication aimed at achieving organization's objectives.	Very little.	Little.	Quite a bit	Much with both individual and groups.		19
b. Direction of information flow.	Downward	Mostly downward.	Down and up.	Down, up, and with peers.		20
c. Downward communication <u>within</u> the department.						
(1) Where initiated.	Initiated at all levels.	Patterned on communication from top, but with some initiative at lower levels.	Primarily at top or patterned on communication from top.	At top of organization or to implement top directive.		21
(2) Extent to which superiors willingly share information with subordinates.	Provide minimum of information.	Gives subordinates only information superior feels they need.	Gives information needed and answers most questions.	Seeks to give subordinates all relevant information and all information they want.		22

Organizational
Variable

Profile of Organizational Characteristics (Cont'd)

3. Character of communication process (Cont'd)

(3) Extent to which communications are accepted by subordinates.	Generally accepted, but if not, openly and candidly questioned.	Often accepted but if not, may or may not be openly questioned.	Some accepted and some viewed with suspicion	Viewed with great suspicion	23
d. Upward communication.	Very little	Limited	Some	A great deal.	
(1) Adequacy of upward communication via line organization.					24
(2) Subordinates' feeling of responsibility for initiating accurate upward communication.	None at all	Relatively little, usually communicates "filtered" information and only when requested; may "yes" the boss.	Some to moderate degree of responsibility to initiate accurate upward communication.	Considerable responsibility felt and much initiative; group communicates all relevant information.	25
(3) Forces leading to accurate or distorted upward information.	Virtually no forces to distort and powerful forces to communicate accurately.	Occasional forces to distort along with many forces to communicate accurately.	Many forces to distort; also forces for honest communication.	Powerful forces to distort information and receive superiors.	26
(4) Accuracy of upward communication via line	Accurate	Information that boss wants to hear flows; other information may be limited or cautiously given.	Information that boss wants to hear flows; other information is restricted and filtered.	Tends to be inaccurate.	27

Organizational Variable		Profile of Organizational Characteristics (Cont'd)			
d.	Upward communication (Cont'd)				
	(5) Need for supplementary upward communication system.	No need for any supplementary system.	Slight need for supplementary system suggestion systems may be used.	Upward communication often supplemented by suggestion systems and similar devices.	Great need to supplement upward communication by spy system, suggestion system, and similar devices.
					28
e.	Sideward communication, its adequacy and accuracy.	Usually poor because of competition between peers, corresponding hostility.	Fairly poor because of competition between peers.	Fair to good.	Good to excellent.
					29
f.	Psychological closeness of superiors to subordinates (i.e., friendliness between superiors and subordinates)	Usually very close.	Fairly close	Can be moderately close if proper roles are kept.	Far apart.
					30
	(1) How well does superior know and understand problems faced by subordinates?	Knows and understands problems of subordinates very well.	Knows and understands problems of subordinates quite well.	Has some knowledge and understanding of problems of subordinates.	Has no knowledge or understanding of problems of subordinates.
					31
	(2) How accurate are the perceptions by superiors and subordinates of each other?	Often in error	Often in error on some points	Moderately accurate.	Usually quite accurate.
					32

Organisational Variable	Profile of Organisational Characteristics (Cont'd)			
4. <u>Character of interaction-influence process within the department.</u>				
a. Amount and character of interaction	Extensive, friendly interaction with high degree of confidence and trust.	Moderate interaction, often with fair amount of confidence and trust.	Little interaction and usually with some condescension by superiors; fear and caution by subordinates.	Little interaction and always with fear and distrust.
				33
b. Amount of Cooperative teamwork present	Very substantial amount throughout the organisation.	A moderate amount.	Relatively little.	None.
				34
c. Extent to which subordinates can influence the goals, methods, and activity of their units and departments				
(1) As seen by superiors.	None.	Virtually none.	Moderate amount.	A great deal.
				35
(2) As seen by subordinates.	None except through "information organization" or via unionisation.	Little except through "informal organization" or via unionisation.	Moderate amount both directly and via unionisation (where it exists)	Substantial amount both directly and via unionisation (where it exists)
				36
d. Amount of actual influence which superiors can exercise over the goals, activity, and methods of their units and departments.	Believed to be substantial but actually moderate unless capacity to exercise severe punishment present.	Moderate to somewhat more than moderate, especially for higher levels in organisation.	Moderate to substantial especially for higher levels in organisation.	Substantial but often done indirectly, as, for example, by superior building effective interaction-influence system.
				37

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Organisational Variable		Profile of Organisational Characteristics (Cont'd)			
e.	Extent to which an effective structure exists enabling one part of organisation to exert influence upon other parts.	Highly effective structure exists enabling exercise influence in all directions.	Moderately effective structure exists; influence exerted largely through vertical lines.	Limited capacity exists; influence exerted largely via vertical lines and primarily downward.	Effective structure virtually not present.
					30
5. <u>Character of decision-making process.</u>					
a.	At what level in organisation are decisions formally made?	Bulk of decisions at top of organisation.	Policy at top, many decisions within prescribed framework made at lower levels but usually checked with top before action.	Broad policy decisions at top, more specific decisions at lower levels.	Decision making widely done throughout organisation, although well integrated through linking process provided by overlapping groups
					39
b.	How adequate and accurate is the information available for decision making at the place where decisions are made?	Information is generally inadequate and inaccurate.	Information is often somewhat inadequate and inaccurate.	Reasonably adequate and accurate information available.	Relatively complete and accurate information available based both on measurements and efficient flow of information in organisations.
					40
c.	To what extent are decision makers aware of problems, particularly, those at lower levels in the organisation?	Generally quite well aware of problems.	Moderately aware of problems.	Aware of some, unaware of others.	Often are unaware or only partially aware.
					41

Organisational Variable	Profile of Organisational Characteristics (Cont'd)				
5. Character of decision-making process (Cont'd)					
d. Extent to which technical and professional knowledge is used in decision making.	Used only if possible at higher levels.	Much of what is available in higher and middle levels is used.	Much of what is available in higher, middle, and lower levels is used.	Most of what is available anywhere within the organization is used.	42
e. Are decisions made at the best level in the organization as far as					
(1) Availability of the most adequate information bearing on the decision.	Overlapping groups and group decision processes to point where information is most adequate or adequate and accurate information to the decision-making point.	Some tendency for decisions to be made at higher levels than where most adequate and accurate information exists.	Decisions often made at levels appreciably higher than levels where most adequate and accurate information exists.	Decisions usually made at levels appreciably higher than levels where most adequate and accurate information exists.	43
(2) The motivational consequences (i.e., does the decision-making process help to create the necessary motivations in those persons who have to carry out the decisions?)	Substantial contribution by decision-making processes to motivation to implement.	Some contribution by decision making to motivation to implement.	Decision making contributes relatively little motivation	Decision making contributes little or nothing to the motivation to implement the decision, usually yields adverse motivation.	44

Organizational Variable	Profile of Organizational Characteristics (Cont'd)				
5. Character of decision-making process (Cont'd)					
f. To what extent are subordinates involved in decisions related to their work?	Not at all	Never involved in decisions; occasionally consulted	Usually are consulted but ordinarily not involved in the decision making.	Are involved fully in all decisions related to their work.	
					45
g. Is decision making based on man-to-man or group pattern of operation? Does it encourage or discourage teamwork?	Man-to-man only, discourages teamwork.	Man-to-man almost entirely, discourages teamwork.	Both man-to-man and group, partially encourages teamwork.	Largely based on group pattern, encourages teamwork.	
					46
6. Character of goal setting or ordering					
a. Manner in which usually done.	Except in emergencies, goals are usually established by means of group participation.	Goals are set or orders issued after discussion with subordinates of problems and planned action	Orders issued, opportunity to comment may or may not exist.	Orders issued.	
					47
b. To what extent do the different hierarchical levels tend to strive for high performance goals?	High goals sought by all levels, with lower levels sometimes pressing for higher goals than top levels.	High goals sought by higher levels but with occasional resistance by lower levels.	High goals sought by top and often resisted moderately by subordinates.	High goals pressed by top, generally resisted by subordinates.	
					48
c. Are there forces to accept, resist, or reject goals?	Goals are overtly accepted but are covertly resisted strongly	Goals are overtly accepted but often covertly resisted to at least a moderate degree.	Goals are overtly accepted but at times with some covert resistance.	Goals are fully accepted both overtly and covertly.	
					49

Organisational Variable	Profile of Organizational Characteristics (Cont'd)			
7. <u>Character of quality performance within your department.</u>				
a. At what hierarchical levels in organization does major or primary concern exist with regard to the quality of performance?	At the very top only.	Primarily or largely at the top.	Primarily at the top but some shared feeling of responsibility felt at middle and to a less extent at lower levels.	Concern for performance of control functions likely to be felt throughout organization.
				50
b. How accurate are the measurements and information used to guide the quality of performance, and to what extent do forces exist in the organization to distort and falsify this information.	Strong pressures to obtain complete and accurate information to guide own behavior and behavior of own and related work groups hence information and measurements tend to be complete and accurate.	Some pressure to protect self and colleagues and hence some pressures to distort; information is only moderately complete and contains some inaccuracies.	Fairly strong forces exist to distort and falsify; hence measurements and information are often incomplete and inaccurate.	Very strong forces exist to distort and falsify; as a consequence, measurements and information are usually incomplete and often inaccurate.
				51
c. Extent to which the quality of your performance is concentrated.	Highly concentrated in top management.	Relatively highly concentrated, with some delegated control to middle and lower levels.	Moderate downward delegation of review and control processes; lower as well as higher levels perform these tasks.	Review and control done at all levels with lower units at times imposing more vigorous reviews and tighter controls than top management.
				52

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Organizational Variable	Profile of Organisational Characteristics (Cont'd)				
7. <u>Character of quality performance within your department. (Cont'd)</u>					
d. Extent to which there is an informal organization present and supporting or opposing goals of formal organization.	Informal organization present and opposing goals of formal organization.	Informal organization usually present and partially resisting goals.	Informal organization may be present and may either support or partially resist goals of formal organization.	Informal and formal organization are one and the same; hence all social forces support efforts to achieve organization's goals.	53
e. Extent to which control data (e.g., accounting, productivity, cost, etc.) are used for self-guidance or group problem solving by managers and non-supervisory employees, or used by superiors in a punitive, policing manner.	Used for policing and in punitive manner.	Used for policing coupled with reward and punishment, sometimes punitively; used somewhat for guidance but in accord with orders.	Used for policing with emphasis usually on reward but with some punishment; used for guidance in accord with orders; some use also for self-guidance.	Use for self-guidance and for coordinated problem solving and guidance; not used punitively.	54
8. <u>Performance goals and training</u>					
a. Level of performance goals which superiors seek to have organization achieve.	Seek to achieve extremely high goals.	Seek very high goals.	Seek high goals.	Seek average goals.	55
b. Extent to which you have been given the kind of management training you desire.	Have received no management training of kind I desire.	Have received some management training of kind I desire.	Have received quite a bit of management training of kind I desire.	Have received a great deal of management training of kind I desire.	56

Organizational
Variable

Profile of Organizational Characteristics (Cont'd)

8. Performance goals and training (Cont'd)

c. Adequacy of training resources provided to assist you in training your subordinates.	Training resources provided are excellent.	Training resources provided are very good.	Training resources provided are good.	Training resources provided are only fairly good.

9. Additional comments are welcome.

APPENDIX K

Sample Responses to Post-Exit Questions
4, 6, 7 and 11

Question 4 What specifically caused you to decide to leave?

- * Nothing specific, just a lot of small things; job satisfaction, unprofessional environment, pay, treatment of female engineers.
- * More money, better working conditions, general feeling that company management did and does not care about individuals.
- * Lack of professional respect as scientist, little potential growth forseen.
- * Lost confidence in senior management, it was evident that management had no interest in my career objectives.

Question 6 How does your present job compare with your last job with us?

- * Better (more money, responsibility, freedom of action), although some of this is natural since I am further along in my career.
- * More challenges and better opportunity for growth and advancement. Creativity not hindered by management, more professional atmosphere.
- * Different type of work, but neither are better.
- * Pay is better, more responsibility, same kind of company, same sort of work, more upper management politics here.

APPENDIX K (Cont'd.)

Question 7 What are your feelings about your work experience at this company?

- * Poor communication between management, engineers, scientists, etc.
- * I have good feelings about my work experience there, I think it is a very good company. I learned a lot.
- * Overall good. I would have like to do more R & D work and design. I was hired thinking I would do this but was disappointed.
- * I would like to return, with a clearer definition of responsibilities and my choice of area to work. The people (co-workers) were very diverse and were enjoyable. The management didn't recognize me.

Question 11 Add here any other comments you wish to make about your work here, your suggestions for making it a better place to work.

- * A spirit of involvement and excitement needs to be developed. There was too much apathy. Employees felt used and unappreciated by management.
- * Change the "Open Air" atmosphere with its constant noise, interruption, etc. Its important to feel comfortable and for me this simple change enables a marked improvement in job efficiency.
- * I enjoyed my work there. The only thing I feel I don't like is that during review period I am rated well but I don't get the corresponding raise.
- * Eliminate all the crap that technical managers are suppose to do (administrative stuff) so they can focus energy within the departments on necessary work and get rid of all managers that can't recognize what necessary work is.

APPENDIX L

Engineering College Hire Retention Report 1980

Year.	Hires No.	% Remaining After Years Shown							
		<1	1	2	3	4	5	6	
1974	70	97	87	71	59	44	37	27	
1975	57	96	82	72	61	47	37	--	
1976	27	96	93	56	56	44	--	--	
1977	68	100	85	66	51	--	--	--	
1978	97	97	91	68	--	--	--	--	
1979	122	96	70	--	--	--	--	--	
1980	161	96	96	--	--	--	--	--	

APPENDIX M

Engineering Turnover Percent

January - June 1984

(xxx = size of Engineering Work Force)

APPENDIX N
Other Interviews

Number	Interviewee	Site	Span Minutes	Knowledge of CEO		
				A	B	C
1	Consultant	His office	20	-	X	-
2	Guard	Entrance	5	X	X	-
3	Barber	Shop	30	X	X	X
4	President of Competing Firm	Restaurant	25	X	X	-
5(F)	Security Clerk	Telephone	10	-	-	X
6	Executive Recruiter	Airplane	20	X	X	X
7	Corporate Staff Member	Airplane	40	X	X	X
8(F)	VP's Wife	Mgt. Meeting	12	X	X	X
9	Public Info Officer	Office	26	X	X	X
10	Engineering Director	Office	22	X	X	X
11	Factory Worker	Coffee	6	X	X	-
12(F)	Professional Recruiter	Job Fair	28	X	X	X
13	Broker	Office	12	X	X	-
14	College Dean	Office	15	-	X	-
15(F)	Training and Development Manager	Cafteria	25	X	X	X

Note. Number 5, 8, 12, and 15 the (F) represents women.

APPENDIX O

STANDARDIZED FORMAT

ENGINEERING DEVELOPMENT/RETENTION PROGRAMS

Facility _____ Prepared by W. P. Shine

Program Name Follow-up Interviews

Program Description:

Conduct informal, unstructured, follow-up interviews with recent graduates after their initial assignment. Interviews are usually conducted 3-6-9 months after their start date.

Status:

This program was implemented in 1981, and it is an on-going program.

Results:

Many problems were identified in the interviews and have been corrected, including facility changes, safety changes, reassignment, reorganization, etc. As a result of the feedback to line supervision, communications have improved. Interviews conducted by College Relations, results presented to VP of Engineering and Director of Industrial Relations.

Point-of-Contact

Name W. P. Shine Title _____
Telephone _____

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APPENDIX P

PROFILE OF ENGINEERING DEPARTMENT

MANAGEMENT CHARACTERISTICS

DISCRIMINATOR:

Composite
N = 84

PERSONNEL PROFILE SURVEY

OPERATING
CHARACTERISTICS

		System 1 Expt- Arch.	System 2 Gen Arch.	System 3 Constr.	System 4 Particip- Group	Item Code
1 LEADERSHIP	a. Superiors have confidence and trust in subordinates	.	.	.	.	7
	b. Subordinates have trust and confidence in superiors	.	.	.	.	8
	c. Superiors are supportive toward others	.	.	.	.	9
	d. Subordinates feel free to discuss with superiors	.	.	.	.	10
2 MOTIVATION	a. Superiors get ideas and opinions from subordinates	.	.	.	.	11
	b. Underlying character motives tapped	.	.	.	.	12
	c. Manner in which motives are used	.	.	.	.	13
	d. Kinds of attitudes toward organization goals	.	.	.	.	14
	e. Motivations conflict with or reinforce each other	.	.	.	.	15
	f. Responsibility felt by member in achieving goals	.	.	.	.	16
	g. Attitudes toward other members	.	.	.	.	17
	h. Satisfaction derived	.	.	.	.	18
3 COMMUNICATION	a. Amount of communication aimed at organizing goals	.	.	.	.	19
	b. Direction of information flow	.	.	.	.	20
	c. (1) Downward communication where initiated	.	.	.	.	21
	(2) Superiors share data with subordinates	.	.	.	.	22
	(3) Communications accepted by subordinates	.	.	.	.	23
	d. (1) Adequacy of upward communication	.	.	.	.	24
	(2) Subordinates' feeling for initiating upward comm.	.	.	.	.	25
	(3) Forces leading to accurate or distorted upward comm.	.	.	.	.	26
	(4) Accuracy of upward communication via line	.	.	.	.	27
	(5) Need for supplementary upward communication system	.	.	.	.	28
	e. Accuracy and adequacy of sideway communication	.	.	.	.	29
	f. Psychological closeness of superiors to subordinates	.	.	.	.	30
	(1) Superiors understand subordinates' problems	.	.	.	.	31
	(2) Accuracy of perceptions between superiors & subord.	.	.	.	.	32
4 INTERACTION	a. Amount and character of interaction	.	.	.	.	33
	b. Amount of cooperative teamwork present	.	.	.	.	34
	c. (1) Subordinates influence goals as seen by superiors	.	.	.	.	35
	(2) Subordinates influence goals as seen by themselves	.	.	.	.	36
	d. Actual influence of goals by superiors	.	.	.	.	37
	e. Part of organization exerts influence upon others	.	.	.	.	38
5 DECISION-MAKING	a. Level in organization where decisions are made	.	.	.	.	39
	b. Accuracy of information related to decision making	.	.	.	.	40
	c. Decision makers are aware of lower level problems	.	.	.	.	41
	d. Technical knowledge used in decision making	.	.	.	.	42
	e. (1) Availability of the most adequate information	.	.	.	.	43
	(2) Motivational consequences	.	.	.	.	44
	f. Subordinates involved in decision making	.	.	.	.	45
	g. Is decision making man-to-man or group pattern?	.	.	.	.	46
6 GOAL SETTING	a. Manner in which setting goals are usually done	.	.	.	.	47
	b. Different levels strive for high performance goals	.	.	.	.	48
	c. Forces to accept, resist, or reject goals	.	.	.	.	49
7 QUALITY	a. What level is concerned with regards to qual. perf.	.	.	.	.	50
	b. Accuracy of measurements used to guide performance	.	.	.	.	51
	c. Concentrated area of quality performance	.	.	.	.	52
	d. Presence of informal organization	.	.	.	.	53
	e. Control data used for group problem solving	.	.	.	.	54
8 PERFORMANCE	a. Level of performance goals sought by superiors	.	.	.	.	55
	b. Extent of management training given	.	.	.	.	56
	c. Adequacy of training of subordinates	.	.	.	.	57

1. LEADERSHIP $\bar{X} = 11.02$

2. MOTIVATION $\bar{X} = 9.74$

3. COMMUNICATION $\bar{X} = 10.06$

4. INTERACTION $\bar{X} = 9.75$

5. DECISION-MAKING $\bar{X} = 10.36$

6. GOAL SETTING $\bar{X} = 10.58$

7. QUALITY $\bar{X} = 11.35$

8. PERFORMANCE $\bar{X} = 9.34$

OVERALL $\bar{X} = 10.33$

Source: "Profile of," 1985. (p. 2-5)

APPENDIX Q

ADVANCED DEGREE RECOGNITION

Invitation and Honorary Degree

Congratulations

On the achievement of your advanced degree!
To recognize your efforts I invite you and
your spouse (or guest) to be our honored
guests at the next Management Club
Meeting.

R.S.B.P.

[THE FIRM]

Whereas: You have worked loyally and faithfully and with unselfish devotion to make possible another's college education.

Whereas: You have uncomplainingly sacrificed many conveniences, waited patiently, shared problems and triumphs through long years of effort.

We in sincere appreciation of all that you have contributed to another's success hereby confer upon you

the honorary degree

P. A. U.

Partner in Academic Labors

Vice President, General Manager

Director of Industrial Relations

APPENDIX R

A REPRESENTATIVE SAMPLING OF STUDIES IDENTIFYING MODELS OF TURNOVER

	AREA OF INVESTIGATION	MAJOR FOCUS	RESEARCHER/AUTHOR
Bluedorn, A. C. (1982)	Erroneous assumptions that turnover is bad.	Marginal utility vs. marginal cost model.	Forget doctrine that turnover must be continuously reduced. Use return investment approach.
Bowen, D. E. (1982)	Unintended consequences of intention to quit.	Two-cycle model of job search. Behavior of employees who intended to quit but did not.	Intention to quit provides useful clues as to how those employees will behave.
Brief, A. (1982)	Job expectations and commitment.	Model of new hire-employer conflict in expectations.	Employers can, and should circumvent discontented newly hired trained professionals.
Dansereau, F., Jr. Cashman, J., & Graen, G. (1973)	Exempt managers.	Vertical Dyad Linkage as alternate to average leadership style, equity and instrumentality theories.	Utility of Vertical Dyad Linkage to investigate complex set of phenomena called leadership. Key leader role and suggests integration of leadership and motivational models to understand organizational behavior and turnover of managers.
Dear, M. R. Weisman, C. S. O'Keefe, S. (1985)	Registered nurses, professional environment.	Contract model to reduce job dissatisfaction and turnover.	Informal construct addressed job dissatisfaction and turnover by mutual planning, and by manipulating core job dimensions, rewards, and incentives.
Dittrich, J. E. & Garrell, M. R. (1979)	Individual perceptions.	Intervening variable model relates job satisfaction and equity perceptions to withdrawal behavior.	Perceptions of equitable treatment are stronger predictors of absence and turnover than are job satisfaction variables. Decision to withdraw may be directly affected by internal and external opportunities.
Farrell, D., & Rusbult, C. E. (1981)	Business students, industrial union workers.	Use of investment model to predict satisfaction and job turnover.	Satisfaction and commitment correlated with turnover. The latter more strongly so than satisfaction. Verified investment model predictions.

APPENDIX R (Cont.) A REPRESENTATIVE SAMPLING OF STUDIES IDENTIFYING MODELS OF TURNOVER			
RESEARCHER/AUTHOR	AREA OF INVESTIGATION	MAJOR FOCUS	AUTHOR(S)' FINDINGS
Farrell, D., & Rusbult, C. E. (1985)	Utility company employees.	Active/passive and constructive/destructive continuum with exit voice, loyalty, and neglect behaviors of individual.	Membership behaviors must be considered in integrated manner. Suggests successful management of voice adds to well-being of the firm - retention.
Graen, G. & Ginsburgh, S. (1977)	University service department.	Dual organizational attachment of members via Vertical Dyad Linkage Model.	Effect of the two job domains of work itself, and the leader-member exchange may be correlated with turnover for newcomers but the effect decreases with tenure.
Grant, P. C. (1979)	Individual effort and return to maximize total personal satisfaction.	Motivational model of Effort-Net Return, and Expected Rewards and Costs. Includes exchange and expectancy concepts.	Absolute level of employee satisfaction is an important determinant of turnover.
Greenhalgh, L. (1980)	Individual level of analysis and job security.	Conceptual process model discusses decisions to participate at various career stages. Similar to approach of Rice, Hill, and Trist (1950).	Questions constancy of turnover Sensitizes us to the likelihood that job insecurity variable affects workers differently at different points in their organizational careers.
Hall, T. E. (1981)	Study of five Southern California Electric Firms.	Seventeen item cost model presented to develop turnover cost data.	Total turnover costs can be estimated without extensive scientific research process.
Hill, R. E. Miller, E. L. (1981)	Fifteen percent convenience sample of heterogeneous job changers to study career peak and midlife maintenance stage.	Adult development model concerning the relationship between job change decisions and life stages.	Job change decisions are influenced by individual developmental tasks as an adult.
Hom, P. W. Griffeth, R. W. & Sellaro, C. L. (1984)	Hospital employees, emphasizes social pressures from referent others.	Uses path analysis to test Mobley's (1977) model and the expanded model of Mobley, Griffeth, Hand, and Meglino (1979).	Continued research is needed to substantiate the validity of their alternative conceptual model. Social welfare payment may cause quitting without search.

APPENDIX R (Cont.) A REPRESENTATIVE SAMPLING OF STUDIES IDENTIFYING MODELS OF TURNOVER			
RESEARCHER/AUTHOR	AREA OF INVESTIGATION	MAJOR FOCUS	AUTHOR(S)' FINDINGS
Horrigan, J. T. (1979)	Data-processing software firm, including programmers, analysts, technicians, management and support personnel.	Cost model to justify training budget.	A close duplication of this study may or may not produce the same results, and of course depends on prevailing business and economic conditions.
Krackhardt, D. McKenna, J. Porter, L. W. & Steers, R. M. (1981)	Commercial bank tellers.	Supervisory interactions with employees following training program of supervisors. Relates bank efficiency and participation to turnover.	Results support contention that turnover can be reduced through supervisory intervention. It is possible to control turnover using correlates identified in the literature, communication emphasized.
Martin, T. N. (1980)	Employees of medium sized educational programme (sic) and services-oriented business.	Model based on contribution inducement theory links organizational and environmental variables to turnover through job satisfaction.	Best predictor of turnover is intent to leave. Intent to leave remains the only significant predictor of turnover. Employees who have strong intentions of leaving will be the most likely to turnover.
Meglino, B. M. & Denisi, A. S. (1985)	Individual level of commitment.	Based on realistic job preview assumption of Wanous (1973) adds reduction and enhancement preview models.	Reduction previews initially reduce job satisfaction but show increased effectiveness over time and tend to reduce turnover when employees can be bound in to their jobs.
Michaels, C. E. Spector, P. E. (1982)	Urban community health center employees.	Added organizational commitment and confirmation of pre-employment expectancies to Mobley et al. (1979) model. Employed path analysis.	Suggests a possible causal chain from individual and organizational factors through job satisfaction and commitment, through intention and finally to turnover. This chain fails to account for a large amount of variance in turnover.
Naughton, T. J. Outcalt, D. (1985)	Comparison of new college graduate nurses and experienced nurses.	Socialization and selection model. Enhancement of realistic job previews to prevent reality shock.	Extent of previous experience influenced perceptions of preferred and expected outcomes and the patterns of job involvement and propensity to leave.

APPENDIX R (Cont.) A REPRESENTATIVE SAMPLING OF STUDIES IDENTIFYING MODELS OF TURNOVER			
RESEARCHER/AUTHOR	AREA OF INVESTIGATION	MAJOR FOCUS	AUTHOR(S)' FINDINGS
Price, J. L. & Mueller, C. W. (1981)	Longitudinal study of registered nurses in seven hospitals.	Adds intent to stay as an intervening variable between job satisfaction and turnover to the original Price (1977) model.	Intent to stay was found to have the largest total impact on turnover. Caution against narrow disciplinary research into determinants of turnover. Eight suggestions for future research included: commitment, size, location, gender, occupations, more timely data collection, measurement, and longitudinal designs.
Roseman, E. (1981)	Individual psychological point of view.	Trigger events increase pressure to leave. Critical Decision Points in employee's work history.	Several common sense actions recommended for managers can have a profound impact on reducing turnover.
Seybolt, J. W. (1983)	Hospital nursing staff. Specific facets of employee's work roles at different points of their organizational careers.	Employs organizational career stage, satisfaction, and work role design to predict and control turnover.	Turnover intentions are affected at different times by work-role design factors. Stresses turnover intentions to find out about turnover.
Sheridan, J. E. & Abelson, M. A. (1983)	Nursing employees. Individual focus on performance, absenteeism and commitment.	Uses Cusp Catastrophe Model to describe the transition from retention to termination in which the employee attempts to retain employment in the organization as long as possible.	Termination appears to represent a change in behavior that occurs frequently only after the bifurcation levels of job tension and commitment are exceeded. Withdrawal to termination is not a continuous linear function of tension nor commitment.
Stumpf, S. A. & Hartman, K. (1983)	Users of on-campus placement services.	Sequential process model of exploration, entry, socialization, commitment, exploration, and withdrawal.	Model best viewed as a framework for examining the process leading to becoming committed to, or deciding to leave an organization.